

Doctoral theses at NTNU, 2021:97

Vegard Stolsmo Foldal

Early phase of long-term sick leave and motivational interviewing

ISBN 978-82-326-5558-8 (printed ver.) ISBN 978-82-326-6708-6 (electronic ver.) ISSN 1503-8181 (printed ver.) ISSN 2703-8084 (electronic ver.)

octoral theses at NTNU, 2021

Norwegian University or Science and Technology Thesis for the degree of Philosophiae Doctor Faculty of Medicine and Health Sciences Department of Public Health and Nursing

Norwegian University of Science and Technology

Norwegian University of Science and Technology

Vegard Stolsmo Foldal

Early phase of long-term sick leave and motivational interviewing

Thesis for the degree of Philosophiae Doctor

Trondheim, April 2021

Norwegian University of Science and Technology Faculty of Medicine and Health Sciences Department of Public Health and Nursing



NTNU

Norwegian University of Science and Technology

Thesis for the degree of Philosophiae Doctor

Faculty of Medicine and Health Sciences Department of Public Health and Nursing

© Vegard Stolsmo Foldal

ISBN 978-82-326-5558-8 (printed ver.) ISBN 978-82-326-6708-6 (electronic ver.) ISSN 1503-8181 (printed ver.) ISSN 2703-8084 (electronic ver.)

Doctoral theses at NTNU, 2021:97





Sammendrag

Bakgrunn

Langtidssykemelding (åtte uker eller mer) er et folkehelseproblem og en utfordring for dem det gjelder. Retur til arbeid er en kompleks prosess for den sykemeldte. NAV anbefaler sine veiledere å bruke motiverende intervju (MI) når de følger opp sykmeldte arbeidstakere, men det er lite forskning som viser hvilke faktorer som hemmer eller fremmer bruken av MI i sykefraværsoppfølging. Denne avhandlingen inngår i en større randomisert kontrollert studie som undersøker effekten av MI ved tilbakeføring til arbeid hos sykmeldte arbeidstakere.

Formål

Formålet med denne avhandlingen var å utforske hvordan sykmeldte arbeidstakere opplever å være langtidssykmeldt og hvordan de opplever å få MI gitt av NAV-veiledere, samt å evaluere hemmende og fremmende faktorer for implementering av MI som et tiltak i NAV for å hjelpe sykmeldte arbeidstakere tilbake i jobb.

Metode

Avhandlingen består av tre delstudier. Studie I og II er kvalitative intervjustudier, hver med 16 sykmeldte arbeidstakere. Studie I utforsker hvordan det oppleves å være langtidssykmeldt i den tidlige fasen av langtidssykmelding (8 uker eller mer). Studie II undersøker erfaringer hos sykemeldte arbeidstakere som har gjennomgått to MI-samtaler hos NAV. I studie III er det benyttet data fra fokusgruppeintervju med NAV-veiledere som har fått opplæring innen MI og utfører MI-samtaler, analyser av kvaliteten på MI-samtalene og spørreskjema til sykmeldte arbeidstakere.

Resultater

Langtidssykmelding opplevdes som nødvendig grunnet en blanding av helse-, arbeids-, og familiebelastninger. Disse belastningene gjorde det vanskelig for de sykmeldte arbeidstakerne å se hvordan de skulle komme seg tilbake i jobb. Retur til arbeid var ønskelig for de sykmeldte, men avhengig av faktorer som opplevdes å være utenfor den sykmeldte sin kontroll (Studie I).

De sykmeldte arbeidstakerne i studie II opplevde en god og støttende relasjon til NAV-

veilederne som brukte MI. MI-samtalene var en positiv opplevelse som bidro til å

legitimere det å være sykmeldt, samtidig som det reduserte skam- og skyldfølelsen hos

de sykmeldte. Ved å få informasjon, støtte og tilbakemeldinger på oppfølgingsplan,

opplevdes MI-samtalene som nyttig, hvor de sykmeldte arbeidstakerne fikk økt

mestringstro på retur til arbeid.

Faktorer som hemmet implementering av MI i sykefraværsoppfølgingen i NAV var den

store mengden av øving og ressurser som krevdes for å mestre de ulike ferdighetene i

MI for NAV-veilederne. I tillegg opplevde NAV-veilederne i dette prosjektet

manglende støtte blant kolleger og ledelsen. Nivået av MI-kompetanse hos NAV-

veilederne var tilstrekkelig for den tekniske delen av MI, men utilstrekkelig på den

relasjonelle delen av MI. NAV-veilederne sin motivasjon for å lære og mestre MI

fremmet implementering, i tillegg til at tidlige oppfølgingssamtaler var foretrukket både

av NAV-veiledere og sykmeldte arbeidstakere.

Konklusjon

Langtidssykmeldte arbeidstakere som strever med å finne løsninger på sine utfordringer

til å komme tilbake i jobb, kan ha nytte av tidlige oppfølgingssamtaler som fokuserer på

personlige og arbeidsrelaterte faktorer som påvirker retur til arbeid prosessen. MI kan

være et nyttig verktøy når man veileder sykmeldte, men implementering av MI hos

NAV er komplekst og krever mye ressurser fra både veilederne og organisasjonen

gjennom hele implementeringsprosessen.

Vegard Stolsmo Foldal

Institutt for samfunnsmedisin og sykepleie, NTNU

Hovedveileder: Marit Solbjør

Biveiledere: Egil A. Fors og Lene Aasdahl

Finansieringskilde: Norges forskningsråd - HELSEVEL

iv

Summary Background

Long-term sick leave is a major issue for public health and the individuals involved and returning to work from long-term sick leave is a complex and multifaceted process for the sick-listed worker. Motivational interviewing (MI) has been advocated for facilitating return to work (RTW) and the Norwegian Labor and Welfare Administration (NAV), who play a central role in facilitating RTW for sick-listed workers, recommend that their caseworkers use MI. However, evidence of the methods' efficacy as a RTW intervention is lacking and has never been evaluated in a Norwegian social insurance setting. Increased attention has been given to evaluating barriers and facilitators of implementation to interpret findings from interventions to inform its opportunity in practice. The thesis is nested within a randomized controlled trial evaluating MI as an instrument for caseworkers at NAV in facilitating RTW for sick-listed workers.

Aims

The aim of the thesis was to explore sick-listed workers experiences of being on long-term sick leave and receiving MI administered by caseworkers at NAV and evaluate barriers and facilitators for implementing MI as a RTW intervention.

Methods

The thesis includes two qualitative interview studies exploring how sick-listed workers experience being on long-term sick leave (Paper I) and receiving MI (Paper II) and one mix-methods study evaluating barriers and facilitators for implementing MI as a RTW intervention (Paper III).

Results

Being on long-term sick leave was experienced as necessary but negative and energy depleting due to health, work and family stressors which negatively affected identity and resolve. RTW was desirable but difficult and dependent on factors outside of their control such as stakeholder coordination and NAV involvement (Paper I).

Sick-listed workers experienced positive and supportive relationships with the NAV caseworkers, and the MI sessions served as an arena for normalizing and providing legitimacy of the sick leave, and thus reduced the sick-listed workers feelings of guilt and stigma. Individually tailored information, support and feedback on their RTW plan increased the sick-listed workers experienced RTW self-efficacy (Paper II).

Barriers for implementing MI in a social insurance setting were the amount of training and resources needed to master the various MI skills for the caseworkers, which were made difficult due to lack of coworker and managerial support. MI fidelity scores showed that the MI caseworkers were over the threshold for "beginning proficiency" in the technical component of MI, whereas they scored beneath the threshold in the relational component. Facilitating factors for implementing MI were the caseworkers' motivation to learn and master MI, and that early follow-up sessions were considered the caseworkers' preferred approach to administer sickness absence follow-up, which was echoed by the sick-listed workers' satisfaction of the MI sessions (Paper III).

Conclusions

Long-term sick-listed workers who are struggling to find solutions to their challenges could benefit from additional early follow-up that proactively examine work-related, social and personal factors that influence RTW. From both the sick-listed workers' and NAV caseworkers' perspective, early sickness absence follow-up is desired. This thesis show that MI may be a beneficial approach when counseling sick-listed workers as it can normalize and provide legitimacy of the sick leave, adjust RTW strategies and increase RTW self-efficacy, through a positive and supportive relationship between the sick-listed worker and NAV caseworker. Implementing MI in a social insurance setting is complicated and requires significant resources on an individual and organizational level. Promoting facilitating factors, such as caseworker motivation for MI and early follow-up sessions, may be equally important as reducing barriers, in order to achieve a successful implementation of MI.

Acknowledgements

This PhD project was funded by the Research Council of Norway (Grant number: 256633) and a cooperation between the Norwegian Labour and Welfare Administration (NAV) and the Norwegian University of Science and technology (NTNU). I appreciate the opportunity, funding and support from the cooperating parties for allowing me to do this work. This would not have been possible without the help and support from several people.

I would like to thank everyone who has contributed to this work. First, I want to thank my main supervisor, Marit Solbjør, who through kindness and tough love have supported and guided me throughout this process. You have been instrumental for my development as a PhD candidate. I would also like to thank my co-supervisors Lene Aasdahl and principal investigator Egil Andreas Fors, who also at some point have been my main supervisors, for scientific guidance and the equally valuable encouragement and criticism. Thanks to all co-authors and members of the project group, especially Roar Johnsen, Roger Hagen, Gunnhild Bagøien and Karen Walseth Hara for challenging me, critically reviewing my manuscripts and providing valuable discussions. A special thanks goes to my fellow PhD candidate in this project, Martin Inge Standal, for all the invaluable help, support and discussions.

I would also like to thank my colleagues at 4th floor at the Department of Public Health and Nursing. Special thanks to Team Corner Office, the omnipotent Ellen Rabben Svedahl and the inspirational Maria Brandkvist, for all the support, interesting discussions, whimsical nonsense and chocolates. I am also grateful to the members of the research group Work and Health and to our qualitative writing group at the Department of Public Health and Nursing for all the valuable comments on my work.

Furthermore, I would like to thank the participants in this project and the caseworkers conducting the interventions at NAV. Special thanks to Silje Haugan, Ingunn Myhre and Heidi Fossen at NAV for the meticulous task of organizing this project in practice.

Finally, I want to thank my family and friends who have contributed with their love and support. A special thanks to my love Guro for the unconditional support and patience. Thank you for holding down the fort during the most hectic periods and being an amazing mom to our son Daniel. This PhD process would never have been possible without you and words cannot express my gratitude.

List of papers

Three papers are included in the thesis and will be referred to as Paper I, II and III.

Paper I:

Health, work and family strain – psychosocial experiences at the early stages of long-term sickness absence

Martin Inge Standal, Vegard Stolsmo Foldal, Roger Hagen, Lene Aasdahl, Roar Johnsen, Egil Andreas Fors, Marit Solbjør.

Submitted to Frontiers of Psychology (in review)

Paper II:

Sick-listed workers' experiences with motivational interviewing in the return to work process: a qualitative interview study

Vegard Stolsmo Foldal, Martin Inge Standal, Lene Aasdahl, Roger Hagen, Gunnhild Bagøien, Egil Andreas Fors, Roar Johnsen, Marit Solbjør.

BMC Public Health 20, 276 (2020). https://doi.org/10.1186/s12889-020-8382-9

Paper III:

Barriers and facilitators for implementing motivational interviewing as a return to work intervention in a Norwegian social insurance setting: a mixed methods process evaluation

Vegard Stolsmo Foldal, Marit Solbjør, Martin Inge Standal, Egil Andreas Fors, Roger Hagen, Gunnhild Bagøien, Roar Johnsen, Karen Walseth Hara, Heidi Fossen, Ida Løchting, Hedda Eik, Margreth Grotle, Lene Aasdahl.

Submitted to Journal of Occupational Rehabilitation

Abbreviations and acronyms

GP General Practitioner

MI Motivational Interviewing

MITI Motivational Interviewing Treatment Integrity

NAV Norwegian Labour and Welfare Administration

RCT Randomized Controlled Trial

RE-AIM Reach, Effectiveness, Adoption, Implementation and Maintenance

RTW Return to Work

Table of contents

S	amme	ndrag	5	iii		
S	umma	ry		v		
A	cknowledgements vii					
L	ist of 1	paper	'S	ix		
A	bbrev	iatior	ns and acronyms	X		
1	Int	roduc	etion	1		
2	Ba	ekgro	ound	3		
	2.1	Wo	rk and sick leave	3		
	2.2	Mo	dels of work disability	4		
	2.2	.1	The case-management ecological model	5		
	2.3	Sic	kness benefit schemes in Europe	6		
	2.4	Sic	k leave in Norway	7		
	2.5	The Norwegian sickness benefit scheme and sickness absence follow-t		8		
	2.5	.1	Follow-up of sick-listed workers by NAV caseworkers	10		
	2.6	Lor	ng-term sick leave	11		
	2.6	.1	Experiences of being on long-term sick leave	11		
	2.7	The	e return to work process	13		
	2.7.1		The importance of return to work professionals	15		
	2.8	Ret	urn to work interventions	17		
	2.9	Mo	tivational interviewing	20		
	2.9.1		Motivational interviewing research and return to work	22		
	2.9	.2	Measuring motivational interviewing processes and fidelity	23		
	2.10	Imp	plementing return to work interventions	24		
3	Aiı	n of	the thesis	27		
4	Me	Methods				
	4.1	Pro	ject context	29		
	4.2	The	e interventions	30		
	4.2	.1	Motivational interviewing intervention	30		
	4.2	.2	Motivational interviewing training	31		

	4.2.3 4.2.4		Non-motivational interviewing intervention control group	32	
			Practice as usual	32	
	4.3	Qua	alitative interviews	32	
	4.4	Mix	xed-methods process evaluation	33	
	4.4	1.1	Process measures	34	
	4.5	Rec	ruitment and participants	35	
	4.5	5.1	RCT Study population	35	
4.5.2		5.2	RCT recruitment procedure	35	
	4.6	Rec	ruitment and participants Paper I	36	
	4.7	Rec	ruitment and participants Paper II	36	
	4.8	Rec	cruitment and participants Paper III	37	
	4.8	3.1	Sick-listed workers	38	
	4.8	3.2	NAV caseworkers	38	
	4.9	Dat	a collection	39	
	4.9	0.1	Interview studies	39	
	4.9	0.2	Focus groups	40	
4.9.3		0.3	Motivational Interviewing Treatment Integrity (MITI)	41	
	4.9	0.4	Questionnaires	42	
	4.10	Dat	a analysis	42	
	4.1	0.1	Descriptive phenomenology	43	
	4.1	0.2	Systematic text condensation	45	
	4.1	0.3	Thematic analysis	46	
	4.1	0.4	Statistical analysis	47	
	4.11	Eth	ics	47	
	4.1	1.1	Anonymity	48	
5	Re	sults.		51	
	5.1	Pap	er I	51	
	5.2	Pap	er II	51	
	5.3	Pap	er III	52	
6	6 Discussion				

6

6	.1 Disc	cussion of findings	53
	6.1.1 leave	The need for return to work support in the early phases of long-term sick 53	k
6.1.2 6.1.3		Overcoming obstacles in the return to work process	.55
		Supportive return to work professionals	.56
	6.1.4	Double role paradox	.57
	6.1.5 workers	Implementing Motivational interviewing for counseling sick-listed 59	
6	.2 Met	thodological considerations, strengths and limitations	64
	6.2.1	Selection bias	.65
	6.2.2	Motivational interviewing fidelity limitations	.65
	6.2.3	Three analytical approaches in three papers	.66
	6.2.4	The interviews and focus groups	.68
	6.2.5	Transferability	.69
	6.2.6	Reflexivity	.71
	6.2.7	Methodological considerations related to NAV	.72
6	.3 Imp	lications and future research	75
7	Conclus	ion	77
8	Reference	ces	79
Pap	ers I-III		
Ap	pendices		

1 Introduction

Long-term sick leave is a major public health problem with large societal costs [1] and is associated with adverse health outcomes, multimorbidity, and an increased risk of disability pension for the individual [2-4]. Most sick-listed workers return to work (RTW) on their own within the first month, but after the first few months of sick leave, the relative likelihood of RTW decreases [5, 6]. Hence, interventions aimed at facilitating RTW after the first two to three months of sick leave have been advocated [7]. However, finding the most efficient type of intervention to implement has shown to be a difficult endeavor, where broad multidisciplinary intervention programs show inconsistent effectiveness [8-12]. The relatively sparse and mostly inconclusive evidence for effective RTW interventions has been suggested to be partly due to the varying settings and inconsistent implementation of interventions [13].

Due to the multifaceted problems that sick-listed workers face in their RTW process, non-health related factors have recently been given more attention in RTW research. Individual and psychosocial factors such as self-perceived health, RTW expectations, self-efficacy and support have been highlighted as important in the RTW process in long-term sick leave [14-21]. Still, knowledge about the early phases of long-term sick leave is scarce and exploring the complexity of sick-listed workers' RTW process can be of importance for designing RTW interventions and guiding professionals working with RTW.

Norway has the highest sickness absence rate compared to other OECD countries [1]. In the follow-up procedure for sickness absence in Norway, the Norwegian Labor and Welfare Administration (NAV) play a central role in facilitating RTW for sick-listed workers [22]. However, it has previously been reported that sick-listed workers experience the content and timing of standard follow-up given by the Norwegian Labor and Welfare Administration (NAV) as insufficient to facilitate RTW [23]. When counseling the sick-listed worker, NAV recommend that their caseworkers use motivational interviewing (MI) [24], but to what extent and quality this is carried out is unknown. Although MI has been advocated for facilitating RTW [25, 26], it has hardly

been evaluated in a RTW setting for sick-listed workers and evidence of the methods' efficacy as a RTW intervention is lacking [27, 28]. Thus, increased attention has been given to evaluating potential barriers and facilitators of implementation can help to interpret findings from randomized controlled trials (RCT) and inform its opportunity in daily practice [29-32].

This thesis explores sick-listed workers' experiences of being in the early phases of long-term sick leave and receiving MI administered by caseworkers at NAV. This thesis also evaluates barriers and facilitators for implementing MI as a RTW intervention. This thesis contributes to knowledge about the early phases of long-term sick leave and in exploring and evaluating the use of MI in a Norwegian RTW setting.

2 Background

Although I have never experienced a sick leave spell longer than five consecutive days in my working career, I have always been interested in what factors influence absence and presence at work. I have a master's degree in work and organizational psychology from NTNU, which sparked my interest in research and strengthened my desire to help people, specifically in the area of work and health. After some short-time engagements in teaching psychology and counselling unemployment job seekers, I ended up working with sickness absence follow-up at NAV. As a NAV caseworker I have had hundreds of counselling sessions with sick-listed workers and thus gained first-hand insight into to the multifaceted and complex situations and problems sick-listed workers can experience in their RTW process. During my nearly two-year employment at NAV, I gained an interest in MI trough self-study and workshops at NAV. Before starting on this PhD project, I was initially one of the chosen caseworkers to receive MI training and to conduct the MI sessions in the current project. My background, interests and motivation have been instrumental and influential in all the stages of this thesis.

2.1 Work and sick leave

Work is more than a way to make money in order to access essential and non-essential commodities and services. Work is central for an individual's identity, social roles and status [3]. A individuals' identity and sense of self is highly influenced by work, comprising of a combination of work performance, experiences, skills, goals and motivation [33]. Working can also be viewed as a signal to others that one is normal and contributing to society [34]. In Norway, work is governed by the Working Environment Act [35]. The purpose of this act is to secure that the working environment provides a basis for a health promoting and meaningful situation [35]. Consequently, losing this important activity due to sick leave comes not only at a large societal costs [1], but also at a high cost for the individual's identity and social life [36-38].

In this thesis, sick leave is used to describe absence from work or work disability due to a certified medical cause(s) [39]. An employee on sick leave is therefore sick-listed. In the context of this thesis, these terms are used interchangeably. In order to illustrate the

temporality of their situation and that they were in fact employed when the sick leave spell began, the individuals will be referred to as sick-listed workers.

For the individual, prolonged sick leave is associated with adverse health outcomes, multimorbidity, increased risk of disability pension [2-4] and a risk for exclusion from the labour market and insecure economic stability [40]. Sick leave duration is influenced by personal characteristics, but also family life, work environment and workplace support [5, 41-44]. The workplace is not only important for the individual's identity, but also in the RTW process. Supportive contact with the employer and workplace is important for facilitating RTW for sick-listed workers [45]. The employer plays a central role through discussing workplace accommodations, but also the timing and amount of contact in this process is important [45]. The support given by the employer in the RTW process is viewed as critical in preventing disability [46] and in facilitating RTW [45]. Several studies have also demonstrated the negative impact of lack of workplace support on RTW outcomes [46-48].

2.2 Models of work disability

Most models on work disability has been developed for the field of musculoskeletal disorders [49]. Researchers in the field of mental health disorders have also started using models developed for musculoskeletal disorders [50]. Understanding disability has largely shifted from biomedical models to biopsychosocial models during the last decades [51]. According to Engel, biomedical models are insufficient in understanding disability, and inclusion of psychosocial factors are crucial [52]. Biopsychosocial models, as originally proposed by Engel, describes how illness can be understood as a combination of biology, behavioral factors and social conditions [52, 53]. Furthermore, biopsychosocial models has a greater focus on interactions within the disabled workers, and interactions in the wider context and between stakeholders, such as the disabled worker, the employer, caseworkers, health professionals, the social environment and the political context where disability occurs [49, 54]. The biopsychosocial perspective on illness suggests a holistic approach for understanding the complex context of an individuals' disability. Many principles of work disability prevention and models of work disability have been formulated from this holistic perspective [49]. One of the

most influential biopsychosocial models used to illustrate work disability is the casemanagement ecological model [55].

2.2.1 The case-management ecological model

The case-management ecological model, also known as the Sherbrooke model, describes how workers' disability is not only due to characteristics of the worker, but where disability is influenced by the actions and attitudes of key stakeholders and the interaction between the stakeholders [55]. The Sherbrooke model (see figure 1) shows the disabled worker at the center and the four main systems preventing or facilitating work, as the arena in work disability prevention. This model offers a visual representation of the complexity of the influence that different systems have on work disability [49], where the most important stakeholders are the workplace, the healthcare system, and the compensation system, in addition to the personal system [55]. These systems are also placed in the overall sociopolitical and cultural context, which also influence work disability and how the four systems interact [55]. As a model made to guide case-management operations or for detecting the influences of systems on the disability process, it was originally developed for back pain but has later been applied t several different disorders and contexts of work disability [49]. Even though the model illustrates the complexity of work disability and may be helpful in mapping relevant stakeholders in the individuals' work disability, the complexity of the model is both the models' strength and its limitation [54].

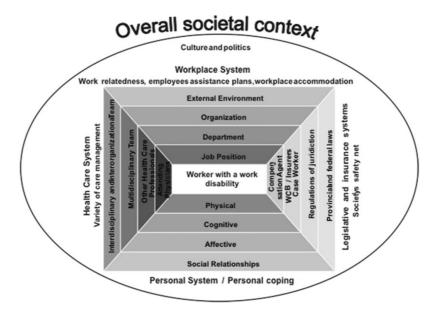


Figure 1. The case-management ecological model (figure from Loisel et al. [55]).

2.3 Sickness benefit schemes in Europe

Sickness benefit is a temporary economic benefit granted to individuals with reduced work ability due to a certified medical cause(s). All EU member states provide rights to sick leave and benefits compensating income loss due to sick leave. For most countries the period and entitlement of sick leave are mostly aligned. However, in some countries (e.g., Italy or the United Kingdom), the duration of entitled sick leave may not coincide with, and thus, exceed the period of payment of sickness benefits [40]. The eligibility criteria for sick leave are for most parts based on employment status (paid work) and social security membership, although some countries differentiate between type of sickness and type of employment (e.g., self-employment) [40]. In most countries, income loss compensation due to sick leave is the responsibility of the employer. Although this is generally limited to less than 100 days in Europe, there is a wide variety ranging from 8 days (Latvia) to 600 (Netherlands). In countries such as Denmark, Ireland and Portugal, sickness benefits are not state-mandated, but at the discretion of the employer. In terms of sickness benefits, the maximum legal duration of benefits varies widely between countries, ranging from 22 weeks in a 9-month period in

Denmark, to three years in Portugal. Despite varying rights and duration of sick leave and sickness benefit payouts, sickness benefits generally aim to promote recovery and RTW [40]. According to OECD, the Norwegian welfare system for providing services related to sick leave and disability are characterized as a social democratic policy model [56]. The same model is also used in Sweden, Finland and Germany. This model is considered the most generous of the OECD countries with full population coverage of disability benefits, low entry thresholds, high benefits, generous benefit suspension, comprehensive employment and vocational rehabilitation programs [56].

2.4 Sick leave in Norway

Compared to other OECD countries, Norway has the highest sick leave [1] with a current sickness absence rate of 5.9% [57]. The leading causes for sick leave in Norway are musculoskeletal disorders (30%) and mental health disorder (27%). The health- and social care sector, which also employs every fifth employee and 36% of all women, reports the highest rate of sickness absence (8.9%), as opposed to the petroleum industry which reports the lowest rate (3.1%) [58]. In terms of employment rate, 75.6% of the working population is employed and with a labour force participation rate of 78.3% [59]. About 83% of Norwegians on sick leave have an average duration of sickness absence for eight weeks or less. Long-term sick leave duration between eight weeks and 26 weeks are currently at 11.7%, whereas the longest duration from 26 weeks until one year of sick leave is at 5.5% (see Figure 2) [58].

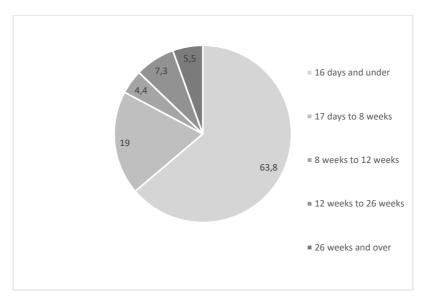


Figure 2: Average duration of sick leave (%) spells first quarter of 2019. Based on data from NAV [58].

Reducing sick leave has been an important political objective for several years and in 2001 a tripartite agreement was signed between employer organizations, employee organizations and the Norwegian government known as the letter of intent regarding a more inclusive working life (the IA agreement), where one of the main goals was to reduce sick leave [60]. A recent study evaluated the impact of the IA agreement on long-term sick leave among young and middle-aged workers in Norway and found no significant change in the overall risk of long-term sick leave after implementing the IA agreement [61]. Hanvold et al. [61] found varying results depending on gender and industry, suggesting that reducing long-term sick leave may benefit from industry-specific interventions.

2.5 The Norwegian sickness benefit scheme and sickness absence follow-up

In Norway, sick-listed workers are entitled to full wage benefits (up to six times the national insurance basic amount) from the first day of sickness absence to a maximum period of 52 weeks. The employer is responsible for the payment during the first 16 working days, while the remaining period is covered by the National Insurance Scheme

through NAV [62]. If work ability is still reduced by at least 50% after the one-year period due to illness, injury or defect, the sick-listed worker is eligible for work assessment allowance for up to three years with 66% income compensation [63]. NAV has since 2006 had full responsibility for the implementation of labour market policies, the provision of employment and vocational rehabilitation services and early interventions in long-term sickness absence, with a budget corresponding to 30% of the Norwegian state budget [1]. Occupational rehabilitation is the multi-professional approach of facilitating RTW for individuals of working age with health-related impairments, limitations or reduced work ability [64]. Vocational rehabilitation can be defined as whatever helps someone to stay at, return to or remain in work [65]. In this thesis the term occupational rehabilitation and vocational rehabilitation are used interchangeably in the context of RTW and sickness absence follow-up.

The employer and sick-listed worker share the main responsibility for sickness absence follow-up. The employer must initiate a follow-up plan in cooperation with the employee before the end of fourth week of sick leave, except in cases where this is clearly unnecessary [66]. The employer is responsible for arranging a meeting (dialogue meeting 1) with the employee if 100% on sick leave within the seventh week of absence, including other relevant stakeholders (e.g., general practitioner (GP)). The meeting is optional if the employee has been on graded sick leave. The GP is usually the sick leave certifier and an important stakeholder in the sickness absence follow-up [66].

If the employer facilitates work-related activities, the employee is expected to participate. In order to be entitled to sickness benefits, the employee is obligated to be in work-related activities (e.g., part-time sick leave) within eight weeks. If the employee does not begin work-related activities within eight weeks, an expanded medical certificate is required to document that the employee has significant medical problems preventing them from participating in work-related activities. NAV has a facilitating role and is responsible for arranging another meeting (dialogue meeting 2) within 26 weeks of sick leave, including the employer and employee. The attendance of the employee's GP is optional, unless NAV deems it necessary for the continued coordination of the RTW process. A third meeting (dialogue meeting 3) can be held if

one or more of the stakeholders find it necessary, and NAV will reassess the situation and the need for work-related measures within one year of sick leave. The employee may also ask for a meeting at any time with NAV to coordinate a plan for RTW outside the scheduled follow-up. NAV can stop the sickness benefit if the employee on sick leave does not cooperate in accordance with the law [66].

2.5.1 Follow-up of sick-listed workers by NAV caseworkers

In the follow-up procedure for sick leave in Norway, caseworkers at the NAV has a facilitating role in the follow-up work by providing support for the employer and sicklisted worker. In relation to the sick-listed worker, NAV caseworkers operate as both a RTW professionals (e.g., facilitating RTW) and as controllers of sickness benefits (e.g., checking eligibility for sickness benefits) [22]. In the context of this thesis, a RTW professional is used to describe stakeholders in a supporting or coordinating role in the RTW process, for example: physical or occupational therapists, healthcare professionals, employment support workers, social insurance officers or officials, case managers, and caseworkers at NAV. These terms are used interchangeably. When in dialogue with the sick-listed worker or employer, the caseworker will often propose relevant work-related instruments or strategies to help facilitate RTW [66]. During the first eight weeks of sick leave, NAV plays a smaller part with only few statutory and controlling tasks during the first eight weeks of sick leave, since the employer and sicklisted worker has the main responsibility in the sickness absence follow-up [67]. It has previously been reported that sick-listed workers experience the content and timing of standard follow-up given by NAV as insufficient to facilitate RTW [23]. NAV caseworkers experience that the longer sick-listed workers are on long-term sick leave, the harder it is to facilitate RTW [23]. Thus, it has been suggested that NAV should play a more active part in the sickness absence follow-up at an earlier stage. Playing a more active part could mean having meetings with the sick-listed workers at eight weeks of sick leave in order to prevent long-term sick leave and future temporary medical benefits [68]. The local NAV offices are characterized by having scarce resources and NAV has emphasized the need for more knowledge and evaluations of their current sickness absence follow-up in order to justify or reallocate their resources

[67]. When counseling the sick-listed workers, NAV recommend that their caseworkers use MI [24], but to what extent and quality is unknown.

2.6 Long-term sick leave

Long-term sick leave is a major public health problem and has large societal costs [1]. Common cutoff for defining long-term sick leave in Norway is eight weeks of sick leave [69]. In a European context, the cutoff for long-term sick leave can vary from 30 days to six months [40]. In the context of this thesis, the individuals on sick leave were all on long-term sick leave for at least eight weeks. As there is no consensus on how to define the early phases of long-term sick leave or when the golden hour for work disability interventions is [70], the term early phases of long-term sick leave is in this thesis described as the following weeks after the sick leave has become long-term, in other words after eight weeks of sick leave.

Although disease and health-related factors are in important factors in short-term sick leave, they become less relevant for RTW in long-term sick leave [15-17]. External and psychosocial factors such as self-perceived health, job demands and strain, benefit claims, self-efficacy and RTW expectations become more important for the RTW process in long-term sick leave [14-19]. Furthermore, having negative RTW expectations can complicate the RTW process even further [18] and predict long-term benefit recipiency [71]. Current biopsychosocial understanding of disability has increased focus on individual cognitions and motivations about long-term disability and the interactions between the individual and surrounding systems [20]. Thus, individual expectations, perceptions and influence over own rehabilitation has been highlighted as important when evaluating RTW efficacy [20, 21].

2.6.1 Experiences of being on long-term sick leave

The RTW process for long-term sick listed individuals is a complex and multifaceted process [72]. In order to grasp the complexity of long-term sick leave, it is important to explore the sick-listed individuals' perspective. Most sick-listed workers RTW within the first eight weeks [58] and after this period the relative likelihood of returning to work decreases [5, 6] (See also figure 1). Thus, interventions to facilitate RTW between

8-12 weeks of sick leave has been advocated [7]. While quantitative studies are useful when investigating RTW predictors and the efficacy of RTW intervention, they seldom capture the complexity of the RTW process and practices in the way qualitative studies can [72].

Previous studies on long-term sick leave have examined how individuals experience long-term sick leave [37, 73]. Lannerström et al. [37] found that being on long-term sick leave radically changed the life-worlds of sick-listed individuals. The process of being on long-term sick leave was mainly considered a negative experience and led to feelings of powerlessness, not being a part of the work force, attending mandatory rehabilitation steps and having numerous encounters with RTW professionals made them loose their independence [37]. The process of losing control when on long-term sick leave is characterized by not finding any alternatives or strategies to regain control of their lives [74]. Regaining control can be done by reorienting their perspective and goals, in addition to receiving support from friends, family or RTW professionals in this process [74].

Negative effects of being on long-term sick leave are more prevalent than positive consequences, and are particularly related in negatively affecting social and family activities, sleep and psychological well-being [75]. Being on long-term sick leave is also associated with shame. In a study on the association between shame and long-term sick leave, Knapstad et al. [76] found that younger individuals with low income and high levels of education reported being ashamed of being on sick leave. Furthermore, previous sick leave spells were also associated with feeling more shame, and that shame might prolong the sickness absence in the following year [76].

Other studies on the experience of long-term sick leave have focused on diagnosis specific experiences [72], experiences with rehabilitation [77] and how different stakeholders view the RTW process [78]. Some research has focused on gender differences or perspectives on sick leave [72], since women generally report higher rates of sick leave [58]. For the most part, women and men share the same experiences and characteristics of long-term sick leave [79]. While women and men experience the same

levels of shame during long-term sick leave [76], women can experience being regarded as an object by stakeholders, by being assessed and valued from an outside point of view and primarily focusing on the sick leave and not being regarded as a person [80]. Also, women experience positive consequences of long-term sick leave more often than men, which is attributed to family relationships, sleep and psychological well-being [75]. Women tend to emphasize the importance of social capital in the RTW process for sick-listed workers, where those with high levels of relational social capital at the workplace and in the domestic sphere had the best prospects of recovering and returning to work [81]. Consequently, researchers should be attentive to the potential nuances in how men and women can experience being on long-term sick leave and also the process of returning to work, respectively.

Individuals may have different experiences in the earlier phases of long-term sick leave than later in the process. Research on long-term sick leave has primarily been conducted on a wide variety of sick leave duration, both within and between studies (e.g., [72]), from 10 weeks to 3 years. However, less is known about how the early phases of long-term sick leave are experienced. This might be important knowledge when designing interventions and for RTW professionals facilitating RTW.

2.7 The return to work process

In the context of this thesis, RTW is used to describe both the goal or outcome of sick leave and work disability, and the process of returning to work for sick-listed workers who have been out of work for a period of time due to a medically certified cause(s).

Work is important to an individual's self-confidence [37] and vice versa; self-confidence, or self-efficacy, is equally important in a RTW process [82-84]. Work ethics and societal norms not only influence how individuals view themselves, but also the RTW process [85]. Factors associated with positive RTW outcomes include high levels of self-efficacy, optimistic RTW expectations, RTW coordination with the workplace and relevant stakeholders, and support from the employer (e.g., [15, 86]). Furthermore, the sick-listed workers own perceptions and expectations of RTW are important prognostic factors for RTW [87]. Returning to work from sickness absence

can be a complex and challenging process for the individual, including several barriers and facilitators [72, 88, 89].

In terms of barriers, the sick-listed worker often struggles with deciding when to RTW and in what fashion [72]. And even after returning to work, the sick-listed find it difficult to implement and adhere to their planned strategies for a successful RTW [72]. During the RTW process, the sick-listed worker may experience varying levels of motivation and self-efficacy [89]. Furthermore, RTW pace, high sense of responsibility and fear of being perceived as a burden can result in too early RTW [74]. Rushing the RTW process can in turn lead to exceeding the sick-listed workers' work ability [72]. Perfectionism can also be a barrier for RTW, as it can make it difficult for sick-listed workers to slow down their work pace and accept their reduced work ability [74, 90].

In terms of facilitators, motivation is important in the RTW process, and motivation can be understood in different ways, such as based on the self-determination theory, which distinguishes between amotivation, controlled and autonomous motivation [91]. Different types of motivation can affect the RTW process in different ways. In a study exploring the different dimensions of motivation in the RTW process, Vanovenberghe et al. [91] found that sick-listed workers with controlled motivation for RTW predicted longer duration of work disability and poor mental quality of life. Controlled motivation for RTW (i.e., returning to work because of financial reasons or because others expect the sick-listed worker to RTW) can be converted into good quality motivation (i.e., returning to work because they enjoy their work or believe it is important) by supportive relationships with RTW professionals [91].

Furthermore, focusing on self-efficacy in sickness absence follow-up may be a successful approach for improving RTW. Self-efficacy is the belief in ones' ability to achieve a given goal or task [92] and has been associated with positive RTW outcomes [82]. High levels of RTW self-efficacy has been shown to be a robust predictor of RTW within three months [83, 84], whereas having low RTW self-efficacy is associated with a risk of late RTW [93]. However, Labriola et al. [94] found that even though self-efficacy was lower in sick-listed workers than in the general working population, it was

not associated with future sick leave or with RTW. Labriola et al. [94] argues that low self-efficacy among sick-listed workers may be a result of the sick leave and not a precursor of it. Thus, RTW interventions may benefit from focusing on increasing self-efficacy during the RTW process. Furthermore, a gradual and stepwise approach to RTW has been advocated, as sick-listed workers are reportedly concerned what impact a fast RTW can have on their health [72]. Consequently, more research is needed on individually targeted and gradual interventions to increase RTW self-efficacy for sick-listed workers.

2.7.1 The importance of return to work professionals

The importance of stakeholders (i.e. RTW professionals) in work disability has long been acknowledged, where a shift towards more communication and interaction between stakeholders has been emphasized [95]. This has also been highlighted by the Sherbrooke model, where work disability is viewed as influenced by actions or interaction between stakeholders (e.g., RTW professionals) at the workplace, healthcare system and compensation systems (e.g., NAV) [55]. For the sick-listed worker, cooperation with RTW professionals is important in the RTW process [8, 96]. More specifically, it is the quality and content of the relationship with the RTW professionals which is important for the sick-listed workers' RTW process. Positive, respectful and supportive encounters or relationships with RTW professionals has been found to be important for individuals on sick leave during their RTW process [77, 81, 97-102]. Mussener et al. [102] interviewed workers who had experienced being on long-term sick leave and been in contact with social insurance officers. They found that positive encounters could be divided into five categories: being treated with respect, feeling supported, establishing a personal relationship, perceiving demands as well-balanced and participating in decision-making regarding the rehabilitation process [102]. These findings are recurring when explored what constitutes a positive encounter with a RTW professional (e.g., [80, 97, 101, 103]), where also being supported and treated as an equal counterpart by RTW professionals can positively facilitate RTW [80].

Sturesson et al. [97] found that having a structured plan in the RTW process can help the sick-listed worker to better cope with their RTW situation, in addition to providing a clear structure in the RTW follow-up and support from the RTW professional. A previous study exploring injured workers' perspective of the vocational rehabilitation process found that an empathic and supportive relationship with the RTW professional engaged the worker in the job development process [104]. The role of the RTW professional is important in the RTW process in terms of structure, but establishing a good relationship with the sick-listed can be necessary to help the sick-listed overcome obstacles in the RTW process [105]. Partnership between the sick-listed and the RTW professional has been shown to be an important factor in a successful RTW process, as well as the focus on the individual's resources and motivation [103]. This has also been found to be important for unemployed sick-listed individuals with affective disorders, where the RTW professionals facilitated a feeling of power and hope by using a personcentered approach [106]. Thus, having an individual approach where RTW professionals focus on the sick-listed workers' own stated needs and seeing them as a unique person with specific problems, may be necessary for unlocking the potential of a successful RTW intervention [105]. Furthermore, a recent study found that building a trustful relationship between the sick-listed worker and RTW professional was essential in starting a RTW process at an early phase of the sick leave [107].

However, in a social insurance context, this might prove more difficult. Previous studies show that sick-listed workers experienced social insurance officials as being distant, lacking trust, questioning them and their credibility leading to not feeling believed or listened to, which led to feelings of powerlessness in the RTW process [37, 77]. Negative encounters with RTW professionals can lead to powerlessness [37], longer periods on sick leave [77] and reduced workability [99]. In a Swedish study of long-term sickness absentees' experiences of encounters with social insurance officers, Upmark et al. [108] found that 20% of respondents had experienced negative encounters where the social insurance officers doubted their capacity to work and questioned their motivation to work. However, the majority of respondents (72%) had experienced only positive encounters. Although the majority had experienced positive encounters, Upmark et al. [108] argues that the relatively high number of negative encounters does not enhance or facilitate their chances to RTW. A recent study on women's experiences of being in the RTW process found that regulations beyond the individual's control led

to a feeling of powerlessness [80]. Lack of control in one own process and not utilizing the sick-listed workers resources or wishes, can be considered a barrier for RTW [80]. Inducing negative emotions and self-evaluations during the RTW process has been proposed to contribute to negative effects on both work ability and health [99].

Comparatively, Andersén et al. [100] found that long-term sick-listed workers experienced positive encounters with the RTW professionals when using MI as the communication method. The sick-listed workers experienced that the RTW professionals were caring, nice and treated them well, while also being engaged and non-judgmental in their rehabilitation process. Andersén et al. [100] conclude that these positive encounters positively affected the sick-listed workers' self-efficacy in general and related to RTW.

2.8 Return to work interventions

RTW interventions are here defined as programs or efforts that aim to increase or facilitate RTW for individuals on sick leave. Most RTW interventions are costly, complex and time-consuming [70] and can vary in structure, components and reach such as: populations (e.g., workers, unemployed), sick leave duration, diagnoses (e.g., musculoskeletal disorders, mental health disorder), settings (e.g., work-directed, workplace-based), stakeholder coordination (e.g., employer, RTW professional, GP) intervention content (e.g., psychotherapy, workplace accommodations, group-based therapy), and RTW outcome (e.g., time to RTW, full-time RTW, sustainable RTW) [8]. Most RTW interventions focus primarily on either musculoskeletal disorders or mental health disorder, or a combination [8], as they represent the majority of causes for medically certified sick leave, which is also the case in Norway (57%) [58].

Most sick-listed workers RTW on their own within the first month and after the first few months of sick leave [58], the relative likelihood of returning to work decreases with time [5, 6]. Subsequently, the optimal time window for interventions has been suggested to be between 8-12 weeks of sick leave [7]. On the other hand, early interventions may not be cost-effective, nor have any additional impact on those with a good RTW prognosis and might even delay the RTW process [7, 65, 109, 110]. Hence,

a stepped care approach has been suggested, starting with brief interventions which may be suitable for most sick listed workers, before offering more complex interventions for those who may need more help to RTW [65]. Furthermore, individually tailored RTW interventions at different phases of sick leave with a time-bound action plan for RTW has been suggested [111]. This approach might take into account the complexity of each sick-listed worker's situation but may in itself be too complex to implement. Most evidence suggest that early interventions initiated within the first six to twelve weeks of sick leave is effective (e.g., [10, 112-114]). This illustrates the challenge of defining an early phase of long-term sick leave. Recent studies also suggest that RTW interventions can be effective in the later phases of sick leave, which suggests that the content of the intervention can be just as relevant to consider as the timing [70].

However, finding the most efficient type of intervention to implement has shown to be a difficult endeavor. Some targeted interventions seem promising, such as work-directed cognitive behavioral therapy for clinical depression [115], whereas broad multidisciplinary intervention programs show inconsistent effectiveness [8-12]. The majority of studies which have investigated the effects of RTW interventions have been on musculoskeletal disorders, rather than mental health disorder [70].

In a recent systematic review of RTW coordination programs for improving RTW in workers on sick leave, Vogel et al. [8] included RCTs that enrolled workers absent from work for at least four weeks and that had randomly been assigned to a RTW coordination program or usual practice. A total of 14 studies from nine countries that enrolled 12.568 workers were identified, where eleven studies focused on musculoskeletal problems. No benefits from all the included RTW coordination programs on RTW outcomes were found, only small benefits on patient-reported outcomes [8]. Two identical studies were identified, where one favored a RTW coordination program (e.g., [116]), whereas the other favored usual care practice (e.g., [117]). Vogel et al. [8] suggests an increased attention to workplace-based interventions and employer involvement in order to face these ambiguous and challenging findings on RTW interventions. However, employer RTW programs has been found to be effective at large and self-insured employers with the greatest impact on men and workers with

permanent disability, while small employers fail to offer necessary work accommodations and RTW programs in order to facilitate RTW [118].

While the literature on RTW interventions in general is substantial, there are only a small number of workplace-based RTW interventions [12]. In a recent systematic review on workplace-based RTW interventions, Cullen et al. [12] found that cognitive behavioral therapy intervention lacking workplace modifications or service coordination was not effective in helping sick-listed workers with mental health disorders to RTW. However, they found moderate levels of evidence that work-focused cognitive behavioral therapy interventions has a positive effect on work functioning after RTW [12]. Cullen et al. concludes that their synthesis revealed strong evidence for multidomain interventions (i.e. with healthcare provision, service coordination, and work accommodation components) [12]. However, complex and multi-domain interventions are costly, time-consuming and might even delay the RTW process (e.g., [7, 65, 70, 109, 110]).

In a systematic review on RTW interventions to improve RTW for sick-listed workers with depressive disorders, Nieuwenhuijsen et al. [115] found moderate quality evidence for work-directed interventions added to a clinical intervention to reduce sickness absence in five studies. Furthermore, three studies showed that telephone or online cognitive behavioral therapy was more effective in reducing sickness absence than usual primary or occupational care [115]. In a recent systematic review and meta-analysis of psychological treatments to improve RTW, Finnes et al. [119] found that psychological treatments were overall more effective in reducing sickness absence than treatment as usual. Cognitive behavioral therapy is often considered the preferred treatment for common mental health disorders like anxiety and depression, although it remains unclear whether it is superior to other forms of psychological treatment for RTW [120]. In a newly updated systematic review of RTW interventions for sick-listed workers with depressive disorders, Nieuwenhuijsen et al. identified nine work-directed studies where work modification in addition to regular care had a moderate reduction of sickness absence, with a decrease in depressive symptoms and improved work functioning [121]. In nine other studies, the researchers found that compared to regular care, psychological

therapy reduced sickness absence to a moderate extent. Although both the work-directed and psychological treatment interventions had a moderate reduction of sickness absence and depressive symptoms, it did not increase the number of individuals being at work at the end of the follow-up [121].

2.9 Motivational interviewing

MI was developed in the field of addiction treatment by William Miller and Stephen Rollnick [122]. MI is a collaborative and goal-oriented style of communication with particular attention to the language of change. It aims to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion [122]. MI was not derived from theory, but from specification of principles underlying intuitive clinical practice [123]. It has therefore been criticized for lacking a theoretical base [124]. MI has been influenced by many theorical perspectives such as Roger's client-centered counselling [125] cognitive dissonance theory [126], theory of psychological reactance [127], Bandura's self-efficacy concept [128], the transtheoretical model of change [129] and self-determination theory [130]. Each of these theoretical models have been applied to explain how and why MI can be effective, where each theory can be aligned with some distinct part of MI.

Despite the criticism of a lack of a holistic theoretical framework or the many definitions, a testable theory of its technical and relational mechanisms of action has emerged [131]. The underlying process of MI to achieve change can be categorized into a technical component and a relational component. The technical component of MI refers to the evocation and reinforcement of change talk by proficient use of MI techniques. The relational component refers to the empathic understanding and interpersonal spirit of MI, characterized by a collaborative relationship honoring the client's autonomy [131].

In MI, open-ended questions, affirmation, reflective listening, and summarizing (OARS) are referred to as core MI skills or techniques [122]. Open-ended questions are opposite of closed questions which typically elicit a "yes" or "no" response. Open

questions invite the client to "tell their story" and helps to gather descriptive information and facilitate dialogue. Affirmation are statements or gestures in order to demonstrate empathy and affirm the client's strengths and abilities for change. Reflective listening is the primary skill for demonstrating empathy, trust and building a relationship with the client. It involves rephrasing a statement in order to capture the implicit meaning or feeling of the client's statement. It can also be used to reinforce the desire for change. Summarizing involves making brief summaries throughout the session and as a conclusion of the session. A summary can be used to help to shift direction or move the conversation forward. It also helps to ensure mutual understanding in the dialogue and demonstrates listening and understanding the client's perspective [122]. MI can be divided into two phases: In the first phase the client is often ambivalent and insufficiently motivated for change. The aim is therefore to resolve the ambivalence and facilitate increased motivation to change. The second phase occurs when the client shows signs of readiness to change characterized by talk or questions about change and a future where the desired change have been made. The aim of the second phase is to strengthen the commitment to change and support the client into developing and implementing an action plan to achieve the change [132].

The MI method consists of an assumption that people have conflicting motivations for change and that the level of motivation and ambivalence varies [132]. Therefore, the aim of MI is to resolve the conflicting motivations and ambivalence by openly expressing them in order to reach the goal of intentional or behavioral change [122, 132]. MI can be considered a brief intervention, often delivered as one to four sessions [132], and has been found to be effective with even small doses of 15 minutes [133] and in single sessions [134]. Brief motivational interventions are defined as a combination of MI and personalized feedback delivered in one to two sessions [135]. The effect of MI on behavioral change has been widely researched and has been shown to be effective in various clinical settings [134, 136-139], but most notably for alcohol and other drug use [123, 138, 140]. MI has also been suggested as a tool to promote successful leadership and change within organizations [141] and been used as a tool to increase engagement and build ownership in a RTW intervention aimed to improve RTW dialogue between supervisors and short-term sick-listed workers [142].

2.9.1 Motivational interviewing research and return to work

An increasing literature is suggesting that MI fit well within a vocational counseling context (e.g., [143, 144]) and can improve RTW outcome [25, 26]. Furthermore, MI is the recommended counseling style for NAV caseworkers in sickness absence follow-up [24]. However, only a few studies have evaluated the effect of MI on RTW for sicklisted individuals, and evidence of the method's efficacy as a RTW intervention is lacking [27, 28]. To date, there exists one literature review by Page and Tchernitskaia [28] from 2014 and two systematic reviews by Flodgren et al. [27] from 2017 and Aanesen et al. [145] from 2020.

Page and Tchernitskaia [28] conducted a literature review to explore whether the use of MI can facilitate changes in thinking and behavior for individuals in a RTW context, revealing mixed support or evidence for using MI to facilitate RTW. Page and Tchernitskaia [28] argue that one factor for the lack of supporting evidence is due to the targeted populations and duration of sick leave, where some studies have focused on individuals who have been out of the work force for more than three months with chronic disorders, and thus harder to reintegrate to the work force. Furthermore, they argue that MI may best be used in a RTW context when it is tailored to the individuals readiness to change, in settings where the individual have enough control to affect their working conditions and when the MI given has high fidelity [28]. In a systematic review by Flodgren et al. [27] commissioned by NAV, five controlled studies met their inclusion criteria, whereas three studies suggested that MI led to people achieving employment, or on having returned to, or being in a process of returning to work. However, these studies were considered to be low to very low quality [27]. In a recent systematic mapping review by Aanesen et al. [145], they identified three studies from two RCTs. A Norwegian RCT with a brief group-based MI intervention for individuals on disability benefits showed no effect, with high risk of bias [146]. A Canadian cluster RCT with low risk of bias found that providing MI in addition to usual rehabilitation care led to more sustainable RTW both at discharge and at one-year follow-up compared to traditional rehabilitation for patients with musculoskeletal complaints [147, 148]. However, they lacked a control group for attention bias. It remains unclear

whether the results can be attributed to other characteristics of the added intervention or MI itself.

Our research group is conducting an ongoing RCT with paralleled group design in three arms, comparing a MI intervention, a non-MI intervention (attention bias control) and practice as usual [149]. Inspired by our project, a collaborating research group in Oslo, Norway is conducting a similarly designed three armed RCT for evaluating MI as a RTW intervention for long-term sick-listed workers with musculoskeletal disorders [150]. More high-quality RCTs comparing a MI intervention group to both active control groups and practice as usual are needed.

Only a few qualitative studies exploring how sick-listed workers experience receiving MI in a RTW context or how RTW professionals experience using MI in a RTW context. Andersen et al. [100] explored the experience of receiving MI in the RTW process and found that sick-listed workers describe the MI approach as a positive experience affecting their self-efficacy both in general and their RTW self-efficacy. Three studies have explored the RTW professional's perspective of using MI in a RTW context, two from Ståhl et al. [151, 152] and one from Secker and Margrove [153]. These studies showed that RTW professionals were positive towards using MI in a RTW context and that they found it to be useful [153], albeit difficult to translate into a social insurance context [151, 152]. Due to the relatively few studies on the use of MI in a RTW setting, more research is needed to further explore how MI can be used in a RTW setting from both the sick-listed workers and RTW professionals perspective.

2.9.2 Measuring motivational interviewing processes and fidelity

Learning and mastering MI is not easy [154] and proficiency cannot be developed through self-study or attending workshops [155]. Reaching proficient levels of MI has been found to be difficult despite both workshop training and additional supervision [156]. Typically, reaching proficient levels of MI require practice with feedback and coaching over time [155]. MI therapists` level of skills are known to vary within and between MI providers [157], and skill levels relates significantly to treatment outcome, even though the results are inconsistent [158].

The assessment of treatment fidelity is important for being able to distinguish between competent and not competent levels of MI in behavioral change interventions [159]. To assess the treatment fidelity of MI, most studies use trained MI coders who listen to a MI session and rate the presence of different therapist and/or client behaviors. This may for example be the number of times the MI therapist reflected the client's experience in the sessions, and then estimate the association between the reflection count with the total number of times the client spoke about changing a problematic behavior [158]. This can be done in single sessions or over time, within and/or between MI therapist using measures such as Motivational Interviewing Skills Code (MISC) [160] and Motivational Interviewing Treatment Integrity (MITI) [161]. A recent systematic review of MI assessment tools shows that MITI is the most commonly used tool to measure MI fidelity in training and efficacy studies. MITI has demonstrated good-to-excellent reliability estimates and strong criterion validity [162].

2.10 Implementing return to work interventions

The relatively sparse and mostly inconclusive evidence for effective RTW interventions has been suggested to be due varying settings and inconsistent implementation of interventions [13]. Difficulties with designing effective RTW interventions could be due to the multifaceted problems that sick-listed workers face, which involve an interaction between the individual, the workplace, health services and social surroundings [55]. Thus, to be able to better interpret the results of RCTs and improve implementation, increased attention is given to evaluating the implementation of interventions [29, 30]. Implementation can be viewed as part of a continuum from diffusion (i.e., the passive, untargeted and unplanned spread of new practice), to dissemination (i.e., the active spread of new practices to the target population using planned strategies), and implementation (i.e., the process of using or integrating new practices in a given setting) [163]. Several models or conceptual frameworks have been proposed in order to capture the multifaced factors of evaluating implementation of RTW interventions in organizations. Main et al. [163] summarized recent theoretical and methodological advances in the field of implementation science in disability management and suggests a four-phased model for evaluating implementation of interventions in organizations.

Followingly, in order to address internal and external factors, research recommend to: (1) assess organizational culture and readiness for change in addition to individual factors; (2) conduct process evaluations alongside controlled trials; (3) analyze decision-making factors among stakeholders; (4) solicit input from employers and stakeholders during early phases of study design [163]. Implementation research has mainly focused on quantitative assessments of implementation, whereas few have had a qualitative or mixed-methods approach. Due to the complexity of sickness absence and multi-professional and organizational involvement, a mixed-methods approach has been recommended [164].

A frequently used framework for process evaluations is the Reach, Effectiveness, Adoption, Implementation and Maintenance (RE-AIM) framework [165, 166]. RE-AIM is comprised of five steps to evaluate interventions by individual factors such as reach and effectiveness (RE), and multi-level organizational factors such as adoption, implementation, and maintenance (AIM) of the intervention [165]. Previous studies using the RE-AIM framework to evaluate RTW interventions have emphasized the importance of evaluating potential barriers and facilitators of implementation for practice and policy makers [31, 32]. Furthermore, it has been recommended to use mixed-methods when applying the RE-AIM framework in order to increase the transferability of the findings to practice [164, 167].

van Beurden et al. [31] conducted a process evaluation of a participatory RTW program for unemployed sick-listed individuals with musculoskeletal disorders using the RE-AIM framework. According to their quantitative evaluation, implementation was performed according to protocol and sick-listed individuals report being satisfied with the RTW professionals. Unclear information, administrative time-investment and the need for additional support in the case of complex health problems were identified as barriers of implementation of the program [31]. Based on only quantitative measures, van Beurden et al. [31] concluded that the findings indicated an overall feasibility for implementation of the intervention in daily practice. However, they lacked any qualitative evaluations to inform its opportunity in daily practice.

Martin et al. [13] conducted a mixed-methods evaluation of implementing a multi-site coordinated and tailored RTW intervention for sick-listed workers with mental health problems and found that different sites experienced different barriers and facilitators for implementation. In terms of barriers, the RTW professionals had differing sickness absence legislative understanding at different sites. Furthermore, there were competing initiatives at the different sites and varying levels of managerial support. Despite the varying levels of managerial support, the managerial involvement and motivation for the intervention were considered facilitating factors. Aust et al. [168] found similar findings when evaluating implementation of a RTW program across 21 Danish municipalities, especially in terms of varying fidelity of the intervention. Martin et al. [13] emphasize the importance of stakeholder involvement when design multi-site RTW interventions.

In a process evaluation of a RTW intervention to improve cooperation between sicklisted workers and employers, Hoefsmit et al. [169] found that the culture of the workplace delivering the intervention was a barrier for implementation. The workplace was characterized with high levels of autonomy and lack of adherence to policy, which exemplifies the need to consider the context or culture when implementing a RTW intervention.

Ståhl et al. [151] investigated the implementation of MI in a social insurance context. Implementing MI simply because training had been offered to the RTW professionals, lead to several difficulties. As for facilitating factors, the RTW professionals were positive about using MI and changed the way they met their clients. However, many barriers were identified. The RTW professionals struggled with using MI in a social insurance context and the application of MI was limited to only a few sets of MI skills. Furthermore, no organizational change was identified, and implementation largely failed due to a lack of managerial support and priority, competing initiatives and high workload [151].

3 Aim of the thesis

Knowledge about the early phases of long-term sick leave is scarce and exploring the complexity of sick-listed workers' RTW process is of importance for designing RTW interventions and guiding professionals working with RTW. Despite that MI have been suggested and used to facilitate RTW for many years, also by NAV, few have investigated or evaluated the implementation of MI in a social insurance setting.

The aim of this thesis was to explore sick-listed workers' experiences of being on long-term sick leave and receiving MI administered by caseworkers at NAV, and to evaluate barriers and facilitators for implementing MI as a RTW intervention. More specifically, the aims of the three papers were:

- 1. To explore psychosocial aspects of sick listed individual's experiences with being on sick leave after 8–12 weeks of sickness absence, and their expectations and thoughts about returning to work (Paper I).
- To explore sick-listed workers' experiences with MI in the RTW process (Paper II).
- 3. To evaluate potential barriers and facilitators for implementing motivational interviewing as a return to work intervention in a Norwegian social insurance setting (Paper III).

4 Methods

This thesis includes three papers with two different methodological approaches. Two qualitative interview studies (Paper I and II) exploring the experience of being long-term sick-listed and receiving MI by NAV. The last study had a mixed-methods approach using data triangulation comprised of focus groups, MI fidelity scoring and a questionnaire to evaluate implementation of the MI intervention (Paper III). All the studies were nested within an ongoing RCT.

4.1 Project context

This thesis is a part of the project "Motivational interviewing and stakeholder coordination to improve return to work: a randomized, controlled trial with mixed methods." This project is a collaboration between the Department of public health and nursing, the Department of psychology at NTNU, and NAV Trøndelag. The project was initiated to evaluate MI as an instrument for caseworkers at NAV in facilitating RTW for sick-listed workers. The research design was a RCT with paralleled group design in three arms, comparing a MI intervention, a non-MI intervention and practice as usual [149]. NAV caseworkers delivered the interventions at a NAV office in Trondheim, Norway's third largest city with approximately 190 000 inhabitants. Originally, two NAV offices in Trondheim participated in the project. In early 2018, these two offices were merged into one. The project aimed to include 750 participants (250 in each group) and started inclusion in august 2017. Due to problems with implementation of the intervention the first couple of months, it was decided to restart inclusion from Jan 1st, 2018. The design of the RCT is presented in figure 3.

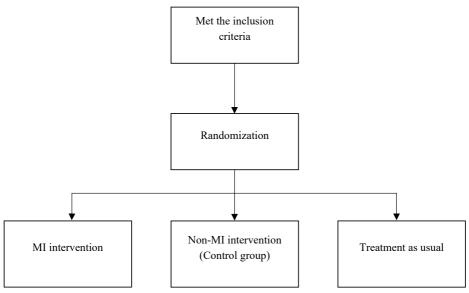


Figure 3: Design of the RCT. MI: motivational interviewing

4.2 The interventions

4.2.1 Motivational interviewing intervention

The MI intervention, also referred to as the MI sessions, was delivered in addition to usual NAV follow-up and consisted of two extra sessions offered to the sick-listed workers by a NAV caseworker after being on sick leave for 14 to 16 weeks. Each MI session had a maximum length of 60 minutes. Four caseworkers at NAV who were part of the project offered the MI intervention, in addition to their normal caseload.

In the first session the emphasis was on engaging the sick-listed worker in forming a collaborative relationship with the caseworker, evoking the person's own motivations to RTW, and mapping out an agenda for the session. During the first session, the caseworker also assessed the sick-listed worker's readiness to change, and the current RTW plan (if any), and assessed their RTW self-efficacy. The NAV caseworkers also assessed the participant's level of RTW readiness according to the stages of change model [129], to adjust the intervention accordingly. In the second session the MI caseworker aimed to map the sick listed individual's work tasks and earlier attempts of RTW. Information exchange of available support from NAV during the RTW process was included. The sick-listed worker's self-efficacy was assessed as well as the

worker's goals for their future work situation. Thereafter the worker's readiness for RTW change was assessed. The second session would ultimately result in one of two outcomes for the sick-listed worker: 1) The sick-listed worker was ready for change and/or ready to RTW and an action plan was written together with the NAV caseworker for establishing commitment to the plan. 2) The sick-listed worker was not ready for change and/or RTW was not appropriate at this moment (e.g., lack of work adaptations, health issues), then no plan was written. Whether or not a RTW plan was made in the sessions, the caseworker provided a written summary of the two MI-sessions that were made available online for the sick-listed worker.

4.2.2 Motivational interviewing training

Three MI experts offered the MI training with nine caseworkers from a local NAV office. These caseworkers were voluntarily selected to be trained and to administer the MI intervention. The MI intervention was carried out using a standardized MI guideline developed by the MI experts in our research group.

The selected MI caseworkers had two three-hour workshops with basic MI training in early 2017. During the six months leading up to intervention start, all the MI caseworkers received three-hour training sessions every other week, which was later adjusted to every three weeks. When the intervention started, the MI training consisted of three-hour supervision sessions every other week, from august 2018 reduced to a once a month. During the training, the caseworkers were guided to develop the necessary MI skills, in addition to receiving feedback from the MI experts on recorded MI sessions.

Due to slow recruitment to the RCT, the number of caseworkers administering the MI intervention were reduced from nine to four. The other five caseworkers who had undergone the MI training acted as substitutes if needed (referred to as MI-substitute caseworkers).

4.2.3 Non-motivational interviewing intervention control group

The non-MI control group consisted of two extra sessions that were offered to the sick-listed workers by a NAV caseworker after being on sick leave for 14–16 weeks. Each session had a maximum duration of 60 minutes. Although being similar in form, the non-MI control intervention and MI intervention were different in terms of content. This intervention had no extra emphasis on MI and served as a control for attention bias. During the first session the NAV caseworker tried to map out the sick-listed workers situation in general, in terms of work ability, type of work, relationship with employer, whether any there is any ongoing health treatment/rehabilitation, and their plan to RTW. The NAV caseworker also offered information regarding rights and obligations as sick-listed, in addition to what NAV can offer in RTW support. During the second session the NAV caseworkers followed-up on what had been focused on in the first session, whether there was any change in their situation as opposed to the previous session, and what their RTW plan was going forward. The NAV caseworkers in this intervention did not receive any supervision related to their contact with their clients [149].

4.2.4 Practice as usual

The practice as usual group consisted of standard sickness absence follow-up by NAV as described earlier in chapter 2.5.1 The Norwegian sickness benefit scheme and sickness absence follow-up.

4.3 Qualitative interviews

Qualitative research addresses the question of "what" which may also involve the conceptualization of its "how" and is a necessary foundation and complement to quantitative research [170]. One way to gain knowledge and gather data in qualitative research is through interviews, which relies on practical skills and personal judgement of the interviewer, to produce data through the relationship of the interviewer and interviewee [171]. The interview can be done in either an one-on-one setting called individual interviews or in groups of five to eight individuals called focus groups [172]. Individual interviews are recommended for exploring individual experiences and perspectives, especially for in-depth or sensitive topics, as it is often a calm and confidential one-on-one setting [172]. In contrast, focus groups are recommended for

exploring the shared experiences within a group [173], where group characteristics and dynamics can create different stories and perspectives than in a one-on-one setting [172]. The structure of the interview can range from unstructured to structured, whereas the most common approach is semi-structured interviews, which allow the participants to move somewhat freely within the topics provided by the researcher [172]

Qualitative interviews are generally suited to explore individual experiences and perspectives in depth [174]. The individual perspective on sick leave has been highlighted as an important factor influencing the RTW process and probability of returning to work [77, 80, 97-101, 175], and is therefore suited for a qualitative approach. Hence, semi-structured qualitative interviews were used to explore how individuals experienced long-term sick leave (Paper I) and how they experienced MI in their encounters with NAV (Paper II). Furthermore, focus groups were chosen to explore the shared experience of barriers and facilitators of using MI in sickness absence follow-up in NAV.

4.4 Mixed-methods process evaluation

Evaluating the implementation of interventions can help to interpret the results of RCTs and improve implementation [29, 30] When evaluating the implementation of a intervention, a mixed-methods approach is recommended to understand the complexity and multifaceted factors that can facilitate or obstruct implementation [164]. Using mixed-methods in a process evaluation not only helps to understand whether or not the intervention worked or failed, but also how and why [167]. Furthermore, it has been recommended to use mixed-methods when applying the RE-AIM framework in order to increase the transferability of the findings to practice [164, 167]. The process evaluation components adoption, implementation and maintenance were chosen to evaluate potential barriers and facilitators for implementing MI as a RTW intervention. Reach and effectiveness of the intervention will be reported separately in an effect evaluation later. In order to evaluate potential barriers and facilitators for implementing MI in a RTW setting, a mixed-methods process evaluation comprised of focus groups, MI fidelity scoring, and a questionnaire was conducted and guided by the RE-AIM framework [9, 29].

4.4.1 Process measures

Adoption refers to the willingness to initiate an intervention and how those administering the intervention react to it [164, 165]. Qualitative evaluation of adoption is useful for understanding reasons for adopting or not adopting, where semi-structured interview guides can be extremely illuminating [164]. By using focus groups, we explored whether the NAV caseworkers were willing to learn and use MI, and how they reacted to using MI during the RCT. A questionnaire was used to examine how sicklisted workers reacted to receiving the MI intervention, where participants were asked about satisfaction, usefulness and timing of the MI intervention.

Implementation includes whether the elements, structures and resources are in place to adequately achieve a successful implementation and whether it was delivered as planned [164, 165]. Implementation is the dimension of RE-AIM where qualitative understanding is most needed, for understanding the conditions under which consistency or inconsistency of implementation and fidelity occurred [164]. In order to explore the how, why and what of implementation fidelity [164], focus groups were used to explore how the NAV caseworkers experienced the MI intervention in terms of whether resources and structures were adequately in place to administer the interventions as planned during the RCT. Implementation can also be quantitatively measured through intervention fidelity indicators [164], in this case MI treatment fidelity, which was measured by using the MITI Coding Manual 4.2.1. [161].

Maintenance is the extent to which a program or policy becomes institutionalized or part of the routine organizational practices or policies [164, 165]. Understanding program sustainability and reasons for intervention continuation or discontinuation is important for practice and can be illuminated by qualitative methods [164]. By using focus groups, we explored what structures and resources were in place for the NAV caseworkers to maintain the MI intervention.

4.5 Recruitment and participants

All participants in Paper I and II were enrolled into the RCT prior to receiving an invitation to participate in the interviews and/or questionnaire. Participants were informed that participation in the studies did not affect their rights to sickness benefits in any way. All information in the interview studies was supplied from the participants during the interviews, and no other information from neither NAV nor the RCT was used or matched into the thesis. None of the researchers had any prior relationship with the participants.

4.5.1 RCT Study population

Eligible participants for the RCT were employed workers aged 18-60 years living in Trondheim, Central Norway and belonging to the NAV office included in the RCT. Participants had to be sick-listed for more than 7 weeks with a current sick leave status of 50-100%. Exclusion criteria were pregnancy and unemployment. Individuals who were not proficient enough in Norwegian to respond to the invitation or understand the request to participate, were excluded by NAV before randomization.

4.5.2 RCT recruitment procedure

Eligible participants were invited via NAV's electronic communication site, which is a secure internet site where NAV communicates with individuals on any form of benefits. Messages sent through this platform generates a text message on the eligible participants' mobile telephone and an e-mail notifying them about the message received. The message conveyed was an invitation text to the project and a link with detailed information about the project [176]. Potential participants were asked to read the information and accept or decline by replying to the message. They were given contact information to the principal investigator and the projects NAV contact in case of any questions. A written reminder was sent if potential participants had not responded to the invitation after seven days, and a phone call from a NAV employee after ten days of no response. One of the projects' NAV contacts checked positive responses for inclusion and exclusion criteria and forwarded a weekly list of new included participants to the researchers.

4.6 Recruitment and participants Paper I

Sick-listed workers who were enrolled into the RCT between November 2017 and February 2018 were invited to participate in the interview study. In total, 73 consecutive participants were contacted by one of the authors (VSF or MIS) via e-mail and invited to participate in an interview about their situation as sick-listed. Thirteen women and three men with current sick leave length of 9 to 13 weeks and an age range of 32–59 agreed to participate in the study. Fifty-seven individuals either did not respond to the e-mail or declined the invitation. See table 1 for descriptive information.

Table 1: Participants' descriptive information Paper I.

	N=16
Gender	
Male	3
Female	13
Age	
32-39	5
40-49	4
50-59	6
Self-reported reason for sick leave	
Common mental health disorder	10
Musculoskeletal disorder	3
Other	2
Education level	
High school	3
College/university up to 3 years	4
University more than 3 years	8
Working sector	
Public	9
Private	7

Education is described as the participant's highest completed education (higher education is at the university/college level). Level of education is missing for one participant. Age is missing for one participant. Self-reported reason for sick leave is missing for one participant.

4.7 Recruitment and participants Paper II

To participate in the current qualitative interview study, the sick-listed worker had to have already completed two MI sessions as part of the RCT. All study participants who had completed two MI sessions between November 2018 and January 2019 were identified by NAV (n=29). Contact information (cell phone number) of these individuals was forwarded to the researchers. In total, 29 individuals were called by one

of the authors (VSF or MIS) and invited to participate in an interview about their recent counseling sessions at NAV. Thirteen individuals either did not answer, declined the invitation, or did not show up at the interview.

In total, sixteen individuals, three men and thirteen women, who had completed two MI sessions participated in the interviews. They were aged 33–60 years and had a sick leave status varying from 50% to 100%, except one participant who since inclusion to the RCT had been graded to 40% sick leave at the time of the interview study. See table 2 for descriptive information.

Table 2: Participants' descriptive information Paper II.

	N=16
Gender	
Male	3
Female	13
Age	
33-39	2
40-49	4
50-59	9
60-64	1
Self-reported reason for sick leave	
Common mental health disorder	8
Musculoskeletal disorder	5
Other	3
Education level	
High school	2
College/university up to 3 years	4
University more than 3 years	8
Working sector	_
Public	8
Private	8

Education is described as the participant's highest completed education (higher education is at the university/college level). Level of education is missing for two participants.

4.8 Recruitment and participants Paper III

The study population of paper III consisted of both caseworkers at NAV Trøndelag working with sickness absence follow-up and who administered the MI intervention, and sick-listed workers who were enrolled into the RCT.

4.8.1 Sick-listed workers

All sick-listed workers who had completed two MI sessions between June 2018 and November 2019 were at the end of the last sessions invited to fill out a questionnaire (see supplementary files paper III). In total, 180 had completed two MI sessions and a total of 112 (62.2%) responded to the questionnaire.

Table 3. Baseline characteristics of sick-listed workers answering the questionnaire about the MI intervention

	MI
	N=112
Gender	
Female n (%)	70 (63%)
Age	
Mean (SD)	45 (9.7)
Education level	
High school n (%)	42 (38%)
College/university up to 3 years n (%)	26 (23%)
University more than 3 years n (%)	44 (39%)
Sick leave length ^a	
Less than 2 months n (%)	3 (3%)
2-4 months n (%)	53 (48%)
4-6 months n (%)	38 (34%)
6-8 months n (%)	14 (13%)
More than 8 months n (%)	3 (3%)

Note: MI intervention: Motivational interviewing intervention ^a Participants` length of sick leave at the time of the first MI session at NAV.

4.8.2 NAV caseworkers

Eligible participants in the focus groups were NAV caseworkers who administered the MI intervention or who had undergone the MI training to be substitutes for the caseworkers in the MI intervention (referred to as MI-substitute caseworkers).

E-mail addresses for all possible caseworkers in each group were forwarded by NAV management to the author VSF, who invited them to participate in the focus groups. All four of the possible caseworkers in the MI group accepted to participate, and three out of five in the MI-substitute group accepted to participate in the focus groups. The NAV

caseworkers had varying experience of working in NAV. In the MI group it ranged from 11 to 28 years, whereas for the MI-substitute group it ranged from 3.5 to 5.5 years. All the caseworkers who participated in focus groups were females.

4.9 Data collection

4.9.1 Interview studies

In Paper I and II data were collected through semi-structured individual interviews. Individual interviews were chosen as it allows for rich and in-depth descriptions of the participants experiences and allowed follow-up questions from the researcher. We aimed to collect a variety of experiences about being on long-term sick leave and from the MI sessions. Therefore, we allowed for different participant characteristics without defining a diagnostic specific sample. The quality of the dialogue and information obtained from the informants were continuously assessed and were considered satisfactory enough for uncovering the varying experiences of the participants. In both studies, the variety in experiences decreased after nine interviews and data collection ended after sixteen interviews as the data were judged satisfactory saturated for our purpose.

All interviews were performed at a university campus by one of the researchers (MIS or VSF). Written informed consent was obtained prior to the interviews. Each interview followed a semi-structured interview guide (see supplementary files Paper I and II) with five major questions. The interviews in Paper I were conducted between November 2017 and February 2018. Interviews in Paper II were conducted between November 2018 and January 2019. All interviews were audio recorded and transcribed verbatim. Due to the semi-structured nature of the interviews, the experiences shared by the participants where not strictly limited to each question asked. Some main questions were answered more briefly, and other questions answered more in-depth, with accompanying probing questions. All participants were willing to share their stories and experiences about the topics, although the level of detail in their descriptions and time spent on each main question varied. Some participants in Paper I cried during the interview when telling their story, whereas a few of them were reticent in their descriptions.

The term saturation was originally coined by Glaser and Strauss as an element of constant comparison in grounded theory [177]. Saturation has often been used in non-grounded theory analytical approaches to justify the number of participants in qualitative studies and that more participants would not add anything further to the analysis [178]. Malterud et al. argues that sample size and quality of data should not rely on procedures from a specific analytical approach, but rather methodological principles for estimating the adequate number of units, events or participants [178]. Subsequently, Malterud et al. propose the concept of information power, where the larger information power the sample holds, the lower number of participants are needed and vice versa. Malterud et al. [178] suggested a guide for determining an adequate sample size to obtain information power in qualitative studies based on aim of the study, sample specificity, theory, dialogue quality, and analytical strategy. Inspired by this, we estimated the need for 10–15 interviews in Paper I and II based on our research aims and the experience of the interviewers (VSF and MIS).

4.9.2 Focus groups

In order to investigate how NAV caseworkers experienced learning and using MI in their daily practice, two focus groups were carried out from January to February 2019, one with the MI caseworkers and one with the MI-substitute caseworkers, respectively. Duration of the focus groups were 89 minutes and 81 minutes. Focus groups are recommended for examining how knowledge, stories and self-presentation operate in a given cultural context, as opposed to individual interviews which are more effective for getting information about individual biographies [179]. We were interested in how knowledge and experience about MI implementation was shared and talked about among NAV caseworkers in the Norwegian social insurance and RTW context. The focus groups were based on a semi-structured interview guide with five main questions concerning their experiences with the MI sessions, MI training, how the organization had adopted the intervention, extra follow-up sessions versus usual follow-up and whether they would continue with the method after the completion of the project (see supplementary files Paper III). Both focus groups were asked about experienced barriers and facilitators for implementation of MI in daily practice. The focus groups were audio

recorded and transcribed verbatim. Each focus group were held in a meeting room at NAV and conducted by a moderator and co-moderator.

4.9.3 Motivational Interviewing Treatment Integrity (MITI)

MITI evaluates component processes within MI, such as engaging, focusing, evoking and planning [161] and is well suited for measuring MI fidelity in various settings [159]. The MITI Coding Manual 4.2.1. [161] has two components: Global scores and behavior counts. Global scores are reported on a five-point Likert scale, capturing the coders' overall impression of how poorly or well the MI therapist meet the dimensions measured. The global scores capture the underlying process of MI to achieve change comprised of a technical component and a relational component. The relational component refers to the empathic and interpersonal spirit of MI, whereas the technical component refers to the evocation and reinforcement of change talk [131]. Behavior counts captures specific MI behaviors and the use of MI skills in the session [161]. Behavioral coding is labor intensive [158] and level of MI proficiency if often reported by using global scores ranging from "Beginning proficiency" (1 - low) to "Competency" (5 - high). The threshold for "beginning proficiency" in the global technical score is ≥ 3 , whereas for the global relational score the threshold is ≥ 4 [161]. It is recommended to use random 20-minute segments of a MI sessions to measure fidelity [161]

Randomly selected audio-recordings of 20 MI sessions were collected from the four MI caseworkers on voluntary basis during 2019. The recordings were transcribed and two MI experts in the research group selected a 20-minute segment in each transcription for further coding. Transcripts were then sent to an external coding lab with objective raters [180] and coded according to the MITI Coding Manual 4.2.1. [161]. Global scores were reported on a five-point Likert scale, capturing the coders' overall impression of how poorly or well the MI counselor met the dimensions measured, ranging from "Beginning proficiency" (low) to "Competency" (high) [161].

4.9.4 Questionnaires

The NAV caseworkers delivered questionnaires to the sick-listed workers who had completed their second MI session between June 2018 and November 2019. The sick-listed workers were asked about their satisfaction with the conversations on a scale from 1 (very dissatisfied) to 5 (very satisfied), and how useful they felt the conversations were (scored on a scale from 1 (not useful) to 5 (very useful)). Participants were asked about the timing of the sessions with the questions: "did the two follow-up conversations come at an appropriate timing for you?" ("yes" or "no" alternatives) and "if the conversations were to come at another time, when do you think it would have been best?" with six alternatives: "two months earlier", "one month earlier", "the timing was good", "one month later", "two months later", or "three or four months later".

4.10 Data analysis

Qualitative analysis can be utilized in many different ways and enable researchers to delve into questions of meaning, experience, practices and processes. It can also help to investigate barriers and facilitators for change, as well as reasons for success or failure of interventions [181]. While some adhere to specific philosophical traditions (e.g., phenomenology or hermeneutics), others rely on methodological traditions (e.g., grounded theory or ethnography) [182]. Furthermore, data analysis can be theory driven or distinguished between a descriptive or interpretative analysis [182]. Choosing the right analysis helps to ensure that the research produces useful results [181].

For our purpose we chose three different analyses for the three papers, where Giorgi's descriptive phenomenological method [183] was chosen to analyse how sicklisted workers experience being on long term sick leave in Paper I. Systematic text condensation [184] was chosen to analyze how sick-listed workers retrospectively experienced the MI sessions in Paper II. Thematic analysis [185] was chosen to analyze how NAV caseworkers experienced barriers and facilitators for implementation in Paper III.

This thesis has not situated itself exclusively in one of the three approaches, but rather been inspired by these three approaches in a pragmatic way due to the different aims of the papers. Kvale and Brinkmann [171] uses two contrasting metaphorical concepts to explain how data is generated, where the interviewer can be viewed as a miner or a traveler. A miner illustrates the assumption of digging for something that is there to be found (e.g., positivism), as opposed to the traveler, who sets out on a journey toward knowledge and learn by means of the journey or through conversation (e.g., constructivism) [171]. Consequently, this influences how data is analyzed. It is difficult to place any of the three analyses in this thesis within one of these dimensions, as they somewhat overlap between a miner and a traveler and can thus be better understood as part of a continuum.

Similar for these three chosen approaches is how data is generated and the goal of a thematic analysis of meaning and content of data across cases [184], where participants are asked to describe their experiences based on an interview guide concerning the phenomenon or topics in question, where the interviewer can probe for clarity and detail. The analytic method seeks to identify descriptions of the phenomenon in question, in a stage sorted coding and decontextualization. Then, themes are identified and sorted, where the essence and commonality of the experience if described in the stage of recontextualization [181]. The researchers' views and preconceptions are mitigated through bracketing [186]. The end product is a thematic description of the essence and structures of the lived experience [181]. The qualitative data analyses used in each paper of this thesis is described under each approach.

4.10.1 Descriptive phenomenology

In Paper I, data analysis was inspired by Giorgi's descriptive phenomenological method [183]. This approach offers a method for gaining knowledge of a specific phenomenon, such as being on long-term sick leave. Descriptive phenomenology attempts to understand how something is experienced from the perspective of the person undergoing the experience, what is also referred to as the lived experience. The method thus allows for examination of the subjective experiences of individuals and how people create meaning in their situations [183]. Phenomenological reduction, a form of bracketing [187], is important in order to describe the phenomenon as experienced by the participants [183]. Thus, it is the individuals' own descriptions and meaning of the

experience that is of interest and not researchers' interpretation. In Paper I, due to the researchers' knowledge about sick leave in general, this might have influenced our analysis and interpretation of the findings. Descriptive phenomenological method was viewed as well suited for the purpose of Paper I, where phenomenological reduction is important in gaining knowledge about the participants lived experience of being on long-term sick leave – and not how scholars in the field interpret participants' experience.

The analytic steps undertaken in Paper I were closely followed as outlined by Giorgi [183]. After attempting to assume the phenomenological attitude, the first step involved reading each complete interview transcript to get an overview of the individual's situation as described by the participant. As the phenomenological method is holistic, no further steps should be taken before the researcher has an understanding of what the data is like [187]. After each transcript were read in its entirety, a short summary and reflection of each transcript was written. The second step of the analysis was to reread the data in search of meaning units [183]. Every time there is a transition of meaning in the data, the researcher marks that description or unit of data and thus creating meaning units. Meaning units are re-expressed in third-person phrasing using as much of the participants' own words are possible. This change of expression does not change the meaning content, but assists the researcher in maintaining the phenomenological attitude [183]. Giorgi states that different researchers will have different meaning units [187], and this process was carried out by two of the authors (VSF and MIS). The third step of analysis involved transforming the data into general descriptions in third-person phrasing [183] and is described as the heart of the method, connecting what is said in the interviews to the phenomenon being studied. [187]. The third-person descriptions contain the essential psychological meanings and is the basis for the last step of analysis, which involved developing themes [183]. Two of the authors (VSF and MIS) developed themes separately based on the descriptions from the meaning units. All the authors read and analyzed one or more of the interviews that were viewed as rich in data. The theme development was conducted both individually and in meetings with all authors. The themes were validated with the initial meaning units, and written into an analytical text as presented in Paper I.

4.10.2 Systematic text condensation

In Paper II, data analysis was based on systematic text condensation, which was originally inspired by descriptive phenomenology [184]. Systematic text condensation is a four-step descriptive analytical process with explorative ambitions to describe the experience of the participant as they express them. Like in Giorgi's approach, systematic text condensation includes an analytical reduction of data, with specified shifts between decontextualization and recontextualization of data [184]. The text reducing stage where decontextualized selections of meaning units are sorted as thematic code is what Malterud et al. [184] calls condensation, which is one of the main characterizes of the method. Since the aim of Paper II was to explore a specific experience in a given situation, we assumed that the data would be rich. Hence, we chose this text reducing approach for several reasons. Systematic text condensation is a method which is a pragmatic and well-suited approach for novice researchers, while still ensuring a responsible level of methodological quality [184]. A theoretical framework is optional but not necessary, and the approach is somewhat detached from any specific epistemological position [184].

The analytic steps undertaken in Paper II were closely followed as outlined by Malterud et al. [184] where the first step of the analysis involves reading the data as a whole to get an overall impression of the data and to identify possible themes [184]. The transcripts of the first four interviews were read before further interviews were carried out, which allowed us to recognize preliminary themes. Minor adaptations to the interview guide were made after the first four interviews in order to improve the wording of the questions and to add some specific follow-up questions regarding the MI sessions. This process was repeated after the ninth and sixteenth interview to increase the quality of the interview guide. The second step of the analysis was to identify and sort meaning units [184]. In the preliminary analysis, meaning units were coded and sorted into themes. The third step of the analysis is called condensation, which involves decontextualizing the meaning units by rewriting them into illustrative quotes. By rewriting the meaning units into first-person narratives, we created a sum of the participants voices regarding the phenomenon that was described in the data.

Malterud [184] states that if you fail to perform the step of condensation, it is misleading to call your approach systematic text condensation. The fourth step of the analysis entailed synthesizing descriptions and concepts by recontextualizing the condensations [184]. The condensations were checked against the raw data in the transcripts in order to validate that the findings represented the experiences described by the participants. Then they were recontextualized into themes and validated by all other authors. Finally, the recontextualized meaning and phenomena were written together into an analytical text.

4.10.3 Thematic analysis

In Paper III, data analysis of the focus group was based on reflexive thematic analysis, which is a method for identifying, analyzing, and reporting patterns within data and suitable for analyzing focus group data [185]. Thematic analysis is a flexible approach which allows researchers to interpret the data through a six phased recursive process [185]. The recursive process allows the researcher to move back and forth between phases if needed, where themes are built from codes. Thematic analysis can be used in various types of qualitative data and is suitable for analyzing focus group data [185]. Reflexive thematic analysis can be used in a deductive orientation, where coding and theme development can be directed by a theoretical framework [188]. Therefore, this approach was considered well-suited for the purpose of Paper III when applying the RE-AIM framework [165].

The first step of the analysis involved reading the data to become familiar with the data and occurring patterns [185]. Transcripts of all three focus groups were read and re-read to get an overall impression and familiarize with the data. Preliminary codes and patterns were identified, as a start of the coding process. The second step of the analysis was the coding process, where items of interest related to the aim were coded. These codes were then used to create core categories for further development of initial themes [185]. The third step was combining the codes into initial themes, which is a data reducing process which allows interpretation from the researchers [185]. The fourth step was reviewing the generated themes and checking them against the coded data, in order to further expand or revise the developed themes [185]. All authors involved in the data

analysis of Paper III had several meetings to discuss and validate the final themes, as a part of the fifth step of the analysis, which is to define and refine the existing themes in order to tell a coherent and compelling story about the data [185]. The sixth and final step of the analysis was to write the final report of the data into a thick description of the findings, contextualized in relation to existing literature [185]. The thick descriptions were written together into an analytical text in relation to the RE-AIM framework [165]. The focus group participants read the final results in order to validate quotes and content. The analysis was first conducted on the data from the MI caseworker group, followed by deriving differences and nuances from the focus groups with MI-substitute caseworkers.

4.10.4 Statistical analysis

Descriptive statistics were used to describe the questionnaire and MITI data (Paper III) in Stata 15.1, College Station, TX [189].

4.11 Ethics

The studies were approved by REC South East – the Regional Committees for Medical and Health Research Ethics in South East Norway (No: 2016/2300) and the trial is registered in clinicaltrials.gov (No: NCT03212118). All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. All participants received written and oral information about the study and gave their written consent before the interviews and focus groups started. Participants were informed that participation was voluntary and that they could withdraw from the study at any time. The sick-listed workers had given informed consent when being enrolled into the RCT study but provided specific consent for the questionnaire and audio-recordings of the 20 MI sessions.

Sick-leave is a complex situation involving a combination of health, work, social and family stressors for the individual. Exploring how individuals experience long-term sick leave may result in participants sharing sensitive information about their health, work

and family life that may be difficult to talk about, and thus be a burden. This became visible in the interviews for Paper I where some participants cried when talking about their situation and their difficulties in returning to work. None of the participants shared similar emotions in the interviews for Paper II, which may indicate that neither the interview guide or probing questions addressed sensitive topics like in Paper I, or that these feelings and emotions are more state-dependent in the early stages of long-term sick leave.

Recording MI sessions was done on a voluntary basis for the caseworkers, but as they were a part of an office wide project, they may have felt pressured to comply or that adherence was expected from management. Similarly, the caseworkers may have felt obligated to participate in the focus group study, which might have affected what they chose to share.

4.11.1 Anonymity

An idealized view of anonymity is that the participants identity will never be traceable from the data presented about them [190], but guaranteeing complete anonymity to participants is arguably difficult [191]. Anonymity can also be viewed as a continuum from fully anonymous to very nearly unidentifiable, where researchers balance two competing priorities: maximizing the participants' anonymity and maintaining the data value and integrity [190]. In this thesis, names, dates, places and people in mentioned in the transcripts were anonymized by replacing or deleting this data, as it was the phenomena or topic that was of interest.

All raw and not anonymized data from the interviews and focus groups were stored locally on an encrypted memory stick and only accessible for two of the researchers in the project. Furthermore, as data was analyzed with analytical approaches that reduce the participants actual statements into core summaries, which then were written to an analytic text in the result section, we consider the participants identity to be unidentifiable in the interview studies. Quotes were also translated from Norwegian to English, thus adding to the level of unidentifiability.

However, anonymity was considered more difficult in the focus group study than in the interviews. Nearly all possible caseworkers at the local NAV office (10 out of 13), which was a relatively small population to begin with, attended the focus groups. Thus, standard anonymizing procedures (e.g., anonymizing participants characteristics) were considered insufficient. Therefore, the caseworkers were informed about this prior to attending the focus groups. Some distinct stories or experiences were taken out from the final draft of the results, since they were considered by the researchers to be very identifiable. It must also be acknowledged that the participants' colleagues are one of the papers intended audience. As a result of this, the final draft of the results was sent to the focus group participants in order to validate quotes and content and given the opportunity to edit potentially identifiable sections. None of the participants opted to do so.

5 Results

5.1 Paper I

This study explored experiences with sick leave and thoughts about returning to work among individuals with 9–13 weeks of sick leave. Being on sick leave were a situation where a combination of health issues and work and family stressors were experienced as energy depleting. Even though being on sick leave had a negative impact on their identity, social life, and contributed to the feeling of being abnormal, participants viewed sick leave as necessary in order to distribute their energy to resolve their challenges. Thus, RTW was desirable, but participants needed assistance in order to find solutions to resolve their challenges and progress towards returning fully to work. Lacking a solution also contributed to a feeling that returning to work was difficult and dependent on factors outside of their control. Those who did not find solutions from other services and were uncertain about how to make progress generally expressed more need for NAV involvement.

5.2 Paper II

This study explored sick-listed workers' experiences with MI in the RTW process. The MI sessions were experienced as a positive encounter due to the supportive relationship that was built between the MI caseworker and the sick-listed worker, where the personality of their MI caseworker appeared to be matched to their own in terms of sense of humor, expressive communication style, and personal interests. In a difficult situation where participants experienced stigma and guilt, the MI sessions served as an arena for normalization and providing legitimacy through support from the MI caseworker, which reduced the feeling of guilt and stigma. The individually tailored information and the support provided by the MI caseworker helped participants to reorient their perception towards workload, work tasks, working time and RTW pace. Receiving personal feedback about their RTW plan, either to support their current plan or to reflect upon potential changes to their plan, increased their experienced RTW self-efficacy.

5.3 Paper III

This study evaluated potential barriers and facilitators for implementing MI as a RTW intervention in a Norwegian social insurance setting. The main barriers for adopting MI were the amount of training and practice that was needed to master the various MI skills. The barriers of implementing MI was that delivering the MI intervention was experienced as resource demanding and an extra workload, in addition to a lack of coworker and managerial support. The barriers for maintenance were mainly that MI caseworkers had no appropriate time and place for practicing to further develop MI skills. MITI scores showed that the MI caseworkers were over the threshold for "beginning proficiency" in the technical component of MI, whereas they scored beneath the threshold in the relational component. The main facilitators for implementing MI were the motivation to learn and master the MI method and that early follow-up sessions allowed the caseworkers to understand the complexity of the sick-listed workers life situation and positively influence their RTW process. Also, the sick-listed workers were satisfied with the MI sessions.

6 Discussion

6.1 Discussion of findings

The need for return to work support in the early phases of long-term sick leave The participants in Paper I needed assistance in order to find solutions and progress towards returning to work after two months of sick leave, where the employer and GP were the most important stakeholders in the RTW process. GPs are viewed by other stakeholders as important for sick-listed workers in their RTW process, whereas the GPs view themselves primarily as advocates for the patients, their well-being and health [192]. The employer is also an important stakeholder in the RTW process (e.g., [45, 46]). In a study exploring employers and employees' experiences with RTW promoting factors, Jakobsen and Lillefjell [193] found that staying motivated was an important factor in order to stay at work, emphasizing that motivational conversations and support can be important factors promoting RTW. Employers were largely willing to adjust or facilitate graded sick leave for the participants (as seen in Paper I), which has shown to have a positive effect on RTW and sustainable work participation [194]. However, this may partly be due to combination of health selection effects, where less healthy individuals might be unable to work at all [195] and that small employers fail to offer necessary work accommodations and RTW programs in order to facilitate RTW [118]. The GP and employer are not only important stakeholders in the RTW process, but also the only stakeholders experienced as taking part in the sick-listed workers' RTW process in the early phases of long-term sick leave (Paper I). When the sick-listed worker does not receive adequate or perceived support from the employer, there may be an increased need for support from other RTW professionals such as NAV caseworkers (e.g., [196, 197]) in the early phases of long-term sick leave.

Aasdahl and Fimland [70] argues that although several studies have found an effect on RTW for individuals sick-listed about 8 to 12 weeks, most of these studies were inspired by the Sherbrooke model [55] and thus included workplace interventions and coordination between stakeholders. Hence, the findings from these studies could be a result of the content of the interventions, rather than the timing [70]. It has previously been reported that sick-listed workers experience the content and timing of standard follow-up given by NAV as insufficient to facilitate RTW [23]. Earlier involvement

from NAV was desired by the participants, as shown in Paper I, and it has also previously been suggested that NAV should play a more active part in the sickness absence follow-up at an earlier phase [23]. Playing a more active part could indicate having meetings with the sick-listed workers already at eight weeks of sick leave in order to prevent long-term sick leave and future temporary medical benefits [68]. The findings in Paper II suggest that early follow-up sessions with MI were beneficial for the sick-listed workers, where the MI caseworkers helped to reorient their perceptions towards work (e.g., workload, work tasks and RTW pace), RTW strategies and RTW self-efficacy. In Paper III, the majority of the sick-listed workers reported being satisfied with the content and timing of the MI sessions. Subsequently, early follow-up sessions with NAV using MI may be useful in facilitating RTW from the sick-listed workers' perspective.

The MI sessions at NAV arguably only applies to two of the four systems described in the Sherbrooke model [55], the personal system and the legislative system. In terms of the personal system, the MI sessions can influence the sick-listed workers' RTW selfefficacy. Regarding the workplace system and health care system, the MI sessions' contribution is unknown. However, as the MI sessions is an individual approach, the responsibility of stakeholder cooperation between these systems will therefore be placed on the sick-listed worker, which has its strengths and limitations. The sick-listed worker is at the center of the arena in work disability prevention as described by the Sherbrooke model, and thus promoting the sick-listed workers' RTW self-efficacy in a MI session is arguably a strength. However, the limitation of the is the lack of cooperation and influence from the two remaining systems in the model, the health care system and the workplace system, respectively. As the workplace system is important in the RTW process, placing the responsibility solely on the sick-listed worker can be considered problematic. As Ståhl [198] argues, the focus on individual resilience in to endure strain and poor working conditions in current social insurance policies, may lead to work disability being interpreted as individual failure. Subsequently, the responsibility of a successful RTW process can be placed on the sick-listed worker, who may not be in a position to make demands given the health condition and the dependency in relation to the employer [198]. Although the MI sessions can be considered strengthening for the

individual in their RTW process, a greater involvement with corresponding systems as described in the Sherbrooke model may have an added value for achieving RTW.

6.1.2 Overcoming obstacles in the return to work process

Being sick-listed can also include feelings of stigma [85], especially in relation to medically unexplained physical symptom conditions [199] and common mental disorders [107], and previous research has shown that unexplained disorders may cause longer illness duration [200]. In Paper II, experiencing reduced workability due to either physical or mental issues (or both), included a search for legitimacy for the sick leave. The absence of a visible and physical reason for the sick leave can be experienced as equivalent to an illegitimate sick leave. Garthwaite [199] found that the need to validate illness was important for sick-listed workers, and the search for legitimacy was a big part of their current lives. Diverging expectations related to disclosing the diagnosis has been found between involved stakeholders in the RTW process, where individuals on sick leave due to common mental disorders prefer not to disclose their illness to their colleagues, due to fear of stigmatization [107]. Thus, gaining acceptance from others about their situation can make it easier for the sick-listed worker to accept their own absence from work [203].

Acceptance and compassion is central in MI [122], and respect and validation from relevant stakeholders is found to make the RTW process easier for the sick-listed worker [201]. Hence, the acceptance and support from the caseworker can help reduce their feelings of guilt, stigma and perceived barriers to RTW. In Paper II, the MI sessions was experienced as an arena for normalizing and providing legitimacy through support from the MI caseworker, which reduced the feeling of guilt and stigma. In turn, this enabled the sick-listed workers to transition into talking about RTW strategies. Enabling or engaging the sick-listed worker to take control in the RTW process has been found to be important for positive RTW outcomes [82]. Regaining control of the RTW process can be achieved by increasing the sick-listed workers' self-understanding and viewing oneself as an active agent [103] and reorienting the sick-listed workers'

perspective and goals, in addition to receiving support from friends, family or RTW professionals [74].

Sick-listed workers may experience expectations from others that restrict activities that promote recovery [202], such as where the participants in Paper I found it easier to avoid social situations that required them to talk about or explain their sick leave. However, most also realized that lack of activity, social isolation, and distancing themselves from their workplace might hinder their recovery and RTW. Some of the participants in Paper I chose not to convey the reason for the sick leave to their employer. On the one hand, not explaining the reason for sick leave may signal a lack of legitimacy which can create tension with colleagues [203], while on the other hand, communicating limitations reduces co-worker resentment [204]. Consequently, the sicklisted worker is faced with a difficult trade-off in the balance of transparency and confidentiality when deciding how much to share about their sick leave, which can be perceived as a barrier for RTW. In the MI sessions in Paper II, diminishing the sicklisted workers' self-perceived barriers of RTW enabled the sick-listed worker to talk about and adjust RTW strategies. This can be achieved by the MI caseworkers when they accentuate the sick-listed worker's own expertise and knowledge on how to overcome obstacles in the RTW process, which is central in MI, where the therapist should be able to give up the expert role and support the client's autonomy and expertise in decisions about change [205].

6.1.3 Supportive return to work professionals

Positive, respectful and supportive encounters or relationships with RTW professionals has been found to be important for individuals on sick leave during their RTW process [77, 81, 97-102]. The positive encounters in Lännerström et al. [37] study was characterized by professionals who asked what the sick-listed workers wanted and treated them with respect. In MI, the client in assumed to be the expert on how to change their circumstances [205]. Thus, the role of a MI practitioner is not to provide answers and solutions, but recognize that the client has insights and capabilities of providing solutions to their own problems [25]. A recent report exploring the conversational structure of various NAV follow-up sessions, found that the NAV

sessions rarely had a clear structure that was made explicit for the individual, and that conversation topics where mainly restricted to what the caseworker asked about [206]. In contrast, the structure of the MI sessions in Paper II allowed the sick-listed worker to be heard and take control of the conversation and subsequent topics, and in turn, their own situation. Discussing their situation with caseworkers may also increase awareness of one's own capacity, which Jansson et al. [207] argues is a component of self-efficacy. Norlund et al. [197] states that self-efficacy affects thought patters that could be barriers to returning to work. Furthermore, receiving positive feedback from others may also increase the individual's self-efficacy [197], such as the positive feedback the sick-listed workers experienced when presenting their RTW plan to the MI caseworkers. Consequently, since self-efficacy and support has been highlighted as important in the RTW process in long-term sick leave [14-19], receiving individually tailored information, support and positive feedback from a MI caseworker on their thoughts on RTW might strengthen their self-efficacy towards RTW.

6.1.4 Double role paradox

The RTW process is complex for the sick-listed worker (e.g., [72]), but also for caseworkers in sickness absence follow-up [208]. Caseworkers make decision concerning entitlement to sickness benefits, which have a major impact on the lives of the individual and on society [209]. Being a supportive RTW professional may be difficult in a social insurance context, such as in Norway, where a caseworker operates both as a RTW professional for the sick-listed in the RTW process and as a controller for the sickness benefits [22]. The role as RTW professional involves facilitating RTW for the sick-listed worker by providing support through dialogue and promoting RTW instruments/efforts which are available from NAV [23]. The role as a controller entails to check and evaluate eligibility for rights to services from NAV and sickness benefit payouts from the National Insurance Scheme [210]. NAV serves in many ways a gatekeeper for the national insurance scheme and sickness benefits [23] and has an important role in sickness absence follow-up, with the potential of positively affecting RTW for sick-listed workers both directly and indirectly [23]. Although, being in contact with NAV has shown to have a negative impact on the probability to RTW, as it may lead to the development of a 'social insurance career' [21]. Furthermore, it has

previously been found that the sickness absence follow-up given by NAV has been considered insufficient from the sick-listed workers' perspective [23]. Similarly, participants in Paper I expressed more need for NAV involvement in the early phase of long-term sick leave.

These conflicting roles has been found to create ambivalence in decision making for caseworkers [209], which was also the case for the caseworkers in Paper III.

On the one hand they were supposed to help individuals and develop a good relationship with the sick-listed workers, while on the other hand they were a controller to sickness benefits. Similar findings have previously been reported from Swedish social insurance officials, where dividing roles with focus on administration on the one hand, and coordination in the other, poses challenges in providing sickness absence follow-up to the sick-listed workers as their roles becomes increasingly more complex [208]. Thus, being both a RTW professional and a controller for sickness benefits presents a double role paradox for the caseworkers. Managing two conflicting roles only adds to the complexity of the caseworker role [208] with handling high caseload, time pressure [151] and coordinating RTW processes with relevant stakeholders [66].

For the sick-listed worker, meeting a person with these dual roles can be experienced as conflicting and may in turn result in a barrier for establishing a good relationship [105] and lead to negative experiences [77]. Still, none of the participants in Paper II had any negative experiences related to the controlling function of the caseworker role. This may be because the caseworkers retrieved necessary information beforehand, that no more information was needed, or that necessary information was in fact unnoticeably retrieved through dialogue in the MI sessions.

Positive and supportive encounters can promote RTW and strengthen self-efficacy (e.g., [77, 97-102]), which has also been found when using MI in sickness absence follow-up [100]. The participants in Paper II described having a positive and good relationship with the MI caseworkers. This may be because the MI sessions were driven by their expressed needs, in combination with creating a good relationship, which is one of the cornerstones of MI. In MI, the relationship between a counselor (e.g., MI caseworker)

and a client (e.g., sick-listed worker) is characterized by acceptance and empathic understanding from the counselor [205]. From a RTW professional's perspective, building an alliance is important in order to succeed with facilitating RTW for sick-listed workers [196].

The MI caseworkers in Paper III described that using MI was more indicative of being a RTW professional rather than a controller for sickness benefits. Putting on the proverbial "MI hat" helped the caseworkers to focus on establishing a good relationship, rather than focusing on entitlement to sickness benefits. The controller role may thus have been moderated through the MI caseworkers' focus on the relational and empathic aspects of the MI sessions. Consequently, MI may be beneficial as a tool in reducing the barrier that the double role paradox poses on the sick-listed workers and caseworkers' cooperation in the RTW process.

The double role is embedded in the role as a caseworker in sickness absence follow-up in Norway [22]. Correspondingly, the role of a controller includes information exchange between the caseworker and sick-listed worker in a counseling session, in order to check and evaluate eligibility for sickness benefits. As a result, a NAV counseling session differs in terms of the amount of information exchange necessary as compared to a clinical setting, which MI originally was developed for [122] and where it most commonly has been found to be effective (e.g., [123, 133, 134, 136-140]). This illustrates that the adaptation of MI in a non-therapeutic social insurance setting may be hindered by conflicting roles and the amount of information exchange necessary.

Process evaluations may assist in distinguishing between intervention failure (e.g., if the concept itself is flawed) and implementation failure (e.g., if the intervention is poorly delivered) [211, 212]. Increased attention has been given to evaluating implementation of interventions, which also can help interpret results of RTCs [29, 30]. Implementing RTW interventions are complex processes, and an inconsistent implementation has been suggested to be a reason for the number of ineffective RTW interventions [13].

6.1.5 Implementing Motivational interviewing for counseling sick-listed workers

Implementation research often evaluates potential barriers and facilitators for

implementation (e.g., [31, 32]). MI as a RTW intervention in sickness absence follow-up has been suggested (e.g., [25, 26, 143, 144]), but rarely found to be effective (e.g., [27, 28, 145]). Moreover, implementation of MI in a social insurance setting has only once been investigated [151]. Thus, knowledge about barriers and facilitators for implementing MI in a social insurance setting is lacking.

One of the main facilitators for implementing MI were the caseworkers' motivation to learn and master the MI method (Paper III). Another facilitating factor was that early follow-up sessions allowed the caseworkers to understand the complexity of the sicklisted workers life situation and positively influence their RTW process, which was a meaningful and preferred way of doing follow-up. This was echoed by the sick-listed workers, who reported being satisfied with the MI sessions and its timing (Paper III). A recent study investigated how caseworkers' role identities are perceived and practiced in two of the largest state bureaucracies in Sweden [213]. The authors argue that agency cultures, meaning the institutionalized social norms guiding collegial interaction, employee - client interactions, as well as employee - manager interaction, affects what caseworkers perceive as "good" work [213]. Arguably, the MI caseworkers in Paper III perceived using MI in early follow-up sessions as "good" work. Awareness of what constitutes a caseworkers' perception of a "good" work when assessing and making decisions regarding a sick-listed workers sickness benefit eligibility and cooperation with relevant stakeholders is important when interpreting results from studies conducted within a social insurance context [213].

The MI caseworkers experienced giving early sickness absence follow-up as meaningful and a preferred way to work (Paper III), which was echoed by the satisfaction, usefulness (Paper III) and overall positive experience (Paper II) of the MI sessions reported by the sick-listed workers. This may suggest a systematic effect beyond the treatment modality or technique applied, due to the therapist, also known as the therapist effect [214]. Due to the low MITI scores, this begs to question whether the reported participant satisfaction of the MI intervention in Paper III and the positive experiences in Paper II is due to a therapist effect, and not a MI effect. Furthermore,

sick-listed workers report the same levels of satisfaction on both content and timing of the MI sessions. This may be because the sick-listed workers experience that it is an appropriate time to facilitate RTW, which corresponds with the findings in Paper I and II, respectively. Thus, it is still unknown to what degree these results can be attributed to the content (MI) or the timing of the intervention. Results from the coming effect evaluation is needed to further evaluate the differences between the MI and non-MI intervention [149]. Additionally, the results from this thesis may in turn help to interpret the results of the RCT.

The double role paradox may serve as a barrier for implementing MI in a social insurance setting, as caseworkers has conflicting roles which may affect how MI is delivered. Experiences from the Swedish insurance system has shown that when caseworkers are pressured on time, they may focus more on assessing the rights to receive benefits instead of focusing on individual needs [215]. Ståhl et al. [215] argue that there is a distinction between a correct and a good decision, where a correct decision is made in accordance with legislation while a good decision takes into account dignity, autonomy, and individual needs. They argue that it is necessary to make exceptions from routines to make good decisions [215]. In the spirit of MI, the therapist should be able to give up the expert role and support the client's autonomy and expertise in decisions about change [205]. Thus, applying the MI approach when counseling sick-listed in a RTW process could arguably be one of these good decisions. However, making decisions that are tailored to each person's needs and situation, as a RTW professional, may contradict the role as a controller and the social insurance principle of treating everybody equally [215]. Whether MI in a social insurance setting serves as a positive moderator for the controller role or if it serves as a barrier in performing their duty as a controller is unknown and calls for more research.

Ståhl et al. [151] found that social insurance officers struggled with using MI in a social insurance context and the application of MI was limited to only a few sets of MI skills. Furthermore, no organizational change was identified in their study, and implementation largely failed due to a lack of managerial support and priority, competing initiatives and high workload [151]. Similarly, the caseworkers at NAV in

the present study (Paper III) report being pressured on time as the MI intervention was experienced as an extra workload and thus resource demanding. Furthermore, lack of co-worker and managerial support was experienced as barriers for implementing MI (Paper III). Ståhl and Gustavsson [151] argues that the flawed implementation strategy of MI into the Swedish social insurance context was partly due to management negligence by not giving appropriate time and support for the implementation to succeed. Similarly, the MI caseworkers in Paper III describe that maintaining MI was difficult, due to lack of support and an appropriate time and place for practicing to further develop MI skills.

Understanding and adapting to and within the social insurance context is arguably important when implementing MI, but also for understanding sickness absence. Biopsychosocial models have been critiqued for not recognizing how other systems, like the social insurance system, affect the individual in their decisions about work participation [49]. In the same way that implementing MI may require adaptations in order to use, understand and implement it, so may the same be said for models of work disability in order to be useful. Ståhl [198] argues that although the Sherbrooke model [55] has been influential for much of the research and policy developments across the world the last couple of decades, work disability research suffers from a lack of attention on the influence of values and prejudices within the policy and welfare systems. Moreover, Ståhl [198] suggests an increased attention to situational and contextual aspects, such as the type of job, workplace conditions, sosio-economic position, gender and age in the RTW process.

6.1.5.1 Measuring MI in a social insurance setting

Implementation fidelity is the degree to which an intervention is delivered as intended and is critical to successful translation of evidence-based interventions into practice [216]. In the current thesis, implementation also relies on the fidelity of the MI intervention. MI is not easily mastered [154] and reaching proficient levels of MI require practice with feedback and coaching over time [155]. The low MITI scores in the Paper III could suggest that barriers such as extra workload, lack of support and

practicing can negatively affect maintaining MI performance in a social insurance setting, despite extensive initial training. Nevertheless, MITI scores showed that the MI caseworkers were over the threshold for "beginning proficiency" in the technical component of MI. The technical component of MI refers to the evocation and reinforcement of change talk by proficient use of MI techniques [131]. Evoking motivation and change, which are essential parts of MI [131], were experienced as difficult skills to master for all the caseworkers who underwent MI training in Paper III. Even though there were barriers for mastering MI skills, the caseworkers managed to achieve proficient levels of technical MI skills. It is unknown whether proficient levels of technical MI skills would be achieved faster if these barriers were reduced, and whether these levels of skills were stable throughout the project period, since MI providers' level of skills is known to vary within and between providers [157].

Although being successful in establishing a good and supportive relationship from the sick-listed workers' perspective (Paper II), the caseworkers did not reach the level of relational skills required to provide a competent level of MI by scoring beneath the threshold for "beginning proficiency" in the relational component of MI (Paper III). These findings are in line with a previous study that found that neither workshops nor additional supervision were sufficient for reaching "beginning proficiency" levels in MI [156]. Another recent study, however, found that four hours of MI training significantly increased counselors' MI competence scores, as well as their skills to promote clients' engagement in RTW behaviors and a strong working alliance [217]. The MI training in the current project comprised of three-hour sessions twice a week for six months prior to administering the MI intervention. Comparatively, this should suffice in order to reach proficient levels of MI (e.g., [217]). Still, reaching proficient levels of MI may have been disrupted due to the experienced barriers such as extra workload, lack of coworker and managerial support and no time or place to practice MI skills outside the MI sessions (Paper III). This emphasizes the need for managerial support and time to develop and maintain MI in order to reach proficient MI skills, since being motivated to learn and master the MI skills arguably was not enough given the circumstances.

The low MITI scores could also be due to the social insurance setting in which it was measured. To our knowledge, MI fidelity have never been measured in a social insurance setting before. The MITI is arguably well suited for measuring MI fidelity in various settings [159] and was therefore chosen for the current study. However, MI integrity has been found to vary between countries and cultures [218]. Thus, it is important to consider cultural and contextual differences when comparing measures of MI integrity across studies and settings. In the context of this thesis, the social insurance setting in NAV is a non-therapeutic setting characterized by conflicting caseworker roles and a large amount of information exchange between the caseworker and sicklisted worker. Thus, it is unknown whether MITI is suited for measuring MI fidelity in this setting, and what level of MI proficiency is needed to affect RTW outcomes. Although the sick-listed workers report positive RTW outcomes from the MI sessions in Paper II, the effect of the MI intervention is currently unknown. When the effect evaluating has been conducted, the findings in this thesis may help interpret the results from the RCT. If the MI intervention is found to be effective in increasing RTW, the current findings will add to the knowledge of what levels of MI competency are needed to affect RTW outcome in a social insurance setting.

6.2 Methodological considerations, strengths and limitations

Validity in qualitative research can be understood as actively questioning the findings' usefulness or relevance by asking what is this valid about, for who and under what circumstances [172], and should be questioned during the whole qualitative research process [174]. In qualitative research, validity is also to what degree the findings can be trusted and can be increased by high transparency. Correspondingly, this is reflexivity in practice [219]. Validity in qualitative research is a criterion of quality in qualitative research and should permeate the whole qualitative research process [174]. The quality criteria's in qualitative research, such as validity, transferability, reflexivity, and information power are arguably closely related to each other and should permeate the whole qualitative research process. Thus, validity permeates all the methodological considerations, strengths and limitations in this thesis.

6.2.1 Selection bias

The interview studies in Paper I and II were nested within a RCT with a response rate of approximately 17%. From this sample, Paper I and II had a response rate of 22% and 55%, respectively. This may have led to a selection bias where other kinds of experiences with sick leave and the MI sessions are missing from our data. Furthermore, those who chose to participate could have been more motivated and satisfied in general, or with the MI sessions itself. Consequently, this may have led to the results not representing the variances in the experiences of sick leave and the MI sessions.

Moreover, in Paper I, we interviewed sick-listed workers about their current and lived experienced of being on long-term sick leave, which may have been a difficult or sensitive topic, which in turn may have led to a low response rate. Comparatively, in Paper II, participants were retrospectively asked how they experienced having attended the MI sessions. As some time had gone by from the MI sessions to the interviews, the participants had time to digest their experience and thus making it perhaps easier to share in the interviews.

Women and individuals with higher education is overrepresented in our sample. Having a more homogeneous sample or a different gender balance could have resulted in other descriptions based on different experiences, since previous studies have found some gender differences in how sick leave and the RTW process is experienced (e.g., [58, 72, 76, 79, 80]). Most caseworkers in NAV are women and all invited and recruited participants in Paper III were women, which is representative of the social insurance offices in Norway.

6.2.2 Motivational interviewing fidelity limitations

There are some limitations of the MI fidelity measurements in this thesis. MI fidelity was assessed for 20 random recordings of the four MI caseworkers at a relatively early and limited point of time in the RCT, when few MI sessions had been conducted. This may have affected the representativity of the MI fidelity scores. Since MI therapists` level of skills are known to vary within and between MI providers [157] and over time [220], it would have been beneficial with repeated measuring of the MI caseworkers over time. Similar to the therapist effect [214], ignoring variability between MI

providers can both increase and decrease a potential treatment effect because differences in treatment may in part be due to variability among MI providers. Thus, future studies should take MI provider variability into consideration by repeated measuring when evaluating the effect of MI treatment.

6.2.3 Three analytical approaches in three papers

This thesis includes three papers where three different methods were used for analyses. The specific analytical steps of each approach have been outlined in the data analysis chapter. Although all three papers were mainly qualitative in data and analysis, there were some distinct differences. Papers I and II both were interview studies with similar data collection and sampling strategies, but different analysis, Giorgi's descriptive phenomenological method [183] and Malterud's systematic text condensation [221], respectively. In Paper III, data were collected through focus groups and analyzed by using thematic analysis [185]. Although these approaches differ in some characteristic's, there are also some similarities. Giorgi's descriptive phenomenological method [183] has its roots from the philosophical method for investigating consciousness by Edmund Husserl, where Giorgi played the leading role in adapting and systematizing the use of phenomenological methods for empirically based psychological research [170]. Malterud's systematic text condensation is inspired by Giorgi's descriptive phenomenological method and thus share many similarities in its analytical steps [221]. The aim in Giorgi's approach is to gain knowledge of a specific phenomenon through the lived experience, while systematic text condensation searches for the essence of the phenomena in question [221]. However, Malterud emphasizes that systematic text condensation is not a phenomenological approach [172]. Malterud [221] states that systematic text condensation also shares many similarities with interpretive phenomenological analysis [222] and qualitative content analysis [223]. Qualitative content analysis and thematic analysis are quite similar and is often used interchangeably by researchers, where the main difference lies in the opportunity for quantification of data in qualitative content analysis [224]. Both systematic text condensation [172] and thematic analysis [185] is a recursive process where the researchers move back and forth between phases. By using analytical approaches where text and meaning is reduced from its original transcript, such as the approach in this

thesis, is the risk of losing or neglecting nuances in the data. Thus, a reflexive and recursive analytical process may increase the quality and validity of the findings.

Similarly, the process of ensuring quality in qualitative research can also be viewed as a recursive process. In this thesis, several steps were taken to increase validity, in a recursive and dynamic way. The analytical steps in each paper was validated by coauthors with different backgrounds than myself, in order to challenge my preconceptions and validate the findings to the transcripts. Furthermore, in the focus group study, final results were read by focus group participants in order to validate quotes and content. The research group consisted mainly of researchers, but also some current and former NAV employees. This made the process of bracketing highly relevant, where research ideas, design and preliminary findings were in some cases discussed with the NAV members of the research group. Ultimately, this was considered to increase validity and trustworthiness of the findings.

Stige et al. [219] argues that if a researcher is able to present findings that are rich and trustworthy, then the study has the ability to make an impact in relation to real-world problems. In this thesis, the findings were considered to be rich in data concerning the topics at hand, and systematically conducted and analyzed in order to increase trustworthiness and thus having the potential of being impactful.

Using several approaches or analysis allows for a broad approach in the investigation and are generally considered to be a strength. More specifically, due to the complexity of sickness absence and organizational involvement, a mixed-methods approach has been recommended [164]. In this thesis, Paper III was a mixed-methods study, where a combination of qualitative and quantitative approaches allows for a more comprehensive understanding of the research topic and added information about the intervention and implementation process. Questioning the "why" and "how" are important when evaluating implementation and cannot be answered with quantitative data [164]. Still, using several approaches and methods in one thesis could also lead to a superficial investigation and thus lacking an in-depth exploration into different aspects.

Since the RCT is ongoing, the reach and effectiveness of the intervention will be reported separately later on. Consequently, the process evaluation was not biased by effectiveness measures and primarily focused on the qualitative data and aspects of the implementation of the MI intervention, as this can increase the transferability of the findings to practice [164, 167].

6.2.4 The interviews and focus groups

A strength of the current thesis was the use of semi-structured interviews and focus groups, which allow the participants to explain and describe their situations and experiences of the topic at hand. This thesis used a broad exploratory approach with a heterogenous sample to uncover the different experiences and nuances. Furthermore, this thesis also had a mixed-methods approach, using NAV caseworker focus groups and questionnaires for sick-listed workers to explore the adoption, implementation and maintenance of the interventions using the RE-AIM framework [9]. Although participants in Paper I and II were invited to the interview studies from the same RCT sample, there were no overlap or matching, where participants in Paper I also participated in Paper III. Some of the participants may have responded to the MI questionnaire in Paper III, although the questionnaire were anonymous and data matching were impossible. Different views of what was important and what should be included in the analysis, such as meaning units, preliminary themes and findings, were discussed and validated through the contribution of our interdisciplinary research group (psychology, sociology, medicine).

Most of the participants in the interviews were female and both interviewers were male. I was also considerably younger than most participants. These characteristics may have influenced what the participants shared in the interviews, but in an unknown direction. Most participants were in graded work at the time of the interviews, meaning that they took time out of their schedule, from work, family, treatment, in order to attend the interviews. This suggests not only an adherence to the study, but also that sharing their experiences was important for them. In Paper I, some participants cried when talking about their situation and their difficulties in returning to work. As they struggled finding their place in their new and unusual situation and identity as sick-listed, the participants

in Paper II found it easier to share their story. Participants in Paper I was on sick leave for about 9 to 13 weeks, whereas participants in Paper II had been sick-listed for more or less 26 weeks. This can suggest that participants had accepted their situation as sicklisted to a larger degree than in Paper I but may also be due to the main topics in the interviews. In Paper I they were encouraged to talk about what it means for them to be on sick leave and delve into the multifaceted experience of sick leave than in Paper II, where this were question more superficially. Furthermore, in Paper I, they were asked to share about their current lived experience, which may be more difficult and sensitive, compared to Paper II, where participants were asked to share how they retroactively experienced the MI sessions. During the project, NAV had several times reported that their MI caseworkers were under the impression that some of the participants considered the MI sessions as interviews as a part of the project, and not as actual NAV counseling sessions. Conversely, the participants in the interview study may have believed that the interviewers were representatives of NAV, which may have affected (either positively or negatively) the way they talked about NAV during the interviews and therefore the trustworthiness of the findings. However, neither the participants nor the interviewers considered this to be an issue.

The role of the focus group moderator is to guide the participants in the group discussion and that the discussion is for the most part on-topic [172]. Initially, I was supposed to moderate the focus groups, but I chose not to moderate or co-moderate any of the focus groups due to my potential impact and bias. A majority of the participants were my former colleagues and the topics in the interview guide was also familiar to me as a former NAV caseworker. This could have influenced how the focus group participants talked about the topics, what probing questions I could have chosen and how they could have responded to me as a moderator, and thus served as a data collection bias. The focus groups were therefore moderated by an experienced focus group moderator from the project group with no previous connection to the participants.

6.2.5 Transferability

A common requirement for the social sciences is to produce knowledge that can be generalized. The assumptions that scientific knowledge is universal and valid at all

places, for all peoples in all contexts, is not the case in qualitative research [174]. The term generalizability is seldom used or appropriate in qualitative research, whereas the term transferability is more appropriate to use, as qualitative research is purposely more aimed towards exploring or describe nuances, rather than similarities [172]. In this thesis, transferability is most suited to understand how the findings are applicable or useful in similar social insurance contexts, or how it can benefit others on long-term sick leave or for professionals working with RTW.

Transferability can be defined as the degree in which findings can be transferred or provide new insights that other can benefit from, in other contexts than where the project was carried out [172]. The term information power is closely related to transferability, where qualitative studies with good information power may increase the transferability of the findings, as it is guided by sample specificity, theory, dialogue quality, and analytical strategy [178]. Furthermore, Malterud [225] argues that findings from qualitative research can to some extent be transferred to a wider population if the research is done systematically with a high degree of reflexivity. Findings from this thesis may be transferable to other NAV offices and systems similar to NAV and may also be transferable to other one-on-one counseling situations.

The participants in the early phases of long-term sick leave described a complex and negative, although necessary, situation of being sick-listed. This entailed the need for support and help to RTW, which was positively facilitated by MI caseworkers at NAV. The findings may be transferable for individuals on sick leave who are employed, and where support towards returning to work is desired by the sick-listed workers. Furthermore, the findings may be transferable to similar social insurance systems or settings with a social democratic policy model, with similar standards and caseworker roles for sickness absence follow-up. Findings from this thesis may also be transferable to individuals with a desire to RTW in similar settings. However, different cultural and social aspects, norms and structures may hinder the transferability and must be taken into consideration.

The MI caseworkers in this project have practiced MI to an arguably biased sample of sick-listed workers, who may have been more motivated for change and help from NAV, since they chose to actually participate. Whether the findings from this thesis is transferable to a larger population of sick-listed workers, who may not be as motivated as the current sample, is unknown. As we have no information on non-responders in the current project and how they differ from the general population of sick-listed workers, more knowledge is needed on how MI can facilitate RTW for a larger and more varied population. Furthermore, the MI caseworkers were extensively trained in MI and showed low MI fidelity scores. This needs to be taken into consideration before transferring the findings to a wider population and also before wide scale implementation of MI in NAV.

6.2.6 Reflexivity

Reflexivity can be understood as the process where the researcher reflects upon and describe positioning, assumptions, personal history or attitudes towards the participants or the phenomenon in question [226]. In the current thesis, I strived towards being reflexive and engaged in several reflexive processes. As a researcher, being aware of one's own preconceptions and reporting them can increase transparency and thus the quality of the research. Some preconceptions can be brought into the open through a reflexive process, where the researcher tries to reflect upon and describe positioning, assumptions, personal history or attitudes towards the participants of the phenomenon in question [226]. The researchers' views and preconceptions can also be mitigated through bracketing [186], which was done in all the analytical processes. I wrote an extensive diary of choices, reflections, preconceptions and about expected findings for each study conducted. I expected that the qualitative studies would find that long-term sick leave is a situation where sick-listed workers experience shame and guilt towards themselves and others, and that most sick-listed workers has their own plan how to RTW. I was prepared to read and write a lot about shame in the articles, but shame was not as big a part of being on sick leave as I thought. This was a preconception I had gained through my experience as a NAV caseworker, but it was not as substantial in our findings as I would have thought. Perhaps sick-listed workers tell different stories to different authorities and persons (e.g., NAV caseworker versus researcher) or maybe it

is a testament to the importance on reflecting upon one's preconceptions, and to what degree they hold true.

Furthermore, I expected that the sick-listed workers would appreciate the meetings with NAV, where the use of MI would make the sessions a positive and reassuring setting. This was based on my previous experience as a NAV caseworker I also suspected that some sick-listed workers would be very negative about how they were met by caseworkers using NAV, since it places a lot of responsibility on to the sick-listed worker due to the amount of mirroring techniques used in MI. However, this was based on my own experience and level of practical MI skills, which is substantially lower than the MI caseworkers in this project. Correspondingly, due to the high level of MI competency I expected from the MI caseworker, I thought this would serve as an important facilitator of implementing MI, accompanied with the MI caseworkers' motivation to use MI.

My preconceptions and knowledge about sickness absence follow-up knowledge has influenced my part in the research project and the design of the studies in this thesis. Particularly, I used this knowledge, or preconception, when designing the interview guides for all the qualitative studies. To make this process reflexive, I engaged my coauthors in researcher triangulation, by discussing each question in the interview guide and in evaluating pilot interviews. As the analytical approaches was descriptive where the phenomena or topic at question was of interest, a minimum of three researchers were involved in the analysis in all three studies in order to reduce the possible impact of single-researcher preconceptions.

6.2.7 Methodological considerations related to NAV

Timing of the intervention and interviews may have affected the sick-listed workers' experience and satisfaction of the MI intervention. During this project, the MI sessions have periodically been administered at different points of time than originally intended, where some sick-listed workers have been on sick leave for 6-8 months before getting the first MI sessions, as opposed to the intended 14 weeks of sick leave. Additionally, the interviews in Paper II were conducted from 2–4 months after the MI sessions, and

the participants may have failed to recall information and details about their experiences. Furthermore, there is a risk that the sick-listed workers could have held back information in the MI sessions if they feared there could be consequences for their benefits. However, none of the participants expressed such barriers in the interviews.

During the project period there has been some practical, structural and legislative changes to the sickness absence-follow up given by NAV. First, the two NAV offices which participated in this project were merged in early 2018, ultimately doubling in size. Although this project had issues with inclusion and carrying out the intervention in its infancy, this is considered as unrelated to the merge Secondly, in addition to promoting more digital communication with its service users, NAV has during the project period had some turnover in management and staff related to this project. This has led to re-organization in administering the intervention, such as downscaling the number of MI caseworkers from nine to four. Thirdly, midway in the project period, technological and legislative changes made it possible for both the employer and sicklisted worker to digitally report the need (or not) for an early dialogue meeting 2 with NAV, as opposed to NAV being solely responsible for assessing the need for a meeting. This may have led to more dialogue and meetings between NAV, the employer and sick-listed worker before the planned interventions in the current project. These changes may have affected how the sick-listed workers experienced their contact with NAV and how the caseworkers experienced the implementation process, as opposed to the conditions when this project and this thesis' aims were formulated. Consequently, these changes may not only have methodological implications for how the findings were interpreted based on these conditions, but also practical implications in terms of transferability of the findings. However, the RTW and social insurance context is constantly evolving in both technological and legislate ways, which is also reflected in this thesis.

The public's trust in public administration and services are important, where the public is more likely to comply, obey rules and regulations if there are high levels of trust towards the public sector [227]. The combination of trust towards research and public services may have affected participation in the current project, as it was a collaboration

with NAV. The phrasing in the invitation letter sent to all eligible sick-listed workers for the RCT may have affected the participation rate. Roughly translated, the invitation is titled "Are you still on sick leave and want to help NAV get better?" and may imply that participants are supposed to help NAV, not the other way around. Experiences during this project have indicated that some eligible sick-listed workers consider themselves not eligible to participate, based on the invitation letter. In retrospect, the phrasing could have been clearly stated to appealed to helping potential participants RTW. Furthermore, the public's trust towards NAV may be at an all-time low due to what became known in late 2019 as the "NAV scandal", where social security recipients were wrongfully charged and convicted for fraud due to malpractice by NAV [228]. This may have, and still might negatively affect sick-listed workers participation in the research project. However, all data for the current thesis was collected and analyzed before this was known to the public and is therefore unlikely to have affected the three papers in this thesis.

Since the current project was externally funded it was better resourced in terms of training, supervising and administering MI than in regular NAV practice. However, the volume of MI sessions per caseworker would be higher if this was regular practice, and not limited by slow recruitment, as was the case in the current RCT. The selection of the MI caseworker group through their motivation for learning and using MI may have biased the caseworkers to overestimate the advantage of MI in practice.

A limitation in evaluating implementation of MI (Paper III) is the lack of a managerial perspective. Management play a central role in any implementation process, and in the current project, two or three individuals in key management roles would be eligible to participate in an interview for Paper III. However, anonymity was considered impossible for these individuals and any data in the study would thus be very identifiable. As a result, we chose not to include or even ask the management. In retrospect, relevant managers could have been given the opportunity to either opt-in or opt-out after receiving written information about the study and what participation would entail, and that anonymity could not be guaranteed.

6.3 Implications and future research

This thesis adds to the knowledge about the early phases of long-term sick leave, where sick-listed workers desire to RTW, but needs assistance from stakeholders in order to find solutions to resolve their challenges and progress towards returning fully to work (Paper I and II). Future research should continue uncovering the complexity of the difference phases of being on long-term sick leave, which can guide future interventions in terms of what intervention should be given to whom at what point during long-term sick leave.

An employer has a different and more workplace specific knowledge in facilitating RTW than a caseworker at NAV. However, a NAV caseworker has a different and arguably broader expertise in facilitating RTW for sick-listed workers, with different tools and efforts at disposal than an employer. Thus, the involvement of a RTW professional, such as NAV caseworkers, can be beneficial in facilitating RTW at an early phase, as this thesis suggests (Paper II and III). In order to offer earlier RTW follow-up than the current practice, changes may be necessary to current NAV policy and follow-up strategy and may require additional resources. It has been stated that it is unlikely that NAV will add more resources or caseworkers to their follow-up [68]. A lack of such resources in ordinary social insurance settings could also hinder the achievement of the proficiency level of MI skills necessary to affect RTW outcome, thereby suggesting that implementation of MI is not realistic without sufficient resources in place. Moreover, when the sick-listed worker is not in need of information from NAV or RTW adjustments, the MI sessions were not experienced as useful. This suggest that future interventions may benefit from selecting individuals who express the need for such RTW support.

COVD-19 have already had a great impact on society and will potentially continue to do so, in ways that are still unknown. New challenges concerning economical, societal and individual factors related to RTW may appear and with unpredictable long-term effects. Subsequently, the transferability of previous studies and the need for future research may now have altered in ways that are yet unclear. However, the COVID-19 pandemic has increased the speed of digitalization within public services, such as for

communication between NAV and individuals on sick-leave. This thesis suggests that having an early face-to-face follow-up session using MI may positively affect sick-listed workers' relationship to NAV and increase trust towards public services. How this can be utilized and adapted to fit in light of the COVID-19 pandemic is unknown and more research is needed to understand how the needs within sickness absence follow-up have changed. In addition to the need for evaluating implementation and efficacy of MI in a social insurance setting given the current COVID-19 pandemic, there is also a need for more research on how the COVID-19 pandemic has affected caseworkers and NAV follow-up, in general.

Barriers and facilitators of implementing RTW interventions can vary within and between intervention sites, partly due to that the organizational and managerial culture at different sites varies [13, 168]. Implementation of MI as a RTW intervention has been suggested but rarely evaluated in a social insurance setting. Knowledge of potential barriers and facilitators are important before implementing new interventions or strategies for follow-up and should be investigated before expanding implementation from local NAV offices to a regional or national level. Furthermore, the appropriate levels of managerial support and resources to deliver high intervention fidelity is important and should be firmly anchored in management. The literature of implementation of MI in a RTW setting is lacking, and future research should address the currently known barriers and facilitators in various settings. Moreover, more research is needed to consider whether current MI fidelity measurements are suitable and adaptable for measuring MI fidelity in a non-therapeutic social insurance setting. Furthermore, what level of MI proficiency is needed to affect RTW outcomes is unknown and should be addressed in future studies.

7 Conclusion

According to Paper I, long-term sick leave is a complex but necessary situation for the sick-listed worker, where a combination of health, work, social and family stressors have a negative impact on the sick-listed workers identity, social life and RTW process. In the early phases of long-term sick leave, individuals who are struggling to find solutions to RTW could benefit from additional early follow-up interventions, such as MI, that proactively examine work-related, social and personal factors that influence RTW.

We found in Paper II and III that from both the sick-listed workers' and NAV caseworkers' perspective, early sickness absence follow-up was desired. Sick-listed workers considered the MI sessions to be a positive experience due to the positive relationships formed with the MI caseworkers, the normalizations of sick leave that they experienced, and the help they received in adjusting their RTW strategies. NAV caseworkers and other professionals working with individuals attempting to RTW may benefit from using MI as a method for helping sick-listed workers to RTW.

The thesis reveals that a NAV caseworker operates both as a RTW professional for the sick-listed in the RTW process and as a controller for the sickness benefits. For the sick-listed worker, meeting a person with two such roles are challenging and may in turn result in a barrier for establishing a good relationship and lead to negative experiences. This double role paradox represents a challenge for NAV and NAV caseworkers when counseling sick-listed workers, as positive, respectful and supportive relationships with RTW professionals has been found to be important for individuals on sick leave during their RTW process. Using MI when counseling sick-listed workers may also be beneficial as a tool to counteract the challenges with the double role paradox. Thus, this adds support to the increasing literature suggesting that MI may be useful for facilitating RTW.

However, implementing MI can be challenging in practice, as MI is resourcedemanding on an individual and organizational level. Barriers and facilitators for implementing RTW interventions can vary across different sites for the same type of intervention, and this is also the case for treatment fidelity. Findings suggest that adopting and implementing MI as a RTW intervention in a social insurance setting requires significant resources. Barriers such as time pressure, workload and managerial support should be addressed for implementing and utilizing MI in order to increase fidelity and feasibility of MI, both when conducting effect evaluations and wide scale implementation. Similarly, promoting facilitating factors, such as caseworker motivation and early follow-up sessions, may be equally important to reducing barriers to implementing MI in a social insurance setting. Furthermore, organizational or cultural differences in each office or site must be taken into consideration before implementing MI in a social insurance setting. Focusing on managerial support, engagement and motivation may be key and needs to be fully invested from day one until the intervention is internalized within the organization's way of working in order to achieve a successful implementation of MI. However, there is an urgent need for well-designed effect studies of MI on RTW to justify the investments required to adopt, implement and maintain MI as a main tool in early follow-up of workers on sickness absence.

8 References

- 1. OECD. Mental Health and Work: Norway. OECD Publishing; 2013.
- Gjesdal S, Ringdal PR, Haug K, Maeland JG. Predictors of disability pension in long-term sickness absence: results from a population-based and prospective study in Norway 1994-1999. Eur J Public Health. 2004;14(4):398-405.
- 3. Waddell G, Burton AK. Is work good for your health and wellbeing? London: The Stationery Office; 2006.
- 4. Schuring M, Robroek SJW, Otten FWJ, et al. The effect of ill health and socioeconomic status on labor force exit and re-employment: a prospective study with ten years follow-up in the Netherlands. Scandinavian Journal of Work, Environment & Health. 2013;39(2):134-143
- 5. Black CM. Working for a healthier tomorrow: Dame Carol Black's review of the health of Britain's working age population. London: The Stationery Office; 2008.
- 6. Norwegian Ministry of Labour and Social Affairs. (2016). NAV i en ny tid for arbeid og aktivitet. Meld. St. 33 (2015–2016). Retrieved from https://www.regjeringen.no Accessed 12.11.2018.
- 7. van Duijn M, Eijkemans MJ, Koes BW, Koopmanschap MA, Burton KA, Burdorf A. The effects of timing on the cost-effectiveness of interventions for workers on sick leave due to low back pain. 2010;67(11):744-50. https://doi.org/10.1136/oem.2009.049874
- 8. Vogel N, Schandelmaier S, Zumbrunn T, Ebrahim S, de Boer WE, Busse JW, et al. Return-to-work coordination programmes for improving return to work in workers on sick leave. Cochrane Database Syst Rev. 2017;3:CD011618. https://doi.org/10.1002/14651858.CD011618.pub2
- Kamper SJ, Apeldoorn AT, Chiarotto A, Smeets RJ, Ostelo RW, Guzman J, et al. Multidisciplinary biopsychosocial rehabilitation for chronic low back pain: Cochrane systematic review and meta-analysis. BMJ. 2015;350:h444. https://doi.org/10.1136/bmj.h444
- 10. Hoefsmit N, Houkes I, Nijhuis FJ. Intervention characteristics that facilitate return to work after sickness absence: a systematic literature review. J Occup Rehabil. 2012;22(4):462-77. https://doi.org/10.1007/s10926-012-9359-z
- 11. Aasdahl L, Pape K, Vasseljen O, Johnsen R, Gismervik S, Halsteinli V, et al. Effect of inpatient multicomponent occupational rehabilitation versus less comprehensive outpatient rehabilitation on sickness absence in persons with musculoskeletal- or mental health disorders: a randomized clinical trial. J Occup Rehabil. 2018;28(1):170-9. https://doi.org/10.1007/s10926-017-9708-z
- 12. Cullen K, Irvin E, Collie A, Clay F, Gensby U, Jennings P, et al. Effectiveness of workplace interventions in return-to-work for musculoskeletal, pain-related and mental health conditions: an update of the evidence and messages for practitioners. J Occup Rehabil. 2018;28(1):1-15. https://doi.org/10.1007/s10926-016-9690-x

- Martin MHT, Moefelt L, Dahl Nielsen MB, Rugulies R. Barriers and facilitators for implementation of a return-to-work intervention for sickness absence beneficiaries with mental health problems: results from three Danish municipalities. Scand J Public Health. 2015;43: 423–31. 10.1177/1403494814568484
- Goorts K, Boets I, Decuman S, Du Bois M, Rusu D, Godderis L. Psychosocial determinants predicting long-term sickness absence: a register-based cohort study. J Epidemiol Community Health 2020;74: 913-918. http://dx.doi.org/10.1136/jech-2020-214181
- Cancelliere C, Donovan J, Stochkendahl MJ, Biscardi M, Ammendolia C, Myburgh C, Cassidy JD. Factors affecting return to work after injury or illness: best evidence synthesis of systematic reviews. Chiropractic Manual Ther. 2016;24(1):1–23. https://doi.org/10.1186/s12998-016-0113-z
- Gragnano A, Negrini A, Miglioretti M, Corbière M. Common psychosocial factors predicting return to work after common mental disorders, cardiovascular diseases, and cancers: a review of reviews supporting a cross-disease approach. J Occup Rehabil. 2018;28(2):215-31. https://doi.org/10.1007/s10926-017-9714-1
- 17. Steenstra IA, Munhall C, Irvin E, Oranye N, Passmore S, Van Eerd, Mahood Q, Hogg-Johnson S. Systematic review of prognostic factors for return to work in workers with sub acute and chronic low back pain. J Occup Rehabil. 2017. doi:10.1007/s10926-016-9666-x.
- Weerdesteijn K, Schaafsma F, Bonefaas-Groenewoud K, Heymans M, Van der Beek A, Anema J. Prognostic Factors for Staying at Work for Partially Sick-Listed Workers with Subjective Health Complaints: A Prospective Cohort Study. BMC Public Health. 2020;20:1095. https://doi.org/10.1186/s12889-020-09203-5
- Løvvik C, Øverland S, Hysing M, et al. Association between illness perceptions and return-to-work expectations in workers with common mental health symptoms. J Occup Rehabil. 2013;24:160–70
- 20. Schultz IZ, Stowell AW, Feuerstein M, Gatchel RJ. Models of return to work for musculoskeletal disorders. J Occup Rehabil. 2007;17:327–352.
- 21. Landstad BJ, Wendelborg C, Hedlund M. Factors explaining return to work for long-term sick workers in Norway. Disability and Rehabilitation. 2009; 31(15): p. 1215-1226.
- 22. White Paper 33. 2015–2016. Nav i en ny tid for arbeid og aktivitet [Nav in a new age: for work and activity]. Oslo: Arbeids og sosialdepartementet. https://www.regjeringen.no/contentassets/8f9e56528fb340eb9f6515cc21ab5119/no/pdfs/stm201520160033000dddpdfs.pdf
- 23. Ose SO, Dyrstad K, Brattlid I, Slettebak R, Jensberg H, Mandal R, et al. Oppfølging av sykmeldte–fungerer dagens regime? SINTEF-rapport A. 2013;24297.
- Norwegian Labour and Welfare Service. Veiledningsplattformen i NAV [Pamphlet]. Arbeids- og veldferdsdirektoratet. 08.11.2016.

- 25. Park J, Gross DP, Rayani F, Norris CM, Roberts MR, James C, et al. Model of human occupation as a framework for implementation of motivational interviewing in occupational rehabilitation. Work. 2019;62(4):629–41.
- 26. Jensen MP. Chapter 21: motivational interviewing for enhancing return to work. In: Schultz IZ, Gatchel RJ, editors. Handbook of return to work. New York: Springer; 2016. pp. 365–379.
- 27. Flodgren GM, Berg RC. Motivational interviewing as a method to facilitate return to work: a systematic review. Oslo: National Institute of Public Health. 2017; 71 p.
- 28. Page KM, Tchernitskaia I. Use of motivational interviewing to improve return-to-work and work-related outcomes: a review. Aus J Rehabil Couns. 2014; 20(1):38–49.
- Franche RL, Cullen K, Clarke J, Irvin E, Sinclair S, Frank J. Workplace-based return-to-work interventions: a systematic review of the quantitative literature. Journal of Occupational Rehabilitation. 2005;15:607-31. 10.1007/s10926-005-8038-8.
- 30. Linnan L, Steckler A. Process Evaluation for public health interventions and research. California: Jossey-Bass San Francisco; 2002.
- 31. Van Beurden KM, Vermeulen SJ, Anema JR, van der Beek AJ. A participatory return-to-work program for temporary agency workers and unemployed workers sick-listed due to musculoskeletal disorders: a process evaluation alongside a randomized controlled trial. J Occup Rehabil. 2012;22:127-40. 10.1007/s10926-011-9314-4.
- 32. van Oostrom SH, van Mechelen W, Terluin B, de Vet HC, Anema JR. A participatory workplace intervention for employees with distress and lost time: a feasibility evaluation within a randomized controlled trial. J Occup Rehabil. 2009;19:212-22. 10.1007/s10926-009-9170-7.
- 33. Taylor, RR. Kielhofner's model of human occupation: theory and application. 5th ed. Philadelphia: Wolters Kluwer; 2017.
- 34. Hamnes B, Rønningen A, Skarbø A. Experiences of participating in return-to-work group programmes for people with musculoskeletal disorders: A focus group study. Musculoskeletal Care. 2017;15(3):272-280. https://doi.org/10.1002/msc.1210
- 35. Norwegian Ministry Of Labour And Social Affairs. The Working Environment Act. [Internet]. Cited 2020 Nov 25. Available from: https://lovdata.no/dokument/NLE/lov/2005-06-17-62
- 36. Blank AA, Harries P, Reynolds F. 'Without occupation you don't exist': occupational engagement and mental illness. J Occup Sci. 2015;22(2):197-209. https://doi.org/10.1080/14427591.2014.882250
- 37. Lannerstrom L, Wallman T, Holmstrom IK. Losing independence—the lived experience of being long-term sick-listed. BMC Public Health. 2013;13:745. 10.1186/1471-2458-13-745.

- 38. Gahnstrom-Strandqvist K, Liukko A, Tham K. The meaning of the working cooperative for persons with long-term mental illness: a phenomenological study. Am J Occup Ther. 2003;57(3):262-72. https://doi.org/10.5014/ajot.57.3.262
- Norwegian Labour and Welfare Administration. Sykepenger til arbeidstakere. 2020 [cited 2020 07.08]; Available from:
 https://www.nav.no/no/person/arbeid/sykmeldt-arbeidsavklaringspenger-og-yrkesskade/sykepenger/sykepenger-til-arbeidstakere.
- 40. Spasova S, Bouget D, Vanhercke B. Sick pay and sickness benefit schemes in the European Union, Background report for the Social Protection Committee's In-depth Review on sickness benefits (17 October 2016). European Social Policy Network (ESPN), European Commission, Brussels
- 41. Nilsen W, Skipstein A, Ostby KA, Mykletun A. Examination of the double burden hypothesis—a systematic review of work-family conflict and sickness absence. Eur J Public Health. 2017;27(3):465-71. https://doi.org/10.1093/eurpub/ckx054
- 42. Aronsson G, Theorell T, Grape T. et al. A systematic review including metaanalysis of work environment and burnout symptoms. BMC Public Health. 2017; 264. https://doi.org/10.1186/s12889-017-4153-7
- van Vilsteren M, van Oostrom SH, de Vet HC, Franche RL, Boot CR, Anema JR. Workplace interventions to prevent work disability in workers on sick leave. Cochrane Database Syst Rev. 2015;(10):CD006955. https://doi:10.1002/14651858.CD006955.pub3
- 44. Nigatu YT, Liu Y, Uppal M, McKinney S, Gillis K, Rao S, Wang J. Prognostic factors for return to work of employees with common mental disorders: a meta-analysis of cohort studies. Soc Psychiatry Psychiatr Epidemiol. 2017;52(10):1205–15.
- 45. Buys NJ, Selander J, Sun J. Employee experience of workplace supervisor contact and support during long-term sickness absence, Disability and Rehabilitation. 2019; 41:7, 808-814, 10.1080/09638288.2017.1410584
- 46. Shaw WS, Robertson MM, Pransky G, McLellan RK: Employee perspectives on the role of supervisors to prevent workplace disability after injuries. J Occup Rehabil. 2003;13: 129-142. 10.1023/A:1024997000505.
- 47. Kristman VL, Shaw WS, Boot CRL, Delclos GL, Sullivan MJ, Ehrhart MG, et al. Researching complex and multi-level workplace factors affecting disability and prolonged sickness absence. J Occup Rehabil. 2016;26(4):399–416.
- 48. Buys N, Randall C, Wagner S, et al. Disability management and organizational culture in Australia and Canada. Work. 2017;57:409–419.
- 49. Costa-Black KM, Feuerstein M, Loisel P. Work disability models: past and present. In: Loisel P, Anema JR, editors. Handbook of work disability: prevention and management. New York: Springer New York; 2013. p. 71–93.
- 50. Briand C, Durand M J, St Arnaud L, Corbiere M. Work and mental health: Learning from return-to-work rehabilitation programs designed for workers with

- musculoskeletal disorders. International Journal of Law and Psychiatry. 2007;30: 444–457.
- 51. Schultz IZ, Chlebak CM, Stewart AM. Impairment, disability, and return to work. In: Schultz IZ, Gatchel RJ, editors. Handbook of Return to Work. Edn. New York: Springer; 2016. p. 3–27.
- 52. Engel GL. The need for a new medical model: a challenge for biomedicine. Science (New York, NY). 1977;196(4286):129–136
- 53. Engel GL. The clinical application of the biopsychosocial model. Am J Psychiatry. 1980;137(5):535–44.
- Schultz I, Stowell A, Feuerstein M, Gatchel R: Models of Return to Work for Musculoskeletal Disorders. J Occup Rehabil. 2007;17 (2): 327-352. 10.1007/s10926-007-9071-6.
- Loisel P, Buchbinder R, Hazard R, Keller R, Scheel I, van Tulder M, Webster B: Prevention of work disability due to musculoskeletal disorders: the challenge of implementing evidence. J Occup Rehabil. 2005; 15: 507-524. 10.1007/s10926-005-8031-2.
- 56. OECD Sickness, Disability and Work. Breaking the Barriers. A Synthesis of Findings Across OECD Countries. 2010. doi:10.1787/9789264088856-en.
- 57. Statistics Norway. Sickness absence. Oslo, Statistics Norway. 2019. [Available from: https://www.ssb.no/en/arbeid-og-lonn/statistikker/sykefratot.
- 58. Norwegian Labour and Welfare Administration [Internet]. Cited 2020 Jul 07. Available from: <a href="https://www.nav.no/no/nav-og-samfunn/statistikk/sykefravar-statistikk/sy
- 59. OECD. Labour force participation rate. 2020 [Internet] Cited 2020 Jul 26. Available from: https://data.oecd.org/emp/labour-force-participation-rate.htm
- 60. The Ministry of Labour and Social Affairs. [Internet]. Cited 2020 Jul 30. Available from:
 - $\frac{https://www.regjeringen.no/globalassets/departementene/asd/dokumenter/2016/ia_a}{greement_2014_18.pdf}$
- 61. Hanvold TN, Kristensen P, Corbett K, Hasting RL, Mehlum IS. Long-term sickness absence among young and middle-aged workers in Norway: the impact of a population-level intervention. BMC Public Health. 2020; 1157. https://doi.org/10.1186/s12889-020-09205-3
- 62. Norwegian Labour and Welfare Administration. Slik følger du opp sykmeldte. [Internet]. Cited 2019 Nov 4. Available from: https://www.nav.no/no/Bedrift/Oppfolging/Sykmeldt+arbeidstaker/Relatert+inform-asjon/oppfolging-av-sykmeldte-arbeidstakere?kap=394789
- 63. NAV. Work assessment allowance (AAP) [Internet] Cited 2020 Jul 26. Available from: https://www.nav.no/en/home/benefits-and-services/relatert-informasjon/work-assessment-allowance-aap#chapter-2

- 64. Escorpizo R, Reneman MF, Ekholm J, Fritz J, Krupa T, Marnetoft SU, Maroun CE, Guzman JR, Suzuki Y, Stucki G, Chan CC. A conceptual definition of vocational rehabilitation based on the ICF: building a shared global model. J Occup Rehabil. 2011;21(2):126–133.
- 65. Waddell G, Burton AK, Kendall N: Vocational Rehabilitation: What Works, for Whom, and When? 2008, London: TSO
- 66. Norwegian Labour and Welfare Administration. Follow-up of sick-leave [Internet] Cited 2020 Nov 25. Available from: <a href="https://www.nav.no/no/bedrift/oppfolging/sykmeldt-arbeidstaker/relatert-informasjon/slik-folger-du-opp-sykmeldte/informasjonsmateriell_kap/_/attachment/download/f23ca683-5251-4953-9096-b6a208aaa2cd:1f04e44d2d86e6cf8dd29a14546b798fc7ac2668/Oppf.sykmeldte%20 2019%20EN%20utskrift.pdf
- 67. Brage S, Kristoffersen P, Lysø N. NAVs oppfølging av sykmeldte. Arbeid og velferd. 2014; 1. p. 78-89.
- 68. Mandal R, Jakobsen HO, Jensen C, Ose SO. Hvordan fungerer arbeidsavklaringspenger (AAP) som ytelse og ordning? Et samarbeidsprosjekt mellom SINTEF og Nasjonalt kompetansesenter for arbeidsretta rehabilitering. 2015.
- 69. Bruusgaard D, Claussen B. Ulike typer sykefravær. Tidsskr Nor Legeforen 2010; 130: 1834-6.
- 70. Aasdahl L, Fimland MS. Is there really a "golden hour" for work disability interventions? A narrative review. Disabil Rehabil. 2019;42:1–8.
- 71. Løvvik C, Shaw W, Overland S, Reme SE. Expectations and illness perceptions as predictors of benefit recipiency among workers with common mental disorders: secondary analysis from a randomised controlled trial. BMJ Open. 2014;4(3):e004321.
- 72. Andersen MF, Nielsen KM, Brinkmann S: Meta-synthesis of qualitative research on Return to Work among employees with common mental disorders. Scand J Work Environ Health. 2012; 38 (2): 93-104. 10.5271/sjweh.3257.
- Bunzli S, Singh N, Mazza D, Collie A, Kosny A, Ruseckaite R, Brijnath B. Fear of (re)injury and return to work following compensable injury: qualitative insights from key stakeholders in Victoria, Australia. BMC Public Health. 2017;17(1):313. https://doi.org/10.1186/s12889-017-4226-7
- 74. Holmgren K, Ivanoff SD: Women on sickness absence-views of possibilities and obstacles for returning to work. a focus group study. Disabil Rehabil. 2004; 26 (4): 213-222. 10.1080/09638280310001644898.
- 75. Floderus F, Göransson S, Alexanderson K, Aronsson G: Self-estimated life situation in patients on long-term sick leave. J Rehabil Med. 2005; 37: 291-299. 10.1080/16501970510034422.

- 76. Knapstad M, Øverland S, Henderson M, Holmgren K, Hensing G. Shame among long-term sickness absentees: correlates and impact of subsequent sickness absence. Scand J Public Health. 2014;42:96–103.
- 77. Mussener U, Ståhl C, Soderberg E. Does the quality of encounters affect return to work? Lay people describe their experiences of meeting various professionals during their rehabilitation process. Work. 2015; doi:10.3233/wor-152121.
- 78. Lammerts L, Schaafsma FG, Van Mechelen W, Anema JR. Process evaluation of a participatory supportive return to work program for workers without a permanent employment contract, sick-listed due to a common mental disorder. J Occup Rehabil. 2016; doi: 10.1007/s10926-016-9625-6.
- 79. Ahrberg Y, Landstad BJ, Bergroth A, Ekholm J: Desire, longing and vanity: emotions behind successful return to work for women on long-term sick leave. Work. 2010; 37 (2): 167-77. 10.3233/WOR-2010-1067.
- Andersson C, Mårtensson L: Women's experiences of being in the sick leave process, Scandinavian Journal of Occupational therapy. 2020. DOI: 10.1080/11038128.2020.1750692
- 81. Solheim L J: Relational social capital: Norwegian women's experiences of the process of being on sick leave and the path back to work. Nordic Journal of Social Research. 2015; 6. https://doi.org/10.7577/njsr.2084
- 82. Cancelliere C, Donovan J, Stochkendahl MJ, Biscardi M, Ammendolia C, Myburgh C, et al. Factors affecting return to work after injury or illness: best evidence synthesis of systematic reviews. Chiropr Man Therap. 2016;24(1):32.
- 83. Lagerveld SE, Blonk RWB, Brenninkmeijer V, Schaufeli WB. Return to work among employees with mental health problems: development and validation of a self-efficacy questionnaire. Work Stress. 2010;24(4):359–375.
- 84. Shaw WS, Reme SE, Linton SJ, Huang YH, Pransky G: 3rd place, PREMUS best paper competition: development of the return-to-work self-efficacy (RTWSE-19) questionnaire—psychometric properties and predictive validity. Scand J Work Environ Health. 2011; 37: 109-119. 10.5271/sjweh.3139.
- 85. Moldvik I, Ståhl C, Müssener U: Work ethics and societal norms influence sick leave and return to work: tales of transformation, Disability and Rehabilitation. 2020; p. 1-10. 10.1080/09638288.2020.1728398
- 86. Etuknwa A, Daniels K, Eib C. Sustainable return to work: a systematic review focusing on personal and social factors. J Occup Rehabil. 2019. https://doi.org/10.1007/s10926-019-09832-7.
- 87. Sampere M, Gimeno D, Serra C, Plana M, Lopez JC, Martinez JM, et al. Return to work expectations of workers on long-term non-work-related sick leave. J Occup Rehabil. 2012;22(1):15–26. doi:10.1007/s10926-011-9313-5.
- 88. Jansson I, Bjorklund A. The experience of returning to work. Work. 2007;28(2):121–34.

- 89. Franche R-L, Krause N. Readiness for return to work following injury or illness: conceptualizing the interpersonal impact of health care, workplace, and insurance factors. J Occup Rehabil. 2002;12:233–56.
- 90. Noordik E, Nieuwenhuijsen K, Varekamp I, van der Klink JJ, van Dijk FJ. Exploring the return-to-work process for workers partially returned to work and partially on long-term sick leave due to common mental disorders: a qualitative study. Disabil Rehabil. 2011;33(17–18):1625–1635. https://doi.org/10.3109/09638288.2010.541547.
- 91. Vanovenberghe C, Van den Broeck A, Lauwerier E, Goorts K, & Du Bois M: Motivation in the return to work process: a self-determination cluster approach, Disability and Rehabilitation. 2020; DOI: 10.1080/09638288.2020.1826584
- 92. Bandura, A: Self-efficacy: The exercise of control. 1997. New York, NY: W. H. Freeman and Company
- 93. Nieuwenhuijsen K, Noordik E, van Dijk FJ, van der Klink JJ. Return to work perceptions and actual return to work in workers with common mental disorders. J Occup Rehabil. 2012;23(3):290–9. 10.1007/s10926-012-9389-6.
- 94. Labriola M, Lund T, Christensen KB, Albertsen K, Bultmann U, Jensen JN, et al: Does self-efficacy predict return-to-work after sickness absence? A prospective study among 930 employees with sickness absence for three weeks or more. Work. 2007; 29 (3): 233-238.
- 95. Pransky G, Shaw W, Franche RL, Clarke A: Disability prevention and communication among workers, physicians, employers, and insurers--current models and opportunities for improvement. Disabil Rehabil. 2004; 26: 625-634. 10.1080/09638280410001672517.
- 96. Lammerts L, Schaafsma FG, Eikelenboom M, Vermeulen SJ, van Mechelen W, Anema JR, et al. Longitudinal associations between biopsychosocial factors and sustainable return to work of sick-listed workers with a depressive or anxiety disorder. J Occup Rehabil. 2016;26(1):70–79.
- 97. Sturesson M, Edlund C, Falkdal AH, Bernspang B. Healthcare encounters and return to work: a qualitative study on sick-listed patients' experiences. Prim Health Care Res Dev. 2014;15(4):464–75. doi:10.1017/s1463423614000255.
- 98. Lynöe N, Wessel M, Olsson D, Alexandersson K, Helgesson G: Respectful encounters and return to work empirical study of long-term sick-listed patients' experiences of Swedish healthcare. BMJ Open. 2011; 1 (2): e000246-10.1136/bmjopen-2011-000246.
- 99. Svensson T, Müssener U, Alexanderson K: Pride, empowerment, and return to work: on the significance of promoting positive social emotions among sickness absentees. Work. 2006; 27 (1): 57-65.

- 100. Andersen A, Ståhl C, Anderzen I, Kristiansson P, Larsson K. Positive experiences of a vocational rehabilitation intervention for individuals on long-term sick leave, the Dirigo project: a qualitative study. BMC Public Health. 2017;17(1):790.
- 101. Klanghed U, Svensson T, Alexanderson K: Positive encounters with rehabilitation professionals reported by persons with experience of sickness absence. Work. 2004; 22: 247-254.
- 102. Mussener U, Svensson T, Soderberg E, Alexanderson K. Encouraging encounters: sick-listed persons' experiences of interactions with rehabilitation professionals. Soc Work Health Care. 2008;46(2):71–87.
- 103. Haugli L, Maeland S, Magnussen LH: What Facilitates Return to Work? Patients Experiences 3 Years After Occupational Rehabilitation. J Occup Rehabil. 2011; 21: 573-581. 10.1007/s10926-011-9304-6
- 104. Wagner SL, Wessel JM, Harder HG: Workers' perspectives on vocational rehabilitation services. Rehabilitation Counseling Bulletin. 2011; 55(1): p. 46-61. https://doi.org/10.1177/0034355211418250
- 105. Andersen MF, Nielsen K, Brinkmann S. How do workers with common mental disorders experience a multidisciplinary return-to-work intervention? A qualitative study. J Occup Rehabil. 2014;24(4):709–724. 10.1007/s10926-014-9498-5.
- 106. Porter S, Lexén A, Johanson S, Bejerholm U. Critical factors for the return-to-work process among people with affective disorders: voices from two vocational approaches. Work. 2018; 60:221–34. https://doi.org/10.3233/WOR-182737.
- 107. Scharf J, Angerer P, Muting, G, Loerbroks A: Return to Work after Common Mental Disorders: A Qualitative Study Exploring the Expectations of the Involved Stakeholders. Int J Environ Res Public Health. 2020; 17(18).
- 108. Upmark M, Hagberg J, Alexanderson K. Negative encounters with social insurance officers experiences of women and men on long-term sick leave. Int J Soc Welf. 2011;20(3):309–17. https://doi.org/10.1111/j.1468-2397.2009.00702.x.
- 109. McLeod CB, Reiff E, Maas E, Bultmann U. Identifying return-to-work trajectories using sequence analysis in a cohort of workers with work-related musculoskeletal disorders. Scand J Work Environ Health. 2018;44(2):147–55.
- 110. Vargas-Prada S. et al., Effectiveness of very early workplace interventions to reduce sickness absence: a systematic review of the literature and meta-analysis. Scand J Work Environ Health. 2016; 42(4): p. 261-72.
- 111. Dekkers-Sánchez PM, Wind H, Sluiter JK, Frings-Dresen MHW: What promotes sustained return to work of employees on long-term sick leave? Perspectives of vocational rehabilitation professionals. Scand J Work Environ Health. 2011; 37 (6): 481-493. 10.5271/sjweh.3173.
- 112. Anema JR, Steenstra IA, Bongers PM, de Vet HCW, Knol DL, van Mechelen W: Multidisciplinary Rehabilitation for Subacute Low Back Pain: Graded Activity or Workplace Intervention or Both? A Randomized Controlled Trial. Spine. 2007; 32: 291-298. 10.1097/01.brs.0000253604.90039.ad.

- 113. Bultmann U, Sherson D, Olsen J, Hansen CL, Lund T, Kilsgaard J: Coordinated and tailored work rehabilitation: a randomized controlled trial with economic evaluation undertaken with workers on sick leave due to musculoskeletal disorders. J Occup Rehabil. 2009;19: 81-93. 10.1007/s10926-009-9162-7.
- 114. Lambeek LC, van Mechelen W, Knol DL, Loisel P, Anema JR. Randomised controlled trial of integrated care to reduce disability from chronic low back pain in working and private life. British Medical Journal. 2010. https://doi.org/10.1136/bmj.c1035
- 115. Nieuwenhuijsen K, Faber B, Verbeek JH, Neumeyer-Gromen A, Hees HL, Verhoeven AC, et al. Interventions to improve return to work in depressed people. Cochrane Database Syst Rev. 2014;12:CD006237.
- 116. Stapelfeldt CM, Christiansen DH, Jensen OK, Nielsen CV, Petersen KD, Jensen C: Subgroup analyses on return to work in sick-listed employees with low back pain in a randomised trial comparing brief and multidisciplinary intervention. BMC Musculoskelet Disord. 2011;12: 112-10.1186/1471-2474-12-112.
- 117. Jensen C, Jensen OK, Nielsen CV. Sustainability of return to work in sick-listed employees with low-back pain. Two-year follow-up in a randomized clinical trial comparing multidisciplinary and brief intervention. BMC Musculoskelet Disord. 2012;13, 156-2474-13-156.
- 118. McLaren CF, Reville RT, Seabury SA: How effective are employer return to work programs? International Review of Law and Economics. 2017; 52. P. 58-73. https://doi.org/10.1016/j.irle.2017.08.003
- 119. Finnes A, Enebrink P, Ghaderi A. et al. Psychological treatments for return to work in individuals on sickness absence due to common mental disorders or musculoskeletal disorders: a systematic review and meta-analysis of randomized-controlled trials. Int Arch Occup Environ Health. 2019; 92, 273–293. https://doi.org/10.1007/s00420-018-1380-x
- 120. Tolin D: Is cognitive-behavioral therapy more effective than other therapies? A meta-analytic review. Clin Psychol Rev. 2010; 710-720. https://doi.org/10.1016/j.cpr.2010.05.003
- 121. Nieuwenhuijsen K, Verbeek JH, Neumeyer-Gromen A, Verhoeven AC, Bultmann U, Faber B: Interventions to improve return to work in depressed people. Cochrane Database of Systematic Reviews, 2020;(10). https://doi.org/10.1002/14651858.CD006237.pub4
- 122. Miller WR, Rollnick S. Motivational interviewing: helping people change, 3rd ed. New York: Guilford Press; 2013. 482 p.
- 123. Hettema J, Steele J, Miller WR. Motivational interviewing. Annu Rev Clin Psychol. 2005;1:91–111. https://doi.org/10.1146/annurev.clinpsy.1.102803.143833
- 124. Draycott S, Dabbs A: Cognitive dissonance 2: A theoretical grounding of motivational interviewing. British Journal of Clinical Psychology, 1998. 37(3): p. 355-364.

- 125. Rogers C. A theory of therapy, personality, and interpersonal relationships: as developed in the client-centered framework. Koch S, editor. New York: McGraw-Hill; 1959.
- 126. Festinger L. A theory of cognitive dissonance. Stanford: Combined Academic Publ; 1957.
- 127. Brehm JW. A theory of psychological reactance. New York, NY: Academic Press; 1966.
- 128. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. Psychol Rev. 1977;84(2):191–215.
- 129. Prochaska JO, DiClemente CC. Stages and processes of self-change of smoking: toward an integrative model of change. J Consult Clin Psychol. 1983;51:390–5.
- 130. Ryan RM, Deci EL. Overview of self-determination theory: an organismic-dialectical perspective. In: Deci EL, Ryan RM, editors. Handbook of self-determination research. Rochester: The University of Rochester Press; 2002. p. 3–33.
- 131. Miller WR, Rose GS. Toward a theory of motivational interviewing. Am Psychol. 2009;64:527–37.
- 132. Arkowitz H, Miller WR. Learning, applying, and extending motivational interviewing. Motivational interviewing in the treatment of psychological problems. 2008;1–25.
- 133. Rubak S, Sandbaek A, Lauritzen T, Christensen B. Motivational interviewing: a systematic review and meta-analysis. Br J Gen Pract. 2005 Apr;55(513):305-12.
- 134. DiClemente CC, Corno CM, Graydon MM, Wiprovnick AE, Knoblach DJ. Motivational interviewing, enhancement, and brief interventions over the last decade: a review of reviews of efficacy and effectiveness. Psychol Addict Behav. 2017;31(8):862-87.
- 135. Borsari B, Hopkins L B, Manuel J K, Apodaca T R, Mastroleo N R, Jackson K M, et al. Improvement in therapist skills over sessions in brief motivational interventions predicts client language and alcohol *use outcomes*. Psychology of Addictive Behaviors, 2019; 33(5), 484–494. https://doi.org/10.1037/adb0000470
- 136. Bagøien G, Bjørngaard JH, Østensen C, Reitan SK, Romundstad P, Morken G. The effects of motivational interviewing on patients with comorbid substance use admitted to a psychiatric emergency unit: a randomised controlled trial with two year follow-up. BMC Psychiatry. 2013;13:93. 10.1186/1471-244X-13-93.
- 137. Lai DT, Cahill K, Qin Y, Tang JL. Motivational interviewing for smoking cessation. Cochrane Database Syst Rev. 2010;20(1):CD006936.
- 138. Lundahl B, Moleni T, Burke BL, Butters R, Tollefson D, Butler C, et al. Motivational interviewing in medical care settings: a systematic review and metaanalysis of randomized controlled trials. Patient Educ Couns. 2013;93(2):157-68. 10.1016/j.pec.2013.07.012.

- 139. Westra HA, Constantino MJ, Antony MM. Integrating motivational interviewing with cognitive-behavioral therapy for severe generalized anxiety disorder: an allegiance-controlled randomized clinical trial. J Consult Clin Psychol. 2016;84:768-82
- 140. Lundahl B, Burke BL. The effectiveness and applicability of motivational interviewing: a practice-friendly review of four meta-analyses. J Clin Psychol. 2009;65(11):1232–45.
- 141. Marshall C, Nielsen A S. Motivational Interviewing for Leaders in the Helping Professions: Facilitating Change in Organizations. 2020. Guilford Press.
- 142. Cohen D, Allen J, Rhydderch M, Aylward M. The return to work discussion: a qualitative study of the line manager conversation about return to work and the development of an educational programme. Journal of rehabilitation medicine. 2012; 44(8): p. 677-683. https://doi.org/10.2340/16501977-0996
- 143. Graham V, Jutla S, Higginson D, Wells A. The added value of motivational interviewing within employment assessments. Journal of Occupational Psychology. 2008; 10(1): p. 43-52.
- 144. Brooks K. 'You would think...'Applying motivational interviewing and career coaching concepts with liberal arts students. Journal of Career Planning and Employment. 2005; 65, 28-36.
- 145. Aanesen F, Berg R, Loechting I, Tingulstad A, Eik H, Storheim K, et al. Motivational Interviewing and Return to Work for People with Musculoskeletal Disorders: A Systematic Mapping Review. Journal of occupational rehabilitation, 2020. 10.1007/s10926-020-09892-0
- 146. Magnussen L, Strand LI, Skouen JS, Eriksen HR. Motivating disability pensioners with back pain to return to work--a randomized controlled trial. J Rehabil Med. 2007;39(1):81–7. 10.2340/16501977-0004.
- 147. Gross DP, Park J, Rayani F, Norris CM, Esmail S. Motivational interviewing improves sustainable return to work in injured workers after rehabilitation: a cluster randomized controlled trial. Arch Phys Med Rehabil. 2017 Dec;98(12):2355–63. 10.1016/j.apmr.2017.06.003.
- 148. Park J, Esmail S, Rayani F, Norris CM, Gross DP. Motivational Interviewing for Workers with Disabling Musculoskeletal Disorders: Results of a Cluster Randomized Control Trial. J Occup Rehabil. 2017; doi: 10.1007/s10926-017-9712-3.
- 149. Aasdahl L, Foldal VS, Standal MI, Hagen R, Johnsen R, Solbjor M, et al. Motivational interviewing in long-term sickness absence: study protocol of a randomized controlled trial followed by qualitative and economic studies. BMC Public Health. 2018;18(1):756. 10.1186/s12889-018-5686-0.
- 150. Øiestad BE, Aanesen F, Løchting I, Storheim K, Tingulstad A, Rysstad TL, et al. Study protocol for a randomized controlled trial of the effectiveness of adding motivational interviewing or stratified vocational advice intervention to usual case

- management on return to work for people with musculoskeletal disorders. The MI-NAV study. BMC Musculoskelet Disord. 2020; 21, 496. https://doi.org/10.1186/s12891-020-03475-z
- 151. Ståhl C, Gustavsson M. Introducing Motivational Interviewing in a Sickness Insurance Context: Translation and Implementation Challenges. J Occup Rehabil. 2017; https://doi.org/10.1007/s10926-017-9731-0.
- 152. Ståhl C, Andersen A, Anderzen I, Larsson K. Process evaluation of an interorganizational cooperation initiative in vocational rehabilitation: the Dirigo project. BMC Public Health. 2017;17(1):431. doi:10.1186/s12889-017-4357-x.
- 153. Secker J, Margrove KL. Employment support workers' experiences of motivational interviewing: Results from an exploratory study. Psychiatric rehabilitation journal. 2014. 37(1): p. 65.
- 154. Miller WR, Rollnick S. Ten things that motivational interviewing is not. Behav Cogn Psychother. 2009;37(2):129–40.
- 155. Miller WR, Yahne CE, Moyers TB, Martinez J, Pirritano M. A randomized trial of methods to help clinicians learn motivational interviewing. J Consult Clin Psychol. 2004;72:1050–62.
- 156. Beckman M, Forsberg L, Lindqvist H, Diez M, Eno Persson J, Ghaderi A. The dissemination of motivational interviewing in Swedish county councils: results of a randomized controlled trial. PLoS One. 2017;12(7):e0181715.
- 157. Dunn C, Darnell D, Atkins DC, Hallgren KA, Imel ZE, Bumgardner K, et al. Within-provider variability in motivational interviewing integrity for three years after MI training: does time heal? Journal of Substance Abuse Treatment. 2016;65:74-82.
- 158. Pace BT, Dembe A, Soma CS, Baldwin SA, Atkins DC, Imel ZE. A multivariate meta-analysis of motivational interviewing process and outcome. Psychol Addict Behav. 2017;31(5):524-33.
- 159. Jelsma JGM, Mertens V-C, Forsberg L, Forsberg L. How to measure motivational interviewing fidelity in randomized controlled trials: practical recommendations. Contemp Clin Trials. 2015;43:93-9.
- 160. Miller W R, Moyers T B, Ernst D, Amrhein P. Manual for the motivational interviewing skill code (MISC): Version 2.1. Substance Abuse and Addiction (CASAA), University of New Mexico. 2008; 8, 901-904.
- 161. Moyers TB, Manuel JK, Ernst D. Motivational Interviewing Treatment Integrity Coding Manual 4.1. Unpublished manual. 2014.
- 162. Hurlocker MC, Madson MB, Schumacher JA. Motivational interviewing quality assurance: A systematic review of assessment tools across research contexts. Clinical Psychology Review. 2020; 82: p. https://doi.org/10.1016/j.cpr.2020.101909
- 163. Main CJ, Nicholas MK, Shaw WS, Tetrick LE, Ehrhart MG, Pransky G. Implementation Science and employer disability practices: should implementation

- factors be imbedded in research designs? J Occup Rehabil. 2016. https://doi.org/10.1007/s10926-016-9677-7
- 164. Holtrop JS, Rabin BA, Glasgow RE. Qualitative approaches to use of the RE-AIM framework: rationale and methods. BMC Health Serv Res. 2018. https://doi.org/10.1186/s12913-018-2938-8.
- 165. Glasgow RE, Vogt TM, Boles SM. Evaluating the public health impact of health promotion interventions: the RE-AIM framework. Am J Public Health. 1999;89:1322–7.
- 166. Gaglio B, Shoup JA, Glasgow RE. The RE-AIM Framework: a systematic review of use over time. Am J Public Health. 2013;103(6):E38–46.
- 167. Forman J, Heisler M, Damschroder LJ, Kaselitz E, Kerr EA. Development and application of the RE-AIM QuEST mixed methods framework for program evaluation. Prev Med Rep. 2017;6:322–8.
- 168. Aust B, Nielsen MBD, Grundtvig G, Buchardt HL, Ferm L, Andersen I, et al. Implementation of the Danish return-to-work program: process evaluation of a trial in 21 Danish municipalities. Scand J Work Environ Health. 2015;41(6):529–41.
- 169. Hoefsmit N, Boumans N, Houkes I, Nijhuis F. A process evaluation of a return-to-work intervention to improve cooperation between sick-listed employees and their supervisors (COSS). Work. 2016; 55(3): p. 593-603. 10.3233/WOR-162431
- 170. Wertz F.J. Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research, and intuitive inquiry. 2011: Guilford Press.
- 171. Kvale S, Brinkmann S. Interviews: Learning the craft of qualitative research interviewing. 2009: Sage.
- 172. Malterud K. Kvalitative forskningsmetoder for medisin og helsefag: en innføring. 2017. Universitetsforlaget.
- 173. Malterud K. Fokusgrupper som forskningsmetode for medisin og helsefag. 2012. Universitetsforlaget.
- 174. Brinkmann S, Kvale S. Interviews: Learning the craft of qualitative research interviewing. Vol. 3. 2015: Sage Thousand Oaks, CA.
- 175. Lynöe N, Wessel M, Olsson D, Alexandersson K, Helgesson G: Respectful encounters and return to work empirical study of long-term sick-listed patients' experiences of Swedish healthcare. BMJ Open. 2011;1(2): e000246-10.1136/bmjopen-2011-000246.
- 176. Norwegian Labour and Welfare Administration. Forespørsel om deltakelse i forskningsprosjekt [Internet] Cited 2020 Nov 26. Available from:

 https://www.nav.no/no/lokalt/trondelag/satsinger-og-aktiviteter/foresporsel-om-deltakelse-i-forskningsprosjektet
- 177. Glaser B G, Strauss A L. Discovery of grounded theory: Strategies for qualitative research. 2017. Routledge.

- 178. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. Qual Health Res. 2016;26(13):1753–60. https://doi.org/10.1177/1049732315617444
- 179. Kitzinger J, Barbour RS. editors. Developing focus group research: politics, theory, and practice. London. 1999. Thousand Oaks: SAGE Publications.
- 180. KoRuS. MI-Analyse. Cited 2020 Feb 11. Available from: https://www.korusbergen.no/motiverende-samtale/mi-analyse/.
- 181. Starks H, Trinidad SB. Choose your method: a comparison of phenomenology, discourse analysis, and grounded theory. Qual Health Res. 2007;17(10):1372–80.
- 182. Malterud K. Theory and interpretation in qualitative studies from general practice: why and how? Scand J Public Health. 2006;44:120–9. https://doi.org/10.1177/1403494815621181.
- 183. Giorgi A. The descriptive phenomenological method in psychology: a modified Husserlian approach. 2009. Pittsburgh, Pa: Duquesne University Press.
- 184. Malterud K. Systematic text condensation: a strategy for qualitative analysis. Scand J Public Health. 2012;40(8):795–805. 10.1177/1403494812465030.
- 185. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77–101.
- 186. Tufford L, Newman P. Bracketing in qualitative research. Qual Soc Work. 2012;11(1):80–96. https://doi.org/10.1177/1473325010368316.
- 187. Giorgi A. The descriptive phenomenological psychological method. J Phenomenol Psychol. 2012;43:3–12.
- 188. Braun V, Clarke V, Hayfield N, Terry G, Liamputtong P. Handbook of research methods in health social sciences. Gateway East: Springer Nature Group. 2019; 843-860.
- 189. Stata StataCorp: Stata Statistical Software: Release 15. 2017, College Station (TX): StataCorp
- 190. Saunders B, Kitzinger J, Kitzinger C. Anonymising interview data: challenges and compromise in practice. Qual Res. 2015;15:616–32.
- 191. Van den Hoonaard WC. Is anonymity an artifact in ethnographic research? J Acad Ethics. 2003;1(2):141–51. doi:10.1023/B:JAET.0000006919.58804.4c.
- 192. Mazza D, Brijnath B, Singh N, Kosny A, Ruseckaite R, Collie A. General practitioners and sickness certification for injury in Australia. BMC Fam Pract. 2015;16(100):9. https://doi.org/10.1186/s12875-015-0307-9
- 193. Jakobsen K, Lillefjell M. Factors promoting a successful return to work: from an employer and employee perspective. Scand J Occup Ther. 2014;21:48–57. 10.3109/11038128.2013.857717
- 194. Markussen S, Mykletun A, Røed K. The case for presenteeism Evidence from Norway's sickness insurance program. J Public Econ. 2012; 96(11):959–72. https://doi.org/10.1016/j.jpubeco.2012.08.008

- 195. Nossen JP, Brage S. Effekt av gradert sykmelding: Betydningen av metodevalg. Arbeid og velferd. 2013;3.
- 196. Eftedal M, Kvaal AM, Ree E, Oyeflaten I, Maeland S. How do occupational rehabilitation clinicians approach participants on long-term sick leave in order to facilitate return to work? A focus group study. BMC Health Serv Res. 2017;17(1):744. https://doi.org/10.1186/s12913-017-2709-y
- 197. Norlund S, Fjellman-Wiklund A, Nordin M, Stenlund T, Ahlgren C. Personal resources and support when regaining the ability to work: an interview study with exhaustion disorder patients. J Occup Rehabil. 2013;23(2):270–9. 10.1007/s10926-012-9396-7
- 198. Ståhl C. The Judas kiss: On the work and retrenchment cures and the troubles they bring. Work. 2020 (Preprint), 1-6.
- 199. Garthwaite K. Becoming incapacitated? Long-term sickness benefit recipients and the construction of stigma and identity narratives. Sociol Health Illn. 2015;37(1):1–13. 10.1111/1467-9566.12168.
- 200. Hanel G, Henningsen P, Herzog W, Sauer N, Schaefert R, Szecsenyi J, Löwe B: Depression, anxiety, and somatoform disorders: Vague or distinct categories in primary care? Results from a large cross-sectional study. Journal of Psychosomatic Research. 2009; 67 (3): 189-197. 10.1016/j.jpsychores.2009.04.013.
- 201. Neves RdF, Nunes MdO, Magalhães L. Interactions among stakehoklders involved in return to work after sick leave due to mental disorders: a meta-ethnography. Cadernos de Saúde Pública. 2015; 31: p. 2275-2290.
- 202. Charmaz K. Loss of self: a fundamental form of suffering in the chronically ill. Sociol Health Illn. 1983;5(2):168–95.
- 203. Tjulin A, MacEachen E, Stiwne EE, Ekberg K. The social interaction of return to work explored from co-workers experiences. Disabil Rehabil. 2011;33(21–22):1979–89. doi:10.3109/09638288.09632011.09553708.
- 204. Skivington K, Lifshen M, Mustard C. Implementing a collaborative return-to-work program: lessons from a qualitative study in a large Canadian healthcare organization. Work Read Mass. 2016;55:613–624.
- 205. Moyers T. The relationship in motivational interviewing. Psychotherapy (Chic). 2014;51(3):358–63.
- 206. Halvorsen K, Riis-Johansen MO, Andenæs E, Hammerstad GT. UTVEI–Utvikling av veiledningssamtalen i NAV. NAV, 2018. Available from:

 https://www.nav.no/no/nav-og-samfunn/kunnskap/forskningsrapporter-og-evalueringer-finansiert-av-nav/navs-tiltak-og-virkemidler-rapportarkiv/utvei-utvikling-av-veiledningssamtalen-i-nav/
- 207. Jansson I, Perseius K, Gunnarsson AB, Bjorklund A. Work and everyday activities: experiences from two interventions addressing people with common mental disorders. Scand J Occup Ther. 2014;21(4):295–304. https://doi.org/10.3109/11038128.2014.894572.

- 208. Ståhl C, Andersson F. Shifting to Value-Based Principles in Sickness Insurance: Challenges in Changing Roles and Culture. J Occup Rehabil. 2018; 28, 730–739. https://doi.org/10.1007/s10926-018-9759-9
- 209. Soderberg E, Alexanderson K: Gatekeepers in sickness insurance: a systematic review of the literature on practices of social insurance officers. Health Soc Care Community. 2005; 13: 211-223. 10.1111/j.1365-2524.2005.00551.x.
- 210. Norwegian Labour and Welfare Administration. Membership of the national insurance scheme. [Internet] Cite 2020 Aug 07. Available from: https://www.nav.no/en/home/rules-and-regulations/membership-of-the-national-insurance-scheme
- 211. Mann C, Shaw A, Guthrie B, Wye L, Man MS, Hollinghurst S, Brookes S, Bower P, Mercer S, Salisbury C. Protocol for a process evaluation of a cluster randomised controlled trial to improve management of multimorbidity in general practice: the 3D study. BMJ Open. 2016;6(5):e011260.
- 212. Rychetnik L, Frommer M, Hawe P, Shiell A: Criteria for evaluating evidence on public health interventions. J Epidemiol Community Health. 2002; 56: 119-127. 10.1136/jech.56.2.119.
- 213. Jacobsson K, Wallinder Y, Seing I. Street-level bureaucrats under new managerialism: a comparative study of agency cultures and caseworker role identities in two welfare state bureaucracies. Journal of Professions and Organization, 2020. https://doi.org/10.1093/jpo/joaa015
- 214. Johns RG, Barkham M, Kellett S, Saxon D. A systematic review of therapist effects: a critical narrative update and refinement to review. Clin Psychol Rev. 2019;67:78–93
- 215. Ståhl C, Müssener U, Svensson T. Implementation of standardized time limits in sickness insurance and return-to-work: experiences of four actors. Disabil Rehabil. 2012;34(16):1404–11. https://doi.org/10.3109/09638288.2011.641667.
- 216. Breitenstein SM, Gross D, Garvey CA, Hill C, Fogg L, Resnick B. Implementation fidelity in community-based interventions. Res Nurs Health. 2010;33(2):164–73.
- 217. Torres A, Frain M, Tansey TN. The impact of motivational interviewing training on rehabilitation counselors: assessing working alliance and client engagement. A randomized controlled trial. Rehabil Psychol. 2019;64(3):328–338.
- 218. Kramer Schmidt L, Andersen K, Søgaard Nielsen A. Differences in the delivery of motivational interviewing across three countries. Journal of ethnicity in substance abuse. 2020; 1-22.
- 219. Stige B, Malterud K, Midtgarden T. Toward an agenda for evaluation of qualitative research. Qual Health Res. 2009; 19:1504–16.
- 220. Forsberg L, Forsberg LG, Lindquist H, Helgason AR: Clinician acquisition and retention of Motivational Interviewing skills: a two-and-a-half-year exploratory study. Subst Abuse Treat, Prev Policy. 2010;5: 8.

- 221. Malterud K. Kvalitative forskningsmetoder for medisin og helsefag: en innføring. 2011. Universitetsforlaget.
- 222. Smith J, Osborn M, Jarman M. Doing interpretive phenomenological analysis. In: Murray M, Chamberlain K, editors. Qualitative health psychology: theories and methods. London: Sage Publications; 1999. p. 218–40.
- 223. Graneheim UH, Lundman B: Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today. 2004; 24: 105-112. 10.1016/j.nedt.2003.10.001.
- 224. Vaismoradi M, Turunen H, Bondas T. Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. Nurs Health Sci. 2013;15(3):398–405.
- 225. Malterud K: Qualitative research: standards, challenges and guidelines. Lancet. 2001; 358: 483-8. 10.1016/S0140-6736(01)05627-6.
- 226. Solbue V. In search of my hidden preconceptions as a researcher. Reflective Practice. 2011; 12(6), 817-827.
- 227. Van de Walle S. Trust in public administration and public services. Trust at Risk: Implications for EU. 2017;118.
- 228. NRK. Dette er trygdeskandalen. [Internet] Cited 2020 nov 22. Available from: https://www.nrk.no/norge/dette-er-trygdeskandalen-1.14760396

Paper I

Title Page Title Health, work and family strain - psychosocial experiences at the early stages of long-term sickness absence Authors Martin Inge Standal¹, martin.standal@ntnu.no (Corresponding author) Vegard Stolsmo Foldal² Roger Hagen^{1,3,4} Lene Aasdahl^{2,5} Roar Johnsen² Egil Andreas Fors⁶ Marit Solbjør² ¹ Department of Psychology, Faculty of Social and Educational Sciences, Norwegian University of Science and Technology, Trondheim, Norway ² Department of Public Health and Nursing, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway ³ Department of Psychology, Faculty of Social Sciences, University of Oslo, Oslo, Norway ⁴ Research institute, Modum Bad, Modum, Norway

⁵ Unicare Helsefort Rehabilitation Centre, Rissa, Norway

⁶ General Practice Research Unit, Department of Public Health and Nursing, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway

Abstract

Background: Knowledge about the psychosocial experiences of sick-listed workers in the first months of sick leave is sparse even though early interventions are recommended. The aim of this study was to explore psychosocial aspects of sick listed individual's experiences with being on sick leave after 8–12 weeks of sickness absence, and their expectations and thoughts about returning to work.

Methods: Sixteen individuals at 9-13 weeks of sick leave participated in semi-structured individual interviews. Data was analysed through Giorgi's descriptive phenomenological method.

Results: Three themes emerged: (1) energy depleted, (2) losing normal life, (3) searching for a solution. A combination of health, work and family challenges contributed to being drained of energy, which affected both work- and non-work roles. Being on sick leave led to a loss of social arenas and their identity as a contributing member of society. Participants required assistance to find solutions towards returning to work.

Conclusions: Even in this early stage of long-term sick leave, sick listed workers faced complex challenges in multiple domains. Continuing sick leave was experienced as necessary but may challenge personal identity and social life. Those not finding solutions may benefit from additional early follow-up that examine work-related, social and personal factors that influence return to work.

Keywords: mental disorders, burnout, musculoskeletal disorders, long-term sick leave, return to work, work-family conflict, work-life balance, social identity, unselected diagnoses

Background

Long-term sickness absence is a significant challenge in industrialised countries [1]. It is costly for society, and prolonged sickness absence is associated with adverse health outcomes, multimorbidity and an increased risk of permanent disability for individuals [2, 3]. Due to the negative impacts of prolonged sick leave, early return to work (RTW) interventions are recommended [3-5]. After the first few months individuals have a reduced relative likelihood of returning to work [4, 6] and interventions between 8–12 weeks of sick leave are proposed to be a sensible approach order to help sick-listed individuals RTW [7-9]. Furthermore, as many prognostic factors for RTW are shared across diagnoses, the process of returning to work can also contain elements that are similar across different health issues [10]. However, attempts at finding effective broad interventions have resulted in inconsistent conclusions [11-14]. Such difficulties in finding effects could be due to the multifaceted problems that sick-listed individuals face, which include interactions between the individual, the workplace, health services and social surroundings [15]. This means that length of sick leave is not only influenced by health status, but also individual expectations, perceptions, as well as family life, work environment and workplace support [14, 16-19].

The importance of psychosocial factors in the RTW process are demonstrated in findings that stressful family situations and a demanding work life are common experiences among long-term sick-listed individuals [20-23]. Meta-syntheses of qualitative RTW research also point to the disruption of social life during sick leave, stressful work situations, and the importance of supportive workplace for RTW as common experiences [24-26]. The theory of role strain states that different obligations for the various social roles (e.g. at work, family, leisure) may not be compatible [27]. In modern society these work and non-work roles converge and impact each other [28] and lack of support in these arenas can lead to conflict between these roles [29].

Furthermore, being on sick leave may also influence an individual's identity and social roles [25, 30-32]. For example, societal and personal expectations of sick leave may also influence individual behaviour when sick-listed. Such expectations were described by Parsons' 'sick role' theory which illustrates how society has viewed illness behaviour [33]. In this theory the sick individual is seen as having lost the capacity to do valued tasks, albeit not being responsible for falling ill [34]. This loss of capacity affects all of the individual's roles at work and outside of work [35]. Consequently, the person is exempt from their normal roles and obligations and enters a 'sick role' where their new obligation is to spend their time and effort to get well as quickly as possible [34]. Thus, withdrawing form society is the expected behaviour to fulfil the sick role [35].

Professionals aiming to support RTW have expressed a need to understand sick-listed individuals' broader life-worlds [36]. Research on experiencing sick leave is extensive, but despite recommendations for early interventions qualitative research focusing on the early stages of long-term sick leave is scarce. Previous research has commonly been performed with undefined or varied sick leave length, or with participants sick listed for several months or years who might not recall their earliest months of sick leave (e.g. [32]). These experiences may not be well-suited to inform early RTW interventions. Research has also focused on specific genders, occupations or diagnoses [16, 37]. It is likely that individuals with different genders, diagnoses or occupations may have different experiences of sick leave (e.g. [38, 39]). However, as returning to work can be argued to be a general process across health issues it is also important to know which experiences might be shared, not least considering the large heterogeneity within and similarities between such groups [40].

Cross-diagnostic RTW approaches have been described as promising and early interventions are increasingly recommended [41]. However, these fields are still in an early phase and there is a need to identify aspects of the RTW process that are common across

disorders and contextualized by time [41, 42]. Thus, more information on common psychosocial experiences of being sick listed across diagnoses in the early stage of sick leave could inform early cross-diagnostic RTW interventions and follow-up.

The aim of this study was to explore psychosocial aspects of sick listed individual's experiences with being on sick leave after 8–12 weeks of sickness absence, and expectations and thoughts about returning to work.

Methods

This is a phenomenological interview study nested within a randomised controlled trial (RCT) evaluating the effect of motivational interviewing on sickness absence [43].

Study setting: Follow-up of sick-listed workers in Norway

In Norway, employees are entitled to 12 months of full wage benefits when on sick leave.

The first 16 days of sick leave are paid by the employer and the rest is paid for by the

National Insurance Scheme through the Norwegian Labour and Welfare Administration

(NAV) [44]. Sick leave is also encouraged to be graded, meaning that employees work a

percentage corresponding to their current work ability.

The employer has the main responsibility for assisting the sick-listed worker back to work. Within the first four weeks of sick leave, the employer and sick-listed worker are obliged to create a plan detailing measures which can help the sick-listed RTW. Within seven weeks, the employer is required to arrange a meeting with the sick-listed worker that may also include other relevant stakeholders. If work-related activities are not resumed within eight weeks, an expanded medical certificate that documents medical problems preventing

such activities is required. Before six months have passed, a mandatory dialogue-meeting must be arranged by NAV. This meeting includes the NAV caseworker, the employer, the sick-listed worker and, in some cases, the general practitioner (GP). The sick-listed worker can, at any time, request a meeting with a NAV caseworker or request a dialogue-meeting that also involves the employer [45].

Recruitment and participants

Eligible participants in the present study were workers aged 18–60 years living in Central Norway who were at eight weeks of sick leave with a current sick leave status of 50–100% and any diagnosis. Eligible individuals were identified at seven weeks of sick leave by NAV and invited to participate in the RCT through NAV's electronic communication website. The list of participants who accepted were then forwarded to a researcher. The present interview study used a convenience sampling strategy where all those who had consented to participate in the RCT between November 2017 and February 2018 were eligible participants. In total, 73 individuals were contacted by one of the authors (MIS or VSF) via e-mail and invited to participate in an interview where they would talk about their experiences of sick leave. Thirteen women and three men with current sick leave length of 9 to 13 weeks and an age range of 32–59 participated in this study (see Table 1 for descriptive information). Fifty-seven individuals declined the invitation or did not respond to the e-mail. No researchers in the present study had any prior relationship with the participants.

Table 1 here

Data collection

Individual interviews were chosen, as they provided a safe space for rich, in-depth descriptions from each individual. Prior to inviting participants, we estimated the need for 10–15 interviews based on our research aim and the experience of the interviewers, guided by the concept information power [46]. There is little consensus regarding how to achieve saturation in phenomenology and the amount of information needed should be evaluated throughout the process [46]. Thus the necessary number of interviews was evaluated consecutively from nine interviews based on dialogue quality and information obtained. We found that participants shared their stories willingly and that dialogue quality was acceptable to extract information that had relevance for the study aim, indicating adequate information power [46]. No thematically new information was obtained from the final three interviews, closing the data collection at sixteen interviews. The quality of information obtained from our informants was considered satisfactory for describing the experiences of the participants.

Interviews were performed at a university campus by one of the researchers (MIS or VSF). Written informed consent was obtained prior to the interviews. Each interview followed a semi-structured interview guide with five broad major questions (See Table 2) and allowed for follow-up questions when necessary. Interview questions were created in collaboration between all authors based a biopsychosocial understanding of sick leave. In biopsychosocial models sick leave length is not only influenced by health, but also psychosocial factors and involvement of the stakeholders in the RTW process [15]. Follow-up questions thus addressed personal attitudes and motivations and the context surrounding the sick listed worker such as experiences with regards to family, friends, work, co-workers, supervisors, the welfare system, their general practitioners and other healthcare services. All interviews were audio recorded and were transcribed verbatim.

Table 2 here

Analysis

Data was analysed using Giorgi's descriptive phenomenological method [47] which offers a method for gaining knowledge of a specific phenomenon, such as being on sick leave.

Descriptive phenomenology attempts to understand how something is experienced from the perspective of the person undergoing the experience and is not interested in whether these experiences are true or false. The method thus allows for examination of the subjective experiences of individuals and how people create meaning in their situations [47]. In order to describe the phenomenon as experienced by the participants, it is necessary for the researchers to reflect on and set aside preconceived assumptions, also known as bracketing [47]. Preconceived assumptions were reflected upon individually and then discussed by all researchers in an early meeting to reduce their impact on data collection and analysis.

The analytic steps undertaken in this study were as outlined by Giorgi [47]:

- (1) Reading the complete interview transcript to get an overview of the individual's situation.
- (2) Re-reading the transcript and breaking the data into parts by marking whenever there was a transition of meaning in the data, creating meaning units.
- (3) Transforming the data from meaning units into expressions that more generally described the issue in the meaning unit while still holding true to the specific situation.
- (4) Developing the theme(s) of the interview by organising the expressions in the previous step. These themes are general expressions of the descriptions found in the interview.

These four steps were undertaken for all interviews by MIS and VSF (see Table 3 for an example) and themes were developed separately based on the meaning units. All other authors developed themes from two to four interviews each. Thus, all interviews were analysed by at least three authors to reduce the impact of preconceptions from a single researcher. The themes from each interview were then discussed in group sessions with all authors and further condensed into three major themes that described the situation for most participants in the study.

Table 3 here

Results

Three major themes emerged from the analysis: (1) energy depleted, (2) losing normal life, and (3) searching for a solution. The first two themes concerned participants' experiences with being on sick leave, while the latter theme focused on their thoughts regarding returning to work. Each theme will be presented in detail below.

Energy depleted

Participants experienced a situation where a combination of health issues and work and family stressors were experienced as energy draining, and they contributed to an inability to function to the participants' standards in either arena. Participants commonly struggled with symptoms such as pain, fatigue, dizziness, low blood pressure, memory or concentration problems:

F 33: 'So I've been dizzy since January, that's my thing, but I didn't get sick leave until May. [...] I used to come home from work exhausted [...], take care of the kid, and then just sleep until I got up for work the next day.'

Being on sick leave was experienced as necessary to distribute their remaining time and energy to better manage their recovery and other simultaneous stressors. In their personal life, such stressors were often related to responsibilities towards their children. This could lead to challenges since the welfare system does not allow sick leave due to care responsibilities.

F 39: '... this time I'm on leave to a larger degree because of my daughter, who is struggling with mental illness, [...] I've arranged with my GP that I can use a [burnout] diagnosis to be able to be home.'

However, such stressful family situations on their own could also contribute to exhaustion and ill health. Experiences of overwhelming care responsibilities were not described by the male respondents, who rather described being able to better prioritise family life when sick listed.

Aspects of the participants' work could also contribute to the perceived necessity of sick leave in their current situation. These aspects could include consistently having a high work load or adjusting to new energy-demanding work roles. Some individuals also disliked their job, which led to questions about whether to find a new job, but economic and social commitments made it hard to decide whether to stay or attempt to change jobs:

M 38: 'If you feel that there is something at the workplace that is difficult [...], the line of business is not right for you or the role you have is not right. [...]. This is not something that the GP or employer can fix, and when you have commitments with family and stuff, you can't just leave to follow some kind of dream.'

For those with less demanding family or work life, sick leave was nonetheless necessary in order to have energy left after treatment so they could function in their personal life while recovering. Without the capacity to do work, there was no use in them being at work:

F 58: 'the way I am now, I think it's OK to be on sick leave because I'm ill and then it's OK. [...] the disease makes me tired ... a loss of concentration and capacity really. [...] so I need to rest and I can't function at work so then it's OK to be on sick leave.'

Participants thus experienced sick leave as providing a necessary respite in an overwhelming situation. Sick leave provided the opportunity to prioritise their time and energy to better cope with their recovery and personal life.

Losing normal life

Needing sick leave to resolve their problems was not without challenges. Working was important to the participants, as work was an arena where they felt appreciated and competent. Working made them feel that they contributed to their workplace, family and/or to society.

F 59: 'This is not a situation I like to be in. I enjoy being at work. I enjoy filling my days with something ... so I know that I'm useful. So being on sick leave ... but I have to ... the way I am now, because I can't go to work now. [The pain] will get worse if I'm at work.'

Being sick listed thus challenged their identity as hard-working, contributing members of society, and they experienced an implicit expectation that they should go to great lengths to

work even if they were sick. Sick leave was viewed as a last resort, and some now realised they should have started sick leave earlier:

F 45: 'I have a teenager that is acting out and it's just a lot to handle right now [...] and if you're up all night arguing with a teenager you can't sleep at the same time. So then it's completely unrealistic to go to work the next day. It's not reasonable to go on like that and you just do a poor job. [...] so I probably worked a month longer than I should have. [...] last month was horribly bad. I just wasn't present at work.'

Thoughts related to losing their identity as a contributing member of society also caused social challenges, as they wanted to appear normal despite feeling abnormal. Aspects such as uncertainty in diagnosis or prognosis could more readily be shared with their employers and colleagues, while other issues, such as unhappiness with their work or needing sick leave to care for a family member, were kept out of the conversations. Even when experiencing support, they were reluctant to talk too much about their situation, as it could be overwhelming for others and a negative focus. One had experienced such discomfort at a social occasion with colleagues:

M 47: 'I looked forward to the event [...] and there was a lot of nice conversation, but there was also a lot of talk about me and my neck, which is not what I wanted. [...] and people ask because they care [...] but it can be too much.'

Participants also struggled with expressing why they sometimes felt fine, but at other times were exhausted:

F 58: 'I have friends that have asked how long I'm going to be on sick leave. And I tell them I don't know but the doctors say it could be two-three months [...]. Then they get surprised because I look just fine and when I talk to them I sound fine. What they

don't see is when I've spent an hour or two with friends or some other small task, I'm stuck in my reclining chair for a couple of hours. They don't see that.'

Those who had few objective signs of illness or were having problems finding a clear diagnosis often felt a greater need to explain their situation. Some experienced that their explanations and reasons for sick leave were perceived as illegitimate. This led to avoiding activities, social events and neighbours in order to avoid questions about why they were out while being sick listed or why they were at home and not at work during the daytime. Some self-imposed such ideas:

F 33: 'No one is preventing me ... I mean, my illness may prevent me, and I need to take that into consideration, but neither my employer or NAV or anyone is limiting me [...]. That's not the problem when I go to [a concert]. It is allowed, actually, but no ... I just feel uncomfortable, socially speaking.'

For those who enjoyed their work environment, sick leave caused them to lose work as an arena for social interaction. This was added to the social avoidance behaviour outside of work and contributed to an experience of being excluded:

F 33: 'When I'm on sick leave, I don't have the energy to meet people because I kind of have to focus on getting better. [...] So I've gone from being very involved at work to not knowing anything about what's happening, and I feel like that's an extra burden as well.'

Thus, being on sick leave challenged the participants' identity and impeded their social life, which contributed to the feeling of being abnormal.

Searching for a solution

Participants needed assistance in order to find solutions to resolve their challenges and progress towards returning fully to work. All participants described much effort through examinations and treatment from their GP and healthcare services; however, some expected a faster recovery than what was reality.

M 47: 'I didn't realise that the pain that day would side-line me for so long. I thought I might get an hour or two with the chiropractor and then I'm done. Do some stretches ... but it didn't work that way.'

Finding a diagnosis that explained their symptoms could also be challenging. This caused uncertainty as to how they were going to make progress.

M 38: 'I'm at the hospital and we do x-rays, we do ultrasound, we do all the tests and everything is OK. The heart is fine, there is no hormonal imbalance, no Lyme disease, so I'm left here after months of examinations with nothing. And I ask my GP: What do I do? I want to be well, I want to function, so what's the deal?'

Lacking a solution also contributed to a feeling that returning to work was dependent on factors outside of their control. Such factors included improvement related to their child's situation, figuring out what was causing their own symptoms or a sudden improvement in their health:

F 39: 'It's difficult to say when ... it depends on [what happens to my daughter]. It's not about how I feel, because I feel pretty OK now you know.'

F 35 '... my diagnosis is one that may pass just as fast as it came. Just by doing exercises and relaxing, and then you can wake up the next morning and be well. It has not happened yet, but we are hoping.'

In addition to health services, assistance from their employers was also important. The employer could assist through emotional support and by accommodations at work, such as changed responsibilities or flexible work hours. This helped to reduce the uncertainty of whether they could cope with the expected work demands and reduced the threshold of whether they would attempt a RTW.

Nearly all participants were aware of the negative aspects of social isolation and inactivity in sickness absence. In cooperation with their GP, they tried to remain active and not lose contact with their workplace. Graded leave was common, and using graded sick leave allowed them to keep in contact with their workplace, test their work capacity and to have enough energy left to function outside of work. Graded sick leave was also used to normalise their situation and alleviate some of the social stigma:

M 38: 'I'm thinking, I have to be home. I'm sick. I can't go out and have a burger and a beer with a buddy because that might look bad. Those from work may not understand that I'm generally not well, but I might have a good day. [...] "if you're well enough to go out, you're well enough to be at work". [...] this is one of the reasons why I want to be on graded leave, because then I can live more normally.'

Employers were mostly experienced as being supportive, as they largely let the sick-listed individuals determine the RTW pace and attempted to adjust their work tasks in order to fit graded sick leave. When determining the RTW pace, the sick-listed individual's focus was finding a pace that balanced work, health and personal life.

F 50: 'When I'm going to start to work 100% again, I think I need a deal with my employer and my GP that if I'm coming home from work exhausted and can't do anything ... then I think it's too early to start 100%. Because I'm going to have a life outside of work, too ... and we need to see how we can work that out.'

Fear of a more difficult situation due to returning to work too quickly was a major concern.

Uncertainty in their work ability led to worry that if they returned to work faster than they could manage, it could result in a worsening of their health or their personal situation:

F 35: '...knowing that I'm going to be [at this job] for many years contributes to being able to take this time off and make my head work again. [...] and really get well, not just going to work [sooner] and becoming worse. And then it will take even longer.'

If the job inherently contained undesirable tasks, or if the sick-listed individual was unhappy at work, they realised that there was little the employer could do.

M 38: 'I've thought about this [...] maybe I should do something that is more meaningful for me. [...] Instead of trying to sell as much stuff as possible, maybe do something that can help people. [...] I don't know how the employer can make adjustments for my situation, because here we are talking about the line of work you are in.'

The assistance the sick-listed workers received from NAV consisted of a standardised letter informing them of their duties and rights during sick leave. Some were surprised by this and stated that they expected more contact. Most wondered how NAV could know if they were progressing toward RTW. They did, however, differ in their perceived need for help from NAV. Finding a solution in order to make progress towards returning to work was not always easy. Those who did not find solutions from other services and were uncertain about how to make progress generally expressed more need for NAV involvement, but only one individual initiated contact on her own. Others viewed early sick leave as a situation where the sick-listed, their GP and employer are in control and suggested that NAV should not interfere.

Discussion

This study explored psychosocial experiences with sick leave and thoughts about returning to work among individuals with 9–13 weeks of sick leave. In addition to health issues, challenges related to work and family life also contributed to the need for sick leave. Even though being on sick leave had a negative impact on their identity and social life, participants viewed sick leave as necessary in order to distribute their energy to resolve their challenges. RTW was desirable, but depended on their health and overall situation, and participants needed assistance in order to find solutions that would help them progress towards returning fully to work.

For participants in the current study, a combination of health issues and family or work stress contributed to a situation where they felt drained of energy, and this made functioning outside of work incompatible with recovery and working. The theory of role strain describes the difficulty of fulfilling role obligations due to excessive strain [27]. Experiencing pressure to devote time and attention beyond one's capabilities to a single role obligation will increase strain for the individual [27]. According to the negative emotional spill-over effect, stress at work can lead to negative feelings, such as worry, doubt, disappointment and frustration, that spill over into private life and make it difficult to pursue a satisfying non-work life [48]. On the other hand, demands in private life also influence work and health, but have received less attention. For example, individuals might experience increased strain due to illness or responsibilities in their family that affect time and energy available for the other arenas in their life [49].

Hamnes et al. [50] interviewed sick-listed individuals who experienced a gradual opting out of other arenas to the point where life only revolved around working, fatigue and resting, finally resulting in sick leave. These findings are aligned with the results in the

present study which indicated sick leave was needed to adjust the balance between self-care, family and recovery. These aspects were prioritised over work because sick leave is only possible in the work arena. Reducing a rewarding work role to compensate for demanding personal lives might not be an optimal solution. However, withdrawal from the demands of the family role is difficult and may cause feelings of guilt, as well as pressure from others [27]. Hamnes et al. [50] also found that individuals chose to work fewer hours, worked part-time and attempted to reduce out of work stressors in order to achieve a better balance between work, family, social life and physical activity. This could be a similar, albeit more long-term, strategy as compared to the need for sick leave in the present study. [51]

Participants had mixed feelings towards being on sick leave. Sick leave was experienced as necessary to improve their situation, but it also led to social avoidance behaviour and a feeling of being 'abnormal'. Working can be viewed as a signal to others that one is normal and beneficial to society [50] and sustainable work participation has also been closely linked to experiencing a meaningful life [51]. Disruption of roles that are important to one's self-image may cause individuals to feel 'lost' [27], and illness may lead to loss of self-image and social isolation [52]. This highlights the identity-bearing aspects of work as well as work as a social arena.

Prolonged sickness absence has also been found to change the sick leave experience from a necessary opportunity to rest towards a negative circle of pain, inactivity and isolation [53]. The sick role theory assumes that the withdrawal behaviour that is expected when on sick leave has an impact on all of the person's role performances and prevents the possibility to receive appreciation from other arenas [35]. Withdrawal behaviour may also lead to social isolation and restrict activities that could promote recovery [52]. For several in the present study, it was easier to avoid social situations which they felt required explanations for their participation. Behaviours that did not appear to promote their own well-being (e.g.,

socialising while being sick listed) may cause conflict to the expected behaviour of the sick role. This could be reinforced by having an illness invisible to their surroundings, making the decision to disclose their illness difficult and stressful, with the potential consequences of being rejected and stigmatised [54]. However, most individuals in the present study realised that lack of activity, social isolation and distancing themselves from their workplaces might obstruct their recovery and RTW. Withdrawing from work obligations may be experienced as necessary, but Parsons' theory of the sick role suggests that legitimate absence from work includes retreat from other roles [35]. Such total withdrawal is problematic as social isolation may be a predictor of prolonged absence [55]. Recent research has also indicated that freedom from the 'sick role' can be an important part of recovery for patients with chronic illness [56]. RTW professionals may thus have an important role in reinforcing health promoting behaviours when such behaviours appear to contradict what is expected in the sick role.

Moreover, the social insurance system limits how long sick listed workers can withdraw from their work obligations. In Norway, sick listed workers are required to take part in work activities after eight weeks of absence or obtain an expanded medical certificate [57]. Parsons describe a moral obligation to overcome the sick role as soon as possible [35]. By demanding work activities, the system turns this moral obligation into a structural obligation, essentially deterring continuing withdrawal. For many sick listed in the present study, this was problematic as they experienced returning to work outside of their control. Thus, in order to find solutions and progress towards returning to work, participants needed assistance, for instance from the employer or their GP. In the present study, employers were largely willing to adjust work and facilitate graded leave, which can promote RTW [14]. However, not all reasons for absence were conveyed to the employer. For instance, proper adjustments may not be possible when absence is partly due to dissatisfaction with the job or

stress due to childcare. Increased co-worker load due to sick listing or a reason for sick leave that lacked apparent legitimacy can create tension with colleagues [58]. On the other hand, communicating limitations reduces co-worker resentment [59]. Thus, there is a difficult trade-off in the balance of transparency and confidentiality when deciding how much to share. When experiencing a conflict between work and personal life, there is an imbalance in whether this conflict is deemed acceptable. Kelloway and colleagues [60] argued that keeping personal life out of the workplace is an established norm, thus spending time and effort on private roles while at work is rarely acceptable. On the other hand, thinking about work in private life or disrupting family plans, such as having to work late, is more acceptable [60].

Participants were apprehensive about prioritising their RTW, but rather viewed it as a consequence of better health or the resolution of their other challenges. Using graded leave enabled a balance between the benefits of returning to work and the fear of a worse situation due to returning to work. Re-entering work through graded leave helps the individual to comply with the competing expectations of both the sick role and the normality of everyday life. Returning to the workplace while still undergoing treatment, and before full recovery, has been described as important in returning to work [61]. Graded leave could also have a positive effect on RTW and sustainable work participation [62]. However, this may partly be due to health selection effects, as less healthy individuals might be unable to work at all [63]. Apart from assistance from healthcare services and ad-hoc employer assistance, participants had not experienced any structured RTW follow-up during the first few months of sick leave. This could be problematic for expedient RTW since other stakeholders see the GPs as a large contributor toward the patient's RTW, while the GPs view themselves primarily as advocates for their patients, their well-being and health [64]. Thus, for some there may not be a stakeholder present focusing on RTW at this stage. The importance of early workplace involvement is emphasized in RTW best practice suggestions [65] and those not experiencing sufficient assistance from an employer may have an increased need for co-operation with social insurance caseworkers [36]. As many of the participants in this study expected some form of contact with social insurance services, caseworker assistance might be useful in order to facilitate and coordinate the RTW process among the sick-listed individual, their GP and their employer.

Strengths and limitations

A particular strength of this study is its descriptions of early sick leave using open-ended questions. Moreover, the data was analysed by researchers from varied backgrounds (psychology, sociology, medicine), contributing to diversity in analytical discussions.

Researcher triangulation is important to promote rigor in qualitative research by providing checks and verification of the research process [66, 67]. In this study, researcher triangulation was used at all stages of design, data-collection, analysis and writing of the manuscript.

A limitation of this study is its low recruitment rate. In this qualitative study, we invited 73 of the participants in the RCT and 16 agreed to participate in interviews. This could have led to a selection bias where other kinds of experiences with sick leave are missing from our data. For instance, women and individuals with higher education may be overrepresented in the current sample. Using a purposive sampling strategy to recruit a more homogeneous sample or a different gender balance could have resulted in other descriptions based on different experiences. Also, both interviewers were male with a psychology background, which could have affected interview responses. More variability in interviewers (gender, age, background) might have allowed other responses. These limitations can hinder the transferability of the results which refer to the ability to transfer experiences and results to situation with similar characteristics [67]. However, we have given rich descriptions of the

data and reported the context of the study which allow the reader to determine whether the results speak to their situation and can thus heighten transferability [66, 67]. Nonetheless, to increase confidence in the results this study needs conceptual replication in other samples, such as those including more lower educated workers and more men, in order to examine whether similar or different cross-diagnostic experiences can be identified.

Practical implications

The results in this study show that experiences previously identified among long-term sick-listed such as demanding work and personal life [24], social disruption [25], and uncertainty in balancing illness and RTW considerations [25, 26, 68], were also relevant across health concerns at an early stage of long-term sick leave. Expectations of caseworker involvement at this stage could indicate that individuals who struggle to find solutions will welcome an outside perspective to their situation, beside what their GP or employer provides. Caseworker involvement at an early stage could facilitate early identification of psychosocial barriers to RTW, such as uncertainty in RTW and disruption to social life. For instance, in a recent study we found that early caseworker involvement contributed to building confidence in the sick-listed's RTW plan and normalized the sickness absence, which reduced the experience of guilt and stigma [69]. Further research should thus investigate the potential for social insurance caseworkers to identify and provide additional assistance to those with psychosocial barriers to RTW that are not easily captured by healthcare services or employer at this early stage of long-term sick leave.

Conclusion

Multiple simultaneous challenges regarding health issues, work- and personal stressors are experienced by sick listed workers already at an early stage of long-term sick leave. When continuing sick leave is necessary to resolve these concerns, individuals on sick leave experience expectations that one should withdraw from society to focus on recovery. Such withdrawal is problematic for the identity and social life of sick listed individuals, and inactivity is often counter-productive for fast RTW. Sick listed workers thus face a difficult dilemma between returning to work to restore normal life and the perceived necessity of continuing sick leave. At this stage of sick leave healthcare services and employers are the main stakeholders involved in the RTW process. However, solutions to personal challenges may be outside the reach of these stakeholders. Thus, those individuals who are struggling to find solutions to their challenges could benefit from individually tailored additional early follow-up that proactively examine work-related, social and personal factors that influence RTW.

List of abbreviations

GP – General practitioner

NAV – Norwegian Labour and Welfare Administration

RCT – Randomised controlled trial

RTW – Return to work

Acknowledgement and declarations

Ethics approval and consent to participate

The study is approved by the Regional Committees for Medical and Health Research Ethics in South East Norway (No: 2016/2300). Written informed consent was obtained from all participants prior to interviews.

Competing interests

The authors declare that they have no competing interests.

Funding

The Research Council of Norway (project number: 256633). The funding body has no role in the design, data collection, analysis or writing of the manuscript.

Authors' contributions

RH, LA, RJ, EAF designed the overall study. MIS, VSF, MS contributed to the design of the interview study. MIS was in charge of writing the article. All authors contributed to development of the interview guide. MIS and VSF did all interviews. MS supervised the data collection. MIS and VSF read and coded all interviews. RH, LA, RJ, EAF, MS read and coded two to four interviews each. All authors contributed in sessions on analysis and developing the results. All authors contributed to writing the article and approved the final version.

Acknowledgements

We particularly thank those who participated in this study. NAV provided invaluable help with recruitment.

Data availability

The datasets generated and analysed during the current study are not publicly available due to protecting the anonymity of participants.

References

- Gabbay M, Taylor L, Sheppard L, Hillage J, Bambra C, Ford F, et al. NICE guidance on long-term sickness and incapacity. Br J Gen Pract. 2011;61(584):118-24. https://doi.org/10.3399/bjgp11X561221
- Gjesdal S, Ringdal PR, Haug K, Maeland JG. Predictors of disability pension in long-term sickness absence: results from a population-based and prospective study in Norway 1994-1999. Eur J Public Health. 2004;14(4):398-405.
 https://doi.org/10.1093/eurpub/14.4.398
- Waddell G, Burton AK. Is work good for your health and wellbeing? London: The Stationery Office; 2006.
- Black CM. Working for a healthier tomorrow: Dame Carol Black's review of the health of Britain's working age population. London: The Stationery Office; 2008.
- Norwegian Ministry of Labour and Social Affairs. (2016). NAV i en ny tid for arbeid og aktivitet. Meld. St. 33 (2015–2016). Retrieved from https://www.regjeringen.no Accessed 12.11.2018.

- 6. NAV (2020). *Sykefraværsnotat 2. kvartal 2019*. Norwegian Labour and Welfare Administration. Retrieved from https://www.nav.no/. Accessed 25.11.20.
- van Duijn M, Eijkemans MJ, Koes BW, Koopmanschap MA, Burton KA, Burdorf A.
 The effects of timing on the cost-effectiveness of interventions for workers on sick leave due to low back pain. 2010;67(11):744-50.

 https://doi.org/10.1136/oem.2009.049874
- Aasdahl L, Fimland MS. Is there really a "golden hour" for work disability interventions? A narrative review. Disabil Rehabil. 2019:1-8.
 https://doi.org/10.1080/09638288.2018.1503735
- Hoefsmit N, Houkes I, Nijhuis FJ. Intervention characteristics that facilitate return to work after sickness absence: a systematic literature review. J Occup Rehabil.
 2012;22(4):462-77. https://doi.org/10.1007/s10926-012-9359-z
- Gragnano A, Negrini A, Miglioretti M, Corbière M. Common psychosocial factors
 predicting return to work after common mental disorders, cardiovascular diseases, and
 cancers: a review of reviews supporting a cross-disease approach. J Occup Rehabil.
 2018;28(2):215-31.
- 11. Vogel N, Schandelmaier S, Zumbrunn T, Ebrahim S, de Boer WE, Busse JW, et al. Return-to-work coordination programmes for improving return to work in workers on sick leave. Cochrane Database Syst Rev. 2017;3:CD011618.
 https://doi.org/10.1002/14651858.CD011618.pub213. Aasdahl L, Pape K, Vasseljen O, Johnsen R, Gismervik S, Halsteinli V, et al. Effect of inpatient multicomponent occupational rehabilitation versus less comprehensive outpatient rehabilitation on sickness absence in persons with musculoskeletal- or mental health disorders: a randomized clinical trial. J Occup Rehabil. 2018;28(1):170-9. https://doi.org/10.1007/s10926-017-9708-z

- 14. van Vilsteren M, van Oostrom SH, de Vet HC, Franche RL, Boot CR, Anema JR. Workplace interventions to prevent work disability in workers on sick leave. Cochrane Database Syst Rev. 2015;(10):CD006955. https://doi:10.1002/14651858.CD006955.pub3
- Loisel P, Buchbinder R, Hazard R, Keller R, Scheel I, van Tulder M, et al. Prevention of work disability due to musculoskeletal disorders: the challenge of implementing evidence. J Occup Rehabil. 2005;15(4):507-24. https://doi.org/10.1007/s10926-005-8031-2
- Nilsen W, Skipstein A, Ostby KA, Mykletun A. Examination of the double burden hypothesis—a systematic review of work-family conflict and sickness absence. Eur J Public Health. 2017;27(3):465-71. https://doi.org/10.1093/eurpub/ckx054
- 17. Aronsson, G., et al., *A systematic review including meta-analysis of work environment and burnout symptoms.* BMC Public Health, 2017. **17**(1): p. 264.
- Nigatu, Y.T., et al., Prognostic factors for return to work of employees with common mental disorders: a meta-analysis of cohort studies. Soc Psychiatry Psychiatr Epidemiol, 2017. 52(10): p. 1205-1215.
- Landstad, B.J., C. Wendelborg, and M. Hedlund, Factors explaining return to work for long-term sick workers in Norway. Disability and Rehabilitation, 2009. 31(15): p. 1215-1226.
- Corbiere M, Samson E, Negrini A, St-Arnaud L, Durand MJ, Coutu MF, et al. Factors perceived by employees regarding their sick leave due to depression. Disabil Rehabil. 2016;38(6):511-9. https://doi.org/10.3109/09638288.2015.1046564
- 21. Frederiksen P, Karsten MV, Indahl A, Bendix T. What challenges manual workers' ability to cope with back pain at work, and what influences their decision to call in sick? J Occup Rehab. 2015;25(4):707-16. https://doi.org/10.1007/s10926-015-9578-1

- Brataas HV, Evensen AE. Life stories of people on sick leave from work because of mild mental illness, pain and fatigue. Work. 2016;53(2):285-91.
 https://doi.org/10.3233/WOR-152106
- Sandmark H, Renstig M. Understanding long-term sick leave in female white-collar workers with burnout and stress-related diagnoses: a qualitative study. BMC Public Health. 2010;10(1):210. https://doi.org/10.1186/1471-2458-10-210
- Thisted CN, Nielsen CV, Bjerrum M. Work participation among employees with common mental disorders: a Meta-synthesis. J Occup Rehabil. 2018;28(3):452-64. doi: 10.1007/s10926-017-9743-9
- 25. Froud R, Patterson S, Eldridge S, Seale C, Pincus T, Rajendran D, Fossum C, Underwood M. A systematic review and meta-synthesis of the impact of low back pain on people's lives. BMC Musculoskelet. Disord.. 2014;15(1):50. doi: 10.1186/1471-2474-15-50
- 26. Grant M, Joanne O, Froud R, Underwood M, Seers K. The work of return to work. Challenges of returning to work when you have chronic pain: a meta-ethnography. BMJ Open. 2019;9(6):e025743. doi: 10.1136/bmjopen-2018-025743
- Goode WJ. A theory of role strain. Am Sociol Rev. 1960;25(4):483-96.
 https://doi.org/10.2307/2092933
- Ford MT, Heinen BA, Langkamer KL. Work and family satisfaction and conflict: a meta-analysis of cross-domain relations. J Appl Psychol. 2007;92(1):57-80. https://doi.org/10.1037/0021-9010.92.1.57
- 29. French KA, Dumani S, Allen TD, Shockley KM. A meta-analysis of work–family conflict and social support. Psychol. Bull. 2018;144(3):284. doi: 10.1037/bul0000120

- Gahnstrom-Strandqvist K, Liukko A, Tham K. The meaning of the working cooperative for persons with long-term mental illness: a phenomenological study. Am J Occup Ther. 2003;57(3):262-72. https://doi.org/10.5014/ajot.57.3.262
- Blank AA, Harries P, Reynolds F. 'Without occupation you don't exist': occupational engagement and mental illness. J Occup Sci. 2015;22(2):197-209.
 https://doi.org/10.1080/14427591.2014.882250
- 32. Lannerstrom L, Wallman T, Holmstrom IK. Losing independence—the lived experience of being long-term sick-listed. BMC Public Health. 2013;13:745. https://doi.org/10.1186/1471-2458-13-745
- Costa-Black KM, Feuerstein M, Loisel P. Work disability models: past and present. In Loisel P, Anema J (eds) Handbook of work disability. New York, NY: Springer. 2013 (pp. 71-93). doi: 10.1007/978-1-4614-6214-9_6
- 34. Parsons T. The social system. 2nd ed. London: Routledge; 1991. X. Social structure and dynamic process: The case of modern medical practice p. 428-479.
- Varul MZ. Talcott Parsons, the sick role and chronic illness. Body Soc.
 2010;16(2):72-94. https://doi.org/10.1177%2F1357034X10364766
- 36. Eftedal M, Kvaal AM, Ree E, Oyeflaten I, Maeland S. How do occupational rehabilitation clinicians approach participants on long-term sick leave in order to facilitate return to work? A focus group study. BMC Health Serv Res. 2017;17(1):744. https://doi.org/10.1186/s12913-017-2709-y
- 37. Ahlstrom L, Dellve L, Hagberg M, Ahlberg K. Women with neck pain on long-term sick leave—approaches used in the return to work process: a qualitative study. J Occup Rehabil. 2017;27(1):92-105. https://dx.doi.org/10.1007%2Fs10926-016-9636-3

- 38. Elderkin-Thompson V, Waitzkin H. Differences in clinical communication by gender.

 J Gen Intern Med. 1999;14(2):112-21. https://psycnet.apa.org/doi/10.1046/j.15251497.1999.00296.x
- McInnis OA, McQuaid RJ, Bombay A, Matheson K, Anisman H. Finding benefit in stressful uncertain circumstances: relations to social support and stigma among women with unexplained illnesses. Stress. 2015;18(2):169-77. https://doi.org/10.3109/10253890.2014.1001975
- Hankivsky O. Women's health, men's health, and gender and health: implications of intersectionality. Soc Sci Med. 2012;74(11):1712-20.
 https://doi.org/10.1016/j.socscimed.2011.11.029
- 41. Schultz IZ, Chlebak CM, Law AK. Bridging the Gap: Evidence-Informed Early Intervention Practices for Injured Workers with Nonvisible Disabilities. In: Schultz I, Gatchel R. (eds) Handbook of Return to Work. Boston, MA: Springer; 2016. doi: 10.1007/978-1-4899-7627-7 13
- 42. Schultz IZ, Gatchel RJ. Where Do We Go From Here in Return to Work Research, Policy, and Practice: A Postscriptum. In: Schultz I, Gatchel R. (eds) Handbook of Return to Work. Boston, MA: Springer; 2016. doi: 10.1007/978-1-4899-7627-7_37
- Aasdahl L, Foldal VS, Standal MI, Hagen R, Johnsen R, Solbjor M, et al. Motivational interviewing in long-term sickness absence: study protocol of a randomized controlled trial followed by qualitative and economic studies. BMC Public Health. 2018;18(1):756. https://doi.org/10.1186/s12889-018-5686-0
- Norwegian Labour and Welfare Administration. Sickness benefits (sykepenger) for employees. 2020. Available from: https://www.nav.no/en/home/benefits-andservices/Sickness-benefit-for-employees. Accessed 26.11.2020.

- 45. Norwegian Labour and Welfare Administration. Hvem gjør hva i sykefraværsarbeidet? 2020. Available from:

 https://www.nav.no/no/bedrift/oppfolging/sykmeldt-arbeidstaker/relatert-informasjon/slik-folger-du-opp-sykmeldte/hvem-gjor-hva-i-sykefravaersarbeidet_kap.

 Accessed 26.11.2020.
- 46. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. Qual Health Res. 2016;26(13):1753-60. https://doi.org/10.1177/1049732315617444
- 47. Giorgi A. The descriptive phenomenological method in psychology: a modified Husserlian approach. Pittsburgh, PA: Duquesne University Press; 2009.
- 48. Evans P, Bartolomé F. The changing pictures of the relationship between career and family. J Organ Behav. 1984;5(1):9-21. https://doi.org/10.1002/job.4030050103
- Kosny A, Newnam S, Collie A. Family matters: compensable injury and the effect on family. Disabil Rehabil. 2018;40(8):935-44.
 https://doi.org/10.1080/09638288.2017.1283450
- Hamnes B, Ronningen A, Skarbo A. Experiences of participating in return-to-work group programmes for people with musculoskeletal disorders: a focus group study.
 Musculoskeletal Care. 2017;15(3):272-80. https://doi.org/10.1002/msc.1210
- 51. Klevanger NE, Fimland MS, Johnsen R, Rise MB. Unfolding the values of work therapists experience of addressing the return to work process in occupational rehabilitation based on Acceptance and Commitment Therapy. BMC Health Serv Res. 2018;18(1):303. https://doi.org/10.1186/s12913-018-3035-8
- 52. Charmaz K. Loss of self: a fundamental form of suffering in the chronically ill. Sociol Health Illn. 1983;5(2):168-95. https://doi.org/10.1111/1467-9566.ep10491512

- 53. Ockander M, Timpka T. A female lay perspective on the establishment of long-term sickness absence. Int J Soc Welf. 2001;10(1):74-9. https://doi.org/10.1111/1468-2397.00154
- 54. Joachim G, Acorn S. Stigma of visible and invisible chronic conditions. J Adv Nurs. 2000;32(1):243-8. https://doi.org/10.1046/j.1365-2648.2000.01466.x
- 55. Steenstra IA, Verbeek JH, Heymans MW, Bongers PM. Prognostic factors for duration of sick leave in patients sick listed with acute low back pain: a systematic review of the literature. Occup Environ Med. 2005;62(12):851–860. https://doi:10.1136/oem.2004.015842
- 56. Cheshire A, Ridge D, Clark LV, White PD. Sick of the Sick Role: Narratives of What "Recovery" Means to People With CFS/ME. Qualitative Health Research. 2020. doi:10.1177/1049732320969395
- 57. NAV. What is the duty to be active? (aktivitetsplikten). 2020. Available from: https://www.nav.no/en/home/benefits-and-services/what-is-the-duty-to-be-active-aktivitetsplikten. Accessed 26.11.2020.
- Tjulin A, MacEachen E, Stiwne EE, Ekberg K. The social interaction of return to work explored from co-workers experiences. Disabil Rehabil. 2011;33(21-22):1979-89. https://doi.org/10.3109/09638288.2011.553708
- Skivington K, Lifshen M, Mustard C. Implementing a collaborative return-to-work program: lessons from a qualitative study in a large Canadian healthcare organization.
 Work. 2016;55(3):613-24. https://doi.org/10.3233/WOR-162437
- Kelloway EK, Gottlieb BH, Barham L. The source, nature, and direction of work and family conflict: a longitudinal investigation. J Occup Health Psychol. 1999;4(4):337-46. https://doi.org/10.1037/1076-8998.4.4.337

- 61. MacEachen E, Clarke J, Franche RL, Irvin E. Systematic review of the qualitative literature on return to work after injury. Scand J Work Environ Health. 2006;32(4):257-269. https://doi.org/10.5271/sjweh.1009
- 62. Markussen S, Mykletun A, Røed K. The case for presenteeism evidence from Norway's sickness insurance program. J Public Econ. 2012;96(11-12):959-72. https://doi.org/10.1016/j.jpubeco.2012.08.008
- 63. Nossen JP, Brage S. Effekt av gradert sykmelding betydningen av metodevalg.

 Arbeid og velferd. 2013;3.
- 64. Mazza D, Brijnath B, Singh N, Kosny A, Ruseckaite R, Collie A. General practitioners and sickness certification for injury in Australia. BMC Fam Pract. 2015;16:100. https://doi.org/10.1186/s12875-015-0307-9
- 65. Kristman VL, Boot CR, Sanderson K, Sinden KE, Williams-Whitt K. Implementing Best Practice Models of Return to Work. In: Bültmann U., Siegrist J. (eds) Handbook of Disability, Work and Health. Handbook Series in Occupational Health Sciences, vol 1. Cham, CH: Springer; 2020. doi: 10.1007/978-3-030-24334-0 32
- Elliott R, Fischer CT, Rennie DL. Evolving guidelines for publication of qualitative research studies in psychology and related fields. Br J Clin Psychol. 1999;38(3):215-29. doi: 10.1348/014466599162782
- 67. Pitney WA. Strategies for establishing trustworthiness in qualitative research. Int J
 Athl Ther Train. 2004;9(1):26-8. doi: 10.1123/att.9.1.26
- 68. Andersen MF, Nielsen KM, Brinkmann S. Meta-synthesis of qualitative research on return to work among employees with common mental disorders. Scand J Work Env Hea. 2012;1:93-104.
- Foldal VS, Standal MI, Aasdahl L, Hagen R, Bagøien G, Fors EA, Johnsen R, Solbjør
 M. Sick-listed workers' experiences with motivational interviewing in the return to

work process: a qualitative interview study. BMC Public Health. 2020;20(1):1-0. doi: 10.1186/s12889-020-8382-9

Table 1 - Participants descriptive information.

Participant	Age	Gender	Self-reported illness	Education	Sector
1	31-40	Female	CMD	Higher (>3y)	Public
2	31-40	Male	CMD	Higher (3y)	Private
3	51-60	Female	MSK	Trade school	Private
4	31-40	Female	CMD	Higher (3y)	Public
5	31-40	Female	CMD	Higher (>3y)	Public
6	41-50	Male	Other	Higher (>3y)	Private
7	51-60	Female	MSK	Higher (3y)	Public
8	51-60	Female	CMD	Higher (>3y)	Public
9	41-50	Male	MSK	Higher (>3y)	Private
10	51-60	Female	CMD	Trade school	Private
11	31-40	Female	CMD	Higher (>3y)	Public
12	Missing	Female	CMD	Missing	Public
13	41-50	Female	Other	High school	Public
14	41-50	Female	CMD	Higher (>3y)	Public
15	41-50	Female	CMD	Higher (>3y)	Private
16	51-60	Female	Other	Higher (3y)	Private

CMD: Common mental disorder. MSK: Musculoskeletal disorder.

Education is described as the participant's highest completed education (higher education is at the university/college level).

Table 2 – Interview guide.

Could you tell us about being on sick leave?

Could you tell us about the assistance that you have received during your sick leave?

What are your thoughts about returning to work?

What motivates you to return to work?

What is it like talking about being on sick leave?

Table 3 - Example of analysis process.

Step 1 – An overview

This individual is struggling with a demanding job, an illness that does not have a clear diagnosis and prognosis and a lack of energy available for personal life.

Step 2 – Creating meaning units

Being able to take a step back and recover and not have to go 'all-in'. That I can relax at home and ... gather energy until the kid comes home and I can spend the energy playing with him. Because just lying on the couch when he wants to play with you and you just doesn't have the energy to do it. It's really a stab in the heart.

///

And we didn't really do anything either. I didn't have the energy to get out of the house. So now there's more I want to do, even though I can't do everything.

Step 3 – Transforming the meaning units to generalised expressions

This individual feels (s)he has been able to recover energy that (s)he can spend with the child when on sick leave.

Step 4 – Developing themes

Energy depleted – work-family conflict

Supplementary files Paper I

Intervjuguide Dybdeintervju T1

1. Kan du fortelle om hvordan det er å være sykemeldt?

- o Noen erfaringer du vil dele?
- Hvordan er kontakt med andre folk / omgangskrets nå som du er sykmeldt?
 (Familie, venner, kolleger, naboer generelt omgangskrets).
- o Er det noe positivt med å være sykemeldt?
- o Negative opplevelser? (hva kan være negativt med å være SM)

2. Kan du fortelle om hvilken oppfølging du har fått i sykemeldingsperioden – og fra hvem?

- o Fastlege/helsevesen?
- o Arbeidsgiver?
- o Er det andre instanser som har vært til hjelp eller støtte i perioden?
- o Hva er forventingene til NAV?
- o Fornøyd med oppfølgingen så langt?
- Hvordan oppleves samarbeidet mellom ulike instanser, inklusive arbeidsgiver, og NAV?
- Hvordan kan av hjelpetilbudene knyttet til arbeidsgiver, helsevesenet, NAVetatene bli bedre for å hjelpe sykemeldte tilbake til arbeid?

3. Hva tenker du om å komme tilbake i arbeid?

- o Noen erfaringer eller tanker om gradert sykemelding?
- o Hva forventer du? (Fra hvem? Hva hindrer? Sykdom? Hva støtter?)
- o Hvilke krav setter du til du selv? (Ansvar?)
- o Hvilke krav settes av andre (familie, arbeidsgiver, venner, o.l.)?
- o Hva/Hvem er til hjelp eller støtte for å komme tilbake i arbeid?
- o Hva er hindringer for å komme tilbake i arbeid?

4. Hva er det som motiverer deg for å komme tilbake i arbeid?

o Motivasjonsfaktorer; f.eks. penger, kollegiet, fremme helse, pressfaktorer.

5. Hvordan er det å fortelle om å være sykemeldt?

- Hvordan fremstiller du sykdommen og hverdagen til de du snakker med?
 (f.eks. NAV, lege, venner, familie, arbeidsgiver/kolleger).
- o I hverdagen?
- o Til hvem/Hvem vet at du er sykemeldt?

- Spørsmål om deltager har lyst til å være med på en ny intervjurunde (etter intervensjon om ca. 2-3 måneder).
- Kontaktinformasjon mobilnummer

Evt. bakgrunnsinformasjon / spørsmål:

- Sykmeldingslengde?
- Sykmeldingsgrad?
- Hvilken type jobb har du, beskrive arbeidsoppgaver?
- o Menneskekontakt? Selvstendig arbeid, teamarbeid?



Forespørsel om å delta i intervju i forskningsprosjektet «Bedre sykefraværsoppfølging»

Bakgrunn og hensikt

Du mottar denne forespørselen fordi du har takket ja til å delta i forskningsprosjektet «Bedre sykefraværsoppfølging». Dette er et spørsmål om å bli intervjuet om opplevelser og erfaringer med å være sykemeldt.

Formålet med intervjuet er å få vite mer om hvordan det oppleves å være sykemeldt og hvilke erfaringer folk har i møte med NAV, arbeidsgiver, nærmiljøet, venner, familie og andre. Intervjuet er ikke en del av en behandling eller et ledd i tilbakeføringen til arbeid, men vil brukes for å øke vår kunnskap om det å være sykemeldt i Norge. Denne kunnskapen vil være svært nyttig for å forbedre metodene og praksisen som i dag blir brukt for tilbakeføring til arbeid.

Studien gjennomføres av forskere ved Institutt for samfunnsmedisin og sykepleie, og Institutt for psykologi ved NTNU. Studien er godkjent av Regional komité for medisinsk og helsefaglig forskningsetikk (REK Ref. nr: 2016/2300).

Hva innebærer intervjuet?

Intervjuet vil ta form som en uformell samtale hvor du deler dine erfaringer om formålet nevnt over. Samtalen blir tatt opp på lydfil for å sikre mest mulig pålitelig gjengivelse av det som blir sagt og vil siden bli skrevet ut som tekst for videre analyse.

Hva skjer med informasjonen om deg?

Informasjonen om deg vil kun brukes som beskrevet i hensikten med forskningsprosjektet. Alle opplysninger du gir vil bli behandlet uten direkte gjenkjennende informasjon. Det blir ikke registrert noe sted om du deltar i intervjuet eller ikke, og du vil fortsatt kunne være med i hovedprosjektet om du velger å ikke delta i intervjuet.

Lydopptakene fra intervjuene vil bli skrevet ut i fulltekst, og intervjuutskriftene vil bli brukt til analyser som rapporteres gjennom publiseringen av studien. Opplysninger om personer og steder vil i bli fjernet i utskriftene, slik at enkeltpersoner ikke kan gjenkjennes.

Lydopptak, utskrifter og deltakerliste oppbevares kryptert og nedlåst under gjennomføringen av prosjektet i henhold til personopplysningsloven. Det er kun forskere ved prosjektet som har tilgang til datamaterialet. Forskerne har taushetsplikt i henhold til Helseforskingslovens §



Institutt for Samfunnsmedisin og sykepleie Institutt for Psykologi

7. Lydopptak og deltakerlister vil bli slettet ved prosjektslutt. Utskriftene vil bli oppbevart i anonymisert form ved NTNU i 5 år etter prosjektslutt i henhold til Helseforskningsloven.

Det vil ikke være mulig å identifisere enkeltpersoner i publikasjoner fra studien. Resultatene fra studien vil publiseres i vitenskapelige tidsskrift, presenteres på konferanser og i populærvitenskapelige fora.

Deltakelse i intervjuet er frivillig og du er ikke forpliktet til å svare på spørsmål eller fortelle om egne opplevelser om du ikke ønsker det. Du kan når som helst trekke deg uten begrunnelse uten at dette har noen form for negative konsekvenser for deg.

Praktisk informasjon

Om du ønsker å delta vil vi ta kontakt med deg for å avtale et egnet sted og tidspunkt for intervjuet. Intervjuet tar ca. 1 time. Reiseutgifter med billigste transportmåte eller parkering vil bli dekt ved fremvist kvittering.

Deltakelse

Om du ønsker å delta kan du gi tilbakemelding på en av følgende måter:

- Fyll ut skjemaet på følgende adresse: https://survey.svt.ntnu.no/TakeSurvey.aspx?PageNumber=1&SurveyID=76L39643#
- 2) Send en e-post til tilbaketilarbeid@ism.ntnu.no
- 3) Send en SMS til 482 16 806.

Om du har noen spørsmål eller ønsker mer informasjon, ta kontakt med prosjektmedarbeider Martin Inge Standal (Tlf: 482 16 806, e-post: martin.standal@ntnu.no) eller Vegard Stolsmo Foldal (Tlf: 415 14 308, e-post: wegard.foldal@ntnu.no).

Med vennlig hilsen

Professor Egil A. Fors

Professor Roger Hagen

Institutt for samfunnsmedisin og sykepleie

Institutt for psykologi



Samtykkeerklæring

Jeg samtykker med dette til å delta i et intervju om sykefravær og tilbakeføring til arbeid.

Min deltakelse i prosjektet er frivillig. Jeg er ikke forpliktet til å svare på spørsmål eller fortelle om egne opplevelser og erfaringer dersom jeg ikke ønsker det. Jeg kan når som helst trekke meg uten begrunnelse og uten at dette skal ha noen form for negative konsekvenser for meg.

Sted og dato	Navn	



Institutt for Samfunnsmedisin og sykepleie Institutt for Psykologi

E-post tekst for invitasjon til intervjuet:

Hei!

Dette er en forespørsel om å delta i et intervju som omhandler opplevelser og erfaringer med å være sykemeldt.

Du mottar denne e-posten fordi du har takket ja til å delta i forskningsprosjektet «Bedre sykefraværsoppfølging».

Intervjuet tar ca. 1 time og vil ta form som en uformell samtale hvor du deler dine erfaringer og prater om opplevelser og erfaringer med å være sykemeldt. Se vedlagte brev for mer informasjon.

Ønsker du mer informasjon så ta gjerne kontakt med oss på tlf, 482 16 806 (Martin) eller 415 415 14 308 (Vegard).

Om du ønsker å bli intervjuet kan du gi tilbakemelding på en av følgende måter:

- Fyll ut skjemaet på følgende adresse: https://survey.svt.ntnu.no/TakeSurvey.aspx?PageNumber=1&SurveyID=76L39643#
- 2) Send en e-post til tilbaketilarbeid@ism.ntnu.no
- 3) Send en SMS til 415 14 308.

Mvh, på vegne av prosjektgruppen

Vegard Stolsmo Foldal og Martin Inge Standal

RESEARCH ARTICLE

Open Access

Sick-listed workers' experiences with motivational interviewing in the return to work process: a qualitative interview study



Vegard Stolsmo Foldal^{1*}, Martin Inge Standal², Lene Aasdahl^{1,3}, Roger Hagen², Gunnhild Bagøien⁴, Egil Andreas Fors¹, Roar Johnsen¹ and Marit Solbjør¹

Abstract

Background: When returning to work after being on long-term sick leave, individuals may experience varying levels of motivation and self-efficacy. Motivational interviewing (MI) is a counseling style that aims to increase motivation towards change, and it may be useful in the return to work (RTW) process. The aim of this study was to explore sick-listed workers' experiences with MI in the RTW process.

Methods: This qualitative study was part of a randomized controlled trial evaluating the effects of MI on the RTW process, and it was administered by caseworkers at the Norwegian Labor and Welfare Administration. Sixteen sicklisted individuals, aged 33–60, participated in semi-structured interviews. All had a sick leave status of 50–100% for at least 8 weeks when interviewed and all had completed 2 MI sessions. The data was analyzed with systematic text condensation.

Results: Participants' experiences of the MI sessions were categorized into three themes: (1) relationship with the MI caseworker, (2) normalizing sick leave, and (3) adjusting RTW strategies. The MI sessions were experienced as a positive encounter due to the supportive relationship that was built between the MI caseworker and the sick-listed worker. Being sick listed led to feelings of guilt and stigmatization, but acceptance and support from the MI caseworkers helped normalize the situation for the sick-listed workers. Furthermore, MI sessions allowed for personalized feedback and discussions on adjustments to their RTW strategies.

Conclusion: Sick-listed workers experienced MI as positive due to the good relationship that developed with the MI caseworker, how this normalized sick leave, and the help they received with adjusting their RTW strategies. Professionals working with individuals attempting to RTW may benefit from using MI as a method for helping sick-listed workers to RTW.

Trial registration: ClinicalTrials.gov: NCT03212118 (registered July 11, 2017).

Keywords: Motivational interviewing, Return to work, Sick leave, Self-efficacy, Professional–patient relationship, Oualitative research

Full list of author information is available at the end of the article



^{*} Correspondence: vegard.foldal@ntnu.no

¹Department of Public Health and Nursing, Faculty of Medicine and Health Science, Norwegian University of Science and Technology, Postboks 8905, MTFS, 7491 Trondheim, Norway

Foldal et al. BMC Public Health (2020) 20:276 Page 2 of 10

Background

Work is central to an individual's health, identity, social role, and status [1]. Long-term sickness absence is challenging for the individual, their employer, and society [2]. Despite various targeted efforts to increase return to work (RTW), there are no conclusive results on what is an effective RTW approach [3–5]. However, it has been suggested that social support, motivation, and self-efficacy play a central role in the RTW process [6–8].

Planning how and when to RTW after long-term sick leave is difficult for the individual worker, and adhering to a RTW plan may also be challenging [9]. Support and encouragement from RTW professionals, such as social insurance caseworkers and health care professionals, may empower and enable the sick-listed worker to RTW [10]. Two important predictors for RTW are social support and self-efficacy [11, 12]. Self-efficacy is the belief in ones' ability to achieve a given goal or task [13]. Support from RTW professionals may positively affect the sick-listed workers' self-efficacy and help them achieve their RTW goals [14]. This suggests that focusing on sick-listed workers' self-efficacy and establishing a positive and respectful relationship between the sicklisted worker and the RTW professional may be a successful approach for improving RTW [14].

Motivational interviewing (MI) has been suggested as a possible approach to promote these factors in a RTW process [15]. MI is a client-centered and directive counseling method aimed to facilitate intentional and behavioral change. The method was first developed for treating alcohol abuse [16], and it was later shown to be effective in various clinical settings and in short interventions [17–20]. MI has been found to be effective by only single sessions [21] and even in small doses of 15 min [20], and can therefore be offered as an early low-intensity intervention. In MI, it is essential that the counselor seek to establish a collaborative partnership with the client and use communication skills to strengthen the client's motivation for change [16]. In Norway, the Norwegian Labor and Welfare Administration (NAV) recommends that their caseworkers apply MI when counseling sick-listed workers in the RTW process [22]. Only a few studies have evaluated the effect of MI on RTW for sick-listed workers, and evidence of the method's efficacy as a RTW intervention is lacking [15, 23]. However, a recent study found that the use of MI led to more sustainable RTW compared to traditional rehabilitation for patients with musculoskeletal complaints [24]. Moreover, a Swedish study found that unemployed longterm sick-listed individuals experienced their encounters with RTW professionals using MI as positive [14]. These findings suggest that MI may be useful in a RTW context. However, research on how sick-listed workers experience MI counseling in a RTW context and how this affects their RTW process is lacking. Therefore, the aim of this study was to explore sick-listed workers' experiences with MI in the RTW process.

Methods

The present study was based on 16 semi-structured individual interviews with sick-listed workers enrolled in a randomized controlled trial (RCT) [25]. This approach was chosen to explore sick-listed workers' experiences with MI in the RTW process.

The randomized controlled trial (RCT)

The overall RCT in which this qualitative study is nested, aims to evaluate MI as an instrument for caseworkers at NAV in facilitating RTW for sick-listed workers. The RCT has a three-armed group design. Eligible participants for the RCT were all sick-listed workers, 18-60 years old, living in central Norway, with unselected diagnoses. Their sick-leave status at the time of inclusion in the RCT had to be 50-100% for at least 8 weeks. Exclusion criteria were pregnancy-related sickleave and unemployment. All participants randomized to the MI intervention group were offered one MI session at 14 and one MI session at 16 weeks of sick leave, in addition to standard NAV sickness absence follow-up. Each MI session had a maximum length of 60 min. Having two 60-min sessions were considered to allow enough time and follow-up to engage in change, and at the same time be considered a brief intervention [25]. The findings from the RCT and the present interview study will be independently reported and not systematically matched in the present article.

The Norwegian welfare system and sickness absence follow-up

Compared to other OECD countries, Norway has a high sickness absence rate [26], and this has been stable the last decade, with a current sickness absence of 5.9% [27]. About 85% of individuals on sick leave RTW before 12 weeks of sick leave, whereas only 7.4% RTW between 12 and 26 weeks of sick leave [28]. In Norway, employees are entitled to full wage benefits in the case of sickness absence, from the first day of absence to a maximum period of 52 weeks. During the first 16 working days, the employer is responsible for the payment, while the rest is paid for by the National Insurance Scheme through NAV [29]. The employer must initiate a follow-up plan in cooperation with the employee before the end of fourth week of sick leave and is responsible for arranging a meeting with the sick-listed worker within the seventh week of absence, including other stakeholders, if relevant. If the employer does not initiate a follow-up plan, NAV has no possibility to sanction the employer. If the employer facilitates work-related activities, the sickFoldal et al. BMC Public Health (2020) 20:276 Page 3 of 10

listed worker is expected to participate. If the employee does not begin work-related activities within 8 weeks, an expanded medical certificate is required to document that the employee has significant medical problems preventing them from participating in work-related activities. Sick-listed workers who do not engage in work-related activities, without a medically certified reason, can be sanctioned by NAV with reductions in sickness benefit payments. NAV is responsible to arrange a meeting which includes the employer and the sick-listed worker, around and or no later than, 26 weeks of sick leave. The attendance of the sick-listed employee's general practitioner is optional. However, the general practitioner is obligated to attend if NAV deems it necessary for the coordination of the RTW process. An additional meeting is held if one or more of the stakeholders find it necessary. The sick-listed worker may also ask for a meeting with NAV to coordinate a plan for RTW outside this schedule [29].

Motivational interviewing (MI) sessions

In addition to the usual follow-up by NAV, two extra MI sessions were offered to the sick-listed workers by a NAV caseworker after being on sick leave for 14–16 weeks [25]. The sick-listed workers were informed that the MI sessions were part of a research project and did not affect their rights or obligations as sick listed. However, they did not receive information from the caseworker that they would be using the MI counseling style.

In the MI sessions, the caseworker tried to engage the sick-listed worker in a collaborative relationship by using person-centered communication skills. During the first session, the sick-listed worker was offered to choose the agenda from a written menu describing different areas of life that the situation as sick listed could affect. These areas could also affect the RTW process. To adjust the intervention accordingly, the client's stage of motivation [30] for RTW change was assessed. The client's own motivations for RTW change were explored and focused on, as well as the sick-listed confidence in RTW. In the second session, the caseworker aimed to map the sicklisted individual's current work tasks and earlier attempts of RTW. Information exchange of available support from NAV during the RTW process was included. The sick-listed worker's self-efficacy was assessed, and his or her future work goals were explored. The sick-listed worker's readiness for RTW change was assessed, and a written action plan was developed if the sick-listed worker was ready for RTW change. Whether or not a written RTW plan was made, the caseworker provided the sick-listed worker with a written summary of the two MI sessions [24]. At the end of the first MI session, they were informed that a written summary remained available for the sick-listed and assigned caseworkers, which is a standard procedure in the sickness absence follow-up at NAV.

Four NAV caseworkers offered the MI intervention, in addition to handling their usual workload in the sickness absence follow-up at NAV. The caseworkers were trained to develop the necessary MI skills, consisting of three-hour sessions twice a week for 6 months prior to recruitment into the RCT. To ensure that the sessions consisted of valid MI content, the caseworker used a standardized MI guideline developed by the research group. Three MI experts offered the training, and the caseworkers were supervised, including use of audiotapes in order to maintain and further develop their MI skills [25].

Recruitment and participants

To participate in the current qualitative interview study, the sick-listed worker had to have already completed two MI sessions as part of the RCT. All study participants who had completed two MI sessions between November 2018 and January 2019 were identified by NAV (n = 29). Contact information (cell phone number) of these individuals was forwarded to the researchers. One of the authors (VSF or MIS) called these participants to invite them to take part in the research interview. Of the 29 individuals who were invited to participate in the interview study, 13 did not answer, declined the invitation, or did not show up at the interview. Sixteen individuals, three men and thirteen women, participated in the interviews. They were aged 33-60 years and had a sick leave status varying from 50 to 100%, except one participant who since inclusion to the RCT had been graded to 40% sick leave at the time of the interview study (see Table 1 for participants' descriptive information). All information in the present study was supplied from the participants during the interviews, and no other information from neither NAV or the RCT was used or matched into the current interview study.

Data collection

To explore the participants' experiences, semi-structured individual interviews were performed, which allowed the participants to provide in-depth descriptions of their experiences and it provided an opportunity for follow-up questions from the researcher. The interviews were based on an interview guide, with five main questions concerning their experiences during sick leave, the RTW process, and the first and second MI sessions, as well as whether these sessions led to any changes during their RTW process (see Additional file 1: Interview guide). The interviews were conducted between November 2018 and January 2019. Ten of the interviews were conducted by the first author, VSF, and six interviews were conducted by the author MIS. The interviews lasted

Foldal et al. BMC Public Health (2020) 20:276 Page 4 of 10

Table 1 Participants' descriptive information

·	
	n
Gender	
Male	3
Female	13
Age	
33–39	2
40–49	4
50–59	9
60–64	1
Self-reported reason for sick leave	
Common mental health disorder	8
Musculoskeletal disorder	5
Other	3
Education level	
High school	2
College/university up to 3 years	4
University more than 3 years	8
Working sector	
Public	8
Private	8

Education is described as the participant's highest completed education (higher education is at the university/college level). Level of education is missing for two participants

from 25 to 66 min (mean time of 42.5 min). Two of the interviews were considerably shorter than the other interviews (lasting 25 and 27 min), and two interviews were considerably longer (64 and 66 min). The interviews were audio recorded and transcribed verbatim. Due to the semi-structured nature of the interviews, the experiences shared by the participants where not strictly limited to each question asked. Some main questions were answered more briefly, and other questions answered more in-depth, with accompanying probing questions. All participants were willing to share their stories and experiences about their RTW process, although the level of detail in their descriptions and time spent on each main question varied. Some interviewees cried during the interview when telling their story, whereas a few of them were reticent in their descriptions.

Malterud et al. [31] suggested a guide for determining an adequate sample size to obtain information power in qualitative studies based on aim of the study, sample specificity, theory, dialogue quality, and analytical strategy. Inspired by this, the desired number of interviews was evaluated before conducting any interviews, and during primary analysis after nine and sixteen interviews. We aimed to collect a variety of experiences from the MI sessions. Therefore, we allowed for different participant characteristics without defining a diagnostic specific sample. The quality of the dialogue and the collected data were considered satisfactory enough for uncovering the varying experiences of the participants. Between the ninth and sixteenth interview, we did not find more variety in experiences, and the data were judged satisfactory saturated for our purpose.

Data analysis

The data analysis was based on systematic text condensation, which was originally inspired by descriptive phenomenology [32]. Systematic text condensation is a four-step descriptive analytical process with explorative ambitions to describe the experience of the participant as they express them. The first step of the analysis involves reading the data as a whole to get an overall impression of the data and to identify possible themes [32]. The transcripts of the first four interviews were read before further interviews were carried out, which allowed us to recognize preliminary themes. After this reading, minor adaptations to the interview guide were made in order to improve the wording of the questions and to add some specific follow-up questions regarding the MI sessions. This process was repeated after the ninth and sixteenth interview. The second step of the analysis was to identify and sort meaning units [32]. In the preliminary analysis, meaning units were coded and sorted into seven themes; Human relations (1), Being acknowledged (2), Orientation towards RTW (3), Practical information (4), Support towards RTW (5), Shame of being sicklisted (6), and Legitimizing sick leave (7). After all interviews were finished, the number of distinct themes was reduced to three main themes, which covered the data from the previous seven overlapping themes. The first two preliminary themes were reduced into one distinct theme, whereas preliminary themes 3, 4 and 5 were grouped into the second final theme. Lastly, preliminary themes 6 and 7 was reduced to the third and final theme. The third step of the analysis was what Malterud [32] termed "condensation," which involves decontextualizing the meaning units by rewriting them into illustrative quotes. By rewriting the meaning units into first-person narratives, we created a sum of the participants voices regarding the phenomenon that was described in the data. The fourth step of the analysis entailed synthesizing descriptions and concepts by recontextualizing the condensations [32]. The condensations were checked against the "raw" data in the transcripts in order to validate that the findings represented the experiences described by the participants. Then they were recontextualized into themes and validated by all other authors. Finally, the recontextualized meaning and Foldal et al. BMC Public Health (2020) 20:276 Page 5 of 10

phenomena were written together into an analytical text, as presented in the results. The author VSF read and analyzed all interviews. All other authors read and analyzed two or more interviews each, thus striving for more nuanced perspectives on the analysis and possibly reducing single-researcher preconceptions.

Ethics

All participants received written and oral information about the study and gave their written consent before the interview started. Participants were informed that participation was voluntary and that they could withdraw from the study at any time. None of the participants opted to do so. The interviewer attempted to be friendly and accommodating during the interviews. All participants were offered a post-interview debriefing, and they were also invited to contact the interviewer if they had any further questions regarding the research, the analysis, or their interviews at a later stage. The study was approved by The Regional Committee for Medical and Health Research Ethics in South East Norway (REK nr 2016/2300).

Results

The participants had some common features, which were not related to their experiences during the MI sessions, but were instead related to their backgrounds before participating in the sessions. These participants had little or no knowledge about being on sick leave or what it entailed in terms of rights, obligations, and possibilities. Their RTW plans varied in terms of RTW strategies, the involvement of employers and helpers, the level of detail in the plan, and whether it was written down or agreed upon orally. Workplace adaptions were important when describing what could enable them to RTW, while the lack of workplace adaptions was disabling for the RTW process. The participants' experiences of the MI sessions could be categorized into three themes: (1) relationship with the MI caseworker, (2) normalizing sick leave, and (3) adjusting RTW strategies. The first theme describes how these participants experienced their relationship with the assigned MI caseworker. The second theme is about how the participants discussed their situation as a sick-listed employee with the MI caseworker. The third theme concerns participants' experiences of the content during the MI sessions.

Relationship with the MI caseworker

The participants had few expectations regarding the involvement of NAV in their RTW process. They expected that NAV would be absent during their RTW process, at least during the first 6 months of sick leave, and that any activity directed towards them would be about controlling their entitlement to sick-leave benefits. They also

expected that NAV would be hard to reach and experienced that receiving messages or letters from NAV was insufficient in terms of motivating the sick-listed worker in their RTW process.

"Merely receiving a letter from NAV does not feel as if they take an interest in you. If NAV had more contact with people, they would be able to push people in the right direction [back to work]..." – Female (age 60)

However, when meeting the MI caseworker, their negative expectations about NAV changed. The sick-listed workers experienced a satisfying and supportive relationship with the MI caseworkers, whom they described as skilled, trustworthy, and with a kind but professional appearance.

The MI caseworkers were described as both accommodating and informative; the latter description was due to ability to provide tailored alternatives in RTW strategies for the sick-listed workers. The MI sessions were an arena where they felt acknowledged and cared for. The MI caseworkers asked questions about several aspects of their lives that could be related to their situation as a sick-listed worker, and they appeared attentive when listening. For participants, the personality of their MI caseworker appeared to be matched to their own in terms of sense of humor, expressive communication style, and personal interests. This allowed them to appreciate their relationship with the MI caseworker.

"....She was accommodating caring and professional. Yes, I think they had chosen the right person for me there." – Female (age 54)

Having a face-to-face encounter with a MI caseworker was emphasized as important to the sick-listed workers. Not only did they receive support from the MI caseworker, but they also appreciated the MI caseworker's ability to enable and motivate them. Sometimes, the MI caseworker lacked expert knowledge about the participant's type of work, but by being curious and interested in the story of the sick-listed worker, the MI caseworkers appeared to quickly comprehend their situation at work.

Normalizing sick leave

When faced with questions about the cause of their sick leave from colleagues, their employer, or NAV, the sick-listed workers had to offer a good reason or an explanation for their sick leave. The need for explaining and defending the necessity for sick leave came from the fear of being viewed as someone who did not want to work. This was even more pertinent when being sick listed due to mental disorders. It was easier to talk about and

Foldal et al. BMC Public Health (2020) 20:276 Page 6 of 10

explain a physical illness that was visible to others. One participant that was on sick leave due to a mental disorder had to provide an alternative story to her colleagues.

"I told someone that I was on sick leave due to back problems, but I'm actually seeing a psychologist. It feels good to talk with someone [psychologist] and clear your head, and I need help doing that." – Female (age 45)

Knowing that their sick leave led to higher workloads for their coworkers and extra strain on the employer caused guilt. Even when on graded sick leave, thus relieving the potential strain on both the employer and their coworkers, the guilt remained.

"It felt like I can't leave work now, somehow, because I've only been here for two, two and a half hours. It felt completely wrong, I felt that it wasn't okay, I felt guilty about it. I find it difficult to just leave work. I have to be there at least for half a day before I feel like I can go home" – Female (age 33)

In a difficult situation where participants experienced stigma and guilt, the MI sessions served as an arena for normalizing and providing legitimacy through support from the MI caseworker. The MI caseworker and the sick-listed worker talked through negative thoughts about the stigma and guilt of being sick listed. The MI caseworker explained how common these thoughts were and that the accompanying feelings were normal. Receiving support from a MI caseworker gave legitimacy to the participant's need for sick leave, and it led to acceptance of this problematic situation. The participants could also discuss concerns about how their illness affected their relationships with their spouses, friends, and children, as well as time for leisure activities. Receiving support from the MI caseworker about all aspects of their RTW process was enabling in terms of transitioning into talking about their RTW strategies. The stigma and guilt that were experienced as barriers in the RTW process were reduced through the dialogue in the MI sessions.

Adjusting return to work (RTW) strategies

During the MI sessions, the participants received personal feedback about their RTW plan from the MI caseworker, who offered information about their rights and obligations as sick-listed workers, as well as possible future economic benefits from NAV. Since the sick-listed workers had little prior knowledge about what NAV could offer, they experienced gaining insights about available support and measures from the MI caseworker as useful and often incorporated it into their RTW plan.

... I didn't know how to relate to it, because I had never been on sick leave before. I knew very little about NAV, you know, I had never been in contact with NAV. So, I didn't know anything, but I got a lot of useful information from her and about what NAV has to offer." – Male (age 57)

The individually tailored information and the support provided by the MI caseworker helped participants to reorient their perception towards workload, work tasks, and working time. The possibility of adjusting their time spent at work and the amount of work they produced was highlighted as new and important information that led to a successful change in their RTW strategy. For one participant, NAV made her aware of the possibility of being present at work full time, while still being on 50% sick leave. This enabled her to work at her own preferred pace and still produce 50% of her expected full-time workload.

"My plan was to return to work in full-capacity, but I was on 50% graded sick leave at the time, so I worked half days for a while. I didn't know until the [MI] caseworker told me that it's not about how many hours you are at work, it's about how much work you produce. So now, I can be at work an extra hour a day and still have time to do my exercises as a part of my rehabilitation. I don't have to work more, but I can spend more time on doing it." – Female (age 52)

Another important RTW adjustment was in terms of the RTW pace. Whereas some experienced recommendations of a slower approach, others experienced that the MI caseworker endorsed a faster pace. Receiving tailored advice from the MI caseworker on their RTW pace was considered important for a successful RTW process.

"My plan was to return to work full-time three months after the operation, I thought that I would be ready for it. My [MI] caseworker thought that wasn't such a good idea, and she suggested that I had a more cautious approach. I now realized that she was completely right, and that it probably was a good reminder for me to listen to my body and take the time I needed to return to work. Retrospectively, If I hadn't taken it easy, I wouldn't have handled it [RTW] and probably gotten worse." – Female (age 47)

However, if the sick-listed worker was not in need of information or adjustments to RTW, the MI sessions were not experienced as useful. One participant experienced that the MI caseworker challenged his already

Foldal et al. BMC Public Health (2020) 20:276 Page 7 of 10

mapped out RTW plan, which made him reconsider the quality of his original plan. The participants said that they could talk with the MI caseworker about what could happen if they were not able to RTW and what they could do when feeling ambivalent towards their choices during the RTW process. Discussing their ambivalence with the MI caseworker was enabling in terms of their actions towards RTW, where adjustments in RTW strategies were made to varying degrees.

Discussion

The results from the present study show that the participants experienced a good relationship with the MI caseworkers during the MI sessions. Talking with the MI caseworkers helped the participants normalize their situation as sick-listed workers, reduce the feeling of guilt, and reduce the stigma they experienced. Receiving personal feedback about their RTW plan, either to support their current plan or to reflect upon potential changes to their plan, increased their experienced RTW self-efficacy.

Previous studies have shown that sick-listed workers consider insurance officials to be distant, lacking trust, and questioning the sick-listed workers' credibility, which may lead to powerlessness during the RTW process [10, 33]. Positive encounters were described in a previous study [33], where the professionals asked what the sicklisted workers wanted and where the participants were treated with respect. In the present study, the sick-listed workers described having a positive and good relationship with the MI caseworkers. This is in line with the findings from a similar study in Sweden, where sickness benefit officials offered a counseling session with unemployed long-term sick-listed workers using a MI approach [14]. Support and encouragement from various professionals may empower and enable the sick-listed worker to RTW [10], and by establishing a good relationship the RTW professional may help the sick-listed worker to overcome obstacles during the RTW process [34]. Despite differences in characteristics, the sick-listed workers in the present study experienced MI as a positive intervention. This may be because the MI sessions were driven by their expressed needs, in combination with creating a good relationship. In MI, the relationship between a counselor (e.g., MI caseworker) and a client (e.g., sick-listed worker) is characterized by acceptance and empathic understanding from the counselor [35]. Forming a good relationship with the client is one of the cornerstones of MI. Having a good relationship can elicit and strengthen the persons' own reasons for change and their plan of action [35]. Studies have also suggested that the relationship between a counselor and a client is important to the outcome of the treatment [36]. From a RTW professional's perspective, building an alliance is reported as important to facilitating RTW for sick-listed workers [37].

In the follow-up procedure for sick leave in Norway, caseworkers at the NAV operate as both RTW professionals and as controllers of sickness benefits [38]. This double role can be a conflicting paradox [34] that may hinder a good relationship [10]. In the present study, participants did not report that MI caseworkers controlled their rights to sickness benefits during the MI sessions, which indicates that this was not a barrier to forming a good relationship during the MI sessions. Having positive and supportive encounters with health care personnel and significant others (e.g., NAV caseworker) has been shown to be important in what longterm sick-listed workers experience as successful RTW processes [39]. This is in accordance with findings in the current study, which indicates that using MI may be beneficial for a successful RTW process. Experiences from the Swedish insurance system have shown that caseworkers who are on a tight schedule might focus more on assessing the sick-listed worker's right to receive benefits instead of focusing on their individual needs. Ståhl et al. [40] claims that there is a distinction between a correct and a good decision, where a correct decision is made in accordance with legislation while a good decision takes into account dignity, autonomy, and individual needs. They argue that it is necessary to make exceptions to rules to make good decisions [40]. In the spirit of MI, the counselor should be able to give up their expert role and support the client's autonomy and expertise in his or her own decisions regarding change [35]. Thus, applying the MI approach when counseling sick-listed workers in a RTW process could arguably be one of these good decisions.

Work is important for an individual's self-confidence and self-esteem [33]. In the present study, being absent from work due to sick leave led to feelings of guilt, even when being on grade sick leave. Garthwaite [41] found that the need to validate illness was important for sicklisted workers, and the search for legitimacy was a large part of their current lives. Similar to the current study, being on sick leave included a search for legitimacy. Gaining acceptance from others about their situation can make it easier for the sick-listed worker to accept their own absence from work. This is in accordance with a previous study [42], where the decision to disclose or not disclose an invisible illness was difficult and disclosing the illness could lead to both support and experiences of stigma. The acceptance and support that the participants received from the MI caseworkers in the present study helped them to reduce feelings of guilt, stigma, and perceived barriers to RTW. Self-understanding and viewing oneself as an active agent is necessary to taking control of ones RTW process [39]. Similarly, in MI the client takes an active part in his or her process of change, in this case, the RTW process.

Foldal et al. BMC Public Health (2020) 20:276 Page 8 of 10

In the MI sessions in the current study, the sick-listed workers received personal feedback about their presented RTW plan, such as adjusting their RTW pace, workload, work tasks, and working time. The role of a MI practitioner is not to provide answers and solutions to the client, but to recognize and support the client's insights and capabilities of providing solutions to his or her own challenges [43]. Hence, when the sick-listed workers in the current study perceived RTW adjustments as positive and useful, it is based on insights and reflections from the sick-listed worker, that were elicited, reflected, and summarized by the MI caseworker. Merely discussing their situation with MI caseworkers may also result in increased awareness of the sick-listed worker's own capacity, which, arguably, is a component of selfefficacy [44]. Norlund et al. [45] state that self-efficacy, the belief in ones' ability to achieve a given goal or task, affects thought patterns that could be barriers to returning to work. Furthermore, receiving positive feedback from others may also increase the individual's selfefficacy [45]. In the current study, when the MI caseworker established a supportive relationship with the sick-listed worker and gave feedback to their thoughts and insights on their RTW plan, this may have strengthened the sick-listed workers self-efficacy, which is known to increase the likelihood of RTW [11, 12].

Strengths and limitations

A strength of the current study was the use of semistructured interviews, which allow the participants to explain and describe their situations and experiences of the MI sessions and the RTW process. This study used a broad exploratory approach with a heterogenous sample to uncover the different experiences and nuances. Both the analysis and preliminary results were presented and discussed with all the authors to strengthen the interpretations and validate the results. Interviews were conducted from 2 to 4 months after the MI sessions, and the participants may have failed to recall information and details about their experiences. Furthermore, there is a risk that the sick-listed workers could have held back information in the MI sessions if they feared there could be consequences for their benefits. However, none of the participants expressed such barriers in the interviews. The current study recruited participants from a RCT, with a response rate of approximately 8%. From this sample, the current nested study had a response rate of 55%. This indicates a selection bias, where participants could be more motivated in general, not necessarily representing the variances in the experiences of the MI sessions. Thirteen of the sixteen recruited participants were women. However, we did not find any gender differences in terms of how they experienced the MI sessions.

Conclusion

Sick-listed workers considered the MI sessions to be a positive experience due to the positive relationships formed with the MI caseworkers, the normalizations of sick leave that they experienced, and the help they received in adjusting their RTW strategies. Having an early face-to-face follow-up session using MI may positively affect sick-listed workers' relationship to NAV and increase trust towards public services such as NAV. NAV caseworkers and other professionals working with individuals attempting to RTW may benefit from using MI as a method for helping sick-listed workers to RTW. However, when the sick-listed worker is not in need of information or RTW adjustments, the MI sessions were not experienced as useful. This suggest that future interventions may benefit from selecting individuals who express the need for such RTW support. Findings from this study may be transferred to other similar systems like NAV and may also be transferable to other one-onone counseling situations.

Supplementary information

Supplementary information accompanies this paper at https://doi.org/10.1186/s12889-020-8382-9.

Additional file 1. Interview guide. This document contains the questions used in the interviews with the participants. Translated into an english language version.

Abbreviations

MI: Motivational interviewing; NAV: Norwegian Labor and Welfare Administration; RCT: Randomized controlled trial; RTW: Return to work

Acknowledgments

We thank the caseworkers at NAV and the participants of the study.

Authors' contributions

VSF was in charge of writing the article. EAF, RJ, RH and MS contributed in the conception of the project. EAF, RH and GB designed the motivational interviewing intervention. VSF, MIS, LA and MS designed the interview study. VSF and MIS conducted all interviews. VSF analyzed and interpreted all data, and MIS, LA, GB, RH, EAF, RJ and MS contributed during the analysis process. The final categories and results were validated by all authors. VSF drafted the manuscript while MIS, LA, GB, RH, EAF, RJ and MS revised the manuscript. VSF finalized the article and MIS, LA, GB, RH, EAF, RJ and MS approved of the final version. The author(s) read and approved the final manuscript.

Funding

Funding granted by The Research Council of Norway (Grant number: 256633). The funding organization had no role in the planning, execution or analyses of the study.

Availability of data and materials

To protect the anonymity of the participants, the datasets generated and analyzed during the current study are not publicly available. Redacted versions are available from the corresponding author upon reasonable request.

Ethics approval and consent to participate

The study was approved by the Regional Committees for Medical and Health Research Ethics in South East Norway (No: 2016/2300), and the trial was prospectively registered at clinicaltrials.gov NCT03212118 (registered July 11, 2017). Written informed consent was obtained from all participants prior to conducting interviews.

Foldal et al. BMC Public Health (2020) 20:276 Page 9 of 10

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

Author details

¹Department of Public Health and Nursing, Faculty of Medicine and Health Science, Norwegian University of Science and Technology, Postboks 8905, MTFS, 7491 Trondheim, Norway. ²Department of Psychology, Faculty of Social and Educational Sciences, Norwegian University of Science and Technology, Trondheim, Norway. ³Unicare Helsefort Rehabilitation Centre, Rissa, Norway. ⁴Tiller Community Mental Health Centre, Division of Psychiatry, St. Olavs Hospital, Trondheim University Hospital, Trondheim, Norway.

Received: 6 November 2019 Accepted: 20 February 2020 Published online: 28 February 2020

References

- Waddell G, Burton K. Is work good for your health and well-being? London: TSO: 2006. p. 246.
- OECD. Sickness, disability and work: breaking the barriers. A synthesis of findings across OECD countries. Paris: OECD Publishing; 2010. p. 165.
- Lambeek LC, van Mechelen W, Knol DL, Loisel P, Anema JR. Randomised controlled trial of integrated care to reduce disability from chronic low back pain in working and private life. BMJ. 2010;340:1–7.
- Nieuwenhuijsen K, Faber B, Verbeek JH, Neumeyer-Gromen A, Hees HL, Verhoeven AC, et al. Interventions to improve return to work in depressed people. Cochrane Database Syst Rev. 2014;12:CD006237.
- Vogel N, Schandelmaier S, Zumbrunn T, Ebrahim S, de Boer WE, Busse JW, Kunz R. Return-to-work coordination programmes for improving return to work in workers on sick leave. Cochrane Database Syst Rev. 2017;3: CD011618
- Brouwers EP, Terluin B, Tiemens BG, Verhaak PF. Predicting return to work in employees sick-listed due to minor mental disorders. J Occup Rehabil. 2009; 19(4):323–32. https://doi.org/10.1007/s10926-009-9198-8.
- Magnussen L, Strand LI, Skouen JS, Eriksen HR. Motivating disability pensioners with back pain to return to work—a randomized controlled trial. J Rehabil Med. 2007;39(1):81–7. https://doi.org/10.2340/16501977-0004.
- Nieuwenhuijsen K, Noordik E, van Dijk FJ, van der Klink JJ. Return to work perceptions and actual return to work in workers with common mental disorders. J Occup Rehabil. 2012;23(3):290–9. https://doi.org/10.1007/s10926-013-0388-6
- Andersen MF, Nielsen KM, Brinkmann S. Meta-synthesis of qualitative research on return to work among employees with common mental disorders. Scand J Work Environ Health. 2012;38:93–104.
- Mussener U, Stahl C, Soderberg E. Does the quality of encounters affect return to work? Lay people describe their experiences of meeting various professionals during their rehabilitation process. Work. 2015;52(2):447–55. https://doi.org/10.3233/wor-152121.
- Brouwer S, Reneman MF, Bultmann U, van der Klink JJ, Groothoff JW. A prospective study of return to work across health conditions: perceived work attitude, self-efficacy and perceived social support. J Occup Rehabil. 2010;20(1):104–12. https://doi.org/10.1007/s10926-009-9214-z.
- Lagerveld SE, Blonk RWB, Brenninkmeijer V, Schaufeli WB. Return to work among employees with mental health problems: development and validation of a self-efficacy guestionnaire. Work Stress. 2010;24(4):359–75.
- Bandura A. Self-efficacy: the exercise of control. ix ed. New York: Freeman; 1997. p. 604.
- Andersen A, Stahl C, Anderzen I, Kristiansson P, Larsson K. Positive experiences of a vocational rehabilitation intervention for individuals on long-term sick leave, the Dirigo project: a qualitative study. BMC Public Health. 2017;17(1):790.
- Page KM, Tchernitskaia I. Use of motivational interviewing to improve return-to-work and work-related outcomes: a review. Aus J Rehabil Couns. 2014;20(1):38–49
- Miller WR, Rollnick S. Motivational interviewing: helping people change. 3rd ed. New York: Guilford Press; 2013. p. 482.
- Bagøien G, Bjørngaard JH, Østensen C, Reitan SK, Romundstad P, Morken G. The effects of motivational interviewing on patients with comorbid substance use admitted to a psychiatric emergency unit - a randomised

- controlled trial with two year follow-up. BMC Psychiatry. 2013;13:93. https://doi.org/10.1186/1471-244X-13-93.
- Lai DT, Cahill K, Qin Y, Tang JL. Motivational interviewing for smoking cessation. Cochrane Database Syst Rev. 2010;20(1):CD006936.
- Lundahl B, Moleni T, Burke BL, Butters R, Tollefson D, Butler C, et al. Motivational interviewing in medical care settings: a systematic review and meta-analysis of randomized controlled trials. Patient Educ Couns. 2013; 93(2):157–68. https://doi.org/10.1016/j.pec.2013.07.012.
- Rubak S, Sandbaek A, Lauritzen T, Christensen B. Motivational interviewing: a systematic review and meta-analysis. Br J Gen Pract. 2005;55(513):305–12.
- DiClemente CC, Corno CM, Graydon MM, Wiprovnick AE, Knoblach DJ. Motivational interviewing, enhancement, and brief interventions over the last decade: a review of reviews of efficacy and effectiveness. Psychol Addict Behav. 2017;31(8):862–87.
- Norwegian Labour and Welfare Service. Veiledningsplattformen i NAV [Pamphlet]. Oslo: Arbeids- og veldferdsdirektoratet; 2016.
- Flodgren GM, Berg RC. Motivational interviewing as a method to facilitate return to work: a systematic review. Oslo: National Institute of Public Health; 2017. p. 71.
- Gross DP, Park J, Rayani F, Norris CM, Esmail S. Motivational interviewing improves sustainable return to work in injured workers after rehabilitation: a cluster randomized controlled trial. Arch Phys Med Rehabil. 2017;98(12): 2355–63. https://doi.org/10.1016/j.apmr.2017.06.003.
- Aasdahl L, Foldal VS, Standal MI, Hagen R, Johnsen R, Solbjor M, et al. Motivational interviewing in long-term sickness absence: study protocol of a randomized controlled trial followed by qualitative and economic studies. BMC Public Health. 2018;18(1):756. https://doi.org/10.1186/s12889-018-5686-0.
- 26. OECD. Mental health and work Norway. Paris: OECD Publishing; 2013.
- Statistics Norway, Sickness absence. Oslo: Statistics Norway; 2019. Available from: https://www.ssb.no/en/arbeid-og-lonn/statistikker/sykefratot.
- Norwegian Labour and Welfare Administration. Available from: https://www. nav.no/no/nav-og-samfunn/statistikk/sykefravar-statistikk/sykefravar. Accessed 29 Jan 2020.
- Norwegian Labour and Welfare Administration. Available from: https://www. nav.no/en/Home/Benefits+and+services/Relatert+informasjon/sicknessbenefits-for-employees#chapter-2. Accessed 30 Sept 2019.
- Prochaska JO, DiClemente CC, Norcross JC. In search of how people change. Applications to addictive behaviors. Am Psychol. 1992;47(9):1102–14.
- Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. Qual Health Res. 2016;26(13):1753–60.
- Malterud K. Systematic text condensation: a strategy for qualitative analysis.
 Scand J Public Health. 2012;40(8):795–805. https://doi.org/10.1177/ 1403494812465030.
- Lannerstrom L, Wallman T, Holmstrom IK. Losing independence—the lived experience of being long-term sick-listed. BMC Public Health. 2013;13:745. https://doi.org/10.1186/1471-2458-13-745.
- Andersen MF, Nielsen K, Brinkmann S. How do workers with common mental disorders experience a multidisciplinary return-to-work intervention? A qualitative study. J Occup Rehabil. 2014;24(4):709–24. https://doi.org/10. 1007/s10926-014-9498-5.
- 35. Moyers T. The relationship in motivational interviewing. Psychotherapy (Chic). 2014;51(3):358–63.
- Horvath AO, Del Re AC, Flückiger C, Symonds D. Alliance in individual psychotherapy. Psychotherapy. 2011;48(1):9–16. https://doi.org/10.1037/ a0072186.
- Eftedal M, Kvaal AM, Ree E, Oyeflaten I, Maeland S. How do occupational rehabilitation clinicians approach participants on long-term sick leave in order to facilitate return to work? A focus group study. BMC Health Serv Res. 2017;17(1):744.
- Ministry of Labour and Social Affairs. Report No. [33] to the Storting (2015-2016). NAV i en ny tid - for arbeid og aktivitet. Oslo: Ministry of Labour and Social Affairs; 2016. p. 83.
- Haugli L, Maeland S, Magnussen LH. What facilitates return to work? Patients' experiences 3 years after occupational rehabilitation. J Occup Rehabil. 2011;21(4):573–81. https://doi.org/10.1007/s10926-011-9304-6.
- Ståhl C, Müssener U, Svensson T. Implementation of standardized time limits in sickness insurance and return-to-work experiences of four actors. Disabil Rehabil. 2012;34(16):1404–11. https://doi.org/10.3109/09638288.2011.641667.
- Garthwaite K. Becoming incapacitated? Long-term sickness benefit recipients and the construction of stigma and identity narratives. Sociol Health Illn. 2015;37(1):1–13. https://doi.org/10.1111/1467-9566.12168.

Foldal et al. BMC Public Health (2020) 20:276 Page 10 of 10

- 42. Joachim G, Acorn S. Stigma of visible and invisible chronic conditions. J Adv Nurs. 2000;32(1):243–8. https://doi.org/10.1046/j.1365-2648.2000.01466.x.
- Park J, Gross DP, Rayani F, Norris CM, Roberts MR, James C, et al. Model of human occupation as a framework for implementation of motivational interviewing in occupational rehabilitation. Work. 2019;62(4):629–41.
- Jansson I, Perseius KI, Gunnarsson AB, Bjorklund A. Work and everyday activities: experiences from two interventions addressing people with common mental disorders. Scand J Occup Ther. 2014;21(4):295–304.
- Norlund S, Fjellman-Wiklund A, Nordin M, Stenlund T, Ahlgren C. Personal resources and support when regaining the ability to work: an interview study with exhaustion disorder patients. J Occup Rehabil. 2013;23(2):270–9. https://doi.org/10.1007/s10926-012-9396-7.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Ready to submit your research? Choose BMC and benefit from:

- fast, convenient online submission
- \bullet thorough peer review by experienced researchers in your field
- rapid publication on acceptance
- support for research data, including large and complex data types
- gold Open Access which fosters wider collaboration and increased citations
- maximum visibility for your research: over 100M website views per year

At BMC, research is always in progress.

Learn more biomedcentral.com/submissions



Supplementary files Paper II

Intervjuguide individuelle intervju T2

Informanter: De som har gjennom 2 samtaler hos NAV – TAU2 og MI

Tidspunkt inklusjon: Ca 4 uker etter andre TAU2 eller MI samtale (20 uker)

Kan du fortelle litt kort om deg selv?

- Alder
- Hvorfor er du sykmeldt?
- Sykmeldingslengde?
- Sykmeldingsgrad?
- Hvilken type jobb har du, beskrive arbeidsoppgaver?
- Menneskekontakt? Selvstendig arbeid, teamarbeid?
- Hvor mang oppfølgingssamtaler har du hatt med NAV? Varighet? Tid mellom?

1. Kan du fortelle litt om situasjonen din?

- a. Hvordan er det å være sykmeldt?
- b. Hvordan har prosessen din for å komme tilbake i arbeid vært?

2. Kan du fortelle om hvilken oppfølging du har fått i sykemeldingsperioden – og fra hvem?

- a. Fastlege/arbeidsgiver /lege/helsetjenester
- 3. Kan du fortelle litt om samtalene hos NAV?
 - Hva snakket dere om i samtalene?
 - a. Hvordan opplevde du forholdet til NAV-veileder? (Hvordan opplevde du at veileder forstod deg og situasjonen din?)
 - b. Hvilke forventinger hadde du til samtalene?
 - c. Opplevde du samtalen som positivt? (Utdyp: Kan du fortelle litt mer om det? Hvorfor?)
 - d. Hvordan opplevde du tidspunktet for disse samtalene i sykefraværsperioden din? (Hadde det passet bedre å fått denne oppfølgingen på et annet tidspunkt? Hvorfor?)

- e. Opplevde du at samtalen var nyttig for deg? (Var de belastende på noen måte? Kan du fortelle litt om hvorfor du opplever det slik som du gjør?)
- f. Hvilke tanker hadde du om å komme tilbake til arbeid før samtalene?
 - i. Hva med etter samtalene?
- 4. Hvilke konsekvenser har disse samtalene hatt for deg? (Jobb, familie, økonomi, trening, vaner, holdninger, andre ting?)
 - a. Har du gjort noen endringer på bakgrunn av disse samtalene?
 - b. Hvis du ikke har gjort noen endringer, kan du fortelle grunnene til det?
 - c. Hvilke tanker har du gjort deg etter disse samtalene? Situasjon, relasjoner, adferd.
 - d. Ble det utarbeidet en plan i samtalene med NAV?
 - i. Kan du fortelle litt om den planen? (Hva var denne planen? Hvordan samsvarte dette med arbeidsgiver? Endringer på plan før vs etter NAV samtale?)

5. Hva tenker du om fremtiden?

- a. Hva tenker du om å komme tilbake i arbeid?
- b. Hva er det som gjør det viktig for deg å komme deg tilbake i arbeid?
- c. Hvilke forventninger har du til deg selv med å komme tilbake til arbeid? (Hva forventer du av deg selv?)
 - i. Har disse forventingene endret seg etter samtalene med NAV? Hvorfor?
 - ii. Hvilke forventinger tror du andre har om deg? (Kolleger, ledelse, venner, familie, NAV)
- d. Hva/hvem er til hjelp eller støtte for deg for å komme tilbake i arbeid?



Forespørsel om å delta i intervju i forskningsprosjektet «Bedre sykefraværsoppfølging»

Bakgrunn og hensikt

Du mottar denne forespørselen fordi du har takket ja til å delta i forskningsprosjektet «Bedre sykefraværsoppfølging» og at du har gjennomført to oppfølgingssamtaler hos NAV. Dette er et spørsmål om å bli intervjuet om dine opplevelser og erfaringer med oppfølgingen fra NAV og situasjonen din som sykmeldt.

Formålet med intervjuet er å få vite mer om hvordan sykefraværsoppfølgingen din har vært så langt, og hvilke tanker du har om å komme i jobb eller holde deg i jobb. Intervjuet er ikke en del av en behandling eller et ledd i tilbakeføringen til arbeid, men vil brukes for å øke vår kunnskap om det å være sykemeldt i Norge. Denne kunnskapen vil være svært nyttig for å forbedre metodene og praksisen som i dag blir brukt for tilbakeføring til arbeid.

Studien gjennomføres av forskere ved Institutt for samfunnsmedisin og sykepleie, og Institutt for psykologi ved NTNU. Studien er godkjent av Regional komité for medisinsk og helsefaglig forskningsetikk (REK Ref. nr: 2016/2300).

Hva innebærer intervjuet?

Intervjuet vil være en samtale hvor du deler dine erfaringer om formålet nevnt over. Samtalen blir tatt opp på lydfil for å sikre mest mulig pålitelig gjengivelse av det som blir sagt og vil siden bli skrevet ut som tekst for videre analyse.

Hva skjer med informasjonen om deg?

Informasjonen om deg vil kun brukes som beskrevet i hensikten med forskningsprosjektet. Alle opplysninger du gir vil bli behandlet uten direkte gjenkjennende informasjon. Du vil fortsatt kunne være med i hovedprosjektet om du velger å ikke delta i intervjuet.

Lydopptakene fra intervjuene vil bli skrevet ut i fulltekst, og intervjuutskriftene vil bli brukt til analyser som rapporteres gjennom publiseringen av studien. Opplysninger om personer og steder vil i bli fjernet i utskriftene, slik at enkeltpersoner ikke kan gjenkjennes.

Lydopptak, utskrifter og deltakerliste oppbevares kryptert og nedlåst under gjennomføringen av prosjektet i henhold til personopplysningsloven. Det er kun forskere ved prosjektet som har tilgang til datamaterialet. Forskerne har taushetsplikt i henhold til Helseforskingslovens § 7. Lydopptak og deltakerlister vil bli slettet ved prosjektslutt. Utskriftene vil bli oppbevart i anonymisert form ved NTNU i 5 år etter prosjektslutt i henhold til Helseforskningsloven.



Institutt for Samfunnsmedisin og sykepleie Institutt for Psykologi

Det vil ikke være mulig å identifisere enkeltpersoner i publikasjoner fra studien. Resultatene fra studien vil publiseres i vitenskapelige tidsskrift, presenteres på konferanser og i populærvitenskapelige fora.

Deltakelse i intervjuet er frivillig og du er ikke forpliktet til å svare på spørsmål eller fortelle om egne opplevelser om du ikke ønsker det. Du kan når som helst trekke deg uten begrunnelse uten at dette har noen form for negative konsekvenser for deg.

Praktisk informasjon

Om du ønsker å delta vil vi ta kontakt med deg for å avtale et egnet sted og tidspunkt for intervjuet ved NTNU. Intervjuet tar ca. 1 time. Reiseutgifter med billigste transportmåte eller parkering vil bli dekt ved fremvist kvittering.

Deltakelse

Om du ønsker å delta kan du gi tilbakemelding på en av følgende måter:

- 1) Send en e-post til vegard.foldal@ntnu.no
- 2) Send en SMS til 415 14 308.

Om du har noen spørsmål eller ønsker mer informasjon, ta kontakt med prosjektmedarbeider Vegard Stolsmo Foldal (Tlf: 415 14 308, e-post: vegard.foldal@ntnu.no)

Med vennlig hilsen

Professor Egil A. Fors

Professor Roger Hagen

Institutt for samfunnsmedisin og sykepleie

Institutt for psykologi



Institutt for Samfunnsmedisin og sykepleie Institutt for Psykologi

Samtykkeerklæring

Jeg samtykker med dette til å delta i et intervju om sykefravær og tilbakeføring til arbeid.

Min deltakelse i prosjektet er frivillig. Jeg er ikke forpliktet til å svare på spørsmål eller fortelle om egne opplevelser og erfaringer dersom jeg ikke ønsker det. Jeg kan når som helst trekke meg uten begrunnelse og uten at dette skal ha noen form for negative konsekvenser for meg.

Sted og dato	Navn	



Institutt for Samfunnsmedisin og sykepleie Institutt for Psykologi

E-post tekst for invitasjon til intervjuet:

Hei!

Dette er en forespørsel om å delta i et intervju som omhandler dine opplevelser og erfaringer med oppfølgingen fra NAV og det å komme tilbake til arbeid / være sykmeldt.

Du mottar denne e-posten fordi du har takket ja til å delta i forskningsprosjektet «Bedre sykefraværsoppfølging» og har gjennomført to oppfølgingssamtaler hos NAV.

Intervjuet tar ca. 1 time og vil ta form som en samtale hvor du deler dine erfaringer og opplevelser med oss. Se vedlagte brev for mer informasjon.

Ønsker du mer informasjon så ta gjerne kontakt med oss på tlf: 415 14 308 (Vegard).

Om du ønsker å bli intervjuet kan du gi tilbakemelding på en av følgende måter:

- 1) Fyll ut skjemaet på følgende adresse: https://survey.svt.ntnu.no/TakeSurvey.aspx?PageNumber=1&SurveyID=76L39643#
- 2) Send en e-post til vegard.foldal@ntnu.no
- 3) Send en SMS til 415 14 308.

Mvh, på vegne av prosjektgruppen

Vegard Stolsmo Foldal

Title page

Barriers and facilitators for implementing motivational interviewing as a return to work intervention in a Norwegian social insurance setting: a mixed methods process evaluation

Vegard Stolsmo Foldal¹, Marit Solbjør¹, Martin Inge Standal², Egil Andreas Fors³, Roger Hagen^{2,4,5}, Gunnhild Bagøien⁶, Roar Johnsen¹, Karen Walseth Hara^{1,7,8}, Heidi Fossen⁷, Ida Løchting⁹, Hedda Eik⁹, Margreth Grotle^{9,10}, Lene Aasdahl^{1,11}

¹Department of Public Health and Nursing, Faculty of Medicine and Health Science,
Norwegian University of Science and Technology (NTNU), Trondheim, Norway

²Department of Psychology, Faculty of Social and Educational Sciences, Norwegian
University of Science and Technology (NTNU), Trondheim, Norway

³Department of Public Health and Nursing, General Practice Research Unit, Faculty of
Medicine and Health Sciences, Norwegian University of Science and Technology (NTNU),
Trondheim, Norway

⁴Department of Psychology, University of Oslo, Norway

⁵Research Institute, Modum Bad, Oslo, Norway

⁶Tiller Community Mental Health Centre, Division of Psychiatry, St. Olavs Hospital,

Trondheim University Hospital, Trondheim, Norway

⁷The Norwegian Labour and Welfare Service of Trøndelag, Trondheim, Norway

⁸Norwegian Advisory Unit on Complex Symptom Disorders, St. Olavs Hospital, Trondheim University Hospital, Trondheim, Norway.

⁹ Faculty of Health Science, Department of Physiotherapy, Oslo Metropolitan University,

Norway

¹⁰Research and Communication Unit for Musculoskeletal Health (FORMI) Clinic for Surgery

and Neurology, Oslo University Hospital, Oslo, Norway

¹¹Unicare Helsefort Rehabilitation Centre, Rissa, Norway

Corresponding author

Lene Aasdahl

Department of Public Health and Nursing, NTNU

Phone: +47 932 24 342

Email: lene.aasdahl@ntnu.no

2

Abstract

Purpose: The aim of this study was to evaluate potential barriers and facilitators for implementing motivational interviewing (MI) as a return to work (RTW) intervention in a Norwegian social insurance setting.

Materials and methods: A mixed-methods process evaluation was conducted alongside a randomized controlled trial involving MI sessions delivered by social insurance caseworkers. The study was guided by the Reach, Effectiveness, Adoption, Implementation, and Maintenance framework using focus groups with the caseworkers, MI fidelity through audio-recordings of MI sessions and questionnaires to sick-listed participants.

Results: Lack of co-worker and managerial support, time and place for practicing to further develop MI skills, and a high workload made the MI intervention challenging for the caseworkers. The MI method was experienced as useful, but difficult to master. MI fidelity results showed technical global scores over the threshold for "beginning proficiency" whereas the relational global score was under the threshold. The sick-listed workers reported being satisfied with the MI sessions.

Conclusion: Despite caseworker motivation for learning and using MI in early follow-up sessions, MI was hard to master and use in practice. Several barriers and facilitators were identified; these should be addressed before implementing MI in a social insurance setting.

Keywords: motivational interviewing; return to work; sick leave; RE-AIM; process evaluation; mixed-methods; social insurance

Trial registration ClinicalTrials.gov: NCT03212118 (registered July 11, 2017)

Introduction

Long-term sickness absence is a challenge for industrialized countries [1]. For the individual, prolonged sick leave is associated with adverse health outcomes, multimorbidity, increased risk of disability pension and a risk for exclusion from the labour market and economic instability [2-5]. Compared to other OECD countries, Norway has the highest sick leave [6] with a current sickness absence rate of 5.9% [7]. The leading causes for sick leave in Norway are musculoskeletal disorders (30%) and mental health disorder (27%) [7].

In order to facilitate return to work (RTW) for sick-listed workers, early interventions have been advocated [8, 9]. Despite various targeted efforts to increase RTW, there are - sparse conclusive results on what is an effective RTW approach [10-12]. To be able to better interpret the results of randomized controlled trials (RCT) and improve implementation, increased attention is given to evaluating the implementation of interventions [13, 14]. A frequently used framework for process evaluations is the Reach, Effectiveness, Adoption, Implementation and Maintenance (RE-AIM) framework [15, 16]. RE-AIM is comprised of five parts to evaluate interventions by individual factors, such as reach and effectiveness (RE), and multilevel organizational factors, such as adoption, implementation, and maintenance (AIM) of the intervention [15]. Previous studies using the RE-AIM framework to evaluate RTW interventions have emphasized the importance of evaluating potential barriers and facilitators of implementation for practice and policymakers [17, 18].

Furthermore, it has been recommended to use qualitative methods within the RE-AIM framework to increase the transferability of the findings to practice [19].

In an ongoing trial we are evaluating the effect of motivational interviewing (MI) on RTW [20]. MI is a client-centered and directive counseling method aimed at facilitating intentional behavioral change. The method has a relational component that refers to the

empathic and interpersonal spirit of MI, as well as a technical component that refers to the evocation and reinforcement of change talk [21]. In MI, open-ended questions, affirmation, reflective listening, and summarizing are referred to as core MI skills [22]. The method was first developed for treating alcohol abuse [22], and has later been shown to be effective in various clinical settings [23-26] and in brief interventions with small doses of 15 minutes [27] and single sessions [28]. While the evidence for MI as an effective RTW intervention is sparse [29-31], a recent study found that the use of MI in rehabilitation led to more sustainable RTW compared to traditional rehabilitation for patients with musculoskeletal complaints [32]. In a recent study we found that sick-listed workers receiving MI as an RTW intervention, given by caseworkers at the Norwegian Labour and Welfare Administration (NAV), experienced increased RTW self-efficacy [33]. A Swedish study on social insurance officers using MI in a sickness insurance setting, found that the implementation of MI largely failed due to high workload and lack of support and priority from management [34]. Furthermore, MI quality has been found to vary between countries and cultures [35]. Thus, it is important to consider cultural and contextual differences when comparing measures of MI quality across studies and settings. When counseling the sick-listed workers in Norway, NAV recommend that their caseworkers use MI [36], but to what extent and quality is unknown. Thus, there is a lack of knowledge on how MI can be implemented as an RTW intervention in a Norwegian social insurance setting [29]. The aim of this study was to evaluate potential barriers and facilitators for implementing MI as an RTW intervention in a Norwegian social insurance setting.

Materials and methods

This mixed-methods process evaluation was conducted alongside a RCT [20] and was guided by the RE-AIM framework [15, 19]. The process evaluation components adoption, implementation and maintenance were chosen to evaluate potential barriers and facilitators for implementing MI as an RTW intervention. Reach and effectiveness of the intervention will be reported separately later on. Adoption, implementation and maintenance were assessed through focus groups with NAV caseworkers who administered the interventions, treatment fidelity through audio-recordings of MI sessions, and questionnaires to sick-listed workers who received the MI sessions. The manuscript is reported according to the Consolidated criteria for reporting qualitative research (COREQ) guideline.

Study setting - The Norwegian welfare system and sickness absence follow-up

In Norway, employees are entitled to full wage benefits from the first day of sickness absence to a maximum period of 52 weeks. The employer is responsible for the payment during the first 16 working days, while the remaining period is covered by the National Insurance Scheme through NAV [37]. The employer and sick-listed worker share the main responsibility for sickness absence follow-up. NAV has a facilitating role and is responsible for arranging a meeting within 26 weeks of sick leave, including the employer and the sick-listed worker. The attendance of the sick-listed employee's general practitioner is optional, unless NAV deems it necessary for the continued coordination of the RTW process. Another meeting can be held if one or more of the stakeholders find it necessary. The sick-listed worker may also ask for a meeting at any time with NAV to coordinate a plan for RTW outside the scheduled follow-up [37].

The interventions

The RCT was designed with three arms: the MI intervention, an active control group comprising of non-MI sessions, and a practice-as-usual group [14].

The MI intervention consisted of two MI counseling sessions that were offered to the sick-listed workers by a NAV caseworker (hereby after referred to as MI caseworker), in addition to the standard NAV follow-up. The first session was held at 14 weeks of sick leave and the second session at 16 weeks of sick leave, where each session had a maximum duration of 60 minutes. In the first session the emphasis was on engaging the sick-listed worker in forming a collaborative relationship with the caseworker, evoking the person's own motivations to RTW, and mapping out an agenda for the session. During the first session, the caseworker also assessed the sick-listed worker's readiness to change, their RTW selfefficacy and the current RTW plan if applicable. The NAV caseworkers also assessed the participant's level of RTW readiness according to the stages of change model [28], to adjust the intervention accordingly. In the second session the MI caseworker aimed to map the sick listed individual's work tasks and earlier attempts of RTW. Information exchange of available support from NAV during the RTW process was included. The second session would ultimately result in one of two outcomes for the sick-listed worker: 1) The sick-listed worker was ready for change and/or ready to RTW and an action plan was written together with the NAV caseworker for establishing commitment to the plan. 2) The sick-listed worker was not ready for change or RTW was not appropriate at this moment (e.g., lack of work adaptations, health issues), then no plan was written. Whether or not an RTW plan was made in the session, the caseworker provided a written summary of the two MI-sessions that was made available online for the sick-listed worker [20].

Two MI experts from the research group (GB and RH) conducted the MI training with nine caseworkers from a local NAV office. These caseworkers were voluntarily selected to be

trained and to administer the MI intervention. The MI intervention was carried out using a standardized MI guideline developed by the MI experts in our research group. The selected MI caseworkers had two three-hour workshops with basic MI training in early 2017. During the six months leading up to intervention start, all the MI caseworkers received three-hour training sessions every other week, which was later adjusted to every three weeks. When the intervention started, the MI training consisted of three-hour supervision sessions every other week, from august 2018 reduced to a once a month. During the training, the caseworkers were guided to develop the necessary MI skills, in addition to receiving feedback from the MI experts on recorded MI sessions. Due to slow recruitment to the RCT, the number of caseworkers administering the MI intervention were reduced from nine to four. The other five caseworkers who had undergone the MI training acted as substitutes if needed (referred to as MI-substitute caseworkers) [20].

Study population and recruitment

The study population consisted of caseworkers at NAV working with sickness absence follow-up who administered the MI intervention, and sick-listed workers who were enrolled into the RCT.

NAV caseworkers

Eligible participants in the focus groups were MI caseworkers and MI-substitute caseworkers.

E-mail addresses for all possible caseworkers in each group were forwarded by NAV management to the first author (VSF), who invited them to participate in the focus groups.

All four of the possible caseworkers in the MI group agreed to participate and three out of five in the MI-substitute group agreed to participate in the focus groups.

Sick-listed workers

Eligible participants for the RCT were sick-listed workers, 18–60 years old, living in central Norway, with unselected diagnoses and sick-listed for at least 8 weeks (with a current sick leave status of at least 50%). Exclusion criteria were pregnancy-related sick-leave and unemployment. The sick-listed workers were informed that participation in the study did not affect their rights to sickness benefits in any way.

Process measures

Adoption

Adoption refers to the willingness to initiate an intervention and how those administering the intervention react to it [15, 19]. By using focus groups, we explored whether the NAV caseworkers were willing to learn and use MI, and how they reacted to using MI during the RCT. A questionnaire was used to examine how sick-listed workers reacted to receiving the interventions, where participants were asked about satisfaction, usefulness and timing of the MI intervention.

Implementation

Implementation includes whether the elements, structures and resources are in place to adequately achieve a successful implementation and whether it was delivered as planned [15, 19]. This was assessed by focus groups to explore how the NAV caseworkers experienced the intervention in terms of whether resources and structures were adequately in place to

administer the interventions as planned during the RCT. MI treatment fidelity was measured by using Motivational Interviewing Treatment Integrity (MITI) Coding Manual 4.2.1. [39].

Maintenance

Maintenance is the extent to which a program or policy becomes institutionalized or part of the routine organizational practices or policies [15, 19]. By using focus groups, we explored what structures and resources were in place for the NAV caseworkers to maintain the MI intervention and whether they would continue with the method after the completion of the project.

Data collection

Focus groups

Two focus groups were carried out in 2019 with the MI and MI-substitute caseworkers in order to investigate how they experienced learning and using MI, and MIs opportunity in daily practice. The focus groups were based on a semi-structured interview guide with five main questions concerning: The caseworkers' experiences with the MI sessions and the MI training, how the organization had adopted the intervention, how the caseworkers experienced performing extra follow-up sessions versus usual follow-up procedures and finally whether the caseworkers would continue to practice the MI method after the completion of the project. Both focus groups were asked about experienced barriers to and facilitators for the implementation of MI in daily practice. The focus groups lasted from 81 to 89 minutes and were audio-recorded and transcribed verbatim. Each focus group was held in a meeting room at the participants' workplace and conducted by a moderator and co-

moderator. The NAV caseworkers had varying experience of working in NAV. In the MI group it ranged from 11 to 28 years, whereas for the MI-substitute group it ranged from 3.5 to 5.5 years. All the caseworkers who participated in the focus groups were female.

MI fidelity

To assess the treatment fidelity, randomly selected audio-recordings of 20 MI sessions were collected from the four MI caseworkers on a voluntary basis during 2019. The recordings were transcribed and two MI experts in the research group selected a 20-minute segment in each transcription for further coding. Transcripts were then sent to an external coding lab with objective raters [40] and coded according to the MITI Coding Manual 4.2.1. [39], which is well suited for measuring MI fidelity in various settings [41]. Global scores were reported on a five-point Likert scale, capturing the coders' overall impression of how poorly or well the MI counselor met the dimensions measured, ranging from "Beginning proficiency" (low) to "Competency" (high). The threshold for "beginning proficiency" in the global technical score is ≥ 3 , whereas for the global relational score the threshold is ≥ 4 [39].

Questionnaires

The MI caseworkers delivered questionnaires to the sick-listed workers who completed their second MI session between June 2018 and November 2019. The sick-listed workers were asked about their satisfaction with the MI sessions on a scale from 1 (very dissatisfied) to 5 (very satisfied), and how useful they felt the conversations were for them (scored on a scale from 1 (not useful) to 5 (very useful)). Participants were asked about the timing of the sessions with the questions: "Did the two follow-up conversations come at an appropriate timing for you?" ("yes" or "no" alternatives) and "If the conversations were to come at

another time, when do you think it would have been best?" with six alternatives: "two months earlier," "one month earlier," "the timing was good," "one month later," "two months later," or "three or four months later."

Data analysis

The focus groups were analyzed using thematic analysis inspired by Braun and Clarke [42]. Thematic analysis is a flexible six-phased recursive process that allows the researcher to move back and forth between phases, which is suitable for analyzing focus group data [42]. Coding and theme development were according to the RE-AIM framework [15]. The analysis had five steps: 1) The authors read and reread the interviews to familiarize themselves and get an overall impression of the focus groups' data and occurring patterns, where preliminary codes were identified. 2) Items of interest to the aim were coded and used to create core categories for the development of initial themes. 3) Codes were combined into initial themes and then 4) reviewed and checked against the coded data in order to expand or revise the developed themes. 5) All authors involved in the data analysis had several meetings to discuss and validate the final themes, as a part of the last step of the analysis, which is to define and refine the existing themes in order to tell a coherent and compelling story about the data [42]. Followingly, the thick descriptions were written into an analytical text [42], contextualized according to the RE-AIM framework [15]. The focus group participants read the final results in order to validate quotes and content. The analysis was first conducted on the data from the MI caseworker group, followed by deriving differences and nuances from the focus group with MI-substitute caseworkers.

Descriptive statistics were used to analyze the questionnaire and MITI data in Stata 15.1, College Station, TX [43].

Ethics

The study was approved by the Regional Committee for Medical and Health Research Ethics in South East Norway (2016/2300). All focus group participants received written and oral information about the study and gave their written consent before the focus groups started. The sick-listed workers had given informed consent when being enrolled into the RCT study but provided specific consent for the questionnaire and audio-recordings of the 20 MI sessions.

Results

The results from the two focus groups with NAV caseworkers, questionnaire data from sick-listed workers and MITI scoring from MI sessions are presented under the headings of the three RE-AIM components: adoption, implementation and maintenance.

In total, 180 sick-listed workers completed the two MI sessions during the period the questionnaires were distributed. A total of 112 (62.2%) participants responded, where 63% were women and the mean age was 45.5 years (SD 9.7). Sixty-two percent of the participants had higher education (Table 1). Participants included in the RCT during this period were mainly sick listed due to musculoskeletal complaints (38%) or mental health disorders (30%), the last third (32%) contained varied other diagnoses.

[Insert table 1 here]

Adoption

Mastering various MI skills required considerable training and practice. However, using the MI method as an early follow-up intervention was experienced as meaningful for the MI caseworkers. Most sick-listed workers reported being satisfied with both the MI sessions and the timing of the MI sessions.

MI-A useful but difficult method to master

The MI training in the current project was experienced as good and comprehensive for the MI caseworkers, but the MI-substitute caseworkers emphasized the need for practicing MI in actual counseling sessions to further develop their skills. At the beginning of the project period, the MI caseworkers were uncertain about how to use the method and gave considerable effort to remembering which skills to use, and how and when to use them, rather than focusing on the content of the conversation. At this stage, they relied heavily on the MI guide developed by the research team. However, with time and practice, they were able to integrate the MI skills into their own conversation style, and retrospectively often realized that they had been using MI. Some specific MI skills were easier to master than others, such as asking open questions and reflective listening, since they were familiar to previous counseling approaches used prior to learning MI. Other MI skills, such as summarizing and asking for permission to give information or advice, were harder to incorporate and use, as it challenged their counseling habits and ability to stay focused throughout the MI session.

"What I'm struggling the most with is summarizing, and I'm also struggling with staying focused, and then there's also this 'ask for permission' stuff that I think is quite difficult. I think that it's kind of unnatural to ask for permission to inform, since they come to us because they want to and then I assume they want to hear what we have to say, and I feel like "No I can't, I should ask for permission to inform them,"

which I take for granted, so I struggle a bit with that one [laughing]." – MI Caseworker 3

Regardless of the difficulties, the MI caseworkers collectively expressed motivation to further develop their MI skills. The MI-substitute caseworkers described that they sporadically applied the MI method in their regular counseling. They experienced that their MI training helped them apply a more explorative approach in their regular counseling sessions by using MI skills such as summarizing and reflective listening.

The MI caseworkers reflected upon how, through MI, they had discovered a new way to meet the sick-listed workers' needs, which enabled them to facilitate the sick-listed workers' RTW process.

"That is what we usually experience, that when sick-listed workers come to NAV they really want to talk about their health issues in order to be believed, and to get acceptance for their sick leave. Many people who get called into a meeting with NAV feel that there is an underlying distrust towards them, so they need to explain why they are on sick leave and describe their health problems. We just give them room to explain, and I think with MI, that if you use summarizing, it kind of helps me to show them that I have heard them, that I have respected them, and that what they are saying is true. It simply makes them feel understood, heard and trusted [...]. — MI Caseworker 3

The MI sessions were a meaningful experience for the MI caseworkers in several ways. First, it gave the caseworkers an opportunity to build a relationship with the sick-listed worker and explore their situation. Second, having two separate one-on-one counseling sessions at an early stage of sick leave gave the MI caseworker a chance to use their MI expertise to facilitate the sick-listed workers' RTW process. The MI caseworkers preferred these early

follow-up sessions as a way of delivering RTW follow-up, as opposed to the standard sickness absence follow-up at NAV, where they were are not involved before 26 weeks of sick leave. Third, these sessions were not only an opportunity to practice specific MI skills, but also a situation where they experienced professional growth and confidence in their abilities as caseworkers.

Satisfaction with the MI sessions among sick-listed workers

The vast majority of sick-listed workers (99%) reported being satisfied or very satisfied with the MI sessions (Table 2). Most participants found the MI sessions to be useful (89%) and had an appropriate timing (86%), but at the same time 36% would have preferred the MI sessions to be either one or two months earlier than they were (Table 2).

[Insert table 2 here]

Implementation

The MI caseworkers experienced the MI interventions as being an extra workload, while also experiencing a lack of support and follow-up from the NAV management.

Furthermore, conflicting roles when counseling sick-listed workers were experienced as a problem for the MI caseworkers.

Resource-intensive RTW follow-up

The MI sessions were described as a strain by the caseworkers, as this were two extra 60-minute sessions added to their usual schedule of sickness absence follow-up. The MI sessions also required time for preparation in order to perform at an appropriate level. For the

caseworkers delivering MI, it was challenging to move from the usually goal-oriented counseling setting, to counseling sessions where the process was a goal in itself. However, the exploratory style of MI allowed caseworkers to better understand the complexity of the sick-listed workers' situation, which enabled better tailoring of the sick-listed workers' RTW process.

"The MI sessions feel very different than those we have in the usual follow-up context, where they perhaps are more planned and goal-oriented. We are more focused on getting somewhere in the usual follow-up sessions than in the MI sessions, where we don't have this focus. I have more of an exploratory focus because of the way the conversations [MI sessions] are organized, with the agenda of exploring all areas of people's lives. I notice that, yes, I spend a lot more time doing these sessions and that I have to limit myself more than I usually would. [...]. It is really different from what I am used to doing in regular meetings." – MI Caseworker 2

Based on communication with NAV management prior to the project, the MI caseworkers had assumed that they would have a reduction in their regular caseload in order to compensate for the added workload. However, the MI caseworkers did not experience any reduction in their ordinary workload. Conflicting roles when counseling the sick-listed workers was also experienced as problematic for the MI caseworkers.

"We felt that we should be in the MI-spirit in order to explore the sick-listed workers' motivation to move forward, while also being gatekeepers of sickness benefits [...]. We are supposed to wear many hats, but it can be challenging when it comes to the expectations of me as a NAV caseworker in an MI context. I am in fact a NAV caseworker, who is supposed to provide information about rights and obligations for sickness benefits." – MI Caseworker 1

On the one hand they were supposed to help individuals and develop a good relationship with the sick-listed workers, while on the other hand they were gatekeepers to sickness benefits. Using MI was more indicative of the first role than the latter, and they frequently described removing the "MI hat" in order to talk about rules, laws, rights and obligations.

MI fidelity

The MI fidelity results assessed by MITI showed technical global scores over the threshold for "beginning proficiency" with an average of 3.26 (SD 0.69), whereas the relational global score was under the threshold for "beginning proficiency", with an average of 3.45 (SD 0.63) (Table 3).

[Insert table 3 here]

Maintenance

Maintaining MI skills were difficult for the MI caseworkers, as they had no appropriate or organized place for utilizing and practicing their MI skills outside of the MI sessions and the monthly supervisions.

Maintaining MI skills – the need for practicing

The MI caseworkers had doubts about their MI skills and expressed the need for practical experience in order to recognize and learn when they were using MI. Thus, they emphasized the need for continuous practice if this intervention was to be maintained in regular follow-ups.

"Now that we have begun to learn the ropes of it, some of the things we struggled with in the beginning have begun to go on autopilot, but there is still some insecurity amongst us sometimes. [...]. We have all had this kind of insecurity and we often get confirmation in our MI training that we aren't as bad [at MI] as we might think."—MI Caseworker 2

Although they experienced that their MI training enabled them to be more explorative when counseling sick-listed workers, they experienced a lack of competence in MI skills. This led to stressful MI sessions, making it difficult for them to focus on the task at hand. In order to cope with the stress, discussing and sharing MI experiences with colleagues were considered important. However, based on earlier attempts at incorporating MI into the organization some years ago, the MI caseworkers described resistance towards the MI approach among several of their co-workers. This made it hard to receive the needed support in order to maintain and further develop their MI skills. The MI caseworkers discussed whether the MI sessions were the only suitable place for training in the MI method in NAV, as regular follow-up sessions involved other stakeholders, and that MI was considered best suited for one-on-one sessions.

Discussion

The aim of this study was to evaluate potential barriers and facilitators for implementing MI as an RTW intervention in a Norwegian social insurance setting. The main barrier for adopting MI was the amount of time needed for training and practice in order to master the various MI skills. The barriers to implementing MI were that delivering the MI intervention was experienced as resource-demanding and an extra workload, in addition to a lack of coworker and managerial support. The main barriers for maintenance was that MI caseworkers had no appropriate time and place for practicing the further development of MI skills. MITI scores showed that the MI caseworkers were over the threshold for "beginning proficiency" in the technical component of MI, whereas they scored beneath the threshold in the relational component. The main facilitators for implementing MI were the motivation to learn and master the MI method. Furthermore, early follow-up sessions allowed the caseworkers to understand the complexity of the sick-listed workers' life situation and believed they could positively influence the RTW process. Regarding the sick-listed workers, they reported that they were satisfied with the MI sessions.

Evoking motivation and change, which are essential parts of MI [21], were experienced as difficult skills to master for all the caseworkers who underwent MI training in the current study. Despite thorough training and mentoring, the MITI scores showed that the technical component of MI was at a "beginning proficiency," while the relational component was beneath this threshold. These findings are in line with a previous study that found that neither workshops nor additional supervision were sufficient for reaching "beginning proficiency" levels in MI [44]. Another recent study, however, found that four hours of MI training significantly increased counselors' MI competence scores, as well as their skills to promote clients' engagement in RTW behaviors and a strong working alliance [45]. MI providers' level of skills is known to vary within and between providers [46], and skill levels

are suggested to be related to treatment outcome, even though the results are inconsistent [47]. However, it is unknown what level of technical MI proficiency is needed to affect RTW outcome. It should also be noted that in a recent study we found that the sick-listed workers reported that they experienced the MI sessions as enabling in terms of RTW strategies [33].

The low MITI scores in the present study could suggest that barriers such as extra workload, lack of support and practicing can negatively affect maintaining MI performance in a social insurance setting, despite extensive initial training. This is in line with previous studies, where the implementation of MI largely failed due to high workload and lack of managerial support and priority [34], and where reduced workload and higher flexibility were considered facilitating factors when using MI [48]. Developing high levels of MI competence for caseworkers in a social insurance setting can be a difficult endeavor due to these barriers. The current project was externally funded and therefore better resourced in terms of training, supervising and administering MI than in regular NAV practice. A lack of such resources in ordinary social insurance settings could hinder achieving desired proficiency of MI skills. Similarly, a lack of MI proficiency might also hinder MIs efficacy on RTW, thereby suggesting that implementation of MI is not realistic without sufficient resources in place.

NAV caseworkers operate both as supporting RTW professionals and controllers of sickness benefits [36]. These conflicting roles represents a double role paradox that could contribute to ambivalence in decision-making for the caseworkers [49] and hinder the establishment of a good relationship when helping individuals to RTW [50]. This illustrates that the adaptation of MI in a non-therapeutic social insurance setting may be hindered by conflicting roles and the amount of information exchange necessary in a counseling session at NAV. In the present study, the MI caseworkers described that using MI was more indicative of being an RTW professional rather than a gatekeeper for sickness benefits. Putting on the proverbial "MI hat" helped the caseworkers to focus on establishing a good relationship,

rather than focusing on entitlement to sickness benefits. Thus, MI may be beneficial as a tool in reducing the barrier that the double role paradox poses on the sick-listed workers and caseworkers' cooperation in the RTW process. In addition to the caseworkers' motivation to learn and master MI, this may be considered important facilitating factors for implementing MI in a social insurance setting, as this may enable the caseworkers to positively influence the sick-listed workers' RTW process.

It has previously been reported that sick-listed workers experience the content and timing of standard follow-up given by NAV as being insufficient to facilitate RTW [51]. In the present study, meeting sick-listed workers at an earlier stage of sick leave were experienced as a preferred way of conducting sickness absence follow-up. In addition, the sick-listed workers were satisfied with the timing of the MI intervention. This suggests that there is a call for more early one-on-one counseling meetings in sickness absence follow-up in Norway.

Strengths and limitations

A strength of the current study was the use of mixed-methods, using NAV caseworker focus groups, MI fidelity scores and questionnaires for sick-listed workers to explore the adoption, implementation and maintenance of the interventions using the RE-AIM framework [9]. The findings are validated through the contribution of our interdisciplinary group of researchers throughout the analytical process. Since the RCT is ongoing, the reach and effectiveness of the intervention will be reported separately later on. Consequently, the current process evaluation was not biased by effectiveness measures when evaluating the implementation of MI. All the caseworkers in this study were women, which is fairly representative of the social insurance offices in Norway.

Since the current project was externally funded it was better resourced in terms of training, supervising and administering MI than regular NAV practice. However, the volume of MI sessions would be higher if this was regular practice, and not limited by slow recruitment, as was the case in the current RCT. As this study was a collaboration with NAV, the caseworkers may have felt obligated to participate in the focus group study, and it could have affected what they chose to share. Furthermore, the selection of the MI caseworker group through their motivation for learning and using MI may have biased the caseworkers to overestimate the advantage of MI in practice. It would have strengthened the study if it had included data from the managerial perspective, which could have added information on structural and organizational barriers and facilitators for the implementation of MI in NAV. Furthermore, recording MI fidelity on a voluntary basis during a limited period of time in the early phase of the RCT may have affected the representativity of the MI fidelity scores.

Conclusion

Adopting and implementing MI as an RTW intervention in a social insurance setting required significant resources. The MI method was hard to master and use in practice, a notion that was supported by the low MITI scores. However, more research is needed on how technical and relational MI skills affect RTW outcomes. A lack of co-worker and managerial support, time and place for practicing and developing MI skills, and a high workload were identified as barriers to implementing MI. More attention should be paid to reducing these barriers and to investigate whether this would promote implementation of MI in a social insurance setting. Similarly, promoting facilitating factors, such as caseworker motivation and early follow-up sessions, may be equally important for implementing MI in a social insurance setting. However, there is an urgent need for well-designed effect studies of MI on RTW to justify

the investments required to adopt, implement and maintain MI as a main tool in early followup of workers on sickness absence.

Authors' contributions

VSF was in charge of writing the article. EAF, RJ, HF, RH and MS contributed to the conception of the project. EAF, RH and GB designed the motivational interviewing intervention. GB and RH trained and supervised the caseworkers in MI. MI fidelity data were prepared by RH and GB. VSF, MIS, LA and MS designed the focus group study. MS conducted the focus groups as moderator. Authors LA and RJ accompanied one focus group each as co-moderators. Authors VSF, MIS and MS read and analyzed all the focus groups, and LA, KWH, RH, EAF and RJ contributed during the analysis. Questionnaire data collection was by VSF and HF. First draft by VSF; draft revision by all authors. All authors read and approved the final manuscript.

Acknowledgments

Funding was granted by the Research Council of Norway (Grant number: 256633). The funding organization had no role in the design, collection, analysis, interpretation or writing of the study. We thank the caseworkers at NAV and the participants of the study, as well as KoRus Vest Bergen for MITI scoring.

Declaration of interests

No potential competing interest was reported by the authors.

Data availability statement

The data sets generated and analyzed during the current study are not publicly available due

to protecting the anonymity of participants, but redacted versions are available from the

corresponding author on reasonable request.

List of abbreviations

MI: Motivational interviewing

MITI: Motivational interviewing treatment integrity

NAV: Norwegian Labour and Welfare Administration

RCT: Randomized controlled trial

RE-AIM: Reach, Effectiveness, Adoption, Implementation, and Maintenance

RTW: Return to work

Ethics approval and consent to participate

The study is approved by REC South East – the Regional Committees for Medical and

Health Research Ethics in South East Norway (No: 2016/2300) and the trial is registered in

clinicaltrials.gov (No: NCT03212118). Written informed consent was obtained from all

participants included in the study.

25

References

- Gabbay M, Taylor L, Sheppard L, Hillage J, Bambra C, Ford F, Preece R, Taske N, Kelly MP. NICE guidance on long-term sickness and incapacity. Br J Gen Pract. 2011; 61(584):e118-e124. 10.3399/bjgp11X561221.
- Gjesdal S, Ringdal PR, Haug K, Maeland JG. Predictors of disability pension in long-term sickness absence: results from a population-based and prospective study in Norway 1994-1999. Eur J Public Health. 2004;14(4):398-405.
 https://doi.org/10.1093/eurpub/14.4.398
- Waddell G, Burton AK. Is work good for your health and wellbeing? London: The Stationery Office; 2006.
- 4. Schuring M, Robroek SJW, Otten FWJ, et al. The effect of ill health and socioeconomic status on labor force exit and re-employment: a prospective study with ten years follow-up in the Netherlands. Scandinavian Journal of Work, Environment & Health. 2013;39(2):134-143
- Spasova S, Bouget D, Vanhercke B. Sick pay and sickness benefit schemes in the European Union, Background report for the Social Protection Committee's In-depth Review on sickness benefits (17 October 2016). European Social Policy Network (ESPN), European Commission, Brussels
- 6. OECD. Mental Health and Work: Norway. OECD Publishing; 2013.
- 7. Norway S. Statistisk sentralbyrå 2020. Available from: https://www.ssb.no/en/arbeidog-lonn/statistikker/sykefratot
- Loisel P, Durand MJ, Berthelette D, Vezina N, Baril R, Gagnon D, Lariviere C, Tremblay C. Disability prevention: new paradigm for the management of occupational back pain. Disease Management & Health Outcomes. 2001;9:351-360. 10.2165/00115677-200109070-00001.

- Schultz IZ, Chlebak CM, Law AK. Bridging the gap: evidence-informed early
 intervention practices for injured workers with nonvisible disabilities. In: Schultz IZ,
 Gatchel RJ, editors. Handbook of return to work from research to practice. Edn. New
 York: Springer; 2016. p. 223–55.
- 10. Lambeek LC, van Mechelen W, Knol DL, Loisel P, Anema JR. Randomised controlled trial of integrated care to reduce disability from chronic low back pain in working and private life. British Medical Journal. 2010
- 11. Nieuwenhuijsen K, Faber B, Verbeek JH, Neumeyer-Gromen A, Hees HL, Verhoeven AC, et al. Interventions to improve return to work in depressed people. Cochrane Database Syst Rev. 2014 Dec;12:CD006237.
- 12. Vogel N, Schandelmaier S, Zumbrunn T, Ebrahim S, de Boer WE, Busse JW, Kunz R. Return-to-work coordination programmes for improving return to work in workers on sick leave. Cochrane Database Syst Rev. 2017 Mar;3:CD011618.
- Franche RL, Cullen K, Clarke J, Irvin E, Sinclair S, Frank J. Workplace-based return-to-work interventions: a systematic review of the quantitative literature. Journal of Occupational Rehabilitation. 2005;15:607-31. 10.1007/s10926-005-8038-8.
- Linnan L, Steckler A. Process Evaluation for public health interventions and research.
 California: Jossey-Bass San Francisco; 2002.
- 15. Glasgow RE, Vogt TM, Boles SM. Evaluating the public health impact of health promotion interventions: the RE-AIM framework. Am J Public Health. 1999;89:1322–7.
- Gaglio B, Shoup JA, Glasgow RE. The RE-AIM Framework: a systematic review of use over time. Am J Public Health. 2013;103(6):E38–46.
- 17. Van Beurden KM, Vermeulen SJ, Anema JR, van der Beek AJ. A participatory return-to-work program for temporary agency workers and unemployed workers sick-

- listed due to musculoskeletal disorders: a process evaluation alongside a randomized controlled trial. J Occup Rehabil. 2012;22:127-40. 10.1007/s10926-011-9314-4.
- 18. van Oostrom SH, van Mechelen W, Terluin B, de Vet HC, Anema JR. A participatory workplace intervention for employees with distress and lost time: a feasibility evaluation within a randomized controlled trial. J Occup Rehabil. 2009;19:212-22. 10.1007/s10926-009-9170-7.
- Holtrop JS, Rabin BA, Glasgow RE. Qualitative approaches to use of the RE-AIM framework: rationale and methods. BMC Health Serv Res.
 https://doi.org/10.1186/s12913-018-2938-8.
- 20. Aasdahl L, Foldal VS, Standal MI, Hagen R, Johnsen R, Solbjor M, et al. Motivational interviewing in long-term sickness absence: study protocol of a randomized controlled trial followed by qualitative and economic studies. BMC Public Health. 2018 Jun;18(1):756. 10.1186/s12889-018-5686-0.
- 21. Miller W, Rose G. Toward a theory of motivational interviewing. Am Psychol. 2009;64: 527-37.
- Miller WR, Rollnick S. Motivational interviewing: helping people change, 3rd ed.
 New York: Guilford Press; 2013. 482 p.
- 23. Bagøien G, Bjørngaard JH, Østensen C, Reitan SK, Romundstad P, Morken G. The effects of motivational interviewing on patients with comorbid substance use admitted to a psychiatric emergency unit: a randomised controlled trial with two year follow-up. BMC Psychiatry. 2013 Mar;13:93. 10.1186/1471-244X-13-93.
- Lai DT, Cahill K, Qin Y, Tang JL. Motivational interviewing for smoking cessation.
 Cochrane Database Syst Rev. 2010 Jan;20(1):CD006936.
- 25. Lundahl B, Moleni T, Burke BL, Butters R, Tollefson D, Butler C, et al. Motivational interviewing in medical care settings: a systematic review and meta-analysis of

- randomized controlled trials. Patient Educ Couns. 2013 Aug;93(2):157-68. 10.1016/j.pec.2013.07.012.
- 26. Westra HA, Constantino MJ, Antony MM. Integrating motivational interviewing with cognitive-behavioral therapy for severe generalized anxiety disorder: an allegiance-controlled randomized clinical trial. J Consult Clin Psychol. 2016;84:768-82.
- 27. Rubak S, Sandbaek A, Lauritzen T, Christensen B. Motivational interviewing: a systematic review and meta-analysis. Br J Gen Pract. 2005 Apr;55(513):305-12.
- 28. DiClemente CC, Corno CM, Graydon MM, Wiprovnick AE, Knoblach DJ.
 Motivational interviewing, enhancement, and brief interventions over the last decade:
 a review of reviews of efficacy and effectiveness. Psychol Addict Behav.
 2017;31(8):862-87.
- 29. Flodgren GM, Berg RC. Motivational interviewing as a method to facilitate return to work: a systematic review. Oslo: National Institute of Public Health; 2017. 71 p.
- 30. Page KM, Tchernitskaia I. Use of motivational interviewing to improve return-to-work and work-related outcomes: a review. Aus J Rehabil Couns. 2014 Jun;20(1):38-49.
- 31. Aanesen F, Berg R, Løchting I, Tingulstad A, Eik H, Storheim K, Grotle M, Øiestad B.E. Motivational Interviewing and return to work for people with musculoskeletal fisorders: a systematic mapping review. Journal of Occupational Rehabilitation. 2020
- 32. Gross DP, Park J, Rayani F, Norris CM, Esmail S. Motivational interviewing improves sustainable return to work in injured workers after rehabilitation: a cluster randomized controlled trial. Arch Phys Med Rehabil. 2017 Dec;98(12):2355-63. 10.1016/j.apmr.2017.06.003.

- 33. Foldal VS, Standal MI, Aasdahl L, Hagen R, Bagøien G, Fors EA, et al. Sick-listed workers' experiences with motivational interviewing in the return to work process: a qualitative interview study. BMC Public Health. 2020;20(1):276.
- 34. Stahl C, Gustavsson M. Introducing motivational interviewing in a sickness insurance context: translation and implementation challenges. J Occup Rehabil.
 2017; https://doi.org/10.1007/s10926-017-9731-0.
- 35. Kramer Schmidt L, Andersen K, Søgaard Nielsen A. Differences in the delivery of motivational interviewing across three countries. Journal of Ethnicity in Substance Abuse. 2020:1-22
- 36. White Paper 33. 2015–2016. Nav i en ny tid for arbeid og aktivitet [Nav in a new age: for work and activity]. Oslo: Arbeids og sosialdepartementet.
- 37. NAV. Follow-up of sick leave. NAV.no Cited 2020 June 11[Internet] Available from:

 <a href="https://www.nav.no/no/bedrift/oppfolging/sykmeldt-arbeidstaker/relatert-informasjon/slik-folger-du-opp-sykmeldte/informasjonsmateriell_kap/_/attachment/download/903f6776-bdd4-4939-b99c-fc042ab2040c:331d2a6dba59cf6ed5efa44377aa6e28d37cb126/Oppf.sykmeldte%2020

 19%20EN%20digital.pdf
- 38. Prochaska JO, DiClemente CC. Stages and processes of self-change of smoking: toward an integrative model of change. J Consult Clin Psychol. 1983 Jun;51(3):390-5.
- 39. Moyers TB, Manuel JK, Ernst D. Motivational interviewing treatment integrity coding manual 4.1. Unpublished manual. 2014.
- 40. KoRuS. MI-Analyse. Cited 2020 June 11 [Internet] Available from: https://www.korusbergen.no/motiverende-samtale/mi-analyse/

- 41. Jelsma JGM, Mertens V-C, Forsberg L, Forsberg L. How to measure motivational interviewing fidelity in randomized controlled trials: practical recommendations. Contemp Clin Trials. 2015;43:93-9.
- 42. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77-101.
- 43. StataCorp. Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC. 2017.
- 44. Beckman M, Forsberg L, Lindqvist H, Diez M, Eno Persson J, Ghaderi A. The dissemination of motivational interviewing in Swedish county councils: results of a randomized controlled trial. PLoS One. 2017;12(7):e0181715.
- 45. Torres A, Frain M, Tansey TN. The impact of motivational interviewing training on rehabilitation counselors: assessing working alliance and client engagement. A randomized controlled trial. Rehabilitation Psychology. 2019.
- 46. Dunn C, Darnell D, Atkins DC, Hallgren KA, Imel ZE, Bumgardner K, et al. Within-provider variability in motivational interviewing integrity for three years after MI training: does time heal? Journal of Substance Abuse Treatment. 2016;65:74-82.
- 47. Pace BT, Dembe A, Soma CS, Baldwin SA, Atkins DC, Imel ZE. A multivariate meta-analysis of motivational interviewing process and outcome. Psychol Addict Behav. 2017;31(5):524-33.
- 48. Stahl C, Andersen A, Anderzen I, Larsson K. Process evaluation of an interorganizational cooperation initiative in vocational rehabilitation: the Dirigo project. BMC Public Health. 2017;17(1):431. doi:10.1186/s12889-017-4357-x.
- 49. Soderberg E, Alexanderson K: Gatekeepers in sickness insurance: a systematic review of the literature on practices of social insurance officers. Health Soc Care Community. 2005, 13: 211-223. 10.1111/j.1365-2524.2005.00551.x.

- 50. Andersen MF, Nielsen K, Brinkmann S. How do workers with common mental disorders experience a multidisciplinary return-to-work intervention? A qualitative study. J Occup Rehabil. 2014;24(4):709-24. 10.1007/s10926-014-9498-5.
- 51. Ose SO, Dyrstad K, Brattlid I, Slettebak R, Jensberg H, Mandal R, et al. Oppfølging av sykmeldte–fungerer dagens regime? SINTEF-rapport A. 2013;24297.

Table 1. Baseline characteristics of sick-listed workers answering the questionnaire about the MI intervention

	MI N= 112
Gender	IV- II2
Female n (%)	70 (63%)
Age	` ′
Mean (SD)	45 (9.7)
Education level	, ,
High school n (%)	42 (38%)
College/university up to 3 years n (%)	26 (23%)
University more than 3 years n (%)	44 (39%)
Sick leave length ^a	` ′
Less than 2 months n (%)	3 (3%)
2-4 months n (%)	53 (48%)
4-6 months n (%)	38 (34%)
6-8 months n (%)	14 (13%)
More than 8 months n (%)	3 (3%)

Note: MI intervention: Motivational interviewing intervention ^a Participants` length of sick leave at the time of the first MI session at NAV.

Table 2. Frequencies of sick-listed workers' satisfaction, usefulness and timing of the MI intervention

intervention										
		1 Strongl disagre		ree	3 Neutr	al	4 Agree		5 Stro agre	ongly
How satisfied were you with the conversations? n (%)	(n = 111)	1 (1%			0		15 (13	%)		86%)
How useful was the first conversation for you? n (%)	(n = 112)	1 (1%) 4 (4%	o)	17 (15	%)	36 (32	%)	54 (4	48%)
How useful was the second conversation for you? n (%)	(n = 111)	2 (2%	,	,	11 (10	%)	30 (27)	%)	67 (6	60%)
How useful were the conversations for you? n (%)	(n = 108)	1 (1%) 1 (1%	o)	10 (9 9	%)	31 (29	%)	65 (6	60%)
Did the two follow-up conversations come at an appropriate timing	(n =		Yes 96 (86%)	No 16 ((14%)					
for you?			1 month earlier	The		1 m	onth r	2 montl	hs	3 or 4 months later
If the conversations were to come at another time, when do you think it would have been best? (r = 99)		(21%)	15 (15%)		(62%)	1 (1	%)	1 (1%	ю́)	0

Table 3. MI treatment fidelity scores of MI caseworkers

•				
MITI components	Mean (SD)			
Global ratings				
Technical: Cultivating change talk	3.11 (0.94)			
Technical: Softening sustain talk	3.34 (0.67)			
Relational: Partnership	3.55 (0.67)			
Relational: Empathy	3.35 (0.73)			
Global Score Technical	3.26 (0.69)			
Global Score Relational	3.45 (0.63)			

Note: MITI: Motivational Interviewing Treatment Integrity, SD: Standard deviation

Supplementary files Paper III

Fokusgruppe feasibility

Informanter: NAV-veiledere (MI)

1. Kan dere fortelle om erfaringene med gjennomføringen av (MI)-samtalene med brukerne?

- Hva dere syntes fungerte bra i samtalene?
- Hvilke eventuelle utfordringer dere møtte i samtalene?
- Hvordan disse samtalene skiller seg fra hvordan dere vanligvis møter brukerne?
- Disse samtalene har blitt gjennomført på tidspunkt hvor dere vanligvis ikke har oppfølging av sykemeldte. Hvordan har dere opplevd dette?

2. Hvordan opplever dere å bruke MI tilnærmingen i samtalene?

- Gjennom opplæringen fikk dere kunnskap om hvordan MI skulle anvendes i møte med de sykmeldte. I hvilken grad ble samtalene slik dere forestilte dere ut fra tidligere erfaring i samtaler med sykmeldte under oppfølging?
 - o Hvilke elementer av MI var enkelt å bruke i samtalene?
 - o Hvilke elementer av MI var vanskelig å bruke i samtalene?
 - O Var det elementer som dere ikke benyttet?
- Var det noe ved samtalene dere har hatt som dere hadde behov for å drøfte med kolleger i etterkant? (både MI-teknikken og innhold i samtalene)
 - O Hva var det i så fall og har dere noen eksempler?
- Etter som dere fikk erfaring, endret samtalenes innhold eller form seg over tid?

3. Kan dere fortelle hvordan de sykmeldte opplevde samtalene?

- Har dere noen eksempler?
- Ga de sykmeldte uttrykk for at samtalene var vanskelig?
 - o Samtalenes innhold?
 - o Samtalenes form?
 - Hva var det i så fall og har dere noen eksempler?
- Ga de sykmeldte uttrykk for at samtalene nyttig?
 - o Innhold eller form?
 - Var det informasjon eller opplysninger som ble etterspurt som ikke inngikk i «samtalemalen»?
- Hvordan synes dere (MI)-samtalene bør gjennomføres for at den sykmeldte skal ha et best mulig utbytte?
 - o Feedback fra brukerne?
 - o Tidspunkt, innhold, hvem egner det seg for?

4. Hvor viktig vurderer dere at disse samtalene er, sett i sammenheng med den totale sykefraværsoppfølgingen?

• Hvordan påvirker disse samtalene den øvrige sykefraværsforløpet?

5. Hvordan har dere arbeidet med MI i avdelingen?

- a. Hvordan har opplæringen vært?
- b. Hvordan har ledelsen forholdt seg til dette?
- c. Hvordan har dere selv jobbet med det individuelt?

6. Hva tenker dere om å fortsette med slike samtaler etter at prosjektet er ferdig?

- o Hva vil være positivt med det?
- o Ser dere noen utfordringer med å bruke slike samtaler videre?
- Hvordan må slike samtaler organiseres innad i NAV for at det skal la seg gjøre å videreføre MI-samtaler?
 - Kompetansevidereføring hva skal til på individuelt og organisatorisk nivå?

Fokusgruppe feasibility

Informanter: NAV-veiledere (MI-Benken)

1. Har dere brukt MI i vanlige samtaler etter opplæringen?

• Kan dere fortelle Hvorfor/hvorfor ikke?

• For dere som ikke har brukt MI: Kan dere fortelle om hvorfor dere ikke har brukt det?

- Hva har holdt dere tilbake med å bruke MI? (Tidspress, kompetansenivå, vanskelig å anvende, nyttig?)
- Ønsker dere å bruke MI i samtaler med sykmeldte?
 - o I hvilken grad ønsker dere å bruke MI / MI-ferdigheter i samtaler?

• For dere som har brukt MI: Kan dere fortelle om erfaringene med MI i samtalene med sykmeldte?

- Hva synes dere fungerte bra i samtalene?
- Hvilke eventuelle utfordringer møtte dere i samtalene?
- Har dere samtaler med sykmeldte hvor dere bruker MI og andre samtaler hvor dere ikke bruker det?
 - Kan dere fortelle om hva som er forskjellen på disse situasjonene?
- Har dere noen inntrykk av hvordan de sykmeldte opplever disse samtalene?
- Hvem egner disse samtalene seg for? Hvem passer de ikke for? Når velger dere å evt. å bruke teknikken?

2. Hvordan opplever dere å bruke MI tilnærmingen i samtalene med sykmeldt?

- Gjennom opplæringen fikk dere kunnskap om hvordan MI skulle anvendes i møte med de sykmeldte. I hvilken grad ble samtalene slik dere forestilte dere ut fra tidligere erfaring i samtaler med sykmeldte under oppfølging?
 - o Hvilke elementer av MI var enkelt å bruke i samtalene?
 - o Hvilke elementer av MI var vanskelig å bruke i samtalene?
 - O Var det elementer som dere ikke benyttet?
- Var det noe ved samtalene dere har hatt som dere hadde behov for å drøfte med kolleger i etterkant? (både MI-teknikken og innhold i samtalene)
 - Hva var det i så fall og har dere noen eksempler?
- Etter som dere fikk erfaring, endret samtalenes innhold eller form seg over tid?

3. Kan dere fortelle om erfaringene med opplæringen av Motiverende Intervju?

- Hvordan har opplæringen vært?
- Opplever dere at dere er kompetente/trygg til å bruke MI?
 - o Kan dere fortelle hvorfor/hvorfor ikke?

• Hvordan har dere arbeidet med MI i avdelingen?

- Hvordan har ledelsen forholdt seg til dette?
- Hvordan har dere selv jobbet med det individuelt?
- Har MI kompetansen påvirket hvordan dere ellers har samtaler med brukerne? (uten å nødvendigvis «gjennomføre MI»)

4. Hva tenker dere om å ta i bruk eller fortsette med MI-samtaler etter at prosjektet er ferdig?

- Hvorfor/Hvorfor ikke?
- Hva vil være positivet med det?
- Utfordringer?
- Hvordan må slike samtaler organiseres i NAV for at det kan gjennomføres? Hva hindrer? Hva fremmer? (organisatorisk, tidsbruk, opplæring, støtte, ledelse, egen tro på metoden, fungerer den til å nå mål/gjennomføre de daglige arbeidsoppgavene)



Forespørsel om å delta i et gruppeintervju om forskningsprosjektet «Bedre sykefraværsoppfølging»

Bakgrunn og hensikt

Du mottar denne forespørselen fordi du er eller har vært en del av forskningsprosjektet «Bedre sykefraværsoppfølging». Dette er et spørsmål om å bli med i et fokusgruppeintervju om opplevelser og erfaringer med forskningsprosjektet som NAV-veileder.

Formålet med gruppeintervjuet er å få vite mer om hvordan det oppleves å være NAVveileder i dette forskningsprosjektet og hvilke erfaringer du har med å gjennomføre oppfølgingssamtaler i dette prosjektet. Kunnskapen fra gruppeintervjuet vil være nyttig for å forbedre metodene og praksisen som blir brukt i dag for tilbakeføring til arbeid for sykmeldte.

Studien gjennomføres av forskere ved Institutt for samfunnsmedisin og sykepleie, og Institutt for psykologi ved NTNU. Studien er godkjent av Regional komité for medisinsk og helsefaglig forskningsetikk (REK Ref. nr: 2016/2300).

Hva innebærer fokusgruppeintervjuet?

Fokusgruppen vil ta form som en gruppediskusjon mellom NAV-veiledere fra din enhet. Alle deltakerne vil få mulighet til å dele sine erfaringer med oppfølgingssamtaler for langtidssykemeldte. Gruppeintervjuet tar ca. 1 time og vil gjennomføres på et møterom på NAV Falkenborg. Intervjuet vil bli ledet av forskere Marit Solbjør og Lene Aasdahl. Samtalen blir tatt opp på lydfil for å sikre mest mulig pålitelig gjengivelse av det som blir sagt og vil siden bli skrevet ut som tekst for videre analyse.

Hva skjer med informasjonen om deg?

Informasjonen om deg vil kun brukes som beskrevet i hensikten med forskningsprosjektet. Alle opplysninger du gir vil bli behandlet uten direkte gjenkjennende informasjon. Lydopptakene fra gruppediskusjonen vil bli skrevet ut i fulltekst, og intervjuutskriftene vil bli brukt til analyser som rapporteres gjennom publiseringen av studien. Opplysninger om personer og steder vil i bli fjernet i utskriftene. Det vil ikke være mulig for utenforstående å identifisere deg i resultatene av studien når disse publiseres. I en slik studie fra en bestemt arbeidsplass kan andre du arbeider sammen med likevel komme til å kjenne igjen spesielle erfaringer eller situasjoner som du beskriver.

Lydopptak, utskrifter og deltakerliste oppbevares kryptert og nedlåst under gjennomføringen av prosjektet i henhold til personopplysningsloven. Det er kun forskere ved prosjektet som har tilgang til datamaterialet. Forskerne har taushetsplikt i henhold til Helseforskingslovens §



Institutt for Samfunnsmedisin og sykepleie Institutt for Psykologi

7. Lydopptak og deltakerlister vil bli slettet ved prosjektslutt. Utskriftene vil bli oppbevart i anonymisert form ved NTNU i 5 år etter prosjektslutt i henhold til Helseforskningsloven.

Det vil ikke være mulig å identifisere enkeltpersoner i publikasjoner fra studien. Resultatene fra studien vil publiseres i vitenskapelige tidsskrift, presenteres på konferanser og i populærvitenskapelige fora.

Deltakelse i gruppediskusjonen er frivillig og du er ikke forpliktet til å svare på spørsmål eller fortelle om egne opplevelser om du ikke ønsker det. Du kan når som helst trekke deg uten begrunnelse uten at dette har noen form for negative konsekvenser for deg.

Praktisk informasjon

Om du ønsker å delta vil gruppediskusjonen finne sted 18.01.2019 kl. 09:30 ved NAV Falkenborg. Det vil bli satt av 1 og en halv time til gruppediskusjonen og det vil bli enkel servering.

Deltakelse

Du får en invitasjon til gruppediskusjonen i Outlook-kalenderen din av Vegard Stolsmo Foldal (vegard.foldal@ntnu.no). Ønsker du å delta i denne fokusgruppen så kan du godta invitasjonen du får i Outlook. I samsvar med din leder, Silje Haugan, vil det bli satt av tid og frigjort ressurser til å delta.

Om du har noen spørsmål eller ønsker mer informasjon, ta kontakt med Vegard Stolsmo Foldal (Tlf: 415 14 308, e-post: vegard.foldal@ntnu.no).

Med vennlig hilsen

Vegard S. Foldal

Institutt for samfunnsmedisin og sykepleie

Spørreskjema om samtalene ved NAV



Som deltager i forskningsprosjektet «Bedre sykefraværsoppfølging» i regi av NAV og NTNU, får du nå oppfølging fra NAV. Vi ønsker å kartlegge hvordan denne oppfølgingen har vært. Ditt bidrag er svært viktig og vi setter stor pris på at du setter av tid til å svare på disse spørsmålene.

Det er frivillig å svare på dette spørreskjemaet og alle svarene er konfidensielle, og vil ikke brukes til å identifisere enkeltpersoner da alle data vil bli analysert på gruppenivå.

-	
s du	har noen spørsmål, ta kontakt med Vegard Foldal på telefon 41 51 43 08 eller e-post vegard.foldal@ntnu.n
Set	t kun ett kryss X for hvert av spørsmålene.
	-
1.	Kjønn Mann
	☐ Kvinne
2.	Alder
3.	Høyeste fullførte utdanning
	☐ Ikke fullført grunnskole
	Grunnskole
	Gymnas / videregående
	Yrkesskole
	Høyskole / universitet (Inntil 3 år)
	Høyskole / universitet (over 3 år)
	Doktorgrad
4.	Som deltaker i prosjektet har du fått tilbud om to oppfølgingssamtalene på NAV. Hvor mange har du gjennomført?
	□ o
	□ 2
5.	Hvor lenge hadde du vært sykmeldt da du var på den første samtalen?
	Mindre enn 2 måneder
	2-4 måneder
	4-6 måneder
	6-8 måneder
	Mer enn 8 måneder

		1	2	3	4	5
' .	Hvor ny	yttig va	ar først	e samt	ale for	deg? SI
		1	2	3	4	5
3.	Hvor ny	yttig va	ar andr	e samt	ale for	deg? SI
		1	2	3	4	5
9.	Hvor ny	yttig va	ar samt	alene f	or deg	? Skala
		1	2	3	4	5
			1		I	I
10.	I hvilke	n grad	opplev	/de du	å bli ta	tt på al
		1	2	3	4	5
11	Opplev	ıda dıı	at de to	o onnfa	Mainace	amtale
	din?	ue uu	at ue to	Oppik	oigiiigos	aiiitaic
		Ja				
		Nei				
L2.	Hvis sa	mtaler	ne skull	e komr	net på	et ann
			neder ti			
		1 mår	ned tidl	igere		
		Tidsp	unktet _l	passet	bra	
		1 mår	ned sen	ere		
		2 mår	neder se	enere		
		3 elle	r flere r	nånede	er sene	re
13.	Har du	noen a	andre k	omme	ntarer	du ønsl

6. Hvor fornøyd var du med samtalene? Skala 1 (Svært misfornøyd) til 5 (svært fornøyd)

Appendices



 Region:
 Saksbehandler:
 Telefon:
 Vår dato:
 Vår referanse:

 REK sør-øst
 Claus Henning Thorsen
 22845515
 13.06.2017
 2016/2300/REK sør-øst C

 Deres dato:
 Deres referanse:

 01.05.2017

Vår referanse må oppgis ved alle henvendelser

Roger Hagen NTNU

2016/2300 Effekten av motiverende intervju og samhandling mellom nøkkelpersoner på tilbakeføring til arbeid

Forskningsansvarlig: Norges teknisk-naturvitenskapelige universitet

Prosjektleder: Roger Hagen

Vi viser til søknad om prosjektendring datert 01.05.2017 for ovennevnte forskningsprosjekt. Søknaden er behandlet av leder for REK sør-øst C på fullmakt.

Vurdering

De omsøkte endringene er beskrevet i skjema for prosjektendringer, og består av at tidligere godkjent informasjonsskriv av praktiske grunner blir sendt som lenke i et invitasjonsbrev til potensielle deltakere (gjennom Ditt NAV).

Komitéen har ingen forskningsetiske innvendinger til prosjektet slik det nå foreligger.

Vedtak

Komitéen har vurdert endringsmeldingen og godkjenner prosjektet slik det nå foreligger med hjemmel i helseforskningslovens § 11.

Tillatelsen er gitt under forutsetning av at prosjektendringen gjennomføres slik det er beskrevet i prosjektendringsmeldingen, og de bestemmelser som følger av helseforskningsloven med forskrifter.

Forskningsprosjektets data skal oppbevares forsvarlig, se personopplysningsforskriften kapittel 2, og Helsedirektoratets veileder for Personvern og informasjonssikkerhet i forskningsprosjekter innenfor helse og omsorgssektoren.

Komiteens vedtak kan påklages til Den nasjonale forskningsetiske komité for medisin og helsefag, jf. helseforskningsloven § 10, 3 ledd og forvaltningsloven § 28. En eventuell klage sendes til REK sør-øst C.

Klagefristen er tre uker fra mottak av dette brevet, jf. forvaltningsloven § 29.

Vi ber om at alle henvendelser sendes inn via vår saksportal: http://helseforskning.etikkom.no eller på e-post til: post@helseforskning.etikkom.no eller på e-post@helseforskning.etikkom.no

Vennligst oppgi vårt referansenummer i korrespondansen.

Med vennlig hilsen

Britt-Ingjerd Nesheim Prof.dr.med. Leder REK sør-øst C

> Claus Henning Thorsen Rådgiver

Kopi til: siri.forsmo@ntnu.n;rek-ism@medisin.ntnu.no





nav.no (https://www.nav.no) Privatperson

(https://www.nav.no) ...

<u>Satsinger og aktiviteter</u> <u>(/no/lokalt/trondelag/satsinger-og-aktiviteter)</u>

Forespørsel om deltakelse i forskningsprosjektet:

Koronavirus - hva gjelder i min situasjon?

PUBLISERT 10.10.2017 | SIST ENDRET 17.01.2018

Forespørsel om deltakelse i forskningsprosjektet:

Bedre sykefraværsoppfølging

Dette er et spørsmål til deg om å delta i et forskningsprosjekt for å undersøke hvilke faktorer som best kan hjelpe sykmeldte tilbake i arbeid. Sykmeldte som har en sykmeldingsgrad på 50 % eller mer og tilhører utvalgte NAV kontor i Trondheim får denne henvendelsen om deltagelse. Forskningsprosjektet er et samarbeid mellom NTNU (Institutt for Samfunnsmedisin og Institutt for Psykologi) og NAV Sør-Trøndelag.

Hva innebærer prosjektet?

Prosjektet undersøker om ekstra samtaler hos NAV kan hjelpe personer tilbake til arbeid. Hvis du sier ja til å bli med i denne studien, vil du bli tilfeldig fordelt til en av tre grupper. Den ene gruppen får sin vanlige oppfølging fra NAV, mens de to andre gruppene i tillegg vil bli innkalt til to samtaler ved NAV for å undersøke om dette kan virke positivt. Noen av samtalene vil bli tatt opp og brukt i veiledning til NAV rådgivere i opplæring i ulike metoder. Alle opptak vil bli slettet etter veiledning er ferdig. Som deltager i studien vil du bli forespurt om å svare på fem spørreskjema elektronisk på ulike tidspunkt. Utfylling av disse spørreskjemaene innebærer en times samlet arbeid i løpet av et år.

Behandles anonymt

Alle opplysningene vi innhenter om deg i dette prosjektet vil bli behandlet uten navn og fødselsnummer eller andre direkte gjenkjennende opplysninger. En kode knytter deg til dine opplysninger. Svar fra de ulike spørreskjemaene vil bli lagret. I tillegg vil data fra NAV sitt register knyttet til utbetaling for sykepenger og andre ytelser bli innhentet. Informasjon om helsetjenesteforbruk vil bli innhentet fra HELFO/KUHR og Norsk pasientregister for bruk i helseøkonomiske analyser. Disse data vil da sammenstilles slik at man ser hvilke typer av metoder som best kan hjelpe NAV for å gi best mulig oppfølging og støtte.

Mulige fordeler og ulemper

Det er ingen risiko eller bivirkninger forbundet med å delta i forskningsprosjektet. Studien ønsker å se på hvilke typer av kontakt med NAV som best kan være til hjelp for tilbakeføring i arbeid. Fordelen med å delta, er at dette kan hjelpe deg med å få en bedre helse og komme raskere tilbake i arbeid. En deltagelse innebærer ingen avvik fra den ordinære oppfølgingen du ellers hadde fått fra NAV, da studien ønsker å undersøke hvilke tilnærminger i tillegg til ordinær oppfølging som hjelper med å redusere sykefraværet. Ulempen innebærer at du må bruke litt ekstra tid, med å fylle ut spørreskjema og økt kontakt med NAV som du ellers ikke vil ha fått hvis du ikke har vært deltager i forskningsprosjektet. Hvis du opplever at du har behov for en samtale om studien kan du kontakte professor Egil A. Fors, Institutt for samfunnsmedisin, NTNU, tlf. 412 36 597, epost: egil.a.fors@ntnu.no, eller professor Roger Hagen, Institutt for psykologi, NTNU, tlf. 481 09 789, epost: roger.hagen@svt.ntnu.no.

Frivillig deltakelse og mulighet for å trekke sitt samtykke

Det er frivillig å delta i prosjektet. Hvis du takker ja til å være med i prosjektet, så er du også med i trekningen om å vinne en EL-sykkel, samt fem Mio Slice aktivitetsklokker og fire iPad Air. Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke. Dette vil ikke få konsekvenser for din videre oppfølging fra NAV. Dersom du trekker deg fra prosjektet kan du kreve å få slettet innsamlede data og opplysninger om deg, med mindre opplysningene allerede er inngått i analyser eller brukt i vitenskapelige publikasjoner. Dersom du senere ønsker å trekke deg eller har spørsmål til prosjektet er det bare å kontakte overnevnte personer.

Hva skjer med informasjonen om deg?

Informasjonen som registreres om deg skal kun brukes slik som beskrevet i hensikten med studien. Du har rett til innsyn i hvilke opplysninger som er registrert om deg og rett til å få korrigert eventuelle feil i de opplysningene som er registrert hvis dette er ønskelig. Alle opplysningene vil bli behandlet uten navn og fødselsnummer eller andre direkte gjenkjennende opplysninger. Data du fyller ut ved hjelp av de elektroniske spørreskjema sendes kryptert til en server fra NTNU, og siden det er kode som knytter deg og dine svar på de ulike spørreskjema vil ingen direkte gjenkjennende opplysninger bli lagret ved NTNU.

Prosjektlederne har ansvar for den daglige driften av forskningsprosjektet og at opplysninger om deg blir behandlet på en sikker måte. Informasjon om deg vil bli anonymisert, vil bli analysert som gruppe og vil ikke bli brukt til å identifisere enkeltpersoner. Prosjektmedarbeiderne har taushetsplikt i henhold til Forvaltningsloven § 13. Data innhentet i forskningsprosjektet kan bli benyttet i fremtidige studier i forhold til langtidsfravær og sykemeldinger.

Forsikring

Det er ingen kjent risiko knyttet til de ulike metoder brukt i forskningsstudien. Gjeldende forsikringsdekning er gitt av NTNU som er selvassurandør når det gjelder forskning i regi av NTNU.

Oppfølgingsprosjekt

Hvis finansiering gjør det mulig, er det ønskelig at vi tar kontakt med deg igjen etter 5 år for å be deg fylle ut noen spørreskjema og innhente data fra register beskrevet ovenfor. Deltagelse i eventuelle oppfølgingsstudier er frivillig.

Godkjenning

Prosjektet er godkjent av Regional komite for medisinsk og helsefaglig forskningsetikk, 2016/2300/REK sør-øst hos REK 2017.04.17.

NAV ønsker å bli bedre i oppfølgingen av deg som er sykmeldt, og derfor samarbeider NAV og NTNU i et forskningsprosjekt om hvordan vi bedre kan hjelpe deg videre. Vil du være med på dette forskningsprosjektet?

Målet er at du skal få best mulig oppfølging slik at du kan komme tilbake til arbeid så tidlig som mulig eller finne andre løsninger som er gode for deg. De som ønsker å delta blir fordelt til to grupper basert på ulike samtalemetoder eller får ordinær oppfølging fra NAV.

Sykmeldte som har en sykmeldingsgrad på 50% eller mer og tilhører utvalgte NAV kontor i Trondheim får denne henvendelsen om deltagelse. Hvis du ikke lenger er sykmeldt kan du se bort i fra denne forespørselen. Dine rettigheter til ytelser eller til oppfølging fra NAV påvirkes ikke av om du velger å delta i prosjektet.

Hvis du takker «JA» til å være med i prosjektet, så er du også med i trekningen om å vinne en EL-sykkel, samt fem aktivitetsklokker av Mio Slice og fire iPad Air.

Nedenfor er det en lenke til mer informasjon om studien. Vi ber om at du leser denne før du svarer på om du ønsker å delta eller ikke. Hvis du ønsker å delta i prosjektet skriver du «Ja» i meldingsfeltet.

https://www.nav.no/no/Lokalt/trondelag/satsinger-og-aktiviteter/foresp%C3%B8rsel-om-deltakelse-i-forskningsprosjektet

Ved å samtykke bekrefter du at du har lest den skriftlige informasjonen i linken om forskningsprosjektet: «Bedre sykefraværsoppfølging». Din deltakelse i prosjektet gir oss verdifull informasjon og bidrar til å utvikle sykefraværsoppfølgingen i NAV.

Ønsker du å vite mer? Ta kontakt med professor Roger Hagen (48109789; roger.hagen@ntnu.no), professor Egil Fors (41236597; egil.a.fors@ntnu.no) eller prosjektkoordinator ved NAV Heidi Fossen (91627606, heidi.fossen@nav.no).