

Marie Fossen Nordal

- “A difficult privilege”
The challenges of adolescent pregnancies in Quito, Ecuador, experienced by health care providers

A qualitative study performed at Hospital Gineco Obstétrico Pediátrico de Nueva Aurora “Luz Elena Arismendy”, Quito, Ecuador

Graduate thesis in Medisin

Supervisor: Arne K Myhre, Aslak Steinsbekk

June 2020



Index

Preface	2
List of abbreviations	3
Abstract	4
Introduction	5
About Ecuador.....	5
The healthcare system in Ecuador.....	5
The hospital in Quito.....	6
Adolescent pregnancies.....	6
The status on adolescent pregnancies in Ecuador	7
Health care professionals' experiences with pregnant adolescents	8
Aim of the study.....	9
Method	10
Research design.....	10
Participants.....	10
Data collection.....	11
Analysis.....	11
Results	13
Different challenges working with pregnant adolescents, compared to grown-up women.....	14
Treating a patient who lives in a challenging environment.....	17
A demanding work situation	19
Discussion	22
Discussion of the method	22
Discussion of the results.....	24
Summary of the findings	24

Witnessing a vicious circle of adolescent pregnancies, poor education and poverty	24
Gender roles and discrimination in the adolescents' environment.....	25
Mentally challenging for the health care professionals.....	27
Conclusion.....	29
References	30
Appendices	34
Appendix 1: Ethical approval from REK.....	34
Appendix 2: Ethical approval from CEISH-USFQ.....	39
Appendix 3: Letter of Information	43
Appendix 4: Informed Consent	45
Appendix 5: Interview Guide	55

Preface

This thesis is written by Marie Fossen Nordal, who is a medical student at The Faculty of Medicine, Norwegian University of Science and Technology (NTNU). The data collection was done in cooperation with two fellow medical students at NTNU, Ingvild Hatlevoll and Ylva Dahle. They were conducting the study “Barriers to use of contraception among adolescent girls in Quito, Ecuador”.

The motivation for this project started fall 2018, when Nordal and Hatlevoll were exchange students at HGONA, a maternity hospital in Quito, where we came back in 2020 to conduct this study. During the exchange program we witnessed a lot of adolescents giving birth and found this both shocking and interesting. After talking to patients, health care professionals and local friends in Quito, we understood that this was a complex health problem in the country and decided that we wanted to learn more about the subject.

I want to thank my supervisors Arne Kristian Myhre, Associate professor at the Department of Clinical and Molecular Medicine, and Aslak Steinsbekk, Professor at the Department of Public Health and Nursing, both at Faculty of Medicine and Health Sciences, NTNU. Thank you for invaluable support, facilitating, and guidance. I also want to thank my university, NTNU, for the approval and economic support for this project.

Furthermore, I want to thank our local contacts in Quito for being so welcoming. Our co-investigator Marisol Bahamonde, pediatrician and professor at the Department of Health Science, San Francisco University of Quito, helped us in the planning of the project and the process of approval from the Human Research Ethics Committee at USFQ. Maria José Vallejo, Coordinator of the Teaching and Research Unit at HGONA, provided us with the information and contacts needed to be able to perform the study. Additionally, she helped us during the data collection as a co-investigator and translator for some interviews. This project would not have been possible without her extraordinary help.

Last, but not least, I want to thank all the health care professionals who participated in this project. Thank you for giving us of your time and sharing experiences from working with pregnant adolescent.

Volda, May 2020

Marie Fossen Nordal

List of abbreviations

ACE	Adverse Childhood Experiences
CEISH	Human Research Ethics Committee
GDP	Gross Domestic Product
HGONA	Hospital Gineco Obstétrico Pediátrico de Nueva Aurora “Luz Elena Arismendy” (The Nueva Aurora Luz Elena Arismendy Hospital of Gynecology, Obstetrics and Pediatrics)
IESS	Instituto Ecuatoriano de Seguro Social (the Ecuadorian Social Security Institute)
REK	Regional Committee for Medical and Health Research Ethics in Norway
UHC	Universal health coverage
UN	United Nations
USFQ	Universidad San Francisco de Quito (The San Francisco University of Quito)
WHO	World Health Organization

Abstract

Background: Adolescent pregnancy is a global problem, and can have severe medical, economic, and social consequences for the individual girls. The situation around the pregnant adolescent is often complex, resulting in different types of challenges for the health care professionals when they provide treatment and follow up of the girls. There is a lack of knowledge regarding the health care professionals' experiences of treating this group of patients.

Aim: The aim of this study was to explore the challenges experienced by health care professionals when working with pregnant adolescents.

Setting: The study was conducted at the maternity hospital HGONA in Quito, Ecuador, in February 2020.

Methods: Semi-structured qualitative interviews were done with 12 health care professionals. All the different professions included in the multidisciplinary team that treated the adolescents were represented in our sample. The interviews were recorded, transcribed and translated. The data were analyzed using systematic text-condensation.

Results: The findings were categorized into three overarching themes with associated subgroups. The first theme, "Different challenges working with pregnant adolescent compared to grown-up women", included difficulties in building trust with the young patients, meeting adolescents in despair, teaching the girls to be vigilant during the pregnancy and to learn pediatric patients to be moms. The second theme was "Treating a patient who lives in a challenging environment", which comprised supporting girls from dysfunctional families and poverty, facing gender inequality and domestic violence and working with the girls' partner and parents. The third theme was "A demanding work situation" and included the health care workers' experience of facing mental distress and the feeling of inadequacy, due to limited time for the overwhelming number of adolescents who needed and deserved a comprehensive treatment.

Conclusion: The health care professionals' experience with the "difficult privilege" of treating pregnant adolescents reflects the dualism related to serious challenges, but also high gain if successful treatment. Witnessing a circle of poverty with adolescents from poor living conditions that had to quit their education because of an unwanted pregnancy or seeing domestic violence and gender inequality in some of the adolescents' families was considered a tough task by the health care professionals. The health care professionals experienced mental burdens that could give secondary trauma, but these burdens were shared and therefore more endurable in cooperation with a multidisciplinary team.

Introduction

About Ecuador

Ecuador is situated on the equator, and by size it is one of the smallest countries in South America. In 2020 there were 17,6 million inhabitants living there (1). The country has a diverse geography including the coastal region, the Andes mountain range, the Amazon area, and the Galapagos Islands. The main religion in the country is Roman Catholicism. In the 15th century the Inca Empire conquered the country, and later in the 1530s, the Spanish conquerors arrived. The conquerors exploited the indigenous people gravely and created a new societal structure with a mercantilist economy with agriculture and textile manufacturing as the main industries and the indigenous people as workers and slaves (2). This complex history with an indigenous and colonial past makes the population in Ecuador a patchwork of different ethnic identities; Afro-Americans, Indians, white, and a majority (2/3) of mestizos, who have a mixed ancestry of genes from Europe and Latin America.

For many years, the country has suffered from political instability and has had twenty Constitutions since the independence in 1830, with the last one introduced in 2008. Even though there has been a positive financial development in the country the last decades, it is still classified as a developing country. There is a lot of poverty in the country, and the GDP per capita was 6324 \$ in 2020 (1). The Gini Coefficient was 45.4 in 2018, which indicates that the income and wealth in the country is unevenly distributed in the population. In the Ecuadorian constitution there are two chapters to specifically address gender equality and women's rights. Despite this, the Human Development Index by the UN, states that the country still faces challenges of gender inequality, with the index of 0.442, where 0 indicates full equality between men and women (3).

The healthcare system in Ecuador

The healthcare system in Ecuador has a private and a public sector. The public sector has a universal health coverage (UHC) system that provides all citizens free health care in public facilities, including emergency care. However, in the public sector there are many patients, a lack of resources, and long queues. The private health care is often of a higher quality, but has high costs and can only be afforded by the wealthier part of the population (4).

The public healthcare consists of four levels. The first level consists of community health care centers (Centro de Salud), which are day hospitals that care for patients with hospitalizations for less than 24 hours. The second level has general hospitals. The third and fourth levels include specialized hospitals in the cities, for instance oncological hospitals, maternities and pediatric hospitals. (5). There are also many private clinics, as anyone with a medical title can open one (6).

Another important part of the healthcare system is the Ecuadorian Institute of Social Insurance (IESS), where anyone permanently employed can access free health care on IESS' own hospitals. This covers health care for 20% of the population (7). In indigenous communities in Ecuador, especially in remote rural areas where governmental health care services are hard to access, traditional medicine still plays an important part. This includes the use of different remedies and practices, such as the use of herbs, amulets, guinea pigs, and rituals to cleanse the body (8).

The hospital in Quito

This study was conducted at Hospital Gineco Obstétrico de Nueva Aurora Luz Elena Arismendy (HGONA) which is a maternity hospital situated in Quito, the capital of Ecuador. It is a third level hospital in the Ecuadorian health care system, meaning that it is specialized and among other things treats patients with high-risk pregnancies, such as adolescent pregnancies. The treatment is free of charge, because it is a public hospital. The hospital lays in the south part of the city where 50-80% of the population is poor (9). This part of the city has had an extreme population growth due to the urbanization, and when the hospital opened in January 2016 it offered health care for more than 600 000 people (10).

Adolescent pregnancies

Previous research has shown that adolescent pregnancies (12-19 years) are a global issue which presents challenges for both the adolescent, her family and the society (11–15). However, the rate of adolescent pregnancies is highest in developing countries (16). In these regions, more than half of the unintended pregnancies end in induced abortion, even though a lot of these countries have laws that prohibit or highly restricts abortion (17). In 2016, 75% of the adolescent pregnancies in Latin America were unintended.

The adolescent pregnancies not ending in abortion can have several adverse consequences. For the newborns, being born by an adolescent mother is associated with a higher infant mortality, and with a higher frequency of neonatal complications such as low birth weight (LBW), preterm delivery, respiratory diseases, and birth trauma (18). Furthermore, there are risks for the adolescent mother's health, with higher risks of eclampsia, puerperal endometritis, and systemic infections compared to women aged 20 to 24. Globally, complications during pregnancy are the most common reason for death among girls aged 15-19 years. In other words, these pregnancies are a big contributor to the global maternal and child morbidity and mortality (16).

Teenage pregnancies can also affect the social life as a high number of young mothers end up working at home with their children instead of getting an education and becoming self-proficient. The chance of going back to school and finish secondary education (12-18 years) after the pregnancy is only 16% for adolescents from a low socioeconomic level in Ecuador (19). Education plays a big role in the development of a country, and adolescent pregnancy poses a potential barrier to this.

The status on adolescent pregnancies in Ecuador

Ecuador has one of the highest adolescent birth rates in Latin America, and this has been a growing concern in the country for many years (20). A National Survey from 2004 revealed that more than 20% of the Ecuadorian women (age 15-49) that was surveyed had had a child or had been pregnant when they were adolescents (21). However, for some of the young women, especially in poorer regions, maternity at a young age is a normalized occurrence. To be recognized as a responsible adult and acknowledged by their family and communities are said to be possible motivations for the planned adolescent pregnancies (21).

Several studies conducted in Ecuador characterize pregnant teenagers and the associated risk factors. A review from 2017 explores the health care needs of adolescents in Ecuador and describes different aspects of their sexual and reproductive health (21). Some of the main challenges were found to be adolescent pregnancies, gender inequality, mental health problems and violence. A case-control study explored the general risk factors associated with adolescent pregnancies (22). This study found that sexual abuse during childhood and adolescence, early sexual debut, experiencing periods without both parents, living in a poor household, and not attending school were factors associated with adolescent pregnancies. A quantitative Ecuadorian study aimed to describe the *family* risk factors associated with adolescent pregnancy (23). The suggested risk factors were as mentioned above but added some more as well. It was shown that families of nonpregnant adolescents had higher educational level of parents, better parent-daughter communication and problem-solving strategies, and higher life satisfaction and future expectations in general.

The Government in Ecuador offers young mothers rights and services (21). In 2007 there was established a national program in Ecuador, in order to give differentiated health care for adolescents, related to sexual health and adolescent pregnancies. A rapid increase in the visits demonstrated the need for adolescent friendly services. However, the economic support disrupted in 2011 when the government initiated a new model where differential care for the adolescent no longer was prioritized (21). The Public Health Department of Ecuador produced a report in 2018 which concluded that: “Pregnancy in girls and adolescents is a social and public health problem, which shows inequality,

social injustice and a clear violation of human rights, with an invaluable social, economic and cultural impact” (translated from Spanish) (24).

The same year, the Ecuadorian government presented the National Plan for Development from 2018 to 2025, where one of the main targets was to reduce adolescent pregnancies. The most important interventions were to give better information, comprehensive education on sexuality and better access to reproductive health services (24). A study found that 27% of the Ecuadorian adolescents that was surveyed, had never used contraception, even though they were or had been sexually active (25). No study is found on barriers to the use of contraception in Ecuador, but a study from Guatemala suggest these barriers: lack of knowledge, the belief that using it is a sin, fear of side effects and infertility, husband being against it, pressure from in-laws and the community (26).

In Ecuador elective abortion is only legal if the pregnancy resulted from sexual crime against a mentally disabled woman, or if there is a threat to the life or health of the pregnant woman that can not be solved in any other way. If the abortion does not fulfill these criteria, the woman risks a two years prison penalty (27). No economic, personal or social reason is acceptable, meaning that a pregnancy after for instance a violation from a family member does not verify a provoked abortion. However, numbers reveal that abortions happen in a great extent, but due to strict laws, the women must obtain clandestine procedures. A majority of the abortions are classified as unsafe and a lot of women are hospitalized with complications from unsafe abortion, such as infections, incomplete abortion, and severe blood loss (28). Compared to grown-up women adolescents are more likely to obtain an unsafe abortion, because they tend to delay more in seeking medical care and additionally they are more likely to induce the abortion themselves or go to untrained providers (29). The unsafe abortions are estimated to account for at least 10% of all the maternal deaths in Latin-America (28). In other words, there is a tremendously potential in helping women to avoid unintended pregnancies.

Health care professionals’ experiences with pregnant adolescents

Even though the health services have a central role in management of adolescent pregnancies, there are only a few studies that focuses on the health care professionals and their experiences of working with pregnant adolescents (30–32).

A study from Kenya explored nurses’ perceptions of the multidisciplinary approach when treating pregnant adolescents and their children (31). The nurses experienced this approach as beneficial to both service users and health care providers, but it was also found barriers such as time constraints and shortage of staff. A review from the US explored how health care providers could counsel the pregnant adolescent (30). These health care professionals expressed that the communication should aim at

building trust with the teenagers, and important prerequisites were maintaining the confidentiality, showing patience, avoiding judgmental attitudes and gearing the communication towards the adolescents' emotional and intellectual development. Further, a study from the United States investigated the health care providers recommendations for best practice when treating pregnant Hispanic teenagers (32). The study concluded that awareness of their cultural background and commitment to teenagers and their needs was essential. Moreover, a challenging, but important aspect was to increase the partners' and family members' involvement in the follow up.

In order to limit unwanted adolescent pregnancies, it is important to gain a close understanding of the situation for the population at risk, including both the risk factors and the consequences for these girls. As revealed above, there is a lot of knowledge on these topics. However, little is known about how the health care professionals' experience challenges when treating pregnant adolescents. This understanding may be a key issue for improvement in the management of this group and justifies further investigation of the topic.

Aim of the study

The aim of this study was therefore to explore the challenges experienced by health care personnel when providing services to pregnant adolescents at a third level hospital in a developing country.

Method

Research design

A qualitative study with semi-structured interviews was conducted. The interviews took place in February 2020 at HGONA, a maternity hospital in Quito, Ecuador.

The study was approved by the Regional Committee for Medical and Health Research Ethics in Norway (reference number 31378, appendix 1) and the Human Research Ethics Committee of Universidad San Francisco de Quito (appendix 2).

This study was part of a more comprehensive investigation. Therefore, the interviews were done in cooperation with two fellow medical students, who were conducting a qualitative study on barriers to use of contraception among adolescent girls in Quito. The interviews were jointly conducted with one separate part for each of the studies, further explained under data collection.

Participants

The study included health care professionals working with pregnant teenagers in the third level hospital in Quito, Ecuador. To ensure variation in experiences, we aimed to include staff with different professional education, age and working experience.

A local contact person who is listed as a co-investigator and worked in the administration at the hospital, assisted in the recruitment of the participants. Based on the inclusion criteria relevant participants were identified by the local contact person, who then guided us around on the hospital to their working places. We gave verbal information about the project and the aim of the study, and in addition we handed out the Letter of Information (appendix 3). Some of the relevant participants who were not present at their office or ward at the specific time, were contacted by phone by the investigators. If participants wanted to join after they had been informed, they contacted one of the investigators, and the local contact person arranged the times of the interviews to fit their schedule. If health care professionals agreed to participate, they were asked to sign the Letter of Consent (appendix 4). The recruitment process explained above was according to requirement from the hospital.

Data collection

The interviews were audio recorded and held in a private room in order to secure anonymity of the participants. This was during their working hours, and as a compensation for their time, they were offered refreshments.

We communicated with the participants in Spanish, since most people in Ecuador speak Spanish, and two of the investigators speak the language fluently after a former exchange semester at the hospital. Due to restricted time we distributed the interviews among us and collaborated with the local co-investigator, who was a translator for the Norwegian medical student who did not speak Spanish. We made sure there were always two investigators present. This was possible since all investigators had knowledge about both of the studies as we had been cooperating from the beginning of this project. Due to personal preferences and possibilities, one interview was held in English, and the others in Spanish, of which six were held with the local contact person as translator.

During the interview, the prepared topics from the Interview guide (appendix 5) were brought into conversation. The interview guide was made while planning the study and adjusted after the pre-analysis, explained in detail below. The main question was “What are the most challenging parts for you as a health care provider when working with pregnant adolescents?”. In addition, the participants were asked to talk about the different challenges between working with pregnant adolescents and pregnant grown-ups.

Analysis

The recorded audio tape from the interviews were translated to Norwegian when they were transcribed, because it was more convenient to analyze the data in our first language. We felt confident enough at our language skills to do the translation without a professional translator. The process of translation was done in collaboration between the three investigators, to enable solving linguistic challenges together.

After four interviews a pre-analysis of the data was done, to ensure that the data collected matched the aim of the study and consider if the Interview guide needed adjustments. We found this necessary and did minor changes in the Interview guide to clarify the questions, as shown in appendix 5. This was done because the first four interviews revealed that the participants talked rather extensively about the challenges and consequences for the teenager, thus focusing less on the challenges they experienced as health care professionals.

After all the data was collected, a phase of analyzing all the data followed, guided by a systematic text condensation method developed by Malterud (33). This method consists of the following four steps: 1) Total impression – from chaos to themes, 2) Identifying and sorting meaning units – from themes to codes, 3) Condensation – from code to meaning, 4) Synthesizing – from condensation to descriptions and concepts.

Initially, six themes were created in step 1; “Time demanding group of patients”, “The adolescents’ immaturity”, “Chaotic life situation for the adolescent”, “Denial of the pregnancy”, “The adolescents’ lack of knowledge”, “The health care workers dependence of the adolescents’ parents/partner”. After discussions with the other investigators and supervisors some of the themes were combined. This resulted into three themes: “Challenging group of patients”, “Treating a patient who lives in a challenging environment”, and “Tough working situation for the health care workers”. In step 2 the relevant extracts from the transcripts were collected and sorted as meaning units. The themes received three to four subunits each in order to organize the meaning units. In step 3, all the extracts in each subunit were rewritten to one continuous text. In step 4 the continuous text was revised and concentrated into a number of paragraphs, which can be read in the Results section.

Results

As shown in Table 1, a total of 12 health care professionals were interviewed. All were employed at the hospital HGONA in Quito, Ecuador, where the study was conducted.

Table 1. Characteristics of the informants

Characteristics	Number
Gender	
- Male	3
- Female	9
Age	
- Range	22-51
- Average	34,3
Professions	
- Medical doctor	5
- Psychologist	2
- Nurse	2
- Social worker	1
- Medical and midwife student	2

The informants expressed that working with pregnant adolescents presented a number of challenges and confronted them with responsibilities they did not commonly face with older pregnant women. These challenges included the experience of meeting pregnant adolescents feeling in despair, some with a troublesome family situation, other with broken dreams for their future. Our informants told that this group of patients generally needed special attention due to the complexity of their situation.

At this hospital, they had chosen to work in multidisciplinary teams to ensure that the multiple needs of the patient were met. The professions included in the multidisciplinary teams consisted of the specter shown in Table 1. Despite this teamwork approach, it was said to be a challenge to satisfy the pregnant adolescents' extra need for attention, as the time needed compared to the time available did not match. Furthermore, participants stressed that it was emotionally challenging to witness consequences of domestic violence or an adolescent patient who had to go through the pregnancy on her own. A participant put it like this:

I find it very demanding to see a 15-16-year old girl that has to step into the mother role, and to witness everything the girl has to go through with the pregnancy. Taking care of a new life has such great consequences and causes so many changes. It is like 9 months of pregnancy... to accept the fact herself, to confront the family and the father of the baby, to deal with the psychosocial reactions, take care of the financial situation and her studies. And then having to be a mother, going through all the bodily changes, the breastfeeding, the pain. For me, following a teenager through these changes is a really heavy challenge. (Psychologist)

To present the details of the findings, they have been categorized in topics and sub-topics as shown in Table 2 and described in detail below.

Table 2: Categorization of the results

Topic	Sub-topic
1) Different challenges working with pregnant adolescents, compared to grown-up women.	a) Building trust with the young pregnant patients
	b) Meeting patients in despair
	c) Teaching the girls to be vigilant during the pregnancy
	d) Learning pediatric patients to be moms
2) Treating a patient who lives in a challenging environment	a) Supporting girls from dysfunctional families and poor living conditions
	b) Facing domestic violence and gender inequality
	c) Working with the girls' partner and parents
3) A demanding work situation	a) Facing mental distress
	b) A feeling of inadequacy

Different challenges working with pregnant adolescents, compared to grown-up women

Building trust with the young pregnant patients

Several participants explained that the first challenge when meeting pregnant adolescents was to build trust with them when they sought medical care. An informant had experienced that without a trustful relationship to the adolescent girl, she would most likely not tell the truth about her real situation, which was said to be essential for a good treatment. Another participant said that he found the

communication with this group of patients to be a complex task. A possible explanation was said to be that the adolescent girls often felt vulnerable and scared when surrounded by health care workers that she did not know and might feel inferior to. A participant explained that in Ecuador the patients generally have a lot of respect for the health care professionals. This could complicate the situation because this respect could be even more prominent among adolescents and thus make it difficult for them to open up and show trust in the health care workers. Moreover, informants had experienced adolescent patients feeling ashamed and being labeled irresponsible by other health care professionals saying things such as – “You chose to get pregnant, so now you have to deal with it.” A participant expressed concern for how this hinders a good cooperation between the adolescents and the health care professionals, and recalled:

A patient told me "I distance myself from these people [health care professionals], because I'm obviously criticized." I think some of the things they [the pregnant adolescents] have trouble with, are that they get criticized because they have had sexual relationships in such a young age, haven't taken care of themselves and the result is the pregnancy. They will always feel disapproved by others, because "look, she's so young and she already has a baby".

(Psychologist)

Meeting patients in despair

During the first meeting with the adolescent patient, our informants told us that they usually bring the planning of the pregnancy into the conversation. When asking “Was this pregnancy planned?”, a majority of the informants told us that the adolescents answered no. A participant recalled:

I had a patient who was 13 years and did not know that her body had developed to become fertile, but she had noticed some strange changes. When she came to the hospital, I had to explain to her that she was already 30 weeks pregnant. (Psychologist)

Participants explained that some adolescents were afraid regarding how their life was going to change with the pregnancy. They described that the teenagers wanted to continue studying, go out with friends, and that the pregnancy could be a barrier for this.

They are dealing with their own maturation process, and in addition to this they have to handle the acceptance of a pregnancy, which in many cases is a disappointment for their family. (Medical doctor)

Some informants reported that the majority of the adolescents seem to have difficulties accepting their future role as a mother, because they were not ready to handle a pregnancy and all the changes that

would follow. One participant explained how some of the adolescents were very scared and in a situation most of them never wanted to end up in and referred to what a patient had said:

“I feel lonely, ashamed, sad and not even my parents support me. They have thrown me out of the house and told me that like I had a responsibility for my sexual relation, I must now take the responsibility of being a mom.” (Psychologist)

Teaching the girls to be vigilant during the pregnancy

Some of the health care professionals told about their first meeting with the girls in an early phase of the pregnancy. It was said to be an unsolvable puzzle to get the girls to understand how important the prenatal controls were. One informant expressed that some of the girls were not in a psychological, biological nor educational state to understand the risks and the severity of the situation, and stated:

The adolescents will have more complications, not just due to their biology, but also because of the lack of prenatal care in the first trimesters. (Medical doctor)

Other informants explained that in some cases the adolescents did not want to meet at the check-ups, because they were denying the fact that they were pregnant. Some were said trying to hide their pregnancy by using a corset that restricted the growth of the stomach and the baby. Another informant had experienced that some girls did not have the basic knowledge about the body and their sexual health to realize that they were pregnant. According to the informant this was a result of a generally poor sexual education in Ecuador. An informant pointed out how difficult it could be to inform a patient with just a marginal education, concerning issues such as the alarm signs of complications in the pregnancy. This worried the informant, who explained that without this knowledge, the patients might not seek medical care in time, and the consequences could be fatal or detrimental to the health of the mother and the baby. Several of the informants pointed out the lack of knowledge and poor compliance as big challenges for the health care system.

Learning pediatric patients to be moms

“When I am watching a teenage mom giving birth, I am having two pediatric patients in front of me - the teenager and the newborn. It is a mixture of feelings.” (Medical doctor)

Several of our informants said they had experienced using a lot of extra time taking care of the newborns, because they observed that the adolescent mothers did not show the same mother's love,

care and responsibility for their babies as the adult obstetric patients. According to a participant some adolescents were in a stage of immaturity that was not congruent with being a mom. The consequence for the health personnel was said to be that they had to use a lot of effort into preparing the young girls for what is going to happen. One informant said that this was a difficult and time-consuming task, because you could not just tell the adolescent to grow up and take responsibility. The informant shared an example from the delivery ward, where there commonly were adolescents who did not want to touch or have anything to do with their newborn. The health care professionals had to spend a lot of time explaining thoroughly that the baby was theirs, trying to teach them how to hold and feed their babies.

Another informant said that some of the teenagers mainly worried about their own pain, while their newborn came second. The informant shared a story of telling the patient “You have to breast feed your baby,”, the patient answered, “My baby has already eaten. He does not want more,” before she fell asleep. Her baby laid beside her screaming, had low blood glucose level and was undoubtedly hungry and needed to be fed.

Treating a patient who lives in a challenging environment

Supporting girls from dysfunctional families and poor living conditions

The hospital where the study was conducted, was as mentioned in the Introduction, located in a part of the city with a low socioeconomic level. Several of the informants mentioned working with girls from poor living conditions and what they called dysfunctional families, as a big challenge. Such families were described as having a poor stability, where the parents often were divorced and had various partners. A participant had experienced grandmothers in an age of 45 as the pregnant adolescent’s dependent, because in these families teenage pregnancies were normalized. Participants described that the parents in these families worked all day to survive economically, and therefore did not spend time in the house with their kids. The consequence was said to be adolescents growing up with an emotional distance to their parents, without a reliable adult who could guide them through their adolescence and talk about matters such as sex and pregnancy. As a participant told us, it was not surprising that this made the work of the medical follow-up even more demanding. Another participant explained that the lack of resources for a new baby in the family, in many cases forced pregnant adolescents to drop out of school to generate an income, and elaborated:

If you are poor, and in addition you become pregnant, this is going to start a poverty behavior that you are going to live with all your life. And not only for you, also for the child that is coming. These patterns of poverty are repeating themselves through generations in our country. (Psychologist)

Additionally, our informants said they met adolescents worrying about what the baby's dad is going to do. Is he going to accept the baby? The informants experienced that a high number of the adolescents were abandoned by the baby's father, which resulted in an even more desperate situation for the pregnant girl. A participant pointed out how vulnerable this group of patients could be, and how difficult it was to compensate for the absence of support from her family and partner. An informant put it like this:

The adolescents do not feel like a member of anything and lack their support group, something they badly need, especially when facing the challenge of a pregnancy at such a young age.

(Psychologist)

Facing domestic violence and gender inequality

Several informants pointed out how violence against young people was a critical problem in Ecuador and a huge challenge to deal with as a health care professional. We were told that a surprisingly high portion of the pregnant adolescent, had been physically or sexually abused by a family member. A participant expressed how difficult it was to help these patients, because the violent behavior was perceived as something normal in the society and most of the patients would choose not to report domestic violence to the police. Another participant pointed out how emotionally challenging it was to witness this and recalled:

I had a patient who was 15 years old that became pregnant after sexual abuse from her biological father. In Ecuador, abortion is illegal, even in situations like this. Working close with this adolescent through her pregnancy, watching how it affected her, her family, her social network and us who treated her, was unbearable. (Medical doctor)

When talking about this, several participants mentioned how the male chauvinism was dominant in major parts of the society and played a role in domestic violence. Several informants had experienced that the perpetrator could be the one who provided for the family, for example the father or the partner of the adolescent. A participant stressed the complexity of a situation like this, because when the well-being of the family depended on the male, it could make it difficult for the adolescent girl to claim her rights and break out of such a situation. A participant recalled:

An adolescent who had married an older man, told me that she had to tolerate his physically assaulting, because she did not have a job and could not provide her children food or a place to live on her own, "I don't know how I can do anything besides staying here in the house".

(Psychologist)

Working with the girls' partner and parents

A participant pointed out that if the adolescent was accompanied by a partner, he usually was older than her. An age difference between a girl of 14 and a man 51 years old was the largest gap this participant had experienced, and according to this health care professional it goes without saying that the dynamics in a relationship like this were likely to be unbalanced, and the one making decisions was not the girl. Another participant had experienced that sometimes it was a challenge to get the adolescents to understand that *girls* had to take responsibility for their own body and that their husband was not their “owner”. A participant recalled a situation from a prenatal check-up, with an adolescent patient and her older partner standing beside her:

I asked the girl: “Date of last menstruation?”. Her husband answered. “How do you feel?”. Her husband answered. “Have you taken your medicines?”. Her husband answered. The girl just sat there with her head bowed and did not say a word. (Psychologist)

Several participants pointed out that working with adolescents was not only a job with the girl, but with her parents as well. Because they were minors, their legal guardian had to sign the consent. According to our participants, this could be complicated, because the parents were not always well-informed about matters such as sex and prevention, and usually had their own presumptions about it. It was therefore experienced as a challenge to teach the adolescents about sexuality in a way that did not offend their parents' point of view. An example given, was that after the birth, the adolescents were offered a hormonal implant free of charge. However, the informants said that some of the guardians said no to this offer, saying “I don't want my daughter to get the implant, because it will make her sterile”. Several of our informants said that the patients' and their guardians' lack of information was a big concern and that it was a time-demanding job to clarify these misconceptions and explain the importance of a safe method of contraception for these adolescents.

A demanding work situation

Facing mental distress

As mentioned earlier several informants expressed how emotionally challenging it could be to witness the difficult situation of the pregnant adolescents. A participant stressed the importance of mental preparation for the health care professionals of the psychological struggle this could involve.

We in the health care system are moved by seeing a 12-year-old who comes with her beautiful hairband, still a young girl, she sits down as a child, but has a big pregnant belly. Obviously, this is disturbing us, Oh My Lord, she is just 12 years old. (Medical doctor)

A participant said it could be a challenge to keep on having the full empathy to every single adolescent patient and not become indifferent, because there was a risk that the tough situations were being normalized when seeing them every day. Another informant had experienced colleagues experiencing secondary traumatic stress through their work with adolescents, above all when dealing with the violence they saw some teenagers being exposed to.

It is impossible to distance yourself from it and separate the feelings you get in such situations, because we [the health care personal] are only humans as well. Working with pregnant adolescents is a difficult privilege. (Medical doctor)

Several of the participants stressed the importance of a multidisciplinary team when working with pregnant adolescents. A participant said that the support from this team was essential not to get burned out in the work. These teams included psychologists, obstetricians, gynecologists, pediatricians, nurses, midwives, and social workers. Another participant expressed that in addition to reduce the mental load for the health care workers, the team also improved the quality of the treatment with its various professions and skills.

We, as health care professionals, get shaken up by all this. It affects us morally, spiritually, psychologically, and this is difficult to handle. But with the help of the multidisciplinary team, we try to support each other in order to work in the most efficient and compassionate way, so that we can continue helping the girls. (Medical doctor)

A feeling of inadequacy

A participant expressed concern regarding how comprehensive the medical care of the pregnant adolescent ideally should have been, and at the same time experiencing that the medical staff did *not* have the sufficient resources to fulfill the tasks. The participant described a feeling of helplessness and mismatch of the limited time, compared to the number of adolescent patients who flooded into the schedule.

The hospital drowns in patients. It is difficult to have 30 patients on your shift, where you feel that you have to dedicate extra time to some adolescents, and therefore giving inadequate treatment to the grown-up patients. (Medical doctor)

A participant problematized that the adolescent's mental health was usually not paid enough attention to in the treatment. In order to comprise mental issues, improvement of the traditional medical system was strongly needed. Additionally, several of the participants stressed that the treatment was not specialized enough for the pregnant adolescents. They had experienced that not

everyone understood that treating adolescent often was something completely different than treating grown-ups, with so many aspects to be considered. A participant explained:

There are so many issues in the treatment. For example, who is going to take care of the baby if the mother is not emotionally ready to become a mother? An orphanage? Or is there someone in their family who could step in? (Psychologist)

The solution could, according to a participant, be a separate hospital customized for the adolescents. As mentioned earlier, the informants experienced challenges to build trust with many adolescents. A part of the problem was said to be that the adolescents felt misjudged by both health care professionals and other patients, and the communication and cooperation between the adolescents and the health care professionals were difficult. According to a participant, a specialized hospital for the adolescents would better facilitate for a trustworthy, multidisciplinary and holistic treatment.

Discussion

Discussion of the method

As medical students from Norway, we experienced a new culture with language, norms and traditions that were foreign for us. It is likely to believe that this may have influenced the data collection and the analysis. Two of the researchers had an exchange semester at the HGONA hospital in Quito fall 2018 and got to know the language and the culture. Due to this, most of the interviews could be conducted on the informants' first language, Spanish, because we experienced that the majority of the health care workers were not confident speaking English. Since Spanish is not our first language, there is a risk of misunderstandings of expressions and nuances in the language. However, we consider it a strength more than a limitation that *we* transcribed and translated the interviews, instead of an external professional translator, because parts of the content must be interpreted with the context of the interview.

To minimize the language bias there was asked clarifying questions during the interview. As mentioned in Method, the investigators collaborated when transcribing and translating the interviews to avoid misinterpretations. As some of the interviews were done with a translator, there is a chance that the content was presented in a slightly different way from what the participant said in Spanish. Yet, we had the recorded audio tape from the interviews, so during the transcription the Spanish speaking investigators were able to re-listen if a segment was vague from the translator. As mentioned, the translator was a co-investigator and had knowledge about the project and the context. Again, this was considered as an advantage, compared to using an external translator.

As explained previously, the data collection was done in parallel for the larger project, in practice using two interview guides and when possible two interviewers during the same interview. Although the topics were closely related, there was a chance that the data could be influenced by conducting the interviews together. However, looking at the transcripts, we did not experience noticeable problems with this. Overall, the participants answered according to the interview guide. Some participants shared experiences that could fit both projects, for example the society's view of sexuality and gender roles. During the analysis, all investigators read the transcripts from both interviews, making sure that the "common" general explanations could be used in both projects. However, we made sure that it did not overlap in a great extent.

Another possible bias due to the experiences from the exchange semester in fall 2018, is that preconceptions may have affected how the project developed and what kind of questions that were asked. According to Malterud (34), preconception can be both an advantage and disadvantage, because it can give the project the right focus, but also lead the investigators to unintentionally look for the

answers they expect without an open-minded approach. To become aware of my preconceptions, I listed the challenges of working with pregnant teenagers experienced by health care providers, that I expected to find on beforehand and compared this to the results from the analysis. I did identify a lot of the same challenges before and after, probing the influence of expectation bias. An explanation for this can be that this topic engaged us when having practice at the hospital for the first time, so we discussed this with health care workers and Ecuadorian friends before we planned the study.

As foreign investigators we were treated with great respect and it is a possible bias that the informants were eager to please by describing the most extreme patient cases and not the stories that represented the majority. To get an impression of this, we were frequently asking the informants whether their experiences represented one patient only or if it was a tendency. Recall bias is also relevant to consider, because a lot of the stories told by the informants happened some time ago. Additionally, it is possible that what they remember from the past is the stories that confirm their point of view, not reflecting the overall picture. However, the stories the informants told were perceived as genuine, and main topics were repeated by several of the informants.

A strength with the group of informants was the great variety of professions, representing every part of the multidisciplinary team that worked with the pregnant teenagers at the hospital. We included both women and men in different ages, because it was likely that the younger health workers had a different and maybe more modern point of view on working with the teenagers due to their proximity in age, compared to the older health workers. However, an advantage of having the older health workers as informants was their broad experience with hundreds of teenage patients. As the topics of sexuality and teenage pregnancies by some are considered taboos, it is likely to believe that participation in this project was more appealing to health workers that are more open minded and innovative.

Additionally, our co-investigator and contact on the hospital introduced us to possible participants who she knew had a special interest and passion for the topic. This may represent a selection bias.

However, our sample did include some contradicting statements, which supports a variation in our participants.

As shown in Table 1, the majority of the participants were female. This was not intentionally but may be a natural consequence of the high number of female health care professionals working with the pregnant adolescents at the hospital, compared to the number of male health care professionals.

Another reason could be that this was a topic that interested the female health care professionals to a greater extent than the male health care professionals. The inequality of the gender of the participants may represent a gender bias and may have influenced the results, considering the gender roles in the Ecuadorian culture. Nevertheless, our impression was that the participants, regardless of gender, had a reflected view on the gender roles, and because of this it is likely to believe that it did not have a great impact on the results.

Discussion of the results

Summary of the findings

The main finding in this study is that the health care professionals reported that treating pregnant adolescents is a “difficult privilege”. This illustrates the double experience of the potential gain due to the treatment, but also the short distance between tragedies and success.

The adolescents could be in despair due to the often unplanned pregnancies. Our informants told about challenges so complex that it was usually not possible to provide substantial help. Further, the health care workers spent more time and worked in multi-professional teams because of the adolescents’ lack of knowledge, experience, and support from their families. With numerous patients in their schedule, they found it difficult to provide all the care and compassion needed. Yet, the health care professionals expressed their wish to help these girls, because there could be a high gain if the situation improved both for the girl and for the future of the newborn. Even though the health care workers could not help with all their problems, they could do certain things to ease their situation. They could change the situations of the pregnant girls from “difficult” to “less difficult”.

The health care professionals also talked about the emotional burden of treating pregnant adolescents, because many of them came from dysfunctional families, some had been exposed to violence and sexual abuse, and some were expelled from their family. Secondary traumatization of the health care professional working with the adolescents was reported to be a risk. However, the health care professionals had experienced that working in multidisciplinary teams enabled them to provide a comprehensive treatment, at the same time as they were together sharing the psychological burden.

I have performed a search in the literature on PubMed and Google Scholar, using versions of the following words: “health care professionals”, “adolescent pregnancies”, “challenges”, “Latin America”. I was not able to identify other studies investigating the same topic in Latin-America, something that justifies further exploration of the topic. However, there were a few studies from other parts of the world focusing on the health care professionals and their experiences of working with pregnant adolescents (30–32). This is explained in detail in the introduction and further discussed with some of the results below.

Witnessing a vicious circle of adolescent pregnancies, poor education and poverty

The health care professionals in this study met pregnant adolescents that had been growing up in dysfunctional families with low socioeconomic status, poor communication skills, and an environment where teenage pregnancies were the norm. The informants were worried about the patterns of poverty

that they observed being repeated from generation to generation. This tendency is supported by other studies on adolescent health in Ecuador (22,23). According to a review article on the health status of adolescents in Ecuador, 47% of adolescents with low socioeconomic status became mothers or were pregnant during adolescence (21).

Health care professionals in this study expressed concern over the teenagers' lack of basic knowledge about their body and sexual health. They experienced difficulties in instructing patients with poor education, about matters such as alarm signs of complications in the pregnancy or the importance of prenatal controls. Additionally, they told about the important topic of adolescents quitting their education to find a job to generate an income for the new baby. This is in line with other studies on the educational situation of Latin-American pregnant teenagers (21,32,35). According to WHO, adolescent pregnancies are more likely to occur in marginalized communities, often caused by poverty and lack of education and employment (16). As mentioned in the introduction, the hospital is situated in a deprived area of the city with low socioeconomic status, which can explain why the participants saw this association.

Education is claimed to be “the best contraceptive” (36). Several participants said that they tried to encourage the adolescents to continue their education, but encountered obstacles related to the girls' responsibility with the new role as a mother. From a historical point of view there is a strong tendency showing that better educated girls will facilitate a reduced fertility rate (37,38). According to Lin (2004) better education provides a positive economic development in a country (39). To illustrate this tendency in Ecuador, the fertility rate and Gross Domestic Product (GDP) can be compared. GDP is used to estimate the size of an economy and the growth rate. The fertility rate in Ecuador in 1970 was 6,4, and in 2017 the fertility rate had dropped to 2,6 (40). Over the last 40 years, GDP per capita has increased with a factor of 20 in Ecuador (41). These numbers indicate an inverse correlation: with increasing educational and economic development in a country, follows a decrease in the fertility rate. This shows how education can be a key issue in reducing unwanted adolescent pregnancies.

Gender roles and discrimination in the adolescents' environment

According to the informants in this study, they have observed rigid gender roles and a lack of equality between men and women in the Ecuadorian culture. This was called machismo, and is supported by other recent studies from Latin-America (42–44). A possible explanation could be that in the traditional Latin-American family structure, men usually have the role as provider, which gives authority and higher status (23,32). Several informants in our study associated the machismo with masculine dominance and gender-based violence. This is related to pregnancy before the age of 18 (21). An Ecuadorian study found a three times higher incidence of sexual abuse among pregnant

adolescents compared to women who were not pregnant (14,9% vs 4,5%) (22). Moreover, international research show that adverse childhood experiences (ACE) such as violence and abuse during childhood is associated with adolescent pregnancies (23,45,46).

Several of the health care professionals in this study emphasized that gender-based violence was a big challenge. “Achieve gender equality and empower all women and girls” is goal number 5 in the UNs Sustainable Development Goals (47). The UN supports gender equality as something more than a fundamental human right, because it is also essential for a sustainable development of the world. Unfortunately, numbers from the UN show the same trend as in Ecuador, that the gender-based violence is occurring in a great extent. Worldwide, one of five girls between the age of 15-49 have reported experiencing physical or sexual violence by an intimate partner within a 12-month period (47). In Ecuador, a report from 2019 showed that 45% of 15-17-year-old girls and 65% of all women had experienced violence during their lifetime. In the term violence, both psychological, physical, and sexual violence was included. Of the violence against women 43% occurred in their home with their partner or husband responsible for the violence (48). These phenomena are supported by the experiences of the health care professionals in our study, who expressed concern for the girls that had to return to a violent environment after the treatment at the hospital.

Russel et al stresses the importance of strengthening the pregnant adolescents’ self-esteem in the treatment (32). This is an opinion shared by the participants in our study. However, it is probably not enough to empower the women, because as the UN states, “(.) the best way to end violence against women and girls is to prevent it from happening in the first place by addressing its root and structural causes.” (49). Further, they suggest that the prevention should start working with young boys and girls, because this is the period of life when values and norms around gender equality are formed. Introducing this early in youth is believed to give an efficient and lasting effect on reducing gender-based violence (49).

Participants in our study expressed concern for the health of pregnant adolescent girls and their offspring in Ecuador, and in the literature, we find the justifications for this. As mentioned in the introduction, there are laws to protect women’s rights in Ecuador. However, the high percentage of women experiencing violence presented above reveals that there still is a long way to go. In 2011, suicide was the most common cause of death among adolescent girls in Ecuador, accounting for 13% of all deaths in this age group (21). This rate was one of the highest on the American continent (50), and the numbers revealed that this was a growing problem (21). According to former research are ACEs, intimate partner violence and adolescent pregnancies suggested risk factors for female suicide (45,50,51). Further low levels of income have also been associated with an increased suicide rate (50). Participants in our study used the risk factors mentioned above to describe the desperate life situations of some of the pregnant adolescents, and this might support an increased risk of suicide.

According to a study on Latin-American teenagers, the age difference within the couples is often large with the girls being young and their male partner much older (32). This was also experienced by the informants in this study, who expressed concern about the unbalanced dynamics in some of the relationships. They observed a female subordination that gave the girl limited possibilities to make decisions promoting her own body and health. Participants found this challenging because the partner or the parents were not always updated or well-informed about maternal health and prevention. However, the study of Russel et al concluded that it was essential to increase the partner's and parents' involvement to improve the follow up of pregnant adolescents (32). Communication was found as a key to gain the partner's and the parents' trust, but this demanded time and investment.

Mentally challenging for the health care professionals

As mentioned, several of the health care professionals in our study emphasized how mentally demanding it was to observe the teenager's difficult situation and lack of support from the family. Secondary trauma was said to be an actual risk in their work. Some informants had own experiences of this, while others had observed it in colleagues. This problem was especially reported in the follow-up of pregnant teenagers who had been victims of violence and sexual abuse. Our findings are in line with the literature showing that exposure to the clients narratives of traumatic events, may indirectly cause traumatization and psychological distress on the therapist, characterized as secondary trauma (52). This phenomenon do usually not occur after a single event, but after cumulative exposure over time (53). It can involve symptoms of PTSD and give long-lasting psychological effects where the health care worker's view of themselves and the world may be challenged by the overwhelming feelings (52).

As described in the review of Elwood, health care professionals were in need for increased clinical training and preparation to prevent secondary trauma among those treating patients with trauma-related experiences (54). This is consistent with several of our informants who wanted more attention to the importance of mental self-care in such situations. In the review by Sabin-Farell, it was indicated that there is an individual variety of the risk for secondary traumatization, depending on personal characteristics, roles in the treatment and coping strategies (52). Health care workers that had low personal stress and actively used coping strategies were less affected by the trauma they indirectly witnessed. On the contrary it was shown that health care workers who had experienced trauma or abuse in his or her childhood were more vulnerable. Additionally, it was shown that those who engaged empathically with the trauma survivors had a higher risk of getting PTSD symptoms, at the same time as empathy was described as a necessary preconditions for a good therapeutic relationship (52).

Participants in our study expressed that it was beneficial to work in a multidisciplinary team when treating pregnant adolescents. Some experienced shortcomings in fulfilling so many basic needs of the teenagers. Others stated that no professional discipline could provide all different aspects of the follow up that the teenagers needed, something that favored interdisciplinary work. A study conducted in 2019 by Govender et al reveals that a multidisciplinary approach in the treatment of adolescent mothers and their children is an important strategy for improving both maternal and the child health outcome (31). In addition to improving the treatment, a cooperation in a multidisciplinary team is important for the psychological support of health care professionals working with terminal cancer patients (55). However, there is little knowledge on the psychological burden on health care professionals working with pregnant adolescents and whether a multidisciplinary approach eases the mental distress of individual team members. These topics require further investigation.

Conclusion

This study aimed to explore the challenges that health care professionals experienced when working with pregnant teenagers. Increased knowledge and awareness of these challenges may facilitate important improvements in both the working situation for the health care professionals and the pregnant adolescents' health care.

The health care professionals in our study said that working with pregnant adolescents was something completely different than treating grown-up women. Some experienced difficulties in building trust with the young patients, that in many cases were in despair, scared, or felt judged by the staff at the hospital. The informants told that some of the pregnant adolescents were from dysfunctional families with poor living conditions, where domestic violence and gender inequality was common. The male chauvinism has been described to play a major role in parts of the Latin American culture (42–44), and this was linked to the violence and seen as a difficult issue by some of our informants.

The adolescent girls' difficult and complex situations made the participants' work demanding. The health care professionals described a feeling of helplessness for the overwhelming number of pregnant adolescents who were in need for quality comprehensive treatment, compared to the limited amount of time available. Another result of the demanding work was the emotional distress that the participants described, and according to the participants secondary traumatization was an actual risk. However, with the cooperation in the multidisciplinary team, the health care professionals experienced emotional support and a feeling of providing a more comprehensive treatment for the pregnant adolescents.

References

1. Developing Countries 2020 [Internett]. [sitert 8. mai 2020]. Tilgjengelig på: <https://worldpopulationreview.com/countries/developing-countries/>
2. Leifsen E, Jacobsen E. Ecuador. I: Store norske leksikon [Internett]. 2019 [sitert 8. mai 2020]. Tilgjengelig på: <http://snl.no/Ecuador>
3. Snapshot [Internett]. [sitert 13. mai 2020]. Tilgjengelig på: <https://lac.unwomen.org/en/donde-estamos/ecuador>
4. Eckhardt M, Santillán D, Faresjö T, Forsberg BC, Falk M. Universal Health Coverage in Rural Ecuador: A Cross-sectional Study of Perceived Emergencies. *West J Emerg Med*. september 2018;19(5):889–900.
5. Manual_MAIS-MSP12.12.12.pdf [Internett]. [sitert 8. mai 2020]. Tilgjengelig på: http://instituciones.msp.gob.ec/somossalud/images/documentos/guia/Manual_MAIS-MSP12.12.12.pdf
6. 122110487.pdf [Internett]. [sitert 15. januar 2019]. Tilgjengelig på: <http://bora.uib.no/bitstream/handle/1956/8781/122110487.pdf?sequence=1&isAllowed=y>
7. Lucio R, Villacrés N, Henríquez R. Sistema de salud de Ecuador. *Salud Pública México*. 2011;53:12.
8. Health in the Andes: The Modern Role of Traditional Medicine (Part I) - The Globalist [Internett]. [sitert 8. mai 2020]. Tilgjengelig på: <https://www.theglobalist.com/health-in-the-andes-the-modern-role-of-traditional-medicine-part-i/>
9. Universidad Simon Bolivar. Pobreza por Sectores Censales en la Ciudad de Quito (2001 - 2006) [Internett]. 2009 [sitert 15. januar 2019]. Tilgjengelig på: http://www.uasb.edu.ec/UserFiles/372/File/pdfs/NOTICIASYSUCESOS/2009/POBREZA_UIO_SECT.pdf
10. Emotiva inauguración del Hospital Gineco Obstétrico de Nueva Aurora Luz Elena Arismendy, al sur de Quito – Ministerio de Salud Pública [Internett]. [sitert 15. januar 2019]. Tilgjengelig på: <https://www.salud.gob.ec/emotiva-inauguracion-del-hospital-gineco-obstetrico-de-nueva-aurora-luz-elena-arismendy-al-sur-de-quito/>
11. Baba S, Goto A, Reich MR. Recent pregnancy trends among early adolescent girls in Japan. *J Obstet Gynaecol Res*. 2014;40(1):125–32.
12. Fielding JE, Williams CA. Adolescent pregnancy in the United States: a review and recommendations for clinicians and research needs. *Am J Prev Med*. februar 1991;7(1):47–52.
13. Ghose S, John LB. Adolescent pregnancy: an overview. *Int J Reprod Contracept Obstet Gynecol*. 23. september 2017;6(10):4197–203.
14. Marino JL, Lewis LN, Bateson D, Hickey M, Skinner SR. Teenage mothers. *Aust Fam Physician*. oktober 2016;45(10):712–7.

15. Vernon M. Adolescent childbearing. *N C Med J*. mai 1991;52(5):209–12.
16. Adolescent pregnancy [Internett]. [sitert 6. mai 2020]. Tilgjengelig på: <https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy>
17. adding-it-up-adolescents-report.pdf [Internett]. [sitert 13. mai 2020]. Tilgjengelig på: https://www.guttmacher.org/sites/default/files/report_pdf/adding-it-up-adolescents-report.pdf
18. de Azevedo WF, Diniz MB, da Fonseca ESVB, de Azevedo LMR, Evangelista CB. Complications in adolescent pregnancy: systematic review of the literature. *Einstein*. 2015;13(4):618–26.
19. Gonzalez-Rozada M. Determinantes y Potenciales Consecuencias del Embarazo Adolescente en Ecuador. 16. november 2009;13.
20. world-fertility-patterns-2015.pdf [Internett]. [sitert 8. mai 2020]. Tilgjengelig på: <https://www.un.org/en/development/desa/population/publications/pdf/fertility/world-fertility-patterns-2015.pdf>
21. Svanemyr J, Guijarro S, Riveros BB, Chandra-Mouli V. The health status of adolescents in Ecuador and the country's response to the need for differentiated healthcare for adolescents. *Reprod Health*. 28. februar 2017;14(1):29.
22. Goicolea I, Wulff M, Ohman A, San Sebastian M. Risk factors for pregnancy among adolescent girls in Ecuador's Amazon basin: a case-control study. *Rev Panam Salud Publica Pan Am J Public Health*. september 2009;26(3):221–8.
23. Guijarro S, Naranjo J, Padilla M, Gutiérrez R, Lammers C, Blum RW. Family risk factors associated with adolescent pregnancy: study of a group of adolescent girls and their families in Ecuador. *J Adolesc Health*. 1. august 1999;25(2):166–72.
24. POLÍTICA-INTERSECTORIAL-DE-PREVENCIÓN-DEL-EMBARAZO-EN-NIÑAS-Y-ADOLESCENTES-para-registro-oficial.pdf [Internett]. [sitert 8. mai 2020]. Tilgjengelig på: <https://www.salud.gob.ec/wp-content/uploads/2018/07/POL%C3%8DTICA-INTERSECTORIAL-DE-PREVENCI%C3%93N-DEL-EMBARAZO-EN-NI%C3%91AS-Y-ADOLESCENTES-para-registro-oficial.pdf>
25. Rodr - HIGH ADOLESCENT FERTILITY IN THE CONTEXT OF DECLIN.pdf [Internett]. [sitert 13. mai 2020]. Tilgjengelig på: https://www.un.org/en/development/desa/population/publications/pdf/expert/2013-14_Rodriguez_Expert-Paper.pdf
26. Richardson E, Allison KR, Gesink D, Berry A. Barriers to accessing and using contraception in highland Guatemala: the development of a family planning self-efficacy scale. *Open Access J Contracept*. 2016;7:77–87.
27. Avenue HRW | 350 F, York 34th Floor | New, t 1.212.290.4700 N 10118-3299 U |. Ecuador: Adopt UN Recommendations on Abortion Law [Internett]. Human Rights Watch. 2015 [sitert 13. mai 2020]. Tilgjengelig på: <https://www.hrw.org/news/2015/04/22/ecuador-adopt-un-recommendations-abortion-law>

28. Abortion in Latin America and the Caribbean [Internett]. Guttmacher Institute. 2016 [sitert 13. mai 2020]. Tilgjengelig på: <https://www.guttmacher.org/fact-sheet/abortion-latin-america-and-caribbean>
29. Adding It Up: Costs and Benefits of Meeting the Contraceptive Needs of Adolescents [Internett]. Guttmacher Institute. 2016 [sitert 13. mai 2020]. Tilgjengelig på: <https://www.guttmacher.org/report/adding-it-meeting-contraceptive-needs-of-adolescents>
30. Bluestein D, Starling ME. Helping pregnant teenagers. *West J Med.* august 1994;161(2):140–3.
31. Govender D, Naidoo S, Taylor M. Nurses' perception of the multidisciplinary team approach of care for adolescent mothers and their children in Ugu, KwaZulu-Natal. *Afr J Prim Health Care Fam Med.* 23. april 2019;11(1):e1–11.
32. Russell ST, Lee FCH. Practitioners' perspectives on effective practices for Hispanic teenage pregnancy prevention. *Perspect Sex Reprod Health.* august 2004;36(4):142–9.
33. Malterud K. Systematic text condensation: a strategy for qualitative analysis. *Scand J Public Health.* desember 2012;40(8):795–805.
34. Malterud K. *Kvalitative forskningsmetoder for medisin og helsefag.* 4. utgave. Universitetsforlaget; 2017. 45 p.
35. Ministerio de Salud Pública, Ministerio de Educación, Ministerio de Inclusión Económica y Social, Ministerio de Justicia. Política Intersectorial de Prevención del Embarazo en Niñas y Adolescentes [Internett]. 2018 [sitert 3. januar 2019]. Tilgjengelig på: <https://www.salud.gob.ec/wp-content/uploads/2018/07/POL%C3%8DTICA-INTERSECTORIAL-DE-PREVENCI%C3%93N-DEL-EMBARAZO-EN-NI%C3%91AS-Y-ADOLESCENTES-para-registro-oficial.pdf>
36. Khraif RM, Salam AA, Al-Mutairi A, Elsegaey I, Al Jumaah A. Education's impact on fertility: The case of King Saud University Women, Riyadh. *Middle East Fertil Soc J.* 1. juni 2017;22(2):125–31.
37. Götmark F, Andersson M. Human fertility in relation to education, economy, religion, contraception, and family planning programs. *BMC Public Health.* 22. februar 2020;20(1):265.
38. Snopkowski K, Towner MC, Shenk MK, Collieran H. Pathways from education to fertility decline: a multi-site comparative study. *Philos Trans R Soc B Biol Sci* [Internett]. 19. april 2016 [sitert 9. mai 2020];371(1692). Tilgjengelig på: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4822436/>
39. Lin T-C. The role of higher education in economic development: an empirical study of Taiwan case. *J Asian Econ.* 1. april 2004;15(2):355–71.
40. Ecuador Population (2019) - Worldometers [Internett]. [sitert 15. januar 2019]. Tilgjengelig på: <http://www.worldometers.info/world-population/ecuador-population/>
41. GDP per capita (current US\$) | Data [Internett]. [sitert 15. januar 2019]. Tilgjengelig på: https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=EC-NO&year_high_desc=false

42. Beckman AL, Wilson MM, Prabhu V, Soekoe N, Mata H, Grau LE. A qualitative view of the HIV epidemic in coastal Ecuador. *PeerJ*. 22. november 2016;4:e2726.
43. Khamishon R, Chen J, Ranatunge N, Wu Q, Downey N, Love E, mfl. Use and Perception of Contraception among Genders in Santo Domingo, Dominican Republic. *Ann Glob Health*. 24. juni 2019;85(1):90.
44. Morales A, Garcia-Montaño E, Barrios-Ortega C, Niebles-Charris J, Garcia-Roncallo P, Abello-Luque D, mfl. Adaptation of an effective school-based sexual health promotion program for youth in Colombia. *Soc Sci Med*. 1. februar 2019;222:207–15.
45. Hillis SD, Anda RF, Dube SR, Felitti VJ, Marchbanks PA, Marks JS. The association between adverse childhood experiences and adolescent pregnancy, long-term psychosocial consequences, and fetal death. *Pediatrics*. februar 2004;113(2):320–7.
46. Raj A, Silverman JG, Amaro H. The Relationship Between Sexual Abuse and Sexual Risk Among High School Students: Findings from the 1997 Massachusetts Youth Risk Behavior Survey. :10.
47. United Nations: Gender equality and women’s empowerment [Internett]. United Nations Sustainable Development. [sitert 6. mai 2020]. Tilgjengelig på: <https://www.un.org/sustainabledevelopment/gender-equality/>
48. Boletin_Tecnico_ENVIGMU.pdf [Internett]. [sitert 6. mai 2020]. Tilgjengelig på: https://www.ecuadorencifras.gob.ec/documentos/web-inec/Estadisticas_Sociales/Violencia_de_genero_2019/Boletin_Tecnico_ENVIGMU.pdf
49. What we do: Ending violence against women: Focusing on prevention to stop the violence [Internett]. UN Women. [sitert 7. mai 2020]. Tilgjengelig på: <https://www.unwomen.org/en/what-we-do/ending-violence-against-women/prevention>
50. Quinlan-Davidson M, Sanhueza A, Espinosa I, Escamilla-Cejudo JA, Maddaleno M. Suicide Among Young People in the Americas. *J Adolesc Health*. 1. mars 2014;54(3):262–8.
51. Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, mfl. Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med*. 1. mai 1998;14(4):245–58.
52. Sabin-Farrell R, Turpin G. Vicarious traumatization: implications for the mental health of health workers? *Clin Psychol Rev*. 1. mai 2003;23(3):449–80.
53. Pearlman LA, Ian PSM. Vicarious Traumatization: An Empirical Study of the Effects of Trauma Work on Trauma Therapists. :8.
54. Elwood LS, Mott J, Lohr JM, Galovski TE. Secondary trauma symptoms in clinicians: A critical review of the construct, specificity, and implications for trauma-focused treatment. *Clin Psychol Rev*. 1. februar 2011;31(1):25–36.
55. Pattison N, Droney J, Gruber P. Burnout: Caring for critically ill and end-of-life patients with cancer. *Nurs Crit Care*. 2020;25(2):93–101.

Appendices

Appendix 1: Ethical approval from REK

Pre- Approval, Norwegian



Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK midt	Magnus Alm	73559949	14.10.2019	31378
Deres referanse:				

Arne Kristian Myhre

31378 Utfordringene ved tenåringsgraviditeter i Quito, Ecuador, fra en helsearbeiders perspektiv.

Forskningsansvarlig: Norges teknisk-naturvitenskapelige universitet

Søker: Arne Kristian Myhre

Søkers beskrivelse av formål:

Studien foregår på sykehuset The Nueva Aurora Luz Elena Arismendy Hospital of Gynecology and Obstetrics (HGONA) i Quito, Ecuador. Det skal utføres en kvalitativ studie, med intervju av helsepersonell ansatt på sykehuset som jobber med jenter i alderen 12-19 år. I intervjuet vil jeg spørre om deres erfaringer som helsepersonell knyttet til utfordringene ved tenåringsgraviditeter. Jeg vil også spørre om deres innrykk av hvilke konsekvenser graviditeten har for tenåringen selv. Målsettingen er å intervju 12-15 personer. Vi vil bruke metoden "systematisk tekstkondensasjon" for å analysere dataene. Alle opplysninger og publikasjoner vil bli fullstendig anonymisert. Prosjektet planlegges gjennomført våren 2020. Tenåringsgraviditeter er et spesielt stort problem for helsevesenet i landet og er et eget satsningsområde for helsedepartementet, The Ecuadorian Ministry of Health.

REKs vurdering

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medisinsk og helsefaglig forskningsetikk (REK midt) i møtet 25.09.2019. Vurderingen er gjort med hjemmel i helseforskningsloven § 10.

Komiteens prosjektsammendrag: Tenåringsgraviditeter er et stort problem i Ecuador, og hensikten med studien er å undersøke hvilke utfordringer og konsekvenser graviditeten har for tenåringene. For å belyse dette skal man intervju helsepersonell som jobber med jenter

Alle skriftlige henvendelser om saken må sendes via REK-portalen
Du finner informasjon om REK på våre hjemmesider rekportalen.no

i alderen 12-19 år. Utvalget består av 15 ansatte på sykehuset The Nueva Aurora Luz Elena Arismendy Hospital of Gynecology and Obstetrics (HGONA) i Quito. Studien er samtykkebasert, og skal danne grunnlaget for en hovedoppgave i medisin ved NTNU.

Forsvarlighet

Komiteen har vurdert søknad, forskningsprotokoll, målsetting og plan for gjennomføring. Komiteen har noen bemerkninger til datalagring, rekrutteringsprosedyre, lokal etisk godkjenning og informasjonsskriv. Utover dette har vi ingen forskningsetiske innvendinger til prosjektet. Under forutsetning av at vilkårene nedenfor tas til følge vurderer REK at prosjektet er forsvarlig, og at hensynet til deltakernes velferd og integritet er ivarettatt.

Datalagring

I søknaden oppgir dere at lydfilene fra intervjuene skal slettes så snart intervjuene er transkribert. Komiteen stiller vilkår om at lydfilene, i likhet med alle andre grunnlagsdata, oppbevares i fem år etter prosjektslutt. Dette på grunn av kontrollhensyn og etterprøvbarehet av forskningen. Vi forutsetter at dere følger NTNUs retningslinjer for sikker dataoppbevaring, og at dere lagrer forskningsdataene på NTNUs servere eller fysisk på NTNUs områder.

Rekrutteringsprosedyre

Komiteen forutsetter at de forespurte får tilstrekkelig betenkningstid til å vurdere deltakelse. Videre ber vi om at helsepersonellet svarer på spørsmålet om deltakelse direkte til forsker, ikke til kolleger de kan ha et avhengighetsforhold til. Dette gjøres for å minimere mulig opplevelse av press om deltakelse.

Lokal etisk godkjenning

Komiteen ber om å få tilsendt kopi av godkjenningen fra etiske komité ved Universidad San Francisco de Quito i Ecuador.

Endring av informasjonsskriv

Alle skriftlige henvendelser om saken må sendes via REK-portalen
Du finner informasjon om REK på våre hjemmesider rekportalen.no

Informasjonsskrivet må revideres i tråd med ny mal på REKs nettsider, slik at informasjonen som gis til deltakerne er forenlig med ny personopplysningslov. Det må også nevnes at prosjektet er godkjent av REK.

Vilkår for godkjenning

1. Via REK-portalen må du sende inn kopi av etisk godkjenning fra Ecuador og revidert informasjonsskriv. Vi vil opprette en oppgave til deg i portalen for dette. Du vil motta en e-post fra oss når oppgaven er opprettet. Prosjektet kan ikke igangsettes før vi har bekreftet at informasjonsskrivet er endret i henhold til våre merknader.
2. Komiteen forutsetter at du og alle prosjektmedarbeiderne følger institusjonens bestemmelser for å ivareta informasjonssikkerhet og personvern ved innsamling, bruk, oppbevaring, deling og utlevering av personopplysninger.
3. Av dokumentasjonshensyn skal opplysningene oppbevares i 5 år etter prosjektslutt. Du og forskningsansvarlig institusjon er ansvarlig for at opplysningene oppbevares aidentifisert, dvs. atskilt i en nøkkel- og en datafil. Opplysningene skal deretter slettes eller anonymiseres.
4. Komiteen forutsetter at ingen personidentifiserbare opplysninger kan framkomme ved publisering eller annen offentliggjøring.

Vedtak

Godkjent med vilkår

Med vennlig hilsen

Vibeke Videm
Professor dr.med. / Overlege
Leder, REK Midt

Magnus Alm
Rådgiver, REK Midt

Alle skriftlige henvendelser om saken må sendes via REK-portalen
Du finner informasjon om REK på våre hjemmesider rekportalen.no



Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK midt	Magnus Alm	73559949	10.02.2020	31378
Deres referanse:				

Arne Kristian Myhre

31378 Utfordringene ved tenåringsgraviditeter i Quito, Ecuador, fra en helsearbeiders perspektiv.

Forskningsansvarlig: Norges teknisk-naturvitenskapelige universitet

Søker: Arne Kristian Myhre

REKs vurdering

Vi viser til tilbakemelding mottatt 10.02.2020 hvor revidert informasjonsskriv og lokal etisk godkjenning var vedlagt. Informasjonsskrivet er revidert i samsvar med REKs merknader, og justert etter lokale krav til informasjonsskriv.

Vi tar det reviderte informasjonsskriv og den lokale etiske godkjenningen til orientering. Vi anser med dette at vilkårene i godkjenningsvedtaket fra 14.10.2019 er oppfylt, og ønsker dere lykke til med gjennomføringen av prosjektet!

Vedtak

Godkjent

Mvh
Magnus Alm
Rådgiver, REK midt

Alle skriftlige henvendelser om saken må sendes via REK-portalen
Du finner informasjon om REK på våre hjemmesider rekportalen.no

Klageadgang

Du kan klage på komiteens vedtak, jf. forvaltningsloven § 28 flg. Klagen sendes til REK midt. Klagefristen er tre uker fra du mottar dette brevet. Dersom vedtaket opprettholdes av REK midt, sendes klagen videre til Den nasjonale forskningsetiske komité for medisin og helsefag (NEM) for endelig vurdering.



Region:	Executive officer:	Telefon:	Date:	Reference:
REC central	Magnus Alm	+47 73559949	28 October 2019	31378

Please include reference number in all inquiries.

To whom it may concern,

CONFIRMATION OF ETHICAL APPROVAL OF RESEARCH PROJECT

Project title: "The challenges of adolescent pregnancies in Quito, Ecuador, from a health care provider perspective."

Reference number: 31378

Institutions responsible for the research: Norwegian University of Science and Technology

Chief investigator: Arne Kristian Myhre

The project was approved by the Regional Committee for medical and health related research ethics Central Norway on September 25th 2019.

Sincerely,
Magnus Alm
Advisor
REC Central Norway

Address:
Det medisinske fakultet
Medisinsk teknisk
forskningssenter 7489
Trondheim

E-post: rek-midt@medisin.ntnu.no
Web: <https://rekportalen.no/>

All post og e-post som inngår i
saksbehandlingen, bes adressert til REK
midt og ikke til enkelte personer.

Kindly address all mail and e-mails to
the Regional Ethics Committee, REK
Central Norway not to individual staff

Appendix 2: Ethical approval from CEISH-USFQ

English version

1

Approval of research project, translated from Spanish

Quito, 6th of February 2020

Doctor (medical student)
Ingvild Hatlevoll
Principal Investigator
Norwegian Institute of Science and Technology (NTNU)

Of our consideration:

The Human Research Ethics Committee of Universidad San Francisco in Quito, «CEISH-USFQ», notifies you that they have evaluated the ethical, methodological and legal aspects of the study, *Retos de las adolescentes de Quito, Ecuador, relacionados con embarazos adolescentes y métodos anticonceptivos, 2020*, and have agreed to **approve** the study registered with the following data:

Code CEISH-USFQ	2019-204E
Original title in English	<i>Challenges with teenage pregnancies and the use of contraception among adolescents in Quito, Ecuador, 2020</i>
Evaluation report number	IE-E29-2020-CEISH-USFQ
Mode of assessment	Mixed, with an USFQ-teacher as co-investigator
Type of study	Qualitative interviews with health professionals, ZP9 DMQ
Field of study	Health Sciences
Risk level	Minimal, exempt
Duration of the study	Two months: February-March 2020
Participating researchers and institutions	P: Ingvild Hatlevoll, NTNU Co-investigators: Dra Saskia Villamarin and Marisol Bahamonde, USFQ; Arne Kristian Myhre, Aslak Steinsbekk, Ylva Dahle, Marie Fossen Nordal, NTNU

Approved documents in this investigation:

	Approved document	Version	Date	# of pages
1	Request for review of the study	-	11th of December 2019	01
2	Research protocol	I02	5th of February 2020	10
3	Informed Consent, written form, for interviews with healthcare professionals	E02	5th of February 2020	04
4	Interview guide	E02	5th of February 2020	01
			Total	16

For the approval of this investigation, it has been taken into consideration; the relevance or scientific relevance of the investigation, the suitability of the research team, the feasibility of the investigation and the suitability of the facilities of the Hospital where the data will be collected, as well as a satisfactory response to all the observations made in the evaluation report of the study: **IE-E29-2020-CEISH-USFQ**.

The validity of approval of this investigation is three months, from **6th of February 2020 to 5th of April 2020**, granting a period of 30 additional days to the end date specified in the protocol, for any contingency.

We remind you that the Principal Investigator must notify the CEISH-USFQ about the start and end of the investigation, giving this committee a final report, as well as complying with the other commitments made with the CEISH-USFQ in the statement of responsibilities of the principal investigator.

The CEISH-USFQ disclaims any responsibility as to the veracity of the information presented. It also informs the researchers that any data that has been collected before the approval date of this study cannot be published or included in the results.

Sincerely

Iván Sisa

President of CEISH-USFQ

Mail: comitebioetica@usfq.edu.ec

Phone: +593 2-297-1700, ext 1149

Ethical approval from CEISH-USFQ, Spanish version



CA-P2019-204M-CEISH-USFQ



UNIVERSIDAD SAN FRANCISCO DE QUITO USFQ

Quito, 06 de febrero de 2020

Doctora
Ingvild Hatlevoll
Investigadora Principal
Norwegian Institute of Science & Technology (NTNU)
Presente

De nuestra consideración:

El Comité de Ética de Investigación en Seres Humanos de la Universidad San Francisco de Quito "CEISH-USFQ", notifica a usted que evaluó los aspectos éticos, metodológicos y jurídicos del estudio *Retos de las adolescentes de Quito, Ecuador, relacionados con embarazos adolescentes y métodos anticonceptivos, 2020*, acordando **Aprobar** el estudio registrado con los siguientes datos:

Código CEISH-USFQ	2019-204E
Título original en Inglés	<i>Challenges with teenage pregnancies and the use of contraception among adolescents in Quito, Ecuador, 2020.</i>
No. de informe de evaluación CEISH-USFQ	IE-E29-2020-CEISH-USFQ
Modalidad de evaluación	Mixta, con docente USFQ como coinvestigadora
Tipo de estudio	Cualitativo aplicando encuesta a profesionales de la salud de la ZP9 DMQ
Campo de estudio	Ciencias de la salud
Nivel de riesgo	Mínimo, exento.
Duración del estudio	Dos meses: febrero-marzo 2020
Investigadores e instituciones participantes	P: Ingvild Hatlevoll, Norwegian Institute of Science & Technology (NTNU) Coinvestigadores: Dra Saskia Villamarin y Marisol Bahamonde, USFQ; Arne Kristian Myhre, Aslak Steinsbekk, Ylva Dahle, Marie Fossen Nordal, NTNU.

Documentos aprobados de esta investigación:

	Documentos aprobados	Versión	Fecha	# págs
1	Solicitud para revisión del estudio	-	11 dic 2019	01
2	Protocolo del estudio	I02	05 feb 2020	10
3	Formulario de consentimiento informado por escrito para entrevistas a profesionales de la salud	E02	05 feb 2020	04
4	Guión de entrevista	E02	05 feb 2020	01
			Total	16



CA-P2019-204M-CEISH-USFQ



UNIVERSIDAD SAN FRANCISCO DE QUITO USFQ

Para la aprobación de esta investigación, se ha tomado en consideración: la pertinencia o relevancia científica de la investigación, la idoneidad del equipo de investigación, la factibilidad de la investigación y la idoneidad de las instalaciones del Hospital donde se recolectarán los datos, así como una respuesta satisfactoria a todas las observaciones realizadas en el informe de evaluación del estudio: **IE-E29-2020-CEISH-USFQ**.

La vigencia de aprobación de esta investigación es de tres meses, **del 06 de febrero de 2020 hasta el 05 abril de 2020**, concediendo un plazo de 30 días adicionales a la fecha de término especificada en el protocolo, para cualquier contingencia.

Recordamos que el investigador principal deberá notificar al CEISH-USFQ sobre el inicio y finalización de la investigación, entregando a este Comité un informe final, así como cumplir con los demás compromisos contraídos con el CEISH-USFQ en la Declaración de responsabilidades del investigador principal.

El CEISH-USFQ deslinda cualquier responsabilidad en cuanto a la veracidad de la información presentada. Asimismo, informa a los investigadores, que cualquier dato que haya sido recolectado antes de la fecha de aprobación de este estudio, no podrá ser publicado o incluido en los resultados.

Atentamente,

Iván Sisa
Presidente CEISH-USFQ
Correo electrónicos: comitebioetica@usfq.edu.ec
Telf. (+593) 2-297-1700, Ext 1149



cc. Archivos digitales y físicos - IS/ammt

Appendix 3: Letter of Information

English Version

¿DO YOU WANT TO PARTICIPATE IN A RESEARCH PROJECT?

How?

We want to invite healthcare professionals such as doctors, nurses, and medical students to participate in a project about contraception and teenage pregnancy.

We will conduct individual interviews of approximately 30 minutes in Spanish (with the help of a translator). We want to ask about your experiences and thoughts, as a health professional, about contraceptive use among adolescents and the challenges of teenage pregnancy.

The participation in the project is completely anonymous.

As a thank you for taking the time to participate, we want to offer the participants a special Norwegian sweet.

WHEN?

We will carry out the interviews in February, at the time that suits you in the hospital.

ABOUT US

We are three medical students, Ingvild Hatlevoll, Marie Fossen Nordal and Ylva Dahle from the Norwegian University of Science and Technology in Europe. We are cooperating with USFQ and HGONA. The project has been approved by the Regional Committee for Medical and Health Research Ethics in Norway and it has been authorized by the Teaching and Research Unit of this hospital.

DO YOU WANT TO KNOW MORE, OR DO YOU WANT TO PARTICIPATE?

Contact Ingvild Hatlevoll / Marie Fossen Nordal / Maria José Vallejo

whatsapp: +4799104610 / +4792881485 / 0962799631

or email: ingvild.hatlevoll@gmail.com / mariefnordal@gmail.com / mariajose.vallejo@hgona.gob.ec



UNIVERSIDAD SAN FRANCISCO



NTNU

Norwegian University of
Science and Technology

¿QUIERES PARTICIPAR EN UN PROYECTO DE INVESTIGACIÓN?

¿CÓMO?

Queremos invitar a profesionales de salud como doctores, enfermeras y estudiantes de medicina para participar en un proyecto sobre anticoncepción y embarazo adolescente.

Vamos a hacer entrevistas individuales de aproximadamente 30 minutos en Español (con apoyo de traducción). Queremos preguntar sobre sus experiencias y pensamientos, como profesional de salud, del uso de anticonceptivos entre las adolescentes y los desafíos de embarazo adolescente.

La participación en el proyecto es completamente anónima.

Como agradecimiento por tomar el tiempo para participar, queremos ofrecer los participantes un dulce especial de Noruega.

¿CUÁNDO?

Vamos a realizar las entrevistas en el mes de Febrero, en el horario que le convenga en el hospital.

¿QUIENES SOMOS?

Somos tres estudiantes de medicina, Ingvild Hatlevoll, Marie Fossen Nordal y Ylva Dahle de la Universidad Noruega de Ciencia y Tecnología en Noruega, Europa. Estamos cooperando con USFQ y HGONA. El proyecto está aprobado por el Comité de ética de investigación en seres humanos en Noruega. Así también ha sido autorizado por la Unidad de Docencia e Investigación de esta casa de salud.

¿QUIERE SABER MÁS O QUIERE PARTICIPAR?

Contacte a Ingvild Hatlevoll / Marie Fossen Nordal / Maria José Vallejo

whatsapp: +4799104610 / +4792881485 / 0962799631

o correo electrónico: ingvild.hatlevoll@gmail.com / mariefnordal@gmail.com /

mariajose.vallejo@hgona.gob.ec



Appendix 4: Informed Consent

English Version



UNIVERSIDAD SAN FRANCISCO DE QUITO USFQ



Written Informed Consent Form for interviews with healthcare professionals

Research title:

Challenges with adolescent pregnancies and the use of contraception among adolescents in Quito, Ecuador, in the year 2020

Organisations involved in the study: Norwegian University of Science and Technology (NTNU)

Principal Investigator: Ingvild Hatlevoll, +47 991 046 10, ingvild.hatlevoll@gmail.com

Co-investigators:

Dra Saskia Villamarin, USFQ, 099 802 8494

Marisol Bahamonde, USFQ, mbahamonde@usfq.edu.ec

María José Vallejo, USFQ, mariajose.vallejo@hgona.gob.ec

Arne Kristian Myhre, NTNU, arne.k.myhre@ntnu.no

Aslak Steinsbekk, NTNU, aslak.steinsbekk@ntnu.no

Ylva Dahle, medical student, dahleylva@gmail.com

Marie Fossen Nordal, medical student, mariefnordal@gmail.com

DESCRIPTION OF THE STUDY
Introducion
This form includes a summary of the purpose of this study. You may ask all the questions you want to clearly understand your participation and clear any doubts you might have. Before you participate you can take some time to think about whether you want to participate or not.
You have been invited to participate in an investigation about the use of contraception among adolescents and the challenges related to adolescent pregnancy, as a health professional and employee at HGONA.
Purpose of the study
This research aims to obtain more knowledge about the different barriers to the use of contraception among adolescent girls and the challenges related to adolescent pregnancy.

Informed Consent, Version 02, 05.02.20 1



We will conduct individual interviews with approximately 15 health professionals at HGONA, who work with adolescents, to gather information for the research project. We will ask about experiences with adolescent pregnancy, and experiences and perceptions about the use of contraceptives among adolescent girls in Ecuador.

Description of the procedures to carry out the study

If you agree to participate, we will interview you about your thoughts and experiences as a health professional about the use of contraceptives among adolescents in Ecuador, and the possible barriers to the use of contraceptives in this group and also about the challenges that follow adolescent pregnancy. The interview will last approximately 30 minutes. The interview can be in Spanish or English, whichever you prefer.

The project will collect and record information about your age, sex and profession. This information will be used to describe the sample, and will not be linked to the answers you give in the interview. This information will be handled in such a way that you cannot be identified.

We want to make it clear that in the interview we want you to tell us about experiences and impressions on the subject that you have obtained through your professional work. We do not want you to tell us about your personal experiences. In addition, we do not want you to tell us anything that can be used to identify patients or colleagues.

Risks and benefits

The issues of contraception and adolescent pregnancy can be controversial in some parts of the world, but as a health professional, we believe that discussing this issue will not cause you any mental stress or other disadvantages.

We hope that the results of the investigation can be useful to reduce the high rate of unwanted pregnancies in adolescents, something that is also a goal for the Ministry of Health of Ecuador. We hope this can contribute to improve the health of young women and newborns.

As a thank you for taking the time to participate in the research project, we want to offer you a snack.



Data confidentiality

We will use a recorder to tape the conversation, to later facilitate its transcription and translation into English if we conduct the interview in Spanish. The original tape will be stored on a secure server for 5 years after the end of the project for quality control and research verifiability. After 5 years the original tape will be deleted.

All information derived from your participation in this study will be kept strictly confidential and anonymously. Any publication or scientific communication of the research results will be completely anonymous.

Any personal data that has been recorded about you will only be used as described in the study description. You have the right to access the information that has been recorded about you and the right to stipulate that any error in the information that is recorded is corrected. You also have the right to know what security measures have been taken when your personal data is processed.

All information will be processed and used without your name or personal identification number, including any other information that is directly identifiable to you.

Information about you will be anonymized or deleted five years after the project has ended.

By agreeing to participate in the study, you also agree that information about your age, sex and profession may be transferred to another country as part of the collaboration and publication of our research.

Participant's rights and options

Your participation in this investigation is completely voluntary. If you wish to participate in the project, you must sign the declaration of consent on the last two pages. It can be withdrawn at any time and without any specific reason, by communicating with the researchers. If you decide to withdraw from the project, you may require that your personal data and statements be deleted, unless, however, the data has already been analyzed or used in scientific publications. If at a later time you wish to withdraw your consent or have questions about the project, you can contact Ingvild Hatlevoll, Ylva Dahle or Marie Fossen Nordal.

The project is approved by the Regional Committee for Ethics in Medical and Health Research in Norway (reference: 30512 and 31378. 14.10.2019) and by the USFQ Human Research Ethics Committee.



In accordance with the General Data Protection Regulation, the controller NTNU and the project manager Arne Kristian Myhre is independently responsible to ensure that the processing of your personal data has a legal basis. This project has legal basis in accordance with the EUs General Data Protection Regulation, article 6 no. 1a, article 9 no. 2a and your consent.

You have the right to submit a complaint on the processing of your personal data to the Norwegian Data Inspectorate.

Procedures to verify the understanding of the information included in this document

- Can you explain how you will participate in this study?
- What do you do if you are participating and decide not to participate anymore?
- What are the possible risks for you if you decide to participate? Do you agree with these risks?
- What will you receive for participating in this study?
- Is there a word that you have not understood and would like to be explained?

Contact information

If you have any questions about the study or want to revoke from it, please send an email to the principal investigator, ingvild.hatlevoll@gmail.com or contact Mariajose Vallejo, mariajose.vallejo@hgona.gob.ec

If you have questions about this form you can contact Dr. Iván Sisa, President of CEISH-USFQ USFQ, using the following email: comitebioetica@usfq.edu.ec



Informed consent	
<p>I understand my participation in this study. I have had the risks and benefits of participating explained to me in a clear and simple language. All my questions were answered. I was allowed enough time to make the decision to participate and was given a copy of this informed consent form. I voluntarily agree to participate in this investigation.</p> <p>By signing this form, you voluntarily agree to participate in this research. You receive a copy of this form.</p> <p>I accept that my interview is recorded. Signature of the participant:</p>	
Name and surname of the participant:	Date
Signature of the participant:	CC
Name and surname of the witness:	Date
Signature of the witness:	CC
Name and surname of the researcher:	Date
Signature of the researcher:	CC
Refusal of consent	
Name and surname of the participant:	Date
Signature of the participant:	CC
Name and surname of the witness:	Date
Signature of the witness:	CC
Name and surname of the researcher:	Date
Signature of the researcher:	CC
Withdrawal of consent	
Name and surname of the participant:	Date
Signature of the participant:	CC
Name and surname of the witness:	Date
Signature of the witness:	CC
Name and surname of the researcher:	Date
Signature of the researcher:	CC



Formulario de Consentimiento Informado por escrito para entrevistas a profesionales de salud

Título de la investigación:

Challenges with teenage pregnancies and the use of contraception among adolescents in Quito, Ecuador, in the year 2020

Organizaciones que intervienen en el estudio: Universidad de Ciencia y Tecnología de Noruega (NTNU)

Investigador Principal: Ingvild Hatlevoll, +47 991 046 10, ingvild.hatlevoll@gmail.com

Co-investigadores:

Dra Saskia Villamarin, USFQ, 099 802 8494

Marisol Bahamonde, USFQ, mbahamonde@usfq.edu.ec

Maria José Vallejo, USFQ, mariajose.vallejo@hgona.gob.ec

Arne Kristian Myhre, NTNU, arne.k.myhre@ntnu.no

Aslak Steinsbekk, NTNU, aslak.steinsbekk@ntnu.no

Ylva Dahle, estudiante de medicina, dahleylva@gmail.com

Marie Fossen Nordal, estudiante de medicina, mariefnordal@gmail.com

DESCRIPCIÓN DEL ESTUDIO
Introducción <p>Este formulario incluye un resumen del propósito de este estudio. Usted puede hacer todas las preguntas que quiera para entender claramente su participación y despejar sus dudas. Para participar puede tomarse el tiempo para pensar si desea participar o no.</p> <p>Usted ha sido invitado a participar en una investigación sobre el uso de anticoncepción entre adolescentes y los desafíos relacionados con el embarazo adolescente como un profesional de la salud y empleado en HGONA.</p>
Propósito del estudio <p>Esta investigación tiene por objetivo que obtener más conocimiento sobre las diferentes barreras para el uso de la anticoncepción entre las adolescentes y los desafíos relacionados con el embarazo adolescente.</p>



Vamos a hacer entrevistas individuales con aproximadamente 15 profesionales de la salud en HGONA, que trabajan con adolescentes, para recoger información al proyecto de investigación. Vamos a preguntar sobre experiencias con el embarazo adolescente, y experiencias y percepciones sobre el uso de anticonceptivos entre las adolescentes en Ecuador.

Descripción de los procedimientos para llevar a cabo el estudio

Si Ud. acepta participar, vamos a entrevistarle sobre sus pensamientos y experiencias como profesional de la salud sobre el uso de anticonceptivos entre las adolescentes en Ecuador, y las barreras posibles para el uso de anticonceptivos en este grupo y también sobre los desafíos que sigue el embarazo adolescente. La entrevista va a durar aproximadamente 30 minutos. La entrevista puede ser en español o inglés, lo que prefiera.

El proyecto va a recopilar y registrar información sobre su edad, sexo y profesión. Esta información se utilizará para describir la muestra, y no estará vinculada a las respuestas que dé en la entrevista. Esta información se utilizará de tal manera que no pueda ser identificado.

Queremos dejar en claro que en la entrevista queremos que nos cuente sobre experiencias e impresiones sobre el tema que ha obtenido a través de su trabajo profesional. No queremos que nos cuente sobre sus experiencias personales. Además, no queremos que nos diga nada que pueda usarse para identificar pacientes o colegas.

Riesgos y beneficios

Los temas de la anticoncepción y el embarazo adolescente puede ser polémicos en algunas partes del mundo, pero como profesional de la salud, creemos que discutir este tema no le causará ningún estrés mental u otras desventajas.

Esperamos que los resultados de la investigación pueda ser útil para reducir la alta tasa de embarazos no deseados en adolescentes, algo que también es un objetivo para el Ministerio de Salud de Ecuador. Esperamos que esto pueda contribuir para mejorar la salud de las mujeres jóvenes y los recién nacidos.

Como agradecimiento por tomarse el tiempo para participar en los proyectos de investigación, queremos ofrecerle un refrigerio.

Confidencialidad de los datos



Vamos a usar una grabadora para realizar la grabación de la conversación y facilitar posteriormente su transcripción y traducción al inglés si realizamos la entrevista en español. La grabación original se almacenará en un servidor seguro durante 5 años después del final del proyecto para el control de calidad y la verificabilidad de la investigación. Después de 5 años la grabación original se eliminará.

Toda la información derivada de su participación en este estudio será conservada en forma de estricta confidencialidad y anónimamente. Cualquier publicación o comunicación científica de los resultados de la investigación será completamente anónima.

Cualquier dato personal que se haya registrado sobre usted solo se utilizará como se describe en el descripción del estudio. Usted tiene derecho a acceder a la información que se ha registrado sobre usted y el derecho a estipular que cualquier error en la información que se registra se corrige. También tiene derecho a saber qué medidas de seguridad se han tomado cuando se procesen sus datos personales.

Toda la información será procesada y utilizada sin su nombre o número de identificación personal, incluye cualquier otra información que sea directamente identificable para usted.

La información sobre usted será anonimizada o eliminada cinco años después de que el proyecto haya finalizado.

Al aceptar participar en el estudio, también acepta que la información sobre su edad, sexo y profesión se pueda transferir a otro país como parte de la colaboración y publicación de nuestra investigación.

Derechos y opciones del participante

Su participación en esta investigación es totalmente voluntaria. Si desea participar en el proyecto, deberá firmar la declaración de consentimiento en las últimas dos páginas. Se puede retirar en cualquier momento y sin ningún motivo específico, comunicándolo a los investigadores. Si decide retirarse del proyecto, puede exigir que se eliminen sus datos personales y declaraciones, a menos que, sin embargo, los datos ya hayan sido analizados o utilizados en publicaciones científicas. Si en un momento posterior desea retirar su consentimiento o tiene preguntas sobre el proyecto, puede comunicarse con Ingvild Hatlevoll, Ylva Dahle o Marie Fossen Nordal.

El proyecto está aprobado por El Comité Regional de Ética en Investigación Médica y de Salud en Noruega (referencia: 30512 y 31378. 14.10.2019) y por el Comité de ética de investigación en seres humanos de la USFQ.



De conformidad con el Reglamento general de protección de datos, el controlador NTNU y el gerente del proyecto Arne Kristian Myhre son responsables de forma independiente de garantizar que el procesamiento de sus datos personales tenga una base legal. Este proyecto tiene base legal de acuerdo con el Reglamento General de Protección de Datos de la UE, artículo 6 no. 1a, artículo 9 no. 2a y su consentimiento.

Tiene derecho a presentar una queja sobre el procesamiento de sus datos personales a la Inspección de Datos de Noruega.

Procedimientos para verificar la comprensión de la información incluida en este documento

- ¿Puede explicarme cómo va a participar en este estudio?
- ¿Qué hace si está participando y decide ya no participar?
- ¿Cuáles son los posibles riesgos para usted si decide participar? ¿Está de acuerdo con estos riesgos?
- ¿Qué recibirá por participar en este estudio?
- ¿Hay alguna palabra que no haya entendido y desearía que se le explique?

Información de contacto

Si usted tiene alguna pregunta sobre el estudio o quiere revocarse, por favor envíe un correo electrónico a la investigador principal, ingvild.hatlevoll@gmail.com o contactar a Mariajose Vallejo, mariajose.vallejo@hgon.gob.ec

Si usted tiene preguntas sobre este formulario puede contactar al Dr. Iván Sisa, Presidente del CEISH-USFQ USFQ, al siguiente correo electrónico: comitebioetica@usfq.edu.ec



Consentimiento informado	
<p>Comprendo mi participación en este estudio. Me han explicado los riesgos y beneficios de participar en un lenguaje claro y sencillo. Todas mis preguntas fueron contestadas. Me permitieron contar con tiempo suficiente para tomar la decisión de participar y me entregaron una copia de este formulario de consentimiento informado. Acepto voluntariamente participar en esta investigación.</p> <p>Al firmar este formulario, usted acepta voluntariamente participar en esta investigación. Usted recibe una copia de este formulario.</p> <p>Acepto que se grabe mi entrevista. Firma del participante:</p>	
Nombres y apellidos del participante:	Fecha
Firma /huella del participante:	CC
Nombres y apellidos del testigo:	Fecha
Firma /huella del testigo:	CC
Nombres y apellidos del investigador:	Fecha:
Firma del investigador:	CC
Negativa del consentimiento	
Nombres y apellidos del participante:	Fecha
Firma /huella del participante	CC
Nombres y apellidos del testigo:	Fecha
Firma /huella del testigo	CC
Nombres y apellidos del investigador:	Fecha
Firma del investigador	CC
Revocatoria del consentimiento	
Nombres y apellidos del participante:	Fecha
Firma /huella del participante	CC
Nombres y apellidos del participante:	Fecha
Firma /huella del testigo	CC
Nombres y apellidos del investigador	Fecha
Firma del investigador	CC

Appendix 5: Interview Guide

Version 1 (before pre-analysis)

Opening question for the participant to reflect upon:

- Tell me about your experience as a health care professional who attends to adolescent pregnancy and the challenges of working with this group and couples.

During the interview we will bring the following subjects into the conversation:

- Tell me your impression of the most important consequences of pregnancy for the individual adolescent.
- Tell me about the most challenging aspects of working with adolescents during pregnancy.
- Tell me about the most challenging aspects of working with adolescents during childbirth and the postpartum period.
- Tell me about the different challenges in working with adolescents compared to other women giving birth in the hospital.

Version 2 (after pre-analysis)

Opening question for the participant to reflect upon:

- What are the most challenging parts for you as a health care provider when working with pregnant adolescents?

During the interview we will bring the following subjects into the conversation:

- What has been most difficult for you as a healthcare professional, facing pregnant adolescents?
- Could you tell me about the different challenges when working with pregnant adolescents compared to pregnant grown-ups?
 - Why is it more challenging working with pregnant adolescents than pregnant grown-ups?
 - How is it a challenge working with pregnant adolescents, compared to pregnant grown-ups?

