Graduate thesis

NTNU
Norwegian University of Science and Technology
Faculty of Medicine and Health Sciences

Ylva Dahle and Ingvild Hatlevoll

Barriers to use of contraception among adolescent girls in Quito, Ecuador

Qualitative insights from health professionals

Graduate thesis in Medicine

Supervisor: Arne K. Myhre and Aslak Steinsbekk

June 2020

NTNU
Norwegian University of Science and Technology

Universidad San Francisco

Ylva Dahle and Ingvild Hatlevoll

Barriers to use of contraception among adolescent girls in Quito, Ecuador

Qualitative insights from health professionals

Graduate thesis in Medicine
Supervisor: Arne K. Myhre and Aslak Steinsbekk
June 2020

Norwegian University of Science and Technology
Faculty of Medicine and Health Sciences

NTNU
Norwegian University of
Science and Technology

Index

Preface

This thesis is written by Ingvild Hatlevoll and Ylva Dahle, who study medicine at the Norwegian University of Science and Technology (NTNU). The data collection for the project was done in Ecuador in collaboration with Marie Fossen Nordal, a fellow medical student at NTNU. Nordal's thesis is titled "The challenges of adolescent pregnancies in Quito, Ecuador, from a healthcare provider perspective".

In the fall of 2018, Ingvild Hatlevoll and Marie Fossen Nordal spent an exchange semester practicing at The Nueva Aurora Luz Elena Arismendy Hospital of Gynecology, Obstetrics and Pediatrics (HGONA) in addition to two other hospitals in Quito. There they noticed a high rate of teenage girls giving birth. Locals from Quito told them that contraception is a taboo subject among the population and that this might be a contributor to the high rate of adolescent mothers in Ecuador. At HGONA, were this study was conducted, all postpartum women are offered an insertion of a contraceptive implant, free of charge. Many accept this offer; however, Hatlevoll and Nordal was told stories by employees at the hospital of teenage girls who removed the implant for different reasons, returning to the hospital a year later to give birth once again. We wanted to investigate this topic further and explore health professional's perception on why so many young girls fail to use contraception.

We want to thank our supervisors Arne Kristian Myhre, Associate Professor at the Department of Clinical and Molecular Medicine, Faculty of Medicine and Health Sciences, NTNU, and Aslak Steinsbekk, Professor at the Department of Public Health and Nursing, Faculty of Medicine and Health Sciences, NTNU, for the invaluable help they have provided us during the planning of the project, the data collection period, the analyzing process and the writing of the thesis. Your feedback has been of great help and value to us.

We also wish to offer our thanks to our collaborators in Ecuador, for helping us plan and conduct the project. Dr. Saskia Villamarin, gynecologist at HGONA, helped initiate the project in 2018. Marisol Bahamonde, pediatrician and professor at the College of Health Sciences, San Francisco University of Quito (USFQ), has been of great help in the process of planning the study and applying for approval from the Human Research Ethics Committee of USFQ. A special thanks to María José Vallejo, Coordinator of the Teaching and Research Unit at HGONA, who acted as co-researcher during the data collection period, aiding us in

getting in contact with possible participants and acting as a translator in six of the interviews, in addition to answering all our questions and giving us a warm welcome at the hospital.

Trondheim, May 2020

Ylva Dahle and Ingvild Hatlevoll

List of abbreviations

ENSANUT	Encuesta Nacional de Salud y Nutrición (The National Survey of Health and Nutrition)
GII	the Gender Inequality Index
HGONA	Hospital Gineco Obstétrico Pediátrico de Nueva Aurora "Luz Elena Arismendy" (The Nueva Aurora Luz Elena Arismendy Hospital of Gynecology, Obstetrics and Pediatrics)
HIV/AIDS	Human Immunodeficiency Virus Infection / Acquired Immune Deficiency Syndrome
IESS	Instituto Ecuatoriano de Seguro Social (the Ecuadorian Social Security Institute)
IUDs	Intrauterine devices, long-acting reversible birth control
KAB	Knowledge-attitude-behavior
UHC	Universal health coverage
UN	United Nations
USFQ	Universidad San Francisco de Quito (The San Francisco University of Quito)
WHO	World Health Organization

Abstract

Objective: There is a lack of information about barriers to the use of contraception in the Latin American population. The aim of this study was to explore health professionals' perception on barriers to the use of contraception among adolescent girls in Ecuador.

Methods: We conducted a qualitative study using semi-structured interviews with 12 health professionals working at Hospital Gineco Obstétrico Pediátrico de Nueva Aurora Luz Elena Arismendy (HGONA) in Quito, Ecuador. The interviews were audio-recorded, and later transcribed. The data was analyzed following the approach used in systematic text condensation as described by Malterud.

Results: According to health professionals, several barriers exist to the use of contraception among adolescent girls in Ecuador. The main findings were categorized in the four themes; "An influence of taboo and social norms", "Adolescents lack adequate information", "Myths and misconceptions" and "Who decides?".

Conclusion: This study identified the taboo of sexuality, myths and the subsequent lack of information regarding the topic, and parent- and male partner influence as the main barriers to contraceptive use among adolescent girls in Ecuador as perceived by health professionals. To address these barriers, interventions should focus on increasing the knowledge on the subject, with parent education programs and by enhancing early sexual education in schools. Further, we suggest the implementation of youth friendly services, with specially trained health professionals.

Introduction

About Ecuador

Ecuador is situated in the northwestern South America and the capital is Quito. The country's geography includes the Andes mountain range, the Amazon area and the coastal region, as well as the Galapagos Islands (2). As of May 2020 Ecuador has 17,4 million inhabitants (3). Due to the intricate indigenous and colonial history, Ecuador is home to a patchwork of ethnic identities, including mestizos, who have both European and indigenous ancestry and represents the majority of the population, as well as indigenous peoples, Afro-Ecuadorians and whites (2). The main religion is Roman Catholicism (2). Ecuador is a democratic republic with the president as head of state. The country is classified by the United Nations (UN) as a Developing Economy (4) and a quarter of the population was below the national poverty line in 2019 (5). The Gini Index, which is a measurement for economic inequality, was at 45,4 in 2018, indicating that the income is unevenly distributed in the population (6).

The healthcare system

The Ecuadorian healthcare system includes a public and a private sector (7). The main healthcare providers in the public system includes The Ministry of Public Health and the Ecuadorian Social Security Institute (IESS) (8,9). There also exists several private healthcare facilities and traditional providers. Private insurance cover healthcare for approximately 3% of the population (8,10).

The country has a universal health coverage (UHC) system that provides the right to free healthcare for all citizens, including emergency care (8). Nevertheless, in the public sector there are long waiting times. A study conducted in rural Ecuador found that despite the national UCH policy, approximately 50% of all patients with emergencies had their first contact with a private healthcare provider, mainly because of expected difficulties to be seen by a public healthcare provider (8).

The public healthcare system is organized in four levels of attention. The first level consists of general consults and health centers which resolves 80% of the population’s health needs and can refer patients to higher levels of care. The second level has specialized consults, outpatient day hospitals and general hospitals. The third level of attention has specialized hospitals, which attend to patients with highly complex health problems, performs transplants and intensive care. The fourth level includes centers for clinical experimentation (7).

According to the Ecuadorian Statistical Registry of Health Resources and Activities (11), there were 4165 national level health facilities registered in Ecuador in 2018. The average number of health professionals for every 10 000 inhabitants was about 23,5 doctors, 0,9 psychologists, 14,5 nurses and 1,4 midwives. In comparison, Norway has 56 medical doctors, 15,4 psychologists, 201 nurses and 6,1 midwives for every 10 000 inhabitants (12).

A national programme in Ecuador, established in 2007, offered differentiated healthcare for adolescents (13). This gave a rapid increase in visits from adolescents, including those who wanted to obtain contraception. However, this was replaced in 2011 by another model which no longer considered adolescents as a group that should receive differential care, resulting in the suffering part being the specially trained medical staff and the adolescents (13).

The hospital in Quito

Hospital Gineco Obstétrico Pediátrico de Nueva Aurora "Luz Elena Arismendy" (HGONA) was opened in January 2016. It is a specialized gynecological, obstetric and pediatric hospital on the third level of attention in the public health care system. The hospital provides specialized care to patients with obstetric complications, high-risk pregnancies, newborn complications and pediatrics up to 5 years of age (14). The hospital is situated in the South of Quito, between the areas Guamaní, Turubamba and Quitumbe. According to a report from Universidad Simon Bolivar, 50-80% of the population in these areas is poor (15). The hospital provides health care to the population in the south of Quito, and the sectors around this part of the city, which in total includes more than 4 400 000 inhabitants (14).

The status of adolescent pregnancy, contraception and abortion in Ecuador

As the Human Rights Watch states in their World Report of 2019 (16), "Ecuador faces chronic human rights challenges, including [..] far-reaching restrictions on women's and girls' access to reproductive health care."

Adolescent pregnancy and its consequences

Adolescent pregnancy is a major health problem worldwide, with a higher rate in developing countries. The adolescent (15-19 years) birth rate in Ecuador was in 2014 at 56,5 per 1000, a number 12 times higher than in the Scandinavian countries (17) and one of the highest in Latin America (18). However, in the last few years, the number of births among the youngest mothers in Ecuador has

decreased; in 2010, the birth rate among girls aged 10-14 was 2.8 per 1000 women, while the rate in 2014 was 1.8 (19). The National Survey of Health and Nutrition in Ecuador (ENSANUT) from 2012 estimated that 19% of live births were to women under the age of 20 (20) and according to the UN (21) in 2013, 21% of the women in Ecuador aged 20-24 had had a live birth before the age of 18.

Globally, complications during pregnancy and childbirth are the leading causes of death for teenage girls aged 15 to 19 years (22). In addition to the fatal consequences for the health of the teenager and her baby, a pregnancy also has social and economic consequences for the girl. A study from the Amazon basin of Ecuador (23) states that "Adolescent pregnancy can also be conceptualized as a marker of inequity, since it disproportionately affects girls from the poorest households and those who have not been able to attend school". This illustrates a poverty pattern were the highest proportion of mothers younger than 19 years, is found in groups with low income and low education (13). Ecuador's government is aware of the problem, and with their Intersectoral Policy for Prevention of Pregnancy in Girls and Adolescents 2018-2025 (24), the aim is to reduce the number of adolescent pregnancies. The report concluded that to give improved information, including extensive education about sexuality and sexual health, were the most important interventions to reach this goal (24).

Knowledge and use of contraception

An study on recent adolescent mothers in Ecuador found that 50% did not know what family planning was and that only 34% had ever used a condom (25), while another Ecuadorian study (26) found that 27% of women aged 15-19 years had never used any method of contraception. The World Health Organization (WHO) statistics from 2004 on contraceptive prevalence, shows that only 56% of girls aged 15-19 use contraception, compared to 73% of all women in total in Ecuador (27). According to ENSANUT from 2018 (19), only 44% of Ecuadorian girls between 12 and 24 years used a contraceptive method in their first sexual intercourse. The main reasons for not using a contraceptive were that they did not know any methods of contraception and that they were unable to obtain a contraceptive (20,24).

Numbers from WHO shows that the proportion of married or in-union women of reproductive age who have their need for family planning satisfied with modern methods, is 81% in Ecuador, compared to a regional average of 83% and global average of 77%. These numbers include women currently sexually active or exposed to risk of pregnancy, not wanting to become pregnant, not using any method of contraception (28,29)

Abortion and unintended pregnancies

About half of the adolescent (15-19 years) pregnancies in developing regions are unintended (30) and in Latin America, the number of unwanted pregnancies among adolescents is growing (26). According to a study published in 2010 (31), 36% of all births in Ecuador are not intended. In Ecuador provoked abortion is only legal if performed when there is a threat to the life of the pregnant woman and this threat cannot be resolved by other means, or when the pregnancy has resulted from sexual crime against a mentally disabled woman. Women who obtain medically assisted abortions who do not meet these criteria, may be criminally prosecuted and risk a prison penalty of up to two years (16,30,32). An article states that 25% of adolescent (15-19 years) pregnancies in Ecuador is a result of sexual violence (32), however, in September 2019, Ecuador's parliament rejected a bill to allow abortions in cases of rape (32).

Despite strict abortion laws, more than half of unwanted pregnancies among adolescents in developing regions, end in abortion (30). A cross-sectional analysis published in 2017 (33) found that between 2004 and 2014 the number of miscarriages and abortions reported in Ecuador was 431,614. Of these 9% were spontaneous abortions, 6% were justified medical abortions, and 85% were "other pregnancies that ended in abortion" (33). Fear of legal prosecution makes women seek illegal abortions, which are often unsafe and without medical assistance (16). This inflict a high risk of complications and injuries for the mother, with incomplete abortion, excessive blood loss, infection and perforation among the main risks (32–35). During 2010-2014, the majority of the abortions in Latin America and the Caribbean were classified as unsafe. At least 10% of all maternal deaths in 2014 in this region were from illegal abortions (36).

As abortion can have severe outcomes, both legal and medical, there is a need to focus further on the *prevention* of adolescent pregnancies. As Metcalfe et al (37) states;

> *As with many health issues, it is much more cost effective to focus on prevention rather than management within a health system. By understanding if certain population groups are (and are not) effectively using contraception, public health interventions can be more appropriately targeted to promote contraceptive use in groups at higher risk for unintended pregnancies.*

Contraception and religion

Religion can be of importance regarding the view of sexual relations and birth control. Of the approximately 92% of the Ecuadorian population that affirms to have a religion, 80% belongs to the Catholic religion (38). The Catholic Church teaches that sex between men and women is reserved for marriage (39) and that the only acceptable form of sexual activity is within a married couple,

without the use of birth control (40). Historically, this religion has not supported neither abortion nor contraception, and in 1997, the Vatican's Pontifical Council for the Family (41) stated: "Contraception is gravely opposed to marital chastity, […] it harms true love and denies the sovereign role of God in the transmission of human life". In 2008 the Congregation for the Doctrine of the Faith, the body responsible of defending Catholic Doctrine, released the instructions Dignitas Personae (42) which states that modern methods for contraception "fall within the sin of abortion and are gravely immoral".

Equal rights in Ecuador

In Ecuador, equal rights for men and women are ensured by the Ecuadorian Constitution, as well as by binding international agreements ratified by the Ecuadorian State, like the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (43). Nevertheless, Ecuador ranks 86 out of 189 countries at the Gender Inequality Index (GII) by the United Nations Development Programme (44), with a score of 0.385. GII is a measurement for gender-based disadvantage, and takes into account three dimensions; reproductive health, empowerment and the labour market. The index ranges from 0 to 1, where 0 indicates equality between men and women (44).

Research on barriers to adolescents' use of contraception

We conducted a search for English literature, published after the year 2000, on the topic of barriers to contraceptive use and found research from different low- and middle-income countries all over the world. There was a predominance of studies from Africa (45–49), an observation supported by review articles on the subject (50–52), that mainly include research from Africa and Asia, though with some exceptions. We have not found any similar publications on this topic from Ecuador and there seems to be a lack of English literature on the subject of contraception and family planning in Latin America in general. Hence, our study may contribute to increase the knowledge about family planning and adolescent contraceptive use in Ecuador and the Latin-American region.

However, there have been conducted several studies on the topic of adolescents and HIV in Ecuador (53–55) which briefly assess the subjects of contraception and sexuality, especially condom use. Some of these studies found lacking knowledge of family planning and a low rate of condom use in the adolescent population. Further, studies from Ecuador about risk factors for adolescent pregnancy (56,57) have found early sexual debut, sexual abuse, poor reproductive health knowledge and non-use of contraception during first intercourse to be important risk factors. A qualitative study from Guatemala (58) also found a lack of knowledge about methods, fear of side effects, the husband being

against family planning and the belief that using contraception is a sin, to be barriers to the use of contraception.

A few studies have researched health professionals' view about contraceptive use and reproductive health services among adolescents. A study from Ecuador, Bolivia and Nicaragua (59) found that healthcare providers believed prioritizing adolescents as a patient group and increased awareness about adolescent friendly approaches were important measures to improve the reproductive services. Further, two studies from Africa interviewed health professionals about why they believed adolescents did not use contraception (60), and about barriers and facilitators adolescents living with HIV face when accessing contraception (61). These studies found that contraception was associated with promiscuity and was dependent on provider behavior and health system improvements.

Many of the barriers to the use of contraception among adolescents recurs in several studies and systematic reviews from different parts of the world. Myths and misconceptions (45,47–51,61–64), limited knowledge (49–51,55,56,58,62,64) and the taboo and stigma surrounding contraception and sexuality (49,51,61,62,65–67) are recurring barriers reported in several publications. This indicates that barriers may be valid across countries and cultures, as is also a conclusion found in several systematic reviews on the subject (51,62,65). We believe this could imply that efforts which have been found efficient in breaking the barriers and increasing the contraceptive use in other parts of the world, may also be efficient in Ecuador.

Aim of the study

Hence, the aim of this study was to explore the barriers to the use of contraception among young girls in Ecuador through interviews with health professionals. The research question was thus "Barriers to use of contraception among adolescent girls in Ecuador – Qualitative insights from health professionals".

Methods

Research design

To answer the research question, a qualitative study using semi-structured interviews with health professionals was conducted. The study took place at the hospital HGONA in Quito, Ecuador. The interviews were conducted in February 2020. The study was approved by the Regional Committee for Medical and Health Research Ethics in Norway (appendix 1) and the Human Research Ethics Committee of USFQ in Ecuador (appendix 2).

This study was part of a larger project on health professionals' views on contraceptives and pregnancy in adolescent girls in Ecuador, named "Challenges with adolescent pregnancies and the use of contraception among adolescents in Quito, Ecuador, in the year 2020". A fellow medical student conducted a study focusing on the challenges of adolescent pregnancies from a healthcare provider perspective. The interviews for both studies were carried out together, using separate interview guides.

Participants

We aimed to include health professionals working in hospital departments where they met pregnant and postpartum adolescent girls daily. To explore the topic from different perspectives, the aim was to have variation in the participants professional background, age and gender.

Recruitment

The participants included in the study, were elected using a purposive sampling strategy. All health professionals employed at the hospital and working with pregnant adolescents, were eligible. Possible participants were contacted in person at the hospital by the researchers, or over the phone by the researcher who was employed at HGONA. When a health professional agreed to participate, date and time for the interview was arranged. This recruitment process was a requirement from the hospital. At the time for the interview the participants were given oral and written information about the project by the researchers, using an informational letter (appendix 3) and an informed consent form (appendix 4). All participants signed the informed consent. The same informational letter and informed consent were used for both studies within the larger project, as was required by the hospital and the Human Research Ethics Committee of USFQ.

The number of participants was determined following the principle of data saturation (68); during the last few interviews no new themes emerged, and thus no further interviews were conducted.

Data collection and transcription

All the interviews were conducted in a quiet room at the hospital during the working hours. Five of the interviews were conducted in Spanish by two of the Norwegian researchers who speak Spanish. Further, as one of the researchers is not fluent in Spanish, one interview was conducted in English, and the rest in Spanish with the local researcher as translator.

A semi-structured interview guide (appendix 5) was used. This was modified after a preliminary analysis, described below, hence there is two versions as can be seen under *Appendices*. In the first version of the interview guide, the main question was: "Tell me about your experiences as a health professional about the use of contraceptives among adolescent girls". The term *adolescent* was used about girls from 12 to 19 years of age, as the hospital uses this definition.

During the first four interviews, all of the participants had talked about what we believed to be causes for teenage pregnancy, rather than barriers to the use of contraception among adolescent girls. Therefore, the interview guide was adjusted to prevent this in the following interviews. In the modified version of the interview guide, the main question was: "Tell me what or who prevents adolescent girls from using contraception in your experience?" The following main topics were introduced if the participants did not speak about them spontaneously; barriers to contraceptive use before and after pregnancy, and how partners, parents, friends and health workers influence adolescent girls' use of contraception. Before each interview, it was emphasized that we wanted the participants to talk about their experiences as health professionals, and not their personal experiences.

The interviews were audio-recorded, and later transcribed. The Spanish interviews were translated to Norwegian or English in the transcription process, depending on the preferred language for the researcher.

Analysis

The data was analyzed following the approach used in systematic text condensation as described by Malterud (68). This approach consists of the following four steps: (1) reading the interviews to gain a general impression and detect initial themes, (2) develop code groups from the initial themes, identify meaning units describing the barriers to contraceptive use for adolescents and coding these, (3) sort the data within each code group further into subgroups, condense the content in the subgroups and

identify illustrating quotes, and (4) synthesize the condensates from each code group, making a re-conceptualized description of the different barriers to the use of contraception.

We conducted a preliminary analysis after the first four interviews and came up with five preliminary themes; "it's not the adolescent girls' choice (to use contraception)", "shame and taboo", "myths and misconceptions", "lack of information" and "immaturity". We discussed these themes with our supervisors and decided to continue with four of these themes, excluding immaturity, as they were most relevant to our research question.

After completing 12 interviews we conducted a new round of analysis using the data from all of the interviews. In this process we made some changes to the preliminary themes, and developed these further to result in the four main categories "An influence of taboo and social norms", "Adolescents lack adequate information", "Myths and misconceptions" and "Who decides?" During this work we also discussed the topic "Chaotic life situation, violence and vulnerability" as a possible theme, but decided to exclude this from the further analysis because we considered this to be a cause of teenage pregnancy more than a barrier to the use of contraception.

When analyzing the data, the term "contraception" was defined as modern contraceptives; condoms, copper intrauterine devices (IUDs) and hormonal contraceptives, including hormonal IUDs, birth control pills, implants and injections (69). This means that we based the result categories on the barriers the participants gave to these contraceptive methods, and not other methods not considered to be modern contraceptives, like abortion and the emergency contraceptive pill. However, these methods still appear in the results, since they were mentioned by the participants on several occasions and constituted illustrating examples.

Results

A total of 12 persons were interviewed. The range in gender, age and profession are shown in Table 1. Eleven of the participants were from Ecuador, one was from a different South-American country. All the participants worked at the HGONA at the time of the interviews.

Table 1. Characteristics of the informants

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

According to the informants, several barriers existed to the use of contraception among adolescent girls in Ecuador. Sexuality being perceived a taboo in the society and the shame associated with this topic, was identified as a premise for the difficulty of accessing a contraceptive for adolescent girls. This would also contribute to inadequate information and a cluster of myths regarding sexuality and contraception. Influence and prohibition by partners and parents were also identified as important in preventing contraceptive use among adolescent girls. Details of these findings are elaborated below.

An influence of taboo and social norms

When explaining about barriers which prevent adolescent girls from using contraception, a majority of the informants said that the topic of sexuality is a taboo in the Ecuadorian culture and society, and that social norms strongly influence this. One informant told us "we are trying to cover the sun with only one finger with this issue". This was explained as a common expression in Ecuador which means that you don't want to see or relate to a problem, for instance because it is a taboo, but that you don't succeed - you can't cover the whole sun so it doesn't shine with just one finger. Another informant explained it like this:

> *Here in Ecuador it is said that one should not "open the eyes" of the adolescents to information about sexuality and contraception, for fear of them exploring the topic of*

> *sexuality. Or even worse, that they might have sex.* (Psychologist)

Some informants explained how the Ecuadorian society is built on the Catholic religion, and according to them, this belief is not favorably disposed to adolescents accessing information about sexuality and contraception. It was also said that, because of this, children are told that their sexual life should start when they get married and that sex before marriage is wrong. The consequence was said to be that adolescent girls are expected to not start their sexual life as a teenager or try to access contraceptives. An informant who talked about sex before marriage, put it like this:

> *So I believe this social construct* [where sexuality is a taboo], *comes from the Catholic view, where the vision is to not do it, simply not do it.* (Psychologist)

This was by one informant contrasted to what was termed male chauvinism. The informant said that among Ecuadorians there exists a perception that a man becomes a man when he is having sex, while the woman will be criticized for doing the very same thing. If she has sex before marriage, she will have failed her parents, her religion and the society. Some health professionals also expressed how this was especially a taboo for adolescent girls, as they are supposed to be teenagers and the girls in the house - and don't have the authority to start their sexual life, and even less to use contraception.

Consequences of the taboo

The taboo of sexuality and contraception was said to evoke numerous consequences. Most informants noted that these topics are considered shameful. Therefore, it was mentioned, many adolescent girls feel that they have to keep the beginning of their sex life a secret, and if they try to access a contraceptive method, they risk revealing this secret. An example given, was that because adolescents usually need to bring a parent to get contraceptives at the health centers, many would not go in order to keep the secret. Furthermore, some explained that many adolescent patients had said they were ashamed to ask the doctor for contraception. This shame had outweighed the risk of becoming pregnant. One informant explained:

> *The adolescents feel really ashamed. In this hospital we have condom-machines, but even the sound that the machine produces, makes them feel shame, so they don't want to use it. When the machine produces a sound, everyone is looking at them.* (Healthcare student)

Because of the shame, it was explained, these topics are rarely talked about. For instance, it was perceived as unusual for an adolescent girl to discuss contraception with her partner when they have sex for the first time. Sexuality and contraception were also believed to be difficult matters to address

with the parents. It was told that parents often don't want to talk about these issues openly in the house. If an adolescent asks for advice, it was said, it would usually be dismissed with statements like "don't have sex" or "take care of yourself, protect yourself" - but without a description of why or how. However, several adolescents had expressed to the informants that they would have liked to discuss these matters with their family.

Some informants said that adolescents can be concerned about what others will think if they choose to use contraception, as young people who seek information about sexuality and contraception are often judged for not having a good behavior or a good moral. An example given was that if a girl brings condoms when she is going to have sex, she risks being seen as promiscuous by the boy. Some informants suggested that there exist healthcare providers who lack the competency to work with adolescents, and who judge teenagers seeking contraceptives as irresponsible, and in this way pose a barrier to contraceptive use. One informant told us about a patient who had gone to a health center to access a contraceptive, but had been refused because they thought she was too young. Further, we were told by one health professional about how rumors and judging were present in a small town where she had practiced some years earlier:

> *As everybody in the village I worked in, knew each other, it was quickly revealed who had come to the health center to get the emergency contraceptive pill. "Look, her daughter went to get the pill. Ah, is she doing that sort of thing? Just what I thought!" And then, suddenly the whole village knew.* (Medical doctor)

Adolescents lack adequate information

Some informants pointed out how the adolescents lack information about the consequences of sex. It was said they often don't know how they got pregnant or how to avoid catching an STD. According to the informants, many adolescents start having sex to experiment, or out of peer pressure, without thinking that it might result in a pregnancy. When talking about her adolescent patients, a female health professional stated:

> *They* [the pregnant adolescent patients] *didn't think a pregnancy could happen to them.* (Nurse)

There were informants who said that adolescents lack information about where contraception may be accessed and how to use it correctly. It was said that many adolescents are not aware that contraception is available for free in all public health institutions. Many of the health professionals also explained that the adolescents know *about* the different types of contraception, but they don't

know *how* to use each specific method correctly. An example was that many adolescents take the emergency contraceptive pill every time they've had sex. What usually happens, it was said, is that they have only been informed; "these are the methods for contraception", but nothing more. A female healthcare provider told us:

> *One girl said to me: "I didn't know that if I didn't take the pill the same day, I could get pregnant". She thought that she could just skip a day and take the contraceptive pill the next day, and it would have the same effect.* (Psychologist)

Some health professionals said that the only sources of information about sexuality and contraception many adolescents have, are their peers, partner and the internet. The problem with this, they said, is that this information is mostly misleading and wrong. An example given, was how their friends say you can have unprotected sex, and if you get pregnant, you can just do a secret abortion and it will be fine, no risks taken into account. An informant reflected that with correct information they would have been able to make better decisions about contraceptive use. Further, many informants remarked that their adolescent patients are usually poorly educated, because of their young age and because many drop out of school. They emphasized how this makes it hard for them to understand certain information. A healthcare provider explained:

> *When we are visiting the adolescent girls after they have given birth, we ask them if the doctor has given them information about contraceptive methods. Some of them respond "Yes, they have given me information, but I didn't understand it". Others say "Yes, they have given me information, and I'm going to get the contraceptive implant, but what is actually the implant?" For many years, they have not properly understood what the doctor treating them is saying. And that is why they have not agreed to get the contraceptive implant, and why they do not want it.* (Psychologist)

Myths and misconceptions

We were told that it's common in the Ecuadorian society to believe in a cluster of myths. Several informants mentioned that many adolescent patients, as mentioned above, believed that for one reason or the other, they could not get pregnant. Examples of such stories were that a girl cannot become pregnant the first time she has sexual intercourse and that in their first menstrual cycles girls are sterile. One informant noted that many indigenous patients didn't use modern contraception because of their myths and believes:

> *They have other believes about reproduction and sexuality. These girls don't protect*

> *themselves. They use water or ancient plants instead. But we do have a lot of pregnant indigenous women in this hospital, so it doesn't work, right?* (Social worker)

An exaggerated fear of side effects of contraception was mentioned as a barrier to its use among adolescents. It was explained that many believe hormonal changes following contraceptive use is harmful for the body and the psychological health of the girl. A female informant recalled a case where a mother had believed her daughter would become sterile if she was given a contraceptive implant, because, according to her, this had happened to a neighbour. Further, some informants said that adolescents worry about possible side effects of contraception. An informant told us:

> *Teenagers believe that if they get the injection, they will get fat. Or they will become very thin, or they will have more acne in the face or more hair on their arms. They don't want to look like that, so they don't use the implant or other contraception. This is a cluster of myths, in which they believe.* (Social worker)

Another widespread belief was that the use of contraception encourages girls to live a promiscuous life and have irresponsible sexual relations with many men, the informants explained. One male doctor told us that they offer a contraceptive implant to all the adolescents who have given birth in the hospital, but in his experience, accepting this was often not considered a mature or responsible decision. An informant recalled a patient she had had in her clinic:

> *The woman wanted to stop taking the contraceptive injections, so we gave her condoms that her husband could use. But the husband said: "No, using condoms will make my wife want to have sex with other men"* (Medical doctor)

Who decides?

Some informants had experienced that the boy would usually be the one who decided whether or not to use a contraceptive, often it would not be up to the girl at all. According to the informants, teenage boys generally refuse to use condoms because it doesn't give them the same pleasure as having sex without a condom. One informant also explained that not using a condom is seen as a way of showing your partner that you trust him. If a girl wants her partner to use condoms, she would be indirectly telling him that she doesn't trust him. Further, several accounts were given of men outright forbidding their female partner from using any form of contraception. A male informant believed this was because in the Ecuadorian society, making a woman pregnant can be a way for a man to show the world how macho he is. An informant noted that in a village she had worked, the women were not

allowed to use any oral contraceptive method. She recalled a female patient there, who had been given condoms instead;

> *The husband wouldn't accept this. He took a toy, shaped as a plastic cone, and placed the condom on this, before he used the toy to penetrate his wife. When the girl came to the hospital, she was bleeding and had strong pain. Imagine being penetrated with those hard edges - he had hurt her to the blood. I asked her "Why did he do this to you?" "He said that the condom had to be used, and that it would make me happy."* (Medical doctor)

As mentioned previously, there were informants who expressed that parents could sometimes pose a barrier to contraceptive use for their daughter. It was explained that many of the parents have low levels of education, and that this can make it challenging for them to understand the importance of contraception for their daughter. An informant said the girl risks getting house arrest or being denied having a boyfriend, if her parents find out that she is using contraception. However, after being taught about the advantages of contraception, the health professionals had experienced that parents would often accept that their daughter were given a contraceptive.

The informants explained that children under the age of 18 are considered minors in health care decisions, and that a signed consent from a parent or legal guardian is usually needed to give an adolescent a contraceptive method. An informant reflected how this is a challenge because if an underage patient wants a contraceptive implant, and her parents forbid it, they cannot give the patient an implant. An informant remembered a case where a contraceptive implant had been placed without the parent's knowledge:

> *Then the mother came and asked "Why? Why did you place the implant without my authorization?". This girl was 14 years old, which is a minor. Then we might also get into a legal situation. So, to prevent this we always try to call the legal guardian, so that they can give us the authorization to place the implant.* (Psychologist)

Discussion

Methodological considerations

We conducted the research in a foreign culture, in a language not native to us. We believe this has caused some misinterpretations during the interviews and in the translation process. Further, we think the use of a translator in several of the interviews has caused a loss of some essential information and linguistic nuances. We tried to minimize the impact of this bias by asking clarifying questions during the interviews and collaborating when transcribing and translating the data.

One of the researchers had, prior to the project, spent an exchange semester practicing in hospitals in Quito, including the one in which the study was conducted. This has given us insights into the local customs and culture. This, together with the researchers' background as medical students, and their experience teaching sexual education to Norwegian middle- and high school students, we believe has aided us in pursuing rich, honest accounts. However, our experiences from the Ecuadorian society have also influenced our preconceptions, and affected the way we asked questions and what themes and topics we pursued in the analysis. In the study we identified many of the same barriers as we expected to find beforehand. We believe some of the reason for this is that we had asked similar questions to health professionals in Quito previously, when we were planning the study.

Interviewing health professionals has caused both strengths and weaknesses in this study. One possible weakness is that the results are based on health professionals' perception on adolescent girls' barriers to use of contraception. It does not elicit what the adolescent girls themselves would have said about their own contraceptive use. Interviewing adolescent girls directly was considered as a possibility early in the project, but was rejected for ethical reasons, in order to act in accordance with the Declaration of Helsinki, as this population is a vulnerable group (70). This led to a focus on health professionals' experiences with adolescents instead. We believe health professionals who work with this patient group offer an important perspective, partly because they might be aware of other barriers to contraceptive use than the adolescent themselves. The health professionals we interviewed have worked with many adolescent girls and were thus able to identify common, and therefore possibly important, barriers that exist in the adolescent population.

There is a risk that, because of the recruitment process used in the study, selection bias might have played a role, and only health professionals with a special interest for the topic of contraception and adolescent pregnancy were selected to participate. Further, the sample had a predominance of female participants, which can have constituted a bias. We have not been able to obtain data on the gender

ratio among the employees at HGONA, hence we do not know if the gender ratio in our sample reflects the true gender ratio at the hospital. A desire to be perceived as modern or forward-thinking, known as social desirability bias, might also have contributed to some participants agreeing to be interviewed. A consequence of this could be that our sample consisted of health professionals who didn't necessarily share the same opinions and views as others. However, even though the participants talked about similar themes in the interviews, there were also contradicting statements. This leads us to believe that the recruitment process did not bias the sample to a greater extent.

Further, an eagerness to give us, as foreign researchers, the answers we were looking for, may have biased the accounts the health professionals gave, hence offering opinions and views which differ from what they truly believe. There is also a risk that recall bias has affected the answers, as some of the stories we were told happened several years ago. Furthermore, confirmation bias can have played a role as the participants might have remembered only the things that confirm their own view of the subject. However, to us, the accounts given by the participants appeared sincere. Further, the findings in the study were consistent with barriers identified in a study which interviewed Ecuadorian parents about the same subject (71). This may indicate that our findings reflect true barriers to contraceptive use among Ecuadorian adolescents.

Qualitative research methods can contribute to present diversity, nuances and subjective experiences. The goal is to understand rather than to explain (68). Because of the small sample size in the study, our findings cannot be generalized to apply to all adolescent girls worldwide. However, we believe our findings can be transferable to countries with similar cultures as Ecuador, because it provides information and contributes to an awareness of factors influencing contraceptive use among adolescent girls.

Discussion of the results

Summary of findings

The main finding in the study was that the health professionals perceived that the taboo of sexuality, which lead to the topic not being discussed openly in the society, was the main barrier to contraceptive use for adolescent girls. This led to a lack of information about sexuality, which again created an environment in which myths were created and believed. According to the informants, parents tended to prevent their children from using contraception due to a belief in myths and due to the shame of discussing the topic with their children. This would further contribute to a lack of

information and maintain the taboo. This illustrates how the different barriers to contraceptive use interact with each other, and that they might exist because of and reinforce one another.

The taboo of sexuality and the lack of information

Several other studies on contraception and adolescents around the world have, like this study, found that sexual activity at a young age and premarital sex is considered morally wrong, and thus constituted a taboo (51,61,66). A taboo is defined as something that is contrary to the prevailing moral in a society. According to Sigmund Freud (72), a taboo is created by conflicting social attitudes, and represents forbidden actions for which there nevertheless exists a strong unconscious desire. The health professionals interviewed in this study believed having sex as a young girl was not morally accepted in the society, and if an adolescent girl were to obtain a contraceptive, she would break this social norm. In other words, the taboo of being associated with premarital sex may lead to unfavorable behavior in relation the health preventive measure of using contraception.

The health personnel in our study indicated, as mentioned, a lack of information among adolescents due to sexuality being a taboo. Information shortage about this topic is confirmed in other studies from Ecuador. One study (73), found that the number of adolescents aged 15 years and younger who, prior to pregnancy, had any knowledge of conception was significantly lower than in the group of 20-30-years old women. Another study on recent adolescent mothers found that 50% did not know what family planning was (25).

The knowledge-attitude-behavior (KAB) model (74) explains the role of knowledge in health related behavior-change. It suggests that the three factors knowledge, attitudes and behavior are interrelated, and as knowledge on a health related subject is increased, attitudes will change gradually, which in turn will lead to a change in behavior (74). The KAB model could be exemplified by the HIV/AIDS epidemic, were inadequate knowledge and misconceptions may be responsible for social stigma and the subsequent discrimination associated with the disease (75,76). The taboo of being associated with HIV can prevent people from protecting themselves from the infection (77). These attitudes and practices are major hindrances in preventing the spread of HIV and continue to fuel the global epidemic (76,77). A study investigating HIV/AIDS related knowledge, attitudes and practices (76), reported that male high school students in Lao with medium and high levels of knowledge, showed positive attitudes towards people living with HIV and had safer sex practices. In our study, the KAB model may help us understand how more knowledge on sexuality and contraception is important to create openness and possibly break the taboo, while pointing out that attitudes and behaviour also need to change to achieve this goal. These factors, however, are not easily changed.

To summarize, due to the lack of information about sexuality and contraception, we believe increasing the knowledge would be a good place to start. Studies on women over the age of 19 find many of the same barriers to contraceptive use as in the adolescent group (47,58,78), and the chances of finishing secondary education after the pregnancy in Ecuador are minimal for adolescents from a low socioeconomic level (79). This was also suggested by the participants in our study. Together, this indicates the importance of introducing interventions to increase knowledge about this topic at an early age to contribute to change the general attitude about contraception in society. The taboo of sexuality and contraception is a complex problem for which there is a need for interventions on multiple levels. As there is strong evidence for the benefits of curriculum-based sex education (62,80), one measure could be to enhance sexual education at an early stage in the education.

How is religion influencing contraceptive use?

As presented in the introduction, the Catholic church has not been known to accept the use of contraception. However, a study investigating religious influence on contraceptive use among Latino women in the United States (81), found no direct association between these parameters. In another study from Nicaragua (82), in which 64% of the study population was Catholic, only 9% believed condoms should not be used for religious reasons. Furthermore one study from 1993 (83) found that women from communities with high levels of religious affiliation were more likely to use contraception, while another study (84) found that Catholics were likely to use more reliable methods of contraception than other religious groups. The researchers in the study argued that contraceptive methods allow the women to conceal their level of sexual activity by avoiding pregnancy.

These findings are contrasted by the results in our study, where some health professionals interviewed, indicated that the Catholic belief in society can make it difficult for young people to access contraception, as well as making it hard to talk about openly. In another study from Ecuador (71), parents of adolescents recognized that religion possessed a fundamental role in their attitudes towards the area of sexuality. The parents expressed that the Church was setting the rules of, as well as being their immediate reference point to, their understanding of sexuality. Since the Catholic Church believe the purpose of sex to be procreation, not pleasure, the use of contraception is still considered intrinsically evil (85,86).

Gender inequality

The findings in our study indicates that a lack of equality between the genders poses a barrier to the access to contraceptive use for adolescent girls. This gender inequality was termed male chauvinism or machismo by some participants and has been found in other studies from Latin-American countries as well (53,82). A review article on the health status of adolescents in Ecuador by Svanemyr et al.

(13) found that the gender inequality, which "expects boys to be aggressive and dominant and girls to be submissive and obedient", limits the adolescents' possibilities to protect themselves.

Svanemyr et al. (13) also found an association between gender-based violence and pregnancy before the age of 18. According to UN Women (43), gender based violence is an extreme form of gender inequality. The Ecuadorian National Survey on Family Interactions and Violence Against Women (ENVIGMU) from 2019 (87) found that 65% of women and 45% of 15-17 year old girls have experienced violence. This includes physical, psychological and sexual violence, which was also reported in our material.

Further, gender inequality has been termed an important fertility determinant (88). A study conducted in secondary schools in Ecuador and Bolivia found that sexually active adolescents between 14 and 18 years who considered gender equality as important, had a higher use of contraceptives (89). This is supported by what was said by the informants in our study, who indicated that a result of the gender inequality in Ecuador was that adolescent girls are prevented by social norms and their partners from using contraceptives.

As mentioned in the introduction, Ecuador has a solid legal framework that ensures women's rights. Nevertheless, as seen above, the country still faces challenges of gender inequality, and there is a need for more political will to focus on this issue as a public health problem (43). Enhancing the sexual education in schools, as previously suggested, would reach boys as well as girls, and could be one of several possible measures to address the issue of gender roles and inequality between genders.

Parental influence

A finding in this study was that health professionals believed parents pose an important barrier to the use of contraception among adolescent girls. This correlates with several other studies, where parents as influencers on contraceptive use is a recurring subject (49,50,61). One study from Ecuador exploring parents view on sexuality and sex education (71), found that parents avoided talking about the use of contraceptives with their children as they saw sexuality as something exclusively for adults. Nevertheless, the parents in the study had suggested specific parent training programs offered by schools as a measure to break this barrier. This would provide them with knowledge and skills to better approach the topic of sexuality with their children. This is also mentioned as a possible measure in a systematic review of interventions to improve adolescent sexual and reproductive health (80). The health professionals interviewed in our study expressed that parents often gain a more positive attitude towards contraception when they get correct information on the subject from health professionals.

Further, in a study from Ecuador, Bolivia and Nicaragua (59), parents were considered potentially significant for improved sexual and reproductive health services and it was said they should be included to create a supporting environment for adolescents to seek these services. A study from Chile (90), found parents, teachers and health professionals to be the most trusted sources of information, and therefore suggested that interventions should focus on these groups. This is in accordance with findings in our study, where several adolescents had expressed to the health professionals that they would have liked to discuss sexuality and contraception with their family. Thus, we believe parental education programs, as suggested in the studies above, could be an important measure to increase the openness and information about contraceptives in Ecuador.

What can health professionals do to contribute to more openness about contraception?

Participants in the study suggested that some healthcare providers in Ecuador might not be qualified to work with adolescents, as they tend to judge adolescents requesting contraceptives. Health professionals usually have the medical knowledge needed, but some have attitudes that are influenced by religious and cultural values, which affects their care for adolescents (91). This view is supported by a study from the Amazon region in Ecuador on providers and policymakers (57), which found negative attitudes towards adolescent girls' sexuality among the participants in the study. The same study concluded that moralistic attitudes and sexism were limiting the services' ability to promote girls' sexual and reproductive health and rights. A study from Nicaragua on knowledge, attitudes and practices related to adolescent reproductive health (92), found that non-supportive attitudes were rather common among doctors.

The study from the Amazon region (57) suggests that " [..] more respectful and democratic interactions between girls and providers would increase girls' access to services, and empower them treating them as autonomous individuals, and helping them to make their own decisions". Another study on healthcare providers views on how to improve sexual and reproductive healthcare for adolescents (59), supports this view and adds that adolescents should be prioritized more as a patient group and that providers should receive skills training to improve their interacting with adolescents. Further, a study from Chile (90), found health professionals to be a trusted source of information for adolescents. This is in accordance with the findings in our study. Hence, we believe health professionals can play a key role in providing correct and easily accessible information for the adolescents, to help break down barriers to contraceptive use.

Several studies highlight "youth friendly services", as a good measure to increase the use of birth control among young people (51,61,62,91). WHO describes this as health services that, among other

criteria, are accessible, equitable, acceptable and appropriate to accommodate the needs of adolescents. WHO also points out that adolescent friendly healthcare providers need to be technically competent in adolescent-specific areas, non-judgmental and considerate, easy to relate to and trustworthy, and stated that adolescents will often not use unfriendly services, or services with poorly trained staff (93). Another aspect to consider in relation to this, is recruiting women who themselves were adolescent mothers, as a resource for making the health services more youth friendly. Several health services in Norway are including patient representatives like these (94–96), as former and current patients may present the patients' perspective to ensure that the patient group is not overlooked or forgotten in decision-making processes (97). We believe these are interesting measures to consider in Ecuador, though youth friendly services, as argued by Godia et al (91), will not solve the unsatisfactory contraceptive use among adolescents alone.

Another interesting finding in our material was that none of the participants mentioned a lack of contraceptives as a barrier to the use of contraception among adolescent girls. This indicates that the supply is not the problem. Rather, making information about sexuality and contraception more accessible and sexual and reproductive health services more specialized to accommodate the needs of adolescents, we believe would be a step in the right direction.

Conclusion

This study identified what health professionals perceived to be barriers to contraceptive use for adolescent girls in Ecuador. Given the high rate of teenage pregnancy in Ecuador and the negative consequences that follows for the girl, her child and the society, it is important that contraceptive services for adolescents are optimized and that contraceptive use is increased in this group. Understanding the factors that prevent adolescent girls from successfully using contraception is key to understand which measures are needed.

The health professionals in this study believed the taboo of sexuality, including a moral ideal in society of abstinence from sex until marriage, also seen in other studies (51,61,66), to be an important barrier to the use of contraception for adolescents. This would also lead to the topic not being discussed openly and a subsequent lack of information, also confirmed by other studies from Ecuador (25,73). The KAB model (74) can explain how increasing the knowledge about contraception and sexuality, may contribute to change the negative attitudes toward these subjects. This could in turn improve the use of contraception among adolescents, though this is complex and not easily achieved.

Parental and male partner influence were identified in this study as perceived barriers to contraception for adolescent girls. This finding is supported by other research on the field (13,49,50,53,61,71,82). Interestingly, the health professionals in our study had experienced a more positive attitude to contraception from parents after they had received correct information, indicating that interventions could focus on this group as well as targeting adolescents. The negative influence male partners may have on contraceptive use, can be seen as a form of male chauvinism - a type of gender inequality. Further, the association between gender inequality, gender based violence, teenage pregnancy and contraceptive use, seen in several studies (13,88,89), supports this view.

Another finding in the study was that some health professionals were believed by the participants to not be suited to work with adolescents and to be influenced by religious and cultural values that negatively affected their care for adolescents. Research suggests that health professionals can play a key role in providing information and contraceptives to adolescents (57,90). Youth friendly services have also been highlighted as a measure to increase the use of birth control among young people (51,61,62,91). Lack of contraceptives was not mentioned as a barrier to contraceptive use in our material, hence supply does not appear to pose a problem.

Implications for practice and further research

Reducing the high rate of adolescent pregnancy in Ecuador and increasing the use of contraception in this group is a complex issue, which calls for interventions on multiple levels. To address the barriers to contraceptive use identified in this study, we suggest increasing the knowledge on the subject with specialized parent education programs and enhancing the sexual education at an early stage in the schools. These measures would reach adolescents before pregnancy, and should focus on equal rights and gender roles in addition to sexual and reproductive knowledge. Further, we suggest the implementation of youth friendly services with patient representatives and specially trained healthcare providers that have the necessary skills and more time, to better accommodate the needs of the adolescent group.

As we in this study have interviewed health professionals regarding adolescent girls, and not the girls directly, we believe it would be reasonable to explore this subject further from the adolescent girls' point of view. Also, as previously mentioned, an important finding in this study is that the male partner of adolescent girls often prevents her from using contraception. Hence, we believe it could be interesting to find out more about adolescent boys' perception on the use of contraception, to be able to implement specific measures against this barrier. We also believe it would be interesting to explore the perceived benefits of contraception among adolescents to be able to emphasize these in the sexual education and the process of increasing the use of contraception in this group.

References

1. Ecuavisa (Editorial Team). Madres denuncian supuesta contaminación de bacteria en maternidad [Internet]. Ecuavisa. 2017 [cited 2020 May 6]. Available from: https://www.ecuavisa.com/articulo/noticias/nacional/316051-madres-denuncian-supuesta-contaminacion-bacteria-maternidad-luz
2. Leifsen E, Jacobsen E. Ecuador. In: Store norske leksikon [Internet]. 2019 [cited 2020 Apr 16]. Available from: http://snl.no/Ecuador
3. INEC. INEC - Instituto Nacional de Estadística y Censos [Internet]. 2020 [cited 2020 May 4]. Available from: https://www.ecuadorencifras.gob.ec/estadisticas/
4. United Nations. World Economic Situation and Prospects. NEW YORK: UNITED NATIONS PUBLICATIO; 2018.
5. The World Bank. Poverty headcount ratio at national poverty lines (% of population) - Ecuador | Data [Internet]. [cited 2020 Apr 22]. Available from: https://data.worldbank.org/indicator/SI.POV.NAHC?locations=EC
6. World Bank. GINI index [Internet]. 2018 [cited 2020 Apr 22]. Available from: https://data.worldbank.org/indicator/SI.POV.GINI?end=2019&locations=EC&start=2007&view=chart
7. Ministerio de Salud Publica. Manual del Modelo de Atención Integral de Salud (MAIS) [Internet]. 2012 [cited 2020 Apr 16]. Available from: http://instituciones.msp.gob.ec/somossalud/images/documentos/guia/Manual_MAIS-MSP12.12.12.pdf
8. 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. 2018 Sep;19(5):889–900.
9. Pan-American Health Organization. Ecuador [Internet]. 2017 [cited 2020 Apr 16]. Available from: https://www.paho.org/salud-en-las-americas-2017/?p=4272
10. Lucio R, Villacrés N, Henríquez R. Sistema de salud de Ecuador. Salud pública Méx. 2011;53:s177–87.
11. INEC. Registro Estadístico de Recursos y Actividades de Salud (Statistical Registry of Health Resources and Activities) [Internet]. 2018 [cited 2020 May 4]. Available from: https://www.ecuadorencifras.gob.ec/actividades-y-recursos-de-salud/
12. SSB. Alder og arbeidsstyrkestatus for personer med helse- og sosialfaglig utdanning (4. kvartal 2019) [Internet]. ssb.no. 2019 [cited 2020 May 4]. Available from: https://www.ssb.no/arbeid-og-lonn/statistikker/hesospers/aar/2020-02-28
13. 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. Reproductive Health. 2017 Feb 28;14(1):29.

14. Hospital Gineco Obstétrico Pediátrico de Nueva Aurora Luz Elena Arismendi. Nuestros Servicios (Pamphlet). Hospital Gineco Obstétrico Pediátrico de Nueva Aurora Luz Elena Arismendi; 2019.
15. Universidad Simon Bolivar. Pobreza por Sectores Censales en la Ciudad de Quito (2001 - 2006) [Internet]. 2009 [cited 2019 Jan 15]. Available from: http://www.uasb.edu.ec/UserFiles/372/File/pdfs/NOTICIASYSUCESOS/2009/POBREZA_UIO_SECT.pdf
16. Avenue HRW| 350 F, York 34th Floor | New, t 1.212.290.4700 N 10118-3299 U|. World Report 2019: Rights Trends in Ecuador [Internet]. Human Rights Watch. 2018 [cited 2020 Apr 23]. Available from: https://www.hrw.org/world-report/2019/country-chapters/ecuador
17. World Health Organization GHO data repository. Sexual and reproductive health - Data by country | SDG Target 3.7 [Internet]. WHO. World Health Organization; 2019 [cited 2020 Apr 23]. Available from: https://apps.who.int/gho/data/node.main.SDG37?lang=en
18. United Nations E and SA Population Division. World Fertility Patterns 2015 - Data Booklet [Internet]. 2015 [cited 2019 Jan 21]. Available from: http://www.un.org/en/development/desa/population/publications/pdf/fertility/world-fertility-patterns-2015.pdf
19. INEC. Encuestra Nacional de Salud Reproductiva y Nutrición (ENSANUT) [Internet]. 2018 [cited 2020 Apr 1]. Available from: https://www.ecuadorencifras.gob.ec/salud-salud-reproductiva-y-nutricion/
20. Ecuador M de salud pública. Encuesta Nacional de Salud y Nutrición: ENSANUT-ECU 2012. Quito: INEC; 2014.
21. UNFPA. Adolescent Pregnancy: A Review of the Evidence [Internet]. 2013 [cited 2019 Jan 2]. Available from: https://www.unfpa.org/sites/default/files/pub-pdf/ADOLESCENT%20PREGNANCY_UNFPA.pdf
22. World Health Organization. Adolescent pregnancy: Fact Sheet [Internet]. 2020 [cited 2020 Apr 16]. Available from: https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy
23. Goicolea I. Adolescent pregnancies in the Amazon Basin of Ecuador: a rights and gender approach to adolescents' sexual and reproductive health. Glob Health Action [Internet]. 2010 Jun 24 [cited 2020 Apr 20];3. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2893010/
24. 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 [Internet]. 2018 [cited 2019 Jan 3]. Available from: 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. Chedraui P, Van Ardenne R, Wendte JF, Quintero JC, Hidalgo L. Knowledge and practice of family planning and HIV-prevention behaviour among just delivered adolescents in Ecuador: the problem of adolescent pregnancies. Archives of Gynecology and Obstetrics. 2007 Aug;276(2):139–44.
26. Rodr J, United Nations Department of Economic and Social Affairs. High Adolescent Fertility in the Context of Declining Fertility in Latin America. 2014;26.
27. World Health Organization. Global Health Observatory country views [Internet]. WHO. World Health Organization; [cited 2020 Apr 20]. Available from: https://apps.who.int/gho/data/node.country.country-ECU?lang=en
28. GHO | World Health Statistics data visualizations dashboard | Adolescent birth [Internet]. WHO. [cited 2019 Jan 4]. Available from: http://apps.who.int/gho/data/node.sdg.3-7-viz-2?lang=en
29. GHO | World Health Statistics data visualizations dashboard | Family planning [Internet]. WHO. [cited 2019 Jan 4]. Available from: http://apps.who.int/gho/data/node.sdg.3-7-viz-1?lang=en
30. Guttmacher Institute. In Developing Regions, Greater Investment Is Needed to Help Adolescents Prevent Unintended Pregnancy [Internet]. Guttmacher Institute. 2018 [cited 2020 Apr 22]. Available from: https://www.guttmacher.org/news-release/2018/developing-regions-greater-investment-needed-help-adolescents-prevent-unintended
31. Goicolea I, San Sebastian M. Unintended pregnancy in the amazon basin of Ecuador: a multilevel analysis. International Journal for Equity in Health. 2010 Jun 3;9(1):14.
32. Ecuador rejects allowing abortion in rape cases. BBC News [Internet]. 2019 Sep 18 [cited 2020 Apr 21]; Available from: https://www.bbc.com/news/world-latin-america-49739495
33. Ortiz-Prado E, Simbaña K, Gómez L, Stewart-Ibarra AM, Scott L, Cevallos-Sierra G. Abortion, an increasing public health concern in Ecuador, a 10-year population-based analysis. Pragmat Obs Res. 2017;8:129–35.
34. Doctors Without Borders. Unsafe abortion: A forgotten emergency [Internet]. Doctors Without Borders - USA. 2019 [cited 2020 Apr 22]. Available from: https://www.doctorswithoutborders.org/what-we-do/news-stories/story/unsafe-abortion-forgotten-emergency
35. Grimes DA, Benson J, Singh S, Romero M, Ganatra B, Okonofua FE, et al. Unsafe abortion: the preventable pandemic (WHO Journal Paper). The Lancet. 2006 Nov;368(9550):1908–19.
36. Guttmacher Institute. Abortion in Latin America and the Caribbean [Internet]. Guttmacher Institute. 2016 [cited 2020 Apr 22]. Available from: https://www.guttmacher.org/fact-sheet/abortion-latin-america-and-caribbean
37. Metcalfe A, Talavlikar R, du Prey B, Tough SC. Exploring the relationship between socioeconomic factors, method of contraception and unintended pregnancy. Reprod Health

[Internet]. 2016 Mar 22 [cited 2019 Jan 3];13. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4802908/

38. Instituto Nacional de Estadística y Censos (INEC) I. INEC presenta por primera vez estadísticas sobre religión [Internet]. Instituto Nacional de Estadística y Censos. [cited 2020 Apr 22]. Available from: https://www.ecuadorencifras.gob.ec/inec-presenta-por-primera-vez-estadisticas-sobre-religion/
39. Fr. Saunders WP. What does the Church teach about premarital sex? (Catholic Straight Answers) [Internet]. Catholic Straight Answers. 2013 [cited 2020 Apr 22]. Available from: https://catholicstraightanswers.com/what-does-the-church-teach-about-premarital-sex/
40. Nordahl M. - Må endre synet på seksualitet [Internet]. 2010 [cited 2020 Apr 22]. Available from: https://forskning.no/seksualitet-religion/ma-endre-synet-pa-seksualitet/856071
41. Pontifical Council for the Family. Vademecum for confessors concerning some aspects of the morality of the conjugal life [Internet]. 1997 [cited 2019 Jan 21]. Available from: http://www.vatican.va/roman_curia/pontifical_councils/family/documents/rc_pc_family_doc_12021997_vademecum_en.html
42. The Congregation for the Doctrine of the Faith. Regarding the Instruction Dignitatis Personae, 12 December 2008 [Internet]. 2008 [cited 2020 Apr 22]. Available from: http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20081212_sintesi-dignitas-personae_en.html
43. UN Women. UN Women: Ecuador [Internet]. UN Women | Americas and the Caribbean. [cited 2020 Apr 23]. Available from: https://lac.unwomen.org/en/donde-estamos/ecuador
44. United Nations Development Programme. Human Development Reports: Gender Inequality Index [Internet]. [cited 2020 Apr 23]. Available from: http://hdr.undp.org/en/composite/GII
45. Kabagenyi A, Reid A, Ntozi J, Atuyambe L. Socio-cultural inhibitors to use of modern contraceptive techniques in rural Uganda: a qualitative study. Pan Afr Med J. 2016;25:78.
46. Kriel Y, Milford C, Cordero J, Suleman F, Beksinska M, Steyn P, et al. Male partner influence on family planning and contraceptive use: perspectives from community members and healthcare providers in KwaZulu-Natal, South Africa. Reproductive Health. 2019 Jun 25;16(1):89.
47. Mushy SE, Tarimo EAM, Fredrick Massae A, Horiuchi S. Barriers to the uptake of modern family planning methods among female youth of Temeke District in Dar es Salaam, Tanzania: A qualitative study. Sexual & Reproductive Healthcare. 2020 Jun 1;24:100499.
48. Ochako R, Mbondo M, Aloo S, Kaimenyi S, Thompson R, Temmerman M, et al. Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study. BMC Public Health. 2015 Feb 10;15:118.
49. Wood K, Jewkes R. Blood Blockages and Scolding Nurses: Barriers to Adolescent Contraceptive Use in South Africa. Reproductive Health Matters. 2006 Jan 1;14(27):109–18.

50. Munakampe MN, Zulu JM, Michelo C. Contraception and abortion knowledge, attitudes and practices among adolescents from low and middle-income countries: a systematic review. BMC Health Serv Res. 2018 Nov 29;18(1):909.
51. Williamson LM, Parkes A, Wight D, Petticrew M, Hart GJ. Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research. Reprod Health. 2009 Feb 19;6:3.
52. Wulifan JK, Brenner S, Jahn A, De Allegri M. A scoping review on determinants of unmet need for family planning among women of reproductive age in low and middle income countries. BMC Womens Health. 2016 Jan 15;16:2.
53. Beckman AL, Wilson MM, Prabhu V, Soekoe N, Mata H, Grau LE. A qualitative view of the HIV epidemic in coastal Ecuador. PeerJ. 2016 Nov 22;4:e2726.
54. Chedraui P, Van Ardenne R, Wendte JF, Quintero JC, Hidalgo L. Knowledge and practice of family planning and HIV-prevention behaviour among just delivered adolescents in Ecuador: the problem of adolescent pregnancies. Arch Gynecol Obstet. 2007 Aug 1;276(2):139–44.
55. Park IU, Sneed CD, Morisky DE, Alvear S, Hearst N. Correlates of HIV Risk Among Ecuadorian Adolescents. AIDS Education and Prevention. 2002 Jan 1;14(1):73–83.
56. Chedraui PA, Hidalgo LA, Chávez MJ, Miguel GS. Determinant factors in Ecuador related to pregnancy among adolescents aged 15 or less. Journal of Perinatal Medicine [Internet]. 2004 Jan 9 [cited 2019 Jan 2];32(4). Available from: https://www.degruyter.com/view/j/jpme.2004.32.issue-4/jpm.2004.063/jpm.2004.063.xml
57. 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. 2009 Sep;26(3):221–8.
58. 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.
59. Jaruseviciene L, Orozco M, Ibarra M, Ossio FC, Vega B, Auquilla N, et al. Primary healthcare providers' views on improving sexual and reproductive healthcare for adolescents in Bolivia, Ecuador, and Nicaragua. Global Health Action. 2013 Dec 1;6(1):20444.
60. Nalwadda G, Mirembe F, Tumwesigye NM, Byamugisha J, Faxelid E. Constraints and prospects for contraceptive service provision to young people in Uganda: providers' perspectives. BMC Health Serv Res. 2011 Sep 17;11:220.
61. Hagey JM, Akama E, Ayieko J, Bukusi EA, Cohen CR, Patel RC. Barriers and facilitators adolescent females living with HIV face in accessing contraceptive services: a qualitative assessment of providers' perceptions in western Kenya. J Int AIDS Soc [Internet]. 2015 Sep 18 [cited 2020 Mar 31];18(1). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4575411/

62. Chandra-Mouli V, McCarraher DR, Phillips SJ, Williamson NE, Hainsworth G. Contraception for adolescents in low and middle income countries: needs, barriers, and access. Reprod Health. 2014 Jan 2;11:1.
63. Keele JJ, Forste R, Flake DF. Hearing Native Voices: Contraceptive Use in Matemwe Village, East Africa. African Journal of Reproductive Health / La Revue Africaine de la Santé Reproductive. 2005;9(1):32–41.
64. Wasti SP, Simmons R, Limbu N, Chipanta S, Haile L, Velcoff J, et al. Side-Effects and Social Norms Influencing Family Planning Use in Nepal. Kathmandu Univ Med J (KUMJ). 2017 Sep;15(59):222–9.
65. Marston C, King E. Factors that shape young people's sexual behaviour: a systematic review. The Lancet. 2006 Nov 2;368:1581–6.
66. McClendon KA, McDougal L, Ayyaluru S, Belayneh Y, Sinha A, Silverman JG, et al. Intersections of girl child marriage and family planning beliefs and use: qualitative findings from Ethiopia and India. Culture, Health & Sexuality. 2018 Jul 3;20(7):799–814.
67. Shariati M, Babazadeh R, Mousavi SA, Najmabadi KM. Iranian adolescent girls' barriers in accessing sexual and reproductive health information and services: a qualitative study. J Fam Plann Reprod Health Care. 2014 Oct 1;40(4):270–5.
68. Malterud K. Kvalitative forskningsmetoder for medisin og helsefag. 4. utgave. Universitetsforlaget; 2017. 254 p.
69. Sex og samfunn. Prevensjon [Internet]. Sex og samfunn. 2020 [cited 2020 Apr 16]. Available from: https://www.sexogsamfunn.no/prevensjon/
70. World Medical Association (WMA). WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects [Internet]. 2018 [cited 2019 Jan 2]. Available from: https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/
71. Jerves E, López S, Castro C, Ortiz W, Palacios M, Rober P, et al. Understanding parental views of adolescent sexuality and sex education in Ecuador: a qualitative study. Sex Education. 2014 Jan 2;14(1):14–27.
72. Encyclopedia Britannica. Taboo [Internet]. Encyclopedia Britannica. 2020 [cited 2020 Apr 17]. Available from: https://www.britannica.com/topic/taboo-sociology
73. Chedraui PA, Hidalgo LA, Chávez MJ, San Miguel G. Determinant factors in Ecuador related to pregnancy among adolescents aged 15 or less. J Perinat Med. 2004;32(4):337–41.
74. Baranowski T, Cullen KW, Nicklas T, Thompson D, Baranowski J. Are Current Health Behavioral Change Models Helpful in Guiding Prevention of Weight Gain Efforts? Obesity Research. 2003;11(S10):23S-43S.
75. Dadgarmoghaddam M, Khajedaluee M, Khadem-Rezaiyan M. A Population-based Study into Knowledge, Attitudes and Beliefs (KAB) about HIV/AIDS [Internet]. 2015 [cited 2020 May 4].

Available from: https://www.google.com/search?q=A+Population-based+Study+into+Knowledge%2C+Attitudes+and+Beliefs+(KAB)+about+HIV%2FAIDS+Maliheh+Dadgarmoghaddam%2C1+Mohammad+Khajedaluee%2C1+and+Majid+Khadem-Rezaiyan1%2C*&oq=A+Population-based+Study+into+Knowledge%2C+Attitudes+and+Beliefs+(KAB)+about+HIV%2FAIDS+Maliheh+Dadgarmoghaddam%2C1+Mohammad+Khajedaluee%2C1+and+Majid+Khadem-Rezaiyan1%2C*&aqs=chrome..69i57j69i64.446j0j1&sourceid=chrome&ie=UTF-8

76. Thanavanh B, Harun-Or-Rashid Md, Kasuya H, Sakamoto J. Knowledge, attitudes and practices regarding HIV/AIDS among male high school students in Lao People's Democratic Republic. J Int AIDS Soc [Internet]. 2013 Mar 11 [cited 2020 May 4];16(1). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3595419/
77. UNAIDS. Stigma and discrimination - Fact Sheet [Internet]. 2003 [cited 2020 Apr 17]. Available from: http://data.unaids.org/publications/fact-sheets03/fs_stigma_discrimination_en.pdf
78. Thapa K, Dhital R, Rajbhandari S, Acharya S, Mishra S, Pokhrel SM, et al. Factors affecting the behavior outcomes on post-partum intrauterine contraceptive device uptake and continuation in Nepal: a qualitative study. BMC Pregnancy Childbirth. 2019 May 2;19(1):148.
79. Gonzalez-Rozada M. Determinantes y Potenciales Consecuencias del Embarazo Adolescente en Ecuador. 2009 Nov 16;13.
80. Salam RA, Faqqah A, Sajjad N, Lassi ZS, Das JK, Kaufman M, et al. Improving Adolescent Sexual and Reproductive Health: A Systematic Review of Potential Interventions. Journal of Adolescent Health. 2016 Oct 1;59(4, Supplement):S11–28.
81. Romo LF, Berenson AB, Segars A. Sociocultural and religious influences on the normative contraceptive practices of Latino women in the United States. Contraception. 2004 Mar 1;69(3):219–25.
82. Manji A, Peña R, Dubrow R. Sex, condoms, gender roles, and HIV transmission knowledge among adolescents in León, Nicaragua: Implications for HIV prevention. AIDS Care. 2007 Sep 1;19(8):989–95.
83. Grady WR, Klepinger DH, Billy JOG. The Influence of Community Characteristics on the Practice of Effective Contraception. Family Planning Perspectives. 1993;25(1):4–11.
84. Hill NJ, Siwatu M, Robinson AK. "My Religion Picked My Birth Control": The Influence of Religion on Contraceptive Use. J Relig Health. 2014 Jun 1;53(3):825–33.
85. Manson J. Catholic church's total ban on contraception challenged by scholars [Internet]. National Catholic Reporter. 2016 [cited 2020 Apr 23]. Available from: https://www.ncronline.org/blogs/grace-margins/catholic-churchs-total-ban-contraception-challenged-scholars
86. Pinter B, Hakim M, Seidman DS, Kubba A, Kishen M, Carlo CD. Religion and family planning.

The European Journal of Contraception & Reproductive Health Care. 2016 Nov 1;21(6):486–95.

87. INEC. Encuesta Nacional sobre Relaciones Familiares y Violencia de Género contra las Mujeres (ENVIGMU) [Internet]. 2019 [cited 2020 Apr 23]. Available from: https://www.ecuadorencifras.gob.ec/documentos/web-inec/Estadisticas_Sociales/Violencia_de_genero_2019/Boletin_Tecnico_ENVIGMU.pdf
88. Morgan SP, Niraula BB. Gender Inequality and Fertility in Two Nepali Villages. Population and Development Review. 1995;21(3):541–61.
89. Meyer SD, Jaruseviciene L, Zaborskis A, Decat P, Vega B, Cordova K, et al. A cross-sectional study on attitudes toward gender equality, sexual behavior, positive sexual experiences, and communication about sex among sexually active and non-sexually active adolescents in Bolivia and Ecuador. Global Health Action. 2014 Dec 1;7(1):24089.
90. Macintyre AK-J, Montero Vega AR, Sagbakken M. From disease to desire, pleasure to the pill: A qualitative study of adolescent learning about sexual health and sexuality in Chile. BMC Public Health. 2015 Sep 23;15(1):945.
91. Godia PM, Olenja JM, Lavussa JA, Quinney D, Hofman JJ, van den Broek N. Sexual reproductive health service provision to young people in Kenya; health service providers' experiences. BMC Health Serv Res. 2013 Nov 14;13:476.
92. Meuwissen LE, Gorter AC, Kester ADM, Knottnerus JA. Can a comprehensive voucher programme prompt changes in doctors' knowledge, attitudes and practices related to sexual and reproductive health care for adolescents? A case study from Latin America. Trop Med Int Health. 2006 Jun;11(6):889–98.
93. World Health Organization. Adolescent friendly health services : an agenda for change. Services de santé adaptés aux adolescents : un programme pour le changement [Internet]. 2003 [cited 2020 Apr 15]; Available from: https://apps.who.int/iris/handle/10665/67923
94. Funksjonshemmedes Fellesorganisasjon. Digital grunnopplæring for brukerrepresentanter på systemnivå [Internet]. FFO. [cited 2020 May 12]. Available from: http://www.ffo.no/arrangementer/digital-grunnopplaring-for-brukerrepresentanter-pa-systemniva/
95. Nasjonal kompetansetjeneste for læring og mestring innen helse. Brukerkompetanse [Internet]. mestring.no. 2020 [cited 2020 May 12]. Available from: https://mestring.no/helsepedagogikk/brukermedvirkning/kompetanse/
96. Norges Astma- og Allergiforbund. Brukerrepresentanter [Internet]. 2020 [cited 2020 May 12]. Available from: https://www.naaf.no/frivillig/jeg-er-frivillig/brukerrepresentanter/
97. Bakke T. Hvordan kan brukerrepresentant oppnevnes? - Alternativ B [Internet]. Helsebiblioteket.no. Helsebiblioteket.no; 2009 [cited 2020 May 12]. Available from: /kvalitetsforbedring/brukermedvirkning/brukerrepresentanter/hvordan-kan-brukerrepresentant-oppnevnes-alternativ-b

Appendices

Appendix 1: Ethical approval from the Regional Committee for Medical and Health Research Ethics in Norway

Preliminary Approval, Norwegian

REK
REGIONALE KOMITEER FOR MEDISINSK OG HELSEFAGLIG FORSKNINGSETIKK

Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK midt	Magnus Alm	73559949	14.10.2019	30512
			Deres referanse:	

Arne Kristian Myhre

30512 Hva hindrer bruk av prevensjon blant unge jenter i Quito, Ecuador? Kvalitativ innsikt fra helsepersonell

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 mangler kunnskap om mulige årsaker til det høye antallet tenåringsgraviditeter i Ecuador og vi vil derfor utforske holdninger og erfaringer knyttet til prevensjon blant unge jenter. Vi skal utføre en kvalitativ studie, der vi vil intervjue helsepersonell ansatt på sykehuset som jobber med jenter i alderen 12-19 år. I intervjuet vil vi spørre om deres erfaringer som helsepersonell med prevansjonsbruk i denne gruppen. Målsettingen er å inkludere 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.

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 holdninger og erfaringer knyttet til prevensjon blant unge jenter i alderen 12-19 år. For å belyse dette skal man intervjue helsepersonell som jobber med jenter i denne alderen om hvordan de opplever jentenes holdninger og

erfaringer med prevensjon. 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 ivaretatt.

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 etterprøvbarhet 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 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

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 avidentifisert, 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

Final approval, Norwegian

REK
REGIONALE KOMITEER FOR MEDISINSK OG HELSEFAGLIG FORSKNINGSETIKK

Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK midt	Magnus Alm	73559949	11.02.2020	30512
			Deres referanse:	

Arne Kristian Myhre

30512 Hva hindrer bruk av prevensjon blant unge jenter i Quito, Ecuador? Kvalitativ innsikt fra helsepersonell

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 informasjonsskrivet 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.

Approval, English

REK
REGIONALE KOMITEER FOR MEDISINSK OG HELSEFAGLIG FORSKNINGSETIKK

Region:	Executive officer:	Telefon:	Date:	Reference:
REC central	Magnus Alm	+47 73559949	28 October 2019	30512

Please include reference number in all inquiries.

To whom it may concern,

CONFIRMATION OF ETHICAL APPROVAL OF RESEARCH PROJECT

Project title: " Barriers to use of contraception among adolescent girls in Quito, Ecuador – Qualitative insights from health professionals"
Reference number: 30512
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 Human Research Ethics Committee of Universidad San Francisco in Quito, Ecuador

Ethical approval from CEISH-USFQ, English Version (translated)

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

2 *Approval of research project, translated from Spanish*

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

DIEGO DE ROBLES ENTRE FRANCISCO DE ORELLANA Y PAMPITE, CUMBAYÁ. P.O.BOX: 17-12-841 QUITO-ECUADOR
T.: (593 2)297-1700 AL 708. FAX.: (593 2)289 0070.
WWW.USFQ.EDU.EC

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/amnt

DIEGO DE ROBLES ENTRE FRANCISCO DE ORELLANA Y PAMPITE,
CUMBAYÁ, P.O.BOX: 17-12-841 QUITO-ECUADOR
T.: (593 2)297-1700 AL 708. FAX.: (593 2)289 0070.
WWW.USFQ.EDU.EC

Appendix 3: Letter of Information

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

Letter of Information, Spanish Version

¿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). Quieremos 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. Asi 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 electronico: ingvild.hatlevoll@gmail.com / mariefnordal@gmail.com / mariajose.vallejo@hgona.gob.ec

UNIVERSIDAD SAN FRANCISCO

NTNU
Norwegian University of Science and Technology

Appendix 4: Informed Consent

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

Organications 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
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, 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.

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

UNIVERSIDAD SAN FRANCISCO DE QUITO USFQ

Informed consent	
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. By signing this form, you voluntarily agree to participate in this research. You receive a copy of this form. I accept that my interview is recorded. Signature of the participant:	
Name and surname of the participant: Signature of the participant:	Date CC
Name and surname of the witness: Signature of the witness:	Date CC
Name and surname of the researcher: Signature of the researcher:	Date CC
Refusal of consent	
Name and surname of the participant: Signature of the participant:	Date CC
Name and surname of the witness: Signature of the witness:	Date CC
Name and surname of the researcher: Signature of the researcher:	Date CC
Withdrawal of consent	
Name and surname of the participant: Signature of the participant:	Date CC
Name and surname of the witness: Signature of the witness:	Date CC
Name and surname of the researcher: Signature of the researcher:	Date CC

Informed Consent, Spanish Version

UNIVERSIDAD SAN FRANCISCO DE QUITO USFQ

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 Technología 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
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. 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.
Propósito del estudio
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.

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 del 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 trascripción y traducción al ingles si realizamos la entrevista en español. La grabación original se almaceará 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 declaracion 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@hgona.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	
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. Al firmar este formulario, usted acepta voluntariamente participar en esta investigación. Usted recibe una copia de este formulario. Acepto que se grabe mi entrevista. Firma del participante:	
Nombres y apellidos del participante: Firma /huella del participante:	Fecha CC
Nombres y apellidos del testigo: Firma /huella del testigo:	Fecha CC
Nombres y apellidos del investigador: Firma del investigador:	Fecha: CC
Negativa del consentimiento	
Nombres y apellidos del participante: Firma /huella del participante	Fecha CC
Nombres y apellidos del testigo: Firma /huella del testigo	Fecha CC
Nombres y apellidos del investigador: Firma del investigador	Fecha CC
Revocatoria del consentimiento	
Nombres y apellidos del participante: Firma /huella del participante	Fecha CC
Nombres y apellidos del participante: Firma /huella del testigo	Fecha CC
Nombres y apellidos del investigador Firma del investigador	Fecha CC

Appendix 5: Interview Guide

Interview Guide, Version 1 (before preliminary analysis)

Opening question for the participant to reflect upon:

- Tell me about your experiences as a health professional about the use of contraceptives among adolescent girls (in the hospital).

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

- Tell me about your experience with adolescents' girls who use contraceptives.
- What barriers do adolescents have that prevent them from using contraceptives?
- Why do you think many adolescents do not use contraceptives?

Interview Guide, Version 2 (after preliminary analysis)

Opening question for the participant to reflect upon:

- Tell me what or who prevents adolescent girls from using contraception in your experience?

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

- Why did the pregnant adolescent not use contraception before she got pregnant?
- What or who prevents adolescent girls from using contraception after they have given birth?
- How does the adolescent's partner, parents and friends influence the adolescent's use of contraception?
- How does health workers/professionals influence the adolescent's use of contraception?

NTNU

Norwegian University of
Science and Technology

Universidad San Francisco