Master's Thesis

Exploring Factors that Limit Contraception Use Among Adolescent Girls Aged 15-19 in Puerto Princesa, Palawan, Philippines

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Abstract

While effective and affordable contraceptive methods have been developed over past decades, the unmet need for contraception among girls and women remains high across the globe. Many factors contribute to this unmet need globally, including lack of access to contraception, gender norms, religious or cultural restrictions, fear of side-effects, and provider bias. Rates of unmet need for contraception are higher in the Philippines than the global average among all demographic groups, but they are the highest among unmarried adolescents aged 15-19. This age group represents the population most in need of contraception and, as such, they are left overwhelmingly unprotected from unwanted pregnancy. Despite this knowledge, there is a gap in the current literature specific to the unique political and religious context of the Philippines about factors responsible for limiting contraception use among the key population of adolescent girls. Thus, this research proposal offers a qualitative approach to exploring the barriers that girls themselves report to face when accessing contraception, as well as the barriers that healthcare providers and educators observe. Additionally, the proposed research aims to better understand the role of sexual education in increasing contraception use among the population. Ultimately, the proposed study seeks to give a voice to an often marginalized and underrepresented group and advance the current knowledge of factors that influence a girl's ability to access contraception.

Statement of the Problem

Globally, 190 million adolescent girls and women of reproductive age have an unmet need for contraception, corresponding to 10% of the population that is in need (United Nations, 2015). Persistent unmet need for contraception has resulted in significant setbacks in ensuring positive reproductive health outcomes among girls and women across the globe. In this context, "unmet need" refers to adolescent girls and women who wish to delay or stop childbearing but are not using contraception (Bongaarts and Bruce, 1995). Ensuring women have access to contraception is a necessary component of effective family planning. A variety of modern and traditional contraceptive methods can be used to prevent pregnancy or space births, including oral contraceptives, implants, intrauterine devices (IUD), and the rhythm method (World Health Organization, 2018). Despite the prevalence of different methods, there remains a significant unmet need for contraception. Among the reasons reported for unmet need are limited access to modern contraceptive methods, especially for adolescents and unmarried women, religious or cultural restrictions, fear of side-effects, and provider bias (World Health Organization, 2018).

Contraception is often framed both in public discourse and in the field of reproductive health as a family planning resource for couples to use as a method of limiting or spacing their births. While some women use contraception as a family planning resource, this framing excludes unmarried and adolescent girls who may seek out contraception to prevent pregnancy altogether or to help manage heavy or painful periods. As a result of this framing, women and girls who are unmarried or in a younger age group of 15-19 often feel stigmatized when seeking out contraception. In fact, studies have shown that unmet need for contraception is higher among women under the age of 25, signifying the need for more targeted interventions (Islam et al., 2016). The provision of contraception to this population results in sharp decreases in unmet need,

demonstrating the importance of providing access to reproductive health services among young women.

The prevalence of religion within countries also has the ability to contribute to the global unmet need for contraception by influencing cultural norms about contraception and family planning. Many religions, including Catholicism, Christianity, Judaism, and Islam, discourage premarital sex or the use of contraceptive methods (Adamczyk and Hayes, 2012; Schenker and Rabenou, 1993). Thus, contraception is often unavailable to women and girls who live in religious communities. If they do seek out contraception, many women and girls report feelings of shame regarding their decision, citing accusations that they are engaging in premarital sexual activities (Belmonte et al., 2018). Women and girls who are religious or fear backlash from religious family or community members often do not feel comfortable seeking out contraception despite a desire to prevent pregnancy. Yet, cultural and religious norms about contraception and premarital sex do not only limit the choices of women and girls, but they also influence healthcare providers. Depending on the severity of a provider's beliefs, they may refuse to provide contraception to a patient who requests it (Bird, 2018).

Finally, due to lack of education about oral or barrier contraceptive methods, many women and girls are fearful of potential side effects associated with these methods. While some women experience mild to moderate side effects from contraception, serious side effects are not common. Furthermore, many women and girls form their opinions on contraception based off of misinformation about possible side effects (Chipeta et al., 2010; Roots of Health, 2019). While condoms, another form of contraception, are not associated with side effects, prevalence and incorrect usage can also lead to complications (Shih et al., 2011; American Academy of Pediatrics, 2013). As Hennegan et al. state, girls' and boys' contraceptive knowledge would be

positively supported through the provision of accurate reproductive health education before or during puberty (2019).

High rates of unmet need for contraception are associated with negative health outcomes across the globe, including high rates of maternal mortality, as women who do not have access to contraception are unable to plan or space their pregnancies. As defined by the World Health Organization (WHO), maternal mortality is "the death of a woman while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes" (2019). Maternal mortality is prevalent in all regions, yet 99% of all maternal deaths occur in low and middle-income countries (LMIC), with half of all maternal deaths occurring in sub-Saharan Africa and one-third in South Asia (WHO, 2018). According to global data compiled by WHO, over 300,000 women die every year from complications associated with pregnancy and childbirth (2015). This number corresponds to a global average maternal mortality ratio (MMR) of 216 maternal deaths per 100,000 live births (WHO, 2015).

Additional attention must be placed on the relationship between maternal deaths and pregnancies that occur during adolescence, as complications that occur during pregnancy and childbirth are the leading cause of death among adolescents aged 15-19 (WHO, 2018). Of adolescents who sought out an abortion in 2008, 3.2 million were forced to undergo an unsafe procedure due to lack of access to services and illegality of the procedure in many countries (Guttmacher Institute, 2016). Further, adolescents aged 15-19 are twice as likely to die from unsafe abortions than women aged 20-34 (Olukoya et al., 2001). Adolescent pregnancy also has negative implications for rates of under-5 mortality, as children born to adolescent mothers are more likely to be born preterm, have lower birth weight, and experience life-threatening neonatal

conditions (WHO, 2018; Melgar et al., 2018, pg. 2). Not only do pregnancies that occur during adolescence increase rates of maternal and infant mortality, but they also often disrupt the educational prospects of adolescent girls, limit future economic potential, and result in more births over her lifetime (Hofferth et al., 1987). On a systems level scale, unintended births place added strain on healthcare systems as well (Guttmacher Institute, 2010).

Because of the many negative consequences of unintended pregnancies, especially those that occur during adolescence, the need to increase access to contraception for this demographic is clear. Beyond this, access to contraception is a necessary component of comprehensive reproductive healthcare and, without the ability to prevent unwanted pregnancies, women and girls will not have full bodily autonomy or control over their futures. Ensuring women and girls have access to contraception involves making contraceptive methods physically available to adolescent girls, providing the necessary education to make girls comfortable seeking out reproductive healthcare, and overcoming the various factors that might hinder access. As will be explored below, girls' access to contraception is limited by a variety of factors including stigma, lack of agency, gender dynamics that limit choices, family dynamics, and a general lack of knowledge about the different contraceptive methods and their availability. Additionally, boys and men play an important role in controlling girls' ability to access contraception due to unequal power dynamics that exist between the groups and, as such, must be considered as vital stakeholders.

In the Philippines, the unmet need for contraception is even higher than the global average, at 17% among all married women, 28% among married adolescents aged 15-19, and 49% among unmarried women (Philippine Statistics Authority, 2018, pg. 19). Many factors contribute to this reality, including "legal obstacles, social and cultural restrictions, and lack of

meaningful political power" (Melgar et al., 2018, pg. 2). As the data shows, use of contraception is especially low among a key population: unmarried adolescents aged 15-19. From 1998 to 2008, the proportion of adolescents aged 15-24 with any sexual experience increased by 7% (Guttmacher Institute, 2013), resulting in a decrease in the average age of adolescent sexual debut from 18.3 to 15.5 years old (Cherry and Dillon, 2014, pg. 509). As a result, the number of adolescent pregnancies has increased country-wide from 6.5% in 1993 to 10.1% in 2013 (Melgar, et al., 2018, pg. 2). Of these adolescent pregnancies, 92% were reported to be unplanned (Cherry and Dillon, 2014, pg. 511). Among the general population, in 2008, half of all pregnancies that occurred in the Philippines were unintended (Guttmacher Institute, 2010). These facts highlight the need for additional contraceptive services and improved access to such services among the key population of adolescent girls aged 15-19 in the Philippines.

Background and Significance

There is a lack of research about contraception use in the Philippines, the barriers that young women face when seeking out contraception, and the ways to increase contraception use among the vulnerable demographic of adolescents aged 15-19 through education or advocacy. Further, research often lacks the necessary contextualization of the problem within the religious and political contexts of the Philippines. Thus, the proposed research will attempt to fill this gap. Additionally, it aims to assess the role that sexual education plays in the lives of young women aged 15-19, particularly in influencing their level of comfortability when accessing reproductive care. The review of the current state of the literature on the topic includes both primary and secondary sources and aims to provide the context necessary to carry out the proposed research in the Philippines.

As the data shows, the unmet need for contraception in the Philippines is higher than the global average among all populations, including married women, married adolescents aged 15-19, and unmarried adolescent girls and women. This has significant negative consequences in terms of high rates of unintended pregnancy and subsequent maternal mortality that adolescents aged 15-19 experience. Before research can be conducted to address this unmet need and its many health and social implications, the regional context of the Philippines first must be explored. Regional context includes country-wide demographic information, as well as political and religious factors.

Regional Context

Situated in Southeast Asia, the nation of the Philippines is comprised of 7,641 separate islands, 81 provinces, and 42,036 individual barangays, or local government units (Philippine Statistics Authority, 2018, pg. 2). The Philippines is home to 105,893,381 people and over 8 different ethnic groups (Central Intelligence Agency, 2019). The country has an overall GDP of $877.2 billion, yet wealth is inequitably distributed, with 1/5 of the population living in poverty. Rates of poverty are especially high among those living in rural areas at 60%.

One of 81 provinces in the country, Palawan is home to 1,104,585 people according to the most recent census conducted in 2015 (Philippine Statistics Authority, 2018, pg. 2). A significant portion of Palawan's population—255,116 people—resides in the capital city of Puerto Princesa City, which was recently classified as a Highly Urbanized City (HUC) (Philippine Statistics Authority, 2018, pg. 2). Young people make up the majority of the population of Palawan, with 2015 census data reporting 263,273 people, or 24% of the total population, in the 0-9 age bracket, 248,737 people or 23% in the 10-19 age bracket, and 190,593

people or 17% in the 20-29 age bracket (Philippine Statistics Authority, 2015). The age at first sex among the 15-19 age group is 16.6 for males and 16.8 for females (Demographic Research and Development Foundation, 2016, pg. 93). Age at first sex is significant to analyze as it can be used as a measure for increased vulnerability of becoming pregnant. As discussed above, adolescent pregnancy is associated with risks to the health and wellbeing of the mother and the fetus. Beyond potential pregnancy, lack of access to contraception and protection exposes young people who engage in sex to a myriad of other sexual and reproductive health risks, such as sexually transmitted infections.

Religious Context

While unmet need for contraception is a problem experienced across the globe, the Philippines offers a unique context in which to conduct research due to its complex religious and political histories. Thus, in order to address low rates of contraception use in the Philippines, one must consider the country's historical context, including the prominent role of religion. Christianity was introduced to the Philippines in the 16th century by Spanish colonists and the Roman Catholic Church specifically has had a strong presence in the country since the 1900s. Nearly 83% of the population is Catholic, making the Philippines the third largest Catholic population in the world. Although the country is secular, because of its widespread influence, the Catholic Church has impacted many laws as well as general cultural norms. For example, the Philippines is the only country in the world where divorce is still illegal, along with the city-state of Vatican City (Hundley and Santos, 2015).

The prominent role of the Roman Catholic Church in Philippines society has many implications in regard to the contraceptive services that are made available. The Catholic Church

has always forbidden the use of contraception, but Pope Paul VI issued a strict ban on all modern, or artificial, methods in 1968 in his *Humanae Vitae* declaration. According to the declaration, the Church definitively condemns "any action which either before, at the moment of or after sexual intercourse, is specifically intended to prevent procreation." In the eyes of the church, sexual intercourse must be reserved for married couples who have the intention of conceiving a child; thus, the use of contraception implies that couples wish to engage in sexual intercourse for the purpose of pleasure rather than to create life, which is a grave sin in the eyes of the Church. Those who engage in premarital sex are faced with extreme repercussions, including experiencing stigma and the possibility of being shunned from their families or communities, especially if a pregnancy occurs (Cherry and Dillon, 2014, pg. 515). It is within this context that rates of contraception use in the Philippines must be considered.

Women and girls must navigate this complex terrain in order to make reproductive choices that accurately reflect their view of religion and morality, while also safeguarding their health and security. An ethnography of low socioeconomic status (SES) women living in urban Manila found that many women apply "subjective re-interpretations of Catholic teachings" in accordance with the reality of their personal and social circumstances. Such re-interpretations allow women to make reproductive decisions to use contraception or have an abortion while also remaining within the bounds of what they believe is morally and religiously acceptable (Natividad, 2019). Government efforts to promote contraception over the past 60 years have also influenced and shaped norms among religious women, leading to increased acceptability of contraception among this group.

Political Context

The political context of the Philippines also offers important contextualizing information in helping to better understand rates of contraception use among adolescent girls. Legal obstacles account for a portion of the unmet need for contraception that is experienced in the Philippines. Many of the legal obstacles reported are caused by conservative religious groups that operate throughout the country. A significant battle of late occurred in response to the Responsible Parenthood and Reproductive Health Act, commonly referred to as the reproductive health (RH) law. The law laid out requirements for many progressive provisions, including the inclusion of rights-based sexuality education, free contraceptive supplies to poor families, and comprehensive contraceptive information to all clients, regardless of age or marital status (Melgar et al., 2018, pg. 7). Furthermore, the law sought to address high rates of maternal mortality, number of unsafe abortions conducted, and unmet need for family planning resources (Natividad, 2019). However, the law clearly states that minors under the age of 18 must have parental consent when seeking out contraception, causing critics to point out that it is not as comprehensive as it could be. Such critics, which often include reproductive health NGOs and advocates, maintain that young adults in need of contraception require the ability to seek it out regardless of whether they have parental consent, citing the high number of pregnancies that occur under the age of 18 (Roots of Health, 2019).

The RH law was signed by the President at the time, Benigno S. Aquino III, and enacted in December 2012, however its implementation was stalled until April 2014 due to protests led by Catholic groups (Melgar et al., 2018, pg. 3). Catholic bishops denounced the law, framing it as ‘anti-life,’ ‘anti-family,’ and ‘anti-God’ (Natividad, 2019). Many Catholics equate contraception to abortifacients, arguing that the RH law would promote a message that is

"contrary to the culture of life" (Natividad, 2019). Thus, while the RH law is certainly a monumental step forward for the Philippines, it has not achieved many of its goals due to push back from conservative groups. Because the country is majority Catholic, conservative groups are often quite successful in swaying the government. Following the implementation of the RH law in 2014, efforts were again stalled in 2015 when the Supreme Court ordered the government to halt provision of progestin subdermal implants (PSI). The anti-choice group responsible for the ruling also argued that other modern contraceptive methods were abortifacients, which resulted in changes to the contraceptives that women were offered (Melgar et al., 2018, pg. 10). The ruling was overturned at the end of 2017, but the damage was done as low SES women and adolescent girls were left without access to free government funded contraceptive methods for two years. Furthermore, under the Constitution, local governments are granted the autonomy to decide how they want to govern, despite national decisions. For example, in Manila, the capital of the Philippines, the mayor decided to ban public and private provision of contraceptives in 2000 due to the lobbying of religious groups (Guttmacher Institute, 2010). These examples highlight the difficulty in providing reproductive health services in the Philippines due to its religious context. Researchers and public health workers focused on increasing access to contraception must be mindful of this context and design interventions accordingly.

Role of Education

Some research has been conducted on the role that sexual education plays in preventing unintended pregnancies and promoting contraception use. A review of the literature published about contraception use in Asia found that lack of knowledge about contraceptive methods and sexual education in general contributes to high rates of unintended pregnancy in the region

(Najafi-Sharjabad et al., 2013). A study conducted of adolescents in the Philippines, Thailand, and Vietnam found that adolescents lack specific knowledge about modern contraceptive methods and their availability, leading to the use of traditional methods or no method of contraception among sexually active adolescents (Pachauri and Santhya, 2002). Regarding the general state of sexual education in the country, experts note that adolescents are not receiving the education they need, highlighting the need for comprehensive sexual education for boys and girls starting at grade 5 to increase knowledge and prevent negative reproductive health outcomes (Galang Philippines, 2016). Thus, the literature supports the need for increased sexual and reproductive health education among adolescents in the Philippines.

Studies have been conducted about the effect of providing education to adolescents. While conducted in a different context than the Philippines, a study based in England found that the provision of comprehensive sexual education was effective at improving sexual health among adolescents (Pound, 2017). Further, a study based in the United States found that adolescents' sexual self-concept, as influenced by the education they receive, is an important factor in understanding contraception use and rates of teenage pregnancy (Winter, 1988). These studies support the positive relationship that exists between sexual education and contraception; however, few studies have been conducted that support the role of education in improving sexual health in the unique context of the Philippines. Thus, further work must be done to better understand the relationship that exists between sexual education and rates of contraception use in the Philippines.

An extensive analysis was also undertaken by Dembo and Lundell about the role education and sexual health information play in empowering young women to use contraception (1979). However, the authors also highlight the fact that education alone does not ensure young

adults will access contraception and note that many studies that have been conducted in the past only included data gained from quantitative methods. Thus, it may be useful to carry out qualitative studies that focus on the question of contraception use. Doing so will allow more information to be gained about the barriers that young adults face when accessing contraception, specifically within the context of the Philippines.

Role of Advocacy

Local and national level advocacy is also an important component of reproductive health and the promotion of contraception use among vulnerable populations. One study conducted by Heuser et al. highlighted the role that healthcare professionals must play in strengthening advocacy efforts (2017). According to the authors, healthcare professionals must insert their voices into public dialogue to help shape common narratives of contraception use and family planning, as well as take part in legislative debates (Heuser et al., 2017, pg. 323). Rice et al. echo this finding, stating that healthcare providers must frame their advocacy efforts through the lens of contraception as a life-saving measure (2019). The authors argue that evidence-based arguments can help to promote universal access to contraception (Rice et al., 2019, pg. 3). Although these sources are based on data and context from the United States, they provide important insight into the role healthcare providers can play in promoting, rather than preventing, contraception use in the Philippines.

Advocacy in the political and public policy arenas is also necessary to shift contraception use norms in the Philippines. A study based in Peru called for increased advocacy in terms of the provision of contraception free of cost and accessible through a public health system. The authors state that, by doing so, advocates will help to ensure that all women will have access to

the resources they need, regardless of SES, educational attainment, or age (Puig Borràs and Álvarez, 2018). As the authors argue, reproductive health equity is an important aspect of contraception advocacy, as ensuring all women, regardless of age or educational attainment, have access to services is necessary in order to increase rates of contraception use. While public policy in the Philippines supports the provision of contraception free of cost, as explored above opponents have prevented such policy from being enacted. Thus, advocacy efforts should be expanded to ensure the policy is enacted.

Social media has emerged in recent years as a powerful advocacy tool, especially among adolescents. In the Philippines, social media websites such as Facebook are widely used due to a deal with Facebook that provides the platform to all smartphone users without requiring them to purchase data, which is often expensive in the country (Swearingen, 2018). Because of this, information is easily and extensively spread on Facebook. Local reproductive health organization, Roots of Health, utilizes Facebook to reach women and girls in need by sharing reproductive health information, such as data about different types of contraceptive methods (Roots of Health, 2019). As such, social media exists as an important method of advocating for access to contraception in the Philippines.

A review of the primary and secondary sources published about the consequences of unmet need for contraception demonstrated that lack of access to necessary reproductive health services has serious implications in the lives of women and their children. Further analysis of the political and religious contexts of the Philippines provides important contextualizing information to better understand low rates of contraception use and high rates of unintended adolescent pregnancy. Without such contextualizing information, any analysis of the situation in the Philippines would be lacking. Further, the review of the literature highlighted gaps in evidence

and analysis, signifying the need for further research. Finally, insight was provided into the role education and advocacy play in improving the health of women and girls. Research has demonstrated the protective role education plays in preventing unintended pregnancy and promoting contraception use. Furthermore, the role of healthcare providers in other contexts and the use of social media platforms in reproductive health advocacy efforts provide suggestions for future contraception advocacy in the Philippines. The Philippines offers a unique context to examine unmet need for contraception and its many consequences through this research proposal. Young women would benefit from country-specific and culturally appropriate interventions, supported by the information gleaned from this literature review and analysis of country context.

Research Aims

The proposed research seeks to explore contraception use among adolescent girls aged 15-19 living in urban Puerto Princesa with the goal of understanding the barriers they face when trying to access contraception, while also situating such barriers within the larger cultural environment of the country. The study will utilize a qualitative approach that will include semi-structured in-depth interviews with individual study participants, focus group discussions (FGD) with participants, and key informant interviews (KII) with reproductive healthcare providers and educators in the city. Ultimately, this research proposal intends to gather the context and information necessary to inform future interventions that address factors limiting adolescent girls' ability to control their reproductive health.

Research Question: What barriers do unmarried adolescent girls aged 15-19 living in urban Puerto Princesa, Philippines face when accessing contraception? Further, does the provision of

sexual and reproductive health education have an effect on the level of agency and comfort unmarried adolescent girls aged 15-19 experience when making the decision to access contraception?

The first aim is to explore perceptions of contraception use among unmarried adolescent girls aged 15-19 living in Puerto Princesa, Palawan, Philippines. It is hypothesized that among unmarried adolescents living in Puerto Princesa, there is a perception that contraception should primarily be used by married women.

The second aim is to identify barriers to accessing contraception and general reproductive healthcare among the target population. It is hypothesized that cultural norms, stigma about potential sexual activity, and familial pressures will act as barriers to accessing reproductive healthcare among the target population.

Finally, the third aim is to determine if the provision of comprehensive sexual education influences the comfortability and confidence the target population feels when accessing contraception. It is hypothesized that the provision of comprehensive sexual education will increase the level of confidence the target population feels when accessing contraception.

Theoretical Framework

This study will utilize the Social Ecological Model as a guiding theoretical framework, as it provides important conceptualization of the barriers and enablers that impact the ability of adolescents to access contraception at the individual, interpersonal, community, and societal levels. As a theoretical model, the Social Ecological Model is an approach that unpacks the factors that shape behavior by incorporating multiple levels of influence to understand where best to intervene to prevent or promote behavior.

In the context of this research proposal, the individual level identifies personal and biological factors that influence contraception use; the individual level may include factors such as age, civil status, and educational attainment. The interpersonal level examines the relationships that may increase or decrease a girl's ability to access contraception. Such relationships may include parents, friends, and boyfriends or husbands. Next, the community level identifies characteristics within a setting that influence behavior. The community level may include factors such as educational norms, the role of religion in the community, and gender norms which may limit autonomy (Mutumba, Wekesa & Stephenson, 2018). Such factors may influence contraception use behavior more dramatically among adolescent girls, as "young women are subject to the authority of adults and institutions such as schools, religious and cultural organizations, and health care institutions that are vested in shaping and regulating their behavior" (Mutumba, Wekesa & Stephenson, 2018). Finally, the societal level examines broader societal factors that contribute to an environment where contraception use is inhibited (Centers for Disease Control and Prevention, 2020).

Applying the Social Ecological Model to the proposed research plans will allow the research team to conceptualize the information that is being gleaned from interviews with participants and healthcare providers and/or educators. Furthermore, this framework shifts the onus of decision-making from solely the individual to multiple factors within her environment. Additionally, the Social Ecological Model has been supported as a tool to increase recruitment of underrepresented and marginalized populations, such as adolescent girls (Salihu et al., 2015). Ultimately, this theoretical framework will allow the research team to better understand the experiences of adolescent girls in the Philippines when accessing contraception and may provide

insight into how to manipulate the environment to increase contraception rates among individuals.

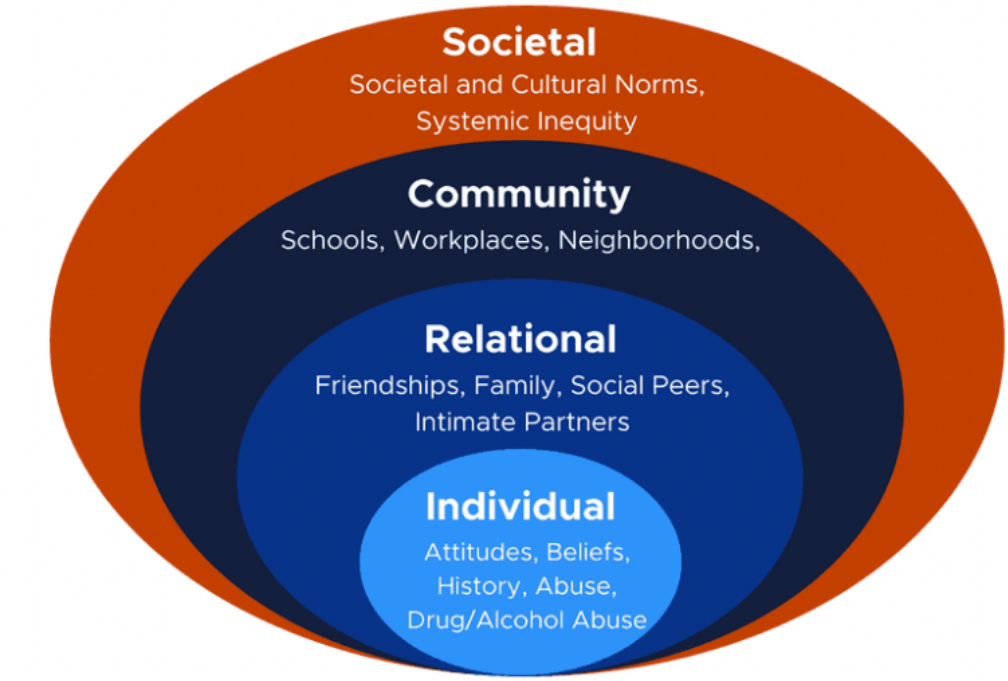

Figure 1. Social Ecological Model

Research Design and Methods

Sample Population and Recruitment

In order to fulfill the aims of the study as described above, research participants will include unmarried adolescent girls between the ages of 15 and 19 who are living in Puerto Princesa, Philippines. The sample for this study will be recruited from local reproductive health clinic Roots of Health (ROH) and from junior and senior high schools in Puerto Princesa. It is important to include participants from local schools in order to limit potential selection bias, as those who are actively seeking out reproductive health services provided by ROH may have a

higher level of knowledge or comfort accessing contraception than the average adolescent girl. ROH provides comprehensive sexual education, prenatal care, and contraception services to women living in the area. As one of the only reproductive health organizations in the city, ROH serves thousands of women, including unmarried adolescent girls within the research participant sample. Participants who will be engaged in KII will include healthcare providers or educators at ROH and local Barangay Health Centers (BHCs).

As the sample includes female adolescents aged 15-19 living in the urban city of Puerto Princesa, participants will be recruited from this geographical area. However, it will be necessary to ensure participants represent a wide range of backgrounds in order to determine if there are differences in access to contraception based on class, educational attainment, or specific age within the age group. Purposive sampling will be employed to include participants based on the research team's judgement. Participants who are eligible to be included in the in-depth interview and FGD components of the study include adolescent girls between the ages of 15 and 19 who are living in Puerto Princesa, have accessed contraception or have tried to access contraception, and are willing and able to participate. Participants must speak English or Tagalog. Exclusion criteria for this portion of the study includes girls under the age of 15 and over the age of 19, adolescent boys, and those who are not able or willing to participate. Participants who are eligible to be included in the KII component of the study include adults who provide healthcare or education to adolescents in Puerto Princesa, are employed by Roots of Health or local Barangay Health Centers, and are willing and able to participate. Participants must speak English or Tagalog. Exclusion criteria for this portion of the study includes professionals who do not provide healthcare or education to adolescents and those who are not able or willing to participate.

As stated, participants will be recruited from ROH's patient and student registry, as well as through flyers that are posted in the ROH clinic and in similar locales across town that this demographic frequents. Participants will also be recruited from local BHCs. In order to complete individual in-depth interviews with patients, 10-20 adolescents will be recruited, or until saturation has been reached and no new information is being collected. Depending on how many adolescents are recruited, between 10-20 in-depth interviews will be conducted. FGD will consist of 5-8 participants and a total of 3 focus group discussions will be conducted. Finally, KII will include the perspectives of 3-4 healthcare providers or educators employed by Roots of Health or Barangay Health Centers.

When conducting research in any capacity, ethical considerations must be taken into account. Such considerations are especially important when conducting research about a sensitive topic, such as reproductive health and contraception use. Furthermore, there are additional ethical considerations to take into account regarding the inclusion of a vulnerable population in research, such as adolescent girls. All research participants will be required to provide informed consent before participating in the study and girls under the age of 18 will require parental consent. The protection of the privacy and autonomy of participants will be ensured through security measures, including omitting any identifying information in written summaries of research and not disclosing participant identities with others. Finally, monetary compensation will not be provided to participants who complete interviews, as the study will only utilize a limited number of participants and it would be unethical to provide compensation to some women and be unable to provide it to other women who wish to participate but cannot due to the small sample size.

Data Collection Method

In order to fulfill the proposed aims, it will be necessary to conduct semi-structured in-depth interviews and FGD with study participants, as well as KII with reproductive health providers and sexual health educators at ROH and BHCs. Data will be collected in three different formats: in the form of tape recorded, semi-structured in-depth interviews with 10-20 participants, in the form of FGD with 5-8 participants and led by a moderator, and in the form of KII with 3-4 staff members at ROH and BHCs. All interviews will be conducted in a confidential space where participants will be able to speak freely and without worry that their privacy will be compromised.

<u>In-depth Interviews</u>

In-depth interviews with participants will follow a semi-structured format. The research team will begin by asking about the participant's experience accessing contraception and allow them to share anything they believe to be relevant. The team will then use the sub-questions of interest to guide the conversation, specifically focusing on individual, societal, or interpersonal pressures the participant experiences when trying to access reproductive healthcare and how these barriers affect their ability to seek care. This aspect of data collection is particularly useful as it will allow girls to share their experiences navigating reproductive health services in their city in a safe and confidential way.

<u>Focus Group Discussions</u>

Focus group discussions will be conducted with 5-8 unmarried adolescents aged 15-19. The moderator will probe about various topics, such as participants' general thoughts about contraception, experiences accessing reproductive healthcare including barriers girls may face, and whether or not they have received sexual education. Probing on participants' opinions on

sexual education will be necessary in order to assess the relationship between education and levels of comfortability when seeking out reproductive healthcare. Focus group discussions will complement the information gained in in-depth interviews, as they allow girls to bounce ideas off one another. Hearing one of her peers speak about accessing contraception or another related topic may spark an idea in a participant, leading to a richer conversation. Furthermore, girls may feel more comfortable being forthcoming with information if they see that their peers have also had similar experiences.

Key Informant Interviews

Finally, for the third component of the study, key informant interviews with 3-4 healthcare providers or educators at ROH and BHCs who work with adolescents will be conducted. Participants will be asked about their experience providing healthcare to the sample population, their perception of contraception, any barriers they face when providing their services, their perception of the role education plays in influencing the behavior of young women, and their perception of the barriers that girls might face when accessing contraception. This final method of data collection will enable the research team to gain perspective on the opposite side of the spectrum, which may provide insight into challenges providers face when providing contraception to adolescents.

Method of Data Analysis

Following data collection, data analysis will begin. The research team will employ a thematic analysis to examine the data generated and identify the common themes that emerge. First, interviews will be transcribed and the research team will read transcriptions in order to become familiar with the data. Following this step, data analysis will consist of open coding of

the interview transcripts, wherein transcripts will be read and analyzed line by line. A codebook of themes that emerged in the interviews will be generated and transcripts will be coded accordingly. Data analysis will be supported by Dedoose software, which will allow the research team to efficiently and quickly code large amounts of data. Transcripts will be uploaded to Dedoose and coded using the software and following the coding methods laid out above. Once this is done, themes that emerged from the data collection will be defined and named to further understand the data and assist in future writeups. Throughout the data analysis process, the Social Ecological Model will guide the discoveries that are made, particularly about the role of interpersonal and societal level factors in influencing contraception use among the population.

All interview data and transcripts will be stored on a password protected computer and only those who are part of the research team will have access to the information. Transcription of interviews will be carried out by a member of the research team to ensure participant information is not given to an outside source. Identifying information will not be recorded or included in written transcripts to ensure participant privacy.

Feasibility

Before carrying out a study, it is necessary to consider the feasibility of the proposed research plan. Because the research team has strong relationships with key stakeholders in the study setting, the feasibility of carrying out the proposed research is high. Maintaining such relationships will be necessary to carry out the proposed research, as they will enable the research team to recruit the study sample. Graduate research students who are trained in qualitative data analysis will assist in the data analysis phase of the study, which is a cost-effective method. Further, because the study involves conducting qualitative interviews only, the

only material that will need to be provided to participants is the informed consent form. For these reasons, carrying out the proposed research plan is feasible.

As discussed above, potential ethical concerns have been considered when creating this research proposal in an effort to minimize harm to participants. Informed consent forms will be utilized in an effort to provide more information about the study and to protect participants. All study participants, including those taking part in KII, FGD, and in-depth interviews, will be required to fill out informed consent forms before data collection occurs. Data will be collected in a confidential and protected way and, following collection, participants' data will be stored in a secure location to which only the research team has access. Participants reserve the right to stop participating in the study at any time and are able to skip any questions that they do not feel comfortable answering. Finally, to address the ethical concerns associated with conducting research with a vulnerable or marginalized population, all interviews will take place in a quiet and confidential space where participants feel comfortable. A member of the research team who lives in Puerto Princesa will be present during each interview.

Discussion

Summary

The proposed study seeks to utilize qualitative interviews to address a gap in the literature about the factors that influence contraception use among a vulnerable population in the Philippines, the role of education in promoting contraception use, and the part that advocacy can play. Through specific aims and methodology, the proposed study will fill in gaps in the literature. If carried out, the research design and methods proposed above will illuminate trends in contraception use and the various factors that empower adolescent girls to seek out

contraception and other reproductive healthcare services. This has important implications in the provision of healthcare in Puerto Princesa, as well as within the broader field of reproductive health.

Strengths and Limitations

As is the case with qualitative research, the results generated as a result of carrying out this research proposal will not be generalizable to other populations. This is both a strength and limitation of qualitative research, as it enables the collection of richer information on the specific reproductive health environment in Puerto Princesa, yet this information cannot be extrapolated to other contexts or populations. Additionally, there are limitations associated with the proposed methods of data collection, specifically focus groups and in-depth interviews with adolescent girls. Due to the sensitive nature of the research topic, girls may not feel comfortable speaking freely and openly both in group settings and individually. This may affect the quality of the data that is generated. However, steps can be taken to ensure girls are comfortable, such as following confidentiality measures. Another consideration associated with focusing solely on adolescent girls is that the perspectives of adolescent boys will not be included in the study, which may limit the knowledge that can be gained about the role of boys.

Despite limitations associated with the proposed study, the research also has many strengths and, thus, is valuable to the field at large. The proposed data collection method is a strength of the study, as the inclusion of both individual interviews and focus group discussions will address concerns girls feel when sharing information about a sensitive subject. Additionally, including healthcare providers and educators in data collection is a strength as it will provide insight into contraception provision.

Conclusions

As explored in this proposal, despite the physical availability of contraceptive methods, there remains a significant unmet need for contraception among key populations in the Philippines. Thus, more information about the complex and varied factors that influence contraception use is needed. The proposed research plan seeks to generate knowledge on the factors that limit contraception use among a very specific population: adolescent girls aged 15-19 living in Puerto Princesa, Philippines. By utilizing a qualitative approach, the proposed research also intends to amplify the voices and perspectives of an often overlooked population. Ultimately, the proposed research will illuminate the lived experiences of adolescent girls as they navigate social, interpersonal, and individual barriers to accessing contraception and the data generated will help to advance the field of reproductive health and access to contraception in the future.

Author Biases

In an effort to maintain full transparency, it is important for members of the research team to outline any possible biases and/or personal experiences that might impact the data collection and analysis plans proposed above. Primarily, members of the team have worked for Roots of Health in the past and feel compelled to support their work. However, the team does not believe that this will influence the outcome of the proposed study design and will not result in any harmful bias. Additionally, it is important to note that members of the team study and work primarily in reproductive health, the role of stigma, and the importance of access to contraception. For this reason, the team is passionate about the topic of this research proposal

and about advocating for access to contraception and other reproductive health services in general.

While potential sources of bias have been identified, the research team does not anticipate negative outcomes as a result, nor will such sources of potential bias harm research participants due to the measures that will be taken to protect participants. However, we must also acknowledge the presence of the unequal power dynamics that exist in this study and in the field of global health more broadly. There is an unequal dynamic between researcher and research population, as members of the research team are white, Western women and the research population proposed in this study are Women of Color and many may belong to a low SES. It is imperative that researchers protect the populations that they intend to work with through the enforcement of strict confidentiality measures and the continuance of respect for the research population.

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