

Research Projects Sexual and Reproductive Health in Emergency Situations for Myanmar Displaced Persons in Takand Mae Hong Son Provinces

Sponsored By International Planned Parenthood Federation (IPPF)



By

The Planned Parenthood Association of Thailand (PPAT) under the Patronage of Her Royal Highness the Princess Mother

Executive Summary

The military coup in Myanmar that occurred on February 1, 2021, has led to an increase in armed conflicts and resulted in a new wave of rapid population displacement across the border into Thailand. These displaced populations are scattered outside temporary shelters along the Thailand-Myanmar border, especially in Tak and Mae Hong Son provinces, where the largest number of Myanmar displaced persons traveled to reside. The urgent migration has caused them to live in difficult conditions, unable to access rights or welfare from the government of Thailand, including services regarding sexual and reproductive health care.

The Planned Parenthood Association of Thailand (PPAT) under the patronage of Her Royal Highness Princess Srinagarindra has played a role in promoting sexual and reproductive health in and around temporary shelters for a long time. PPAT has recognized the importance of developing operations to meet urgent and complex situations, Therefore PPAT has initiated a research project titled "Sexual and Reproductive Health in Emergency Situations for Myanmar Displaced persons: in Tak and Mae Hong Son Provinces". This project was funded by the International Planned Parenthood Federation (IPPF), with the following objectives: 1) To study the knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergency situations among Myanmar displaced persons 2) To study the needs for sexual and reproductive health services in emergency situations among Myanmar displaced persons, and 3) To study service provision, operations, issues, and obstacles in the field of sexual and reproductive health among those working with Myanmar displaced persons. A qualitative research method was employed, using non-participant observation and in-depth interviews, with semi-structured interview guidelines as the research tools. The target groups were divided into the following 3 main groups: 1) A total of 17 Myanmar displaced persons, comprising youth (15 - 24 years old), women (25 - 49 years old), pregnant women (15 - 49 years old), and persons with disabilities (15- 49 years old) 2) A total of 10 stakeholders, comprising government officials and NGO staff, and 3) A total of 2 PPAT officials. Descriptive analysis was applied with the data through systematic content analysis. The knowledge gained will serve as guidelines for developing suitable and sustainable sexual and reproductive health operations to meet the Myanmar displaced persons' needs according to humanitarian principles. The study's findings are presented in the following sections.

Knowledge, attitudes, and behaviors regarding sexual and reproductive health

Overall, every group of Myanmar displaced persons has limited knowledge of sexual and reproductive health, and the level of knowledge varies on different issues. Regarding sexual and reproductive rights, most of them do not fully understand, especially concerning the right to receive accurate and complete information and the right to make decisions about their own sexual and reproductive health. Regarding sex education, most of them have basic knowledge, such as using sanitary pads and maintaining hygiene during menstruation. However, they lack knowledge about other issues, such as sexually transmitted infections (STIs). Regarding family planning and contraception, most have knowledge of various contraceptive methods, such as taking birth control pills, contraceptive injections, contraceptive implants, intrauterine devices (IUDs), and condoms. However, they lack knowledge of the contraceptive methods that are most suitable for them. Regarding sexually transmitted infections, most of them have limited knowledge, knowing only about HIV/AIDS but lacking knowledge about other STIs' symptoms and correct prevention methods. Regarding domestic violence and sexual violence, most of them have some level of knowledge but lack understanding of certain issues, such as the causes of violence or how to prevent and solve it. Regarding sexual exploitation, most of them have a basic understanding but lack deep knowledge about the forms of sexual exploitation or the potential impacts on those who are exploited.

In terms of attitudes toward sexual and reproductive health, Myanmar displaced persons across all groups generally recognize the importance of sexual and reproductive health, although their understanding and experiences differ based on one's own level of knowledge, understanding and experiences. They agree that taking care of sexual and reproductive health is important and express concerns about unplanned pregnancies. They also want access to information and services related to contraception and family planning. Most of them have negative views toward abortion, viewing it sinful and something that should not be done. They also recognize the problems of sexual violence and exploitation, agreeing that sexual exploitation is wrong, unethical, and should not occur. In terms of behaviors regarding sexual and reproductive health, Myanmar displaced persons, especially youth, women, and pregnant women, tend to practice self-care when facing health issues, such as purchasing medication or using herbal remedies. All groups tend to seek advice and assistance from close individuals, such as parents, older sisters, elders, or friends, when deciding on treatments or accessing sexual and reproductive health services. Some also

seek services from healthcare facilities. Women, pregnant women, and people with disabilities also have knowledge and experience with various contraceptive methods.

From the above study results, it reflects that there is a relationship between the knowledge, attitudes, and behaviors of Myanmar displaced persons regarding sexual and reproductive health. Most of them have similar knowledge, attitudes, and behaviors. However, it is found that some Myanmar displaced persons have behaviors that are not aligned with knowledge and attitudes which are affected by limitations or other factors especially in the context of social and economic instability, as the following explanation.

Every group of the Myanmar displaced persons has knowledge about correct contraception methods, such as contraceptive pills, contraceptive injections, contraceptive implants, intrauterine devices IUDs, and condoms. They also have a positive attitude toward contraception to prevent unintended pregnancies, so they, especially women, pregnant women, and disabled individuals, have behaviors such as taking contraceptive pills, getting contraceptive injections, using contraceptive implants, and using condoms.

Every group of the Myanmar displaced persons knows that domestic violence and sexual violence are wrong, and they have attitudes of disagreement with such violence, making them behave in ways that attempt to avoid involvement in violent incidents. However, due to their lack of knowledge on certain issues, such as the causes of violence or how to prevent and solve it, including living in risky and unstable situations, they often cannot avoid being involved in violent incidents. This is particularly true for women and pregnant women, who have both direct experiences and awareness of violence against others, such as physical abuse, emotional abuse through verbal abuse, threats, and sexual assault.

Despite having negative attitudes toward sexually transmitted infections (STIs), every group of the Myanmar displaced persons have limited knowledge about STIs, recognizing only HIV and AIDS. They lack knowledge about the symptoms of other STIs, such as syphilis and gonorrhea, leading to behaviors that may overlook the symptoms of STIs other than HIV and AIDS in their physical bodies.

Every group of the Myanmar displaced persons knows that sexual exploitation is wrong and illegal. They have attitudes against sexual exploitation, resulting in behaviors that do not involve prostitution. However, some of them, despite knowing that sexual exploitation is wrong and having negative attitudes toward it, acknowledge that various factors, including poverty, lack of job opportunities, and living in risky and unstable situations, may force them into prostitution for survival.

Every group of the Myanmar displaced persons has knowledge about unintended pregnancies and abortion but may have some misconceptions about the details and processes of safe abortion. Most of them generally have negative attitudes toward abortion, viewing it as sinful, which leads them to decide against terminating pregnancies, even when the pregnancies are unintended.

Most Myanmar displaced persons still lack knowledge and understanding of comprehensive sexual rights and reproductive health, especially among youth, who have very little knowledge and understanding about their rights to make decisions regarding their own sexual and reproductive health. They view themselves as young and are still in school, therefore, they tend to depend on and seek advice regarding their health care from close individuals especially their family members.

Every group of the Myanmar displaced persons has varying levels of knowledge about family planning. Women and pregnant women possess knowledge about family planning, such as planning the number of children and the spacing between births. They also have attitudes that recognize the importance of family planning that aligns with their financial situation and health circumstances. This awareness leads them to plan their family size and spacing between children. Meanwhile, most youth lack knowledge about family planning and have the attitude that they are still young and in school, which results in their lack of focusing on this matter and consequently no family planning.

Most of the Myanmar displaced persons in every group understand that sexual and reproductive health are essential and require ongoing attention. Their attitudes show that taking care of their sexual and reproductive health is important, leading them to seek services from health facilities when facing issues related to sexual health and reproductive health. However, some of them, despite having knowledge, understanding, and attitudes that recognize the importance of sexual and reproductive health, decide not to seek services from health facilities due to financial constraints and inconvenient travel.

The needs for sexual and reproductive health services

In general, all groups of Myanmar displaced persons have a need for necessary medicines and supplies for their sexual and reproductive health care, such as sanitary pads, contraceptive pills, and condoms. They express a demand for knowledge and information about sexual and reproductive health, including methods of preventing sexually transmitted infections, contraception, and family planning. They also seek access to screening for sexually

transmitted diseases, prenatal care, postnatal care, and general health check-ups. However, individuals with disabilities prioritize their health care related to their disabilities first, prioritizing their basic living needs such as medicine, food, and shelter.

Stakeholders' service provision, operations, issues, and obstacles

Stakeholders involved in the care and assistance of the Myanmar displaced persons, including government agencies, NGOs, and health volunteers, have faced various challenges and obstacles in their operations. Government agencies in the administration and public health sectors have provided reproductive health services to Myanmar displaced persons, such as prenatal care, childbirth services, postnatal care for mothers and newborns, and contraception. They have also organized training to provide accurate knowledge on sexual and reproductive health to health volunteers (HV) and community health workers (CHW) so that they can deliver services in the community. However, they encounter issues and obstacles in their operations regarding the burden of expenses that the government must bear. The inconvenience of travel, especially during the rainy season, is prone to disasters such as fallen trees, flash floods, deeply rutted roads, The differences in language, and limited resources.

For NGOs, there are 2 clinics in Mae Hong Son province that provide reproductive health services to Myanmar displaced persons. These services include prenatal care, childbirth, postnatal care for mothers and newborns. There are agencies providing information and counseling regarding family planning and contraception as well as agencies providing sexual and reproductive health education in schools and communities. Additionally, all the agencies also refer HIV patients to Mae Sot Hospital and distribute condoms and contraceptives to ensure the well-being of Myanmar displaced persons. The challenges and obstacles in their work include the lack of access to services by Myanmar displaced persons, many of them are unaware of the services and fear deportation. There are also issues of budget and personnel shortages, which hinder the reach of services, as well as legal and operational constraints as most Myanmar displaced persons lack official legal status, making it difficult to access rights and benefits. Also, working in border areas is further restricted by legal and security issues, making it even more difficult to carry out operations. Physical challenges, such as natural disasters like wildfires and landslides, also make it hard to travel to provide services.

As for PPAT, it emphasizes education, counseling, and sexual and reproductive health services for Myanmar displaced persons both inside and outside temporary shelters.

These services include HIV screening to enable early detection and treatment, and referral of HIV-positive individuals and other patients requiring specialized care to hospitals or clinics. The challenges and obstacles facing also include the lack of access to services due to most displaced persons lacking identification documents and fearing deportation. Safety issues in some areas, language and cultural differences, budget and personnel shortages, and insufficient medical supplies, such as expensive implants for contraception, also hinder operations.

Recommendations

The study reflects that all groups of Myanmar displaced persons have limited knowledge of sexual and reproductive health, and their understanding of each topic varies. Therefore, relevant agencies should promptly promote accurate and comprehensive knowledge across all aspects of sexual and reproductive health to enable displaced persons to be able to take care of themselves and protect themselves, as well as being aware of where to seek help when facing health issues or violence.

However, promoting accurate and comprehensive knowledge about sexual and reproductive health alone may not be enough to build or change their behaviors. It is essential to also foster an attitude that recognizes its importance. We must not forget that some of their attitudes may stem from values, beliefs, and cultures brought from their homeland. Even if they have the right and conformed knowledge and attitudes, individual and environmental factors, such as unstable social and financial status, travel difficulties, lack of employment or adequate income, and living in a situation or environment, these factors hinder them access information and change their attitudes and behaviors. Therefore, relevant agencies need to help tailored to the needs of each group to ensure the most efficient and effective support that reduces physical and mental illness and loss of life as much as possible amid uncertain and risky situations.

Furthermore, even though agencies working to support Myanmar displaced persons recognize the importance of cooperation with other governmental and private agencies to make their operations more effective and cover more displaced persons, there are still gaps in information sharing, which can lead to redundant work. Therefore, all relevant agencies and sectors should hold meetings to exchange operational data or results to make an assistance plan for displaced persons, reduce redundant work, and ensure that aid reaches and covers as many displaced persons as possible.

Abstract

The research project titled "Sexual and Reproductive Health in Emergency Situations for Myanmar Displaced Persons: in Tak and Mae Hong Son Provinces" aims to 1) study the knowledge, attitudes, and behaviors regarding sexual and reproductive health 2) study the needs for sexual and reproductive health services, and 3) study the provision of services, operations, issues, and obstacles in sexual and reproductive health-related work for those who are involved with Myanmar displaced persons. Data were collected through non-participatory observation and in-depth interviews. The target groups were divided into 3 groups, which are 1) 17 Myanmar displaced persons, comprising youth, women, pregnant women, and individuals with disabilities 2) 10 stakeholders, comprising government officials and NGO staff, and 3) 2 staff members from the Planned Parenthood Association of Thailand.

The study found that Myanmar displaced persons had limited knowledge regarding sexual and reproductive health. They lacked in-depth understanding of sexual and reproductive health rights, sexually transmitted diseases, suitable contraception methods, causes of domestic and sexual violence, ways to prevent and solve the violence, and sexual exploitation. Most of them recognized the importance of sexual and reproductive health but were concerned about unplanned pregnancies, sexual violence, and sexual exploitation. They also held negative views towards abortion. Most participants consulted family and relatives in making decisions about their sexual and reproductive health services. Women, pregnant women, and individuals with disabilities had experiences with various contraceptive methods. Most of them have a high demand for medication and medical supplies, such as sanitary pads, contraceptives, and condoms. They also wanted to learn more about sexually transmitted diseases, contraception, and family planning, as well as services such as screening for sexually transmitted diseases, prenatal care, and postnatal care. Meanwhile, the group of individuals with disabilities prioritized health care that are related to their disabilities. Stakeholders involved in caring for and assisting Myanmar displaced persons, including government agencies, NGOs, and the PPAT, provided different scopes of services. Government agencies primarily focused on basic reproductive health services, such as prenatal care and childbirth, while NGOs and PPAT offered more diverse and comprehensive services, such as reproductive health and family planning counseling, and patient referrals. Their working processes were also more flexible and adaptable to emergency situations compared to the formal and procedural operations of government agencies.

Therefore, all relevant agencies should urgently promote accurate and comprehensive knowledge on all aspects of sexual and reproductive health for Myanmar displaced persons and hold meetings to exchange operational information to reduce redundancy and ensure widespread and equitable assistance.

Table of Contents

Chapter 1	1
Introduction	1
1.1 Background and the significance	1
1.2 Objectives	3
1.3 Expected benefits	3
1.4 Definitions	4
1.5 Research ethics	5
Chapter 2	6
Literature Review	6
2.1 Concepts of Sexual and Reproductive Health in Emergencies (SRHiE)	6
2.1.1 The Definition of sexual and reproductive health in emergencies	6
2.1.2 Problems and challenges in emergencies	7
2.1.3 Sexual and reproductive health management in emergencies	8
2.1.4 Minimum Initial Service Package (MISP) for sexual and reproductive health	8
2.1.5 Sexually Transmitted Infections (STIs) and AIDS	12
2.1.6 Maternal and newborn health	19
2.2 Concepts of Knowledge, Attitude, and Behavior (KAB) Model	31
2.3 Related studies	35
2.3.1 Studies related to sexual and reproductive health in emergencies	35
2.3.2 Studies related to the relationship between knowledge, attitudes, and behav	iors 39/
Chapter 3	43
Research Methodology	43
3.1 The Target Groups	43
3.2 Research areas	44
3.3 Research timeline	45
3.4 Data collection methods and research instruments	46
3.5 Data analysis	46
3.6 Research ethics	46

Chapter 4	48
Research Findings	48
4.1 Knowledge, attitudes, and behaviors regarding sexual and reproductive health in	
emergencies among Myanmar displaced persons	48
4.2 The need for sexual and reproductive health services in emergencies among	
Myanmar displaced persons	127
4.3 Provision of services, operations, problems, and obstacles related to sexual and	
reproductive health for stakeholders working with Myanmar displaced persons	145
Chapter 5	.162
Summary, Discussion, and Recommendations	.162
5.1 Knowledge, attitudes, and behaviors regarding sexual and reproductive health in	
emergencies among Myanmar displaced persons	162
5.2 The need for sexual and reproductive health services in emergencies for	
Myanmar displaced persons	168
5.3 Provision of services, operations, problems, and obstacles related to sexual and	
reproductive health for stakeholders working with Myanmar displaced persons	169
5.4 Recommendations	172
References	162

Chapter 1

Introduction

1.1 Background and the significance

The Planned Parenthood Association of Thailand (PPAT), under the royal patronage of Her Royal Highness Princess Srinagarindra, is a non-profit, public-benefit organization that leads the field of Sexual and Reproductive Health (SRH) education. It is also a member of the International Planned Parenthood Federation (IPPF), which supports and provides sexual and reproductive health services globally with equality. IPPF has established the Sexual and Reproductive Health in Crisis and Post-Crisis Situations (SPRINT) project to support sexual health, sexual and reproductive health rights, while reducing illness and mortality rates in emergency situations (PPAT, 2023), as known as "Sexual and Reproductive Health in Emergency (SRHiE)", which provides guidelines for delivering sexual and reproductive health services in emergencies such as natural disasters, wars, or crises which affect humans. The approach focuses on offering friendly services to all genders and sexualities (Askew et al., 2016).

According to statistics as of April 30, 2021, there were 91,795 displaced persons¹ from Myanmar who sought refuge in Thailand, with 45,005 registered and 46,790 unregistered. At the Mae La camp in Tha Song Yang District, Tak Province, 34,291 displaced persons were recorded, with 15,877 registered and 18,414 unregistered. At the Mae La Ma Luang camp in Sop Moei District, Mae Hong Son Province, there were 9,905 displaced people with 4,080 registered and 5,825 unregistered. At the Mae La Oon camp in Sop Moei District, Mae Hong Son Province, 9,046 displaced persons were recorded with 4,946 registered and 4,100 unregistered (UNHCR, 2021). Most of the displaced persons residing in temporary shelters are Karen and Karenni ethnic groups. However, National legal frameworks do not allow displaced persons to access healthcare and education services or to leave temporary shelters

¹ Since Thailand is not a party to the Convention relating to the Status of Refugees (1951), the Thai government refers to refugees as "Myanmar displaced persons from the war" or "displaced persons". The government has implemented human rights policies based on international standards, allowing displaced persons to reside in temporary shelters along the Thai - Myanmar border in Tak, Mae Hong Son, Kanchanaburi, and Ratchaburi provinces where the support provided, such as housing, food, healthcare, education, and vocational training, is limited (Thailand Development Research Institute (TDRI), 2022)

(UNHCR, 2023). Many displaced persons have lived in these shelters for extended periods and are unable to relocate. There are those who fled Myanmar after the February 1, 2021, military coup which caused increased armed conflicts and displacement. The Thai government reported that over 50,000 Myanmar nationals sought temporary protection in Thailand. The conflict is expected to continue or worsen, and displaced individuals will be returned to Myanmar once fighting subsides according to official announcements. However, many displaced persons may remain in Thailand. Although the Thai government has policies to promote the health of migrant populations, these policies do not fully cover displaced persons from wars and displaced persons (Onarheim, 2018).

As a result, addressing sexual and reproductive health issues among Myanmar displaced persons, both in and outside the shelters, is essential. A study by Salisbury et al. (2016) on 'Family planning knowledge, attitudes, and practices in refugee and migrant pregnant and post-partum women in the Thailand-Myanmar border - a mixed methods study' revealed concerning findings where most target groups had low use of long-term contraception and lacked awareness about emergency contraception. Misconceptions about sterilization were also prevalent, with many believing that a C-section or hysterectomy was equivalent to sterilization. This increases the risk of unplanned pregnancies. Another study by Asnong et al. (2018) on 'Adolescents' perceptions and experiences of pregnancy in refugee and migrant communities on the Thailand-Myanmar border: a qualitative study' that studied about teenage displaced persons' perception of pregnancy and knowledge about sexual and reproductive health, as well as the support structure for immigrant families and communities on the Thai - Myanmar border. The study found that adolescents felt they were too young for pregnancy and parenthood. The teenage girls were concerned about their physical and financial readiness while the teenage boys were concerned about education opportunities and social effects that could cause difficulties in their lives in the future. Moreover, the family's and community's disapproval of premarital sex and pregnancy which can lead to forced marriages in cases where young couples were discovered meeting alone.

PPAT is one of the agencies that are involved in promoting sexual and reproductive health services within and outside the temporary shelters. According to service and counseling records in 2021, it was found that there were 1,023 Myanmar displaced persons who received family planning services from PPAT, with 116 new clients and 907 returning clients. Reproductive health services were provided to 2 new clients. Family planning counseling services were provided to 114 new and 100 returning clients, while reproductive health

counseling saw 116 new and 100 returning clients. Advice for married couples was provided to only 1 new client. Given the total number of displaced persons, service access and number of clients are considered low. Research on sexual and reproductive health in emergency situations is also limited where issues include sexual knowledge, understanding, attitudes, sexual behaviors, sexual violence, support for the survivors' needs, HIV prevention, reduction of deaths caused by HIV and sexually transmitted diseases, illness prevention for mothers and newborn babies, and prevention of unplanned pregnancies.

These knowledge gaps as mentioned above led to the research study "Sexual and Reproductive Health in Emergency Situations of Myanmar Displaced Persons: Tak and Mae Hong Son Provinces". The objectives are to 1) study knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergency situations among Myanmar displaced persons, 2) identify the needs for sexual and reproductive health services in emergency situations, and 3) study service provision, operations, issues, and obstacles faced by those working with Myanmar displaced persons. The knowledge gained will guide the development of appropriate and sustainable sexual and reproductive health and family planning services to meet the needs of displaced persons.

1.2 Objectives

- 1.2.1 To study knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergency situations among Myanmar displaced persons.
- 1.2.2 To study the needs for sexual and reproductive health services in emergency situations among Myanmar displaced persons.
- 1.2.3. To study service provision, operations, issues, and obstacles in the field of sexual and reproductive health among those working with Myanmar displaced persons.

1.3 Expected benefits

1.3.1 Gaining insight into the knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergency situations among Myanmar displaced persons which can support the development of PPAT's projects in Tak and Mae Hong Son.

- 1.3.2 Gaining insight into the needs for sexual and reproductive health services in emergency situations, which can facilitate the improvement of service provision to better meet the needs of Myanmar displaced persons.
- 1.3.3 Gaining insight into the service provision, operations, issues, and obstacles faced by those involved with Myanmar displaced persons, which can help develop effective and efficient collaborative practices among related agencies.

1.4 Definitions

- **1.3.4 Myanmar displaced persons** refers to individuals or groups fleeing Myanmar due to unsafe situations, residing in Tak and Mae Hong Son provinces along the Thai Myanmar border.
- **1.3.5** Emergency situations refer to situations threatening life and property, arising from wars, conflicts, and human rights violations.
- **1.3.6 Sexual health** refers to the state of physical and mental well-being in matters related to sexuality, free from illness and violence.
- **1.3.7 Sexual rights** refer to the fundamental rights of individuals to make their own sexual decisions where others must respect and accept.
- **1.3.8** Reproductive health refers to physical, mental, and social well-being in all aspects related to sexuality and childbearing.
- 1.3.9 Reproductive rights refer to the fundamental rights of individuals to make decisions regarding having sexual relations and having own children, whether to have children or not, when and how many children to have, with access to accurate and complete information as well as available methods that are accessible, acceptable, and with quality.
- **1.3.10 Youths** refer to Myanmar displaced persons aged 15 to 24 years old living in Tak and Mae Hong Son provinces, the age is based on WHO's criteria (Department of Health, Ministry of Public Health, 2021).
- **1.3.11** Women of reproductive age are Myanmar displaced women aged 15 to 49 years old, the age is based on WHO's criteria (Department of Health, Ministry of Public Health, 2021).
- **1.3.12 Women** refer to displaced women from Myanmar, aged 25 to 49 years old living in Tak and Mae Hong Son provinces.

- **1.3.13 Pregnant women** refer to displaced women from Myanmar, aged 15 to 49 years old living in Tak and Mae Hong Son provinces, and are pregnant at the time of providing information.
- 1.3.14 Individuals with disabilities refer to displaced persons from Myanmar, aged 15 to 49 years old living in Tak and Mae Hong Son provinces, who became disabled while still in Myanmar before migrating to Thailand.
- **1.3.15 Government sector** refers to Thai government officials who work with displaced persons from Myanmar living in Tak and Mae Hong Son provinces.
- 1.3.16 Non-Governmental Organizations (NGOs) refer to officials of non-governmental organizations (NGOs) who work with displaced persons from Myanmar who live in Tak and Mae Hong Son provinces.
- 1.3.17 Planned Parenthood Association of Thailand (PPAT) refers to officials of PPAT who work on sexual and reproductive health projects in Tak and Mae Hong Son provinces.

1.5 Research ethics

This research project has been approved by the Human Research Ethics Committee of the Institute for Human Research Protection, Department of Medical Sciences, Ministry of Public Health, under certification numbers IHRP2024060, IHRP No. 049-2567, dated May 7, 2024.

Chapter 2

Literature Review

This research focuses on the study of knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergency situations among Myanmar displaced persons. It aims to explore the needs for sexual and reproductive health services in emergency situations for these displaced persons and examine the provision of services, operational processes, challenges, and obstacles faced by those involved in providing sexual and reproductive health services to Myanmar displaced persons. To guide the research design, a review of related concepts and previous research has been conducted as follows.

- 2.1 Concepts of Sexual and Reproductive Health in Emergencies (SRHiE)
 - 2.1.1 The Definition and importance of sexual and reproductive health (SRH)
 - 2.1.2 Challenges and obstacles in emergencies
 - 2.1.3 Management of sexual and reproductive health in emergencies
 - 2.1.4 Minimum Initial Service Package (MISP) for sexual and reproductive health
 - 2.1.5 Sexually Transmitted Infections (STIs) and AIDS
 - 2.1.6 Maternal and newborn health
 - 2.1.7 Sexual and Gender-Based Violence (SGBV)
- 2.2 Concepts of studying Knowledge, Attitude, and Behavior (KAB) Model
- 2.3 Related Research

2.1 Concepts of Sexual and Reproductive Health in Emergencies (SRHiE)

2.1.1 The Definition of sexual and reproductive health in emergencies

Sexual and reproductive health (SRH) refers to the physical, mental, and social well-being related to the reproductive system at all stages of life. This encompasses a satisfying and safe sex life and the right to access appropriate and safe health information and services, enabling individuals to make free decisions regarding their sexual and reproductive health.

Sexual and Reproductive Health Services (WHO, 2018) are significant for the following reasons:

1) Reducing the vulnerability of at-risk populations before an emergency occurs.

- 2) Building the capacity of communities to prevent and prepare for emergencies and respond to and recover from such incidents. This also serves to protect public health systems, health services, and basic infrastructure.
- 3) Building the foundation for scaling up measures to respond to health needs in a comprehensive manner during emergencies.
- 4) Preventing avoidable illness and deaths, particularly among women, children, and adolescents.
- 5) Using the recovery phase as an opportunity to strengthen services and reduce future risks from emergencies.

Accordingly, Sexual and Reproductive Health in Emergencies (SRHiE) refers to the management and provision of sexual and reproductive health services during emergencies such as natural disasters, wars, and conflicts, which have severe impacts on people's lives and well-being because healthcare services may be limited in such emergencies and people may face increased risks from sexually transmitted infections (STIs), unplanned pregnancies, and sexual violence. Proper and timely management and services can help reduce these risks and support the mental and social well-being of affected individuals. Sexual and reproductive health services in emergencies include counseling, medication distribution, and managing sexual health risks.

2.1.2 Problems and challenges in emergencies

Emergency situations often disrupt health infrastructure and medical services, making it difficult for affected populations to access sexual and reproductive health services (UNFPA (2015). In emergencies, the risk of sexual violence increases, especially among women and children who lack safe spaces (IASC, 2015). Furthermore, the lack of knowledge and access to contraceptives leads to unplanned pregnancies and the spread of sexually transmitted infections (WHO, 2006). The details are as follows.

- 1) Access to essential health services: Medical services may be limited or inaccessible due to the destruction of infrastructure, large-scale displacement, and shortages of essential medicines or medical supplies.
- 2) Increased risk of sexual abuse: In unsafe situations, the rate of sexual violence may increase, with the lack of safe spaces and legal support for affected individuals.
- 3) Unplanned pregnancies: The lack of knowledge and access to contraceptives, along with inadequate pregnancy care.

4) Sexually Transmitted Infections (STIs): The lack of knowledge about prevention and treatment, along with the inability to access testing and treatment services.

2.1.3 Sexual and reproductive health management in emergencies

- 1) Preparedness and planning in advance, which involves assessing the specific needs of target groups as well as available and lacking resources (Sphere Association, 2018), to adequately prepare emergency sexual and reproductive health kits with necessary equipment and medicines. This also includes training staff and volunteers to provide the services (IAWG, 2018).
- 2) Service provision for sexual and reproductive health, which includes establishing temporary health centers that can provide maternal care, safe childbirth services, and post-partum health care (WHO, 2017), also offers contraceptive services by distributing contraceptive pills and devices to prevent unplanned pregnancies (UNFPA, 2015).
- 3) Prevention and response to sexual violence, which includes providing safe spaces for women and children at risk of sexual abuse (IASC, 2015), also offers psychological and legal support to survivors of sexual violence (Chynoweth, 2015).
- 4) Control and prevention of sexually transmitted infections, which involves providing testing and treatment services for sexually transmitted infections, such as HIV and gonorrhea (Casey et al., 2015).
- 5) Education and information dissemination, which includes providing sexual health education, such as pregnancy prevention and sexually transmitted infections, to communities (WHO, 2017). This also involves using media and social channels to disseminate information and raise awareness (IAWG, 2018).

2.1.4 Minimum Initial Service Package (MISP) for sexual and reproductive health

The Minimum Initial Service Package (MISP) for sexual and reproductive health is a basic service package designed for emergency situations, such as natural disasters, wars, and conflicts. The Inter-Agency Working Group on Reproductive Health in Crises (IAWG) developed this package to provide immediate and effective services to address specific sexual and reproductive health needs within the first 48 hours of an emergency. The main goals are to reduce mortality rates and mitigate the risk of the spread of sexually transmitted infections, unplanned pregnancies, and sexual violence based on the human rights principles that aim to save lives through operations (IAWG, 2018).

The main objectives of MISP (Minimum Initial Service Package) are as follows.

- 1) Sickness and mortality prevention of mothers and newborns by ensuring the provision of safe childbirth services, postpartum care, and comprehensive health care for mothers and newborns.
- 2) Prevention of unplanned pregnancies by providing contraceptive services, family planning, and reproductive health counseling.
- 3) Prevention and reduction of the spread of sexually transmitted infections (STIs) by offering testing, treatment for STIs, education, and condom distribution.
- 4) Care and support for survivors of sexual violence by providing mental health services, counseling, legal assistance, and referral to relevant agencies.

MISP services cover various aspects of sexual and reproductive health in emergency situations to protect the lives and health of affected individuals, as follows.

- 1) Coordination and management for sexual and reproductive health (SRH) services by establishing coordination between government agencies, non-profit organizations, and international organizations to ensure effective and consistent services.
- 2) Prevention and treatment for survivors of sexual and gender-based violence (SGBV) by offering medical care and mental health support for survivors, as well as legal counseling.
- 3) Provision of contraceptive services and family planning by offering contraceptive methods such as condoms, birth control pills, IUDs, and counseling on family planning and choosing suitable contraception methods.
- 4) Provision of childbirth and postpartum care by ensuring safe childbirth services in suitable facilities and postpartum care for both mothers and newborns to prevent illness and mortality.
- 5) Prevention and management of sexually transmitted infections (STIs) by providing testing and treatment for STIs such as gonorrhea, syphilis, and HIV, and distributing condoms to at-risk populations.
- 6) Provision of essential equipment and medical supplies, such as contraceptives, antibiotics (for bacterial, fungal, and virus infections), treatments for STIs, and safe childbirth equipment.

7) Provision of information and education on sexual and reproductive health, by offering information and education on pregnancy prevention, prevention of sexually transmitted infections (STIs), and prevention of sexual violence.

The implementation of the MISP plan in emergency situations requires preparedness, effective coordination, and efficient resource management to ensure a rapid and effective response to the needs of affected populations, the process is as follows.

- 1) Situation assessment and preparedness which involves assessing the affected areas to identify the number of people, urgent health needs, and resource availability. This also involves establishing a sexual and reproductive health operations team which consists of medical professionals, coordinators, and volunteers. Staff and volunteers should also receive training on the use of MISP services to ensure correct understanding and implementation.
- 2) Coordination and resource management by establishing mechanisms for coordination between relevant agencies, such as government agencies, NGOs, and international organizations, to ensure aligned operations. Necessary resources, medical supplies, and medical equipment should be efficiently supplied and managed to ensure availability and accessibility when needed.
- 3) Provision of sexual and reproductive health services, where safe childbirth services should be provided in secure facilities, with specialists available for prenatal and postnatal care for both mothers and newborns. Testing and treatment for sexually transmitted infections (STIs) should be provided, along with condom distribution and counseling on prevention methods. Contraceptive services and family planning should also be provided, offering contraceptive devices and counseling to prevent unplanned pregnancies.
- 4) Management and prevention of sexual violence, where medical and mental care should be provided to survivors of sexual violence, along with legal counseling. Safe spaces should also be created for vulnerable groups, such as women and children, in affected areas.
- 5) Provision of information and education on sexual and reproductive health, STIs, and prevention of sexual violence should be in place, using suitable media to spread information such as posters, brochures, or local radio.
- 6) Monitoring and evaluation, by creating a system for monitoring and evaluating the provided services to identify problems and challenges in the operations while improving

the services as needed. Reports on the operation should also be prepared to support further planning and service improvement.

7) Long-term and sustainable planning by developing strategies for transitioning from MISP (Minimum Initial Service Package) to the provision of sustainable sexual and reproductive health services over the long term, including building partnerships with local organizations and other relevant bodies. This aims to establish sustainable service systems and prepare for future emergency situations.

SRH Kit (Sexual and Reproductive Health Kit) is a set of equipment prepared for providing sexual and reproductive health services in emergency situations. SRH Kit is designed to be diverse and meet the health needs of the affected population (IAWG, 2018). SRH Kit consists of various tools and medical supplies as follows.

Kit 1: Contraception Kit, which includes contraceptive pills, intrauterine devices (IUD), male and female condoms, and materials for counseling and educational tools regarding contraception.

Kit 2: STI Kit (Sexually Transmitted Infection), which includes medications for treating sexually transmitted infections, such as syphilis and gonorrhea, diagnostic equipment such as slides, specimen swabs, chemical agents for testing and analysis, and materials for counseling and education on sexually transmitted infections.

Kit 3: Safe Delivery and Newborn Care Kit, which includes delivery equipment such as sterile gloves, delivery drapes, cotton swabs, delivery cloths, and newborn care items such as thermometers, infant wraps, and postpartum care equipment such as nursing pads and infant resuscitators.

Kit 4: Postpartum Care Kit, which includes medications and tools for postpartum care, such as pain relievers, antibiotics, and materials for counseling and education on postpartum care and family planning.

Kit 5: Management of Sexual Violence Kit, which includes medications and tools for treating survivors of sexual violence, such as antibiotics, pain relievers, examination and treatment equipment, and materials for counseling and education on managing sexual violence.

Kit 6: Malaria and HIV/AIDS Kit, which includes malaria diagnostic tools, such as slides, testing chemicals, and antiretroviral drugs for HIV/AIDS and malaria patients, along with counseling and education materials on the prevention and treatment of such diseases.

Kit 7: SRH Planning and Management Kit, which includes tools for data collection and planning, such as demographic reporting forms, and materials for counseling and training for staff and volunteers.

Kit 8: Obstetric Complication Management Kit. which includes medications and equipment for managing obstetric complications, such as blood clotting medications, labor-inducing drugs, life-saving equipment, and medical instruments such as suction machines and resuscitators.

Kit 9: Neonatal and Child Care Kit, which includes equipment and medications for the care of infants and children, such as fever reducers, antibiotics for children, vitamins, and tools used for vaccinations and health check-ups.

Kit 10: Information, Education, and Communication Kit (IEC Kit), which includes educational and informational materials such as posters, pamphlets, and counseling guides, as well as training materials for staff and volunteers, such as manuals and educational videos.

In summary, during emergency situations, the use of the Minimum Initial Service Package (MISP) for sexual and reproductive health services can help reduce the risk to life and health for those affected and can also build the foundation for providing long-term health services after an emergency ends.

2.1.5 Sexually Transmitted Infections (STIs) and AIDS

Sexually transmitted infections (STIs) refer to a group of diseases transmitted from one person to another, primarily through sexual intercourse. Some STIs can also be transmitted through sexual contact or from mother to child during pregnancy. STIs are classified based on symptoms as follows 1) sores, which includes syphilis, chancroid, and genital herpes 2) abscesses, which includes Lymphogranuloma Venereum or LGV 3) discharges, which include gonorrhea and nongonococcal urethritis 4) other infections, which includes genital warts, molluscum contagiosum, trichomoniasis, vaginal yeast infection, and pubic lice.

STIs are caused by various pathogens. STIs caused by bacteria are treatable but can recur if re-exposed to the infection through sexual intercourse, such as syphilis and chancroid. Viral infections are treatable but may recur even without re-exposure to the virus, transmitting through sexual contact or skin-to-skin contact, even without complete sexual intercourse, such as genital herpes and genital warts. Also, fungal or protozoan infections,

such as vaginal yeast infection, can occur without sexual intercourse (Department of Disease Control, n.d.).

The Thai Red Cross Society (n.d.) defines sexually transmitted infections as diseases that are transmitted from one person to another through sexual intercourse. These infections were traditionally referred to as "venereal diseases," including gonorrhea, non-gonococcal urethritis, syphilis, chancroid, and lymphogranuloma venereum. Nowadays, the definition of STIs has expanded to include other diseases that, although transmissible through other means, can also be transmitted through sexual intercourse with an infected individual, such as hepatitis B and HIV/AIDS.

In humanitarian emergencies, whether caused by natural disasters, conflicts, or displacement, the environment becomes conducive to the spread of sexually transmitted infections (STIs). Preventing STIs is a crucial component of the emergency response, not only to protect the health of those affected but also to maintain the stability and well-being of the community. In humanitarian emergencies, preventing STIs is particularly important due to several factors outlined below.

- 1) There is an impact on health as many STIs, such as HIV, syphilis, and gonorrhea can cause severe long-term health impacts. In emergencies where public health systems are weakened, access to treatment may be difficult, increasing the risk of complications and higher mortality rates (WHO, 2006).
- 2) Risks to vulnerable groups such as women, children, and individuals with diverse sexual orientations, face higher risks of infection and sexual exploitation in emergencies. Preventing STIs is a way to protect their human rights and dignity (IASC, 2010).
- 3) There are social and economic impacts as the spread of STIs can disrupt the social, economic, and security structures of communities. STI prevention is therefore essential in strengthening communities' resilience during crises (Sphere Association, 2018).

Measures for STI prevention in humanitarian emergencies

1) Providing accurate and accessible information by raising awareness about STIs, transmission methods, symptoms, and the importance of prevention and treatment through accessible channels during emergencies, such as individual counseling, small group activities, social media, and public announcements (WHO, 2010). The content should be tailored to the target audience, delivered in easily understood language, and mindful of cultural and belief differences, especially for vulnerable groups such as women, children, and

men who have sex with men (IAWG, 2018). Promoting open communication and creating environments where people can discuss sexual health openly without judgment is essential (UNHCR and UNFPA, 2020).

- 2) Supporting access to prevention tools by providing sufficient and accessible condoms and lubricants in various locations, such as temporary shelters, mobile clinics, and distribution points for essential items (UNFPA, 2017). Encouraging condom use and providing guidance on correct and consistent use in every sexual intercourse (WHO, 2006), as well as offering contraceptive services, such as various types of birth control pills or contraceptive implants (UNFPA, 2017).
- 3) Screenings and treatments which include providing accessible, fast, and confidential screening services for sexually transmitted infections (STIs), as well as prompt treatment that is both timely and effective for those infected. This also includes follow-up care (WHO, 2006) and offers mental and social counseling and support to those infected and those at risk (UNHCR and UNFPA, 2020).
- 4) Protection of vulnerable groups, which identifies vulnerable groups and prioritizes their access to prevention, screening, and treatment services (UNHCR and UNFPA, 2020). Prevent sexual violence by implementing measures to prevent and manage sexual violence in emergency situations, such as installing lighting in public areas, providing separate male and female bathrooms, and establishing systems for reporting incidents of violence (IASC, 2015). Mental health support is also provided to those affected by or at high risk of sexual violence (IAWG, 2018).
- 5) Coordination and support, which includes coordinating efforts with government agencies, non-governmental organizations (NGOs), and local communities to integrate STI prevention services into other humanitarian responses (Sphere Association, 2018). Strengthen healthcare systems, rebuild and support recovery of public health systems in affected areas to ensure continuous sexual and reproductive health services (WHO, 2010). This also includes monitoring the spread of STIs and evaluating the operations to continuously improve prevention measures (Sphere Association, 2018).

The relationship between STIs and AIDS

STIs and AIDS are primarily transmitted through sexual intercourse. The prevention and control methods for both are similar and share the same target groups. The incidence and trends of STIs serve as good indicators of the effectiveness of AIDS

prevention and control efforts, better than tracking HIV infection rates or the number of AIDS patients. An increase in the number of STI cases increases the risk of HIV infection, raises the rate of HIV transmission, and accelerates the progression from HIV to AIDS (Department of Disease Control, n.d.).

HIV (Human Immunodeficiency Virus)

HIV is a virus that destroys the human immune system, specifically the CD4 cells or T cells, which protect the body from infections. When HIV destroys enough CD4 cells, the body becomes immunocompromised. HIV is the virus that causes AIDS (Acquired Immunodeficiency Syndrome), but HIV and AIDS are not the same. A person with HIV does not necessarily have AIDS. Once infected with HIV, the virus remains in the body for life. While there is currently no cure for HIV, antiviral medicine is available. Early, consistent, and continuous treatment with antiviral medicine can help individuals infected with the virus to maintain good health over a long period and reduce the risk of transmitting the virus to others (Department of Disease Control, n.d.).

The importance of HIV prevention in emergencies

HIV prevention is critically important in humanitarian emergencies because such situations can significantly increase the risk of HIV transmission. Implementing HIV prevention measures is not only a health issue but also essential for protecting human rights and promoting long-term recovery.

HIV transmission in humanitarian emergencies is complex and influenced by various factors and surrounding contexts, such as the existing HIV infection rates and risks in the affected population and the host population, the level of interaction between displaced and local populations, the duration of displacement, and the location and extent of isolation of displaced populations. For example, urban displaced persons compared to those in refugee camps (IAFM, 2018).

The specific characteristics defining complex emergencies, such as conflict, large-scale displacement, loss of livelihoods, food insecurity, social instability, unemployment, fragile infrastructure, environmental destruction, and lack of power, all contribute to increased risks and vulnerabilities for HIV transmission among affected populations (IAFM, 2018).

Key reasons to support the need for HIV prevention in emergencies

- 1) Reducing new infections is required as humanitarian emergencies weaken public health systems and make it harder for people to access prevention services. Intense HIV prevention efforts help reduce the chance of new infections, which is a key factor in controlling the epidemic (UNAIDS, 2020).
- 2) Protecting vulnerable groups such as women, children, and displaced populations who are at higher risk of HIV infection in emergencies. HIV prevention can help focus on protecting their rights and health (IASC, 2010).
- 3) Reducing the burden on health systems as HIV prevention not only reduces the number of new infections but also lowers the long-term demand for HIV care and treatment services, easing the burden on already strained health systems in emergencies (IASC, 2010).
- 4) Promoting human rights, as access to HIV prevention services is a fundamental human right. HIV prevention efforts in emergencies can affirm and protect the rights of those affected (UNAIDS, 2020).
- 5) Supporting long-term recovery HIV prevention is a key foundation for the long-term recovery of communities and societies. Controlling the spread of HIV helps ensure that the population remains healthy and can contribute to building a better future (WHO, 2016).

Impact of emergencies on those living with HIV and at risk of infection

- 1) In emergencies, public health systems are disrupted or made difficult to access. This results in people living with HIV not being able to access antiretroviral (ARV) medication regularly, which can lead to increased viral loads, drug resistance, and a higher risk of death (WHO, 2016). Furthermore, shortages of necessary medications and medical supplies make it more difficult to treat opportunistic infections that often accompany HIV (UNAIDS, 2014).
- 2) There is increased risk of new HIV infections as emergencies cause large-scale displacement, family separation, and the collapse of social protection systems. These factors increase the risk of unsafe sexual practices, injectable drug use, and prostitution, all of which are major risk factors for HIV transmission (IASC, 2010; UNHCR, 2012). Moreover, the lack of access to prevention services, such as condoms and counseling, further worsens the situation (Sphere Association, 2018).

- 3) There are psychosocial impacts as people living with HIV and those at-risk experience stress, anxiety, and depression during emergencies due to uncertainty, fear, loss, and separation from loved ones (Bogic et al., 2015). Furthermore, HIV-related stigma and discrimination remain significant problems, especially in resource-limited situations where everyone is struggling to survive (Nyblade et al., 2009).
- 4) There is difficulty accessing other health services as emergencies make it difficult to access other health services, such as regular check-ups, family planning, and treatment for chronic diseases, which impacts the overall health of people living with HIV and those at risk of infection (Blanchet et al., 2017).

Challenges in providing HIV services in emergencies

- 1) In emergencies, resources are often limited in terms of personnel, funding, medical supplies, and infrastructure, making it harder to provide HIV services (WHO, 2016). For example, there may be a shortage of medical staff, antiretroviral medications, and diagnostic equipment (UNAIDS, 2015).
- 2) Accessing services becomes difficult as emergencies can make travel and communication difficult, preventing people living with HIV and those at risk from accessing services as usual (IASC, 2010). Furthermore, displacement and family separation create further barriers (UNHCR, 2012).
- 3) Patient referral systems are disrupted in emergencies, such as referral systems for patients needing specialized care, resulting in patients with complications or those needing specific care not receiving appropriate treatment (Sphere Association, 2018).
- 4) Stigma and discrimination faced by people living with HIV may worsen during emergencies due to fear, panic, and misinformation (Nyblade et al., 2009). This can prevent people from disclosing their HIV status or seeking services (Link et al., 2001).
- 5) Discontinuity of care, as a lack of continuity in HIV care can occur in emergencies due to changes in location, loss of medical records, or the absence of follow-up (Blanchet et al., 2017).
- 6) Other competitive needs, such as other urgent humanitarian needs in emergencies, must be addressed simultaneously like food, water, shelter, and emergency medical care. As a result, HIV services may not be a priority (IFRC, 2023).

Accordingly, for effective HIV care in emergencies, collaboration between various agencies, careful planning, proper resource allocation, and adapting services to the specific context of the situation are essential (WFP, 2014).

Implementing Comprehensive Services for HIV Prevention and Care in Humanitarian Emergencies is crucial to ensure that people living with HIV and those at risk continue to receive appropriate and continuous care, even in crises (WHO, 2016). Comprehensive services cover prevention, diagnosis, treatment, care, and social support (UNAIDS, 2015). The key principles for providing comprehensive services during emergencies are as follows.

- 1) Service integration, as HIV services should be fully integrated into overall humanitarian responses to ensure that people living with HIV receive comprehensive care and are not neglected (IASC, 2010). This may include integrating HIV services with general health clinics, food and water distribution, or shelter services (UNHCR, 2012).
- 2) Equal access to services, as all individuals living with HIV should receive equal care, regardless of age, gender, sexual orientation, ethnicity, religion, or social status (Sphere Association, 2018). This is especially important in emergencies, where existing inequalities may be aggravated (IFRC, 2023).
- 3) Community involvement of people living with HIV and affected communities in planning and implementing services can help ensure that services meet the actual needs of those affected (WFP, 2014). Building trust and cooperation with the community is also a key factor in reducing stigma and discrimination.
- 4) Efficient use of resources, as resources are limited in emergencies, so using them efficiently is crucial. This may include using rapid HIV tests, providing antiretroviral medication in forms suitable for the situation, and utilizing technology to enhance service delivery (UNAIDS, 2020).
- 5) Adapting to changing situations, as emergencies are unpredictable and unstable, so it is important to adapt to changing circumstances (WHO, 2021). This may involve adjusting service delivery models, reallocating resources, or changing service locations (UNAIDS, 2020).

Implementing Comprehensive Care for People Living with HIV in emergencies is an essential direction for taking care of those living with HIV, particularly in emergencies where such individuals have to face physical, mental, social, and spiritual challenges (WHO, 2016).

Holistic care focuses on addressing the needs of people living with HIV in all aspects to ensure a good quality of life and help them live with dignity (UNAIDS, 2014). The key components of holistic care include:

- 1) Medical care, which is the foundation of care for people living with HIV, focusing on antiretroviral therapy, regular health monitoring, prevention and treatment of opportunistic infections, and addressing other necessary health needs (IASC, 2010). In emergencies, continuous access to antiretroviral medications and treatment for complications is critical (UNHCR, 2012).
- 2) Mental and social care, as people living with HIV often face stress, anxiety, depression, and other mental health issues (Bogic, 2015). Mental and social care is vital in helping them cope with stress, adapt to the situation, and improve their quality of life (WHO, 2015). This service may include counseling, psychological therapy, life skills training, and building support groups (Patel et al., 2011).
- 3) Social care, as people living with HIV may encounter social challenges, such as stigma, discrimination, loss of income, homelessness, and food shortage (Blanchet, 2017). Social care aims to help them access basic rights, provide financial support, provide housing, strengthen communities, and promote the involvement of people living with HIV in society (Sphere Association, 2018).
- 4) Spiritual care, as this is important for some people living with HIV who seek meaning and purpose in life or need religious support (Puchalski, 2009). This may include spiritual counseling, organizing religious activities, and creating spiritual support networks (Koenig, 2008).

Nevertheless, implementing holistic care in emergencies requires collaboration from multiple sectors, including government, private sectors, international organizations, and communities. Effective planning, appropriate resource allocation, and adapting services to the context of the situation are essential (WFP, 2014). Additionally, the use of technology, such as telemedicine and health applications, can help increase access to services and improve the quality of care (UNAIDS, 2020).

2.1.6 Maternal and newborn health

Maternal health refers to the health of women during pregnancy, childbirth, and the postpartum period. Newborn health refers to the health of infants during the first month of life. Having good health from the beginning of life significantly impacts

the well-being of individuals throughout infancy, childhood, and adulthood. Therefore, every country must make strong efforts to ensure the provision of high-quality maternal and newborn health (MNH) care. Moreover, high-quality maternal and newborn care is essential for ensuring the right to health, equity, and the protection of the rights of mothers and newborns (WHO, 2024).

Maternal and newborn health is critically important during emergencies, as both mothers and newborns are vulnerable and at higher risk of illness and death compared to other populations. Emergencies may arise from various causes, such as natural disasters, pandemics, conflicts, or accidents, all of which affect public health systems and access to essential services for mothers and newborns. The reasons why maternal and newborn health is crucial during emergencies (WHO, 2024; Cooper, 2018; ICM, 2023) include the following.

- 1) Vulnerability, as mothers and newborns are particularly vulnerable to the impacts of emergencies more than other populations due to their physical state and underdeveloped immune systems, making them more susceptible to illness, injury, and death.
- 2) Long-term effects, as a mother's health before, during, and after pregnancy directly affects the health and development of her child in both the short and long term. If mothers do not receive adequate health care during emergencies, complications during pregnancy, preterm births, low birth weights, and other health problems may arise, impacting the long-term development of the child.
- 3) Family and community stability, as maternal and newborn health is the foundation of family and community stability. If mothers and newborns are healthy, it positively impacts the long-term social and economic development of the country. On the contrary, if mothers and newborns become ill or die, it can affect family stability and create a burden on society.
- 4) Access to health services, as public health systems are affected in emergencies which reduces access to essential maternal and newborn health services, it therefore increases the risk of illness and death. Accordingly, maternal and newborn care in emergencies is essential to ensure timely and necessary care is provided.
- 5) Human rights, as health is a fundamental human right. Maternal and newborn care in emergencies protects the right to life, health, and well-being.

The Inter-Agency Field Manual on Reproductive Health in Humanitarian Settings: IAFM (2018) outlines essential services to prevent illness and death among mothers and newborns as follows.

1) Emergency Obstetric and Newborn Care (EMONC) is crucial at the health facility level to manage complications that may arise during childbirth, including newborn complications. In cases where such services cannot be reimbursed, medical staff must provide first aid to mothers and newborns before transferring them to hospitals. Also, signal functions are essential medical interventions used to directly manage obstetric complications. A primary cause of maternal mortality worldwide involves the treatment of complications from unsafe or incomplete abortions. While some critical services may not be explicitly mentioned, they are included under these signal functions, such as cesarean sections, which imply the availability of various anesthetic drugs. A major obstacle in preventable maternal deaths is the continuous lack of high-quality essential supplies. For instance, Misoprostol tablets should be available at all health facilities as they are life-saving medications used to prevent and treat postpartum hemorrhage (PPH) without requiring intensive training for healthcare providers. Additionally, Magnesium Sulfate (MgSO4) is the medication of choice for preventing and treating eclampsia.

Cesarean sections are necessary when natural childbirth poses a risk to the mother or newborn, such as in cases of prolonged labor, fetal distress, or abnormal presentation. However, performing cesarean sections without medical indications can lead to serious complications, disabilities, or death, especially in healthcare facilities that lack the resources for safe surgeries or the capacity to treat potential complications.

Neonatal emergencies are not always predictable, similarly to obstetric emergencies. When complications arise during childbirth and are not correctly diagnosed or addressed, the result could be a stillbirth, or a newborn who is alive but in severe distress and may not be able to breathe independently. Therefore, all healthcare staff must be prepared to perform neonatal resuscitation during every delivery, and health facilities must have ventilators and neonatal bag-and-mask ventilation available for use.

Healthcare staff must also be prepared to identify and treat serious infections that may occur in newborns. Clinical practices focusing on hygiene during childbirth, such as washing hands before handling the baby, properly caring for the umbilical cord, and promoting immediate and exclusive breastfeeding, play a critical role in preventing infections in newborns. Furthermore, an improved, easy-to-use algorithm is available for diagnosing and

treating severe infections in newborns. This algorithm covers initial care before referring the baby to a higher-level health facility, as well as treatment protocols for cases where referral is not possible. Moreover, healthcare staff must be capable of diagnosing, preventing, and managing complications related to preterm birth and low birth weight, depending on the necessary capabilities and infrastructure to provide comprehensive care for preterm infants. Infants who were born with low birth weight or illnesses, require immediate and high-quality inpatient care to survive, including temperature management, nutritional support, and intensive care in some cases.

As for health authorities, it is important to make sure that healthcare providers are skilled in performing emergency obstetric and neonatal care procedures and are also capable of referring patients to higher-level facilities when necessary. Clear guidelines for operations should be widely distributed, and all health facilities should always be stocked with the necessary medical supplies, equipment, and tools ready to use.

2) Referral systems for obstetric emergencies, as most maternal and neonatal deaths during childbirth result from delays in accessing health services with skillful healthcare staff when complications arise. Therefore, having an effective referral system is a key factor. This system is set up to identify obstetric complications and ensure that patients receive appropriate care, whether it is primary treatment or referral to a hospital with a capability to provide comprehensive emergency obstetric and neonatal care.

This system involves the creation and distribution of clear clinical guidelines that specify the criteria for referring patients to the suitable healthcare facilities. It also requires complete documentation of the patients referred which includes the patient's name, reason for referral, treatment outcomes at the destination healthcare facility, following up with treatment results at the facility that refers the patient, and continuous communication with staff at the referring facility.

A high-quality referral system, which includes a system for patient return, requires clinical guidelines, communication systems, transport systems, along with trust and understanding between the community, service providers, clinics, and hospitals. Healthcare staff must be aware that the distance between the referring and receiving healthcare facilities can influence decisions to refer patients as the greater the distance, the more quickly healthcare staff must make decisions to refer to obstetric cases with complications.

3) Clean, safe delivery, and newborn care kits for emergencies: In humanitarian emergencies, many women and adolescent girls may be in the late stages of pregnancy and

need to give birth during crises. In the early stages of an emergency or in areas with high rates of out-of-hospital births, deliveries may occur without the presence of trained birth attendants. Therefore, clean and safe delivery kits for emergency situations should be distributed to visibly pregnant women to improve the standard of care for those unable to access healthcare facilities. These kits can be distributed at registration points or through community health workers in areas with stable community health networks.

The basic delivery kit should include a clean plastic sheet for delivery considering the position chosen by the pregnant woman, a bar of soap, a pair of rubber gloves, a new razor blade for cutting the umbilical cord, 3 cord ties, 2 cotton cloths (one for cleaning the baby and one for wrapping the baby), and one tube of 7.1% Chlorhexidine Digluconate gel for proper umbilical cord care.

In such areas, there should be a requirement to distribute misoprostol tablets to prevent postpartum hemorrhage (PPH). This life-saving medication should be included in the basic kit. Several research through decades have shown that misoprostol, used as a prevention for PPH, is both effective and safe when taken immediately after delivery. The World Health Organization (WHO) recommends that community health workers and health volunteers hand this medication to pregnant women in situations where skilled birth attendants and oxytocin are unavailable. Studies from both stable and crisis-affected areas have shown that self-administration of misoprostol is safe and effective, particularly in reaching pregnant women who need to give birth, whether choosing to give birth at home or at a healthcare facility that lacks electricity, refrigeration, and specialized medical personnel.

The quality of maternal and newborn health care is the foundation of comprehensive maternal and newborn health services, considered a key element of the right to health, a pathway to promoting equity and improving the quality of life for mothers and their children. High-quality maternal and newborn health services include the following characteristics (IAFM, 2018).

1) Availability: Every area with a population of 500,000 should have at least 5 health facilities capable of providing emergency obstetric and newborn care (including at least 1 facility that offers comprehensive emergency obstetric and newborn care). These facilities must be available 24 hours a day, 7 days a week, with sufficient and qualified healthcare staff, as childbirth and complications can occur at any time.

- 2) Accessibility: Health facilities should be in areas that are easily accessible by roadway or waterway, with public transportation options available and affordable for patients.
- 3) Acceptability: Healthcare providers must be committed and supported to provide services with dignity and respect to everyone, build trust, and encourage the public to seek maternal and newborn healthcare services.
- 4) Effectiveness: Maternal and newborn health services should include medical interventions that are based on solid evidence, promoting maternal and newborn health and enhancing survival rates during pregnancy, childbirth, and postpartum.
- 5) Affordability: Efforts should be made to provide services at reduced costs or free of charge to lessen the financial burden of accessing services.
- 6) Cultural competency: In maternal and newborn health services, the language and culture of the target population should be considered, such as having consideration for female healthcare providers. However, the lack of female staff should not be a barrier to accessing services.
- 7) Safety: Maternal and newborn healthcare processes should not affect their safety.
- 8) Timeliness: Maternal and newborn health care should be provided promptly to ensure that patients receive care when and where it is most needed.
- 9) Respect: Maternal and newborn health services must respect the dignity, feelings, rights of choice, and needs of all women, adhering to the principles outlined in the Respectful Maternity Care Charter: The Universal Rights of Childbearing Women.

All the above aligns with the World Health Organization (WHO)'s vision for quality of care for maternal and newborn health, which states that high-quality maternal and newborn healthcare in all areas must be built on a strong foundation that includes skilled healthcare professionals and a basic public health infrastructure.

2.1.7 Sexual and gender-based violence (SGBV)

Sexual and gender-based violence (SGBV) refers to violence directed at an individual based on their sex or gender, including actions that cause physical, mental harm, or suffering, as well as threats, coercion, and the deprivation of rights and freedom (UNHCR, 2003). Sexual violence, which is a part of gender-based violence, involves exploitation, abuse, and non-consensual sexual acts (Araujo et al., 2019; UNHCR, 2003). Within refugee populations, the term "sexual and gender-based violence" is commonly used (UNHCR, 2011; Simon-Butler

and McSherry, 2019) because SGBV can encompass a wide range of severity, from verbal harassment to murder. In order to clarify this issue (IPPF, 2020), the research team uses the term "sexual and gender-based violence", which refers to any harmful act directed at an individual based on unequal gender norms and power imbalances, without the victim's consent. The violence includes acts that cause or may cause physical, emotional, or financial harm, where perpetrators use force, coercion, and deception (IPPF, 2020; IOM, 2019). Such violence can cause physical and mental harm or causes suffering based on the victim's gender due to gender inequality and abuse of power (UNHCR, 2003). Even though most victims and survivors of sexual and gender-based violence are girls and women, boys and men can also suffer from such violence.

The nature of SGBV is rooted in power imbalances between men and women, using physical, emotional, and psychological violence to coerce and control. Factors that connect different forms of violence are the gender roles assigned, locations, traditional and cultural contexts. Contributing factors to SGBV include social marginalization and the instability caused by uncertainty, which leads to discrimination where women, in particular, face discrimination and are at a higher risk of becoming victims of SGBV. Female migrants are at greater risk of becoming victims of sexual exploitation, sexual abuse, and human trafficking (Le Monde selon les femmes, 2019). Moreover, rape culture arises from colonial social contexts and a culture of pornography that reinforces mechanisms of domination and submission that particularly impacts young children. Commercial sexual exploitation contributes to gender prejudice and racism (Maquestiau, P. and Duysens, C., 2016; Le Monde selon les femmes, 2019). Having sexual relationships, creating sexual behaviors or products have brought sexuality into people's daily life, whether in public spaces, on television, radio, or online media, influencing the attitudes and behaviors of people in society (Le Monde selon les femmes, 2019).

Sexual violence can be categorized into 5 types: sexual violence, physical violence, emotional and psychological violence, violence based on beliefs, values, traditions, and culture, and economic and social violence. The details are as follows (UNHCR, 2003).

1) Sexual Violence:

- Rape and marital rape which are physical invasions of the victim's body by the perpetrator's genitals or the invasion of the victim's genital or anal area using any object or other parts of the body, done by force or threat of violence, or through coercive circumstances.

- Child sexual abuse, defilement, and incest, include any act involving a child for the perpetrator's sexual satisfaction, including sexual relations with a child and having sexual intercourse with a child.
- Forced sodomy or anal rape which refers to forced anal intercourse, it can occur between men or between a man and a woman.
- Attempted rape or attempted forced sodomy/anal rape refers to the attempt to rape or force anal intercourse.
- Sexual abuse which involves physical invasion or harassment, including inappropriate touching of the body, using power under unequal circumstances or coercion.
- Sexual exploitation which refers to taking sexual advantage of another person, including sexual exploitation for human trafficking purposes. Examples include forced stripping, forced marriage, forced childbirth, participation in pornography, transactional sex, and sexual extortion for goods, services, welfare or support, or sex slavery.
- Forced prostitution or sexual exploitation which refers to forcing individuals into sex work in exchange for resources, services, and support, primarily targeting women or girls who are at high risk.
- Sexual harassment which involves any unwanted sexual advances, which may occur repeatedly and go unaddressed. Sexual harassment includes verbal or physical sexual advances that are sexually inappropriate and harassing, as well as displaying pornography, creating a hostile work environment that is harassing and hostile.
- Sexual violence as a weapon of war and torture, which includes rape, forced abortion, forced sterilization, or other means to prevent childbirth, forced pregnancy, forced childbirth, forced child-caring, and sexual violence as a form of torture. It also includes any act that causes severe physical or mental suffering to obtain information or confession, as well as punishing the victim or the third person, threatening or destroying people based on ethnicity, race, or religion.

2) Physical violence

- Physical assault, which includes hitting, punching, kicking, biting, burning, causing disability, or killing, with or without the use of weapons, often in conjunction with sexual violence or other forms of violence.
- Human trafficking, which refers to forced trafficking or slavery for sexual purposes, forced labor or services, and organ removal.
 - 3) Emotional and psychological violence

- Abuse/Humiliation is non-sexual verbal abuse or humiliation, including actions that demean, degrade, or shame the victim/survivor, whether in public or private spaces.
- Confinement, which involves isolating individuals from their friends or family, restricting their movement, and depriving them of freedom.
 - 4) Violence based on beliefs, values, traditions, and culture
- Female genital mutilation (FGM), which refers to the cutting of female genital organs for non-medical reasons, often performed at a young age. It ranges from partial to complete removal of genital parts and can include stitching of the genital area. FGM is often carried out on women after childbirth and on girls or women who have been victims of sexual abuse.
- Early marriage, which is a marriage arranged with the consent and decision made by the parents or legal guardians.
- Forced marriage, which is a marriage that occurs against the wishes of the victim or survivor, often involving a dowry paid to the family. If the victim refuses, severe consequences can occur.
- Honor killings and maiming, which involves physical assault or murder of women or girls as punishment for actions deemed inappropriate according to gender norms, which are believed to bring shame upon the family or community. An example includes pouring acid on a woman's face to punish her for bringing shame to her family, such as by attempting to marry someone not chosen by her family.
- Infanticide and/or neglect, which involves the killing, withholding of food, or neglect of female infants, based on the belief that girls are inferior to boys in society.
- Denial of education for girls or women, which refers to removing girls from school or preventing their access to basic, technical, vocational, or scientific education.
 - 5) Social and economic violence
- Discrimination and/or denial of opportunities or services, which includes discrimination or denial of access to education, healthcare aid, or paid employment, as well as denial of property rights.
- Social exclusion/ostracism based on sexual orientation, which refers to the exclusion from services or social benefits, denial of civil, social, economic, cultural, and political rights, or the imposition of criminal penalties, discrimination, or physical and psychological harm based on gender diversity.

- Obstructive legislative practices, which are legal restrictions that limit citizens' rights, especially women's rights, to access entertainment, civil rights, and rights in social, economic, cultural, and political aspects.

Caring for survivors of sexual and gender-based violence is a sensitive and complex issue, requiring consideration of the physical, psychological, emotional, and social well-being of those affected. Therefore, the care process should include urgent support, medical care, psychological rehabilitation, counseling, social support, and efforts to help survivors return to a normal, healthy life. The processes must be based on respect for the dignity, privacy, and safety of the individuals affected. Caring for survivors of sexual and gender-based violence requires cooperation from multiple sectors, including government, private, civil society, and community sectors, to create a comprehensive and effective care system. The primary goal is to help survivors recover from physical and psychological trauma, have a quality life, and rejoin the society to their fullest potential. The details are as follows (IPPF, 2022).

- 1) Survivor-centered approach, which aims to create an environment that supports and respects the rights of individuals who have experienced crisis, treating them with respect. This approach promotes the recovery of survivors by identifying their needs and empowering them to make decisions. The components of this approach include:
- Safety, as safety and security of the survivor and their dependents are considered the primary concerns.
- Confidentiality, as survivors have the right to choose whether to share their story or not. Any information shared must be with their consent and understanding before dissemination.
- Respect for decisions, where all actions are based on respect for the survivor's wishes, rights, and dignity. The role of support providers is to facilitate recovery and provide resources to assist survivors.
- Non-discrimination, as survivors should be treated equally and fairly, regardless of age, disability, gender identity, religion, nationality, ethnicity, sexual orientation, or any other characteristic.

- 2) Care guidelines for survivors of sexual and gender-based violence
 - The first step of support is to listen, inquire, and assess.
- Take a medical history, assess, evaluate emotions and, if necessary, perform forensic evaluations.
 - Treat physical injuries.
- Suggest PEP or Post-Exposure Prophylaxis, which is an emergency antiretroviral medication to prevent HIV infection, within 72 hours.
 - Suggest emergency contraception within 5 days.
 - Suggest prevention of sexually transmitted infections.
 - Support the creation of a safe space.
- Assess mental health, discuss self-care guidance, and plan for follow-up care.
- 3) Clinical management guidelines for survivors of rape and survivors from intimate partner violence, which offer a survivor-centered service approach, prioritizing the rights, needs, and desires of the survivor. The steps of these guidelines include:

Part 1: Preparation, which involves studying operational procedures for caring for survivors of sexual violence and intimate partner violence, while supporting the survivors' needs thoroughly and understanding them. Such procedures require careful preparation in setting up services and developing treatment protocols, as well as procedures developed and adapted to the local context.

- Understanding laws and policies
- Awareness of available resources and services
- Identifying locations where appropriate care can be provided if

none exists

- Preparing health care facilities
- Training staff
- Developing operational procedures
- Coordinating with network partners
- Announcement within community
- Treating as healthcare service providers

Part 2: Providing initial support, which is a critical component of care for survivors of sexual violence and intimate partner violence by supporting the needs and prioritizing continuous safety without affecting the survivor's privacy. The initial support also provides emotional needs and a guideline to further assistance.

- Listening closely with empathy and without judgment
- Asking about needs, assessing, and responding to emotional, physical, and social concerns and needs
- Examining by showing understanding and believing in the survivor, listening without blame
- Creating a safe space by developing a plan for self-protection from harm in cases of violence
- Providing support through information, services, and social support

Part 3: Clinical management of rape, where survivors of rape must receive urgent medical care, which directly relates to the type of violence they experienced.

- Listening and asking about needs and concerns, following the principles of initial support
- Obtaining consent and preparing for inquiring with the survivor, where the limits of confidentiality must be clearly explained to the survivor. In cases where the survivor does not consent to medical care, that is acceptable and will not affect their access to future medical care. During the preparation for inquiring with the survivor, communication must be clear, and a witness should be present to observe.
- Taking medical history, where survivors must be informed that there is a physical examination and physical injury treatment, and include a psychological assessment.
- Physical examination, which includes a physical and genital examination, which can only be performed with the survivor's consent for evidence collection, following a survivor-centered approach. The purpose of the physical examination must be explained, and the survivor should be informed before any physical contact.
- Treatment within 72 hours of the incident, which includes wound care, pregnancy testing, emergency contraception, treatment for sexually transmitted infections (STIs), counseling, HIV testing, and vaccinations. Treatment within 120 hours (5 days) includes wound care, pregnancy testing, emergency contraception, STI treatment, counseling,

HIV testing, and vaccinations. Treatment after 120 hours from the incident includes wound care, infection screening, pregnancy testing, STI treatment, counseling, HIV testing, and vaccinations.

- Enhancing safety and referral for further support, which includes safety planning and making referrals.

- Mental health assessment and psychological support, by asking the survivor about their biggest concerns and observing them without judgment by looking for signs in physical appearance, body language, behavior, emotions, verbal communication, and thoughts.

- Care and follow-up, which depends on the feasibility regarding the patient.

Sexual and gender-based violence can occur anywhere, at any time, and is often used as a weapon of war. It also takes place in the home for the sake of safety, similarly to how laws and societal structures influence behavior. Individual attitudes can also affect how families, communities, and societies respond to certain behaviors.

2.2 Concepts of Knowledge, Attitude, and Behavior (KAB) Model

The Knowledge-Attitude-Behavior (KAB) Model is a framework that explains the interrelationship between knowledge (K), attitudes (A), and behaviors (B). This model confirms that knowledge and attitudes can lead to changes in behaviors (Schneider and Cheslock, 2003, as cited in Ichayaporn Chuaychoo, 2021). The KAB Model has been applied in research across various fields such as public health, education, and social development to understand and analyze individual or group behaviors in different contexts.

Singh and Malaviya (1994) described the relationship between knowledge, attitudes, and behaviors or practices. as follows.

- 1) Knowledge is the foundation for changing attitudes and behaviors. Accurate and sufficient knowledge helps develop positive attitudes, which then leads to appropriate practices.
- 2) Attitudes can be influenced by knowledge. A positive attitude toward a particular issue leads to correct behaviors or practices.
- 3) Behaviors or practices result from the correct and positive attitudes, eventually leading to appropriate and correct actions.

The analysis on knowledge, attitudes and behaviors by Singh and Malaviya indicates that having sufficient knowledge about a specific issue, such as disease prevention or health care, leads to the development of a positive attitude toward such an issue. A positive attitude can be a motivation for appropriate behaviors, resulting in effective and sustainable change. The relationship between knowledge, attitudes, and behaviors is closely interconnected, with changes in one can influence the others.

Launiala (2009) emphasized the importance of understanding the relationship between knowledge, attitudes, and behaviors or practices, particularly in the context of public health and development. Launiala critiqued and expanded on the KAB model to fit various social and cultural contexts, with the following key concepts from this model.

- 1) Having knowledge does not necessarily lead to correct behaviors. This indicates that knowledge alone is insufficient to change behaviors. Even if a person has correct knowledge about health or disease prevention, other factors such as social, cultural, economic contexts, and access to resources can influence their behaviors as well.
- 2) A positive attitude can strongly influence behaviors. A person's attitudes play a crucial role in shaping behaviors, and if a person has a positive attitude toward a certain practice, they are more likely to follow through with that practice.
- 3) Behaviors or practices are influenced by multiple factors as an individual's behaviors do not depend solely on knowledge and attitudes but are also influenced by other factors such as community support, government policies, and the physical environment.
- 4) The importance of research in a specific context emphasizes that research and evaluation of knowledge, attitudes, and behaviors or practices must consider the specific context of the population being studied to obtain accurate and useful information. Studies conducted in different contexts may yield different outcomes.

The application of Launiala's concept has been used in planning and implementing health and development programs in various countries, particularly in communities with diverse cultural backgrounds. The application of this model helps identify the factors influencing knowledge, attitudes, and behaviors or practices of individuals and communities in greater detail which leads to more effective program planning and implementation.

The KAB Model is a method for assessing changes in knowledge and attitudes that lead to improvements in various areas of effectiveness (Schrader and Lawless, 2004, as cited in Ichayaporn Chuaychoo, 2021). In practice, the KAB Model has been used in planning and implementing activities that promote appropriate knowledge and behaviors, such as health

awareness campaigns, training, and counseling to foster positive attitudes and behaviors in living a daily life. Several studies using the KAB Model focus on health-related behaviors, such as HIV/AIDS prevention (Taweesak Theppitak, 2013), sexual health care (Klangploy Eurwittayasuporn et al, 2011), dietary health care (Nawaporn Nakanit, 2020), and COVID-19 prevention (Daranchanok Phansuma and Phongsit Boonraksa, 2021). Nonetheless, no previous research has applied this model to the population of Myanmar displaced persons residing in Thailand.

In summary, the KAB Model emphasizes 3 variables: knowledge, attitudes, and behaviors (Nawaporn Nakanit, 2020). Therefore, the research team has applied this model to explain the phenomena related to the study of knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergencies among Myanmar displaced persons in Tak and Mae Hong Son provinces of Thailand. The relationship is categorized into 4 patterns (Panita Atinnawong, 2022) as follows:

1) The knowledge of Myanmar displaced persons regarding sexual and reproductive health influences their attitudes toward sexual and reproductive health, and such attitudes ultimately affect their behaviors in practicing sexual and reproductive health.



Image 1 Knowledge, Attitude, and Behavior Model (Pattern 1)

2) The knowledge and attitudes of Myanmar displaced persons regarding sexual and reproductive health are interrelated, which leads to their corresponding behaviors and practices.

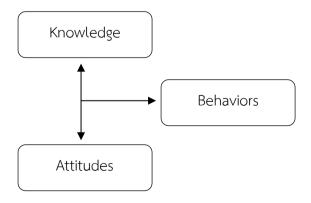


Image 2 Knowledge, Attitude, and Behavior Model (Pattern 2)

3) The knowledge and attitudes of Myanmar displaced persons regarding sexual and reproductive health both lead to the corresponding behaviors and practices, where knowledge and attitudes do not necessarily need to be related to each other.

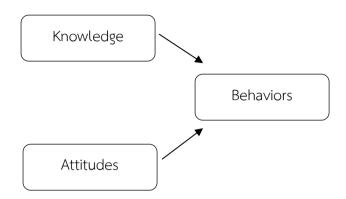


Image 3 Knowledge, Attitude, and Behavior Model (Pattern 3)

4) The knowledge of Myanmar displaced persons regarding sexual and reproductive health affects their behaviors both directly and indirectly. Attitude is an intermediary to cause certain behaviors according to the knowledge, or knowledge influences attitudes first and that leads to the corresponding behaviors.

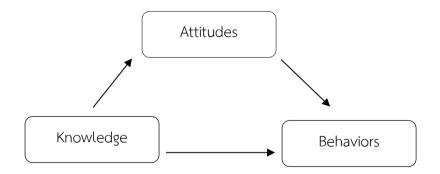


Image 4 Knowledge, Attitude, and Behavior Model (Pattern 4)

For this research, the research team applied the KAB Model (Pattern 4) to explain the phenomenon, viewing that knowledge, attitudes, and behaviors are interconnected, where knowledge and attitudes both influence behaviors simultaneously, with knowledge affecting attitudes, and attitudes lead to the corresponding behaviors.

2.3 Related studies

The research team conducted literature review of related studies to guide the research design and discussion of research findings. The related studies were divided into 2 main groups, which are 1) research related to sexual and reproductive health in emergencies, and 2) research related to the relationship between knowledge, attitudes, and behaviors, with the following details.

2.3.1 Studies related to sexual and reproductive health in emergencies

Salisbury et al. (2016) conducted a study titled "Family planning knowledge, attitudes, and practices in refugee and migrant pregnant and post-partum women in the Thailand-Myanmar border - a mixed methods study". The study focused on the knowledge, attitudes, and practices regarding family planning among refugee and migrant women who were pregnant and post-partum in the Thailand-Myanmar border area. The study area was conducted in the Shoklo Malaria Research Unit (SMRU), located in Tak province, which provides childbirth services and family planning services to displaced persons by the Planned Parenthood Association of Thailand. The research used a mixed-methods approach, combining both quantitative and qualitative methods. These included a cross-sectional survey and focus group discussions with 120 pregnant women. The methods also included in-depth interviews with 21 postpartum women with 3 or more children.

The study found that more than 90% of women were aware of contraception methods to space out pregnancies. Over 50% of them knew that sterilization could prevent pregnancy and believed that women who had never been pregnant before could use contraception. They also knew where to purchase contraceptive devices, and over 60% of them had used family planning services. However, a concerning finding was that over 90% of women lacked awareness of emergency contraception. There were also misunderstandings about sterilization, with some believing that a cesarean section or hysterectomy was equivalent to sterilization. They also feared that surgery would prevent them from being able to work. Furthermore, they were unable to estimate when to start or stop having children, which increased the risk of unintended pregnancies. However, the study had limitations, as it only explored the perspectives of women who had already experienced pregnancy, without considering the perspectives of children, adolescents, or women who had never been pregnant.

Asnong et al. (2018) conducted a study titled "Adolescents' perceptions and experiences of pregnancy in refugee and migrant communities on the Thailand-Myanmar border: a qualitative study" which explored refugee adolescent perceptions of pregnancy and their knowledge of sexual and reproductive health, as well as the support structures from family and community along the Thailand-Myanmar border. The study used in-depth interviews and focus group discussion with 76 pregnant adolescents under 18 years of age, where 40 participants received prenatal care at the Clinic in Mae La refugee camp and 36 participants received prenatal care at Maw Ker Thai Clinic. The study found that all the adolescents viewed themselves as too young to be pregnant and to be mothers. They considered the age of 20 to be the minimum age at which one should become pregnant and take on the role of a mother. The adolescent girls were very concerned about their bodies not being ready for childbirth and financial insecurity, while the adolescent boys worried that a lack of educational opportunities and social consequences would make their future lives difficult. In terms of family and community context, premarital sex and pregnancy before marriage were unacceptable. If a young couple was found meeting alone without parental supervision, it often led to forced marriage very quickly. If an adolescent girl became pregnant without being married, some schools would expel her, while others would allow her to continue her education if she agreed to marry. However, pregnant adolescents and their partners often chose to leave school due to feelings of shame or because of new responsibilities as parents. In summary, the primary factors contributing to adolescent pregnancy were related to traditional attitudes and stigma surrounding sexual and reproductive health which resulted in gaps in knowledge about contraception and the necessary life skills for making informed decisions regarding sexual and reproductive health, especially for unmarried adolescents.

Perera et al. (2022) conducted a study titled "Access to community-based reproductive health services and incidence of low birthweight delivery among refugee and displaced mothers: a retrospective study in the Thailand-Myanmar border region" which aimed to examine the relationship between access to community-based reproductive health services for refugee and displaced mothers before childbirth and postnatal outcomes, in order to assess the impact of reproductive health services in the community. The research area was conducted at Mae Tao Clinic, the largest reproductive health care provider in the Thailand-Myanmar border region, located in Mae Sot district, Tak province. The study analyzed retrospective data from 34,240 women who gave birth between 2008 and 2019. The study

found that community-based reproductive health services for mothers before childbirth were significantly associated with positive birth outcomes. Therefore, prenatal reproductive health care, access to family planning services, and maternal and newborn health outcomes are clearly interconnected. Furthermore, the study suggested that the development of flexible models for sexual and reproductive health care for displaced persons or migrants should allow displaced persons and migrants to participate in planning and development processes.

Lee et al. (2017) conducted a study titled "Sexual and reproductive health needs and risks of very young adolescent displaced persons and migrants from Myanmar living in Thailand" which explored the essential needs for sexual and reproductive health and the risks faced by young adolescent displaced persons and migrants from Myanmar living in Thailand, specifically in Mae Sot town and Mae La refugee camp. Data were collected using 22 focus group discussions with a total of 176 participants, including boys and girls aged 10-16, as well as adults living in Mae Sot town and Mae La refugee camp. The study focused on gathering information about their perspectives, experiences, and values related to sexual and reproductive health, as well as the associated risks. The findings found that both boys and girls expressed concerns about their physical safety. The girls were particularly afraid of rape and sexual harassment, while the boys feared being arrested by Thai authorities and police.

Hobstetter et al. (2015) conducted a study titled "In rape cases we can use this pill: A multimethod assessment of emergency contraception knowledge, access, and needs on the Thailand-Burma border" which assessed the knowledge, access, and needs for emergency contraception along the Thailand-Myanmar border. The target group consisted of migrants and cross-border displaced persons. The study methods included interviews with 46 representatives from 25 organizations, focus group discussions with 18 participants from the target group which included adult migrants, adolescent migrants, and healthcare workers. A service mapping exercise with 22 stakeholders was also included. The study found that the use of emergency contraception among the target group was low as there were structural barriers.

Due to the structural barriers, the target group lacked accurate knowledge about emergency contraception, particularly regarding the contraception properties, duration for use, safety, effectiveness, side effects, and potential complications. For example, there was a misconception that emergency contraception containing only progestins was only effective within 24 hours after unprotected intercourse. This misconception led healthcare

workers to refrain from giving emergency contraception to migrants and displaced persons. Additionally, different organizations had varying definitions of emergency, which further limited the provision of emergency contraception to rape survivors. For example, some organizations considered that women who engaged in consensual intercourse and adolescents were not entitled to emergency contraception, especially clinics in refugee camps that restricted access to emergency contraception only for survivors of sexual assault. Although addressing the needs of this group is crucial, the provision of emergency contraception should not be limited to this group alone but should be extended to all women who wish to prevent pregnancy after unprotected intercourse within 120 hours, with the right to request emergency contraception as often as necessary.

Ivanova et al. (2018) conducted a study titled "A Systematic Review of Sexual and Reproductive Health Knowledge, Experiences, and Access to Services among Refugee, Migrant and Displaced Girls and Young Women in Africa" which examined the knowledge, experiences, and access to sexual and reproductive health services among refugee, migrant, and displaced girls and young women in Africa. The study found that girls and young women were often overlooked within populations affected by conflict or disasters, and their sexual and reproductive health needs were frequently neglected. Forced migration and human displacement increased the risk for girls and young women of experiencing poor sexual and reproductive health outcomes, such as engaging in high-risk sexual behaviors, lack of contraception, sexually transmitted infections (STIs), and HIV/AIDS. The available evidence indicated that girls and young women had limited knowledge regarding contraception, STIs, and HIV/AIDS. They often experienced sexual violence and harassment. Access to and availability of sexual and reproductive health services were commonly restricted due to distance, cost, and negative stigma towards them.

Marlow et al. (2022) conducted a study titled "The Sexual and Reproductive Health Context of an Internally Displaced Persons' Camp in Northeastern Nigeria: Narratives of Girls and Young Women". The study examined the sexual and reproductive health context in an internally displaced persons camp in northeastern Nigeria, through the experiences of girls and young women living in the camp. The study involved a total of 25 participants, divided into girls (aged 15-19 years old) with 13 participants (8 unmarried and 5 married), and young women (aged 20-24 years old) with 12 participants (3 unmarried and 9 married). They faced challenges such as food shortages, lack of essential resources, and poverty.

As a result, they were coerced into engaging in sexual relationships and marrying at a young age in exchange for food and essential resources needed for survival. This impacted their sexual and reproductive health, leading to issues such as unwanted pregnancies, sexually transmitted infections (STIs), sexual violence, and unsafe abortions. Unmarried girls often sought abortions in areas near the camp since the camp's clinic did not provide abortion services. They kept it a secret due to feelings of shame and fear of being stigmatized. In cases where they experienced complications after the abortion then they would seek health care services at the camp's clinic.

Magezi and Mairah (2022) conducted a study titled "Sexual and Reproductive Health and Rights in Emergency Communities: A survey on the Kyaka II Refugee Settlement, Southwestern Uganda" which is quantitative research focusing on 4 areas which are sexual health, sexual rights, reproductive health, and reproductive rights. Data were collected through questionnaires, targeting a sample group with a majority aged between 36 - 50 years old (57%), followed by 19-35 years old (29%), over 50 years old (8%), and 12-18 years (6%), respectively. The findings revealed the sexual health prevalence was low at 20%, with 71% of the respondents had limited access to counseling services on sexual identity and sexual relations, while 21% of the respondents had no access to counseling at all. Sexual rights prevalence was also low at 20%, with only 54% of the respondents having limited access to information regarding sexual rights, while 10% of the respondents had no access at all. Reproductive health prevalence was also ow at 20%, with 74% of respondents having limited access to support when facing violence from their partner or other forms of sexual violence, while 6% had no access to any aid. Reproductive rights prevalence, including issues like gender equality, freedom to decide when to have children, and spacing between children, was also low at 20%. In summary, this study reflected the vulnerability of girls and women in emergency situations, especially regarding gender inequality. Therefore, funding should be increased to provide care and education regarding sexual health, reproductive health, and the displaced persons' related rights.

2.3.2 Studies related to the relationship between knowledge, attitudes, and behaviors

Taweesak Theppitak (2013) conducted a study titled "Using the KAP Model to Study the Knowledge, Attitudes, and Behaviors Regarding HIV/AIDS Prevention among Thai Seafarers" which examined the relationship between knowledge, attitudes, and behaviors in

the context of HIV/AIDS prevention among Thai seafarers. The findings revealed that Thai seafarers who had accurate knowledge and understanding of HIV/AIDS were more likely to have positive attitudes towards self-monitoring and prevention of HIV infection. Such a positive attitude led to appropriate behaviors in practicing self-protection and infection prevention. On the contrary, Thai seafarers with insufficient knowledge and understanding of HIV/AIDS were more likely to have negative attitudes towards self-monitoring and infection prevention. The negative attitude leads to inappropriate behaviors in practicing carefulness and infection prevention. However, inconsistencies were found between knowledge, attitudes, and behaviors regarding sexual and reproductive health among Myanmar displaced persons as well. These inconsistencies are influenced by various personal and environmental factors that differ among them.

Sudarat Tolanuwat et al. (2022) conducted a study on the carbon offset behaviors of Thai passengers influenced by knowledge, with attitudes serving as a mediating variable. The research investigated the relationship between knowledge, attitudes, and behaviors in reducing carbon dioxide emissions from air travel among Thai passengers. Data were collected from 222 Thai passengers using an online questionnaire. The study found that the carbon offset behaviors of Thai passengers resulted from both knowledge and attitudes where knowledge regarding airlines' carbon offset programs had a direct impact on the intention to offset carbon from air travel among Thai passengers. Meanwhile, attitudes towards carbon offsetting were a variable that partly and indirectly affected the relationship between knowledge and behaviors, influencing passengers' intentions to offset carbon from their travels.

Hsiu-Yueh Liu et al. (2017) conducted a study titled "Caregivers' oral health knowledge, attitudes, and behaviors toward their children with disabilities" which examined the relationship between oral health knowledge, attitudes, and behaviors of caregivers toward children with disabilities. The study found that caregivers' knowledge and attitudes were significantly related to their oral health behaviors, both in relation to themselves and the children they cared for. The more knowledgeable the caregivers were about oral health, the more likely they were to develop positive attitudes toward providing oral health care for children with disabilities. This accordingly promoted better oral health behaviors in the children with disabilities.

Saraswat et al. (2022) conducted a study titled "Knowledge, Attitudes, and Practices of Indian Immigrants in Australia towards Oral Cancer and Their Perceived Role of General Practitioners: A Cross-Sectional Study" which aimed to study the knowledge, attitudes, and practices of Indian immigrants in Australia regarding oral cancer to understand their risk behaviors toward oral cancer and the factors influencing such behaviors. This study could lead in setting potential prevention strategies. Data were collected from 164 Indian immigrants living in Australia. The study found that Indian immigrants had varying levels of knowledge about oral cancer (with an overall average score of 61%), particularly regarding risk factors such as alcohol consumption and betel guid chewing, as well as signs or symptoms related to oral cancer. A large proportion of Indian immigrants (87.7%) had not received any information about oral cancer from healthcare facilities, but most of them (71-90%) agreed that general doctors should play a more prominent role in this area. Most Indian immigrants had positive oral health practices while only a few individuals continued to chew betel quid, which negatively affected their oral health. Therefore, culturally tailored strategies should be developed, particularly involving general doctors, to raise awareness about oral cancer and to facilitate early screening of Indian immigrants.

Panita Atinnawong (2022) conducted a study titled "Parents' Knowledge, Attitudes, and Experiences Regarding the Use of Child Safety Seats" with data collected from a sample of parents with children aged newborn to 6 years old, who owned a car, had a child safety seat, and had experience using the seat while traveling in their vehicle. The study included 28 parents and representatives from 5 companies in the business of child safety seats. The findings revealed that parents' knowledge, attitudes, and experiences regarding the use of child safety seats were interrelated in a positive way. Most parents had a good basic understanding of child safety seats and held positive attitudes toward them. Most of the parents recognized the importance of having a safety seat for children and prioritizing children's safety. In terms of experience, the study found that the distance traveled influenced the frequency of using the safety seat, with parents using it more often during longer trips. A positive experience noted by parents was that the child remained seated securely, which significantly increased their focus on driving safely.

Patamaporn Charoennon and Laddawan Kongphli (2018) conducted a study on "Knowledge, Attitudes, and Practices for Obesity Prevention among Public Health Students at Rajabhat Valaya Alongkorn University under the Royal Patronage, Pathum Thani Province" which data collected from a total of 120 students. The study found that most of the students

had moderate levels of knowledge and attitudes regarding obesity, as well as moderate levels of preventive practices. This reflects a correlation between knowledge, attitudes, and behaviors, all of which aligned in the same direction. Knowledge led to the formation of attitudes, which then influenced behaviors. Attitudes acted as a mediator between knowledge and behaviors, meaning that attitudes were shaped by existing knowledge, and behaviors followed such attitudes. It can be said that knowledge, attitudes, and behaviors were directly and indirectly related.

Chapter 3

Research Methodology

The research titled "Sexual and Reproductive Health in Emergency Situations of Myanmar Displaced persons: Tak and Mae Hong Son Provinces" is a qualitative research study aimed at examining the knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergencies among Myanmar displaced persons. The research investigates the needs for sexual and reproductive health services in emergencies for Myanmar displaced persons and studies the organization of services, operational processes, problems, and obstacles in providing sexual and reproductive health services for those involved with Myanmar displaced persons. The research considers the appropriateness and benefits for all sectors, with the following research methodology.

3.1 The Target Groups

The research team used purposive sampling and snowball sampling to collect data that would meet the research objectives where the target group was divided into 3 main groups:

- **3.1.1 Myanmar displaced persons,** with a total of 17 displaced persons, consisting of:
- Group of youth (aged 15 to 24 years old) 5 individuals, with 3 living in Tak province and 2 living in Mae Hong Son province.
- Group of women (aged 25 to 49 years old): 5 individuals, with 3 living in Tak province and 2 living in Mae Hong Son province.
- Group of pregnant women (aged 15 to 49 years old): 5 individuals, with 4 living in Tak province and 1 living in Mae Hong Son province.
- Group of people with disabilities (aged 15 to 49 years old): 2 individuals, both living in Tak province.

3.1.2 Stakeholders, with a total of 10 individuals, consisting of:

- Government officials in administrative and public health sectors who play a role in providing care and aid to Myanmar displaced persons in Tak and Mae Hong Son provinces: 4 individuals.
- NGO staff who are involved in providing care and aid to Myanmar displaced persons in Tak and Mae Hong Son provinces: 6 individuals.

3.1.3 PPAT officials, who are responsible for projects related to sexual and reproductive health in Tak and Mae Hong Son provinces: 2 individuals.

Table 1 Research Target Group

	Are	Quantity							
Research Target Group	Tak province	Mae Hong Son province	(number of individuals)						
Myanmar displaced persons									
Group of youth (aged 15 - 24)	3	2	5						
Group of women (aged 25 - 49)	3	2	5						
Group of pregnant women (aged 15 - 49)	4	1	5						
Group of people with disabilities (aged 15 – 49)	2	-	2						
Stakeholders									
Government officials in administrative and public health sectors	2	2	4						
NGO staff	3	3	6						
PPAT officials	2	-	2						
Total	29 individuals								

3.2 Research areas

The research team selected Tak and Mae Hong Son provinces as the study areas as they have the largest population of Myanmar displaced persons and they are also the areas where PPAT has actively operated its work on sexual and reproductive health for a long time. The study also includes areas outside of temporary shelters, as many newly arrived Myanmar

displaced persons have settled outside these shelters. These displaced persons urgently fled their home country as they were affected by the unstable situation from the military coup on February 1st, 2021, which has increased armed conflicts.

3.3 Research timeline

The research team planned to carry out the entire process from literature review to the completion of the research report and distribution of the study. The total duration is 6 months, from April 1st to September 30th, 2024, as demonstrated in Table 2.

Table 2 Timeline and process of the research

Research process	Month						
	March 2024	April 2024	May 2024	June 2024	July 2024	August 2024	
1. Review relevant literature							
2. Develop research instruments							
3. Submit a research ethics approval							
4. Collect data							
5. Analyze research findings							
6. Summarize and discuss research findings							
7. Prepare the report and distribute the research study							

3.4 Data collection methods and research instruments

- **3.4.1 Secondary data** obtained by the research team through the review of relevant literature and research which was previously conducted by various individuals or organizations, to be applied as a guideline in designing the research.
 - **3.4.2 Primary data** collected by the research team through the following methods.
- **3.4.2.1. Non-participant observation** which involves observing the surrounding context, behaviors, and activities in the research areas without actively participating in the activities of the target group.
- 3.4.2.2 In-depth interviews aimed at obtaining specific and detailed information. Therefore, these were conducted in the form of an open conversation, allowing the target group to express their thoughts and feelings along with detailed information. The research instrument that the research team developed was a semi-structured interview guide with predetermined questions focused on topics related to the research objectives. The interview guide consisted of open-ended questions allowing participants to freely share, explain, or express their attitudes, perspectives, and opinions. The questions were broadly structured and can be adapted or expanded depending on the situation and the individual during the interview. In order to ensure that no data is omitted, the research team used tools for recording data, including an audio recorder and note-taking in a notebook, with permission from the target group every time before both audio recording and note-taking.

3.5 Data analysis

The research team conducted descriptive analysis through a systematic content analysis to interpret and summarize the research findings in accordance with the research objectives.

3.6 Research ethics

The research team adhered to ethical principles in human research and obtained ethical approval from the Institute for the Development of Human Research Protections (IHRP), Department of Medical Sciences, Ministry of Public Health. The research was approved under certificate number IHRP2024060, IHRP No. 049 - 2567, dated May 7th, 2024.

In this regard, before conducting interviews with the target group during the data collection process, the research team explained the research project details, assured

confidentiality of the collected data, and asked for permission to record the interviews for accuracy. After obtaining voluntary consent from the participants, interviews were then conducted.

Chapter 4

Research Findings

This research investigates the knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergencies among Myanmar displaced persons. It explores the needs for sexual and reproductive health services in emergencies among Myanmar displaced persons, as well as the provision of services, operations, problems, and obstacles faced by those involved in providing sexual and reproductive health services to Myanmar displaced persons. The research findings are as follows.

4.1 Knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergencies among Myanmar displaced persons

4.1.1 Knowledge of sexual and reproductive health consists of knowledge related to sexual and reproductive health rights, family planning and contraception, sexually transmitted infections (STIs), domestic violence, sexual violence, and sexual exploitation, with the following details.

4.1.1.1 Knowledge regarding sexual and reproductive health and rights (SRHR)

The group of youths, most of them lack knowledge and understanding of sexual and reproductive health rights, particularly regarding the right to make decisions about their own bodies, access to accurate information, and access to services related to sexual and reproductive health rights, such as contraception, prevention of sexually transmitted infections, and safe abortion. This is supported by the following statement.

"I don't understand what rights are. What I know is that I have the right to do farming on my parents' land if they allow me to do so." (MHS01, a female youth, interviewed on May 16, 2024)

However, some respondents demonstrated an understanding of certain aspects of sexual and reproductive health rights, such as the right to make decisions about their own bodies or the right to access healthcare services, as supported by the following statement.

"I have the right to decide that nobody can do anything to me, for example I will go to the hospital if I need a service but when it comes to seeking advice, I will consult my mother first." (T03, a female youth, interviewed on May 19, 2024)

"I know I have the right to get my health taken care of, but when I'm sick, I usually ask my employer to buy me medicine. However, if my sickness gets serious, I will definitely go to the hospital." (T02, a female youth, interviewed on May 14, 2024)

Some respondents were able to connect sexual and reproductive health rights with their own experiences, such as the right to decide about having children, as supported by the following statement.

"I think I have the right to plan for marriage in the future. If I were to have a child with my partner or not, we would need to discuss it together." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, some of them did not fully understand the meaning of the term 'rights', but they did engage in discussions on various issues related to sexual and reproductive health rights, such as the right to access healthcare services, the right to make decisions about their own bodies, the right to privacy, the right to life, the right to migrate, and the right to education. Most of them were aware that they had the right to access healthcare services, such as receiving medical examinations at hospitals or clinics, as supported by the following statements.

"I heard that here we have the right to resettlement, and in terms of health, I think there are hospitals where we can seek medical care, such as Mae Tao Clinic." (T05, a woman, interviewed on May 14, 2024)

"I think we have rights to everything mentioned, including the right to good physical health and good sexual health." (MHS04, a woman, interviewed on May 16, 2024) Some respondents understood the right to make decisions about their own bodies, such as decisions regarding contraception and family planning, even though some of them still lacked a deep understanding of these issues, as supported by the following statement.

"I believe I have the right to make decisions, and my husband agrees with me. He doesn't prevent me from making any choices related to my sexual health." (MHS04, a woman, interviewed on May 16, 2024)

Some of the women also understood the right to privacy, particularly in the context of being displaced persons and violations of rights, as supported by the following statements.

"I know what privacy means. There was no privacy over there as the Burmese constantly invaded. There was no privacy. Sometimes they came for a search, and some of our people even joined them, making the invasion constant." (T06, a woman, interviewed on May 19, 2024)

"I understand the concept of privacy. When visiting a doctor then it should be only with the doctor and my family." (MHS04, a woman, interviewed on May 16, 2024)

Some of the women demonstrated an understanding of the right to life, especially in emergencies where their lives were in danger, as supported in the following statement.

"I think, as a mother, I have the right to live." (MHS04, a woman, interviewed on May 16, 2024)

Some of the women had knowledge about their rights to migrate and receive education, particularly in emergencies, as supported in the following statement.

"I know that I have the right to resettle because right now I am in the process of resettlement. My children will receive a complete education here, which is much better than when they were back there, where they had to study under trees. Sometimes they would study, and sometimes they skipped as there were days they didn't go to school at all. They didn't really learn or receive a full education. But now that we are here, they are getting a full education." (T05, a woman, interviewed on May 14, 2024)

Nonetheless, most of the women still lack full knowledge and understanding of sexual and reproductive health rights in emergencies, particularly regarding the right to receive accurate and complete information about sexual and reproductive health, the right to make decisions about their own sexual and reproductive health, and the right to protection from sexual violence.

The group of pregnant women, most of them were unaware that they had sexual and reproductive health rights. Only a few knew that they had the right to make decisions about their own bodies, as supported by the following statements.

"I know I have the right to make decisions. If I'm sick, I can visit the doctor and get medicine." (T07, a pregnant woman, interviewed on May 13, 2024)

"I know I have the right to life, to survival, and to health." (T010, a pregnant woman, interviewed on May 13, 2024)

From the information above, it can be seen that most pregnant women have very limited knowledge about their sexual and reproductive health rights.

The group of individuals with disabilities, their knowledge about sexual and reproductive health rights varies. Some of them have very limited understanding, particularly in terms of preventing sexually transmitted infections and using condoms. Many of them have never used a condom and do not know how to use one. Furthermore, there is a belief among them that abortion is wrong and should not be done, as supported in the following statement.

"I've never received one (condom), and no one has ever given them to me. I believe that my way of prevention is not being with women. If a woman gets pregnant, I would need to accept that, because abortion is considered a sin." (T11, a man with a disability, interviewed on May 13, 2024)

On the other hand, some of them have more knowledge about sexual and reproductive health rights. They are aware of various contraceptive methods, such as taking birth control pills, contraceptive injections, and using condoms. Moreover, they also have knowledge of sexually transmitted infections such as HIV, hepatitis B and C, and syphilis. However, they have never received any sexual and reproductive health services before, as supported in the following statement.

"There are pills, injections, and condoms. The diseases include AIDS, hepatitis B, hepatitis C, and syphilis." (T12, a man with a disability, interviewed on May 19, 2024)

In summary, from the interviews with all target groups, it is found that there are still significant gaps in knowledge and understanding regarding sexual and reproductive health rights, where these gaps have yet to be addressed. They need access to more comprehensive information and access to services related to sexual and reproductive health, which will enable them to make decisions about their sexual and reproductive health, with accurate and complete information.

4.1.1.2 Knowledge regarding sex education

The group of youths, most of them have limited knowledge about sexual education, which they primarily learn from school. Some of them learned about sexual health topics from their school only. Schools usually teach about adolescent health care and the use of condoms. Some of the youths have never even received any sexual education. This is supported by the following statements.

"I only learn it at school. My parents didn't learn about it."

(T01, a male youth, interviewed on May 14, 2024)

"The teachers have taught us about it at school." (T02, a female youth, interviewed on May 14, 2024)

"I have read about it from books, and the teachers have taught us. No one at home has taught me." (T03, a female youth, interviewed on May 19, 2024)

Some respondents learned about sexual education through training sessions before they migrated to Thailand. They gained knowledge about family planning, contraception, and sexually transmitted infections, as supported in the following statement.

"I know a little about the relationship between men and women. I recently attended a training session in Yangon. The knowledge I learned about sex was provided by health service providers, not doctors or nurses, but by those who provide knowledge relating to sex." (MHS02, a female youth, interviewed on May 16, 2024)

Regarding self-care during menstruation, most respondents had a certain level of knowledge about menstruation and how to care for themselves, which they learned from their mothers or older sisters, as supported in the following statements.

"My mother taught me." (MHS01, a female youth, interviewed on May 16, 2024)

"Before I had my period, my older sister had hers. When she had her period, she went to buy sanitary pads. She explained to me about how to use the pads, how to clean, and how to take care of myself." (MHS02, a female youth, interviewed on May 16, 2024)

Regarding access to sanitary products, most of the respondents experienced difficulties in obtaining necessary sanitary products, as supported in the following statements.

"If I'm at home, sometimes I use 3 pieces of cloth, but if I need to go out, I use sanitary pads." (MHS01, a female youth, interviewed on May 16, 2024)

"It's good if there are sanitary pads because they have to be purchased." (T02, a female youth, interviewed on May 14, 2024)

The group of women, most of them had basic knowledge about sexual education, such as menstruation, having their first period, using sanitary pads, and personal hygiene during menstruation. However, some of them lacked knowledge about the proper use of sanitary pads and continued to use the same cloth repeatedly during their periods which could negatively affect their health, as supported in the following statement.

"Back in my home country, I didn't use sanitary pads but I used cloth as my mother taught me how." (MHS03, a woman, interviewed on May 16, 2024)

"We have to use it discreetly, avoiding men to see." (T05, a woman, interviewed on May 14, 2024)

"My period is usually light. When the period is finished then I no longer use sanitary pads but I just wear an extra pair of underwear as it's light." (T04, a woman, interviewed on May 13, 2024)

"If sexual health is poor, then childbirth and breastfeeding will be difficult." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them have very little knowledge about sexual education. They revealed that they had never received any instruction or training on sexual education, as supported by the following statements.

"I don't understand anything about sex." (T09, a pregnant woman, interviewed on May 13, 2024)

"They don't teach us about sex." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"There was an instructor, it was a women's organization.

I happened to sit in and listen, but I didn't understand because they taught in the Karen language, which I don't understand." (T08, a pregnant woman, interviewed on May 13, 2024)

"I didn't learn from school. However, there was some information and training provided sometimes, like when the community was called to the clinic to receive information about sexual health." (T07, pregnant woman, interviewed on May 13, 2024)

"I learned about women of reproductive age, how to take care of oneself during periods, and what happens when men and women sleep together. Even if you have sex, you have to be careful and use protection." (T010, a pregnant woman, interviewed on May 13, 2024)

Overall, most pregnant women still lack knowledge and understanding of other topics related to sexual education. Such knowledge is crucial for maintaining sexual health. Although some of them have knowledge about menstruation from being told or trained, it doesn't mean that everyone is informed, as many of them have not received education or training on sexual education.

The group of individuals with disabilities, most of them gained knowledge about sexual education from schools in Myanmar, with topics such as the differences between males and females, menstruation, and equality between males and females. However, some still lack understanding about family planning, contraception, and sexually transmitted infections. The majority mentioned that they learned about sexual education in school, while others gained knowledge through training sessions on sexuality, sexually transmitted infections, and health care, as supported in the following statements.

"There were people who came to provide information about sexuality, sexually transmitted infections, HIV, and how to maintain and care for personal hygiene" (T11, male with a disability, interviewed on May 13, 2024)

"I learned it at school, nobody taught me at home." (T12, a man with a disability, interviewed on May 19, 2024)

"Sexual rights, sex, women have periods and men do not, equality between men and women, women can have long hair and so can men. Regarding sex, it cannot be altered, women are women, and men are men." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.1.3 Knowledge regarding family planning and contraception

The group of youths, most of them do not know what family planning is. Some of them explained that they haven't learned about it yet, they have not been taught by anyone, and they have not planned about family planning as they are still in school. Only a few have some knowledge about family planning, as supported in the following statements.

"Right now, I don't have any plans for this because I'm still in school." (T01, a male youth, interviewed on May 14, 2024)

"I have no idea about family planning." (T03, a female youth, interviewed on May 19, 2024)

"I haven't learned about it, nobody has told or taught me yet."

(MHS01, a female youth, interviewed on May 16, 2024)

Most of them have some knowledge about contraception methods, such as using condoms, taking birth control pills, contraceptive injections, and contraceptive implants, as supported in the following statements.

"I'm only aware of 3 methods which are using condoms, taking birth control pills, and contraceptive injections. I think there are only 3 methods." (T01, a male youth, interviewed on May 14, 2024)

"Family planning on not having children and planning on having children are probably involved with taking pills, getting injections, and using condoms." (T02, a female youth, interviewed on May 14, 2024)

"What I know includes contraceptive implants, contraceptive injections, using condoms, and taking birth control pills." (T03, a female youth, interviewed on May 19, 2024)

"The knowledge and understanding about family planning for those who are married and don't want to have children yet is that they can plan by using condoms or taking birth control pills. But if married persons want to have children then they can engage in sexual activity without any contraception." (MHS02, a female youth, interviewed on May 16, 2024)

"Yes, I know about contraceptive implants, injections, pills, and condoms." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them have knowledge of family planning and see its importance. Most of them want to plan the number of children they have and the spacing between their children, as supported by the following statements.

"I plan to have 3 children, spaced 5 years apart." (MHS03, a woman, interviewed on May 16, 2024)

"I will have only 4 children." (T05, a woman, interviewed on May 14, 2024)

"I think that having children at an older age wouldn't be good, it would be harder to take care of them. I had an unplanned pregnancy before, so I decided to have only one child." (T04, a woman, interviewed on May 13, 2024)

Some of them were unable to follow through with their family planning due to a lack of knowledge or access to contraception services, which prevented them from effectively planning their families, as supported in the following statements.

"Between my first and second child, I didn't get a chance to take birth control. Even though I went to receive the pills, after I received them, I felt like I was already pregnant, so I got examined and found out I was pregnant." (MHS03, a woman, interviewed on May 16, 2024)

"I had a plan to have a child every 2 years. I had an implant put in, but it didn't work out for me, so I had it removed. After that, I took birth control pills but not regularly, so I got pregnant and had a child." (T05, a woman, interviewed on May 14, 2024)

Most of the women have knowledge about family planning and contraception, being familiar with various methods such as birth control pills, contraceptive injections, intrauterine devices (IUD), and condoms. However, some of them still lack understanding of which contraceptive methods are suitable for them and have difficulty accessing contraception services comprehensively.

Regarding the knowledge about contraception, most of them are aware of several methods, such as condoms, birth control pills, contraceptive injections, contraceptive implants, and sterilization.

Some of them even incorrectly understand about contraception, such as inconsistent use of birth control pills or combining oral contraceptives with contraceptive injections, which can affect the effectiveness of contraception. This is supported by the following statements.

"There are condoms, injections, pills, and IUDs." (MHS03, a woman, interviewed on May 16, 2024)

"I know that family planning involves taking birth control pills, getting contraceptive injections, using IUDs, and implants. I know about these methods." (T05, a woman, interviewed on May 14, 2024)

"There are implants, condoms, pills, injections, and sterilization.

Once you're sterilized, it's done." (T04, a woman, interviewed on May 13, 2024)

"I used to take pills, but now I get injections." (T06, a woman, interviewed on May 19, 2024)

The group of pregnant women, most of them lack knowledge and understanding of overall family planning, such as spacing between children, accessing family planning services, and the health and well-being impacts of having many children. This is supported in the following statements.

"We want to have 3 children, but I'm not sure if we will end up with 3 or not. We only want to have 3." (T09, a pregnant woman, interviewed on May 13, 2024)

"We somehow plan on having children, for example, we want to have 2 children around the same time, but for the 3rd child we will wait another 5 years." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"We don't really have a plan. If we want children, we will just have them. We only plan for whether to have children or not during this time or to access services together. We casually plan like after having a child, I will start taking birth control pills." (T08, a pregnant woman, interviewed on May 13, 2024)

The group of pregnant women received knowledge about family planning from various sources, such as training sessions provided by public health agencies, word-of-mouth within groups of housewives, and conversations with medical personnel. This is supported in the following statements.

"There were people who came to educate us." (MHS05 and T07, a pregnant woman, interviewed on May 13, 2024)

"We talked within our housewives' group, sharing information with one another, that's where I got knowledge from." (T07, a pregnant woman, interviewed on May 13, 2024)

Knowledge about contraception is varied and differs from person to person. Most have knowledge of various contraceptive methods, such as birth control pills, contraceptive injections, contraceptive implants, and condoms. This is supported in the following statements.

"There are contraceptive injections, pills, and implants." (T09, a pregnant woman, interviewed on May 13, 2024)

"I know there are 4 methods which are using condoms, taking pills, getting injections, and using IUDs." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"There are 4 methods which are implants, injections, pills, and condoms." (T08, a pregnant woman, interviewed on May 13, 2024)

"Family planning includes contraception, and the methods are implants, injections, pills, and condoms." (T07, a pregnant woman, interviewed on May 13, 2024)

"Pills, injections, and implants." (T010, a pregnant woman, interviewed on May 13, 2024)

Some women have had prior experiences with contraception, such as taking birth control pills or receiving contraceptive injections, as supported by the following statements.

"I used to take birth control pills before, but my husband's mother wanted a grandchild, so I stopped taking them. I got pregnant only a week after I stopped taking pills." (T08, a pregnant woman, interviewed on May 13, 2024)

"I used contraceptive injections before but I felt dizzy after getting injections, so I switched back to taking pills. I have never used a condom." (T08, a pregnant woman, interviewed on May 13, 2024) Overall, the group of pregnant women have knowledge of contraceptive methods but still lack understanding of family planning, which could affect their future decisions and family planning.

The group of individuals with disabilities, most of them do not have knowledge about family planning, as supported by the following statements.

"No idea." (T11, a man with a disability, interviewed on May 13, 2024)

"I don't know, I wasn't taught." (T12, a man with a disability, interviewed on May 19, 2024)

Some of them have knowledge about contraceptive methods such as contraceptive injections, birth control pills, and condoms, but still lack understanding and knowledge about other methods and accessible service locations, as supported by the following statements.

"At the border, there is the border refugee center's birth control hospital." (T11, a man with a disability, interviewed on May 13, 2024)

"There are oral contraceptives, injections, and condoms." (T12, a man with a disability, interviewed on May 19, 2024)

The group of pregnant women are aware of prenatal care, but they have not yet received it due to various factors, for example, the stage of pregnancy as some women plan to start prenatal care when they reach 3 months of pregnancy. Also, there are concerns over costs as some are worried about the expenses involved, as well as travel issues as some pregnant women are unable to travel for prenatal care by themselves because they are in the process of migrating and have not yet settled. As supported by the following statements.

"During my first pregnancy, I went for prenatal care, but this time, I haven't gone for prenatal care yet, I'm about to." (T07, a pregnant woman, interviewed on May 13, 2024)

"I know about prenatal care, but I haven't gone to receive it yet.

I will do it next month." (T08, a pregnant woman, interviewed on May 13, 2024)

"I haven't received prenatal care yet." (T010, a pregnant woman, interviewed on May 13, 2024)

"I haven't received prenatal care yet." (MHS05, a pregnant woman, interviewed on May 16, 2024)

4.1.1.4 Knowledge regarding unplanned pregnancy

The group of youths, most of them are aware that unplanned pregnancy results from having unprotected sexual relations. Some of them mentioned that unplanned pregnancy could also result from not protecting oneself in cases of rape, as supported by the following statements.

"It's from not using protection, not protecting oneself." (T01, a male youth, interviewed on May 14, 2024)

"It's from not protecting oneself, from being raped, and I have no further idea." (T02, a female youth, interviewed on May 14, 2024)

"Not using protection, a young man and a woman being together and not being careful." (T03, a female youth, interviewed on May 19, 2024)

"It's caused by unprotected sexual relations." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them understand the causes of unplanned pregnancy, such as not using condoms, having unprotected sex, and having sex with multiple partners. Some of the women, however, still have misconceptions about abortion, believing it to be immoral and illegal, as supported by the following statements.

"Maybe they just fool around and get pregnant without knowing who's the father." (MHS03, a woman, interviewed on May 16, 2024)

"Well, these people, it's because they didn't have plans for themselves." (T05, a woman, interviewed on May 14, 2024)

"It's due to their own personal desires." (T04, a woman, interviewed on May 13, 2024)

The group of pregnant women, most of them understand that unplanned pregnancy can result from various factors, such as having unprotected sex, especially among young people with multiple partners, or having unprotected sex after discontinuing birth control. As supported in the following statements.

"It probably comes from being pregnant and then terminating the pregnancy, or some people who don't want children just terminate the pregnancy and abandon their child." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"In case of getting contraceptive injections and then stopping, even if it's just for 1 day that a woman stops, and then she may get pregnant after having sex with her husband, because she hasn't continued with the injections or hasn't been careful. When the injection wears off, you may think it's fine, but you can get pregnant after a day or two, within a week. It can happen with both forgetting to take pills or forgetting injections." (T07, a pregnant woman, interviewed on May 13, 2024)

There are also cases where women feel unprepared for various reasons, such as financial instability, family conditions, or business problems, as supported by the following statements.

"It might be a man's fault, then an unplanned pregnancy happens, and he doesn't want the child. It can also be about the family expenses, their business isn't going well, and there's no money, so they're not ready." (T08, a pregnant woman, interviewed on May 13, 2024)

Most pregnant women are unaware of the availability of safe abortion services and have negative views toward abortion, viewing that abortion is wrong. As supported by the following statements.

"I don't know if it's illegal or not, but I don't know anything about safe abortion." (T08, a pregnant woman, interviewed on May 13, 2024)

"There aren't any such services in where I live." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"I've never heard of it. I only know about those who secretly do it. But I've never heard of any safe abortion rights." (T07, a pregnant woman, interviewed on May 13, 2024)

However, there is one respondent who mentioned that abortion is not illegal, as stated below.

"Over there, if there's a reason to do it, nurses and hospitals can do it. It's not wrong." (T010, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities have knowledge of unplanned pregnancies, mentioning factors such as unintended sexual relation, rape, or being uncareful from drinking alcohol. They also have some knowledge of abortion, but their opinions on abortion are different, as supported by the following statements.

"I've heard of abortion, but I don't know the details. I believe that abortion is a sin. If you don't want to have children, then don't get pregnant." (T11, a man with a disability, interviewed on May 13, 2024) "I know that abortion is possible, and I know it can be done within the first 3 months. But if it's later than that, they must terminate the fetus first, which is a misunderstanding. Abortion isn't a severe wrongdoing, and it's a personal right to decide." (T12, a man with a disability, interviewed on May 19, 2024)

Overall, all target groups have some knowledge of unplanned pregnancy and abortion, but there may be some misconceptions about the details and processes of safe abortion. Furthermore, opinions on abortion are highly varied, which reflects the need to provide accurate and comprehensive information to them.

4.1.1.5 Knowledge regarding sexually transmitted infections (STIs)

The group of youths, most of them have limited knowledge about sexually transmitted infections (STIs), they only know about HIV and AIDS, as supported by the following statements.

"I only know about HIV and AIDS." (T03, a female youth, interviewed on May 19, 2024)

"I know only one, which is HIV." (T02, a female youth, interviewed on May 14, 2024)

The group of women, most of them are aware of STIs, especially HIV and AIDS. However, some of them still lack understanding of symptoms of other STIs and proper prevention methods. As supported by the following statements.

"It might be cancer, but there are others, though I can't tell exactly what those severe diseases are." (MHS03, a woman, interviewed on May 16, 2024)

"I know about some; I've heard that HIV can be sexually transmitted." (MHS03, a woman, interviewed on May 16, 2024)

"HIV, AIDS, that's all I know." (T04, a woman, interviewed on May 13, 2024)

"HIV, AIDS." (T06, a woman, interviewed on May 19, 2024)

Some individuals have misunderstandings about the symptoms of STIs, thinking they are limited to skin conditions or general symptoms like weakness or poor skin health. As supported by the statements below.

"There are itches, bumps, stinky discharges from the genitals, pus. The body looks yellow. That's what I've heard." (MHS03, a woman, interviewed on May 16, 2024)

"Having poor health, looking weak, unable to work, and bad skin conditions." (T06, a woman, interviewed on May 19, 2024)

Most women are aware that condoms can help prevent STIs, but some still do not see the importance of consistently using condoms or are unaware of other prevention methods. As supported by the following statements.

"It's important, but if the husband and wife are not sleeping with other people, then there's no need for protection. If my husband sleeps with other women and I find out then I will need to protect myself." (T04, a woman, interviewed on May 13, 2024)

"I know that condoms should be used for protection, but it's not necessary for me because there's no risk." (T06, a woman, interviewed on May 19, 2024)

The group of pregnant women have limited knowledge about sexually transmitted infections (STIs), only knowing well-known infections such as HIV and AIDS. As supported by the following statements.

"I've heard of them, but I don't really know about them." (T08, a pregnant woman, interviewed on May 13, 2024)

"I only know about HIV." (T010, a pregnant woman, interviewed on May 13, 2024)

"HIV, syphilis." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"I know about AIDS." (T07, a pregnant woman, interviewed on May 13, 2024)

However, some of them can name other STIs, such as syphilis, as supported by the following statement.

"I've heard of it, but I don't know about the symptoms." (MHS05, a pregnant woman, interviewed on May 16, 2024)

Only one person could explain the symptoms of AIDS, while others have misunderstandings about the causes of HIV infection, believing it's due to having multiple sexual partners. As supported in the following statements.

"In the early stages, you can't tell if someone is infected, but after 6 months, they'll start showing symptoms like fever, weight loss, and bumps on the skin." (T07, a pregnant woman, Interviewed on May 13, 2024)

"I know it comes from women who frequently change sexual partners, and men who do the same." (T07, a pregnant woman, interviewed on May 13, 2024)

Overall, pregnant women have very limited knowledge about sexually transmitted infections and lack accurate understanding of the causes, symptoms, and proper prevention methods for STIs.

The group of individuals with disabilities, most of them have limited knowledge about sexually transmitted infections (STIs), mostly recognizing the common ones such as HIV, syphilis, and hepatitis B and C. As supported by the following statements.

"I've only heard of HIV, and I don't know about other sexually transmitted infections." (T11, a man with a disability, interviewed on May 13, 2024)

"I know about several STIs, such as HIV, hepatitis B and C, and syphilis, but I know very little about their symptoms, like yellow skin, weakness, and poor skin condition." (T12, a man with a disability, interviewed on May 19, 2024)

However, both individuals lack understanding of how to prevent and treat STIs. As supported by the following statements.

"I've never used condoms, and I don't know how to prevent STIs other than by not having sex with anyone." (T11, a man with a disability, interviewed on May 13, 2024)

"I know about condoms, but I've never used them and don't know how to take care of myself to prevent STIs." (T12, a man with a a disability, interviewed on May 19, 2024)

According to the information above, it is seen that all target groups have limited knowledge about STIs. They lack understanding of how to correctly prevent and treat STIs, which increases their risk of infection and spreading the disease.

4.1.1.6 Knowledge regarding domestic violence

The group of youths, most of them have limited knowledge about domestic violence. Most of them understand that domestic violence is a result of arguments, the use of violence, alcohol consumption, and economic problems. They often see it as an issue of physical abuse. As supported by the following statements.

"It's caused by arguments and misunderstandings within the family. The family members neither communicate or understand each other, so domestic violence happens." (T01, a male youth, interviewed on May 14, 2024)

"Drinking alcohol, talking too much, then arguing. Sometimes families can't take care of each other, they are poor, and don't have enough money to support the family, I think." (T02, a female youth, interviewed on May 14, 2024)

"I know about domestic violence, like when a husband drinks alcohol or beer, then comes home and beats his wife and children." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them understand domestic violence and have either directly experienced or witnessed it through close contacts. Some of them still have misconceptions about sexual violence, not recognizing that rape is a form of sexual violence. As supported by the following statements.

"Mostly, it's about physical abuse, like hitting the wife, punching, and verbally abusing to hurt emotions. The husband gets drunk, comes home and beats his family." (MHS03, a woman, interviewed on May 16, 2024)

"I've witnessed it in my own family. It's about sexual violence in the family. It's more about mental harm." (T05, a woman, interviewed on May 14, 2024)

"It's about wanting to hurt and kill, fighting, husbands hitting their wives, saying bad things to each other. But I don't know about rape." (T04, a woman, interviewed on May 13, 2024)

The group of pregnant women generally have a basic understanding of domestic violence, recognizing forms such as physical abuse and verbal abuse, as stated below.

"Beating the wife and children, drinking a lot, coming back home and hurting family members." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"I think if they can't live together, there's no need to argue or fight. They should just leave each other's lives. There's no need to stay together." (T08, a pregnant woman, interviewed on May 13, 2024)

"I understand that physical and emotional violence, like fathers hitting children or husbands hitting wives, is a wrong thing." (T010, a pregnant woman, interviewed on May 13, 2024)

Some of them have experienced or witnessed violence before, while others have never encountered it but are aware of its possibility to occur, as stated below.

"I once saw a man raped a child, which led to the child's death." (T010, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities are aware of domestic violence and can identify its forms, such as physical abuse, verbal aggression, or being forced to work excessively. They generally view domestic violence as negative and wrong, as stated below.

"I think hitting your child if they've done something wrong is fine, and if your wife is bad, hitting her is fine. But if your child or wife is good and you hit them, that's wrong and bad." (T11, a man with a disability, interviewed on May 13, 2024)

"It's about anger and fighting, things like that." (T12, a man with a disability, interviewed on May 19, 2024

"Assaulting, hitting each other in the family, overworking the wife and kids, hitting each other if they aren't happy. My mother used to hit me as well, but it wasn't very severe." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.1.7 Knowledge regarding sexual violence

The group of youth, most of them have limited knowledge of sexual violence, often associating it with rape, physical harm between sexual partners, or infidelity. As stated below.

"I think it happens when sexual partners hurt each other, or when one of them sleeps with someone else, leading to arguments and fights in the family." (T01, a male youth, interviewed on May 14, 2024) "What I've heard is that it's when a man rapes a woman." (MHS02, a female youth, interviewed on May 16, 2024)

Some individuals do not know what sexual violence is, as stated below.

"In the family, it's about fathers hitting their children or their wives. I don't know about sexual violence." (T03, a female youth, interviewed on May 19, 2024)

"I don't know what sexual violence is." (MHS01, a female youth, interviewed on May 16, 2024)

The group of women, most of them lack knowledge about sexual violence, and some are unable to define or provide examples, as stated below.

"It's about wanting to hurt and kill, fighting, husbands hitting their wives, saying bad things to each other. But I don't know about rape." (T04, a woman, interviewed on May 13, 2024)

Some of them understand that forced marriage is a form of sexual violence, as stated below.

"As for me, I don't see it as sexual exploitation, but it is forcing a woman to not be able to decide for themselves or choose their own partners. The family's decision could be wrong because the woman doesn't want to marry but is forced to." (MHS04, a woman, interviewed on May 16, 2024)

Some women have experienced or witnessed domestic violence, as stated below.

"I've seen it myself in my own family. It's about sexual violence in the family. It was more about emotional abuse. When my father started earning more, like when he sold the cows or buffaloes, he then went to have mistresses and be with other women whom he could be happier with." (T05, a woman, interviewed on May 14, 2024)

"Mostly, I've seen aunts hitting their grandchildren aggressively. My sister hits her kids, my dad and my mom hitting their children, and arguing." (T06, a woman, interviewed on May 19, 2024)

The group of pregnant women have some knowledge of sexual violence experienced by Myanmar women who fled conflict to Thailand. Their understanding varies based on personal experiences and information received. Most of them can identify forms of sexual violence, such as rape, sexual harassment, forced prostitution, and forced marriages. However, their level of detail in their understanding is different. Additionally, some of them have received training or knowledge from organizations focused on women's rights or medical personnel. However, this education may not cover other topics related to sexual violence, such as the rights of survivors or how to seek help. Some women have gained knowledge through direct experiences or from hearing stories of others, which deepens their understanding. However, these experiences can emotionally traumatic and may not always provide accurate or comprehensive information about sexual violence. The diversity and differences in knowledge and understanding about sexual violence among Myanmar women who fled the conflict and came to Thailand reflects the necessity of providing appropriate knowledge and support tailored to everyone, in order to help them understand and effectively cope with sexual violence, as stated below.

"The only form of violence I know of is rape. I've seen it before, there was a a man who adopted a child raped the child until the child died." (T010, a pregnant woman, interviewed on May 13, 2024)

"I understand what rape is." (T09, a pregnant woman, interviewed on May 13, 2024)

"Domestic violence means physically hurting each other. Sexual violence, it is about if I don't agree to have sex with my husband but if he forces me then it's considered violence." (T07, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities have a certain level of understanding of sexual violence and can identify forms such as rape, child sexual abuse, and sexual exploitation, as stated below.

"It could happen in cases like, rape can occur when an adult plays with a child's genitals or sucks their breasts, then something wrong happens." (T12, a man with a disability, interviewed on May 19, 2024)

Overall, all target groups have some level of knowledge about domestic and sexual violence. However, they still lack understanding in certain areas, such as the causes of violence, prevention methods, and how to address and cope with these issues. These are points that require further education for them.

4.1.1.8 Knowledge regarding sexual exploitation

The group of youths, most of them have heard about sexual exploitation but have not experienced it themselves. They often gain information from stories or news about people being deceived into prostitution or human trafficking for sexual purposes, as stated below.

"I've read news about some people being forced into prostitution." (T02, a female youth, interviewed on May 14, 2024)

"I know some. What I understand is there is someone who can take people to work at a restaurant, but actually, those people are deceived into prostitution." (T03, a female youth, interviewed on May 19, 2024)

The group of women, most of them have not had direct experiences with sexual exploitation, but they understand that it is wrong and illegal. However, some of them view that sexual exploitation may arise from economic hardship, as stated below.

"Sexual exploitation like prostitution is not normal because it is forcing and violates the rights of others. It might happen through deception or without proper disclosure, but exploitation is still wrong." (MHS04, a woman, interviewed on May 16, 2024)

"Sexual exploitation does exist, like tricking their friends by saying they can go work somewhere, like in Myanmar, they end up working in nightclubs and it's actually prostitution." (T06, a woman, interviewed on May 19, 2024)

"I've never experienced it myself, but I know sexual exploitation, such as prostitution, happens. I've seen videos where children are taken into families and then get physically abused and sexually exploited." (T05, a woman, interviewed on May 14, 2024)

"I've seen sexual exploitation happening in Myanmar, but I've never experienced it myself." (T04, a woman, interviewed on May 13, 2024)

Overall, the group of women have a basic understanding of sexual exploitation, even though they may not have direct experience. They are aware that sexual exploitation is illegal and wrong, but economic factors may push some individuals into it.

The group of pregnant women, most of them have basic understanding such as prostitution and forced marriage, but they still lack knowledge about other forms of exploitation, such as hua man trafficking, child sexual abuse, and other forms of sexual exploitation, as stated below.

"I know that forcing someone to prostitution is sexual exploitation, but I didn't know that deceiving someone into inappropriate work or forcing them to marry someone they don't love is also included." (T010, a pregnant woman, interviewed on May 13, 2024)

The group of pregnant women receive information about sexual exploitation from various sources, such as news, social media, or the experiences of people close to them. However, the information they receive may be incomplete or outdated, as stated below.

"I've heard about human trafficking from the news, but I don't know the details or how to protect myself from it." (T09, a pregnant woman, interviewed on May 13, 2024)

Some of them are aware of the risk of becoming a victim of sexual exploitation, but they lack knowledge and skills to protect themselves, as stated below.

"I know I should be cautious, but I don't know what to do if someone tries to persuade me to work abroad." (MHS05, a pregnant woman, interviewed on May 16, 2024)

Overall, the knowledge of pregnant women regarding sexual exploitation is limited, and there are misunderstandings that could affect their ability to prevent and address such issues.

The group of individuals with disabilities, most of them have a basic understanding of sexual exploitation, often associating it to poverty and a lack of job opportunities, as stated below.

"I don't like it, it's bad to seek benefits from prostitution. If a woman wants a husband, they should just get one, there's no need to do prostitution." (T11, a man with a disability, interviewed on May 13, 2024)

"It is caused by poverty and not having a job. They need a job, but they have no money, that's probably it." (T12, a man with a disability, interviewed on May 19, 2024)

In summary, the group of individuals with disabilities generally understand that sexual exploitation is often driven by poverty, but they view it as wrong. However, they lack a deeper understanding of other forms of sexual exploitation and the potential impacts on the people who are exploited.

4.1.1.9 Similarities and differences in knowledge regarding sexual and reproductive health in emergencies among Myanmar displaced persons in each group

Similarities in knowledge about sexual and reproductive health rights, most target groups do not fully understand their sexual and reproductive health rights, especially when it comes to their rights to access accurate and complete information. They also lack awareness of their right to make decisions about their own sexual and reproductive health.

Similarities in knowledge about sexual education, most of the target groups have basic knowledge about sexual education, such as menstruation, the first arrival of menstruation, how to use sanitary pads, and how to maintain personal hygiene during menstruation. However, they still lack knowledge and understanding of other topics, such as family planning, contraception, and sexually transmitted infections (STIs).

Similarities in knowledge about family planning and contraception, most target groups have some knowledge of various contraceptive methods, such as birth control pills, contraceptive injections, intrauterine devices (IUDs), and condoms. However, they lack understanding of which methods are most appropriate for themselves and do not have equal access to contraceptive services.

Similarities in knowledge about sexually transmitted infections (STIs), most target groups have limited knowledge about STIs, primarily knowing about HIV and AIDS. They lack understanding of the symptoms of other STIs, and correct prevention methods.

Similarities in knowledge about domestic and sexual violence, the target groups generally have some level of awareness about domestic and sexual violence but lack deeper understanding of the causes and proper prevention or solutions to these issues.

Similarities in knowledge about sexual exploitation, most target groups have a basic understanding of sexual exploitation, often associating the issue to poverty and lack of job opportunities. However, they lack in-depth knowledge of the various forms of exploitation and the potential impacts on the people who are affected.

Differences in knowledge about family planning, in the group of youths, generally focus on preventing pregnancy as they are still in school, while the group of women and the group of pregnant women are more interested in planning the number of children and spacing of children.

Differences in knowledge about unplanned pregnancy, the group of pregnant women are more concerned about unplanned pregnancies than other groups because it directly affects their health and the health of their unborn child.

Differences in knowledge about domestic violence, it is found that the group of women and the group of individuals with disabilities have higher experience of domestic violence. They have direct experience or close contact with domestic violence cases.

Differences in knowledge about menstruation, the group of youths and the group of women have basic knowledge about menstruation and self-care. However, some women still reuse the same pieces of cloth during menstruation.

Differences in sources of knowledge, the group of youths primarily receive sexual education from school, while women, pregnant women, and individuals with disabilities gain knowledge from other sources, such as training sessions, word-of-mouth, and personal experiences.

Remarks

The group of individuals with disabilities, according to the information, there are only 2 individuals with disabilities included as target participants, which may not be sufficient to draw clear conclusions about this group's knowledge and understanding of sexual health and reproductive health.

The group of pregnant women, they have very limited knowledge about their sexual and reproductive health rights. When asked about sexual health, most pregnant women had never received any education or training related to the subject.

Overall, all target groups have limited and varying levels of knowledge and understanding of sexual and reproductive health, influenced by individual factors and social context. It is necessary to provide appropriate education and support to each group to ensure they can access the necessary information and services to manage their sexual and reproductive health in an effective way.

Table 3 Comparison between similarities and differences in knowledge of sexual and reproductive health in emergencies among Myanmar refugee groups

	Target groups				
Knowledge	Youths	Women	Pregnant women	Individuals with disabilities	
Sexual and Reproductive Health and Rights (SRHR)	Lack knowledge and understanding, especially the right to make decisions about one's own body.	Some do not fully understand the meaning of the term 'rights', but there are discussions about various issues related to sexual and reproductive health and rights	Most do not know that they have sexual and reproductive health rights. Only a few people are aware that they have the right to make decisions about their own bodies.	Their knowledge is varied, some of them have quite limited knowledge.	
Sexual education	They mostly learn from school, but some have never learned before.	They have basic knowledge, but some still lack understanding about the correct use of sanitary pads.	Most have very little knowledge and have never received education or training before.	Most of the knowledge comes from schools in Myanmar, but some still lack understanding about family planning, contraception, and STIs.	

	Target groups				
Knowledge	Youths	Women	Pregnant women	Individuals with disabilities	
Family planning	Most do not have knowledge about family planning.	Most understand and prioritize family planning.	Most still lack knowledge and understanding about comprehensive family planning.	Most do not have knowledge about family planning.	
Contraception	Most have knowledge about contraception methods.	Most have knowledge about various contraceptive methods.	Most have knowledge about various contraceptive methods.	Some have knowledge about contraception methods.	
Unplanned pregnancy	Most know that it results from unprotected sexual intercourse.	Most have knowledge about the causes of unintended pregnancy.	Most have knowledge about the causes of unintended pregnancy.	Most have knowledge about unintended pregnancy.	
Sexually Transmitted Infections (STIs)	Most have limited knowledge about sexually transmitted infections, knowing only about HIV and AIDS.	Most have knowledge about sexually transmitted infections, especially HIV and AIDS.	Most have limited knowledge about sexually transmitted infections, knowing only about HIV and AIDS.	Most have very little knowledge about sexually transmitted infections.	

	Target groups				
Knowledge	Youths	Women	Pregnant women	Individuals with disabilities	
Domestic	Most understand	Most have	Most have	Most have	
violence and	that domestic	knowledge	a basic	knowledge	
sexual	violence is caused	about domestic	understanding	about domestic	
violence	by arguments,	violence and	of domestic	violence and can	
	violence, alcohol	have either	violence and can	identify forms of	
	consumption, and	personal	identify forms of	domestic	
	financial problems.	experience or	violence, such as	violence,	
		experiences	physical abuse	such as physical	
		from people	and verbal abuse	abuse, aggressive	
		close to them.	that hurt one's	verbal abuse,	
			feelings.	or forcing into	
				doing hard work.	
Sexual	Most people have	Most have never	Most have never	Most have	
exploitation	heard of sexual	had direct	had direct	a basic	
	exploitation	experience	experience	understanding	
	but have not	with sexual	with sexual	of sexual	
	personally	exploitation, but	exploitation, but	exploitation,	
	experienced it.	they understand	they understand	often associating	
		that sexual	that sexual	it with poverty	
		exploitation is	exploitation is	and lack of job	
		wrong and	wrong and	opportunities.	
		illegal.	illegal.		

4.1.2 Attitudes regarding sexual and reproductive health and rights (SRHR) consists of attitudes regarding sexual and reproductive rights, sexual and reproductive health care, family planning and contraception, abortion, prevention and treatment of sexually transmitted infections, domestic violence and sexual violence, and sexual exploitation. The details are as follows.

4.1.2.1 Attitudes regarding sexual and reproductive health rights

The group of youths, most of them have a basic understanding of the right to survival and access to basic healthcare. Some of them believe they have rights over their own bodies and health, as supported in the following statements.

"I think that I have this right, I already have it. Like when I get sick, I can visit doctors in the area, not at a hospital because there are nurses available, so I can just visit them." (T01, a male youth, interviewed on May 14, 2024)

"I know that I have the right to take care of my health. But usually, when I'm sick, I ask my employer to buy medicine for me. But I think if the illness gets serious, I will definitely go to the hospital." (T02, a female youth, interviewed on May 14, 2024)

Nonetheless, some of them still lack understanding of these basic rights. For instance, some of them do not think that they have the right to survival. They understand their rights regarding making a living and supporting themselves to survive, but they are not sure about their rights to make decisions about their bodies and access to reproductive health services, as stated below.

"I think I don't have such rights." (MHS01, a female youth, interviewed on May 16, 2024)

"I can say that I have the right to decide that no one can do anything to me. When I receive services, I will go to the hospital. As for seeking advice, I will consult my mother first." (T03, a female youth, interviewed on May 19, 2024) Regarding the concept of privacy, most people place importance on personal privacy, but some may not be able to fully exercise this right due to family circumstances, as stated below.

"It is important. Privacy in my opinion is to have my own space, not being bothered by others." (T02, a female youth, interviewed on May 14, 2024)

"It's important, being aware of yourself, nobody can harm you and being able to have more privacy." (T03, a female youth, interviewed on May 19, 2024)

"I know about privacy, but the privacy is not 100%." (MHS01, a female youth, interviewed on May 16, 2024)

"Yes, I know. Privacy for me is something I'm not entirely sure about. But when it comes to someone else's privacy, if they ask me to keep a secret, I will then keep it." (MHS02, a female youth, interviewed on May 16, 2024)

Regarding marriage equality, most of them did not express opinions on marriage equality. Only one individual shared the following perspective.

"I think marriage equality is all about 2 people. Men can marry men, or women can marry women. But I can't do that because my mother still lives, so it depends on my mother, and I wouldn't want to upset her." (MHS02, a female youth, interviewed on May 16, 2024)

In terms of concerns and insecurities regarding sexual relations, most of the participants expressed worry and uncertainty in sexual relations, especially in emergency situations, which may prevent them from discussing or seeking advice. Some feel embarrassed or uncomfortable discussing sexual matters, as stated below.

"I'm afraid to ask anyone about sexual matters. I'm afraid to talk with anyone about it, not even with the healthcare staff." (T02, a female youth, interviewed on May 14, 2024)

"I have never learned about sexual matters before, and I don't know who to consult if I have any sexual issues." (MHS01, a female youth, interviewed on May 16, 2024)

"I attended a sexual education training, but I am still not confident in my own knowledge and understanding." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them have opinions on the following 2 main issues 1) rights over their bodies and decision-making, they understand that they have the right over their bodies and the right to make decisions about their sexual and reproductive health, especially in terms of family planning and contraception, as supported in the following statements.

"I'd say contraception is important. It's important to us." (T05, a woman, interview on May 14, 2024)

"I know that I can stay here. In the future I will need a certificate to continue staying, so it's a concern. As for receiving medical treatments, I can go to the hospital or Mae Tao clinic. I feel secure living here, no one invades my privacy." (T06, a woman, interviewed on May 14, 2024)

"I believe I have the right to make decisions, and my husband agrees with me. He doesn't prevent me from making any choices related to my sexual health." (MHS04, a woman, interviewed on May 16, 2024)

And 2) rights to access health services, which most of them understand that they have the right to access sexual and reproductive health services, but there were obstacles such as costs, inconvenience in traveling, and lack of knowledge about available services, as stated below.

"I know I have the right in myself. About my health, I know that when I come here, I can make decisions here. When I get sick, I can go to the hospital right away." (T05, a woman, interviewed on May 14, 2024)

"I know where to go for services. I usually go to Mae Tao clinic." (T06, a woman, interviewed on May 19, 2024)

"If I needed services then I could go to a clinic there on the other side, but here, since we're displaced persons, I'm afraid to ask." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them have a basic understanding of sexual and reproductive health rights but still lack in-depth knowledge on various issues. However, most of them expressed their opinions that they have the right to make decisions about their bodies and reproductive health, such as contraception, family planning, and accessing healthcare services, as stated below.

"I know I have the right to make decisions." (T07, a pregnant woman, interviewed on May 13, 2024)

"I know I have the right to decide to take care of my own body." (T08, a pregnant woman, interviewed on May 13, 2024)

"I think I have the right to decide the spacing between having children." (T010, a pregnant woman, interviewed on May 13, 2024)

"I have the right to safety. I sought safety so I came here." (T09, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities, most of them have a certain level of understanding of their right to make decisions about their own bodies, but there are still some gaps in their knowledge. They expressed understanding of their right to choose whether to have sexual activities and the right not to be physically harmed, as stated below.

"I think my way of protecting myself is by not sleeping with other women." (T11, an individual with a disability, interviewed on May 13, 2024)

"It means nobody has the right to harm me." (T12, a man with a disability, interviewed on May 19, 2024)

Regarding the right to privacy, most of the target groups value their privacy, but they are also concerned about stigma and disclosing their personal information, as stated below.

"Privacy is that I can choose to stay at home alone, being in my personal space. But if I go outside, I may get caught." (T12, a man with a disability, interviewed on May 19, 2024)

This indicates concerns about being stigmatized when in public. While some did not directly express opinions about privacy. However, the inability to seek help when faced with sexual issues might reflect concerns about disclosing their personal information.

Regarding the right not to be discriminated against, some individuals experienced discrimination due to their disability, as stated below.

"It happens, because my body is like this, so some people tease or mess with me. But I choose to stay quiet and not respond, although in my mind I may think about it. I know that my body is not like everyone else's, and sometimes people tease or mess with me." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.2.2 Attitudes regarding sexual and reproductive health care

The group of youths, most of them view sexual and reproductive health care as important, but they still lack the knowledge and understanding to properly take care of themselves, especially regarding contraception and the prevention of sexually transmitted infections, as stated below.

"We have the right to choose how to use it, how to take care of ourselves, and what to use when we have our period. If we take good care of ourselves, our sexual and reproductive health will be good, but if we don't take good care then we will have health problems." (MHS01, a female youth, interviewed on May 16, 2024)

"I think sexual health is important because if you have good sexual health, it means you are healthy and can live your daily life. I also think contraception is important because in Myanmar, couples who live together, if they don't use protection, they are at risk of getting diseases or infections. But if they use protection, they can feel more at ease." (MHS02, a female youth, interviewed on May 16, 2024)

"Taking care of reproductive health during the reproductive age is important. For example, if we have our period, we need to take good care of ourselves to avoid getting sick, and we should use sanitary pads to maintain personal hygiene. It's important because without contraception, we might end up having too many children too quickly, which could cause difficulties. Also, the children might be unhealthy, and also with breastfeeding as the milk supply may be low." (T03, a female youth, interviewed on May 19, 2024)

"We can take care of our health by having nutritious food. We don't do much beyond that, just maintain personal hygiene. I think having contraception is good." (T01, a male youth, interviewed on May 14, 2024)

The group of women, most of them are aware of the importance of taking care of their sexual and reproductive health, seeing the importance of personal hygiene especially during menstruation, as stated below.

"You have to use it discreetly, avoiding men to see." (T05, a woman, interviewed on May 14, 2024)

"It's mostly related to menstruation. When I'm on my period, I won't have sex with my husband, and I avoid eating injurious foods." (MHS03, a woman, interviewed on May 16, 2024)

The group of pregnant women, all the pregnant women agree that taking care of sexual and reproductive health is important and necessary because it affects their own health and their baby's health, although they may lack knowledge or understanding in some areas, as stated below.

"We must take care of ourselves. It's important because if we don't, then we get unhealthy. When I fled, there were many issues. We didn't receive health care, and fleeing in an emergency makes health care very important, much more important than anything else." (T07, a pregnant woman, interviewed on May 13, 2024)

"It's important because if there is an illness then I will know in advance. If I'm unhealthy then I can start seeing a doctor." (T010, a pregnant woman, interviewed on May 13, 2024)

"It's important for raising children, taking care of ourselves to avoid illness, and also for the baby." (MHS05, a pregnant woman, interviewed on May 16, 2024)

The group of individuals with a disability, all of them agree that taking care of sexual and reproductive health is important, as stated below.

"It's related to our sexual health, how we take care of things, keeping ourselves healthy and taking good personal hygiene by shower." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.2.3 Attitudes regarding family planning and contraception

The group of youths, most of them have knowledge of contraceptive methods but still lack an understanding of comprehensive family planning. Some do not know much about family planning but understand the importance of contraception, providing reasons such as preventing frequent pregnancies and maintaining the health of the mother and child. However, there are still misunderstandings and incorrect knowledge about

contraceptive methods, reflecting the need for accurate and accessible information. As stated below.

"It's important because without contraception, we might end up having too many children too quickly, which could cause difficulties. Also, the children might be unhealthy, and also with breastfeeding as the milk supply may be low." (T03, a female youth, interviewed on May 19, 2024)

Some of them expressed a desire to plan for their families in the future, while others had not yet considered it, as stated below.

"Currently I don't have any plans for this because I'm still in school." (T01, a male youth, interviewed on May 14, 2024)

"I haven't planned about this yet." (T03, a female youth, interviewed on May 19, 2024)

Meanwhile, some of them believe they have the right to plan whether to have children in the future and feel they have the right to make decisions about having children without being forced, as stated below.

"I know I can make my own decisions without being forced by anyone." (T02, a female youth, interviewed on May 14, 2024)

"I think I have the right to plan for marriage in the future, and if we are going to have children or not, we have to discuss it." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them place importance on family planning, considering various factors such as difficult living conditions, their ability to care for children, and their own health, as stated below.

"I think that having children at an older age wouldn't be good, it would be harder to take care of them. I had an unplanned pregnancy before, so I decided to have only one child." (T04, a woman, interviewed on May 13, 2024)

"We have a plan to have one child every two years." (T05, a woman, interviewed on May 14, 2024)

"I've planned to have one child every five years." (MHS03, a woman, interviewed on May 16, 2024)

Regarding contraception, most of them view it as important, especially in difficult situations and economic constraints, as stated below.

"We think contraception is important. It's important to us." (T05, a woman, interviewed on May 14, 2024)

"It's important. If it weren't important, I wouldn't use it because if I had another child while being unhealthy, it would cause problems." (T06, a woman, interviewed on May 19, 2024)

The group of pregnant women, most of them view family planning and contraception as important and necessary, especially in difficult circumstances. In terms of family planning, many of them expressed the need to plan the number of children and the spacing between them, as stated below.

"I know about it. I discussed with my husband that we want two children." (T07, a pregnant woman, interviewed on May 13, 2024)

"We made plans. I never got pregnant before marriage, so we planned to have our first child." (T010, a pregnant woman, interviewed on May 13, 2024)

"I know about it. We want three children. If we don't want children, then I need to take birth control pills." (T09, a pregnant woman, interviewed on May 13, 2024)

"We somehow plan on having children, for example, we want to have 2 children around the same time, but for the 3rd child we will wait another 5 years." (MHS05, a pregnant woman, interviewed on May 16, 2024) Regarding contraception, most of them understand its necessity, especially when they are not ready to have children or want to space out their pregnancies, as stated below.

"It's necessary. If you don't use protection or contraception, then you may get pregnant again after just giving birth, which would cause more problems." (T07, a pregnant woman, interviewed on May 13, 2024)

"Family planning is important, and contraception is also important, but I don't know how to explain it about not being ready to have children." (T08, a pregnant woman, interviewed on May 13, 2024)

Overall, the group of pregnant women has generally positive views toward family planning and contraception. However, there are challenges in accessing services and receiving accurate and complete information about contraception and family planning.

The group of individuals with a disability, all of them agree with family planning and contraception, emphasizing the importance of spacing between children for the mother's health and the family's financial stability. Although their knowledge and methods of contraception varied, this reflects the need for comprehensive education and access to family planning services for individuals with disabilities. As stated below.

"I know about contraception. For the first child, we didn't use any contraception because we wanted to have a child. But for the 2nd child, we use birth control injections to space our children about 3-4 years apart before trying again." (T11, a man with a disability, interviewed on May 13, 2024)

Furthermore, all of them have a positive view of contraception. One person chose to have his wife use birth control injections, while another emphasized the importance of contraception to prevent economic and family difficulties from having too many children, as stated below.

"When it comes to family planning, I have my wife get birth control injections." (T11, a man with a disability, interviewed on May 13, 2024)

"It's important. If we don't use contraception and have many children, it will affect the family. It'd be more difficult to make a living." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.2.4 Attitudes regarding abortion

The group of youths, most of them have negative attitudes toward abortion, viewing it as sinful, wrong, and something that should not be done, as stated below.

"Abortion is wrong because the baby did nothing wrong." (T02, a female youth, interviewed on May 14, 2024)

"It shouldn't be done." (T03, a female youth, interviewed on May 19, 2024)

However, some of them expressed the view that abortion might be necessary in certain situations. For example, while abortion is generally seen as bad, if someone is not ready to have a child, it may be necessary, and it is each person's right to decide, as stated below.

"I think it's wrong. But if we're not ready, then we might have to do it if we're not ready to have a child." (T01, a male youth, interviewed on May 14, 2024)

"It depends on the person. If we decide to do it, it's our right." (MHS01, a female youth, interviewed on May 16, 2024)

The group of women, their attitudes toward abortion vary, but most see it as wrong and sinful, as stated below.

"Wrong, very sinful." (T04, a woman, interviewed on May 13, 2024)

"No, there are no laws regarding this. But if we're talking about the other aspect, which is in my religion, having an abortion is extremely sinful for me." (T05, a woman, interviewed on May 14, 2024)

"Abortion is possible, and people do have abortions. But the problems are dizziness, lightheadedness, and the body temperature get cold. Over there, they use methods like medication or herbal remedies. But I don't know if there's a safe abortion available." (MHS03, a woman, interviewed on May 16, 2024)

However, some of them view abortion as an individual choice, especially in cases where the person is not ready or faces social or economic problems, as stated below.

"I don't think it's wrong nowadays because raising a child is very difficult. If you're not ready, it's better to have an abortion than to bring a child into a difficult life." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them agree that abortion is wrong and should not be done, even if the pregnancy is unplanned. Many of them view abortion as sinful or a serious wrongdoing, and some emphasize their responsibility toward the unborn child, believing that they should give birth and raise the child, even if they are not ready. Some of them also mentioned cases of abuse but still believe abortion is sinful. Overall, the pregnant women's group has generally negative views toward abortion, based on religious beliefs and a sense of responsibility for a new life, as stated below.

"I think abortion is something that should not be done, even if the pregnancy is unplanned. If you're pregnant, you should give birth and raise the child. If someone asks me for advice, I will give them guidance as well." (T09, a pregnant woman, interviewed on May 13, 2024)

"It's not good, and I won't have an abortion because it's a sin.
I will raise the child." (MHS05, a pregnant woman, interviewed on May
16, 2024)

"It's wrong." (T08, a pregnant woman, interviewed on May 13, 2024)

"If I got pregnant unexpectedly, I didn't dare to terminate the pregnancy because I believe it is sinful. I would raise the child. I would accept that it was a mistake, it's caused by a couple's unprotected sex. But terminating the pregnancy is a sin." (T07, a pregnant woman, interviewed on May 13, 2024)

"It's a serious wrongdoing." (T010, a pregnant woman, interviewed on May 13, 2024)

Some of them stated that terminating a pregnancy is a sin, while others mentioned the responsibility toward the unborn child.

"It's a sin." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"Once pregnant, you must give birth and raise the child." (T09, a pregnant woman, interviewed on May 13, 2024)

"Just continue to raise the child." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"I would continue raising the child, as abortion is a sin. It's a type of bad karma. Even though I was violated, if I did abortion then it's a continuous sin." (T07, a pregnant woman, interviewed on May 13, 2024)

"I would advise them to continue the pregnancy. If their parents are still around, they should be able to take care of themselves." (T010, a pregnant woman, interviewed on May 13, 2024)

In the group of individuals with disabilities, their views on abortion are varied. One person considered it a sin that shouldn't be committed, while another did not view it as inherently wrong, though they felt one shouldn't harm the unborn child.

These different views come from varying beliefs, religions, and personal experiences, as stated below.

"Terminating a pregnancy is a sin, and if you're pregnant, you must accept that you're having a child. If you terminate the pregnancy, it would be sinful." (T11, a man with a disability, interviewed on May 13, 2024)

"It's not a major wrongdoing. It's wrong to hurt a child that is about to be born, but as for our rights, it depends on us. You can choose whether to do it or not." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.2.5 Attitudes regarding prevention and treatment of sexually transmitted infections (STIs)

The group of youths, most of them are aware of the importance of preventing sexually transmitted infections (STIs), yet they lack adequate knowledge and understanding regarding correct prevention and treatment methods. They understand that STIs can be prevented through proper protective methods and that they should seek medical care for infections, as stated below.

"I think that I don't have much knowledge about this, but I think it's necessary to protect myself from it." (T01, a male youth, interviewed on May 14, 2024)

"It's necessary because I'm afraid that if I got an infection, it could affect my children and grandchildren." (T02, a female youth, interviewed on May 14, 2024)

"It's necessary to protect ourselves because if one person is infected, another person who has protection won't get infected. But if no protection method is used, the other person will get infected." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them are concerned about sexually transmitted infections, especially HIV and AIDS, and recognize the importance of prevention. However, they still lack sufficient knowledge and understanding about effective prevention methods, as well as access to services, as stated below.

"It's important, but if the married couple don't cheat on each other, then there's no need for protection. But if my husband is involved with other women, then I must protect myself." (T04, a woman, interviewed on May 13, 2024)

"I know some about it. I've heard that HIV can be transmitted through sexual relations." (T05, a woman, interviewed on May 14, 2024)

The group of pregnant women, most of them are aware of STI prevention but still lack understanding of proper methods for prevention and treatment of STIs. They recognize the importance and necessity of STI prevention, especially the use of condoms during sexual intercourse, as stated below.

"When having sex, I should use a condom during intercourse." (T07, a pregnant woman, interviewed on May 13, 2024)

"Yes, I think it's necessary to use." (T010, a pregnant woman, interviewed on May 13, 2024)

Regarding treatment of sexually transmitted infections (STIs), most of them do not know how to treat STIs or what to do if they become infected. As stated below.

"I should visit a doctor at the clinic, then the clinic will direct us to the right place for further assistance." (T07, a pregnant woman, interviewed on May 13, 2024)

"Condoms should be used, and visit a doctor at the clinic, then they will guide us where to go next." (T09, a pregnant woman, interviewed on May 13, 2024) Overall, most of them are aware of the importance of preventing STIs, but they still lack the correct knowledge and understanding of prevention and treatment methods. This may result from a lack of education or limited access to accurate information about sexual and reproductive health. Additionally, some individuals may hesitate to seek health services for sexual health issues due to fear or embarrassment, which can hinder their access to appropriate STI prevention and treatment. Therefore, providing knowledge and access to comprehensive and equitable healthcare services in sexual health are essential for the effective prevention and treatment of STIs.

The group of individuals with disabilities, all of them recognized the importance of preventing STIs, but they lack knowledge and experience in correct protection methods for themselves. As stated below.

"I think, protecting myself is not to go sleep with other women."

(T11, a man with a disability, interviewed on May 13, 2024)

"It's about taking care of one's health. If I had an STI, I would use a condom. I would never sleep around with anyone. I've never done that. I don't know how to protect myself." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.2.6 Attitudes regarding domestic violence and sexual violence

The group of youths, most of them believe that domestic violence arises from situations like fathers hitting their children or wives, which they view as wrong. They think domestic violence is caused by arguments and conflicts within the family, while they see sexual violence as when partners are unfaithful. As stated below.

"In the family, it usually happens when fathers hit their children or wives, something like that." (T03, a female youth, interviewed on May 19, 2024)

"We think it happens when partners physically harm each other, and when one sleeps with someone else, leading to arguments and then conflicts in the family." (T01, a male youth, interviewed on May 14, 2024)

Meanwhile, some of them lack knowledge about domestic violence and sexual violence. Therefore, they cannot express their views on the issue, as stated below.

"We don't know what family violence is or what sexual violence is." (MHS01, a female youth, interviewed on May 16, 2024)

The group of women, most of them agree that domestic violence and sexual violence are wrong and unacceptable. Some of them have experienced or witnessed domestic violence. Most understand the forms of domestic violence, such as physical abuse, verbal abuse, and threatening, as stated below.

"It mostly involves physical abuse, like husbands hitting or punching their wives, using hurtful words, and husbands coming home drunk and hitting their wives." (MHS03, a woman, interviewed on May 16, 2024)

"Wanting to hurt and kill, fighting, hitting wives, punching wives, using aggressive language with each other, but I don't know about rape." (T04, a woman, interviewed on May 13, 2024)

"I think it's bad. However, I haven't experienced it in my life." (T05, a woman, interviewed on May 14, 2024)

"Mostly, I've seen aunts hitting their grandchildren aggressively. My sister hits her kids, my dad and my mom hitting their children, and arguing" (T06, a woman, interviewed on May 19, 2024)

"I've experienced a lot of it, where disagreements lead to physical abuse." (MHS04, a woman, interviewed on May 16, 2024)

Some of them have personally encountered sexual violence or seen it affect people who are close to them, as stated below.

"I've witnessed it in my own family. It's about sexual violence in the family. It's more about mental harm." (T05, a woman, interviewed on May 14, 2024) "What I heard is that there's a woman who doesn't want children anymore, but her husband still forces himself on her." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them agree that using violence in the family, whether physical or emotional, such as hitting or scolding, is wrong and unacceptable. Some of them expressed concerns about the long-term impact that children may receive from family violence, such as verbal abuse or aggressive scolding in front of children. Most of them also believe that sexual violence, such as rape, is bad and wrong, as stated below.

"I think it's a bad thing, and wrong." (T07, a pregnant woman, interviewed on May 13, 2024)

"It's wrong, and it's bad for a father to hit his children or wife." (T08, a pregnant woman, interviewed on May 13, 2024)

"It's not something that should be done." (T09, a pregnant woman, interviewed on May 13, 2024)

"I think it's wrong. Children should be taught, not hit. Husband and wife should talk kindly, not argue." (T010, a pregnant woman, interviewed on May 13, 2024)

"It's wrong. If people love each other, they should understand each other, not hurt each other." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"It will have long-term effects. If the parents use violence, verbally abuse each other, or verbally harm each other severely in front of the child, it will impact the child in the long run. The child will remember the fights between the parents." (T07, a pregnant woman, interviewed on May 13, 2024)

"Sexual violence, it is about if I don't agree to have sex with my husband but if he forces me then it's considered violence." (T07, a pregnant woman, interviewed on May 13, 2024

"I think there's probably one type of sexual violence which is rape." (T010, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities, their opinions on domestic violence varied. One person considered it wrong but made exceptions in certain situations, while another viewed it as inherently wrong and a violation of others' rights, as stated below.

"I think hitting your child if they've done something wrong is fine, and if your wife is bad, hitting her is fine. But if your child or wife is good and you hit them, that's wrong and bad." (T11, a man with a disability, interviewed on May 13, 2024)

"It's wrong. From my views, it's very wrong. Physical abuse in the family or things like that, it's about the rights of the child, the rights of people. Hitting children isn't right." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.2.7 Myanmar displaced persons' attitudes regarding sexual exploitation

The group of youths, all of them agree that sexual exploitation is wrong, abnormal, and should not be done, as stated below.

"I think it's not good at all to exploit others sexually." (T01, a male youth, interviewed on May 14, 2024)

"I don't know how to put it, but it's definitely wrong, but I can't explain exactly how." (T02, a female youth, interviewed on May 14, 2024)

"From what I've heard, it's mostly wrong, and it happens because people need money. They're in hardship and need money." (T03, a female youth, interviewed on May 19, 2024)

"It's not normal and shouldn't be done, because that is wrong." (MHS02, a female youth, interviewed on May 16, 2024)

"It's a bad thing because if they're the victim, they are unhappy." (MHS01, a female youth, interviewed on May 16, 2024)

Most of them are aware of the issues of sexual violence and sexual exploitation but still lack the knowledge and skills to prevent and deal with such situations, as stated below.

"What I've heard is that when a man rapes a woman." (MHS02, a female youth, interviewed on May 16, 2024)

"From what I understand, they were told to go work at a restaurant when actually they're being tricked into prostitution." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them agree that sexual exploitation is wrong and should not happen. Some have witnessed or learned that sexual exploitation happens in their communities. They also recognize that it is wrong and has negative effects on the victims, as stated below.

"It's wrong. I understand that it may be an easy job and can support a family, but there are also other options for work. It's wrong." (T04, a woman, interviewed on May 13, 2024)

"It is wrong." (MHS03, a woman, interviewed on May 16, 2024)

Some of them also expressed sympathy for victims of human trafficking, understanding the economic hardship and pressures that may lead people into prostitution, as stated below.

"I think some people are facing hardship, so they have to earn money through prostitution. Some might want to do it and can't help themselves. Is it wrong? Yes, but it's about some people's needs." (T06, a woman, interviewed on May 19, 2024) Additionally, some of them consider forced marriages as a violation of women's rights and as wrong, as stated below.

"For me, I don't see it as sexual exploitation, but rather as coercion that denies women the right to make decisions about their own lives and to choose their own partners. The family's decision may be wrong because the woman doesn't want to get married, but she has to do it." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them view sexual exploitation as bad, wrong, and something that shouldn't be done, even if some of them cannot clearly explain the reasons. Some of them do not understand the issue, and others have different points of view, especially in cases of consensual sex work, as stated below.

"I think it's not good, shouldn't be done, as it's one's own body. Even if you're starving, selling your body isn't right. I can't say exactly why it's not good, but it shouldn't be done." (T09, a pregnant woman, interviewed on May 13, 2024)

"I've never known about it or encountered it, but I think it's not good." (T08, a pregnant woman, interviewed on May 13, 2024)

"It's not normal for people to sexually exploit others, whether it's a husband and wife or otherwise. It is human trafficking. Exploiting people, like selling a wife out for gain, is harassment and wrong." (T07, a pregnant woman, interviewed on May 13, 2024)

"I've seen it before and think it's wrong. It's not good. People shouldn't exploit others sexually in that way." (T010, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities, their opinions vary. One person does not agree with sex work and believes that if someone wants a partner, they should marry rather than provide sex work. Meanwhile, another person disagrees with forced sex work but accepts it if it is consensual and legal, as stated below.

"I don't like it, it's not good if someone exploits sexually by selling sexual services. If you want a man, just have a husband, there's no need to sell sexual services." (T11, a man with a disability, interviewed on May 13, 2024)

"If earning through sex work is legal, I would consider going, but if forced to do it, then it's extremely wrong." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.2.8 Similarities and differences in attitudes regarding sexual and reproductive health in emergencies among different groups of Myanmar displaced persons

Similarities in attitudes regarding importance of sexual and reproductive health, all target groups agree on the importance of sexual and reproductive health, especially in emergency situations.

Similarities in concern about unplanned pregnancy, all target groups express concerns about unplanned pregnancies and want access to information and services related to contraception and family planning.

Similarities in negative attitudes regarding abortion, most target groups have negative views on abortion, considering it sinful and something that should not be done.

Similarities in attitudes regarding sexual violence, all target groups are aware of issues related to sexual violence and sexual exploitation, but they still lack the knowledge and skills to prevent and deal with such situations.

Similarities in negative attitudes regarding sexual exploitation, all target groups agree that sexual exploitation is bad, wrong, and should not be done.

Differences in understanding sexual and reproductive rights, each target group has varying levels of understanding regarding sexual and reproductive rights. The group of women and the group of pregnant women have a better understanding of these topics than the group of youths and the group of individuals with disabilities.

Differences in knowledge about contraception, the group of youths has less knowledge about contraception compared to other groups and they still have misunderstanding about contraceptive methods.

Differences in experiences and concerns about sexual violence, the group of women are more likely to have experience or concerns related to sexual violence compared to other groups.

Differences in attitudes regarding abortion, although most participants hold negative views on abortion, some women consider it a personal choice, especially in cases of unpreparedness or health issues.

Differences in knowledge and understanding regarding sexual and reproductive health among the youths, where female youths have more knowledge and understanding of these topics than male youths.

Differences in concerns about unplanned pregnancy among the youths, female youths are more concerned about unplanned pregnancy than male youths.

Differences in experiences of sexual violence among the youths, female youths are more likely to have experienced sexual violence than male youths.

In summary, all target groups are aware of the importance of sexual and reproductive health, but there are differences in levels of understanding, knowledge, and experiences. This reflects the need for appropriate information and services tailored to each group.

Table 4 Comparisons of the similarities and differences in attitudes regarding sexual and reproductive health in emergencies among different groups of Myanmar displaced persons.

	Target groups			
Attitudes	Youths	Women	Pregnant women	Individuals with disabilities
The importance	Important, but	Important,	Important and	Important, but
of sexual and	there is a lack of	especially for	necessary, as it	there is a lack of
reproductive	knowledge and	personal	affects both	knowledge and
health care	understanding on	hygiene during	personal health	experience in
	how to properly	menstruation.	and the child's	correctly
	take care of		health.	protecting
	oneself.			oneself.

	Target groups			
Attitudes	Youths	Women	Pregnant women	Individuals with disabilities
Unplanned pregnancy	Concerned and interested in learning about family planning and contraception.	Concerned especially in difficult situations with economic limitations.	Want to plan and limit the number of children and spacing between children.	Agree with family planning and contraception for the mother's health and economic status.
Termination of pregnancy	The majority disagree with it, viewing it as wrong, sinful, bad, and should not be done.	The majority disagree with it, viewing it as wrong and sinful, though some view it as a personal choice.	The majority disagree with it, viewing it as a sin or a serious wrongdoing.	The majority disagree with it, viewing it as a sin, but some do not consider it wrong, but unborn babies should not be hurt.
Sexual violence	Aware of the issue but lack the knowledge and skills for prevention and dealing with the issue.	Aware of the issue, with some having experienced or witnessed it.	Most of them view it as bad and wrong.	Most of them view it as wrong and a violation of others' rights.
Sexual exploitation	It's bad, abnormal, and should not be done.	It should not happen. Some of them have witnessed or learned that	Most of them view it as bad, wrong, and should not be done, even if	The majority disagrees with prostitution and believe that if someone wants

	Target groups			
Attitudes	Youths	Women	Pregnant women	Individuals with disabilities
		sexual	some of them	a man, they
		exploitation	cannot clearly	should get
		happens in their	explain the	married instead
		community.	reasons.	of providing sex
				work.

4.1.3 Behaviors regarding health and reproductive health in emergencies among Myanmar displaced persons including the behaviors related to decision-making in choosing treatments for sexual and reproductive health, behaviors related to family planning and contraception, behaviors related to the prevention and treatment of sexually transmitted infections, behaviors related to domestic violence and sexual violence, and behaviors related to sexual exploitation. The details are as follows.

4.1.3.1 Behaviors regarding to decision-making in choosing treatment for sexual and reproductive health

The group of youths, their behaviors are varied and influenced by various factors, including knowledge and understanding of sexual and reproductive health, personal attitudes, and social and cultural contexts. Some of them still lack knowledge and understanding of sexual and reproductive health, leading them to rely on close individuals for advice in making decisions about their medical treatments, as stated below.

"I consult my friends first, then I seek advice from my parents, and then I consult my advisor." (T01, a male youth, interviewed on May 14, 2024)

"I consult my mother first, but I will still go to the hospital because I'm afraid to consult anyone else." (T03, a female youth, interviewed on May 19, 2024) "When it comes to sexual issues, I consult my mother first." (MHS02, a female youth, interviewed on May 16, 2024)

Some of them choose to care for their sexual health issues by themselves, for example, using a traditional sarong instead of sanitary pads during menstruation, as stated below.

"I don't use sanitary pads. "When I have my period, I use a sarong. This is the method that I choose myself. If my flow is heavy, I will use it but if it's light, then I don't use it." (MHS01, a female youth, interviewed on May 16, 2024)

"Before I had my period, my older sister had her period first. When she had her period, I went to buy sanitary pads for her. She explained to me about how to use the pads, how to clean, and how to take care of myself." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them have the behaviors regarding decision-making in choosing treatment for sexual and reproductive health. Some women choose to self-medicate by buying and taking their own medicine or using herbal remedies, while others may have cultural beliefs that influence their decisions for treatment. Moreover, there are expenses for medical care at health facilities, as stated below.

"When I'm sick, I will buy medicines myself or prepare herbal remedies. I usually ask someone to buy them for me. For herbal remedies, I will ask my aunt to prepare them because she's skilled and knowledgeable about this." (T06, a woman, interviewed on May 19, 2024)

"I buy medicines from the local shops, but I can't use them often as they make me feel dizzy, so I don't use them much." (MHS03, a woman, interviewed on May 16, 2024)

Some women consult with close individuals, such as aunts who live nearby or elder relatives, before deciding to see a doctor due to the inconvenience of traveling to a healthcare facility, as stated below.

"If you ask whom I get advice from when I'm sick, I'll consult my aunt who lives here." (T06, a woman, interviewed on May 19, 2024)

"If I need healthcare services, I could go to a clinic back in my home country, but I'm a refugee here so I'm afraid to ask." (MHS04, a woman, interviewed on May 16, 2024)

Some women are aware of the importance of accessing healthcare services and try to visit healthcare facilities, such as hospitals or clinics, as stated below.

"I'll go visit a doctor at Mae Tao Clinic." (T05, a woman, interviewed on May 14, 2024)

"While I'm here, I'll ask for help from those caring for us before going to the hospital. Back in my home country, I'd tell my parents first so they could take me to the hospital." (MHS03, a woman, interviewed on May 16, 2024)

The decision making for these women is often influenced by various factors such as accessibility to services, cost, cultural beliefs, and their knowledge and understanding of sexual and reproductive health.

The group of pregnant women, most of them can make decisions by themselves regarding sexual and reproductive health care, as stated below.

"For me, I would take birth control pills." (T09, a pregnant woman, interviewed on May 13, 2024)

"I would go, but here I have to go to Mae Riang Hospital for prenatal care, and it is quite far." (MHS05, a pregnant woman, interviewed on May 16, 2024)

Meanwhile, some women consult with their husbands or family members before making decisions about sexual and reproductive health care, as stated below.

"I have to wait for someone to take me, no set schedule. I will ask my older sister to take me." (MHS05, a pregnant woman, interviewed on May 16, 2024)

Some women rely on their knowledge and experience in making decisions about sexual and reproductive health care, as stated below.

"In unusual cases, like if my belly is big and the baby shows no signs of movement or my belly isn't growing, then something is wrong." (T07, a pregnant woman, interviewed on May 13, 2024)

Moreover, some women have a positive experience with health checkups and continuous care, as stated below.

"I wasn't really aware what pregnancy was like, so I've been having a check-up every month. The doctor says everything is normal." (T09, a pregnant woman, interviewed on May 13, 2024)

However, some women have not received regular check-ups, as stated below.

"I haven't had prenatal care yet." (T010 and MHS05, a pregnant woman, interviewed on May 16, 2024)

Regarding prenatal health care, most women have knowledge of self-care during pregnancy, which they have received from word of mouth, training, or direct experience. This includes diet, especially nutritious food such as fruits. Some women also follow cultural beliefs, such as avoiding certain types of food or not having a shower in the evening. As stated below.

"It's mostly about diet, eating more fruit than anything else." (T08, a pregnant woman, interviewed on May 13, 2024)

"I take care of my diet, avoid hot food, and keep my body cool.

I take a shower before dark, avoid taking a shower at night, and only take a shower when the sun is still up." (T010, a pregnant woman, interviewed on May 13, 2024)

When experiencing problems related to sexual and reproductive health, most of them seek advice from family members or close individuals, such as mothers, grandmothers, and older sisters, as stated below.

"If something affects my body or mind, I'll consult my mother and grandmother first." (T010, a pregnant woman, interviewed on May 13, 2024)

"If there are any health or sexual health problems, I'll ask my older sister to take me to see someone I can get advice from." (MHS05, a pregnant woman, interviewed on May 16, 2024)

Meanwhile, some of them hesitate to seek advice on sexual and reproductive health, concerning it may worry other people, as stated below.

"If a problem occurs, I'll keep it to myself. I won't tell anyone, not even my parents." (T09, a pregnant woman, interviewed on May 13, 2024)

Although many of them seek advice from their family members or close individuals, they still prefer professional guidance from experts such as doctors, as stated below.

"If such a situation happens, I'd ask for help from those nearby first and then go to the hospital." (T07, a pregnant woman, interviewed on May 13, 2024) The group of individuals with disabilities, most of them do not have regular health check-ups. They visit a doctor only when they have an illness. As stated below.

"No regular check-ups, but if I feel sick then I visit a doctor."

(T11, an individual with a disability, interviewed on May 13, 2024)

"I've never been there, but if I have to, I heard that I can go to Mae Tao clinic." (T12, a man with a disability, interviewed on May 19, 2024)

Regarding seeking advice on sexual and reproductive health, most of them have never sought advice on sexual and reproductive health because they do not know where to receive such services and tend to avoid seeking advice. While some of them have no prior experience with consulting others on such issues and may feel embarrassed or uncomfortable discussing them with others. As stated below.

"I don't know where to go. If I had a sexually transmitted infection, I'd rather commit suicide." (T11, an individual with a disability, interviewed on May 13, 2024)

"It hasn't happened to me, but if it does, I'd ask my mother first." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.3.2. Behaviors regarding family planning and contraception

The group of youths, most of them lack a clear understanding of family planning. However, they recognize the importance of contraception. Most of them have not yet considered family planning for the future, as stated below.

"I don't currently have any plans for that because I'm still in school." (T01, a male youth, interviewed on May 14, 2024)

"I haven't planned about that yet." (T03, a female youth, interviewed on May 19, 2024)

"Not using contraception could lead to having children too close together." (T03, a female youth, interviewed on May 19, 2024)

The group of women, most of them have an awareness and see the importance of family planning and contraception. Most of them prefer to limit the number of children as they consider various factors such as difficult living conditions, their capacity to care for children, and their own health. As stated below.

"I planned. I think that having children at an older age wouldn't be good, it would be harder to take care of them. I had an unplanned pregnancy before, so I decided to have only one child." (T04, a woman, interviewed on May 13, 2024)

"We have a plan which is to have a child every two years." (T05, a woman, interviewed on May 14, 2024)

"I plan to have 3 children, spaced 5 years apart." (MHS03, a woman, interviewed on May 16, 2024)

Some of them plan for the gender of their children by aiming to have both a son and a daughter, as stated below.

"Yes, I have a plan too. I don't have a daughter, I only have a son, but I haven't planned exactly when to have another child. Once I have a daughter then I'll stop." (T06, a woman, interviewed on May 19, 2024)

Regarding contraception, most of them use various methods, such as birth control pills, contraceptive injections, condoms, and contraceptive implants. As stated below.

"There's condoms, injections, pills, and IUD." (MHS03, a woman, interviewed on May 16, 2024)

"I know family planning involves methods like birth control pills, contraceptive injections, IUD, and implants." (T05, a woman, interviewed on May 14, 2024)

"Implants, condoms, pills, injections, and sterilization. Sterilization means it's done for good." (T04, a woman, interviewed on May 13, 2024)

Most of them have used at least one method of contraception

"I only take birth control pills." (MHS03, a woman, interviewed on May 16, 2024)

"Currently I am using condoms to prevent pregnancy." (T05, a woman, interviewed on May 14, 2024)

"I only take birth control pills." (T04, a woman, interviewed on May 13, 2024)

Some of them have experienced problems with contraception, such as side effects from birth control pills or ineffective methods, as stated below.

"Currently I'm using condoms to avoid pregnancy, but I don't choose injections or implants because I feel like once I have it, I'd feel uncomfortable, and unhappy. I'd feel that my health wouldn't be good. Also, with pills, sometimes I can forget to take the pills and might get unintended pregnant." (T05, a woman, interviewed on May 14, 2024)

The group of pregnant women, most of them plan for children by considering factors such as financial readiness and the mother's health. There are also discussions and mutual decisions about family planning within the family, as stated below.

"I know about it. I've discussed it with my husband that we want to have two children." (T07, a pregnant woman, interviewed on May 13, 2024)

"Our plan is to have only two children, no more than that." (T09, a pregnant woman, interviewed on May 13, 2024)

"We have family planning, like we discuss whether to have a child and use contraception. I've already had two children. Before having a child, I consulted with my partner on whether to have children or use contraception. My contraception method is taking birth control pills." (T08, a pregnant woman, interviewed on May 13, 2024)

"We also plan to have children. For example, we agreed on having two children around the same time, but for the third one, we'll wait another five years." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"We need to discuss it together, it's not just up to me." (T010, a pregnant woman, interviewed on May 13, 2024)

Regarding contraception, most women have knowledge and experience in various methods, such as birth control pills, contraceptive injections, implants, and condoms. As stated below.

"I used contraceptive injections before, but they made me feel dizzy, so I switched to pills, and I have never used condoms." (T08, a pregnant woman, interviewed on May 13, 2024)

"Do I know about family planning? Yes, I do. We made plans. I never got pregnant before marriage, so we planned to have our first child." (T010, a pregnant woman, interviewed on May 13, 2024)

In terms of unplanned pregnancies, most women decided to keep the child despite being unprepared, as stated below.

"Even if I become pregnant when I'm not ready, I wouldn't dare terminate the pregnancy because I fear it would be sinful. I would continue and raise the child." (T07, a pregnant woman, interviewed on May 13, 2024)

"I will continue with the pregnancy; I won't terminate it." (T08, a pregnant woman, interviewed on May 13, 2024)

"I think I'll advise to continue the pregnancy, if the parents are still around, they should be able to take care of themselves" (T010, a pregnant woman, interviewed on May 13, 2024)

"I won't allow them to terminate their pregnancy, because it's sinful. They should raise their child." (MHS05, a pregnant woman, interviewed on May 16, 2024)

The group of individuals with disabilities, most of them have a certain level of knowledge regarding family planning, although they do not systematically plan for a family. As stated below.

"When it comes to family planning, I let my partner get contraceptive injections. We didn't plan, we let it happen. I know about contraceptive methods. We didn't plan our first child because we intended to have a baby. But for the second child, we started to use injections as we want our children to be 3-4 years apart, and then we will stop using contraception." (T11, a man with a disability, interviewed on May 13, 2024)

In terms of contraception, one person uses methods such as injections while the other person doesn't use any contraception, as stated below.

"When it comes to family planning, I let my partner get contraceptive injections" (T11, a man with a disability, interviewed on May 13, 2024)

"I've never used any myself, but I know about condoms and pills." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.3.3 Behaviors regarding prevention and treatment of sexually transmitted infections

The group of youths, most of them have varied behaviors based on their knowledge and understanding of sexual and reproductive health, personal attitudes, and social and cultural contexts. Some of them understand that STIs can be prevented through correct protection methods, such as using condoms. As stated below.

"I think I need to use self-protection methods by using condoms, and have my partner take birth control pills if we're not ready." (T01, a male youth, interviewed on May 14, 2024)

"I will prevent infections. For example, if I'm with a man, I would use condoms to prevent infections." (T03, a female youth, interviewed on May 19, 2024)

"There should be a protection because if one person is infected, the other person won't be if they're protected. But if there's no protection, the other person will get infected." (MHS02, a female youth, interviewed on May 16, 2024)

In terms of treatment for STIs, most of them have an intention to visit a doctor for a treatment, as stated below.

"If I have a sexual health problem or if something serious happens, I think I would go to the hospital." (T01, a male youth, interviewed on May 14, 2024)

"For prevention, I think I should consult a doctor. For treatment, if I visit a doctor, I will take the medicine that the doctor prescribes." (T02, a female youth, interviewed on May 14, 2024)

"I'd go to the hospital first; I wouldn't buy medicine myself." (T03, a female youth, interviewed on May 19, 2024)

"In Myanmar, if I were infected, I'd go to a hospital. But here, since there's a community health center, I think I could go there." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them are concerned about STIs and make efforts to prevent getting infected. However, they still lack accurate knowledge and understanding. Most of them use condoms as a preventive method, but condom use is not yet widespread. As stated below.

"My partner uses condoms." (T05, a woman, interviewed on May 14, 2024)

"I think the only method is using condoms. I don't know of any others." (T04, a woman, interviewed on May 13, 2024)

"Actually, I know we should use condoms for protection, but I don't think it's necessary because we're not at risk." (T06, a woman, interviewed on May 19, 2024)

Some women focus on maintaining personal hygiene to prevent STIs, as stated below.

"We don't really do much to prevent it specifically, but before and after sex, I clean my body according to my understanding, like how to wash my body." (MHS04, a woman, interviewed on May 16, 2024)

In terms of treatment for STIs, most of them lack accurate knowledge of correct STI treatment, and some of them still have some misunderstandings, as stated below.

"I had abscess on my rear, so I sought treatment. However, the two men went to have sex with another woman I knew, so we both got infected and had to seek treatment. Later on, people in the village disdained us for this." (T05, a woman, interviewed on May 14, 2024)

"HIV/AIDS, that's all I know." (T04, a woman, interviewed on May 13, 2024)

Some of them were not able to access STI testing and treatment

services.

"I think It's essential because, without prevention, infections spread. Once the infection is spread and infected, there's nowhere to go for treatment here, as there's no medicine available." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them have an STI protection method by using condoms, as stated below.

"When I'm having sex, I have to use a condom." (T07, a pregnant woman, interviewed on May 13, 2024)

"I have to protect myself by using condoms." (T09, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities, most of them do not use condoms for STI prevention, as stated below.

"I've never used them." (T11, a man with a disability, interviewed on May 13, 2024)

"About access to condoms, I haven't used condoms before, but there are people who sell them here. They're not given for free." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.3.4 Behaviors regarding domestic violence and sexual violence

The group of youths, some of them are aware of channels where they can seek help if they experience violence, while others are unsure what steps to take, as stated below.

"If I were severely assaulted in a sexual way, first I would ask my friends for help. If they couldn't help, I'd seek assistance from my teachers here." (T01, a male youth, interviewed on May 14, 2024)

"If someone were to assault me in the village, I'd report it to the village headman first." (T02, a female youth, interviewed on May 14, 2024)

"I'd seek help from an organization that could provide help." (MHS01, a female youth, interviewed on May 16, 2024)

The group of women, most of them are aware of and opposed to domestic violence and sexual violence, some with related personal experience. Some of them have experienced or seen domestic violence in their families or from people close to them, as stated below.

"Mostly, it's physical violence, like hitting a wife, fistfights, verbal abuse, or a husband coming home drunk and beating his wife." (MHS03, a woman, interviewed on May 16, 2024)

"I've experienced it in my own family, about sexual violence in the family. It's more like mental abuse." (T05, a woman, interviewed on May 14, 2024)

"Mostly, I've seen aunts hitting their grandchildren aggressively. My sister hits her kids, my dad and my mom hitting their children, and arguing" (T06, a woman, interviewed on May 19, 2024)

"I've seen a lot of it, often when disagreements arise, leading to physical abuse." (MHS04, a woman, interviewed on May 16, 2024)

Some women can specify types of violence they encountered in the family, including physical abuse, verbal abuse, threatening, and sexual violations.

In terms of responses to domestic violence and sexual violence, there are various ways that they respond to. Some of them choose to avoid or leave the situation, some of them report it to authorities, and some attempt to talk and offer advice, as stated below.

"I think I must go talk to them; help pull them apart. I don't like violence." (MHS03, a woman, interviewed on May 16, 2024)

"In situations I've faced before, I helped them with physical fistfight to stop it." (T05, a woman, interviewed on May 14, 2024)

"I think I want to give advice, but if there are weapons then I wouldn't dare to intervene. If it was just fighting or arguing, if I know them well then I'd remind them that they're husband and wife and need to think about their love for each other." (T04, a woman, interviewed on May 13, 2024)

"If I were in such a situation. As I'm a woman, I wouldn't dare to get involved myself. I'd call the men nearby to help mediate." (T06, a woman, interviewed on May 19, 2024)

Some of them do not know whom to ask for help when facing violence, as stated below.

"I don't know who to consult, but if my husband hit me, I'd hit him back without hesitation and not ask anyone for help." (T04, a woman, interviewed on May 13, 2024)

"It's hard to ask for help because our house isn't near anyone else in the village. If I lived near a hospital, I'd seek help there, but now I don't have anyone nearby to help me." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them do not know how to respond to domestic violence and sexual violence, but some mentioned that they would seek help from community leaders or close individuals, as stated below.

"If such a situation happened, I'd ask someone nearby for help, and to take the injured to the hospital." (T07, a pregnant woman, interviewed on May 13, 2024)

"If I face physical or emotional violence, I'll consult the village headman here." (T08, a pregnant woman, interviewed on May 13, 2024)

Furthermore, most women have not personally experienced domestic violence or sexual violence, but some of them have encountered or heard about violence from people they know, as stated below.

"I haven't seen or experienced it, but if someone came to me, I'd offer encouragement and consolation, then take them to see a doctor to assess the risk level and report it to the related authorities." (T07, a pregnant woman, interviewed on May 13, 2024)

"I've seen it before, and I think it's wrong, it's bad. There shouldn't be such sexual exploitation. Forced marriage is also wrong." (T08, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities, when facing domestic violence or sexual violence, they tend to avoid getting involved in such situations due to fear or uncertainty to help the victims in domestic violence. It may result from not knowing how to help or being afraid of getting affected by getting involved. When they see a situation with sexual violence, they tend to not get involved as they give the reason that it's a personal issue. As stated below.

"I'd like to help, but I'd just observe. I don't want to get involved." (T11, a man with a disability, interviewed on May 13, 2024)

"I'd pull them apart and advise them to stay calm and stop fighting." (T12, a man with a disability, interviewed on May 19, 2024)

The statements indicate that they would try to mediate but not help in other aspects.

4.1.3.5 Behaviors regarding to sexual exploitation

The group of youth, most of them are not aware of how to protect themselves from sexual exploitation or where to seek help if they become victims. As stated below.

"I would flee and seek help." (T02, a female youth, interviewed on May 14, 2024)

"I'd run away because I'd be scared." (MHS01, a female youth, interviewed on May 16, 2024)

"I'd run away." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, according to the interviews with the women, there was no information regarding actions taken in response to experiencing sexual exploitation. However, most of them understand that forms of sexual exploitation, such as prostitution, forced marriage, and sexual violations, are wrong and harmful to the victims. Some of them have seen or are aware of incidents of sexual exploitation occurring within their communities, as stated below.

"I understand that it's an easy way to earn money to support a family, but there are many other jobs to do. So it's wrong." (T04, a woman, interviewed on May 13, 2024)

"If it involves human trafficking or prostitution, I've never encountered it myself, but I've heard about it. I saw a video where a child asked her parents to let her go to work, but actually her employer took all the money and forced her into a household where she was physically and sexually abused." (T05, a woman, interviewed on May 14, 2024)

"There was a case where a friend was tricked into work, supposedly in Myanmar, but actually it's a job at a nightclub and involved with prostitution. Her boyfriend found out later and went to bring her back." (T06, a woman, interviewed on May 19, 2024)

"From what I've heard, it's rare, I mean there might be children being forced to marry due to family circumstances. Those children may agree to get married. If you ask if it's forcing, yes, it is." (MHS04, a woman, interviewed on May 16, 2024)

"It's wrong." (MHS03, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them have not directly experienced sexual exploitation but some of them have seen or heard about it from other people, as stated below.

"I've only heard about it in the news, it hasn't happened in our village." (T07, a pregnant woman, interviewed on May 13, 2024)

"I've seen and heard about it. I think it's wrong, it's bad.
There should not be sexual exploitation. Forced marriage is also bad."

(T010, a pregnant woman, interviewed on May 13, 2024)

"I've heard people talk about it, but I haven't encountered it myself." (T09, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities, all of them has never had personal experiences with sexual exploitation. When asked for an example, one responded that if he was coerced or threatened, he would seek help. As stated below.

"No, no one has ever asked me for such help." (T11, a man with a disability, interviewed on May 13, 2024)

"I would ask someone nearby by calling out for help." (T12, a man with a disability, interviewed on May 19, 2024)

4.1.3.6 Similarities and differences in behaviors regarding sexual and reproductive health in emergencies among Myanmar displaced persons

Similarities in behaviors regarding self-care: Across groups, including female youths, male youths, women, and pregnant women, there is a tendency to engage in self-care when facing sexual and reproductive health issues, such as using sanitary pads, purchasing medication by themselves, or using herbal remedies.

Similarities in behaviors regarding seeking advice from close individuals: All target groups tend to consult and seek help from close individuals, such as parents, older sisters, elder relatives, or friends, when making decisions related to treatment or receiving services.

Similarities in behaviors regarding accessing healthcare services: All target groups report seeking healthcare services when dealing with sexual and reproductive health issues. However, some of them face challenges in accessing services due to travel inconvenience or costs.

Similarities in behaviors regarding domestic violence and sexual violence: Both groups of women and pregnant women are aware of and opposed to domestic violence and sexual violence. They have experiences and perceptions of various forms of violence, including physical abuse, verbal abuse, threatening, and sexual violations.

Similarities in behaviors regarding sexual exploitation: The groups of women and pregnant women are aware of issues related to sexual exploitation, where some of them have seen or heard about incidents of exploitation within their communities.

Similarities in behaviors regarding contraception: The groups of women, pregnant women, and individuals with disabilities possess knowledge and experience with various contraceptive methods, including birth control pills, injections, implants, and condoms.

Differences in behaviors regarding decision-making in receiving treatment: Some of the youths lack knowledge and understanding of sexual and reproductive health. As a result, they rely on close individuals for guidance in making decisions about receiving treatments. Meanwhile, the groups of women and pregnant women tend to make independent decisions regarding treatment or consult family members, such as their husband.

Differences in behaviors regarding family planning: The groups of women and pregnant women tend to engage in more serious family planning, taking into consideration factors such as financial readiness and their personal health. On the other hand, the group of youths place less importance on family planning at this stage.

Differences in behaviors regarding prevention of STIs: Even the group of youths generally understand that STIs can be prevented through correct methods, such as condom use, but condom use is still not widespread among this group. Meanwhile, most women and pregnant women use condoms for STI prevention, though they still lack accurate knowledge and understanding regarding treatment methods.

Differences in behaviors regarding unplanned pregnancy: The group of pregnant women tends to make decisions to keep the child in cases of unplanned pregnancy, while this information does not appear among the youths, the women, or the individuals with disabilities.

Differences in behaviors regarding health check-up: The group of pregnant women regularly engage in prenatal health check-ups, whereas the youths, the women, and the individuals with disabilities do not have the behaviors of getting health check-ups.

Differences in behaviors regarding self-care during pregnancy:

The group of pregnant women have some knowledge on self-care during pregnancy. Such behaviors are not found among the youths, the women, or the individuals with disabilities.

Differences in behaviors regarding seeking advice on sexual issues:

The group of pregnant women generally seek advice from their family members or close individuals when facing sexual health issues, while individuals with disabilities have no experience seeking advice on sexual matters from anyone.

Table 5 Comparison of similarities and differences in behaviors regarding sexual and reproductive health in emergencies among Myanmar refugee groups

	Target groups			
Behaviors	Youths	Women	Pregnant women	Individuals with disabilities
Consulting with close individuals	Consult their parents, older sisters, elderly relatives or friends.	Consult their neighbors or relatives.	Consult their mothers, grandmothers, and older sisters.	Consult their mothers.
Accessing services at healthcare facilities	Buy medication themselves and use herbal remedies.	Receive healthcare services, buy medication themselves, and use herbal remedies.	Receive healthcare services, buy medication themselves, and use herbal remedies.	They do not have regular health check-ups.

	Target groups			
Behaviors	Youths	Women	Pregnant women	Individuals with disabilities
Contraception	Generally, have not planned for contraception, as they are still in school and have not had a sexual activity.	Mostly use contraceptive methods such as birth control pills, contraceptive injections, and condoms.	Often did not use contraception prior to pregnancy, but began using contraception methods after childbirth, such birth control pills and contraceptive implants.	Use contraception methods such as contraceptive injections.
Domestic violence and sexual violence	Generally, have no direct experience with domestic violence or sexual violence.	Some have personal experiences and awareness of different forms of violence, such as physical abuse, verbal abuse, threatening, and sexual violations.	Some have personal experiences and awareness of different forms of violence, such as physical abuse, verbal abuse, threatening, and sexual violations.	Tend to avoid involvement when witnessing incidents of domestic violence or sexual violence.

	Target groups			
Behaviors	Youths	Women	Pregnant women	Individuals with disabilities
Sexual	Lack of personal	Lack of personal	Most have not	Have no personal
exploitation	experience	experience	had personal	experience and
	with sexual	with sexual	experience, but	have not
	exploitation	exploitation	some have	encountered
	or never	or never	encountered or	situations
	encountered it.	encountered it.	heard about	involving sexual
	They also do not	They also do not	incidents of	exploitation.
	know how to	know how to	sexual	
	protect	protect	exploitation	
	themselves or	themselves or	from people	
	whom to seek	whom to seek	around them.	
	help from if they	help from if they		
	become victims.	become victims.		

4.2 The need for sexual and reproductive health services in emergencies among Myanmar displaced persons

4.2.1 Access to sexual and reproductive health services

The group of youths lack access to sexual and reproductive health services, especially contraceptive services, including birth control pills and condoms. This is due to limited knowledge, understanding, and opportunities for accessing such services, as stated below.

"We once received a sexual health service when someone came to school to distribute condoms to students, but I haven't received any other services." (T01, a male youth, interviewed on May 14, 2024)

"No, I've never used those services and never used any of these items before." (T03, a female youth, interviewed on May 19, 2024)

"Since I've been here, I haven't gone to the hospital or visited a doctor." (MHS02, a female youth, interviewed on May 16, 2024)

The group of women, most of them can access contraceptive services by purchasing items from local shops or occasionally receiving services from clinics in Myanmar, as stated below.

" I buy them from the shop, but I can't use it often because it makes me feel dizzy, so I don't use it much." (MHS03, a woman, interviewed on May 16, 2024)

"I buy it from a shop, as there are shops nearby." (T05, a woman, interviewed on May 14, 2024)

"I got extra just in case." (T04, a woman, interviewed on May 13, 2024)

"I usually ask someone to buy it for me. If it's herbal, then my aunt will make it for me because she's skilled and knowledgeable about this." (T06, a woman, interviewed on May 19, 2024)

"I don't receive any particular services, but when I need a contraceptive injection, I will go to the clinic." (MHS04, a woman, interviewed on May 16, 2024)

Most of them can access reproductive health services, as stated below.

"Usually, I can get birth control pills from the local drug stores or shops." (MHS03, a woman, interviewed on May 16, 2024)

"Mae Tao Clinic gave condoms to us to use to prevent pregnancy." (T05, a woman, interviewed on May 14, 2024)

"I don't receive any particular services, but when I need a contraceptive injection, I will go to the clinic." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, most of them can access sexual and reproductive health services through various channels, including a clinic in their village, which is an initial service provider closer to their place, allowing convenient travels. As stated below.

"I go to the clinic in the village, they give us supplies for free." (T09, a pregnant woman, interviewed on May 13, 2024)

They can also access services at nearby public hospitals or hospitals in temporary shelters, which offer more comprehensive services than the clinic in their village. As stated below.

"I'd like to go, but here I have to go for prenatal care at Mae Sa riang Hospital, which is quite far." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"I'll go to Phob Phra Hospital for prenatal care because I recently moved here, and there's expenses." (T010, a pregnant woman, interviewed on May 13, 2024)

Furthermore, they can access free or affordable services provided by NGOs working in the area. As stated below.

"There's a clinic here specifically to support the displaced persons." (T07, a pregnant woman, interviewed on May 13, 2024)

"No organization has taken me for prenatal care yet, so I'll go myself to the Moge Thai Hospital, which is a little bit further from here." (T08, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities have not received sexual and reproductive health services in emergencies and generally lack knowledge and understanding in this issue. They prioritize managing physical disabilities and injuries over accessing sexual and reproductive health services. As stated below.

"I prefer to have services to care for my legs." (T11, a man with a disability, interviewed on May 13, 2024)

"Actually, it's not that important to me. When I fled to come here, it didn't feel necessary because I was alone and not in any relationships, so I don't think I have any infection issues." (T12, a man with a disability, interviewed on May 19, 2024)

The statements indicate that individuals with disabilities may lack knowledge and access to sexual and reproductive health services in emergencies, which result from various factors such as language barriers, lacking access to information and news, being unaware of one's own rights, not being aware of the importance of sexual and reproductive health care, as well as concerns about expenses for the services.

4.2.2 Obstacles to accessing sexual and reproductive health services in emergencies

The group of youths are generally unaware of the sexual and reproductive health services available to them, and some of them are afraid or embarrassed when discussing or receiving sexual and reproductive health services. As stated below.

"I don't know where to go for the services." (MHS01, a female youth, interviewed on May 16, 2024)

"I'm afraid to talk to anyone, not even with the healthcare staff." (T02, a female youth, interviewed on May 14, 2024)

"I can't even think of anyone to consult." (MHS01, a female youth, interviewed on May 16, 2024)

This indicates that the youths cannot access sexual and reproductive health services, even though some of them know about contraception but they lack opportunities to access the necessary services. Furthermore, they still lack knowledge and understanding about sexual and reproductive health, which can affect their long-term health and well-being.

The group of women's key obstacles in accessing sexual and reproductive health services are language and cultural barriers, as well as unfamiliarity with Thailand's healthcare system, as stated below.

"Here, I'll ask for help from my caregiver before going to the hospital. If I were back home, I'd ask my parents to take me to a hospital." (MHS03, a woman, interviewed on May 16, 2024)

"I will get the medicine at Mae Tao Hospital clinic because, living here, I don't have an ID card, so I'm afraid to go out and buy medicine myself." (T05, a woman, interviewed on May 14, 2024)

"I've never had a health check-up, but I had a prenatal care, and they gave good advice on how to take care of my health." (T04, a woman, interviewed on May 13, 2024)

"I usually ask someone to buy the medicine for me, but if it's herbal, my aunt will make it for me because she is skilled and knowledgeable about this." (T06, a woman, interviewed on May 19, 2024)

"If it's around here, there's notification, coordination, and spreading the news. Here, it might not be allowed, which makes the clients reluctant to receive the services." (MHS04, a woman, interviewed on May 16, 2024)

The group of pregnant women, some of them may face issues with travel expenses to receive services or service fees that may be expensive, as stated below.

"There are usually expenses that we have to pay." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"I will have prenatal care at Phob Phra hospital because I recently moved to this area, and there are expenses." (T010, a pregnant woman, interviewed on May 13, 2024)

Some of them live in remote areas, making it difficult to travel to receive services, as stated below.

"I plan to go, but here, I have to get prenatal care at Mae Sa riang hospital, which is quite far." (MHS05, a pregnant woman, interviewed on May 16, 2024)

Moreover, some of them may lack information about their rights regarding access to sexual and reproductive health services, including service locations and steps to take to get services, as stated below.

"I don't know where to go to get the services." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"I don't understand what rights I have, or what rights mean." (T07, a pregnant woman, interviewed on May 13, 2024)"

4.2.3 Similarities and differences in access to sexual and reproductive health services in emergencies for among groups of Myanmar displaced persons

Similarities in access to services include:

- 1) Access to contraception: The groups of youths, women, and pregnant women have access to contraceptive services. The access is available through purchases at stores, services provided by clinics, or by receiving contraceptive pills from various organizations.
- 2) Language and cultural barriers: All target groups face obstacles in accessing services due to language and cultural limitations, as well as unfamiliarity with Thailand's healthcare system.
- 3) Demand for services: All target groups have a need for access to sexual and reproductive health services, even though their knowledge and experience in accessing these services vary.

Differences in access to services include:

- 1) The group of youths is unable to access sexual and reproductive health services. Although some of them may have knowledge about contraception, they still lack opportunities to access essential services. Additionally, they have limited knowledge and understanding about sexual and reproductive health.
- 2) The group of women, most of them can access contraception by purchasing it from stores or receiving services from clinics in Myanmar. They also have access to reproductive health services, especially for prenatal care and childbirth care.
- 3) The group of pregnant women, most of them have access to sexual and reproductive health services through various channels, including clinics in their village, nearby

public hospitals, hospitals within refugee shelters, and non-governmental organizations operating in the area.

4) The group of individuals with disabilities has never received sexual and reproductive health services in emergencies and lacks knowledge and understanding in this area, as they prioritize treatments for injuries relating to their disabilities.

4.2.4 The needs for sexual and reproductive health services in emergencies for each group of Myanmar displaced persons

4.2.4.1 The needs for sexual and reproductive health services

The group of youths needs essential and accessible sexual and reproductive health services. Most of them need accurate and age-appropriate information and advice on sexual and reproductive health, as they have had limited opportunities to learn about these topics. As stated below.

"I want to learn about contraception and how women can take care of themselves." (T03, a female youth, interviewed on May 19, 2024)

Furthermore, there is a need for essential medication and medical supplies to care for their sexual and reproductive health, such as medicines, contraceptive pills, condoms, and sanitary pads, as stated below.

"I just thought it might be helpful to provide general medicine services, such as giving out condoms for free to the youths living in this area." (T01, a male youth, interviewed on May 14, 2024)

"I want education about self-protection for both women and men, about various sexually transmitted infections and contraception. I would like someone to come and provide this knowledge, as well as giving medicines related to the health of both women and men." (T03, a female youth, interviewed on May 19, 2024)

"I need help. It would be great if sanitary pads are available because we have to buy them ourselves." (MHS02, a female youth, interviewed on May 16, 2024) Some of them face sexual health issues and need access to health check-ups and treatment but are unable to access due to various limitations, as stated below.

"I'll go to the hospital first; I won't get medicines myself." (T03, a female youth, interviewed on May 19, 2024)

The group of women, many of them lack essential medicines and hygiene supplies, such as sanitary pads, condoms, and contraceptives, due to financial limitations and restricted access to services. They also need access to healthcare services, such as screenings for sexually transmitted infections, prenatal care, and postpartum care, as stated below.

"I would like someone to come and provide more knowledge on family care and a service for contraceptive pills." (MHS03, a woman, interviewed on May 16, 2024)

"I want good healthcare services, essential medicines, and most importantly, a safe place to live, with free government-provided services." (T04, a woman, interviewed on May 13, 2024)

"Care for women should focus on providing general medicines, knowledge about personal health care, childcare, and family planning." (T06, a woman, interviewed on May 19, 2024)

Furthermore, many of them lack knowledge and information on sexual and reproductive health. They need education on preventing sexually transmitted infections, contraception, and family planning. They also require mental health support to cope with stress and psychological trauma that may arise from emergencies, as stated below.

"I don't know which one is the most important. All of those are necessary, from family planning to contraception and how to use the different types of contraceptives. They are all essential." (MHS04, a woman, interviewed on May 16, 2024) "I would like training on maternal and childcare, on how mothers should take care of themselves and their children." (MHS04, a woman, interviewed on May 16, 2024)

Furthermore, different cultural beliefs and values may influence their decisions about sexual and reproductive health. Therefore, service providers should consider these cultural differences and provide services that are appropriate to everyone's needs, as stated below.

"Since I'm here, I will ask for help from my caregiver before going to the hospital. Back at home, I'll tell my parents first and ask them to take me to the hospital." (MHS03, a woman, interviewed on May 16, 2024)

"I'll get medicine at Mae Tao clinic because, since I've been here, we don't have an ID card, so I'm afraid to go buy medicines myself." (T05, a woman, interviewed on May 14, 2024)

The group of pregnant women needs access to essential healthcare services, such as prenatal care, health check-ups, access to medicine and vitamins, and safe childbirth, especially in emergencies where there may be limited access to services. As stated below.

"There should be food and medicine for children." (T08, a pregnant woman, interviewed on May 13, 2024)

"Rice and medicine that can be provided in emergency situations." (T010, a pregnant woman, interviewed on May 13, 2024)

"I think there are baby diapers and baby clothes that I will need." (T09, a pregnant woman, interviewed on May 13, 2024)

They also need knowledge and guidance on prenatal health care, preparing for childbirth, newborn care, and contraception, so they can properly care for themselves and their child, as stated below.

"I also want education relating to living with family, family health and hygiene, and family-transmitted diseases." (T08, a pregnant woman, interviewed on May 13, 2024)

"I want to learn about being with a sexual partner, how to avoid pregnancy without using protection, such as withdrawal, and how to prevent unplanned pregnancy." (T010, a pregnant woman, interviewed on May 13, 2024)

"I want more education on family planning, family care, care for children and husband, and contraception." (MHS05, a pregnant woman, interviewed on May 16, 2024)

They also need easy and convenient access to contraceptive methods for family planning and prevent unintended pregnancies, especially in emergencies where resources may be limited, as stated below.

"I want a mobile service that provides contraception." (T08, a pregnant woman, interviewed on May 13, 2024)

"I need more. It would be helpful to have a nearby clinic, so it'd be more accessible for those who need contraception." (T07, a pregnant woman, interviewed on May 13, 2024)

Furthermore, pregnant women seek other forms of support related to survival in emergencies, such as food, safe housing, and financial assistance, as stated below.

"Rice and medicine that can be provided in emergency situations." (T010, a pregnant woman, interviewed on May 13, 2024)

"I think having a good life and happiness is enough." (T09, a pregnant woman, interviewed on May 13, 2024)

The group of individuals with disabilities has different needs among

them, one of them prioritizes general health services related to a disability, such as leg care, as he focuses more on treatment for a disability-related injuries than accessing sexual and reproductive health services, as stated below.

"I prefer care services for my legs." (T11, a man with a disability, interview on May 13, 2024)

Meanwhile, another individual places importance on basic survival needs, such as housing, medicine, and food, without mentioning a need for sexual and reproductive health services in emergency situations, as this is not his priority. As stated below.

"In an emergency, what I need is comfortable shelter, essential medicine, and enough food to eat." (T12, a man with a disability, interviewed on May 19, 2024)

Nonetheless, from in-depth interviews, it was found that the group of individuals with disabilities need access to sexual and reproductive health services in emergency situations, including accurate knowledge and information on sexual and reproductive health. They still lack knowledge and understanding in this issue, such as contraception methods, sexually transmitted infections, and preventing unintended pregnancies. Therefore, providing accurate information is essential.

In terms of accessing contraception services, they are interested in contraception but do not know how to access these services. Therefore, providing information on contraceptive services and support for accessing these services is important. In Terms of access to sexual health check-ups, they have never received any such examinations, so providing information on the importance of sexual health check-ups and supporting access to these services is necessary. Furthermore, in terms of counseling services, the individuals with disabilities do not know where to seek advice on sexual and reproductive health, so providing information on counseling services and building trust to encourage them to seek guidance is also important.

4.2.4.2 Similarities and differences in the needs for sexual and reproductive health services

Similarities in the needs include:

- 1) The needs for medicines and medical supplies: All target groups need essential medicines and medical supplies, such as sanitary pads, contraceptives, and condoms.
- 2) The needs for knowledge and information: All target groups need knowledge and information on sexual and reproductive health, including methods of preventing sexually transmitted infections, contraception, and family planning.
- 3) The needs for access to healthcare services: All target groups need access healthcare services, such as screening tests for sexually transmitted infections, prenatal care, postpartum care, and general health check-ups.
- 4) Barriers to accessing services: All target groups face problems in accessing reproductive health services due to language, financial, and cultural limitations.

Differences in the needs include:

- 1) The group of youths, they place importance on receiving accurate and age-appropriate knowledge and counseling about sexual and reproductive health, as they have had limited opportunities to learn about the issues.
- 2) The group of women emphasizes the need for access to essential hygiene supplies, such as sanitary pads, contraceptive pills, and condoms. Additionally, they need access to healthcare services, such as screening tests for sexually transmitted infections, prenatal care, and postpartum care.
- 3) The group of pregnant women values access to essential healthcare services, such as prenatal care, health check-ups, access to medicine and vitamins, and safe childbirth. They also need knowledge and counseling on prenatal health, preparing for childbirth, newborn care, and contraception.
- 4) The group of individuals with disabilities prioritizes general healthcare services related to their disability and basic survival needs, such as shelter, medicine, and food.

4.2.4.3 Recommendations regarding provision of sexual and reproductive health services

For the group of youths, the recommendations include:

1) Providing sexual and reproductive health services which focus on providing knowledge, access to essential services, as well as friendly and easily accessible services. It also includes providing general medicines. As stated below

"I need help. It would be great if sanitary pads are available, because we have to buy them ourselves." (MHS02, a female youth, interviewed on May 16, 2024)

"I just thought it might be helpful to provide general medicine services, such as giving out condoms for free to the youths living in this area." (T01, a male youth, interviewed on May 14, 2024)

2) Providing information on sexual and reproductive health services that is easy to access, easy to understand, and in their own language. As stated below.

"I want education about self-protection for both women and men, about various sexually transmitted infections and contraception. I would like someone to come and provide this knowledge, as well as giving medicines related to the health of both women and men." (T03, a female youth, interviewed on May 19, 2024)

This group also needs a safe space where they can discuss or receive sexual and reproductive health services without feeling embarrassed or judged, as stated below.

"If the service comes to our home, we can use it, and we can be open to it." (T02, a female youth, interviewed on May 14, 2024)

3) Consider the cultural context and beliefs of the displaced persons to make services appropriate and acceptable. Service providers should be trained on sexual and reproductive health issues and cross-cultural communication skills to effectively provide services to the displaced persons.

For the group of women, recommendations include:

1) Collaborate with local organizations or clinics located in the area to facilitate easier access to services, as reflected in the statement below.

"If PPAT provides services by cooperating with the clinics. I think more people would use the service, especially in Karen areas." (MHS04, a woman, interviewed on May 16, 2024)

2) Distribute information about available services and rights to access the services. This is important as some of them lack knowledge and understanding of available sexual and reproductive health services in Thailand and how to access them, as expressed in the statement below.

"It'd be good if they come to educate us, but I don't know where to go and get the services." (T04, a woman, interviewed on May 13, 2024)

3) It is essential to have rapid and effective emergency services, as many of them face urgent situations, such as unplanned pregnancies or physical and emotional abuse, as stated below.

"Services for emergencies should be clothing, food, medicine." (T06, a woman, interviewed on May 19, 2024)

4) Health service providers should be trained to understand the culture and needs of women to provide appropriate and effective services, as stated below.

"I would like someone to come and provide more knowledge on family care and a service for contraceptive pills." (MHS03, a woman, interviewed on May 16, 2024)

For the group of pregnant women, recommendations include:

1) There should be agencies providing information and counseling regarding sexual and reproductive health that are extensive and accessible for pregnant women, while considering language and cultural differences. This could include creating simple educational materials, providing language interpreters, providing training sessions or

counseling through various channels to ensure pregnant women understand the importance of reproductive health care and can access services appropriately. As stated below.

"I also want education relating to living with family, family health and hygiene, and family-transmitted diseases." (T08, a pregnant woman, interviewed on May 13, 2024)

"I want to learn about being with a sexual partner, how to avoid pregnancy without using protection, such as withdrawal, and how to prevent unplanned pregnancy." (T010, a pregnant woman, interviewed on May 13, 2024)

"I want more education on family planning, family care, care for children and husband, and contraception." (MHS05, a pregnant woman, interviewed on May 16, 2024)

"I want to learn more about health, how to stay healthy." (T09, a pregnant woman, interviewed on May 13, 2024)

2) Provide skilled interpreters who are skilled in both language and cultural communication for pregnant women to ensure smooth and mutual understanding between service providers and recipients. Additionally, there should be medical personnel who understand the needs and concerns of pregnant women in emergency situations and can provide appropriate care, as reflected in the statement below.

"There was an instructor. I happened to sit in and listen, but I didn't understand because they taught in the Karen language, which I don't understand." (T08, a pregnant woman, interviewed on May 13, 2024)

3) Build partnerships with local organizations, community leaders, and the group of women for effective operations and wider access to target groups, as reflected in the statement below.

"In such situations, I will ask for help from people nearby first and ask them to take me to the hospital." (T07, a pregnant woman, interviewed on May 13, 2024)

4) Provide emergency delivery kits that are available for pregnant women who may face premature or emergency deliveries to ensure safe care for newborns, as reflected in the statement below.

"In cases of premature or emergency delivery, is there a kit like this? I've never seen one." (T010, a pregnant woman, interviewed on May 13, 2024)

For the group of individuals with disabilities, recommendations include:

1) Provide accurate knowledge and information as some of them do not know the correct ways to prevent sexually transmitted infections. There should be easy-to-understand informational materials available in Thai and the languages of different ethnic groups, especially the languages spoken by displaced persons, such as Burmese and Karen. As stated below.

"I think my way of protecting myself is by not sleeping with other women." (T11, an individual with a disability, interviewed on May 13, 2024)

"We shouldn't go and sleep around with anyone, I've never done that, so I don't know how to take care of myself." (T12, a man with a disability, interviewed on May 19, 2024)

2) Organize training to provide knowledge on sexual and reproductive health, including sexually transmitted infections, contraception, pregnancy, and postpartum care, while considering cultural differences and beliefs among displaced persons, as reflected in the statement below.

"I'd like to learn about diseases, how to protect and care for myself to avoid getting ill, and how to control my emotions when I feel upset." (T12, a man with a disability, interviewed on May 19, 2024) 3) Provide contraceptive services that are various and accessible. The services should include contraceptive pills, condoms, and contraceptive implants, while considering individual needs and appropriateness. Additionally, condoms should be distributed for free, as reflected in the statements below.

"I don't know much; I only know about contraceptive injections." (T11, a man with a disability, interview on May 13, 2024)

"That would be good. Even if I don't use them, I can give them to people who need it." (T12, a man with a disability, interview on May 19, 2024)

4) Provide mobile medical units for sexual health check-ups that can reach displaced persons in remote areas, especially those with disabilities who may have travel limitations, as some of them have never had health check-ups. As stated below.

"I've never been there." (T12, a man with a disability, interviewed on May 19, 2024)

5) Provide interpreters or counselors who can communicate in the displaced persons' languages so the displaced persons can easily and clearly express their issues and needs, as most of them have never received sexual health counseling before. As reflected in the statements.

"I don't know where to go. I'd rather commit suicide if I had a sexually transmitted infection." (T11, a man with a disability, interviewed on May 13, 2024)

"It hasn't happened yet, but if it did, I'd ask my mother first."

(T12, a man with a disability, interviewed on May 19, 2024)

4.2.4.4 Similarities and differences in recommendations for providing sexual and reproductive health services in emergencies among groups of Myanmar displaced persons

Similarities in recommendations include:

- 1) Provide accurate knowledge and information to all target groups, emphasizing the importance of accurate information on sexual and reproductive health, including preventing sexually transmitted infections, contraception, and health care.
- 2) Provide access to essential services to all groups, stressing the importance of access to essential services, such as health check-ups, contraception, and treatment for sexually transmitted infections.
- 3) Provide friendly and accessible services to all groups, highlighting the importance of friendly and easily accessible services, so service recipients can feel comfortable and safe when receiving services.
- 4) Consider the cultural context of all groups, stressing the importance of considering the cultural context and beliefs of the recipients to make services appropriate and acceptable.

Differences in recommendations include:

- 1) The group of youths: Focus on providing education, access to essential services, and providing friendly, accessible services, as well as providing general medicine.
- 2) The group of women: Focus on collaboration with local organizations or clinics in the area, distributing information about available services and rights to access them, and providing rapid and effective services in emergency situations.
- 3) The group of pregnant women: Focus on providing knowledge and counseling regarding sexual and reproductive health. Provide skilled interpreters for language and cultural communication, build partnerships with local organizations, community leaders, and women groups, and provide emergency delivery kits for childbirth.
- 4) The group of individuals with disabilities: Focus on creating simple and understandable informational materials, training about related knowledge, providing a variety of accessible contraception services, providing mobile medical units, and interpreters or counselors who can communicate in the displaced persons' languages.

4.3 Provision of services, operations, problems, and obstacles related to sexual and reproductive health for stakeholders working with Myanmar displaced persons

Results of the operations on sexual and reproductive health related to Myanmar displaced persons by various agencies play essential roles in caring for this vulnerable group. The in-depth analysis of data from the stakeholders, including government agencies, NGOs, and PPAT, reflects different perspectives on the problems and complexities in operations. The key summaries are as follows.

4.3.1 Government agencies

Government agencies provide reproductive health services for Myanmar displaced persons, including prenatal care, childbirth, postpartum care, contraception, and child health services. These services are offered by both government agencies and NGOs, with training provided for village health volunteers (VHVs) and traditional birth attendants (TBAs) to enable service provision in the community. However, there are still access limitations due to travel and communication issues, as reflected in the statements:

"There are trainings for TBAs conducted every year, particularly in areas like Sam Ngao, Nua Nam, Nua Khuen, and also Wang Chao. We provide training to prepare them for emergency deliveries. If they can't handle it, they are trained to refer cases, but the current policy is to bring every case to the hospital for delivery." (T014, a female government representative, interviewed on May 20, 2024)

"In terms of reproductive health, we have to coordinate with hospitals and public health offices. We have to identify where individuals are located, to see whether they fall under the hospital's responsibility or within the jurisdiction of Mae Sot municipality." (MHS07, a male government representative, interviewed on May 18, 2024)

Operations of related government agencies, each worker provided information about their roles in supporting Myanmar displaced persons, which includes security, providing temporary shelters, providing public health services, and coordinating with other agencies, as reflected in the statements below.

"Actually, our work in the refugee shelters starts from the moment they cross over. We, soldiers, are responsible for security, sovereignty, and the process of screening and filtering individuals as they enter." (MHS06, a male government representative, interviewed on May 17, 2024)

"What the district office is coordinating with other service providers, mostly includes essential survival items, food, drinking water, and toilet facilities." (T013, a female government representative, interviewed on May 14, 2024)

Problems and obstacles in operations for sexual and reproductive health by the government agencies

1) Costs: Some refugee groups do not have health insurance, leading to a financial burden for medical care, as reflected in the statement below.

"There are many groups. Some foreign groups don't have insurance, it becomes a financial burden for us." (T014, a female government representative, interview on May 20, 2024)

2) Access to services: Some pregnant women often come to the hospital only when symptoms are severe due to travel and care challenges, as reflected in the statement below.

"Another issue is about pregnant women, if they have no entitlements, they usually come with severe symptoms." (T014, a female government representative, interview on May 20, 2024)

3) Communication: There are communication challenges with ethnic displaced persons due to language differences, as reflected in the statements below.

"There is an issue with communication. With ethnic groups, we usually have unclear communication, but we try to talk to them, using interpreters." (T014, a female government representative, interviewed on May 20, 2024)

"Since displaced persons are ethnic groups, communication can be problematic. Some of our staff are from ethnic groups and can communicate with them, but in other cases, we can't communicate with them, so we need interpreters." (MHS07, a male government representative, interview on May 18, 2024)

4) Resource limitations: The increasing number of displaced persons impacts resource management in the area, as reflected in the statements below.

"If the numbers increase, it will definitely affect our work because the number of displaced persons is rising, but our staff numbers remain the same so we can't provide comprehensive care or enforce regulations thoroughly. The more people, the greater diversity of thoughts and issues, as well as increased sharing of resources in the area." (MHS07, a male government representative, interviewed on May 18, 2024)

5) Travel to the area: poor road conditions can cause obstacles to reaching temporary shelter areas, as reflected in the statement below.

"Regarding the area condition, traveling can be quite challenging because of poor road conditions, especially in the rainy season. There are fallen trees, flash floods, and deep potholes on the roads, which increase travel time and also impact the workers." (MHS07, a male government representative, interviewed on May 18, 2024)

Additional points from the government agencies

1) Managing temporary safe zones: There are cooperations between different agencies to manage temporary safe zones, with the military primarily responsible for security and screening displaced persons, as reflected in the statements below.

"We have to screen whether the armed forces are coming in, and ensure the displaced persons are entering the areas we've designated, then other cooperating agencies come and help." (MHS06, a male government representative, interviewed on May 17, 2024)

"From the latest incident where there was an armed conflict in Myanmar, the displaced persons entered into what we call temporary safe zones. The displaced persons received temporary assistance while affected, and then they returned once the situation calmed." (T014, a female government representative, interviewed on May 20, 2024)

2) Collaboration with NGOs: There is a collaboration with NGOs in providing various services for displaced persons, such as food support and medical care, as stated below.

"In Mae Sot area, there are actually NGOs in the area that already provide support. We receive significant and fast assistance from them because we are working against time and don't know when the displaced persons will come in, so we work against time." (T014, a female government representative, interviewed on May 20, 2024)

4.3.2 Non-Governmental Organizations (NGOs)

Regarding the operations for sexual and reproductive health services provided by NGOs, the research team studied through data collection from agencies that offer comprehensive reproductive health care, from prenatal care, childbirth, and postpartum care. There are 2 clinics in Mae Hong Son province. There are also organizations that provide reproductive health education and counseling, including family planning and contraception, focusing on providing knowledge and counseling, not direct medical services. There are also organizations that focus on providing education on sexual and reproductive health to teachers in schools so they can convey the knowledge to students. Their topics cover sexual harassment and self-protection methods. There are also organizations that provide knowledge on sexual and reproductive health to schools and communities, providing educational activities and counseling on sexual education and prevention of sexually transmitted infections, as well as providing training for teachers and educational staff, as stated below.

"In schools, there are cases of pregnant students. In the community, there are women and girls who experience sexual harassment. Therefore, we must address these issues, working together with both government and private sectors. In Karen communities, we have a partner, similarly to a public health ministry, but for Karens. We work together. They conduct research and collect data. There are high numbers of pregnant women and married underage girls. They rarely use contraception like pills or condoms. They don't use modern contraceptives. They rarely receive prenatal care, like less than 10%. The access to services is a problem we address in clinics, schools, and communities. This is a problem that happens. Gender inequality is also an issue we must address. We must go and solve the problems, not just provide education. We must check with the clinics that provide services. We must check with the schools whether they provide related education, and how the teachers and the students think about such education. We must check whether they distribute condoms for free, or if there are any related services. We have checked with the schools, and we designed activities and projects, while our partners also work with us." (T015, a male NGO representative, interviewed on May 14, 2024)

"Currently, we oversee all migrant schools in Mae Sot, so our work is focusing on SRHR education, with teachers teaching according to the school curriculum." (T016, a female NGO representative, interviewed on May 14, 2024)

"In the camps, the areas are divided into zones, from 1 to 7, each with an MCH unit that focuses on mother and childcare. There are staff in the unit assigned to look after community health within each zone, they are our staff. They are assigned to look after each zone. When patients visit them, MHC will bring them to clinics or hospitals for further care. They manage in their own zone." (MHS08, a male NGO representative, interviewed on May 15, 2024)

"There are ANC and PNC services available, covering all aspects except family planning. They provide preventive healthcare by offering knowledge, counseling, and nutritional guidance within the community." (MHS09, a female NGO representative, interviewed on May 15, 2024)

"Mostly, we provide advice, counseling, and posters on reproductive health knowledge and self-care. We organize meetings for pregnant women to share their experiences on pregnancy, especially for younger and older pregnant women who need guidance on self-care." (MHS010, a female NGO representative, interviewed on May 17, 2024)

"Pregnant women often come seeking help, and we give them a gift set, like diapers and nutritious food, but there is no medication provided for pregnancy care or food supplies they may need." (MHS010, a female NGO representative, interviewed on May 17, 2024)

The NGOs' operations include providing information. They have been dedicated to caring for the lives and health of displaced persons for over 30 years through public health and hygiene programs that support women and children facing violence. They provide shelter, food, and coordinate with relevant agencies within shelters and refugee centers. They particularly focus on women's rights, empowering women to escape bad situations, and educating on sexual and reproductive health (SRHR) to teachers and students in Myanmar refugee schools so the children can have better life and education. They provide SRHR curricula for refugee children from elementary school Prathom 4 to secondary school Mathayom 6, as well as providing training for teachers. Furthermore, their focus is on 3 aspects which are health, education, and social development. They provide SRHR knowledge in schools and communities, organizing activities and counseling on sexual education and prevention of STIs, training teachers and staff, and referring HIV patients to Mae Sot Hospital. Additionally, they distribute condoms and contraceptive pills to maintain the displaced persons' good health, as stated below.

"When registering, we focus on 3 issues: health, education, and social development." (T015, a male NGO representative, interviewed on May 14, 2024)

"Children should not just hide in the learning centers. Those children must get quality education and a good life, and they can go to universities. In the past 20 years, there have been over 500 students who graduated." (T017, a female NGO representative, interview on May 14, 2024)

"The main goal is to ensure the safe lives of displaced persons and care for their health. There are 2 public health projects focused on health, as well as sanitation, water, toilets, clean, and drinking water." (MHS08, a male NGO representative, interviewed on May 15, 2024)

"The organization was established to help everyone, especially women, regarding their rights. Whether it's about coercion or anything, the organization wants to help women to escape all that is harmful happening to them." (MHS010, a female NGO representative, interviewed on May 17, 2024)

Problems and obstacles in operations for sexual and reproductive health faced by NGOs

NGOs face 5 main problems and obstacles in providing sexual and reproductive health services, which are, lack of access to services, budget and staff shortages, legal and operational restrictions, physical constraints, and attitudes of the local people. The details are as follows.

1) Lack of access to services: Some refugee groups, especially those without documentation, are afraid to seek sexual and reproductive health services due to fear of being deported. Additionally, some of them lack knowledge and understanding of sexual and reproductive health and do not know how to access these services, as stated below.

"For the immigrants, we train them about their rights through parents. Sometimes, there are networks for group training, like guiding students on how to get scholarships for a university. As for the displaced persons, it's mainly an emergency response with BM's assistance, mostly food supplies, and other related issues. There's a system in place for help if something happens." (T017, a female NGO representative, interviewed on May 14, 2024)

"In terms of health, there have been people who died because they didn't have money for treatment. I knew someone who passed away, leaving behind a child because the mother couldn't afford healthcare. It can be viewed as a form of violence, she was afraid to go outside, so it could be severe regarding food and healthcare, we couldn't tell." (T017, a female NGO representative, interviewed on May 14, 2024)

2) Budget and staff shortages impact operations and limit service accessibility, especially as the number of displaced persons grows, the available resources become inadequate for increasing demands. Furthermore, staff turnover due to relocation to third countries requires ongoing training of new staff, as stated below.

"Yes, absolutely. As the number of displaced persons increases, our staff numbers remain the same. The budget stays the same. For example, we have a budget for referrals for 5 people, but there may be 8-10 who need it. Budget allocation is an issue." (MHS08, a male NGO representative, interviewed on May 15, 2024)

"Since the hospital staff consists of displaced persons in the area, those staff who hope to relocate to a third country have registered and may resign to prepare for relocation, leading to a shortage of staff and we need to keep training new staff." (MHS09, a female NGO representative, interviewed on May 15, 2024)

"The main challenges in the work involve border crossing. There are multiple issues, such as transporting supplies across the border, where people on the other side will monitor checkpoints and ask questions, which creates additional challenges. We want to help as much as possible, but it requires donors for the budget. As the organization doesn't have much annual budget, there's no income." (MHS010, a female NGO representative, interviewed on May 17, 2024)

3) Legal and operational constraints: Since most displaced persons lack official status, which makes accessing rights and benefits difficult. Furthermore, working in border areas comes with legal and security restrictions, making operations even more challenging, as reflected in the statements below.

"The problem of working with displaced persons relates to their lack of official status, providing assistance therefore requires coordination with multiple agencies. As the displaced persons don't have official status, we must coordinate with multiple agencies for them. The displaced persons cannot make decisions on their own, it must depend on the organizations that help

or take care of them. When we ask them, they can't decide for themselves, so we need to consult the organization that helps them first. As this is a border area, the displaced persons can't control in-and-out movement, which also affects disease control. For instance, with dengue fever, we can't control it effectively. When they go back, the fever resurges, so we can't keep the numbers under control, whether it's dengue fever or malaria." (MHS08, a male NGO representative, interviewed on May 15, 2024)

"The district office does not prohibit us or interfere with our work, as we follow guidelines approved by the Ministry of Interior and use public holidays according to the government's calendar. Another thing is about the numbers and statistics that cannot be publicly disclosed." (MHS08, a male NGO representative, interviewed on May 15, 2024)

"If they have official status, it's feasible, but without it then it is a legal challenge whether we are violating the law or not. Legally, they are seen as illegal and dangerous. However, from a human rights perspective, they have all the rights, so it's conflicting. When we work with groups without official status, it's risky and illegal. Sometimes, we just go to help them, but it turns out we're breaking the law as well." (T017, a female NGO representative, interviewed on May 14, 2024)

4) Physical challenges which are natural disasters in the area, such as wildfires and landslides, make it difficult to access certain areas to provide services, as reflected in the statement below.

"A problem with our operations, during the dry season, there are wildfires which affect water pipes, disrupting the water supply to camps or hospitals. Another issue is the distance. During the rainy season, the roads become muddy which increases travel time. Sometimes, there are disasters, like heavy rain or storms which cause landslides as the camps are in mountainous areas. That causes problems for our work." (MHS09, a female NGO representative, interviewed on May 15, 2024)

Additional points from NGOs

1) Sexual and gender-based violence (SGBV): It has been found that there is an issue of sexual violence among Myanmar displaced persons, particularly involving with children and women. Reports include sexual assault, sexual abuse, and sexual exploitation. The issues are complex and related to various factors such as poverty, lack of economic opportunities, and social instability, as reflected in the statements below.

"What's concerning is the number of children who are sexually abused is higher, as the situation makes these children more vulnerable. They live in crowded shelters, relying on teachers, schools, and guardians. There's less teacher training, fewer new teachers, which increases the risk of sexual harassment. Last year, we saw a rise in reported sexual harassment cases, especially for those under 18 in schools and shelters. These cases often aren't reported directly, we must indirectly investigate and help them. Often, children either don't know how to report or are afraid to report the abuse." (T015, a male NGO representative, interviewed on May 14, 2024)

"For younger children, typically from 5 years old and above, they get assaulted. Most of them involve excessive labor, oppression, persecution, and exploitation beyond their capacity." (MHS010, a female NGO representative, interviewed on May 17, 2024)

2) Mental Health: Many Myanmar displaced persons experience mental health issues, such as depression, anxiety, and stress, due to the hardships and uncertainties in their lives, separation from their homeland, loss of loved ones, and the need to adjust to the new environment. These factors impact their mental health, as reflected in the statement below.

"In terms of mental health, it's likely severe. There's a lot of depression. In the past, there were suicides. Those who were to move to another country, they were here a long time without jobs. Even they were supported by organizations, there were suicides. However, for those outside who don't have support, we don't know the level of severity. Even with mental health support, it wasn't adequate." (T017, a female NGO representative, interviewed on May 14, 2024)

3) Education: Many refugee children from Myanmar cannot fully access the education system due to issues with official status and language barriers, which cause the children to miss opportunities for self-development and a secure future, as reflected in the statement below.

"Our group is without official status, so we face many issues. According to the 2015 Thai law, all children have the right to education regardless of their status, whether in schools or learning centers. The law is in place but it's still difficult. At school, the children can study, but without documents, they are still illegal. If the immigration bureau catches them, they will be deported. Even if they have some documentation, they are still afraid to get deported. There's also an issue with the school curriculum as we need to use the Burmese curriculum because they are Burmese children. We also bring in Burmese teachers since there are no Thai teachers available. That is manageable. We work in the district areas, the immigration bureau or soldiers won't come into the learning centers, unlike the times during lockdown. So education is secure. However, outside there's still an issue with traveling. When the children finish school here, they can't use our certificate to get into a university because it's not recognized by any government. Another issue is funding, even though the group is poor, many people overlook their needs, thinking they are doing fine. There are INGOs that work through legal channels, so accessing us is difficult. Mainly, it's about funding and official status. Without these, we lack access to various rights." (MHS010, a female NGO representative, interviewed on May 17, 2024)

4) Cooperation between agencies: There are agencies assisting Myanmar displaced persons that have a certain level of cooperation, but there are still gaps in coordination and information sharing, which sometimes makes the work less effective than it could be, as reflected in the statement below.

"As I mentioned earlier, we need to discuss with the parties involved to see how much they can support and to review our plans and policies to see if there are any conflicts. What we can do, what we can't do. We need to go over the details if we plan to work together in the future." (MHS08, a male NGO representative, interviewed on May 15, 2024)

4.3.3 Planned Parenthood Association of Thailand (PPAT)

Sexual and reproductive health services provided by PPAT focus on providing knowledge, counseling, and sexual and reproductive health services to Myanmar displaced persons, both inside and outside temporary shelters, with the following main services.

1) Providing knowledge: Educational training sessions on sexual and reproductive health, sexually transmitted infections, and family planning are provided to staff, volunteers, and displaced persons. The purpose is to help them take care of their health and access essential services appropriately, as reflected in the statement below.

"We have provided training in the camps, with PPAT staff as instructors on sexual and reproductive health. We offer knowledge and train camp staff, volunteers, and organizations at the camps so they can pass on the knowledge." (T018, a male PPAT representative, interviewed on May 19, 2024)

2) Counseling: PPAT offers individual counseling on sexual and reproductive health issues, family planning, and the prevention of sexually transmitted infections for displaced persons, as reflected in the statement below.

"If they reach out to ask for medication or condoms, we provide them. If a woman is pregnant, we coordinate to refer them to the hospital." (T019, a male PPAT representative, interviewed on May 19, 2024)

3) HIV screening: Screening services are provided for Myanmar migrant workers outside the shelters to facilitate early detection and quick access to treatment, as reflected in the statement below.

"Outside the shelters, we also offer HIV screening services in the area." (T018, a male PPAT representative, interviewed on May 19, 2024)

4) Referral services: By referring patients with HIV infection and other patients who require specialized care to hospitals or relevant clinics, with coordination and close monitoring of their treatment progress, as reflected in the statement below.

"When we identify a positive case, we don't disclose the results immediately. We ask for their contact number and, in some cases, contact a trusted guardian. After providing the service, we follow up with a call to make an appointment to meet for further discussion." (T018, a male PPAT representative, interviewed on May 19, 2024)

PPAT's operations involve a systematic and comprehensive process, from planning, field visits, providing services, data collection, and follow-up. PPAT prioritizes collaboration with government and private organizations to enhance the efficiency and benefits of their services for displaced persons, as reflected in the statement below.

"First, we have to plan for supplies, prepare equipment for activities. Then we contact and coordinate with the target groups that we plan to provide the activities for. Sometimes, we reschedule if they aren't available. Sometimes, when we arrive in the areas, we find additional target groups. We also find more people to help coordinate, who can coordinate and help enable us to work more in the area." (T019, a male PPAT representative, interviewed on May 19, 2024)

Problems and obstacles in PPAT's operations regarding sexual and reproductive health

1) Access to services: Some displaced persons cannot access services because they do not have identification documents, they're afraid to get arrested, or have limitations related to time and travel. Furthermore, some areas lack security which makes it difficult to access, as reflected in the statement below.

"The problem is reaching the service recipients, as in some areas they can't gather due to a lack of identification documents. They are migrant workers who entered illegally and moved here for work, so they're afraid to gather and get arrested." (T018, a male PPAT representative, interviewed on May 19, 2024)

2) Language and cultural barriers: Some displaced persons have different languages and cultural backgrounds from the staff, causing difficulties in communication and understanding about sexual and reproductive health. Moreover, some religious beliefs may be an obstacle to get services, such as contraception, as reflected in the statement below.

"We use different languages, which causes issues. Some of them use Burmese, while others use Karen, but there are many Karen dialects. The language barrier complicates communication. Communication with service recipients can be incorrect, with distorted information." (T018, a male PPAT representative, interviewed on May 19, 2024)

3) Staff and budget shortages: The number of staff and budget is limited which makes it difficult to cover all displaced persons, prolong operation and limit the service reach, as reflected in the statement below.

"Usually, 5 of the staff would go to the field, but now there are only 3 staff members, including volunteers and nurses helping us. There are so many things to do but not enough staff, so it takes more time." (T018, a male PPAT representative, interviewed on May 19, 2024)

4) Essential products are insufficient, such as, contraceptive implants are expensive and cannot be provided in sufficient quantities to meet the demand, as reflected in the statement below.

"I'd like to provide more comprehensive services, including full family planning and complete referral services." (T018, a male PPAT representative, interviewed on May 19, 2024)

4.3.4 Similarities and differences in service provision, operations, problems, and obstacles in sexual and reproductive health services for stakeholders supporting different groups of Myanmar displaced persons

From the data analysis, it was found that stakeholders working with Myanmar displaced persons share similarities in prioritizing the provision of sexual and reproductive health services for Myanmar displaced persons. All agencies recognize the importance of sexual and reproductive health care for Myanmar displaced persons and strive to provide essential services such as prenatal care, childbirth, contraception, screening for sexually transmitted infections, and counseling. Also, they provide knowledge and training, with government agencies, NGOs, and PPAT all emphasizing training for staff, volunteers, and displaced persons to promote self-care and access to necessary services. Furthermore, all agencies recognize the importance of collaboration with other government and private organizations to increase efficiency of operations and cover the displaced persons as much as possible.

Regarding differences in operations among stakeholders supporting Myanmar displaced persons, it is found that, in terms of scope of services, the government agencies focus on providing basic reproductive health services, while NGOs and PPAT offer more diverse and comprehensive services, such as mental health counseling, women's rights education, and patient referrals. Regarding the target groups, the government services are generally provided to the wider refugee population, while NGOs may target specific groups, such as children, women, or individuals with HIV. In terms of operational approach, the government agencies have formal and procedural operations, while NGOs and PPAT are more flexible and adaptive to changing situations. Regarding problems and obstacles, the government agencies primarily face budget and staffing limitations, while NGOs and PPAT encounter challenges related to accessing service recipients, language and cultural limitations, and insufficient product supplies for operations. Details are summarized in the table below.

Table 6 Summary of similarities and differences in the operations of stakeholders involved with Myanmar displaced persons

Issues	Government agencies	NGOs	PPAT
Provision of basic reproductive health services	√	√	√
Provision of knowledge and training	√	✓	✓
Coordination with other agencies	√	✓	√
Mental health counseling		✓	✓
Education on women's rights		✓	
Patient referrals		✓	✓
Focusing on specific target groups		✓	
Budget and staffing limitations	✓		
Problem with accessing service recipients		√	✓
Language and cultural limitations		✓	✓
Insufficient medicines and medical supplies			√

4.3.5 Similarities and differences in problems and obstacles in sexual and reproductive health operations for stakeholders working for Myanmar displaced persons

From the data analysis regarding problems and obstacles in sexual and reproductive health operations for stakeholders working for Myanmar displaced persons, it was found that the government agencies, NGOs, and PPAT face similar problems in accessing service recipients because some displaced persons lack identification documents, they are afraid to get arrested, or have limitations related to time and travel. Some areas also lack

security, which makes it difficult to access. Furthermore, there are language and cultural limitations, as some displaced persons have languages and cultures different from the staff, making it difficult to communicate and understand about reproductive health. Also, some religious beliefs can be an obstacle for providing services, such as contraception. Resource shortages: all agencies face the problem of resource shortages, including budgets, staff, and essential products for operations, which affect the reach and efficiency of services.

Nevertheless, the research team found differences in the problems and obstacles in sexual and reproductive health operations for stakeholders working for Myanmar displaced persons, faced by each stakeholder group. The government agencies primarily struggle with the healthcare service costs because some displaced persons do not have health insurance, leading to additional costs for healthcare services. There are resource limitations as the increasing number of displaced persons impacts service and resource management in the areas. Traveling to the areas is also problematic because of bad road conditions which present obstacles to reaching temporary shelters. On the other hand, NGOs face problems related to local people's attitudes, where providing sexual and reproductive health services for displaced persons may be seen as inappropriate. Additionally, natural disasters, such as wildfires and landslides, make it difficult to access certain areas to provide services. There are also legal and operational constraints, as most displaced persons do not have official status, which limits access to rights and services. For PPAT, insufficient supplies are also problematic, as the products used in operations, such as contraceptive implants, are expensive and cannot be provided in sufficient quantities to meet the demand of the service recipients.

Chapter 5

Summary, Discussion, and Recommendations

The research titled "Sexual and Reproductive Health in Emergency Situations for Myanmar Displaced Persons: in Tak and Mae Hong Son Provinces" aims to study areas with the highest number of Myanmar displaced persons. The objectives are to 1) study the knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergency situations among Myanmar displaced persons 2) study the needs for sexual and reproductive health services in emergency situations among Myanmar displaced persons, and 3) study the service provision, operations, issues, and obstacles in the field of sexual and reproductive health among those working with Myanmar displaced persons.

The research team used a qualitative research methodology, collecting data through non-participant observation, which involved observing the surrounding context and behavior of the target group without participating in their activities. In-depth interviews were also conducted using a semi-structured interview guideline as the main tool. The target group selection was through purposive sampling and snowball sampling to obtain the data that aligned with the research objectives.

The participants were divided into 3 main groups, which are 1) Myanmar displaced persons, totaling 17 individuals, including youths (15 - 24 years old), women (25 - 49 years old), pregnant women (15 - 49 years old), and individuals with disabilities (15 - 49 years old) 2) Stakeholders, totaling 10 individuals, comprising government officials and NGO staff, and 3) PPAT officers, totaling 2 individuals. The data were analyzed using descriptive analysis and systematic content analysis to interpret and summarize findings in line with the research objectives, as detailed below.

5.1 The knowledge, attitudes, and behaviors regarding sexual and reproductive health in emergency situations among Myanmar displaced persons

5.1.1 Knowledge regarding sexual and reproductive health. Overall, the target groups which include youths, women, pregnant women, and individuals with disabilities, have limited knowledge and understanding of sexual and reproductive health. Their knowledge regarding sexual and reproductive rights is generally superficial as most individuals do not fully comprehend their right to receive accurate and comprehensive information, and the right to

make decisions regarding their own sexual and reproductive health. Regarding sex education, most participants have basic knowledge, such as menstruation, the use of sanitary pads, and personal hygiene during menstruation. However, they lack knowledge and understanding in other areas, such as contraception and sexually transmitted infections (STIs). In terms of family planning and contraception, most participants have some knowledge about various contraceptive methods, such as birth control pills, contraceptive injections, intrauterine devices (IUDs), and condoms. However, they lack an understanding of which contraceptive methods are most suitable for them personally and still have limited access to comprehensive contraceptive services. Regarding STIs, most participants have limited knowledge, as they primarily know about only HIV and AIDS, while lacking awareness of other STIs' symptoms, and effective prevention methods. In terms of domestic violence and sexual violence, most of the participants have moderate level of awareness, but lack understanding in certain issues, such as the causes of violence and methods for prevention and addressing the issues. Regarding sexual exploitation, most of the participants have a basic level of understanding, often linked to issues of poverty and lack of employment opportunities. However, the participants still lack in-depth knowledge and understanding of the various forms of sexual exploitation and the potential impacts on victims.

Nevertheless, differences were found among the target groups. The group of youths expressed a strong interest in knowledge related to pregnancy prevention, given that they are still in school. Meanwhile, the group of women and the group of pregnant women were more interested in knowledge about family planning and spacing between children. The pregnant women showed more concern about unplanned pregnancies than other groups due to the potential direct impact on their health and their unborn child's health.

The group of women and the group of individuals with disabilities were found to experience higher levels of domestic violence and either had direct experiences or were aware of domestic violence incidents from the people they are close with. The group of youths and the group of women, both groups generally have basic knowledge about menstruation and personal hygiene during menstruation. However, it was found that some women still reuse the same cloth during menstruation. The group of youths primarily receive knowledge regarding sex education from their school, while the group of women, the group of pregnant women, and the group of individuals with disabilities often acquire knowledge through other sources such as training sessions, word-of-mouth, and personal experiences.

The above findings indicate that all groups of Myanmar displaced persons have limited knowledge and understanding regarding sexual and reproductive health, with varying levels of awareness across specific topics. This aligns with research by Salisbury et al. (2016), which found that pregnant and postpartum Myanmar refugee women living along the Thai -Myanmar border similarly had limited knowledge of sexual and reproductive health. Although they possess some correct information about family planning and contraception methods, such as spacing childbirths and preventing unplanned pregnancies, misconceptions remain. For example, some of them believe that cesarean sections or hysterectomies were equivalent to sterilization, such a misunderstanding that can increase the risk of unplanned pregnancies. The findings also align with the research by Asnong et al. (2018) which found that teenage Myanmar displaced persons residing along the Thai - Myanmar border lack knowledge about contraception and essential decision-making skills for managing their sexual and reproductive health, especially among unmarried teenagers. This due to their community contexts that do not accept premarital sexual relationships. If adults in the community find that young people are meeting in private without supervision by adults, it can bring about forced marriage in a very short time.

The findings also align with the research by Hobstetter et al. (2015), which found that both adolescent and adult Myanmar migrants and displaced persons along the Thai - Myanmar border, including healthcare providers, lack accurate knowledge regarding emergency contraception, including its properties, duration of use, safety, effectiveness, side effects, and potential complications. For example, there is a misconception that progestin-only emergency contraceptives are effective only if used within 24 hours after unprotected sexual intercourse, which results in healthcare providers not giving emergency contraception to migrants and displaced persons.

Therefore, it is crucial to promote accurate and comprehensive knowledge across all dimensions of sexual and reproductive health to all target groups. This includes providing education on sexual and reproductive rights, sex education, family planning, contraception, sexually transmitted infections, domestic violence and sexual violence, and sexual exploitation. Such knowledge can enable these groups to access the information and services necessary for their sexual and reproductive health, which can ultimately reduce physical health issues, mental health issues, and risks of early death, in such risky and insecure situations.

5.1.2 Attitudes regarding sexual and reproductive health. Overall, all target groups are aware of the importance of sexual and reproductive health, but the details are varied based on their knowledge level, understanding, and personal experiences. In every group, there is a common belief that maintaining sexual and reproductive health is important, particularly in emergency situations with instability and risk. Every group has concerns about unplanned pregnancies and desire for access to information and services related to contraception and family planning. Most participants hold negative attitudes toward abortion, viewing it as wrong, sinful and unacceptable. All groups are aware of the issues of sexual violence and sexual exploitation but still lack knowledge and skills for prevention and response. Also, all groups agreed that sexual exploitation is bad, wrong, and unacceptable.

However, differences are found among the groups. Each group has a different understanding about sexual and reproductive health rights. The group of women and the group of pregnant women demonstrated a greater understanding of this topic compared to the group of youths and the group of individuals with disabilities. The group of youths had the least knowledge about contraception compared to other groups, with some misconceptions about contraceptive methods. The group of women are more likely to have experienced or expressed concern about sexual violence than other groups. Although most participants have negative views on abortion, some women view it as a personal choice, especially in cases of unpreparedness or health issues. The group of youths, it is found that the female youths generally have more knowledge and understanding of sexual and reproductive health than the male youths. Female youths also expressed greater concern about unplanned pregnancies compared to the male youths. Furthermore, female youths are more likely to have experienced sexual violence than the male youths.

The findings indicate that all groups of Myanmar displaced persons are aware of the importance of sexual and reproductive health and have positive attitudes toward contraception to prevent unplanned pregnancies and sexually transmitted infections. They also expressed concern about unplanned pregnancies. This aligns with the study by Salisbury et al. (2016), which found that pregnant and postpartum Myanmar refugee women residing along the Thai - Myanmar border had positive attitudes toward contraception, viewing that even women who have never been pregnant can use contraception. Similarly, it aligns with the study by Asnong et al. (2018), which found that Myanmar adolescent displaced persons in the same areas felt they were too young for pregnancy and motherhood, viewing

20 years as the minimum age for being pregnant and becoming mothers. Also, adolescent girls are particularly concerned about their physical conditions that are not ready for childbirth.

Therefore, promoting accurate and comprehensive knowledge across all aspects of sexual and reproductive health among all target groups is essential. Correct knowledge and understanding can lead to having positive attitudes toward maintaining sexual and reproductive health. This is a motivation or a factor for their correct behaviors and practices regarding health care and reproductive health care. Consequently, this can help reduce their physical health issues, mental health issues, and risk of death, amidst the risky and insecure situations.

5.1.3 Behaviors regarding sexual and reproductive health. Overall, the group of youths, the group of women, and the group of pregnant women tend to practice self-care when faced with sexual and reproductive health issues, such as self-medicating with over-the-counter drugs or using herbal remedies. All target groups are likely to seek advice and help from close individuals, such as parents, older sisters, older relatives, or friends, when deciding on treatment or seeking reproductive health services. Every target group generally visits healthcare facilities when they face sexual and reproductive health issues. However, some of them face a problem accessing these services due to insufficient funds or difficulty with transportation.

The group of women and the group of pregnant women are particularly aware of and opposed to domestic violence and sexual violence, with direct or indirect experiences of various forms of violence, such as physical assault, verbal abuse, coercion, and sexual violation. These groups are also knowledgeable about sexual exploitation, some of them have encountered or learned about sexual exploitation cases from people close to them.

Moreover, the group of women, the group of pregnant women, and the group of individuals with disabilities are familiar with various contraceptive methods. Most of them know about methods such as birth control pills, contraceptive injections, contraceptive implants, and using condoms.

However, the differences among the groups are as follows. Some individuals in the group of youths still lack accurate and comprehensive knowledge of sexual and reproductive health, leading them to rely on advice from people they know when making health decisions. Meanwhile, the group of women and the group of pregnant women are generally capable of making their own healthcare decisions, or consulting with their spouses or family members. The group of women and the group of pregnant women also approach

family planning seriously, considering factors like financial stability and personal health, while the group of youths do not view family planning as important because they are still in school.

Although the group of youths have knowledge and understanding that sexually transmitted infections (STIs) can be prevented through proper protection, such as condom use, condom use remains uncommon among this group. On the contrary, the group of women and the group of pregnant women are more likely to use condoms for STI prevention, however, they still lack full knowledge and understanding on the proper treatment of STIs. The group of pregnant women, in particular, refrain from terminating unplanned pregnancies, viewing it as sinful, and such perspective was not found in other groups. The group of pregnant women also tend to have regular health check-ups during pregnancy, while the group of youths, the group of women, and the group of individuals with disabilities do not have regular health check-ups. The group of pregnant women have knowledge on self-care during pregnancy, which is not found in other groups. When facing reproductive health issues, the group of pregnant women is more likely to seek advice from their family members, whereas the group of individuals with disabilities have not previously sought consultation for such issues.

5.1.4 The relationship between knowledge, attitudes, and behaviors regarding sexual and reproductive health among Myanmar displaced persons. Using the KAB Model (Knowledge-Attitude-Behavior) to analyze the findings reveals that target groups tend to have behaviors consistent with their attitudes and knowledge. Their knowledge and attitudes influence their behavior, while knowledge can also shape attitudes, and attitudes can lead to certain behaviors. However, it was found that some individuals in the target groups have behaviors that do not align with their knowledge and attitudes, due to other influencing factors such as social and economic contexts, as follows.

In all the target groups, most participants have accurate knowledge of contraception methods and have positive attitudes toward using contraception to prevent unplanned pregnancies. Accordingly, especially among women, pregnant women, and individuals with disabilities, there is a behavior of using contraceptive methods such as birth control pills, contraceptive injections, contraceptive implants, and condoms.

In all the target groups, most participants are aware that domestic violence and sexual violence are wrong and have negative attitudes toward these forms of violence, which leads them to try to avoid involvement in violent situations. However, they still lack knowledge in certain areas, such as the causes of violence and effective prevention or response strategies.

The group of women and the group of pregnant women also have both direct experiences and indirect experiences with violence happening to others. Such experiences include physical assault, verbal abuse, coercion, and sexual violation. The findings align with the study by Magezi and Mairah (2022), who studied sexual and reproductive health and rights in the Kyaka II refugee settlement in southwestern Uganda. Their research revealed that female displaced persons, including young girls and women, are vulnerable and become victims of sexual violence. Most of them often have limited access to support services when experiencing violence from their spouse and other forms of sexual violence, with some of them completely unable to access any assistance.

The findings also align with the study by Ivanova et al. (2018), which examined knowledge on sexual and reproductive health, as well as related experiences and access to these services among female displaced persons, migrants, and displaced persons in Africa, who are young girls and women. Their study found that young girls and women frequently encounter sexual violence and sexual violation, where access to sexual and reproductive health services often limited by factors such as distance, costs, and social stigma against them.

All target groups, although they have negative attitudes toward sexually transmitted infections (STIs), they still have limited knowledge about the issue as they only recognize HIV/AIDS. They also have limited awareness of other STIs such as syphilis and gonorrhea. This can lead to a tendency to overlook symptoms of other STIs that are not HIV/AIDS.

In all the target groups, most of them are aware that sexual exploitation is wrong and illegal, and they have negative attitudes toward it, which prevents them from engaging in prostitution. However, although some individuals understand that sexual exploitation is wrong and disagree with it, they accept that factors such as poverty, lack of employment opportunities, and the need to survive in insecure conditions may force them into prostitution. This finding is consistent with Marlow et al. (2022), who studied sexual and reproductive health in refugee camps in northeastern Nigeria and found that young girls and women were often coerced into early marriages in exchange for food and essential resources for survival.

All the target groups have knowledge about unplanned pregnancies and abortion but may have misconceptions about the details and safe procedures for abortion. Most participants have negative attitudes toward abortion as they view it as sinful, which leads them to decide against abortion even in cases of unplanned pregnancy. In all the target groups, most of them lack comprehensive knowledge and understanding of sexual and reproductive rights. Particularly in the group of youths, they have very limited knowledge and understanding

of their rights to make autonomous decisions regarding their own sexual and reproductive health. They often have an attitude that they are still very young and still in school, which leads to their behaviors in relying on and seeking advice from people close to them, especially their family members, about their own health care.

All target groups have different knowledge regarding family planning. The group of women and the group of pregnant women generally have knowledge of family planning practices, such as planning the number of children and spacing between childbirths. They are aware of the importance of family planning that aligns with their economic status and physical health, leading them to do family planning. This aligns with the study by Salisbury et al. (2016), which found that over 60% of pregnant and postpartum Myanmar refugee women residing along the Thai - Myanmar border had family planning. Meanwhile, most of the youths lack understanding of family planning concepts, viewing themselves as still very young and still in school. Therefore, they do not view family planning as very important which leads them to not have any family planning.

In all the target groups, most of them have knowledge and understand that sexual and reproductive health is important to maintain. They have an attitude that maintaining one's own sexual and reproductive health is important. Therefore, they tend to seek healthcare services when experiencing issues related to sexual and reproductive health. However, although some of them are aware that maintaining one's own sexual and reproductive health is important, they still face limitations such as insufficient funds for expenses and inconvenient transportation, which lead them to decide not to seek services from the healthcare facilities when facing sexual and reproductive health issues.

According to the findings above, it reflects the relationship between knowledge, attitudes, and behaviors regarding sexual and reproductive health among Myanmar displaced persons. Their knowledge, attitudes, and behaviors are aligned in the same direction. This is consistent with the study by Taweesak Teppitak (2013), which explored the knowledge, attitudes, and behaviors that are preventive against HIV/AIDS among Thai seafarers. It was found that those with knowledge and understanding of HIV/AIDS had positive attitudes toward self-monitoring and protection, leading to appropriate behaviors for monitoring and preventing infection. On the contrary, the Thai seafarers with limited knowledge had negative attitudes toward prevention, resulting in inappropriate behaviors for self-monitoring and preventing infection.

However, it is found that there are inconsistencies between knowledge, attitudes, and behaviors regarding sexual and reproductive health among Myanmar displaced persons which are influenced by their different personal and environmental factors according to their circumstances. This aligns with the study by Sudarat Tolanuwat et al. (2022), which examined the relationship between knowledge, attitudes, and behaviors regarding carbon emission reduction in air travel among Thai passengers, finding that carbon offset behaviors were influenced by their knowledge and attitudes.

The knowledge about airline carbon offset programs directly influences the intention of Thai passengers to offset carbon emissions from air travel. Also, their attitudes toward carbon offsetting serve as an indirect factor affecting the relationship between knowledge and behavior, leading Thai passengers to intend to offset carbon emissions from air travel. This finding aligns with Hsiu-Yueh Liu et al. (2017), who studied the relationship between knowledge, attitudes, and behaviors of caregivers for children with disabilities regarding oral health. Their study found a strong relationship between caregivers' knowledge and attitudes and their behaviors in managing oral health for themselves and the children in their care. The more knowledge about oral health that the caregivers had, the more likely they were to develop positive attitudes toward oral health care for children with disabilities, promoting positive behaviors in the children's oral health care. This also aligns with Saraswat et al. (2022), who studied the knowledge, attitudes, and practices of Indian migrants in Australia regarding oral cancer. They found that most Indian migrants were knowledgeable about oral cancer, especially the concerning risk factors such as alcohol consumption and betel nut chewing, as well as signs or symptoms associated with oral cancer. Also, they have a positive attitude toward oral health care and desire to learn more about the issue from healthcare facilities. Accordingly, most Indian migrants tend to positively care for their oral health, with only a few continuing traditional practices, such as betel nut chewing, which pose risks to their oral health.

Therefore, promoting accurate and comprehensive knowledge and understanding of sexual and reproductive health among Myanmar displaced persons alone may not be sufficient to build or change their behaviors regarding sexual and reproductive health. It is required to cultivate positive attitudes toward its importance of sexual and reproductive health. It is required to consider that some attitudes may come from their values, beliefs, and cultural traditions brought from their homeland in Myanmar.

Although some displaced persons have the accurate and aligned knowledge, understanding, and attitudes, there are limitations regarding their personal and environmental

factors such as social and economic instability, inconvenience in transportation, lack of employment and income, and being in circumstances that do not support their access to knowledge that can influence their change in attitudes and behaviors. As a result, it is crucial for relevant agencies to provide support tailored to the needs of each group to maximize effectiveness and efficiency of assistance, reduce physical and mental health issues, and reduce the risk of death, amidst conditions of risk and insecurity, as much as possible.

5.2 The need for sexual and reproductive health services in emergency situations among Myanmar displaced persons

Overall, all the target groups: the group of youths, women, pregnant women, and individuals with disabilities, have different access to sexual and reproductive health services. Most of the youths cannot access the government's healthcare facilities due to lacking official status. The group of women and the group of pregnant women often have multiple access points for the services, including nearby public healthcare facilities, the clinic in their village, purchasing contraception from local stores, assistance from NGOs working in the area, and receiving prenatal and childbirth services at public healthcare facilities. However, the group of individuals with disabilities have not accessed sexual and reproductive health services, lacked comprehensive knowledge and understanding in this area as they prefer treatments for injuries from their disabilities.

Notably, there are similarities in accessing the services. The group of youth, the group of women, and the group of pregnant women access services for contraception, whether by purchasing from local stores, receiving services at clinics, or receiving contraceptive pills from various organizations. However, all target groups face issues in accessing sexual and reproductive health services due to language and cultural barriers, as well as unfamiliarity with Thailand's healthcare system.

In terms of the needs for sexual and reproductive health service, overall, all target groups: the group of youths, women, pregnant women, and individuals with disabilities, express their needs for essential medications and medical supplies, such as sanitary pads, contraceptive pills, and condoms. They also desire knowledge and information about sexual and reproductive health, including STI prevention, contraception, and family planning. Furthermore, they express their needs in access to services such as STI screenings, prenatal care, postnatal care, and general health check-ups. However, their access to these services is limited by language and cultural barriers, as well as insufficient funds for expenses.

However, there are also different needs among the target groups. In the group of youths, most of them primarily seek age-appropriate information on sexual and reproductive health, while placing less importance on knowledge about family planning as they consider themselves as still being in school. The group of women needs hygiene supplies such as sanitary pads, contraceptive pills, and condoms, as well as access to health check-ups such as STI screenings. The group of pregnant women prioritizes access to maternal and child health services, including prenatal care, medications, vitamins, and safe childbirth. They also desire knowledge and guidance on prenatal health care, preparation for childbirth, newborn care, and contraception. The group of individuals with disabilities places greater importance on health care related to their disabilities. Therefore, they prefer necessities for survival such as medication, food, and shelter.

The findings above reflect that although all target groups are aware of the importance of maintaining their sexual and reproductive health, each group has different and specific needs in this area. These differences come from varied personal and environmental factors. Therefore, relevant agencies across all sectors must consider the distinct needs of each group within the Myanmar refugee population to provide targeted assistance and effectively address their requirements.

5.3 The service provision, operations, issues, and obstacles in the field of sexual and reproductive health among those working with Myanmar displaced persons

Overall, the stakeholders involved in supporting Myanmar displaced persons, including government agencies, NGOs, and PPAT, encounter different obstacles in their work, as follows.

5.3.1 Government agencies. Thai governmental agencies responsible for administration and public health in areas with Myanmar displaced persons provide reproductive health services such as prenatal care, childbirth, postnatal care for mothers and infants, and contraception. They conduct training sessions on accurate knowledge of sexual and reproductive health for public health volunteers and village midwives to enable them to effectively deliver services in the areas.

Problems and obstacles in providing sexual and reproductive health services to Myanmar displaced persons include financial burden as some displaced persons lack health insurance or official status, placing the financial responsibility for healthcare on the government. There are transportation difficulties for displaced persons as many displaced persons cannot afford travel costs to access healthcare services. There are also challenges for

government staff to travel to provide services, especially during the rainy season, with risks such as fallen trees, flash floods, and roads with deep potholes. Communication is also a challenge between government staff and displaced persons as they use different languages. Furthermore, there are resource limitations because the increasing number of displaced persons affects allocation of local resources as the resources are insufficient to fully meet displaced persons ' needs.

5.3.2. Non-governmental organizations (NGOs). There are 2 clinics In Mae Hong Son province that provide reproductive health services to Myanmar displaced persons, covering prenatal care, childbirth, and postnatal care for mothers and infants. Furthermore, there are organizations that focus on providing knowledge and counseling related to reproductive health, including family planning and contraception, emphasizing education and counseling rather than direct medical services. There are also other organizations that focus on educating teachers on sexual and reproductive health, enabling them to pass on the knowledge to their students. Moreover, there are organizations that provide knowledge on sexual and reproductive health to schools and communities by organizing activities that offer knowledge and counseling on sex education and STI prevention. Training sessions for teachers and educational staff are also conducted.

NGOs providing information have been dedicated to supporting the lives and health of displaced persons for over 30 years through public health and wellness programs to assist women and children affected by violence by offering shelter, food, and services coordinating with agencies both in refugee camps and resettlement centers. Their work emphasizes on women's rights, assisting women to escape abusive situations and providing sexual and reproductive health education for teachers and students in Myanmar refugee schools so that children can be educated. A curriculum has been developed for sexual and reproductive health education for students from elementary school level Prathom 4 to secondary school level Mathayom 6, with training provided to teachers. Furthermore, the NGOs focus on 3 main areas which are health, education, and social development. They provide education regarding sexual and reproductive health in schools and communities by conducting activities and counseling sessions on sex education and STI prevention, as well as providing training to educators, referring HIV patients to Mae Sot hospital and distributing condoms and contraceptive pills to promote the overall health of displaced persons.

Problems and obstacles in providing sexual and reproductive health services to Myanmar displaced persons include the displaced persons' limited access to services as some

displaced persons lack official status, they are afraid to seek services due to fear of deportation. Some displaced persons are also unaware of sexual and reproductive health issues or how to access available services. Another problem involves budget and staffing shortages which obstruct comprehensive service delivery, particularly as the displaced persons population grows, making resources become insufficient for the demand. Also, some staff members are displaced persons who constantly resign to relocate to third countries, causing ongoing training for the new staff. Another problem is legal and operational limitations as most displaced persons lack official status which restricts their access to rights and benefits. There are also legal and security constraints in border areas which further complicate operations. Lastly, the problem about physical limitations involving natural disasters in the areas, such as wildfires and landslides, which cause difficulties in reaching the areas to deliver services.

5.3.3 The Planned Parenthood Association of Thailand (PPAT), prioritizes providing knowledge, counseling, and reproductive health services to Myanmar displaced persons, both within and outside temporary shelters. The primary services include providing education where PPAT conducts training sessions on sexual and reproductive health, STIs, and family planning for staff, volunteers, and displaced persons to enable them to take care of their health and access essential services. Another service is counseling by providing individual counseling on issues related to sexual and reproductive health, family planning, and STI prevention. Another service is HIV screening where PPAT offers HIV screening services outside temporary shelters to enable early detection and prompt access to treatment. PPAT also provides referral services by referring HIV-positive individuals and other patients requiring specialized care to relevant hospitals or clinics, with coordination and close follow-up on treatment progress.

PPAT's operational process is systematic and comprehensive, covering planning, fieldworks, service provision, data collection, and follow-up. PPAT emphasizes coordination with government and private agencies to ensure effective operations and the best benefits for displaced persons. PPAT's problems and obstacles include *displaced persons' limited access to services* as some displaced persons cannot access services due to lack of identification documents, fear of arrest, or limitations in time and transportation. Moreover, there are safety concerns in certain areas which further restrict access to services. Another problem is *language and cultural limitations* as some displaced persons have different languages and culture, therefore communicating with staff can be difficult. Also, certain religious beliefs can obstruct

services such as contraception. Another issue involves *staffing* and *budget* shortages as limited personnel and budget prevent comprehensive coverage for all displaced persons. There are also *supply shortages* for operations, such as contraceptive implants, which are expensive and cannot be provided in quantities that meet the displaced persons' needs.

When examining the work of stakeholders involved with Myanmar displaced persons, all groups, government agencies, NGOs, and PPAT, recognize and prioritize providing essential sexual and reproductive health services to displaced persons. They strive to offer essential services, such as prenatal care, childbirth, contraception, STI screenings, counseling, as well as education and training on sexual and reproductive health. Each organization emphasizes the importance of educating and training staff, volunteers, and displaced persons to enable them to take proper care of their own health and access necessary services. Furthermore, all agencies understand the importance of collaborating with other government and private organizations to ensure effective operations and reaching as many displaced persons as possible.

The differences in the work of stakeholders with Myanmar displaced persons include scope of services, where the government agencies focus primarily on providing basic reproductive health services, whereas NGOs and PPAT offer a broader range of services, such as mental health counseling, education on women's rights, and patient referrals. In terms of the target groups, the government agencies serve the general population of Myanmar displaced persons, while NGOs may focus on specific groups, such as children, women, or HIV-infected individuals. Furthermore, regarding operational approach, the government agencies follow formal and procedural operations, while NGOs and PPAT have more flexibility and adaptability to changing situations. In terms of limitations and obstacles, the government agencies primarily face problems related to budget and staffing constraints. Meanwhile, NGOs and PPAT encounter issues with reaching service recipients, language and cultural barriers, and insufficient supplies needed for operations.

5.4 Recommendations

5.4.1 From the study's findings, it reflects that all groups of Myanmar displaced persons have limited knowledge and understanding of sexual and reproductive health, with variations in specific areas depending on individual and social factors. Therefore, relevant agencies must provide education and support that is appropriate to each group's needs, which enable them

to effectively access essential information and sexual and reproductive health services, as follows.

5.4.1.1 The group of youths, most of them lack knowledge and understanding regarding their rights to accurate and complete information, autonomy in making decisions about their sexual and reproductive health, STIs, contraception and family planning. Many of them are more interested in preventing unplanned pregnancies but not so much in family planning. They also seek advice from their family members for their sexual and reproductive health care, given that they are still in school. Therefore, agencies should prioritize providing youths with appropriate information on sexual and reproductive rights to address their specific needs effectively, particularly STI prevention and contraceptive methods.

5.4.1.2 The group of women, most of them lack knowledge and understanding regarding their rights to receive accurate and complete information, autonomy in making decisions about their sexual and reproductive health, STIs, and hygiene care during menstruation, with some women reuse the same cloth during menstruation, family planning, and suitable contraception methods. They have limited access to contraception services. Moreover, some of the women have experienced domestic violence. Therefore, relevant agencies should prioritize providing women with comprehensive knowledge on their sexual and reproductive rights that are appropriate and tailored to their needs. This includes knowledge on their right to accurate information, autonomy in decisions regarding sexual and reproductive health, correct practices on using sanitary pads, preventing and resolution of domestic violence, family planning, STI prevention, suitable contraceptive methods, and accessible contraception services.

5.4.1.3 The group of pregnant women, most of them lack knowledge and understanding regarding their rights to accurate and complete information, autonomy in making decisions about their sexual and reproductive health, STIs, causes of domestic violence and sexual violence, prevention and resolution of violence, and suitable contraceptive methods. They also face limited access to contraception services. Furthermore, many pregnant women are interested in family planning regarding the number of children, spacing of children, and preventing unplanned pregnancy as it can directly impact their health and their unborn child's health. Therefore, relevant agencies should focus on providing tailored information on sexual and reproductive rights to meet the needs of pregnant women. This should also emphasize on education on the right to receive accurate and complete information, autonomy in making decisions about their sexual and reproductive health,

STI prevention, prevent and solutions of domestic violence and sexual violence, appropriate contraceptive methods, access to contraception services, and family planning.

5.4.1.4 The group of individuals with disabilities lacks knowledge and understanding of their rights to receive accurate and complete information, autonomy in making decisions about their sexual and reproductive health, STI prevention, causes of domestic violence and sexual violence, preventing and resolutions to violence, and suitable contraceptive methods. They also have limited access to contraception services. Furthermore, many of them have experienced domestic violence, and they prioritize health care related to their disabilities over sexual and reproductive health. Therefore, besides providing relevant information, such as the right to accurate information, autonomy in making decisions about their sexual and reproductive health, STI prevention, prevention and resolution of domestic and sexual violence, suitable contraceptive methods, and access to contraception services, agencies also need to work on raising awareness among individuals with disabilities about the importance of maintaining their sexual and reproductive health.

5.4.2 Although agencies supporting Myanmar displaced persons recognize the importance of collaboration with other government and private organizations to maximize efficiency and coverage, gaps in information sharing can still be found, which may lead to potential duplication of operations. Government agencies typically focus on basic reproductive health services, such as prenatal care, childbirth, postpartum care, and contraception. Meanwhile, NGOs and PPAT provide a wider range of services, including reproductive health counseling, family planning counseling, women's rights education, and patient referrals. These organizations also aim for specific groups, such as children, women, and HIV-infected individuals, and apply flexibility and adaptability to emergency situations, unlike the more formal and procedural operations of the government agencies. As a result, all relevant agencies should hold joint meetings to share operational data and outcomes, which can be used for further operational planning, reducing redundant works, and distributing support more effectively to cover the needs and numbers of displaced persons, under each agency's limited budgets and resources.

References

- Askew, I. et al. (2016). Sexual and reproductive health and rights in emergencies. Bulletin of the World Health Organization, 94(5), 311. doi: 10.2471/BLT.16.173567
- Asnong et al. (2018). Adolescents' perceptions and experiences of pregnancy in refugee and migrant communities on the Thailand-Myanmar border: a qualitative study. Reproductive health, 15, 1-13. doi: 10.1186/s12978-018-0522-7
- Blanchet et al. (2017). Governance and Capacity to Manage Resilience of Health Systems:

 Towards a New Conceptual Framework. International Journal of Health Policy

 Management, 6(8), 431-435.
- Bogic et al. (2015). Long-term mental health of war-refugees: a systematic literature review.

 BMC International Health and Human Rights, 15, 1-41. doi: 10.1186/s12914-015-0064-9
- Casey, M., Smith, J., & Johnson, R. (2015). Control and prevention of sexually transmitted infections: Providing testing and treatment for STIs such as HIV and gonorrhea. Journal of Infectious Diseases, 45(3), 123-130.
- Chynoweth. (2015). From Policy to Practice: Sexual & Reproductive Health in Humanitarian Crises. Retrieved August 10, 2024, from https://www.hsph.harvard.edu/wp-content/uploads/sites/ 2413/2015/05/Sarah-K.-Chynoweth-Wilson-Center.pdf
- Cooper, R. (2018). Maternal, newborn, and child health in emergency settings. Retrieved August 11 2024, from https://reliefweb.int/report/world/maternal-newborn-and-child-health-emergency-settings
- Daranchanok Pansuma and Pongsit Boonraksa (2021). Knowledge, attitudes, and behaviors regarding COVID-19 prevention among residents in Prue Yai sub-district, Mueang district, Nakhon Ratchasima province. Srinagarind Medical Journal, Faculty of Medicine, Khon Kaen University, 36(5), 597-604.
- Department of Disease Control. (n.d.). Sexually transmitted infections (STIs). Retrieved August 10, 2024, from https://ddc.moph.go.th/disease_detail.php?d=30
- Department of Health. (2021). Integrated care guidelines for teenage mothers. Nonthaburi: CGTool Co., Ltd.
- Hobstetter et al. (2015). "In rape cases we can use this pill": A multimethods assessment of emergency contraception knowledge, access, and needs on the Thailand-Burma border. International Journal of Gynecology and Obstetrics, 130, 37-41. doi: 10.1016/j.ijgo.2015.05.008

- Hsiu-Yueh Liu et al. (2017). Caregivers' oral health knowledge, attitude and behavior toward their children with disabilities. Journal of Dental Sciences, 12(4), 388-395. doi: 10.1016/j.jds.2017.05.003
- IASC. (2010). Framework on Durable Solutions for Internally Displaced Persons. Retrieved August 10, 2024, from https://interagencystandingcommittee.org/sites/default/files/migrated/2021-03/IASC%20Framework%20on%20Durable%20Solutions%20for%20 Internally%20Displaced%20Persons%2C%20April%202010.pdf
- IASC. (2015). Guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action. Retrieved August 10, 2024, from https://interagencystandingcommittee.org/sites/default/files/migrated/2021-03/IASC%20Guidelines%20for%20Integrating%20Gender-Based%20 Violence%20Interventions%20in%20Humanitarian%20Action%2C%202015. pdf
- IAWG. (2018). Inter-Agency Field Manual on Reproductive Health in Humanitarian Settings.

 Retrieved August 10, 2024, from https://iawg.wpengine.com/wp-content/uploads/2019/07/IAFM-English.pdf
- Ichayaporn Chuaychoo. (2021). A study of cabin safety awareness among Thai passengers using knowledge, attitudes, and behaviors (KAB) approach. Humanities, Arts and Social Sciences Studies Journal, 21(1), 78-87.
- ICM. (2023). Health of Women and Children in Disasters. Retrieved August 11, 2024, from https://internationalmidwives.org/resources/health-of-women-and-children-in-disasters
- IFRC. (2023). Annual report 2023. Retrieved August 11, 2024, from https://www.ifrc.org/document/annual-report-2023
- IOM. (2019). IOM Global report 2019 Operation and emergency. Retrieved August 11, 2024, from https://www.iom.int/sites/g/files/tmzbdl486/files/documents/IOM-Global-Report-2019-Operations-and-Emergencies.pdf
- IPPF. (2020). IMAP Statement on Sexual and Gender-based Violence. Retrieved August 11, 2024, from https://www.ippf.org/sites/default/files/2020-08/IMAP%20statement%20on%20 Sexual%20%26%20Gender-based%20Violence_0.pdf
- IPPF. (2022). Sexual and Gender-based Violence (SGBV) Communications Guidance for IPPF Member Associations.Retrieved August 11, 2024, from https://www.ippf.org/resource/sexual-and-gender-based-violence-communications-guidance

- Ivanova et al. (2018). A Systematic Review of Sexual and Reproductive Health Knowledge, Experiences and Access to Services among Refugee, Migrant and Displaced Girls and Young Women in Africa. International Journal of Environmental Research and Public Health, 15(8), 1-12. doi: 10.3390/ijerph15081583
- Klungploy Eua-vithayasuporn and Onnicha Pomountip (2011). Knowledge and attitudes toward risky sexual behavior among teenagers in Mueang district, Nakhon Ratchasima province.

 The Journal of Boromarajonani College of Nursing, Nakhonratchasima, 17(2), 15-16.
- Koenig. (2008). Concerns about measuring "spirituality" in research. The Journal of Nervous and Mental Disease, 196(5), 349-355. doi: 10.1097/NMD.0b013e31816ff796
- Launiala. (2009). How much can a KAP survey tell us about people's knowledge, attitudes and practices? Some observations from medical anthropology research on malaria in pregnancy in Malawi. Anthropology Matters Journal, 11(1), 1-13. doi: 10.22582/am.v11i1.31
- Le Monde selon les femmes. (2019). Sexual and Gender-Based Violence in a Migration Context.

 Retrieved August, 2024, from https://eea.iom.int/sites/g/files/tmzbdl666/
 files/documents/1.PROTECT-Sexual-Violence-Training-Handbook.pdf
- Lee et al. (2017). Sexual and reproductive health needs and risks of very young adolescent refugees and migrants from Myanmar living in Thailand. Conflict and Health, 11, 43-65. Doi: 10.1186/s13031-017-0130-0
- Link et al. (2001). Conceptualizing stigma. Annual Review of Sociology, 27, 363-385. doi: https://doi.org/10.1146/annurev.soc.27.1.363
- Magezi & Mairah. (2022). Sexual and Reproductive Health and Rights in Emergency Communities: A survey on the Kyaka II Refugee Settlement, South Western Uganda. International Journal of Innovative Science and Research Technology, 7(7), 959-964.
- Maquestiau, P. & Duysens, C. (2016). Perspectives de genre dans la lutte contre les violence sexuelles, Coll. Focus genre, Le Monde selon les femmes, Bruxelles.
- Marlow et al. (2022). The Sexual and Reproductive Health Context of an Internally Displaced Persons' Camp in Northeastern Nigeria: Narratives of Girls and Young Women. Frontiers in Reproductive Health, 3, 1-7. doi: 10.3389/frph.2021.779059
- Nawaporn Nakanithi (2020). Knowledge, attitudes, and behavior regarding plant-based meat consumption among the population in Bangkok. Master's thesis in Management, College of Management, Mahidol University.
- Nyblade et al. (2009). Combating HIV stigma in health care settings: what works?. Journal of the International AIDS Society, 12, 1-7. doi: 10.1186/1758-2652-12-15

- Onarheim et al. (2018). Towards universal health coverage: including undocumented migrants.

 BMJ global health, 3(5), 1-6. doi: 10.1136/bmjgh-2018-001031
- Panita Atinwong. (2022). Knowledge, attitudes, and experiences of parents regarding the use of child safety seats. Master's thesis in Management, College of Management, Mahidol University.
- Patamaporn Charernnon and Laddawan Kongphlee. (2018). Knowledge, attitudes, and practices in obesity prevention among public health students at Valaya Alongkorn Rajabhat University under the Royal Patronage, Pathum Thani province. Nakhon Phanom University Journal, 25th anniversary conference edition, 87-94.
- Patel, V., Chowdhary, N., Rahman, A., & Verdeli, H. (2011). Improving access to psychological treatments: Lessons from developing countries. Behaviour Research and Therapy, 49(9), 523-528. doi: 10.1016/j.brat.2011.06.012
- Perera et al. (2022). Access to community-based reproductive health services and incidence of low birthweight delivery among refugee and displaced mothers: a retrospective study in the Thailand-Myanmar border region. BMJ Open, 12(1), 1-11. doi: 10.1136/bmjopen-2021- 052571
- Planned Parenthood Association of Thailand. (2018). IMAP statement on sexual and reproductive health services in humanitarian situations. Retrieved August 10, 2024, from https://ppat.or.th/wp-content/uploads/2023/12/IMAP-Statement-กันยายน-2561 .pdf
- Puchalski. (2009). Improving the quality of spiritual care as a dimension of palliative care:

 The report of the Consensus Conference. Journal of Palliative Medicine, 12(10),

 885-904. doi: 10.1089/jpm.2009.0142
- Salisbury et al. (2016). Family planning knowledge, attitudes and practices in refugee and migrant pregnant and post-partum women on the Thailand-Myanmar border—a mixed methods study. Reproductive health, 13, 1-13. doi: 10.1186/s12978-016-0212-2
- Saraswat, N. et al. (2022). Knowledge, Attitudes and Practices of Indian Immigrants in Australia towards Oral Cancer and Their Perceived Role of General Practitioners: A Cross-Sectional Study. International Journal of Environmental Research and Public Health, 19(14), 1-16. doi: 10.3390/ijerph19148596
- Simon-Butler, A. & McSherry, B. (2019). Defining Sexual and Gender-Based Violence in the Refugee Context. IRiS Working Paper Series, No. 2/2018, Birmingham: Institute for Research into Superdiversity.

- Singh, I. N. & Malaviya, A. N. (1994). Long distance truck drivers in India: HIV infection and their possible role in disseminating HIV into rural areas. International Journal of STD and AIDS, 5(2), 137-138. doi: 10.1177/095646249400500212
- Sphere Association. (2018). The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response, fourth edition, Geneva, Switzerland.
- Sudarat Tolanuwat et al. (2022). Behavior regarding carbon offset of Thai passengers as a result of knowledge with attitudes as a mediating variable. Journal of Business Administration, Mahanakorn University of Technology, 19(1), 1-20.
- Araujo et al. (2019). Prevalence of sexual violence among refugees: a systematic review. Rev Saude Publica, 53, 1-15. doi: 10.11606/s1518-8787.2019053001081
- Taweesak Theppitak (2013). Using the KAP model to study behavior and attitudes regarding HIV/AIDS prevention among Thai seafarers. Journal of Management Science, Chiang Rai Rajabhat University, 8(2), 84-102.
- Thai Red Cross Society. (n.d.). Sexually Transmitted Infections (STI). Retrieved August 11, 2024, from https://webportal.bangkok.go.th/upload/user/00000150/sti/060661/3.%20STI% 206%20Jun%202018%20FINAL%20MARKED.pdf
- Thailand Development Research Institute (TDRI). (2022). Refugees fleeing conflict from Myanmar Not refugees? Retrieved August 10, 2024, from https://tdri.or.th/2022/02/refugee-asylum-seeker
- UNAIDS. (2015). HIV in Emergency Contexts. Retrieved August 11, 2024, from https://www.unaids.org/sites/default/files/media_asset/20150729_UNAIDS_PCB36_ppt __15 -13_HIV_emergency_contexts.pdf
- UNAIDS. (2020). Seizing the moment Tackling entrenched inequalities to end epidemics.

 Retrieved August 11, 2024, from https://www.unaids.org/sites/default/files/media_asset/2020_global-aids-report_en.pdf
- UNFPA. (2015). Annual report 2015. Retrieved August 11, 2024, from https://www.unfpa.org/modules/custom/unfpa_global_annual_reports/docs/UNFPA_2015_Annual_Report.pdf
- UNFPA. (2017). Unified Budget Results and Accountability Framework (UBRAF) 2016-2021.

 Retrieved August 11, 2024, from https://open.unaids.org/sites/default/files/documents/UNFPA_organizationalreport_final_tmp_f_0.pdf

- UNHCR and UNFPA. (2020). Operational Guidance Responding to the health and protection needs of people selling or exchanging sex in humanitarian settings. Retrieved August 11, 2024, from https://www.unfpa.org/sites/default/files/pub-pdf/Op_Guidance_-__Sex_work_in_humanitarian_settings.pdf
- UNHCR. (2003). Sexual and Gender-Based Violence against Refugees, Returnees and Internally Displaced Persons. Retrieved August 11, 2024, from https://www.unhcr.org/sites/default/files/legacy-pdf/3f696bcc4.pdf
- UNHCR. (2011). Action against Sexual and Gender-Based Violence: An Updated Strategy.

 Retrieved August 11, 2024, from https://www.unhcr.org/sites/default/files/legacy-pdf/4e1d5aba9.pdf
- UNHCR. (2012). Assessing mental health and psychosocial needs and resources: toolkit for humanitarian settings. Retrieved August 11, 2024, from https://iris.who.int/handle/10665/76796
- UNHCR. (2012). UNHCR guidelines on HIV and refugees. Retrieved August 11, 2024, from https://www.unhcr.org/sites/default/files/legacy-pdf/4885959c2.pdf
- UNHCR. (2021). Thailand Border Operation: RTG/MOI-UNHCR Verified Refugee Population (30 April 2021). Retrieved August 11, 2024, from https://reliefweb.int/report/thailand/thailand-border-operation-rtgmoi-unhcr-verified-refugee-population-30-april-2021
- UNHCR. (2023). UNHCR Thailand Operational Fact Sheet (30 SEPTEMBER 2023). Retrieved August 11, 2024, from https://www.unhcr.org/th/wp-content/uploads/sites/91/2023/10/UNHCR-Thailand Operational-Factsheet-July-September-2023.pdf
- WFP. (2014). The world food programme in 2014 facts and figures. Retrieved August, 11 2024, from https://documents.wfp.org/stellent/groups/public/documents/communications/wfp274971.pdf? ga=2.212921235.608452084.1726198347-2135091825.1726198347
- WHO. (2006). Reproductive Health Indicators. Retrieved August, 10 2024, from https://iris.who.int/bitstream/handle/10665/43185/924156315X_eng.pdf?sequence=1
- WHO. (2010). Developing sexual health programmes. Retrieved August, 11 2024, from https://www.who.int/publications/i/item/WHO-RHR-HRP-10.22
- WHO. (2015). mhGAP Humanitarian Intervention Guide (mhGAP-HIG). Retrieved August, 11 2024, from https://www.who.int/publications/i/item/9789241548922
- WHO. (2016). World health statistics 2016: monitoring health for the SDGs, sustainable development goals. Retrieved August, 11 2024, from https://iris.who.int/handle/10665/206498

- WHO. (2017). A Strategic Framework for Emergency Preparedness. Retrieved August, 11 2024, from https://iris.who.int/bitstream/handle/10665/254883/9789241511827-eng.pdf?sequence=1
- WHO. (2017). Service provision: Establishing temporary health centers to provide care during pregnancy, safe delivery, and postnatal care. Retrieved August, 11 2024, from https://www.who.int
- WHO. (2018). Sexual and reproductive health during emergencies. Retrieved August, 11 2024, from https://www.who.int
- WHO. (2021). Consolidated guidelines on HIV prevention, testing, treatment, service delivery, and monitoring: recommendations for a public health approach. Retrieved August, 11 2024, from https://www.who.int/publications/i/item/9789240031593
- WHO. (2024). Child Health and Development: Children in humanitarian settings. Retrieved August, 11 2024, from https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/child-health/children-in-humanitarian-settings



Chatuchak, Bangkok 10900

Tel +2320 941 2 66 Fax +5130 561 2 66

Email: info@ppat.or.th Website: www.ppat.or.th

Facebook: PPATBANGKOK Youtube: PPAT Channel