

IFMSA Policy Proposal Access to Family Planning

Proposed by Team of Officials

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POLICY STATEMENT

Introduction:

Individuals' ability to control their family size and the timing and spacing of children has been shown to significantly improve health, social and economic well-being. Yet, there is a high unmet need for family planning services amongst individuals of reproductive age. This can be attributed to a lack of access to proper education about family planning products and services, financial constraints and socio-cultural factors. Certain strategies can be employed to secure the rights of individuals to family planning and they include proper education and counseling about family planning services and universal access to reproductive health services. Although these strategies will greatly improve the access to family planning for people around the globe, certain barriers can also present to hinder the full implementation and success. Notwithstanding, these barriers can be tackled by strong collaboration between international and local organizations, government, civil society and also efforts at the individual level

IFMSA position:

The IFMSA affirms that the decision to choose the number, timing and spacing of children is a human right, essential to the achievement of sustainable development. The realization of this right for all can be achieved through universal health coverage and access to affordable, accessible and effective family planning services such as contraception and infertility treatment. It is imperative that these services address the needs of all, including young people, unmarried people, the LGBTQIA+ community, people with disabilities, people living in rural and remote locations and people living in poverty. The IFMSA acknowledges the importance of access to information in the achievement of access to family planning and therefore, emphasizes the role of comprehensive sexuality education and counseling in health policies. Moreover, the IFMSA recognizes that the realization of reproductive health and rights begins with respecting bodily autonomy and should aim to empower and support autonomous decision-making over their own bodies and the formation of a family through reproduction.

Call for action:

IFMSA calls for governments to:

- Adopt legislation to ensure equality of access to a broad range of contraception and other family planning methods and services including fertility treatments, regardless of gender, age, sexual orientation, ethnicity, level of ability and socioeconomic status.
- Ensure that resources and funding are allocated to the continuous training of healthcare workers who provide family planning services.
- Integrate family planning into strategies and policies to achieve universal health coverage as well as develop policies on sexual and reproductive health and rights, providing comprehensive and evidence-based information concerning effective methods of family planning.
- Strengthen contraception supply systems and improve coordination of supply efforts to ensure universal access, promote and support the community-based distribution of contraceptives.
- Provide adequate funding for domestic and international programs providing contraceptive methods and access to emergency contraception.
- Promote comprehensive sexual education at schools to empower young people and adolescents to make autonomous choices over their sexual and reproductive health.
- Address inequalities in access to family planning methods in national policies, ensuring equitable services for left-behind populations, taking into account their diverse barriers.

IFMSA calls international agencies to:

- Collaborate with governments to promote access to family planning through implementing policies, providing resources, support, and guidance, and increasing funding.

- Involve youth in the development and implementation of family planning policies and activities.
- Provide training for health professionals who can provide family planning services.
- Establishing a comprehensive monitoring and evaluation system on access to family planning.
- Conducting research and publicizing data on access to family planning, unmet needs, commonly used methods, and left-behind populations.
- Participate in and organize activities on numerous levels to raise awareness about different family planning services and their importance, in order to reduce the fear and stigma surrounding them.

IFMSA calls for the healthcare sector to:

- Provide comprehensive and evidence-based information concerning effective methods of family planning and continuously updated training of healthcare workers who provide family planning services as well as improving their soft skills in providing family planning services.
- Provide services aiming for the reduction of unintended pregnancies, including the full provision of contraceptive methods and access to emergency contraception.
- Educate their patients on family planning methods in a comprehensive and non-judgemental approach, improving their access to health information and providing counseling services.
- Cooperate and work with governmental and non-governmental organizations to facilitate access to family planning services through developing and implementing policies and providing well-established resources.
- Encourage the presence of community-friendly clinics to support and provide family planning services without stigma or discrimination.
- Ensure that sexual and reproductive health services including family planning services are accessible, equitable and evidence-based as well as culturally sensitive and relevant.
- Provide equal access to family planning to all groups, especially young people and adolescents, sex workers, people with disabilities, diverse sexual orientations and gender identities.
- Conduct ethical research on interventions and programs addressing barriers to accessing family planning and contraceptives as well as their improvement and development.
- Improve provider training surrounding sexual and reproductive health for transgender, nonbinary and gender-expansive individuals

IFMSA calls medical schools to:

- Ensure that medical students are well-educated about all the types of family planning methods and their management available in their region as well as who, how and where to access these services.
- Educate medical students that the problems related to family planning have different origins, from medical to social, which are often beyond the control of the individual and include the social determinants of health and wellbeing.
- Include evidence-based information on modern family planning methods in medical school curricula.
- Conduct ethical research on interventions and programs addressing barriers to accessing family planning and contraceptives as well as their improvement and development.

IFMSA calls National Member Organizations to:

- Develop projects targeting medical students and healthcare workers that increase awareness of evidence-based family planning methods to minimize the use of outdated and ineffective methods.
- Advocate for increased and non-discriminatory accessibility to effective, affordable contraceptive methods, and infertility treatments by engaging with key stakeholders such as governments and by partnering with other civil society organizations.
- Promote gender equality for women and non-cisgender people in NMO activities and structures, internally and externally, to encourage sexual and reproductive autonomy, especially for left-behind populations.

POSITION PAPER

Background

According to the World Health Organization, family planning is “the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births” [1]. It encompasses services such as contraception, infertility treatment and information on how to get pregnant [2].

According to the World Health Organization, As of 2019, 1.1 billion women of reproductive age worldwide are in critical need for family planning. 842 million of them use one or more contraceptive methods, and 270 million have an unmet need [3]. Ensuring access to family planning advances several health and non-health causes, including good health, body autonomy, expanded education opportunities, and sustainable population development.

There are multiple barriers to the implementation and availability of family planning services. They include gender inequality, misconceptions about methods, affordability, and product and healthcare workforce shortages. With national and international strategies and multi-stakeholder collaboration, these barriers can be overcome [2].

Discussion

International recognition of family planning

Family planning itself is not a new practice. For many centuries, people have been managing their reproductive health. Historical records show that women in West Africa were advised by physicians to space their children from as early as the 16th century. [4] However, it wasn't until the 1900s that governments and organizations began to focus on family planning. In 1936, the Sex Hygiene and Birth Regulation Society (renamed to New Zealand Family Planning Association) was established in New Zealand, as one of the earliest non-governmental organizations (NGOs) advocating for and providing birth control [5]. In 1952, India became the first country in the world to launch a national policy addressing this, known as the National Programme for Family Planning.[6] Soon, many other countries followed with their own national policies, with low- and middle-income countries receiving financial and technical aid. Along with that, the International Planned Parenthood Foundation was established.

Today, reproductive rights, including the right to family planning, are well established under international laws. Numerous major international committees and conventions have improved progress in family planning access and they are outlined below.

Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1979)

CEDAW was adopted by the United Nations General Assembly in 1979. Its 30 articles address women's rights in civil, political, economical, and social spheres [7]. CEDAW contains numerous articles pertaining to family planning. Article 10 focuses on promoting gender equality in education, which includes “Access to specific educational information to help to ensure the health and well-being of families, including information and advice on family planning. Article 12 emphasizes on eliminating inequalities and discrimination against women in healthcare, to promote “access to health care services, including those related to family planning. Article 16 states that women are guaranteed equal rights in deciding “freely and responsibly on the number and spacing of their children and to have access to the information, education and means to enable them to exercise these rights.”[8] The CEDAW Committee also provides recommendations on implementing the actions stated in the Articles of the original Convention, also within the scope of improving access to family planning and reproductive health services and ensuring their unconditional access [9–12].

Convention on the Rights of the Child (1989)

Article 24.2 (f) states that parties should “develop preventive health care, guidance for parents and family planning education and services” in order to realize the child’s right to quality healthcare. [13]

International Conference on Population and Development (1994)

The ICPD is a conference held by the United Nations. The 1994 conference saw the adoption of the Programme of Action as a guide for the work of the United Nations Population Fund (UNFPA) over the next 20 years.[14]The PoA provided a definition for reproductive health. In addition, it listed objectives and actions for improving access to family planning, applying a human rights-based, sex-positive approach. The PoA has also determined that the aim of family planning programs is to enable people to decide if and when they want children and to “have the information and means to do so and to ensure informed choices and make available a full range of safe and effective methods.”[15] The main platform to follow up on the progress on access to family planning is Commission on Population and Development held every year, evaluating national progress and commitments.

In 2019, 25 years after the ICPD of 1994, the UNFPA and the governments of Denmark and Kenya co-convened the Nairobi Summit on ICPD25. The summit centered around mobilizing political and financial resources key to achieving many goals in the PoA, including universal coverage for sexual and reproductive health services, ending gender-based violence, and preservation of health services in humanitarian emergencies.[16,17]

The 4th World Conference on Women (1995)

The 1995 Fourth World Conference on Women in Beijing saw the adoption of the Beijing Declaration and the Platform for Action. The document reaffirmed the concerns and actions stated in the ICPD PoA and CEDAW. It called for the Member States to protect women and children from gender-based violence and harmful traditional practices. In addition, the document emphasizes the right to have “access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility [...] It also includes sexual health..”, thereby recommending a sex-positive approach [18,19].

A platform to follow up on the progress on the goals of the Beijing Platform of Action is the Commission on the Status of Women held every year. The 66th Commission on the Status of Women highlights the impact climate change has on access to family planning. Conclusion 46 reaffirms the importance of “ensuring universal access to sexual and reproductive health-care services, including for family planning, information and education.”[20] The 57th Commission also highlights the importance of family planning access in detail, with Conclusion 22 recognizing that respecting and promoting sexual and reproductive health is key to “achieving gender equality and the empowerment of women” [21].

Convention on the Rights of Persons with Disabilities (2006)

Article 23, which discusses family matters, states that people with disabilities have the right to “decide freely and responsibly on the number and spacing of their children and to have access to age appropriate information, reproductive and family planning education”, and have the right to “retain their fertility on an equal basis with others.” In addition, Article 25, about health emphasizes the rights of people with disabilities to the same range, standard, and quality of gender-sensitive healthcare, including in the area of sexual and reproductive health [22].

Sustainable Development Goals (SDGs) (2016)

The SDGs refer specifically to family planning in Goal 3 (Health) and Goal 5 (Gender Equality) [23].

Goal 3: Good Health and Wellbeing

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes

3.8 Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all

Goal 5: Gender Equality

5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences[24,25]

Many of the goals are indirectly related to family planning. Ensuring people's access to family planning can lead to progress in providing quality education, ending poverty and hunger, combating climate change, and supporting economic growth.

Overview of family planning services

There is a high unmet need for family planning services and products around the globe [3]. This need often correlates with a lack of implementation of other tools to promote development, such as access to education, highlighting the intersectional, multifactorial role that family planning plays with other sectors in sustainable development [26].

Family planning allows people to attain their desired number of children, if any and determine spacing between them. It reduces unintended pregnancies and sexually transmitted infections, lowers the prevalence of pregnancy-related health conditions and deaths. Access to family planning also supports the continued education of girls and creates opportunities for women to participate more fully in society, including paid employment.

The right to family planning can be achieved through universal access to reproductive health services such as contraceptive counseling and contraceptives and fertility treatments. There are multiple barriers to the implementation and sustainability of these services [1]. However, with comprehensive international and local strategy and collaboration between sectors and organizations, governments and NGOs, these barriers can be overcome.

Nonetheless, reducing the vast unmet need for family planning remains a massive challenge to countries and the global health community. Services are still poor-quality or unavailable in many settings, while service delivery and social constraints persist [27].

Contraception is the act of intentionally preventing pregnancy, such as through the use of devices, practices, medications or surgical procedures. Contraception can be considered modern or traditional. There are 172 million women who are using no method at all. A few of the reasons for not using modern contraception are as present:

- fear and experience of side effects (26%)
- infrequent sexual encounters or none at all (24%)
- general negative attitudes toward contraception (23%)
- breastfeeding or postpartum period and no menstruation (20%) [28]

Contraceptive information and services are fundamental to health and human rights.

According to 2017 estimates, 270 million women of reproductive age in the Global South have an unmet need for contraception. Reasons for this include:

- limited access to contraception
- insufficient choice of methods
- fear or prior experience of side effects
- cultural or religious opposition
- poor quality of available family planning services [29]

Ensuring access to effective and suitable contraceptives for all people advances several human rights, such as the right to life and liberty, freedom of opinion and expression and the right to work and education, and the right to health. The use of contraception prevents pregnancy-related health risks, especially for adolescent girls. It also helps to decrease infant mortality as it helps to decide on the spacing between children. When births are spaced in less than 2 years, the infant mortality rate is 45% higher than it is when births are 2-3 years apart and 60% higher than it is when births are 4 or more years apart. Aside from health benefits, it also increases expanded educational opportunities and empowerment, and thus, sustainable population growth and economic development for countries [3].

Contraception delivery should be affordable for everyone, provided with dignity, autonomy and confidentiality and the decision should be made by a fully-informed patient, meeting their needs and perspectives [30].

Types of Contraceptives

Currently, contraceptives can be reversible or permanent (sterilization). The reversible methods are divided into three types based on their mode of action: barrier, hormonal and chemical.

Within barrier methods, we differentiate internal or external condoms, contraceptive sponges, diaphragms and cervical caps. Their purpose is to prevent sperm from entering the uterus. It is worth mentioning that apart from preventing pregnancy, both external and internal condoms, play a key role in reducing the risk of sexually transmitted infections (STIs).

Hormonal methods are combined oral contraception, progestogen-only pill, implants, intrauterine devices (IUDs), injections (progestogen-only or combined), patches and vaginal rings. Their main goal is to suppress ovulation and thicken cervical mucus [3]. While the copper intrauterine devices operate by damaging sperm due to a sterile inflammatory reaction [31].

Chemical methods are preparations with spermicides such as foams, creams and jellies, but also are contained in contraceptive sponges. On account of their inefficient effectiveness, they always need to be used along with other birth control methods [32].

For new mothers whose menstruation has not returned it is possible to use a temporary contraceptive method called the lactational amenorrhea method, which is exclusive breastfeeding of an infant less than 6 months old. There are also methods that are based on observation of the menstrual cycle and avoiding vaginal sex on 'fertile' days, however, these methods may not be as effective as a barrier or hormonal methods [3].

Emergency contraception refers to various methods of contraception that can be used to prevent pregnancy after sexual intercourse. They are the most effective within 5 days after intercourse without contraception [33].

Infertility Treatment

According to WHO, infertility is a disease of the reproductive system which involves the inability to get pregnant, after more than 12 months of having unprotected sexual intercourse. It is divided into primary and secondary infertility. Primary infertility is when a couple has not previously conceived and given birth to a live child, compared to secondary infertility when a couple is unable to have a child but has had previous successful pregnancies [34].

If people wish to have biological children, infertility treatment can be proposed for them. The treatment depends on the condition of the reproductive system. Hormonal therapy, surgery and management of delayed ejaculation are methods used to improvement of sperm delivery and quality. In case of ovulatory disorders, changes in lifestyle, hormonal and pharmacological therapy or surgery can be offered. For tubal and structural uterine disease, usually surgery is the management option. Other methods available that could be considered are intrauterine insemination, in vitro fertilization (IVF), intracytoplasmic sperm injections, donor insemination and oocyte donation [35].

The description of available options:

- Sperm donation: a procedure where a person donates semen to help another couple/individual get pregnant using their sperm. Before sperm donation, the donor must be screened for medical conditions or any risk factors [36].
- Intrauterine insemination (IUI): is a type of artificial insemination where sperm that have been washed and concentrated are placed directly in the uterus around the time your ovary releases one or more eggs to be fertilized [37].
- In Vitro Fertilization (IVF): an egg is removed from the person's ovaries and fertilized with sperm in a laboratory. The fertilized egg, called an embryo, is then returned to a person's womb to grow and develop. Also, there is a type called reciprocal IVF for lesbian couples where one partner donates their eggs for fertilization and their partner carries the pregnancy [38] [39].
- Egg Donation: This is when a person donates their eggs to another couple/individual to make them able to get pregnant. The donor must be given medications that will enable them to develop multiple eggs over a single cycle. The eggs are then aspirated from the donor's ovaries. After the eggs are removed, they get evaluated by an embryologist[40].
- Surrogacy: involves a person agreeing to carry the pregnancy for someone else and giving guardianship to the intended parents after childbirth. Surrogacy has complicated legal and medical requirements that must be met [41].

Despite the fact that the majority of people affected by infertility lives in the Global South, there is a geographical disparity in access to infertility treatment, particularly in differences between the Global South and the Global North and the availability of IVF and intracytoplasmic sperm injections. In 2006, only 48 member states of WHO out of 191 had medical facilities offering IVF. Aside from the availability of facilities, there is also a challenge of timely and affordable services that remain out of range for many people living in low- and middle-income countries, while in some high-income countries IVF might be publicly funded [42].

Early detection and treatment of STIs, promoting healthy diets and exercise, avoiding smoking, regulation of environmental and occupational exposure to chemicals in some cases might prevent infertility [43].

Assisted fertilization for LGBTQIA+ couples:

Options for Gay Men

They have the option of egg donation combined with surrogacy. It's only possible to use the sperm from one person to fertilize the donor egg. However, some gay couples choose to split insemination where half of the eggs are put with one partner's sperm and the other half are put with the other partner's sperm.

Options for Lesbian Women

They have various fertilization options. For example, Intrauterine Insemination (IUI) either with an anonymous or known sperm donor, In Vitro Fertilization (IVF) for women who may be experiencing problems conceiving through insemination, and also they also can use co-IVF or reciprocal IVF.

Options for Transgender Individuals

They can freeze their eggs or sperm prior to hormone therapy or surgery. While some transgender individuals may be able to conceive on their own, some may need the help of a specialist to become pregnant. fertilization options also include: in vitro fertilization, intrauterine insemination, or gestational surrogacy. During assisted fertilization process, transgender individuals may need to temporarily postpone hormone therapy [44].

Emergency Contraception

Emergency contraception can be used after sexual intercourse without contraception to avoid pregnancy (preferably 5 days after). This can be in situations of sexual assault and failed or improper use of contraception. Although, the most effective emergency contraception method is the copper-bearing intrauterine devices (IUDs) there are other convenient methods like the emergency contraception pills (ECPs) containing either ulipristal acetate (UPA), or levonorgestrel (LNG), or combined oral contraceptives (COCs). Emergency Contraception works to prevent ovulation in ECPs or creates an environment that hinders fertilization in copper-bearing IUDs. It should be noted that these methods do not result in abortion or affect a developing embryo [33].

Family planning counseling

Counseling is one of the important components when it comes to providing high-quality family planning services. It helps people to make informed decisions regarding their reproductive health. Good counseling leads to improved client satisfaction. A satisfied client promotes family planning, returns when they need to and continues to use a chosen method [45].

Important definitions

Family planning counseling is defined as a continuous process that you as the counselor provide to help clients make and arrive at informed choices about if they want to have children or not, the size of their family, spacing, and the timing. Family planning counseling is not a type of lecture, it is a process of mutual understanding. The provider should show respect to the client and deal with their problems and concerns about contraception in a straightforward way.

Informed choice is when we give people all the information they need about a specific topic, then they make their own choice based on the knowledge they have and their own preferences. In order to allow people to make an informed choice about family planning, the provider must make them aware of all the available methods, and the advantages and disadvantages of each.

Couple counseling is when the counselor gives a counseling service to a couple or partners together. This happens mainly when they are thinking of using irreversible family planning services, such as sterilization. Individual counseling, in most cases individuals prefer privacy and confidentiality during communication or counseling with you. It is important to provide them with a safe space where they can feel comfortable sharing.

Group information sharing is used when individual counseling is not possible, or if there are people in a village who are more comfortable in a group. In this situation, the counselor would explain to them the benefits of family planning, briefly discuss common myths and mistaken beliefs about family planning, and then inform the group about how to obtain appropriate contraception. It is a cost-effective way of information sharing and answering general questions, but people are not likely to share their more personal concerns with a provider in this setting.

The counseling process includes:

1. Assess situation

2. Define problems, needs, and information gaps
3. Generate alternatives
4. Prioritize solutions
5. Develop a plan
6. Review and evaluate [46]

Birth spacing and postpartum family planning

Family planning is about deciding how many children an individual chooses to have and when they want to have them (timing of pregnancies and birth spacing). A person can become pregnant within several weeks after birth if they are not breastfeeding exclusively. It is important that a healthcare worker discusses the topic of family planning and birth spacing, and helps people in choosing the contraceptive method that is right for them. During late pregnancy, after giving birth and after an abortion, it is important that they receive and discuss correct and appropriate information so that they can choose a method that best meets their needs. If a person is able to get pregnant, and if applicable their partner, is able to make an informed choice, they are more likely to be satisfied with the method chosen and continue its use.

When to counsel on birth spacing

Discussing family planning then begins during pregnancy, particularly during the third trimester, after birth and in the immediate postpartum period. Pregnant people need to know that if they are not exclusively breastfeeding they can get pregnant as soon as four weeks after the birth, even if they have not yet started their menstrual cycle. Several methods of family planning can be started immediately after birth, but others may need to be delayed if the person is breastfeeding. If the individual wants female sterilization or an Intrauterine Device (IUD) inserted immediately after childbirth, they should inform their birth attendant and plan to give birth in a health facility. Clarifying for breastfeeding people the benefits of using breastfeeding as a family planning choice, known as the Lactational Amenorrhoea Method (LAM), is important at this stage of counseling [47].

Counseling a woman on family planning after an abortion

Abortion by definition is the unintended termination of a pregnancy or the elective abortion which refers to intentional pregnancy termination by surgical, medical or other means. When advising a person on how to care for themselves after an abortion, it is important to discuss the use of a family planning method to prevent another unwanted pregnancy. Explaining that they can become pregnant as soon as two weeks after an abortion. It is recommended for a person who has recently experienced an induced or spontaneous abortion to wait at least six months before another pregnancy to reduce risks to their health and to the future fetus/baby [47].

Partner involvement

The partner should be encouraged to take part in family planning counseling sessions, especially if the chosen method involves their cooperation, for example, condoms. Research has shown that family planning methods are more successful when partners choose them together. First, ask the person able to get pregnant whether they would be happy for their partner to be involved. In some cases, individuals may feel more comfortable if their partners are not present or if their partners are counseled on their own and/or by a male counselor. Men are one of the important determinants when it comes to family planning and birth spacing. Understanding their role in reproduction and sharing the responsibility will improve the impact of family planning methods [47].

Transgender and gender-diverse (TGD) populations

No matter what is your sex or gender, everyone may have contraceptive needs. However, with no professional society guidelines and scant data on contraceptive use for transgender and gender-diverse populations, clinicians' abilities to counsel patients on use, safety, side effects, and efficacy is severely limited.

We know very little about how hormonal contraceptives interact with gender-affirming testosterone therapy. Consequently, providers must extrapolate from data on the use of hormonal contraceptive methods in cisgender women and rely on clinical expertise.

There are specific conditions to be taken into consideration while providing counseling to TGD individuals including side effects that the contraceptives may have on gender-affirming therapy, barriers to access due to discrimination, and misconceptions regarding their reproductive capacity. Counselors should acknowledge the spectrum of gender identities and sexual orientations within their communities, create an inclusive safe space, and perform physical exams taking into consideration the potential physical and emotional discomforts specific to these patients [48].

Statistics on access to family planning services

Unmet need for family planning is defined as the percentage of women who are married or partnered, do not want any more children at all or within the next two years but are not using any contraceptive or method to prevent pregnancy. This definition can be divided into the unmet need for limiting and the unmet need for spacing of children [49].

However, both married and unmarried people have a need for contraception and family planning services [3,50]. Globally, 1.1 billion women of reproductive age (15-49 years) have a need for family planning, but for more than 270 million of them, these needs are unmet. Unmet needs for contraception are especially high among adolescents, migrants, refugees, urban slum dwellers and women in the postpartum period [50].

The number of women with unmet needs in family planning isn't close to the real number because they tend to be based only on surveys of women who are married or in a recognized relationship and do not account for variability between countries over time. Using data from 185 countries, the authors estimated contraceptive prevalence from 1990 to 2019 and projected changes up to 2030. By 2030, this number is expected to rise to 272 million because family planning services are not keeping pace with the rapid population increase in low- and middle-income countries [51].

The global prevalence of modern contraception use has been in stagnation at around 77% from 2015 to 2020 but increased from 55% to 58% in the African region in the same period. However, there are still large regional discrepancies in the unmet need for contraceptives [3,50]. In sub-Saharan Africa, only 22% of people reported the use of a modern contraceptive in 2022 [52]. In comparison, in western Europe, 82% of people of reproductive age use modern contraceptives [53]. Men account for only a small subset of these prevalence rates with easily available contraceptive options limited to condoms and sterilization [3].

As a result of the inaccessibility of modern methods of family planning, roughly 121 million unintended pregnancies occurred every year from 2015 to 2019 [2].

In Sub-Saharan Africa, there is a higher unmet need for modern contraception among older women compared to younger women, as they either have few or no children [52]. This is due to an overall trend of a smaller desired family size. Countries or areas with a rapidly decreasing desired family size may have an increasing unmet need for contraception, without the supply and service systems to meet demand. More rigorous research is required to understand regional and population discrepancies in unmet needs for family planning.

A study in 2014 showed that although 148 countries have access to hormonal Emergency contraception, only 56 of these countries have access without prescription and 17 countries with over-the-counter prescriptions [54].

Infertility treatment

In 2010, among women who want to have children the prevalence of primary infertility was approximately 2%, whereas the prevalence of secondary infertility is estimated at approximately 11%, with the lowest prevalence of 7.2% in the North Africa and Middle East region and the highest (18%) in the Central and Eastern Europe and Central Asia regions. In the case of men, the prevalence of infertility varies from 2.5% to 12% with the highest rate in Africa and Central and Eastern Europe [34]. It is estimated that nowadays one in every four couples in developing countries struggle with infertility [55].

Barriers to access to family planning

General Awareness

The importance of knowledge in all facets of human life is undeniable. Information about family planning is critical to living a meaningful life, both for the individual family and for the nation[56].

Monitoring and evaluation of awareness and utilization of family planning methods in communities are important to improve the quality and effectiveness of services, policies and planning with resulting beneficial impacts on the health and quality of life of women, children, families, and communities[57]. Contraceptive use is hampered by a lack of awareness, misperceptions, and exaggerated fears about the safety of contraceptive methods. In some countries, schools' emphasis on abstinence-only education may have contributed to widespread misunderstandings about contraceptive effectiveness, mechanisms of action, and safety, which can influence contraceptive use and method selection. Many people, for example, have erroneous fears that oral contraceptives cause serious health problems or that IUDs provide a high risk of infection [58].

WHO studies have shown that women in many countries in Global South do not have enough knowledge about contraception. A comprehensive evaluation of qualitative data shows that in five developing countries, young women's use of contemporary contraceptive techniques is limited by a number of issues, including a lack of awareness, access barriers, and lack of control. The use of hormonal methods was limited because of a lack of knowledge and access and concern over side effects, especially fear of infertility. Although often more accessible, and sometimes more attractive than hormonal methods, the use of condoms was limited by their association with disease and promiscuity and greater men's control of this method [59]. Also, many women and couples who have an unmet need for spacing or limiting births do not use contraception because they are unaware of the social, economic, and health benefits of family planning, are unaware of which methods are accessible or suited for them, or are unaware of where to obtain one. Others are put off from taking contraception because they believe their partner, family, community, or religion opposes it [60].

Side effects and misconceptions

Myths and misconceptions regarding current techniques, such as exaggerated or false reports about side effects, beliefs about short- or long-term health problems, and negative perceptions about people who use contraception, are other significant obstacles to contraception usage.[61,62] Many women in high, middle and low-income nations, for example, mistakenly believe that using oral contraceptives is riskier than pregnancy.[63] In an eight-country survey, 50–70% of women believed that using the pill carried significant health risks [64]. Many women in Mali thought that the pill and injection would result in irreversible infertility, according to research. The possible unwanted side effects, for example, breast soreness, headaches, weight gain, irregular menstrual bleeding, nausea, and/or loss of bone density may occur as a result of long-term use, depending on the route utilized. These possible side effects are frequently the source of a variety of misunderstandings. Where women's ability to bear children is important to their socioeconomic status, for example, they frequently fear that using contraception to avoid pregnancy may lead to permanent infertility if used long enough [59]. They may assume that not having a monthly period means they have a dangerous blood buildup within their body. Some people feel that nausea produced by oral contraceptives is an indication that the pill's acid is scorching their stomach or ovaries [65].

Fear of real or imagined negative effects is a key reason why women stop using contraception, which can lead to unwanted births [59]. In a 36-country study, it was discovered that discontinuing use resulted in more than a third of unwanted pregnancies. When asking women why they discontinue, many health surveys do not differentiate between misperceptions and actual side effects, making it difficult to identify the exact impact of each [62]. "People who use contraceptives end up with health problems," "contraceptives are detrimental to women's health," and "contraceptives can injure your womb" were the most common family planning myths at the individual and community levels [66]. To maintain autonomy in decision-making, all information and counseling must be medically accurate, non-directive, and supportive. That means health-care providers and other experts should give evidence-based counseling and information regarding contraceptive function, benefits, and risks, and do so in a way that meets women (and, if appropriate, their partners) where they are. This knowledge may and should debunk the misunderstandings, misperceptions, and fears that are frequently the root causes of non-use. It should also clarify how emergency contraception works, differentiating it from induced abortion; this is especially crucial among groups and individuals who are culturally opposed to abortion [67].

Gender inequality and Sociocultural barriers

Gender equality has a variety of effects on contraceptive use. It can influence any power inequalities within intimate interactions, from the personal and political degree to which women are free to choose their sexual activities to access family planning options [68].

Access to high-quality reproductive health services is hampered by gender discrimination and inequity. They also make it difficult to plan their families and utilize contraception properly. Men, too, experience gender-related hurdles to reproductive health programming, despite the fact that traditional gender norms place larger restrictions on women's access. Men may be hesitant to use family planning services that are predominantly geared toward women, or they may regard family planning as a female concern. The paucity of use and development of male contraceptive techniques is a result of these norms.[69] Also, Providers may have preconceived notions or biases concerning male techniques or men's involvement in family planning, as a result of which they may withhold information about male methods or presume that men are uninterested.[70]

According to a study published in the Lancet Global Health, gender equality and education enhance access to modern contraception. Trends in sexual activity, as well as demand for and usage of current contraceptive procedures, were evaluated in 74 countries, involving 3 million women. Women's needs for modern contraception are more likely to be realized over time in countries where gender equality and educational opportunities are growing.[71] According to a retrospective examination of nationally representative surveys, the availability of modern contraception is highly linked to beneficial changes in social structures. There was a 6.7% increase in women who were sexually active but did not desire to conceive for every 0.1 point improvement in a country's gender development index. A further 13.5% of those women employed modern measures to avoid pregnancy.

The expectation that every girl has the right to education made an impact as well. Each additional year of education is associated with a 2.3% rise in demand and a 4.7% increase in the usage of current contraceptive techniques [68]. Contraception decisions are also influenced by a variety of social, cultural, and economic factors [72]. Sexual assault has been linked to harmful effects on women's reproductive health, including unmet contraceptive needs [73]. Sexual violence has been on the rise in recent years, and it is described as any sexual act, effort to get a sexual act, or any act directed against a person's sexuality through coercion, committed by anyone, regardless of their relationship to the victim, in any context [74]. Rape by a spouse, partner, stranger, or acquaintance, unwanted sexual approaches at school or work, and sexual abuse of mentally or physically challenged individuals are all examples of sexual abuse [75]. Furthermore, in communities where traditional medicine reigns supreme, culture takes precedence over medical advice due to

a lack of familiarity with the healthcare system. Fear of the unknown is rarely discussed, yet it is an important component in a woman's decision to use family planning and contraception services.[76] While Many transgender people expect the physician and/or the health care staff to treat them in an unprofessional or unfriendly manner before they go to the doctor. Furthermore, if he is being seen at an Ob/Gyn practice, the transgender man may feel uncomfortable and unsafe in a waiting room occupied solely by cisgender women or pregnant women. Add to that the unease that frequently follows a discussion about sexual and reproductive health issues. The social and political backdrop of being stigmatized in the majority of areas where health care settings exist exacerbates this pain. Discrimination and inequity make it more difficult for a transgender man in his forties to identify and address his sexual and contraceptive needs in a safe environment [76,77].

Accessibility and Affordability

In low- and middle-income countries, an estimated 270 million women desire to avoid pregnancy but do not use a contemporary form of contraception.[78] Women and girls, for example, frequently arrive at health facilities to discover that their desired technique is not accessible or is too expensive for them to pay or contraceptive supplies are frequently accessible at the central level but do not reach customers, particularly those in rural regions.

In high-income nations, affordability is also a barrier, impacting the contraceptive method of choice and compliance. The expense of consulting a doctor, purchasing a contraceptive, and, in certain situations, paying for the contraceptive's insertion or delivery (medium or long-acting contraceptives) can be substantial and vary greatly [79].

Legal, facility-based and provider-based barriers must be addressed to improve access. Formal regulations and limitations prevent persons of reproductive age from easily accessing family planning services. Keeping oral contraceptive pills on prescription, for example, prevents them from being socially marketed and used as a vital distribution and funding method in low-resource countries. Other limits include who can/should give specific contraceptive techniques and at what level of provider. Pre-service training for all levels of health workers, not only those working in higher-level facilities, should include the provision of non-surgical long-term contraceptive techniques[80]. Non-restrictive legislation must safeguard and assist the reproductive rights of all persons of reproductive age, regardless of age, marital status, or location of residence.

It is estimated that Emergency contraception can prevent 95% of unwanted pregnancies. However, Emergency contraception is affected by a number of factors including lack of information and misconceptions in relation to regular contraception. In some cases when copper-bearing IUDs are to be used, a trained healthcare practitioner is required which further affects the accessibility of the most effective method (copper-bearing IUDs) when available. Despite not having an age restriction (except in a few regions with age-discriminatory policies), it is advised that emergency contraception should not be used too frequently [33].

Barriers to Infertility Treatment

Throughout 8–12% of couples around the world have trouble becoming pregnant, and this number climbs to 1 in 4 in low-income countries.[81] Some parts of Europe, Asia, and Africa, for example, have a very high rate of infertility.[82]. Infertility is defined as the failure to obtain a clinical pregnancy after at least 12 months of frequent, unprotected sexual intercourse.[82] Difficulties throughout the treatment process can arise from the initial consultation to obtaining therapy. Perhaps the most well-known impediment to patients receiving therapy is the cost of the procedure, which is especially problematic in low and middle-income countries.[82] Wealthier individuals, particularly those with a household income of over \$100,000, are more likely to seek infertility treatment, according to studies[83]. Concerns about the mental and physical effects of therapy are sometimes obstacles to continuing treatment [84]. Some of the negative ideas of infertile people include the

vision of a hazy future in life and the fear of treatment failure. These negative thoughts and feelings act as a mental filter, providing a bad image of the future, therapy, and its process [85].

Family planning and left-behind populations

Studies looking at countries from the Global South have found that women in the poorest income categories have higher rates of unintended pregnancies than women with higher family income levels [86,87]. In a broad overview of DHS data from 29 countries in sub-Saharan Africa, spanning 2010–2016 researchers found that the proportion of pregnancies considered unintended was highest among the poorest women. Similar findings have been reflected in studies from the United States [88].

One explanation for this correlation is that poorer women are often less able to afford modern contraception [89].

Lower-income women tend to have a lower educational status than their peers which may result in lesser knowledge about contraception. They are additionally more likely to live in rural or underserved parts of urban areas, and that impairs their access to family planning services [2].

The rural/urban divide

Many studies have shown that rural women are more likely than urban women to have unintended pregnancies, in some cases more than twice as likely [87]. The simplest explanation for this difference would be that rural women have less access to modern contraception, and this is true in many circumstances but it is far from the complete story. By many measures, women living in rural communities may have greater barriers to empowerment and autonomy overall. For instance, rural women in countries in Asia, Latin America and Africa experience lower levels of autonomy when looking at healthcare decision-making, household decision-making and contraceptive use [90–92]. Social and gender norms in rural areas may also tend to be more conservative and patriarchal. Interviews with rural women in the Democratic Republic of the Congo showed that socio-cultural norms and poor communication between spouses discouraged the use of contraception, for instance [93]. Rural women in developing countries are also more likely to have lower education levels and higher poverty, which, as we have seen, correlates with higher rates of unintended pregnancies [94].

By looking at the 2019 Human Development Index (HDI) data and two of its core components — namely, educational attainment and per capita gross national income (GNI) — against rates of unintended pregnancy. Globally, higher levels of social and economic development, as measured by these indicators, were strongly correlated with a lower incidence of unintended pregnancy in 2015–2019.

One explanation is that countries with higher development scores are likely to be those where contraceptive services are more widely accessible and where women face fewer cultural barriers to managing their fertility preferences. Pregnancy outcomes tended to differ between high-income countries and low- and middle-income countries [2].

In low- and middle-income countries, higher levels of social and economic development were associated with a higher proportion of unintended pregnancies being aborted (even after controlling for differences in the legal status of abortion). This finding lends itself to the hypothesis that, as opportunity costs associated with childbearing increase, women who experience an unintended pregnancy are more strongly motivated to avoid having a child. The same pattern was true with respect to trends over the 30-year period between 1990 and 2019 in these countries: improvements in development scores at the country level were associated with increases in the proportion of unintended pregnancies that were terminated [95].

One might assume that income and education levels among women and girls are more closely linked to lower rates of unintended pregnancy than are the levels of income and education among men and boys, but that was not the case. Per capita GNI scores and levels of educational attainment among females were not more

strongly correlated with the incidence of unintended pregnancy or the proportion aborted than were male scores for per capita GNI and educational attainment. This indicates that overall country GNI and education level are linked to lower unintended pregnancy, rather than exclusively per capita GNI and education among women and girls. In other words, and importantly, overall development is a likely factor in lowering rates of unintended pregnancy [2].

In this matter; the Gender Inequality Index (GII) is used as a measure of women's and girls' status. The GII measures three aspects of gender equity — reproductive health, empowerment and economic status — with higher GII scores indicating higher levels of gender inequality. Countries (and territories) with higher levels of gender inequality, as measured by the GII, had higher rates of unintended pregnancy in 2015–2019, in both low- and middle-income countries and in high-income countries. This correlation persisted even after controlling for the role of the HDI [96].

LGBTQIA+ Community

The LGBTQIA+ rights movement emphasizes a person's right to control their own reproductive destiny as well as the freedom and legitimacy of sexual activity without reproduction as the desired outcome, supporting the right of individuals to control their sexuality and build their families in the ways they choose. Encompassed in this right is equal access to fertility services [97]. Some infertility centers deny LGBTQIA+ couples assistance based on discrimination causes only. Insurance companies also deny lesbians access to fertility services even when their plan covers advanced reproductive assistance. Even in states where insurance companies are required to cover infertility services, women sometimes only qualify for these services if they use their "spouse's sperm" to fertilize their egg [98]. This requirement openly discriminates against same-sex couples. These legal obstacles hurt LGBTQIA+ family formations and limit the ways LGBTQIA+ parents can protect their families.

LGBTQIA+ people face unique barriers to accessing health care. People in the transgender community who wish to build and protect their families face additional obstacles. Many transgender people lack access to important reproductive information that would allow them to make informed decisions about their reproductive choices. For example, transgender might rarely receive reproductive counseling on issues such as banking sperm or eggs before beginning medical transitioning. According to the 2015 U.S. Transgender Survey, a third of respondents could not afford healthcare services when needed. Trans people of color, including multiracial (42%), American Indian (41%), Black (40%), and Latine (37%) respondents, were more likely to not have seen a health care provider in the past year due to cost. When they can access health care spaces, they often experience rampant discrimination, harassment, lack of provider knowledge, and even refusals of care [99].

Regarding queer people - queer people able to get pregnant do not engage in only same-sex intercourse. For example, recent studies show that LGBTQ youth may experience unplanned pregnancies at a higher rate than heterosexual youth. Many queer-identified women also have sex with both men and women without using contraception. Such voluntary encounters can and do lead to unintended pregnancies and the spread of STIs. We seek to ensure that people facing an unintended pregnancy have the resources and support to determine what is best for their lives; be it access to contraception (including emergency contraception), safe and legal abortion, or prenatal care and the full range of birthing options should they choose to carry their pregnancies to term [100].

People with disabilities (PWD)

Access to contraception is important for people with disabilities as they experience a wide range of inequalities within healthcare systems leading them to negative health outcomes [101].

The biggest oppression that PWD experience within reproductive services is sterilization. Sterilization is the surgical or non-surgical method of ceasing the individual's reproductive ability. Consensual sterilization is a permanent method of contraception. However, forced or non-consensual sterilization is a persisting practice that PWD experience disproportionately more often [102].

In 2017 the UN Special Rapporteur on the Rights of Persons with Disabilities released the annual report to the General Council, which focused thematically on the Sexual and Reproductive Rights of Women with Disabilities (WWD). It highlights the forced sterilization experienced by WWD worldwide is a "widespread human rights violation" that "disproportionately subjects WWD to forced and involuntary sterilization for different reasons, including eugenics, menstrual management, and pregnancy prevention". The report calls for the global community to end the harmful practice of forced sterilization. As reflected in the report, non-consensual sterilization of PWD is a form of discrimination, violence, torture, and other cruel and inhuman or degrading treatment, it remains legal and practiced in many countries. These violations might be the results of social misperceptions of PWD as unfit for parenthood [103].

WWD, in comparison to the general population, are sterilized 3 times more often. They are also misperceived as asexual, leading to the assumption of having no sexual or reproductive needs. However, empirical studies show that PWD have the same needs with regard to sexuality and relationships. The presumed asexuality of WWD leads to the paternalistic rationalization of sterilization. There are even recent incidents of courts justifying such practices as "to prevent" the birth of a child with a disability by a WWD—regardless of if the condition is hereditary. In some states, there are negotiations to ease guardians of PWD to file for sterilization in the courts [102].

Young people and Adolescents:

The Sustainable Development Goals prioritize the needs of those who are most vulnerable and underserved, including young people. Their reproductive choices will have a huge impact on their lives. However, their unmet need for reproductive health services is high. Although using contraception among adolescent girls has increased, the consumption levels remain lower than in any other age group.

There are 13 million adolescent girls with an unmet need for contraception, about half live in Asia and the Pacific and more than 30% live in sub-Saharan Africa. A substantial majority, 74%, are not sexually active. Only about 15% of adolescent girls who are married or in union are using modern contraception. The unmet need for family planning among adolescents is 23%, while among women ages 30-34 is 15%.

An unintended pregnancy at an early age hinders health, and education, and lowers the quality of their lives. Studies show that individual, familial and community factors make some girls and adolescents even more vulnerable to unintended pregnancy, including low educational attainment, substance abuse and intimate partner violence [104]. There are many barriers that hinder their access to contraceptives:

- Laws and policies may restrict their access.
- Not feeling comfortable enough to visit family planning clinics
- Adolescents' lack of education or money reduces their access to concrete information and their ability to make informed decisions.
- Living in rural areas can limit their options.
- Adolescent girls without schooling are three times more likely to get pregnant than their peers with secondary education or higher.

In most countries, sex outside marriage is not socially accepted, so they don't consider the contraceptive needs of unmarried women, including adolescent girls. But a human rights perspective – and international commitments – insists that the reproductive rights of unmarried girls be fulfilled. Human rights norms direct States to ensure quality health-care services for adolescents that respect their rights to privacy and

confidentiality on the basis of non-discrimination [105]. These services should be available and accessible without any complicated requirements. But these rights are not realized in many parts of the world, meaning that adolescent girls and young women require special attention in reducing unintended pregnancies.

Unmarried girls aged 15-19 who are sexually active have the highest demand for contraception than any other age group. They often face extra discrimination while trying to access contraception methods. In three out of five developing regions (Asia and the Pacific, East and Southern Africa, and West and Central Africa), the unmet need for sexually active unmarried girls is double that of married ones. Condoms account for nearly 70 % of their total usage [106].

Migrants and refugees

People on the move face many accessibility-related barriers to using family planning services such as long distance to the facility and the associated costs of transportation, insufficient knowledge on different types of methods, misinformation and misconceptions, cultural opposition or social stigma, language barrier and xenophobic attitudes of providers.

Many interventions in the provision of family planning services in refugee situations primarily focus on supplying the products as well as reshaping behaviors and attitudes. Some research that examined the sexual and reproductive health (SRH) outcomes of refugees and internally displaced persons within camp settings compared them to the host community and presented the diversity of superior and inferior health outcomes. The most mentioned barriers were: the affordability of services and the ability to obtain them.

Research conducted in 6 refugee settings revealed that 6.7% of women have an unmet need for family planning. They also reported not wanting more children and are currently not using any modern method. In detail, 4% of adolescents and 7.1% of adults, 8.8% of married women and 1.5% of unmarried women, 7.7% of women who never attended school and 5.8% of those who ever attended school reported the unmet need [107].

Indigenous Peoples

Indigenous peoples are one of the most marginalized groups in most communities globally. Their settlements are usually in geographically inaccessible locations which are generally not considered in political, social and economic policies [108]. Hence, they largely depend on traditional medicine and the few able to visit health facilities face several challenges in accessing family planning services and information. Indigenous peoples face barriers such as poverty, cultural differences, illiteracy, and discrimination from healthcare providers who do not prescribe certain family planning methods thinking they won't be able to use them. Even in situations where information on family planning methods is available to them, they face difficulty because of illiteracy, and no reservations are made for verbal communication specific to them [109].

These people have an increasingly large poverty gap compared with their non-indigenous counterparts, making it difficult to afford certain family planning services. In addition, they are not usually under any health insurance scheme that can cover their medical bills. However, family planning is not socially acceptable among most indigenous people and their women have no autonomy in using any family planning methods [109].

Men's involvement in family planning

Although there are contraceptive methods for men such as the use of condoms, vasectomy, withdrawal method and standard days method (SDM), most family planning programs focus on women as users of contraception and men as partners [110]. These have left women bearing the personal and social costs faced with accessing family planning services. The available contraception methods for men are even cheaper compared to that for women. For instance, vasectomy where the surgeon cuts off the sperm tube is simpler,

cheaper and even better than female sterilization. Although, some barriers such as access to a clinic where vasectomy is required, financial constraints and information about contraception methods may sometimes hinder access to male contraception services [111].

Despite the large use of condoms, their long-term use is very low. Studies indicate that over 57% stop the use of condoms within the first year [112]. Similarly, Vasectomy which is an irreversible method involving a surgical procedure is not usually a preferred method among men. This further shows that there is a desire and need for the development of new and better forms of male contraception methods that are currently available [111].

Unfortunately, even with the evidence suggesting men's desire for contraception information and services, there is still less attention given to the funding of male conception development [110]. Condoms, for example, are more discussed in the prevention of STIs than as a method of contraception. Even the few novel contraception methods discovered are no longer in use because of their side effects and only little effort is given to their development [112].

Effect of crises on access to family planning

During the COVID-19 pandemic, health care has shifted its attention to the prevention of viral spreading, emergent medicine, and the development of treatments and vaccines. The unfortunate effect of this change is the neglect of other essential medical services such as access to family planning [55,113].

As a result of the COVID-19 pandemic, more than 47 million women globally could lose access to modern contraception methods which could result in up to 7 million unintended and unwanted pregnancies. The serious consequences of unintended pregnancy are an increase in maternal and neonatal morbidity and mortality. Unavailability of family planning options also results in unsafe abortions, pregnancy complications transmission of HIV and other STIs, as well as increased incidence of post-traumatic stress disorder, depression, suicide, and intimate partner violence. These problems disproportionately affect marginalized groups and low-income countries, especially in sub-Saharan Africa [113].

Economic crises and war are other aggravating factors that women must deal with globally while trying to gain access to modern contraception. More than 20% of women refugees will experience some form of sexual violence, but the main focus of international and local relief agencies during wars and conflicts has always been the provision of food, water, shelter and basic health care, which unfortunately leaves access to contraception as a very low priority [114]. As the war in Ukraine progresses, the supply chain of modern contraception has been cut off and access to family planning has become completely dependent on humanitarian aid which distributed more than 3000 morning-after pills in the first three weeks of the conflict [114,115] [116]. Although there is limited conflict-period data, Yemen is another war-stricken country with urgent and unmet access to modern contraception. An estimated 3 million Yemeni women of reproductive age have an unmet need for family planning due to the ongoing conflict, 1.1 million of which are currently pregnant. Only 29% of Yemeni women used modern contraception in 2013 and it is estimated that the number halved because of the conflict [117] [118].

The second big barrier to access to modern contraception for refugees is the struggling health care infrastructure of their new country. Before the civil war in Syria, more than 58% of Syrian women used free contraception, but after leaving their home country that number dropped to 37% because of Lebanon's struggle to medically accommodate its rapidly growing population [119].

Although the extensive documentation of sexual and gender-based violence and transmission of STIs during conflicts in recent years has finally transmuted access to modern contraceptives as one the essential medical services, there is still an enormous gap in the accessibility of those services that need to be filled [114,119].

Another important correlation we should take into consideration is the connection between climate change and access to family planning. Many developing countries consider population growth as one of the biggest challenges when it comes to climate change. Access to family planning allows fewer unintended pregnancies and slower population growth which strengthens climate change-stricken communities' ability to adapt by reducing pressure on climate-sensitive resources. Family planning has such a crucial role in climate adaptation that access to modern contraception is ranked 7th out of the 100 most substantive solutions to global warming [114,119,120].

Health and social implications of family planning

Only 57% of women are able to make their own decisions over their sexual and reproductive health and rights and this emphasizes that rates of unintended pregnancy are a reflection of overall social development and that higher levels of informed choice in reproductive decision-making are part of a positive cycle fuelling other development gains [121]. The most recent data on SDG 5.6.1, looking at partnered women of reproductive age in 64 countries, show that 23% are unable to say no to sex, 24% are unable to make decisions about their own health care and 8% are unable to make decisions specifically about contraception.

Globally, the latest data show that in 2015–2019, there were roughly 121 million unintended pregnancies each year, with some 48% of all pregnancies being unintended [95]. 61% of these unintended pregnancies ended in induced abortion.

The current rate of unintended pregnancies represents a decline from previous years — likely reflecting development gains made during that period. Between 1990 and 2019, the annual unintended pregnancy rate fell from 79 to 64 unintended pregnancies for every 1,000 women aged 15 to 49 years. While the falling rate of unintended pregnancy offers some comfort, the absolute number of women who experience an unintended pregnancy has actually increased by about 13%, because of population growth over this 30-year period. The current rate of 64 unintended pregnancies per 1,000 women means that roughly 6% of the world's women experience an unintended pregnancy each year.

New, model-based estimates reinforce the fact that rates and incidence of unintended pregnancy vary widely between countries [95].

This is the context in which we must understand the incidence of unintended pregnancy. After all, pregnancy is typically described in terms of personal behavior and responsibility. Yet these trends show that national and regional conditions can play a critical role in supporting or suppressing bodily autonomy, and that, conversely, the loss or exercise of bodily autonomy can materially affect societal well-being. Both of these notions shift some measure of accountability for these issues away from individuals and onto States.

Most maternal deaths globally are associated with childbirth and pregnancy-related causes such as hemorrhage, high blood pressure and infection contributing to the death of over 810 women every day [122]. However, in some cases, these women had underlying health issues which were exacerbated by taking pregnancy medications. Thus, family planning together with other relevant services, family planning centers such as screening for cervical cancer, HIV, Gonorrhoea, and HPV as well as counseling [123] are vital in mitigating maternal mortality and morbidity. The use of contraceptives has been shown to also reduce the risk of some reproductive cancers (endometrial, and ovarian) pelvic inflammatory diseases, ectopic pregnancy and treatment of menstrual disorders, despite being a risk factor for cardiovascular diseases as well as breast and cervical cancers [124].

Studies have shown that \$2.2 is saved from pregnancy-related healthcare for every dollar invested in reproductive health [125]. We can see in the educational sector that unintended pregnancy delays or results in

dropping out of young women and girls from school. This significantly affects the economy as we continue to have a high percentage of the population doing menial jobs with a wide gender gap in the labor force. Most of these women don't obtain certain skills or reach their career goals with a higher earning power because of drawbacks from their highest level of education. In the case of working mothers, they might have a gap in their pay compared to their childless co-workers and have to rely on assistance from families or relatives. Unintended pregnancy can also cause early marriage which usually fails and is not economically desirable. With children, they would find it difficult to invest in their education and behavioral development and the circle continues [124,126].

Therefore, reducing fertility for the attainment of a demographic dividend; a higher population of the working-age or independent compared to the dependent would contribute tremendously to economic development [125].

Pregnancy issues among adolescents

Unintended pregnancy is often conflated with the issue of teen pregnancy, but the relationship between these two concerns is actually more complex. A majority of births among girls under the age of 18 take place within a marriage or union which in turn is considered a child marriage, a finding reaffirmed by new research from the United Nations Population Division [127]. Many of those pregnancies may well be classified as "intended" by existing surveys, self-reports and other measurements. However, young girls' ability to decide when and with whom to have children is severely constrained if they have any choice at all, so their decision autonomy regarding pregnancy and describing it as "intended" is questionable. A closer look at adolescent fertility, particularly among the youngest adolescents, shows the limitations of looking only at current measures of pregnancy intention when examining autonomy and Motherhood in childhood [127,128]

Looking at 96% of the world's adolescent population, excluding China and high-income countries, it is observed that across the developing world, nearly one in three young women aged 20 to 24 years gave birth in adolescence, defined as ages 10 to 19. Nearly half of these adolescents were children (aged 17 years and younger) and they commonly went on to experience additional births while still in childhood.

In other words, 13% of all young women in low- and middle-income countries begin childbearing while still having children and these adolescents go on to account for a strikingly large portion of all adolescent births. Three-quarters of girls with the first birth at age 14 and younger had a second birth before turning 20, and 40% of those with two births went on to have a third birth before turning 20. Half of the girls with a first birth between ages 15 and 17 had a second birth before turning 20 [129].

The role of child marriage

In 54 Global South countries with data, the majority of first births to girls under the age of 18 occur within a marriage or union, Countries in Central and Southern Asia and in Northern Africa and Western Asia most consistently show high proportions of marital births [130].

The relationship between adolescent childbearing and marriage is that many young brides are expected to bear children or demonstrate their fertility early in their marriage, in which case pregnancy occurs soon after marriage. But we also know pregnancy can be a driver of child marriage, owing to cultural beliefs or gender-stereotyped attitudes about childbearing and wedlock, premarital sex, family honor and lack of access to sexual and reproductive health services including safe abortion [131].

In low- and middle-income countries they face particularly acute risk factors [132]. They are known to face challenges in accessing contraceptive information and services and have their modern contraceptive demands satisfied at lower levels than any other age group [132,133]. It is also worth noting adolescents bear disproportionate costs as a result of unintended pregnancy.

Strategies to improve access to family planning

According to UNFPA, in developing regions, an estimated 218 million women who want to avoid pregnancy are not using safe and effective family planning methods, which means they have an unmet need for family planning. The reasons range from lack of access to information or services to lack of support from their partners or communities. This limits their ability to properly plan and space their children [134]. Improving the access to Family planning can greatly reduce the risk of maternal, newborn, infant, and child illness and death by preventing a high-risk pregnancy in individuals with certain health conditions[135]. Good family Planning services should offer education, counseling and birth control methods and support people's decision of when and if they should have children. Planning pregnancies result in healthier babies and help you avoid social, health, and financial problems[136]. The need to close the gap in access to family planning and contraception cannot be overemphasized. When people are given access to the proper knowledge about contraceptives, they are able to make informed decisions, they are more empowered to live their lives as they choose and not what others impose on them. It is important to make women and girls the key decision-makers on matters concerning their own health as this is crucial to overcoming harmful gender norms [137].

The following strategies can be employed to improve access to family planning:

Improving person-centered care

For successful family planning services, person-centered care is essential. Person-centered care has gotten a lot of attention in the last decade, especially in poor countries. Person-centered care includes specialized care methods that may improve an individual's experience of care and better represent their preferences and beliefs connected to family planning. According to previous research, women around the world experience poor treatment from their providers. They are ignored, screamed at, and discriminated against while receiving care. In person-centered care, some cardinal characteristics of the interactions between providers and patients include - receiving care in a respectful and tender setting, privacy and confidentiality and free communication between providers and patients. In the framework, there is a bidirectional relationship between the provision of care and person-centered care. This will greatly improve the experience and satisfaction of patients [138].

Increased education and awareness

Sexually active people's contraception needs are largely unmet. Young people, married and unmarried, require reliable and user-friendly information and services, It has been discovered that, in addition to giving knowledge and contraceptive methods, increasing education levels helps to improve the adoption of family control devices. Better initiatives used to pass on information and education should be adopted to enable customers to make educated decisions. By providing women and girls who are not ready to become pregnant with evidence-based contraception, they are equipped with all the knowledge that will help them make an informed decision [139]. Information on contraception alternatives should be made available as part of normal counseling in primary healthcare clinics and other healthcare facilities [57].

Proper delegation of tasks among healthcare workers

The number of appropriately trained health care providers is insufficient to meet the demand for contraception, and their distribution can leave women in distant or difficult-to-reach areas without access. Human resource constraints in the health industry have long been recognized as a challenge to achieving health-related Sustainable Development Goals[140]. Task shifting and task sharing are recognized by the World Health Organization as viable techniques for solving the significant shortage of health care workers in low-income countries who can offer reproductive, maternal, and newborn care. To increase access and cost-effectiveness, task sharing is intended to produce a more reasonable distribution of jobs and responsibilities among cadres of health workers.

Both task shifting and sharing aim to incorporate cadres who would not typically be qualified to perform specific jobs in order to expand health care access. Both highlight the importance of training and ongoing educational assistance for all cadres of health workers in order for them to accomplish their duties. When implementing task shifting/sharing, it is critical to maintaining service quality and safety. The skill set for which various cadres are trained and equipped differs by country, therefore the training and education required to enable a cadre to provide an extra family planning service will also change. These modifications may be minor in some circumstances, while more comprehensive training and support programs may be required in others [140].

Access to free or affordable contraception through policies

The use of contraceptives provides significant health benefits by reducing unwanted high-risk pregnancies, maternal and child morbidity and mortality, unsafe abortions, and medical treatment. These benefits are so important that universal access to contraception is internationally recognized as essential to human rights [141].

In some communities, the main barrier to family planning for some individuals is financial constraints. People without insurance cannot access free or low-cost family planning products and services at community clinics. Making available, free, or affordable family planning services in underserved communities will give individuals living in such areas opportunities to access and benefit from them. Community-based financing is viewed as a key effort in fulfilling unmet needs and improving financial access to family planning. Although, conditions under which different community financing schemes for health are developed, implemented, and evaluated vary considerably

Developing and implementing laws, policies and program designs that focus on enhancing the access to family planning services and products and a periodic review of such policies will greatly improve the statistics of people who have access to this.

More than 90 countries, donors, multilateral institutions, civil society, research, development, and private sector organizations made formal commitments to family planning. Their commitments included measurable financial, policy, and programmatic pledges that will contribute to achieving the FP2020 goal of expanding access to contraception [142]. These countries include, but are not limited to, the following:

- France: a policy was introduced to give free birth control to all women under 25. This is a government's response to the decline in contraceptive usage among a certain group of young women. Young women who are no longer covered under their parents' healthcare plan are at risk of giving up contraception because of the expense [143].
- Afghanistan: first commitments to FP2020 were made in 2016 by increasing the number of facilities that offered family planning services and by expanding contraceptive options. Further, the country worked toward strengthening public/private partnerships and engaging with religious leaders, youth, and civil society [144].
- Egypt: social, cultural, and religious norms in Egypt have sometimes caused family planning to be stigmatized. The Government of Egypt is committed to safeguarding the health of its women and girls and mitigating the rate of its population growth by expanding its contraceptive programs and improving the quality of services to attract new users while expanding contraceptive method choice [145].
- Germany: the German government pledged donations of at least 514 million EUR to the rights-based Family Planning and Maternal Health Initiative, which aims to provide information and access to modern contraceptives [146].

IFMSA Contribution to Access to Family Planning

Access to family planning is mainly addressed through the IFMSA Program on Maternal Health and Access to Safe Abortion. Most of the activities were conducted and enrolled as educational and took place on national and local levels. In 3 previous terms, the number of reported activities focusing on family planning specifically were as follows: 2 (2018/19), 3 (2019/20), 8 (2020/21).

In the international settings, the sessions on family planning took place in: EMR17 (educating advocates from Eastern Mediterranean Region), August Meeting 2019 (that focused on adolescents' access to contraception and was delivered to advocates from around the globe). In General Assembly August Meeting 2019, for the first time the policy document on "Family Planning and Access to Contraception" was adopted and was used in internal and external advocacy efforts throughout the last terms.

Global Priorities of the term 2021/22 include "Women and Adolescents' Health" which in many initiatives emphasized the necessity of expanding access to family planning and outlined their situation of vulnerability.

The Commission on Population and Development that the IFMSA attends annually focuses on the global access to family planning and calls member states to strengthen their policies. The IFMSA delivered oral and written statements during the meeting and organized side events voicing the stances on the issue of 1.3 million medical students worldwide [147–149].

REFERENCES

1. Stith Butler A, Wright Clayton E. Overview of Family Planning in the United States. In: Institute of Medicine (US) Committee on a Comprehensive Review of the HHS Office of Family Planning Title X Program, editor. A Review of the HHS Family Planning Program: Mission, Management, and Measurement of Results. National Academies Press (US); 2009.
2. UNFPA ESARO. Seeing the Unseen [Internet]. 2022 Mar [cited 2022 Jun 16]. Available from: <https://esaro.unfpa.org/en/publications/seeing-unseen>
3. Family planning/contraception methods [Internet]. World Health Organization. 2020 [cited 2022 Jun 21]. Available from: <https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception>
4. The royal kingdoms of Ghana, Mali, and Songhay : life in medieval Africa : McKissack, Pat, 1944- : Free Download, Borrow, and Streaming : [Internet]. Internet Archive. [cited 2022 Jun 25]. Available from: <https://archive.org/details/royalkingdomsof00patr>
5. Our History [Internet]. Family Planning New Zealand. [cited 2022 Jun 25]. Available from: <https://www.familyplanning.org.nz/about/our-history>
6. Family Planning [Internet]. Ministry of Health & Family Welfare - Government of India. [cited 2022 Jun 25]. Available from: <https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=821&lid=222>
7. UN Women. Convention on the elimination of all forms of discrimination against women (CEDAW) [Internet]. researchgate.net; 1979. Available from: https://www.researchgate.net/profile/Wade-Cole/publication/316228202_Convention_on_the_Elimination_of_All_Forms_of_Discrimination_against_Women_CEDAW/links/59b1a96f458515a5b4893d41/Convention-on-the-Elimination-of-All-Forms-of-Discrimination-against-Women-CEDAW.pdf
8. Degener T, Koster-Dreese Y. CONVENTION ON THE ELIMINATION OF All FORMS OF DISCRIMINATION AGAINST WOMEN: Adopted and opened for signature, ratification and accession by General Assembly resolution 34/180 of 18 December 1979 Human Rights and Disabled Persons [Internet]. 1995; Available from: https://brill.com/downloadpdf/book/edcoll/9789004479890/B9789004479890_s018.pdf
9. United Nations Human Rights Treaties. CEDAW/C/GC/36: Convention on the Elimination of All Forms of Discrimination against Women. In: General recommendation No 36 (2017) on the right of girls and women to education. 2017.

10. United Nations Human Rights Treaties. CEDAW/C/GC/35: Convention on the Elimination of All Forms of Discrimination against Women. In: General recommendation No 35 on gender based violence against women, updating general recommendation No 19. 2017.
11. United Nations Human Rights Treaties. GENERAL RECOMMENDATIONS ADOPTED BY THE COMMITTEE ON THE ELIMINATION OF DISCRIMINATION AGAINST WOMEN. In: General recommendation No 24: Article 12 of the Convention (women and health).
12. United Nations Human Rights Treaties. CEDAW/C/GC/34: Convention on the Elimination of All Forms of Discrimination against Women. In: General recommendation No 34 (2016) on the rights of rural women [Internet]. 2016. Available from: https://tbinternet.ohchr.org/Treaties/CEDAW/Shared%20Documents/1_Global/INT_CEDAW_GEC_7933_E.pdf
13. United Nations. Convention on the Rights of the Child [Internet]. 1989. Available from: <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>
14. International Conference on Population and Development 5-13 September 1994, Cairo, Egypt [Internet]. United Nations. United Nations; [cited 2022 Jun 26]. Available from: <https://www.un.org/en/conferences/population/cairo1994>
15. Fund UNP. Programme of Action: Adopted at the International Conference on Population and Development: Cairo, 5-13 September 1994. United Nations Population Fund; 1996.
16. About the [Internet]. Nairobi Summit. 2019 [cited 2022 Jun 25]. Available from: <https://www.nairobisummiticpd.org/content/about-nairobi-summit>
17. Nairobi Statement on ICPD25: Accelerating the Promise [Internet]. Nairobi Summit. 2019 [cited 2022 Jun 25]. Available from: <https://www.nairobisummiticpd.org/content/icpd25-commitments>
18. World Conferences on Women [Internet]. UN Women – Headquarters. [cited 2022 Jun 25]. Available from: <https://www.unwomen.org/en/how-we-work/intergovernmental-support/world-conferences-on-women>
19. Fourth World Conference on Women, Beijing 1995 [Internet]. [cited 2022 Jun 25]. Available from: <https://www.un.org/womenwatch/daw/beijing/platform/health.htm>
20. CSW66 Agreed Conclusions. In: Achieving gender equality and the empowerment of all women and girls in the context of climate change, environmental and disaster risk reduction policies and programmes. 2022.
21. UN Women. Agreed conclusions: Elimination and prevention of all forms of violence against women and girls. In: 2013 Commission on the Status of Women. 2013.
22. Sixty-first session of the General Assembly by resolution A/RES/61/. Convention on the Rights of Persons with Disabilities. In.
23. Sustainable Development Goals [Internet]. UNDP. [cited 2022 Jun 26]. Available from: <https://www.undp.org/sustainable-development-goals>
24. United Nations Department of Economic and Social Affairs. Family Planning and the 2030 Agenda for Sustainable Development. 2019.
25. Barbara Dockalova, Katie Lau, Heather Barclay, Alison Marshall. Sustainable Development Goals and Family Planning 2020. International Planned Parenthood Federation (IPPF); 2016.
26. Sultan S. The Effects of Education, Poverty, and Resources on Family Planning in Developing Countries. Clinics Mother Child Health [Internet]. 2018 [cited 2022 Jun 28];15(1). Available from: <https://www.walshmedicalmedia.com/open-access/the-effects-of-education-poverty-and-resources-on-family-planning-in-developing-countries-2090-7214-1000289.pdf>
27. Family Planning and Reproductive Health [Internet]. USAID. 2021 [cited 2022 Jun 27]. Available from: <https://www.usaid.gov/global-health/health-areas/family-planning>
28. Every woman is at risk [Internet]. United Nations Population Fund. [cited 2022 Jun 27]. Available from: <https://www.unfpa.org/swp2022/risk>
29. Contraception [Internet]. World Health Organization. [cited 2022 Jun 27]. Available from: https://www.who.int/health-topics/contraception#tab=tab_1

30. Ensuring human rights in the provision of contraceptive information and services [Internet]. World Health Organization. 2014 [cited 2022 Jun 27]. Available from: https://apps.who.int/iris/bitstream/handle/10665/102539/9789241506748_eng.pdf?sequence=1
31. Elias J. Intra-uterine contraceptive devices. Practitioner [Internet]. 1985 May; Available from: <https://www.ncbi.nlm.nih.gov/pubmed/4011570>
32. What is the Effectiveness of Spermicide? [Internet]. Planned Parenthood. [cited 2022 Jun 28]. Available from: <https://www.plannedparenthood.org/learn/birth-control/spermicide/how-effective-spermicide>
33. Emergency contraception [Internet]. World Health Organization. 2021 [cited 2022 Jun 27]. Available from: <https://www.who.int/news-room/fact-sheets/detail/emergency-contraception>
34. Infertility [Internet]. World Health Organization. 2020 [cited 2022 Jun 21]. Available from: <https://www.who.int/news-room/fact-sheets/detail/infertility#:~:text=Infertility%20is%20a%20disease%20of,on%20thei,r%20families%20and%20communities.>
35. Fertility problems: assessment and treatment [Internet]. National Institute for Health and Care Excellence. 2013 [cited 2022 Jun 26]. Available from: <https://www.nice.org.uk/guidance/cg156/chapter/Recommendations#medical-and-surgical->
36. Sperm donation [Internet]. 2020 [cited 2022 Jul 19]. Available from: <https://www.mayoclinic.org/tests-procedures/sperm-donation/about/pac-20395032>
37. Intrauterine insemination (IUI) [Internet]. 2021 [cited 2022 Jul 19]. Available from: <https://www.mayoclinic.org/tests-procedures/intrauterine-insemination/about/pac-20384722>
38. IVF [Internet]. nhs.uk. 2021 [cited 2022 Jul 19]. Available from: <https://www.nhs.uk/conditions/ivf/>
39. Reciprocal IVF [Internet]. Reproductive Science Center of New Jersey. 2019 [cited 2022 Jul 19]. Available from: <https://fertilitynj.com/services/lgbtqia-family-building/reciprocal-ivf/>
40. American Society for Reproductive Medicine. Website [Internet]. Reproductive Facts. Available from: <https://www.reproductivefacts.org/news-and-publications/patient-fact-sheets-and-booklets/documents/fact-sheets-and-info-booklets/egg-donation/>
41. Healthdirect Australia. Surrogacy. 2021 Aug 14 [cited 2022 Jul 19]; Available from: <https://www.pregnancybirthbaby.org.au/surrogacy>
42. Nachtigall RD. International disparities in access to infertility services. Fertility and Sterility [Internet]. 2006 Apr [cited 2022 Jun 27];85(4). Available from: <https://pubmed.ncbi.nlm.nih.gov/16580367/>
43. A Public Health Focus on Infertility Prevention, Detection, and Management [Internet]. 2019 [cited 2022 Jun 27]. Available from: <https://www.cdc.gov/reproductivehealth/infertility/whitepaper-pg1.htm>
44. LGBT Fertility Options - IVF for Gay and Lesbian Couples [Internet]. RMA Network - Fertility Clinic. 2021 [cited 2022 Jul 19]. Available from: <https://rmanetwork.com/family-building-options/lgbtq-fertility-options/>
45. Solter C. Comprehensive Reproductive Health and Family Planning Training Curriculum [Internet]. Pathfinder International; 1998 [cited 2022 Jun 28]. Available from: https://pdf.usaid.gov/pdf_docs/PBAAD148.pdf
46. Family Planning Module: 3. Counselling for Family Planning [Internet]. The Open University. [cited 2022 Jun 28]. Available from: <https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=138&printable=1>
47. Family Planning Counselling. In: Counselling for Maternal and Newborn Health Care: A Handbook for Building Skills. World Health Organization; 2013.
48. Bonnington A, Dianat S, Kerns J, Hastings J, Hawkins M, De Haan G, et al. Society of Family Planning clinical recommendations: Contraceptive counseling for transgender and gender diverse people who were female sex assigned at birth. Contraception. 2020 Aug;102(2):70–82.
49. Public Health at a Glance - Unmet Need for Contraception [Internet]. [cited 2022 Jun 27]. Available from: http://web.worldbank.org/archive/website01213/WEB/0__CO-17.HTM
50. The DHS Program [Internet]. [cited 2022 Jun 27]. Available from: <https://dhsprogram.com/Topics/Unmet-Need.cfm>

51. Atake EH, Gnakou AP. Women's empowerment and fertility preferences in high fertility countries in Sub-Saharan Africa. *BMC Women's Health* [Internet]. 2019 Apr 5 [cited 2022 Jun 28];19(1). Available from: <https://pubmed.ncbi.nlm.nih.gov/30953494/>
52. Boadu I. Coverage and determinants of modern contraceptive use in sub-Saharan Africa: further analysis of demographic and health surveys. *Reprod Health*. 2022 Jan 21;19(1):1–11.
53. PRB 2019 Family Planning Data Sheet [Internet]. [cited 2022 Jun 27]. Available from: <https://www.prb.org/fpdata/>
54. Baird DT, Cameron S, Evers JLH, Gemzell-Danielsson K, Glasier A, Moreau C, et al. Emergency contraception. Widely available and effective but disappointing as a public health intervention: a review. *Hum Reprod*. 2015 Feb 11;30(4):751–60.
55. Agarwal A, Mulgund A, Hamada A, Chyatte MR. A unique view on male infertility around the globe. *Reprod Biol Endocrinol* [Internet]. 2015 [cited 2022 Jun 27];13. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4424520/>
56. Chukwuji, Tsafe, Sayudi. Awareness, access and utilization of family planning information in Zamfara State, Nigeria. *Library Philosophy and Practice* [Internet]. 2018; Available from: https://www.researchgate.net/profile/Aliyu-Tsafe-2/publication/324181371_Awareness_Access_and_Utilization_of_Family_Planning_Information_in_Zamfara_State_Nigeria/links/5b7ae78e92851c1e1223a834/Awareness-Access-and-Utilization-of-Family-Planning-Information-in-Zamfara-State-Nigeria.pdf?_sg%5B0%5D=started_experiment_milestone&origin=journalDetail
57. Alenezi GG, Haridi HK. Awareness and use of family planning methods among women in Northern Saudi Arabia. *Middle East Fertility Society Journal*. 2021 Apr 1;26(1):1–8.
58. Hladky KJ, Allsworth JE, Madden T, Secura GM, Peipert JF. Women's knowledge about intrauterine contraception. *Obstetrics and Gynecology* [Internet]. 2011 Jan [cited 2022 Jun 26];117(1). Available from: <https://pubmed.ncbi.nlm.nih.gov/21173643/>
59. Williamson LM, Parkes A, Wight D, Petticrew M, Hart GJ. Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research. *Reproductive Health* [Internet]. 2009 Feb 19 [cited 2022 Jun 26];6. Available from: <https://pubmed.ncbi.nlm.nih.gov/19228420/>
60. Singh S, Darroch JE, Ashford LS. Adding it up: The costs and benefits of investing in sexual and reproductive health 2014. 2014 Dec 4 [cited 2022 Jun 26]; Available from: https://www.guttmacher.org/report/adding-it-costs-and-benefits-investing-sexual-and-reproductive-health-2014?utm_source=Master+List&utm_campaign=caa65b4fd7-GPR_18_1_Barot_A_B_campaign&utm_medium=email&utm_term=0_9ac83dc920-cao65b4fd7-244293949
61. Creel, Sass, Yinger. Client-centered quality: clients' perspectives and barriers to receiving care. *New Perspectives on Quality Care* [Internet]. 2002; Available from: https://www.researchgate.net/profile/Justine-Sass/publication/242758081_Client-Centered_Quality_Clients%27_Perspectives_and_Barriers_to_Receiving_Care_Population_Council_and_Population_Reference_Bureau/links/57ad73ff08ae0932c9750b96/Client-Centered-Quality-Clients-Perspectives-and-Barriers-to-Receiving-Care-Population-Council-and-Population-Reference-Bureau.pdf
62. Ali MM, Cleland JG, Shah IH. Causes and consequences of contraceptive discontinuation: evidence from 60 demographic and health surveys [Internet]. World Health Organization; 2012 [cited 2022 Jun 26]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/75429?sequence=1>
63. Lee J, Jezewski MA. Attitudes toward oral contraceptive use among women of reproductive age: a systematic review. *ANS Advances in Nursing Science*. 2007 Jan;30(1):E85–103.
64. Grubb. Women's perceptions of the safety of the pill: a survey in eight developing countries: Report of the perception of the pill survey group. *Journal of Biosocial Science* [Internet]. 1987; Available from: <https://www.cambridge.org/core/journals/journal-of-biosocial-science/article/womens-perceptions-of-the-safety-of-the-pill-a-survey-in-eight-developing-countries/F9DC318F80E76A2ABEB30BB9D1672732>
65. Diamond-Smith N, Campbell M, Madan S. Misinformation and fear of side-effects of family planning. *Culture, Health & Sexuality*. 2012 Mar 5;14(4):421–33.
66. Gueye A, Speizer IS, Corroon M, Okigbo CC. Belief in Family Planning Myths at the Individual And Community Levels and Modern Contraceptive Use in Urban Africa. *International Perspectives on Sexual and Reproductive*

Health. 2015 Dec;41(4):191.

67. Kollodge R. My Body is My Own: Claiming the Right to Autonomy and Self-determination. 2021.
68. The unmet need for social context in family planning [Internet]. World Health Organization. 2020 [cited 2022 Jun 26]. Available from: <https://www.who.int/news/item/10-03-2020-the-unmet-need-for-social-context-in-family-planning>
69. MEASURE Evaluation. The Importance of Gender in Family Planning and Reproductive Health Data [Internet]. 2017 Mar. Available from: <https://www.measureevaluation.org/resources/publications/fs-17-205b.html#:~:text=The%20Importance%20of%20Gender%20in%20Family%20Planning%20and%20Reproductive%20Health%20Data,-Download%20Document%3A&text=Abstract%3A,benefits%20for%20men%20and%20women.>
70. Ndenzako FN. Male contraceptive prevalence and factors associated with contraceptive use among men in Ngara, Tanzania. 2001 [cited 2022 Jun 26]; Available from: <https://www.duo.uio.no/handle/10852/30089>
71. Slaymaker E, Scott RH, Palmer MJ, Palla L, Marston M, Gonsalves L, et al. Trends in sexual activity and demand for and use of modern contraceptive methods in 74 countries: a retrospective analysis of nationally representative surveys [Internet]. Vol. 8, The Lancet Global Health. 2020. p. e567–79. Available from: [http://dx.doi.org/10.1016/s2214-109x\(20\)30060-7](http://dx.doi.org/10.1016/s2214-109x(20)30060-7)
72. Gribble J, Haffey J. Reproductive health in sub-Saharan Africa [Internet]. Population Reference Bureau; 2008. Available from: https://pdf.usaid.gov/pdf_docs/PNADO910.pdf
73. Alio AP, Daley EM, Nana PN, Duan J, Salihu HM. Intimate partner violence and contraception use among women in Sub-Saharan Africa. International Journal of Gynaecology and Obstetrics. 2009 Oct;107(1):35–8.
74. World Health Organization, Pan American Health Organization. Understanding and addressing violence against women : intimate partner violence [Internet]. World Health Organization; 2012 [cited 2022 Jun 26]. Report No.: WHO/RHR/12.36. Available from: <https://apps.who.int/iris/handle/10665/77432>
75. Kaneda, Smith. Intimate Partner Violence and Unmet Need for Family Planning. Population Reference Bureau [Internet]. 2015; Available from: https://paa.confex.com/paa/2016/mediafile/ExtendedAbstract/Paper7280/PAA%20abstract_IPV%20and%20unmet%20need.pdf
76. Fortier L. Cultural Barriers to Family Planning [Internet]. Girls' Globe. 2013 [cited 2022 Jun 26]. Available from: <https://www.girlsglobe.org/2013/11/14/cultural-barriers-to-family-planning/>
77. Francis A, Jasani S, Bachmann G. Contraceptive challenges and the transgender individual. Women's Midlife Health. 2018 Jul 13;4(1):1–4.
78. Harlan SV. How Can We Ensure Universal Access to Contraceptives? [Internet]. Knowledge SUCCESS. 2020 [cited 2022 Jun 26]. Available from: <https://knowledgesuccess.org/2020/01/10/how-can-we-ensure-universal-access-to-contraceptives/>
79. Torres A, Forrest JD. The costs of contraception. Family Planning Perspectives [Internet]. 1983 [cited 2022 Jun 26];15(2). Available from: <https://pubmed.ncbi.nlm.nih.gov/6671479/>
80. Prata N. Making family planning accessible in resource-poor settings. Philosophical Transactions of the Royal Society of London. 2009 Oct 10;364(1532):3093.
81. Kumar N, Singh AK. Trends of male factor infertility, an important cause of infertility: A review of literature. Journal of Human Reproductive Sciences. 2015 Oct;8(4):191–6.
82. Barriers and factors associated with significant delays to initial consultation and treatment for infertile patients and partners of infertile patients. Reproductive Biomedicine Online. 2021 Dec 1;43(6):1126–36.
83. Smith JF, Eisenberg ML, Glidden D, Millstein SG, Cedars M, Walsh TJ, et al. Socioeconomic disparities in the use and success of fertility treatments: analysis of data from a prospective cohort in the United States. Fertil Steril. 2011 Jul;96(1):95–101.
84. Eisenberg ML, Smith JF, Millstein SG, Pasch LA, Nachtigall RD, Katz PP. Predictors of not pursuing infertility treatment after an infertility diagnosis: examination of a prospective U.S. cohort [Internet]. Vol. 92, Fertility and Sterility. 2009. p. S26–7. Available from: <http://dx.doi.org/10.1016/j.fertnstert.2009.07.103>

85. Mosalanejad L, Parandavar N, Abdollahifard S. Barriers to Infertility Treatment: An Integrated Study. *Global Journal of Health Science*. 2014 Jan;6(1):181.
86. Sarder MA, Islam SMS, Maniruzzaman M, Talukder A, Ahammed B. Correction: Prevalence of unintended pregnancy and its associated factors: Evidence from six south Asian countries. *PLoS One*. 2021 Oct 26;16(10):e0259360.
87. Ameyaw EK, Budu E, Sambah F, Baatiema L, Appiah F, Seidu AA, et al. Prevalence and determinants of unintended pregnancy in sub-Saharan Africa: A multi-country analysis of demographic and health surveys. *PLoS One*. 2019 Aug 9;14(8):e0220970.
88. Finer LB, Zolna MR. Declines in Unintended Pregnancy in the United States, 2008–2011. 2016 Mar 3 [cited 2022 Jun 21]; Available from: <https://www.nejm.org/doi/full/10.1056/nejmsa1506575>
89. Garraza LG, Tobar F, Rodríguez BI. Out-of-pocket spending for contraceptives in Latin America. *Sexual and reproductive health matters* [Internet]. 2020 Dec [cited 2022 Jun 21];28(2). Available from: <https://pubmed.ncbi.nlm.nih.gov/33131452/>
90. Acharya DR, Bell JS, Simkhada P, van Teijlingen ER, Regmi PR. Women's autonomy in household decision-making: a demographic study in Nepal. *Reproductive Health*. 2010 Jul 15;7(1):1–12.
91. Chant S. Cities through a “gender lens”: a golden “urban age” for women in the global South? *Environment and Urbanization*. 2013;25(1):9–29.
92. Darteh EKM, Dickson KS, Doku DT. Women's reproductive health decision-making: A multi-country analysis of demographic and health surveys in sub-Saharan Africa. *PLoS One*. 2019 Jan 9;14(1):e0209985.
93. Muanda M, Ndongo PG, Taub LD, Bertrand JT. Barriers to Modern Contraceptive Use in Kinshasa, DRC. *PLoS One* [Internet]. 2016 [cited 2022 Jun 21];11(12). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5132197/>
94. Suttie D. Overview: Rural Poverty in Developing Countries: Issues, Policies and Challenges [Internet]. International Fund for Agricultural Development (IFAD); 2019 [cited 2022 Jun 21]. Available from: <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/03/Suttie-Paper.pdf>
95. Bearak JM, Popinchalk A, Beavin C, Ganatra B, Moller AB, Tunçalp Ö, et al. Country-specific estimates of unintended pregnancy and abortion incidence: a global comparative analysis of levels in 2015–2019. *BMJ Global Health*. 2022 Mar 1;7(3):e007151.
96. United Nations. Gender Inequality Index. Human Development Reports [Internet]. [cited 2022 Jun 21]; Available from: <https://hdr.undp.org/en/content/gender-inequality-index-gii>
97. Home Page - Ipas [Internet]. Ipas. 2020 [cited 2022 Jun 21]. Available from: <https://www.ipas.org/>
98. National Women's Law Center, Law Students for Reproductive Justice. If You Really Care about LGBT Rights, You Should Care about Reproductive Justice! [Internet]. 2011 [cited 2022 Jun 27]. Available from: https://nwlrc.org/wp-content/uploads/2015/08/final_lgbt_fact_sheet_0.pdf
99. James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. The Report of the 2015 U.S. Transgender Survey [Internet]. National Center for Transgender Equality; 2016. Available from: <https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf>
100. Mercer CH, Bailey JV, Johnson AM, Erens B, Wellings K, Fenton KA, et al. Women who report having sex with women: British national probability data on prevalence, sexual behaviors, and health outcomes. *American Journal of Public Health* [Internet]. 2007 Jun [cited 2022 Jun 22];97(6). Available from: <https://pubmed.ncbi.nlm.nih.gov/17463372/>
101. Disparities in access to health care among adults with physical disabilities: Analysis of a representative national sample for a ten-year period. *Disability and Health Journal*. 2015 Apr 1;8(2):182–90.
102. Sterilization of People With Disabilities: Acknowledging the Past and Present History, Rhetoric, and Effects of a Harmful Practice [Internet]. Rights View. 2019 [cited 2022 Jun 22]. Available from: <https://blogs.cuit.columbia.edu/rightsviews/2019/01/27/sterilization-of-people-with-disabilities-acknowledging-the-past-and-present-history-rhetoric-and-effects-of-a-harmful-practice/>
103. United Nations. Sexual and reproductive health and rights of girls and young women with disabilities. In: *Promotion and protection of human rights: human rights questions, including alternative approaches for improving the effective enjoyment of human rights and fundamental freedoms* [Internet]. 2017. (A/72/133). Available from:

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/N17/214/63/PDF/N1721463.pdf?OpenElement>

104. Chung HW, Kim EM, Lee JE. Comprehensive understanding of risk and protective factors related to adolescent pregnancy in low- and middle-income countries: A systematic review. *Journal of Adolescence* [Internet]. 2018 Dec [cited 2022 Jun 27];69. Available from: <https://pubmed.ncbi.nlm.nih.gov/30390598/>
105. United Nations Committee on the Rights of the Child. General comment No. 20 (2016) on the implementation of the rights of the child during adolescence [Internet]. 2016. Available from: <https://www.refworld.org/docid/589dad3d4.html>
106. UNFPA. Facing the facts: Adolescent girls and contraception [Internet]. 2015 [cited 2022 Jun 27]. Available from: https://www.unfpa.org/sites/default/files/resource-pdf/UNFPA_Adolescent_brochure.pdf
107. Tanabe M, Myers A, Bhandari P, Cornier N, Doraiswamy S, Krause S. Family planning in refugee settings: findings and actions from a multi-country study. *Confl Health*. 2017 May 31;11(1):1–12.
108. United Nations Department of Economic and Social Affairs. State of the World's Indigenous Peoples: Indigenous Peoples' Access to Health Services. United Nations; 2016. 200 p.
109. Mallas SN. Increasing Access To Family Planning Services Among Indigenous Groups [Internet]. Paperpile. [cited 2022 Jul 18]. Available from: <https://paperpile.com/app/p/932e51d4-be7a-0ed3-bacf-a9c8d0a5e9d2>
110. Hardee K, Croce-Galis M, Gay J. Are men well served by family planning programs? [Internet]. Vol. 14, *Reproductive Health*. 2017. Available from: <http://dx.doi.org/10.1186/s12978-017-0278-5>
111. Plana O. Male Contraception: Research, New Methods, and Implications for Marginalized Populations. *Am J Mens Health*. 2017 Jul;11(4):1182–9.
112. Dorman E, Bishai D. Demand for male contraception. *Expert Rev Pharmacoecon Outcomes Res*. 2012 Oct;12(5):605–13.
113. Aly J, Haeger KO, Christy AY, Johnson AM. Contraception access during the COVID-19 pandemic. *Contraception and Reproductive Medicine*. 2020 Oct 8;5(1):1–9.
114. McGinn T. Reproductive Health of War-Affected Populations: What Do We Know? [Internet]. Guttmacher Institute. 2005 [cited 2022 Jun 27]. Available from: <https://www.guttmacher.org/journals/ipsrh/2000/12/reproductive-health-war-affected-populations-what-do-we-know>
115. Rackham A. Ukraine war: Volunteers deliver emergency contraception pills. *BBC News* [Internet]. 2022 Apr 29 [cited 2022 Jun 27]; Available from: <https://www.bbc.com/news/health-61269792>
116. Levy MG. The War in Ukraine Is a Reproductive Health Crisis for Millions [Internet]. *WIRED*. 2022 [cited 2022 Jun 27]. Available from: <https://www.wired.com/story/the-war-in-ukraine-is-a-reproductive-health-crisis-for-millions/>
117. Morris CN, Lopes K, Gallagher MC, Ashraf S, Ibrahim S. When political solutions for acute conflict in Yemen seem distant, demand for reproductive health services is immediate: a programme model for resilient family planning and post-abortion care services. *Sexual and Reproductive Health Matters* [Internet]. 2019 May 23 [cited 2022 Jun 27]; Available from: <https://www.tandfonline.com/doi/abs/10.1080/26410397.2019.1610279>
118. Women and girls continue to pay a heavy price in Yemen as the conflict slips further from global view [Internet]. United Nations Population Fund. [cited 2022 Jun 27]. Available from: <https://www.unfpa.org/press/women-and-girls-continue-pay-heavy-price-yemen-conflict-slips-further-global-view>
119. Berryman L. Why is family planning seldom prioritised in refugee settings? *The Guardian* [Internet]. 2013 Jul 25 [cited 2022 Jun 27]; Available from: <https://amp.theguardian.com/global-development/poverty-matters/2013/jul/25/refugees-family-planning-health-syria>
120. Thomson Reuters Foundation. Why family planning is key to climate adaptation [Internet]. *news.trust.org*. [cited 2022 Jun 27]. Available from: <https://news.trust.org/item/20190927141807-uhqjk/>
121. Gender-based violence [Internet]. UNFPA Sierra Leone. 2020 [cited 2022 Jun 27]. Available from: <https://sierraleone.unfpa.org/en/topics/gender-based-violence-11>
122. Maternal health [Internet]. [cited 2022 Jun 27]. Available from: https://www.who.int/health-topics/maternal-health#tab=tab_1

123. Kavanaugh ML, Anderson R. Contraception and Beyond: The Health Benefits of Services Provided at Family Planning Centers [Internet]. Guttmacher Institute; 2013 Jul [cited 2022 Jun 27]. Available from: <https://www.guttmacher.org/report/contraception-and-beyond-health-benefits-services-provided-family-planning-centers>
124. National Research Council (US) Committee on Population. Contraception and Reproduction: Health Consequences for Women and Children in the Developing World. National Academies Press; 1989.
125. Kanem N. The economic benefits of family planning [Internet]. World Economic Forum. 2018 [cited 2022 Jun 27]. Available from: <https://www.weforum.org/agenda/2018/07/the-economic-benefits-of-family-planning/>
126. Sonfield A, Hasstedt K, Kavanaugh ML, Anderson R. The Social and Economic Benefits of Women's Ability To Determine Whether and When to Have Children. 2013 Mar 1 [cited 2022 Jun 27]; Available from: <https://www.guttmacher.org/report/social-and-economic-benefits-womens-ability-determine-whether-and-when-have-children>
127. Welcome to the United Nations. [cited 2022 Jun 27]; Available from: <https://www.un.org/development/>
128. Website [Internet]. Available from: <http://hrw.org/report/2018/06/14/leave->
129. Women and Young Persons with Disabilities [Internet]. United Nations Population Fund. [cited 2022 Jun 27]. Available from: <https://www.unfpa.org/featured-publication/women-and-young-persons-disabilities>
130. Arora A. Child Marriage: Latest trends and future prospects [Internet]. UNICEF; 2018 Jul [cited 2022 Jun 27]. Available from: <https://data.unicef.org/resources/child-marriage-latest-trends-and-future-prospects/>
131. New Findings on Child Marriage in Sub-Saharan Africa. Annals of Global Health. 2017 Sep 1;83(5-6):781–90.
132. Neal S, Channon AA, Chandra-Mouli V, Madise N. Trends in adolescent first births in sub-Saharan Africa: a tale of increasing inequity? International Journal for Equity in Health. 2020 Sep 4;19(1):1–11.
133. Kantorová V, Wheldon MC, Dasgupta ANZ, Ueffing P, Castanheira HC. Contraceptive use and needs among adolescent women aged 15-19: Regional and global estimates and projections from 1990 to 2030 from a Bayesian hierarchical modelling study. PLoS One [Internet]. 2021 Mar 4 [cited 2022 Jun 27];16(3). Available from: <https://pubmed.ncbi.nlm.nih.gov/33661965/>
134. Family planning [Internet]. United Nations Population Fund. [cited 2022 Jun 26]. Available from: <https://www.unfpa.org/family-planning>
135. World Health Organization Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, editors. Promoting Family Planning. In: Family Planning: A Global Handbook for Provide. 2018.
136. Why is family planning important to you as an individual? [Internet]. Alaska Department of Health and Social Services: Division of Public Health. [cited 2022 Jun 26]. Available from: <https://dhss.alaska.gov/dph/wcfh/Pages/informedconsent/familyplanning/importance.aspx>
137. Gates MF. Family Planning [Internet]. Bill & Melinda Gates Foundation. [cited 2022 Jun 26]. Available from: <https://www.gatesfoundation.org/our-work/programs/global-development/family-planning>
138. Diamond-Smith N, Warnock R, Sudhinaraset M. Interventions to improve the person-centered quality of family planning services: a narrative review. Reproductive Health. 2018 Aug 28;15(1):1–17.
139. Malhotra V, Bhat S. Strategies for family planning going forward - Social marketing & expanding contraceptive choices package. Indian Journal of Medical Research. 2014 Nov;140(Suppl 1):S6.
140. World Health Organization. Task Sharing to Improve Access to Family Planning/Contraception [Internet]. 2017 [cited 2022 Jun 27]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/259633/WHO-RHR-17.20-eng.pdf>
141. Universal Access to Contraception [Internet]. American Public Health Association. 2015 [cited 2022 Jun 26]. Available from: <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2015/12/17/09/14/universal-access-to-contraception>
142. Commitment Maker FP2020 Landing Page [Internet]. FP 2030. [cited 2022 Jun 26]. Available from:

<https://fp2030.org/FP2020-commitment-makers>

143. Rodriguez L. Young Women in France Can Now Receive Contraception for Free [Internet]. Global Citizen. 2021 [cited 2022 Jun 26]. Available from: <https://www.globalcitizen.org/en/content/young-women-under-25-free-contraception-france/>
144. Afghanistan [Internet]. FP 2030. 2022 [cited 2022 Jun 26]. Available from: <https://fp2030.org/afghanistan>
145. Egypt's Commitment to enhance family planning [Internet]. FP 2030. [cited 2022 Jun 26]. Available from: <https://fp2030.org/sites/default/files/2017-Egypt-FP2020-Commitment.pdf>
146. Germany [Internet]. FP 2030. 2022 [cited 2022 Jun 26]. Available from: <https://fp2030.org/germany>
147. International Federation of Medical Students' Associations. Programs Annual Impact Report 2018-2019 [Internet]. [cited 2022 Jul 19]. Available from: https://drive.google.com/file/d/1xnMd_KCuT55e3RJbu77LmqvByUWNQBUC/view
148. International Federation of Medical Students' Associations. Programs Annual Impact Report 2019-2020 [Internet]. [cited 2022 Jul 19]. Available from: https://drive.google.com/file/d/1WbpDLWsr99H_fPxNORdqZNPJH-b7GSnf/view?usp=embed_facebook
149. International Federation of Medical Students' Associations. Programs Annual Impact Report 2020-2021 [Internet]. [cited 2022 Jul 19]. Available from: <https://drive.google.com/file/d/1e4V60TimzxxSJpLrkTEpJDewE74I52T6/view>