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IFMSA Policy Document Reproductive Health

Proposed by Team of Officials

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Policy Statement

Introduction

According to the WHO, reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health and rights are internationally recognised as a key priority in global health, especially following the International Conference on Population and Development in 1994 and the 4th Conference on Women in 1995. New emerging issues, such as climate change, the intersection of reproductive and mental health, and assisted reproduction together with longstanding challenges, such as reproductive systems disorders and pregnancy care, create the need for renewed action in this field.

IFMSA Position

IFMSA strongly advocates for the protection and promotion of reproductive health and rights of every individual, no matter their race, ethnicity, gender identity, sexual orientation, religion, age, social and economic status. Every person and especially women and young girls should have the right to make their own informed decisions for their reproductive status and enjoy the highest attainable standard of care and treatment. IFMSA emphasizes the need for a holistic, multisectoral and rights-based approach to reproductive health, with increased attention to arising global health issues of concern, which may negatively affect the reproductive health and rights of all people and in particular the most vulnerable.

Call to Action

Therefore, IFMSA calls for:

Governments & Policy-makers to:

1. Prioritise the protection and promotion of reproductive health and rights following the ICPD Programme of Action and the Beijing Platform of Action;
2. Increase funding towards research, prevention and treatment of reproductive health disorders and programs promoting the reproductive health and rights of women and girls;
3. Expand access to assisted reproduction technology programs for all individuals, including marginalised communities, same-sex couples and LGBTQIA+ individuals, making the appropriate legislative reforms;
4. Regulate the way assisted reproduction technology programs operate in order to eliminate cases of eugenics or sex-selective processes that act against specific gender or other groups;
5. Invest in universal coverage of antenatal, intrapartum and postpartum needs of women, following the established international guidelines;
6. Establish national strategies for the prevention of negative effects of climate change and global health crises to reproductive health and rights;
7. Implement resilient mechanisms to mitigate the effects of mental health disorders on women, girls and men inflicted with reproductive health disorders;
8. Ensure proactive and meaningful engagement of society, in particular of women, girls and young people, in the development of all policies and programs related to reproductive health.

WHO, UN Agencies and other intergovernmental organizations to:

1. Spearhead the research on the effects of climate change on reproductive health and rights and produce specific recommendations to be included in the International Health Regulations;
2. Provide technical guidance to national governments for universal provision of antenatal, intrapartum and postpartum care in order to achieve the SDGs related to maternal and newborn mortality;



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International Federation of
Medical Students' Associations

3. Take proactive measures for the protection of those most vulnerable for reproductive health disorders and rights violations during periods of global health crises and unrest;
4. Initiate research and provide recommendations for the safety of vaccination for COVID-19 for pregnant, breastfeeding and women planning to become pregnant;
5. Provide meaningful opportunities for engagement of women, girls and youth in high-level meeting and decision making processes in regards to reproductive health and rights, void of any kind of discrimination and tokenism.

The Health Care Sector and Health Care Providers to:

1. Provide dignified and respectful care of the highest level to all patients combating reproductive health issues;
2. Refrain from imposing their personal opinions on the treatment and counselling of patients for reproductive health issues;
3. Build the capacity and raise the awareness of all health care workers, and in particular those specialising in reproductive health, on emerging issues of the field, including but not limited to climate change, mental health, humanitarian and global health crises;

Medical Schools and other teaching institutions to:

1. Train medical and other students to provide dignified, non-discriminatory and culturally sensitive reproductive healthcare services;
2. Re-evaluate existing curricula and teaching methods focusing on reproductive health issues and implement changes that tackle arising topics in the field;
3. Build the capacity of teaching staff on emerging issues of reproductive health, including but not limited to the intersection with climate change, humanitarian crises, pandemics and other global health issues;
4. Support student-led initiatives on the education for and promotion of reproductive health and rights;
5. Allocate human and other resources in research efforts for emerging reproductive health issues, while meaningfully engaging students at all stages of the respective projects.

IFMSA National Member Organisations and medical students to:

1. Identify stakeholders and actively advocate for reproductive health and rights issues;
2. Create and contribute to awareness and education campaigns and activities on reproductive health and rights;
3. Utilise existing mechanisms inside IFMSA to step-up and assess the impact of their interventions on reproductive health and rights;
4. Undertake research related to reproductive health, including on prevention, treatment and stigma;
5. Collaborate with other civil-society, non-governmental and youth-led organisations on joint efforts for reproductive health and rights.



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Position Paper

Background Information

Reproductive health is defined by the WHO as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.”(1) Further to this definition, reproductive health care encompasses all these techniques that will protect and promote reproductive well-being, while treating any arising pathologies. These concepts were flagged and internationally recognised in the 4th World Conference for Women in Beijing in 1995 and in the Platform of Action launched thereafter. (2)

The Programme of Action produced as an outcome of the International Conference on Population and Development (ICPD) in 1994 had paved the way for the recognition of reproductive health and rights. A lot of emphasis was given to the right of men and women to access information and reproductive health care services that are in line with the concepts of universal health coverage (quality, affordability, acceptability, appropriateness). The ICPD Programme of Action also highlighted the intersection of reproductive and human rights. In the core lies the right of every person to decide independently if, when and how many children to have, as well as the right to information and attaining a standard level of sexual and reproductive health. (3)

Women hold most of the burden when it comes to reproductive health disorders. It is estimated that 808 women die each day due to pregnancy related complications or childbirth in unsafe conditions. (4) This policy paper addresses several aspects of reproductive health, which affect various groups of people in different ways. Whilst women are one of the key populations of this policy, it is also crucial to address the reproductive health of LGBTQIA+ individuals. The maternal mortality ratio is skewed in favour of higher income countries, with the number of women dying during childbirth being 42 times higher in low income countries compared to high income countries in 2017. (5)

Reproductive health issues are also recognised in the 2030 UN Agenda for Sustainable Development, especially under SDG 3: Good Health and Well-being. The following targets focus heavily on reproductive health and related issues:

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

3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 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.

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.” (6)



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Discussion

Antenatal, Intrapartum and Postpartum Care

In General

Prenatal care with at least 8 contacts (7) and neonatal care, including thermal and hygienic cord care (8), and intrapartum care are some of the ways in which high-risk pregnancies and neonatal mortality and morbidity are detected and prevented, as well as pregnant people are educated about better delivery and how maternal deaths are prevented. (9) The absence of adequate monitoring, illiteracy, and cultural variables have demonstrated little effect in low-income countries as an effective approach. (10) According to the World Health Organization, only 29 to 36% of Africans, 20 to 61% of Asians, and 69 to 89% of South Americans have access to pregnancy care. (11) This helps to explain why Sub-Saharan Africa and Southern Asia have such high rates of maternal and neonatal mortality, accounting for more than 86% of global maternal deaths (295,000). (5)

Antenatal Care

Antenatal care refers to the care given to pregnant individuals in preparing them for birth and parental care and in preventing, detecting, alleviating, and handling pregnancy health concerns, for example, pregnancy complications, pre-existing pregnancy conditions, and the effect of an unhealthy way of living. The aim is to identify and manage obstetrical complications, immunize for Tetanus toxoids, prevent recurrent malaria during pregnancies, and identify and manage infections (HIV, syphilis, and other STIs). This creates an opportunity to promote the use of skilled birth attendants, healthy conduct and people's contacts with their health system, development of a plan to prepare for births and emergencies, and promote long-term health beyond their period of pregnancy. (12)

Maternal and perinatal morbidity and mortality are reduced directly through detection and treatment of complications associated with pregnancy, or indirectly by identifying pregnant people at high risk for complications during labor and delivery. (13) Estimates show that 98% of women in developed countries have access to antenatal care (10), whereas this is not the case in low and middle-income countries (LMICs), particularly Nigeria and India, which account for 34% of global maternal deaths. (14)

Pregnancy causes 25% of maternal deaths, with hypertension (that combined with proteinuria might most commonly lead to preeclampsia and eclampsia) and antepartum hemorrhage due to inadequate intrapartum care accounting for three and half of these deaths. Complications before the onset of labor account for two-thirds of stillbirths in countries with a mortality rate of more than 22 per 1000 births. (12)

The WHO has revised its global recommendations from a minimum of four antenatal care contacts to a minimum of eight. However, only 60% of pregnant women in the world receive four antenatal care visits, while 87% receive antenatal care with skilled personnel at least once. (13)

Intrapartum and Postpartum Care

Intrapartum care is provided during childbirth, while postpartum care is provided during the first six weeks after birth. The care a person receives during labor can have an immediate and long-term impact on their physical and emotional well-being, as well as the health of their baby. (15) Complications following the birth can result in disability and delayed development in newborns. In LMICs, intrapartum causes half of stillbirths and 23% of neonatal deaths. (16)

Although the first day of delivery is the most dangerous for both mother and newborn, rates of skilled care provision after childbirth are lower. According to a health survey, only 13% of women who give birth at home receive postnatal care within two days of giving birth. (17)



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Medical Students' Associations

Half of all maternal deaths occur within the first week of delivery, with the majority occurring within the first 24 hours, with Asphyxia claiming many babies on the first day of life. Hemorrhage is the leading cause of maternal death in Africa, accounting for 34% of all maternal deaths, with Sepsis and infection accounting for 10%. (17)

Because the first week of life also accounts for more than a quarter of all neonatal deaths worldwide (2.4 million), providing skilled intrapartum, postpartum, and neonatal care is critical to reducing maternal and neonatal mortality. Thus, the WHO recommends that a person should be discharged no sooner than 24 hours after giving birth. (18)

Reproductive Systems Cancers and Disorders

Endometriosis is a disorder influencing the uterus. Endometriosis is the case at which the sort of tissue that regularly lines the uterus develops elsewhere. It can develop on the ovaries, behind the uterus, on intestines, or the bladder. Seldom, it fills in different pieces of the body. This "lost" tissue can cause pain, excessive menstruation and could lead to infertility. The torment is ordinarily in the midsection, lower back, or pelvic regions. A few patients have no side effects by any means, and experiencing difficulty getting pregnant might be the primary sign they have endometriosis. (19)

Uterine fibroids are the most well-known non-cancerous tumors in people with uterus of reproductive age. Fibroids are made of muscle cells and different tissues that fill in and around the mass of the uterus or belly. The reason for fibroids is obscure. Hazard factors incorporate being African-American or having increased body mass. (19)

All pregnant people should know their HIV status. Pregnant individuals living with HIV can work with their medical services suppliers to guarantee their infants don't contract HIV during pregnancy, conveyance, or after passage (through breastfeeding). It is feasible for people to be living with HIV and not spread it to their foetus or child, particularly when they think about their HIV status early and work with their medical services supplier to decrease the danger. (19)

Interstitial cystitis (IC) is a persistent bladder condition bringing about repeating inconvenience or torment in the bladder or encompassing pelvic locale. For the most part, individuals with IC have aroused or bothered bladder dividers that can cause scarring and hardening of the bladder. IC can influence anybody; notwithstanding, it is more usual in women than men. (19)

Polycystic ovary condition happens when a person's ovaries or adrenal organs produce more androgens than ordinary ones. One outcome is that blisters (liquid-filled sacs) create on the ovaries. Patients with PCOS are at an expanded danger of developing diabetes and coronary illness. (19)

Infertility

Infertility refers to the inability to conceive after 12 or more months of sexual intercourse without contraception. This has undermined Individuals' rights to decide the spacing of their children, as well as their rights to complete physical and mental health. (20)

Causes of male infertility can be a result of varicoceles, trauma to the testis, unhealthy habits, use of medications and supplements, cancer treatment, medical conditions, hormonal and genetic disorders. Whereas, female Infertility can be due to anovulation, Fallopian tube obstruction and others. In general, women's fertility declines with age; as they get older, they have fewer eggs. (21)



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Infertility affects about 10-15% of people in their reproductive years around the world (22), which ranges from primary infertility that rises ever before, being pregnant, or secondary (prevalent in developing countries) that arises after subsequent births. The major cause of infertility in developing countries was bilateral tubal occlusion in STIs and Pregnancy-related infections. (23)

In our society today many couples globally experience loss of identity with feelings of incompetence and defectiveness as a result of infertility. (22) Although 50% of the cases worldwide are associated with male infertility, women still suffer the consequences of discrimination/stigmatization. This is an important issue in the community as infertility is seen as a negative feature. In many cultures, especially in sub-Saharan Africa majority of infertile women suffer discrimination, stigma, gender-based violence, and ostracism. They are seen as a burden to the family and non-suitable for marriage. Thus, more than half of infertile couples hide their status from the community. (24)

Stress and depression can cause changes in immune function, which can have a negative impact on reproductive function. One study found that depression is associated with abnormal regulation of luteinizing hormone, a hormone that regulates ovulation. (25) Therefore, fertility care should not be limited to assisted reproductive technology, but also the provision of psychological support for infertile couples. (22)

However, in regions where it is most needed, fertility care remains unaffordable and inaccessible. (21) At national and international levels, assertions for the reason for inequitable access to infertility care were due to limited resources and overpopulation despite its gross social and economic consequences. (20)

Assisted Reproduction

Assisted Reproductive Technology (ART) was developed to treat infertility through treatments or procedures that use human eggs, sperm, or embryos. Some of these technologies include zygote intrafallopian transfer (ZIFT), gamete intrafallopian transfer (GIFT), frozen embryo transfer (FET), and in vitro fertilization transfer (IVF-ET), which is the most common ART. (26,27) In fact, the Society for Assisted Reproductive Technology (SART) reported that 99% of ART cycles performed are IVF-ET – a series of complex procedures where mature eggs are retrieved from ovaries, fertilized by sperm in a laboratory dish, then transferred into a uterus. (28) ART, which can also be coupled with donor-assisted reproduction, paves the way for hopefuls to overcome infertility and provides same-sex couples an opportunity at starting a family. In addition, with the rapid progression of technology in medicine, the risks associated with ART such as infant mortality rate have been significantly reduced (26,29)

While this can be seen as a beacon of hope to many, there is no doubt that the onset of ART has given rise to several legal, social, and ethical issues. For instance, assisted fertility treatments tend to be costly as they are seldom covered by health care providers. This cost can be a large barrier to people when it comes to using ART, but it also creates an ethical dilemma in which couples are encouraged to implant more embryos than needed all at once. They do this so that they have higher chances that at least one of these embryos fully survives; but this raises several issues, particularly when it comes to using preimplantation genetic diagnosis (PGD) to select certain characteristics of embryos. What exacerbates these issues even more is the lack of general awareness and knowledge about reproduction and ART among the general population, thus creating an atmosphere of moral cautiousness surrounding ART. (30)

Another issue regarding ART is access. Access to ART, like any other reproductive health issue, is intersectional in nature. Marginalized individuals and those with lower socioeconomic statuses are less



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likely to have access to fertility assistance. There has been extensive debate about whether ART insurance coverage should be mandatory to reduce these disparities in access. Some argue that ART is a luxury rather than a medical necessity, while others argue that procreation and reproductive health are rights and should be treated as such. Other controversies about accessibility have revolved around policies regarding who should be covered versus who should not. Some people believe, for instance, that coverage or access should not be granted to same-sex couples and/or single individuals because for them it is a social issue, as opposed to a medical issue as with individuals with infertility. (30)

A sizable and significant controversy that has surrounded ART over the years is the issue of eugenics. Many believe that the advent of ART has brought about a new method of selecting desirable characteristics for offspring. Moreover, many debates have arisen about the consequences of ART, whether their use might bring about a brighter future or lead to even more injustices and disparities, and whether the use of ART can be considered intrinsically “good” or “bad”. (31)

Finally, the use of third-party assisted reproduction (such as donor eggs, donor sperm, and surrogacy) raises multiple questions. One particular controversy surrounds whether donors and surrogates are volunteering or whether they are somehow being coerced (either financially or emotionally). Moreover, questions arise around whether or not donors should remain anonymous, or if they have rights to their biological offspring. (31,32)

Reproductive Mental Health

Sexual and reproductive health and mental health are related and interconnected throughout life. During the adolescence stage, adolescents and young adults go through numerous physical, mental, and psycho-social changes and are powerless to running levels of mental pressure. The psychological strain is considerably higher, particularly for individuals scrutinizing their sexuality and sexual personality. When combined with malicious societies, customs and beliefs, these actual changes can establish a climate conducive to poor mental and physical health. (33) Perinatal mental health issues are among the most common morbidities of pregnancy and the post-pregnancy time frame and happen in one in every five women. While postpartum anxiety is the most considered perinatal mental health issue, other regular perinatal issues incorporate antenatal gloom, antenatal nervousness, and post-pregnancy tension. Perinatal mental problems sway unfavorably on the prosperity of the pregnant individual. Impacts include expanded preterm birth, low birth weight, toxemia, and helpless mother-baby collaborations during the quick post-pregnancy time frame. Arising literature from longitudinal examinations likewise shows that perinatal mental issues effectively affect longer-term results in the posterity, including less-fortunate scholastic accomplishment and expanded danger for psychopathology in their juvenile years. (34)

It is possible for people to experience what is called “postpartum blues” — feeling pushed, pitiful, restless, desolate, drained, or tearful — following their child’s introduction to the world. In any case, a few women, up to 1 of every 7, experience a substantially more real state of mind issue — postpartum depression (PPD). (Post pregnancy psychosis, a condition that may include a serious mental health disorder presenting as symptoms of frank psychosis, cognitive impairment and delusions and hallucinations, is an alternate issue and is uncommon.) (35) Unlike postpartum blues, PPD doesn’t disappear without necessary interventions. It can seem days or even a very long time in the wake of delivering a child; it can keep going for a long time or months whenever left untreated. PPD can make it difficult for anyone to overcome the day, and it can influence the capacity to deal with the child or themselves. PPD can affect any women, those with uncomplicated pregnancies or issue pregnancies, first-time pregnant people and people with at least one child, people who are partnered or not, and paying little mind to pay, age, race or identity, culture, or education. (36)



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Postpartum depression and “postpartum blues” share numerous manifestations, including emotional episodes, crying jags, misery, a sleeping disorder, and being easily irritable. The thing that matters is that with postpartum depression, the presentations are more extreme (like self-harm considerations or powerlessness to focus on the infant) and longer enduring. These are altogether warnings for PPD. (37)

Premenstrual Syndrome (PMS) influences up to 12% of people who menstruate. About 80% of women report in any event one physical or mental manifestation during the luteal period of their monthly cycle; nonetheless, most don't report critical hindrance in their day-by-day life. In an investigation of 2,800 French women, about 12% met the analytic rules for PMS, and 4% revealed extreme symptoms. The predominance of PMS isn't related to age, instructive accomplishment, or work status. Symptom steadiness and seriousness will, in general, change. One study tracked down that just 36% of women who put on weight or had an unpleasant occasion in the previous year are bound to be determined to have PMS. Fewer patients meet the more thorough analytic models for PMDD; its pervasiveness is 1.3% to 5.3%. (38)

Menopause can cause an assortment of emotional changes, including: A deficiency of energy and a sleeping disorder, an absence of inspiration and trouble concentrating, nervousness, misery, mindset changes and strain, migraines, forcefulness, and crabbiness. These changes can occur outside of menopause. Overseeing changes during menopause can be troublesome, yet are conceivable. The medical services supplier might have the option to recommend a prescription to help it out. It might likewise serve to realize that there is a name to the inclination they encounter. Care groups and directing are valuable apparatuses when managing these dynamic changes during menopause. (39)

A past filled with pregnancy miscarriage is a free danger factor for post-pregnancy mental disease. This danger is uplifted by a concurrent history of psychiatric treatment. Significant contrasts are seen according to the circumstance of psychiatric drugs happening after pregnancy loss and the overall danger of resulting Postpartum Psychiatric Treatment (PPT). Significant clinical ramifications emerge from this investigation. Both a past filled with psychiatric treatment and earlier pregnancy miscarriage are hazard factors for PPT, mainly when both are available. Clinicians ought to be aware of these discoveries, to all the more likely recognize and allude people at more significant danger to suitable advising. Also, for psychiatrists and other mental health professionals, the presence of post-pregnancy issues may introduce a chance to help patients address hidden issues. The clinical experience of psychiatrists has uncovered that numerous women won't offer to talk about earlier pregnancy losses except if welcomed to do as such. (40)

In the past, the linkage between SRH and Mental Health has been highly negligible and spins around women's reproductive medical problems and regularly disregards sex and mental health viewpoint. The need to gather proof to build up multifacetedness between Mental Health and SRH is an unquestionable requirement. Expanding admittance to SRH administrations and mainstreaming Mental Health with SRH is significant. This won't just set up SRH, and mental health connections yet add to accomplish appropriate personal satisfaction. (33)

Massive advancement in improving mental well-being have been made in specific spaces. Family planning has expanded worldwide through new methodologies and new strategies. A reestablished obligation to family planning among healthcare providers and public governments has animated more extensive administrations joined by more prominent emphasis on quality and common liberties.



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Climate change and reproductive health

Cultural factors, which multiply risk on a regional scale, compound women's health vulnerabilities. Around the world, 1.3 billion people residing in low- and middle-income countries live below the poverty line, with 70% of them being women. Despite the fact that the linkages between poverty, gender-based social discrimination and violence, and climate change have the potential to exacerbate gender-based health disparities, women's social responsibilities and agency potential provide chances for supporting sustainable solutions, catastrophe risk reduction, and health-related solutions. To preserve women's health, governments must move beyond traditional distinctions between health, gender, and the environment and embrace proactive, gender-based solutions and mobilize their diverse social potential to mitigate and respond to climate threats. (41)

A lot of detriments can be caused by dehydration to both pregnant person and their child during pregnancy, owing to the fact that dehydration increases the risk of anemia and eclampsia for the pregnant person, affecting fetal growth and releases labour inducing hormones resulting in preterm births. In addition, the rise in temperature, the drought and heat waves incidents, the inconsistent patterns of rainfall have adverse effects on access to food and water, which obstructs a pregnant person's ability to acquire safe and reliable drinking water. The deficiencies in micro and macronutrients entailed by the lack of access to food and the undernutrition of gestating people, have negative effects on the pregnancy, the nursing process and the foetus resulting in miscarriages, perinatal death, and low birth weights. (42)

Due to the numerous physiologic and social changes that occur as a result of pregnancy, pregnant and postpartum people, as well as their infants, are particularly vulnerable to the health effects of climate change. Negative pregnancy and newborn health outcomes, such as spontaneous abortion, low birth weight, preterm birth, increased neonatal death, and dehydration, may be caused by climate-related exposures and associated renal failure and malnutrition. (43)

- Due to increased nutritional needs during menstruation and childbirth, people with uterus suffer from greater rates of anaemia and malnutrition globally and are more vulnerable to climate-driven food insecurity. Anemia is linked to cognitive issues such as a short attention span, poor working memory, and poor academic performance. (44) Furthermore, because women make up the majority of the world's smallholder farmers, climate-related crop failure puts women's livelihoods at risk, potentially leading to increased poverty and worse health outcomes.
- Due to a higher predisposition for increased deposition of particulate matter in lung tissue and higher rates of anaemia, women are more likely to develop respiratory and cardiovascular disease as a result of poor air quality (45). Poor air quality is linked to poor birth outcomes (46) and has an impact on mother and child health by increasing the risk of stillbirth, intrauterine growth restriction, and congenital abnormalities. (47) Because women spend more time at home, they are disproportionately exposed to particulate matter from traditional indoor stoves for cooking and heating.
- Temperature extremes and dehydration make pregnant people prone to the release of labor-inducing hormones. Because their capacity for controlling body temperature is weak, newborns are especially vulnerable to environmental temperature fluctuations. Extreme heat is also linked to negative birth outcomes such as preterm birth, low birth weight, and infant mortality. (48)
- Due to changes in immune function caused by pregnancy, pregnant individuals are more susceptible to waterborne disease, particularly gastrointestinal illness, during flooding. Pregnant people who suffer from severe gastrointestinal disease are at a higher risk of having a bad pregnancy. Lyme illness, Dengue fever, and the Zika virus, which causes microcephaly in foetuses, are all vector-borne diseases that women are susceptible to. (49)



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Family planning impact on climate response

A case study from Ethiopia found that training individuals in sustainable land management methods, as well as expanding access to family planning, resulted in immediate environmental improvements, which were sustained and not damaged by a fast growing population in the long run. Additionally, Fewer Emitters, Lower Emissions, Less Cost, according to an economic case study in the United Kingdom, concluded that family planning is 5 times cheaper than traditional green technology for combating climate change. The analysis calculated the effects of satisfying the world's unmet need for family planning and showed that investing \$7 in basic family planning over the next four decades would result in a reduction in global carbon dioxide emissions by more than 1 tonne. (49)

Reproductive health in times of humanitarian emergencies

A large number of people are now facing an ongoing crisis, with the exact number of individuals estimated to require humanitarian aid reaching 135.7 million in 2018. The main causes are armed conflicts and natural disasters. (50)

Chad is dealing with a number of humanitarian issues as a result of underdevelopment and conflicts in its bordering nations. In 2018, 4.4 million people, or about one-third of the population, require humanitarian assistance. Large-scale displacement has had an impact on host communities, putting additional strain on already scarce resources and vulnerable people, which are frequently underserved. Over 650,000 individuals have been displaced as refugees, internally displaced persons (IDPs), or returnees. Chad is one of the African countries with the highest number of refugees (405,674). In central Chad, 3.5 million people are food insecure. (51)

In the aftermath of disasters, people are more likely to develop mood problems and have a slower economic recovery. When women have a lower socioeconomic standing, these effects are compounded. (52) For poorer people, as well as groups like women who are frequently left out of migration studies, forced migration and repeated short-distance migrations are especially important. (41)

Women and girls of reproductive age (ages 15–49) account for over one-quarter of those in need, and around 5 million will be pregnant. Conflict, instability, displacement, and natural disasters account for 60% of all preventable maternal fatalities worldwide. Sexually transmitted infections (STIs), such as HIV, unwanted pregnancy, maternal death and sickness, and sexual and gender-based violence, are all more common among women and girls. At least 15% of all pregnant women or girls may likely develop pregnancy-related problems. If the unmet need for family planning were satisfied, maternal mortality would be reduced by 29%. As a result, the necessity for sexual and reproductive health in humanitarian circumstances is undeniable. (50)

COVID-19 effects on reproductive health

Many sexual and reproductive rights may have been breached during the COVID-19 epidemic, according to evidence. Regardless of the COVID-19 pandemic, the World Health Organization emphasises that women's sexual and reproductive health care choices and rights should be protected. (41) Anecdotal research suggests that during the COVID-19 epidemic, there was a surge in unplanned pregnancies as a result of prolonged home stays, a lack of or decreased access to contraceptive treatments, and financial difficulties in acquiring condoms or contraceptive tablets. (53) Due to distance, transportation, and financial constraints, several women were unable to obtain critical antenatal care or their preferred birthing, post-partum, or baby care. Government policies and structural constraints in several countries have resulted in insufficient financial support for SRHR services during the COVID-19 epidemic. (54)



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Medical Students' Associations

Another big issue of concern during the COVID-19 pandemic is the eligibility of pregnant, breastfeeding or people planning to become pregnant to receive a vaccine. While preliminary data suggest that these individuals should be vaccinated, there are still questions about any potential health implications for the person or the fetus/child. (55,56)

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