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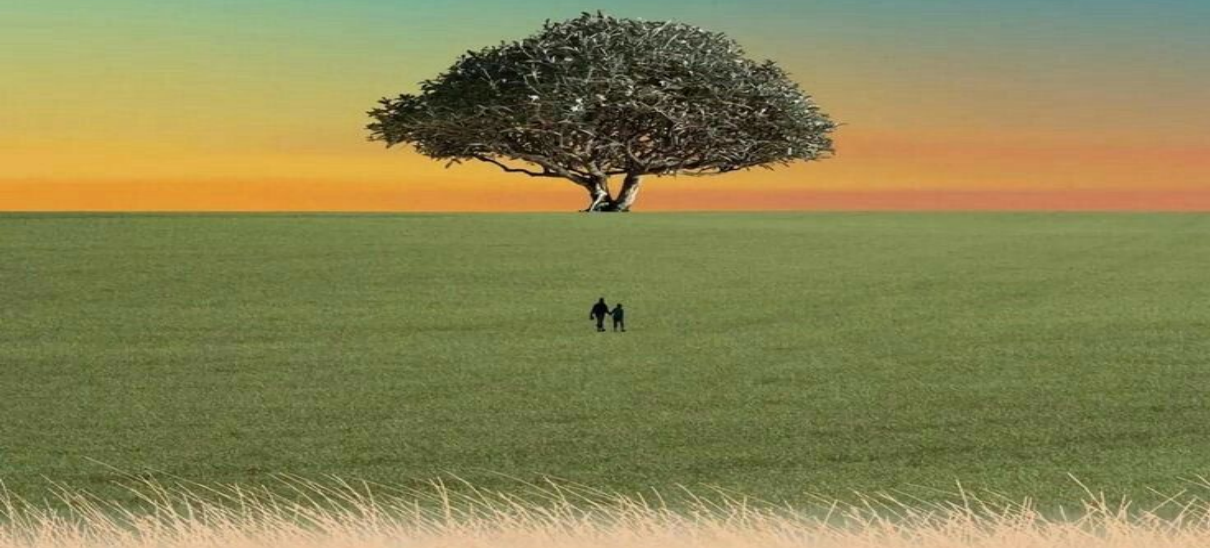

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İÇİNDEKİLER

COMMON NUTRITION-RELATED ISSUES AMONG UNIVERSITY STUDENTS IN YEMEN

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1. INTRODUCTION

A global nutrition study involving more than 130 scientists from 40 countries and covering 195 nations found that poor dietary habits are responsible for the death of one in every five people worldwide (Mazurek-Kusiak et al., 2021). Although the terms nutrition, food, and diet are frequently used as if they mean the same thing, each one has its own specific definition. Nutrition, generally refers to the vital macro- and micronutrients the body needs to function properly and sustain life (Rattan & Kaur, 2022). Nutrition plays a vital role in maintaining health and supporting physical and mental development throughout all stages of life (WHO, 2025). An unhealthy diet characterized by low intake of fruits, fiber and vegetables and high consumption of sugar, fat and calories is a leading global contributor to non-communicable diseases (Drywien et al., 2021).

Starting university marks a significant transition in a person's life, bringing new responsibilities including making independent food choices. During this period, students gain more freedom over their diets, making it essential to adopt healthier

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eating and lifestyle habits (Qamar Javeed, 2021). College weight gain often occurs as students transition into university life a pivotal period when young adults begin making independent food choices, and their dietary habits are especially susceptible to change (Yun et al., 2018).

The Middle East and North Africa (MENA) region, made up of mostly low- and middle-income countries, is dealing with double burden of malnutrition, involving both undernutrition such as stunting, wasting, and micronutrient deficiencies and overnutrition, which includes overweight, obesity, and related non-communicable diseases (UNICEF, 2025).

Yemen, a nation in West Asia, was estimated to have a population of 39.4 million in the year 2023. It is part of the WHO Eastern Mediterranean region and is classified by the World Bank as a low-income country (LIC). As of 2015, the nation's health expenditure accounted for 4.25% of its Gross domestic product (GDP) (WHO, 2024).

Since 2014, Yemen has been gripped by ongoing conflict, resulting in a severe humanitarian crisis. Over two-thirds of the population about 21.6 million people require humanitarian aid, with women and children making up the majority. More than 17 million people lack access to enough food for their daily needs, and approximately 4.5 million have been internally displaced (UN, 2025).

Published studies have shown that university students in Yemen face several nutritional issues, including malnutrition, macronutrient deficiencies, limited nutritional knowledge and awareness, as well as unhealthy dietary habits and food consumption patterns. These problems are often influenced by economic hardship, lack of access to balanced meals, and insufficient education about proper nutrition. As a result, students

may experience poor health outcomes that can affect their academic performance and overall well-being.

2. NUTRITIONAL ISSUES

2.1. Nutritional Deficiencies among University Students in Yemen

A cross-sectional study was conducted between April and October 2019 to assess the vitamin D status among healthy female undergraduate students at the Faculty of Medicine and Health Sciences, University of Aden, Yemen. Out of 120 volunteers, 70 students aged 19–30 years (age of mean 22.4 ± 2.01) were randomly selected according to inclusion and exclusion criteria. Participants completed a questionnaire including demographic and health-related information, and individuals with chronic diseases or on medications affecting vitamin D metabolism were excluded. Despite Aden's year-round sunny climate, results revealed that 34.3% of the participants were vitamin D deficient and 65.7% had insufficient levels. The findings suggest that limited sun exposure and cultural dress practices, such as wearing full-body covering (Hegab), may contribute to the high prevalence of vitamin D deficiency among this population (Shaif et al., 2024).

At Hodeida University a cross-sectional study was carried out to determine the prevalence and risk factors of iron deficiency anemia (IDA) among healthy university students without any health problems. Blood samples from 500 randomly selected medical students (326 males and 174 females) were analyzed for some blood parameters such as complete blood count (CBC), serum ferritin (SF), serum iron (SI), and total iron binding capacity (TIBC). Alongside laboratory tests, a structured questionnaire collected information on demographics, dietary and beverage habits, and socioeconomic status. The overall

prevalence of IDA was 30.4%, with females showing a higher proportion (54%) than males (46%). Students aged 20 to 22 had the highest prevalence compared to other age groups. Statistical analysis revealed that regularly eating breakfast significantly lowered the risk of IDA, while infrequent consumption of vegetables, fruits, and protein-rich foods, frequent tea drinking, low household income, smoking, and khat chewing were all significantly linked to higher IDA risk. No significant association was found with coffee or coke intake. The findings highlight a substantial burden of IDA among university students particularly females largely driven by poor nutrition and unhealthy lifestyle factors. This underscores the need for targeted interventions focused on promoting better dietary habits, healthier lifestyles, and greater awareness of iron deficiency anemia and its consequences (Al-Alimi et al., 2018).

Compared to the study conducted at Hodeida University, which reported a high prevalence of iron deficiency anemia (IDA) at 30.4%, the study at Sana'a University found a significantly lower anemia rate of just 4.5% among final-year medical students. While both studies identified female gender as a major risk factor for anemia, the Hodeida study also highlighted the influence of poor dietary habits, frequent tea drinking, smoking, khat chewing, and low socioeconomic status. In contrast, the Sana'a study found smoking to be a significant risk factor but did not observe strong associations with khat use, income, or diet. This contrast may reflect differences in regional lifestyle factors, nutritional awareness, or sample demographics, and underscores the importance of conducting broader research to better understand anemia trends among university students in Yemen (Mogahid et al., 2021).

Another study examined the prevalence and factors related with anemia among youngs living in the conflict-affected area of Hodeida, Yemen, while also evaluating the effect of an

intervention of nutrition based education on hemoglobin levels in participants who have IDA. The survey was conducted on a random sample of 400 adolescents aged 15 to 19 years, collecting data through structured questionnaires covering demographics, socioeconomic status, lifestyle, and clinical history. Alongside this, capillary blood samples, anthropometric measurements, and stool analyses were performed. For the intervention, anemic adolescents were randomly divided into two groups: one received both iron supplements and nutrition education, while the other received only iron supplements. The overall IDA prevalence was 37.8%, with female gender, khat chewing, heavy menstruation, and symptoms such as headaches, fatigue, and dizziness emerging as significant predictors. In contrast, attending private schools, consuming snacks regularly, and practicing hand hygiene were linked to a lower anemia risk. Among the 116 adolescents who completed the three-month intervention, those receiving nutrition education alongside supplementation showed significantly greater increases in hemoglobin levels than those receiving supplements alone. These results highlight key risk groups and suggest that combined nutrition education and supplementation interventions could be an effective model for anemia prevention programs targeting adolescents in similar settings (Al-Jermmy et al., 2022).

2.2. Dietary Habits and Awareness among University Students in Yemen

Mansour M.A. Ghaleb assessed the nutrition information of female medical and non-medical students at the University of Science and Technology in Sana'a. The study used a cross-sectional design with systematic random sampling, collecting data through face-to-face interviews and a semi-structured questionnaire over two months from January to February 2019. A total of 120 female students aged 18 to 30 participated, with most (56.7%) between 21 and 23 years old. The majority (83.3%) of

the participants demonstrated good or excellent nutritional knowledge, and nearly half (45.8%) were enrolled in the Clinical Nutrition and Dietetics department. Students in this department showed significantly higher nutritional knowledge than those in the English department. Additionally, nutritional knowledge was significantly associated with department, grade, and attendance at nutritional courses. These results highlight the importance of integrating nutrition education across all academic disciplines and call for coordinated efforts to enhance nutrition programs for both medical and non-medical students to improve their awareness and understanding of nutrition (M.A. Ghaleb, 2021).

Abdulla S. Alhanshi et al. explored attitudes and behaviors related to eating disorders among university students at Hadhramout University in Mukalla, Yemen, and examined how these relate to various factors. Conducted between November 2022 and June 2023, the descriptive cross-sectional study involved 369 students from diverse faculties including medicine and health sciences, nursing, engineering, law, women's studies, and administrative sciences. Data were gathered through a self-administered questionnaire developed specifically for the research. The results showed that slightly over 50% of the participants were male (56.9%). Using the EAT-26 screening tool, 85.1% of students were categorized as low risk for disordered eating attitudes, while 14.9% were identified as having a high risk. Regarding body weight, the majority of students (53.1%) were within the normal weight range, while 22.5% were underweight and 8.1% were classified as obese. Interestingly, although students from scientific faculties were more numerous, those from literature faculties exhibited a higher prevalence of eating disorder attitudes. These findings suggest a rising concern over eating disorders among university students, potentially influenced by peer dynamics in the campus environment. Since such attitudes may develop into actual behavioral symptoms, the

study recommends broader research involving multiple universities in Yemen, as well as comprehensive educational programs aimed at raising awareness and encouraging healthy lifestyle choices among students (Abdulla S. Alhanshi, 2024).

2.3. Obesity and Dyslipidemia among University Students in Yemen

A study conducted at the University of Science and Technology in Sana'a, Yemen, investigated the prevalence of obesity among medical students and examined factors associated with it. A total of 448 students aged 18 to 29 were randomly selected, and data on their demographics, smoking habits, physical activity, and family history of obesity were collected through a standart questionnaire. Anthropometric measurements were taken to calculate BMI. The most of the participants were male (62.1%) and aged 22 years or older (63.4%), with over half maintaining a normal weight. Interestingly, the majority of students indicated that there was no obesity history in their families.The analysis revealed that male gender, age above 22, smoking, and physical inactivity were significantly linked to overweight and obesity, whereas family history showed no significant association. Approximately one-third of the students were found to be overweight or obese. These findings emphasize the need for targeted health education programs to promote healthy lifestyles among medical students, encouraging better dietary habits and increased physical activity to manage body weight effectively (Ali Alhaj, 2020).

At Ibb University, a field study was conducted to evaluate the prevalence of dyslipidemia and its associated factors among 240 Yemeni university students. Fasting blood samples were analyzed for lipid profiles using NCEP-ATP III criteria. The participants had an average age of 19.8 years, with females making up 51.7% of the group. Dyslipidemia was very common,

affecting 86.7% of the students, particularly characterized by low HDL-C levels (81.7%) and elevated LDL-C levels (31.7%). Male gender, being in an older age group, living in the urban residence, and studying in medical or natural science faculties were significantly linked to dyslipidemia, while smoking, qat chewing, and diet showed no significant association. These findings reveal a high burden of dyslipidemia among healthy students and highlight the need for screening and preventive interventions in this population (Al-Duais & Al-Awthan, 2019).

2.4. Metabolic Disorder

Metabolic syndrome (MetS) is becoming an increasingly serious health issue worldwide, especially because it raises the risk of having type 2 diabetes and chronic heart disease. This study conducted at Hadhramout University in Mukalla, Yemen, looked at the health of 400 students between the ages of 18 and 26 to better understand how common MetS is among young adults and what factors contribute to it. Data collection included assessments of anthropometric parameters, blood pressure, blood sugar concentrations, and cholesterol levels. According to international guidelines, about 11.5% of the students were found to have MetS. The study showed that certain groups such as females, younger students, those living in cities, single individuals, students from theoretical faculties, former smokers, and those with a higher waist-to-hip ratio were more likely to be affected. These findings highlight the need to raise awareness and provide health programs on campuses that focus on early detection and healthier lifestyle habits to help prevent MetS among university students (Bagabir et al., 2025).

3. CONCLUSION

In conclusion, Yemeni university students face many nutrition-related problems, from vitamin and mineral deficiencies

to issues like obesity, unhealthy cholesterol levels, and eating disorders. These challenges are tied to factors such as age, gender, the type of faculty they study in, their lifestyle habits, and the difficult living conditions caused by the ongoing conflict in Yemen. While some students have good knowledge about nutrition, many still lack awareness, especially those outside medical fields. This highlights the importance of incorporating nutrition education across all fields of study. Besides education, practical support like supplements and guidance on healthy habits is needed to tackle both undernutrition and overnutrition. Inadequate and unbalanced nutrition adversely affects universit students' cognitive performance and overall health status, which in turn undermines the country's long term human resource potential. Therefore, it has a critical importance to develop targeted nutritional interventions at the university level and to establish sustainable food support mechanisms through colloboration national and international stakeholders. Working together, universities, health experts, and policymakers can help improve the health of young people in Yemen and prevent serious problems related to poor nutrition in the future.

REFERENCES

Abdulla S. Alhanshi, Y. K. A., Nawal S. Banafa. (2024). Eating Disorders Attitudes and Behaviors among Hadhramout University Students in Mukalla, Yemen. *Yemeni Journal of Medical and Health Research*, *13*(1 and 2). https://doi.org/https://doi.org/10.47372/yjmhr.2024(13).2.1

Al-Alimi, A. A., Bashanfer, S., & Morish, M. A. (2018). Prevalence of Iron Deficiency Anemia among University Students in Hodeida Province, Yemen. *Anemia*, *2018*, 4157876. https://doi.org/10.1155/2018/4157876

Al-Duais, M. A., & Al-Awthan, Y. S. (2019). Prevalence of dyslipidemia among students of a Yemeni University. *J Taibah Univ Med Sci*, *14*(2), 163-171. https://doi.org/10.1016/j.jtumed.2018.12.003

Al-Jermmy, A. S. M., Idris, S. M., Coulibaly-Zerbo, F., Nasreddine, L., & Al-Jawaldeh, A. (2022). Prevalence and Correlates of Anemia among Adolescents Living in Hodeida, Yemen. *Children (Basel)*, *9*(7). https://doi.org/10.3390/children9070977

Ali Alhaj, A. A. (2020). Prevalence and risk factors associated with obesity among students of a private university in Sana'a, Yemen. *International Journal of BioMedicine and Public Health*, *3*(2), 30–34. https://doi.org/10.22631/ijbmph.2020.206110.1137

Bagabir, Z. A., Al-Taffi, A. S., Al-Amoudi, A. H., A Omrh, M., A Baslasil, A., O Ba-Ogba, N., A Al-Attas, A., Al-Ahdal, O. H., A Bamga, H., K Bawazeer, O., Mersal, E. M., A Al-Idroos, F., A Al-Kaf, S., & Bamhfood, S. M. (2025). Prevalence and Predictors of Metabolic Syndrome Among University Students in Yemen: A Cross-Sectional

Study. *International Journal of Advanced Multidisciplinary Research and Studies*, *5*(3), 327-334. https://doi.org/10.62225/2583049x.2025.5.3.4232

Drywien, M. E., Hamulka, J., & Jezewska-Zychowicz, M. (2021). Perceived Nutrition and Health Concerns: Do They Protect against Unhealthy Dietary Patterns in Polish Adults? *Nutrients*, *13*(1). https://doi.org/10.3390/nu13010170

M.A. Ghaleb, M. (2021). Evaluation of Nutritional Knowledge of Females Medical Students and Non-Medical Students at University of Science and Technology in Sanaa City, Yemen, 2018. *International Journal of Advanced Research*, *9*(11), 11-20. https://doi.org/10.21474/ijar01/13706

Mazurek-Kusiak, A. K., Kobylka, A., Korcz, N., & Sosnowska, M. (2021). Analysis of Eating Habits and Body Composition of Young Adult Poles. *Nutrients*, *13*(11). https://doi.org/10.3390/nu13114083

Mogahid, Y. N., Ahmed, S. H., Fatima, A., Aisha, M., Ala'a, M., Fatima, M., Hadeer, A.-a., Reem, A.-m., Narmeen, A.-a., & Wafa'a, A.-h. (2021). Anemia and Its Associated Factors among Final-Year Medical Students at Sana'a University, Yemen. *Yemeni Journal for Medical Sciences*, *15*(1). https://doi.org/10.20428/yjms.15.1.A2

Qamar Javeed, Y. T., Maheen Hashim Khan Burki, Zafar Iqbal Butt, Adnan Ahmed, Sidra Tull Muntha. (2021). Eating Habits Among University Students. *Turkish Online Journal of Qualitative Inquiry*, *12*(7), 9192–9197. https://www.tojqi.net/index.php/journal/article/view/5363

Rattan, S. I. S., & Kaur, G. (2022). Nutrition, Food and Diet in Health and Longevity: We Eat What We Are. *Nutrients*, *14*(24). https://doi.org/10.3390/nu14245376

Shaif, D. S. A., Assakaf, G. M., & Awadh, I. (2024). Vitamin D Status among Female Students in Faculty of Medicine and Health Sciences University of Aden- Yemen. *Electronic Journal of University of Aden for Basic and Applied Sciences*, *5*(3), 263-268. https://doi.org/10.47372/ejua-ba.2024.3.372

UN. (2025). *The UN in Yemen*. United Nation https://yemen.un.org/en/about/about-the-un

UNICEF. (2025). *Nutrition*. United Nations International Children's Emergency Fund. https://www.unicef.org/mena/nutrition

WHO. (2024). *YEMEN, Health at a glance*. World Health Organization. https://data.who.int/countries/887

WHO. (2025). *Nutrition*. World Health Organization https://www.who.int/health-topics/nutrition#tab=tab_1

Yun, T. C., Ahmad, S. R., & Quee, D. K. S. (2018). Dietary Habits and Lifestyle Practices among University Students in Universiti Brunei Darussalam. *Malays J Med Sci*, *25*(3), 56-66. https://doi.org/10.21315/mjms2018.25.3.6

UNDERSTANDING OF FEMALE GENITAL MUTILATION

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Egemen ÜNAL[2]

1. INTRODUCTION

Female genital mutilation (FGM) refers to the practice of removing partial or total removal of the external female genital or other injury to the female genital organs for no medical reasons. It is practiced in many cultural, religious and social contexts. FGM is internationally recognized as a violation of human rights and it is a major public health concern. As mentioned, the practice has no health benefits and is associated with many short and long term physical and psychological complications Despite global effort to eradicate FGM, it remains prevalent in at least 30 countries in Africa, the middle East, and parts of Asia, and increasingly among diaspora communities worldwide (UNICEF, 2024; WHO, 2025).

This chapter explores the prevalence, causes and consequences, treatment related to FGM, and examines the global responses and policies to the practice. It provides an evidence-based overview of how cultural traditions, social norms and

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religion beliefs continue to shape and continue the practice among different communities.

1.1. What is FGM

Female genital mutilation is any procedure that involves the partial or complete removal of external female genitals or any other procedure that is done on the female genitals without any medical reasons.

FGM is typically performed on girls from infancy to age of 15. Despite the form in which its practiced, FGM violates the basic human right of girls and women, infringing upon their rights to health, safety and dignity (WHO, 2025).

1.2. Prevalences of FGM worldwide

The practices of FGM affects over 230 million girls and women globally. Africa has the largest burden with more than 144 million affected, followed by Asia with over 80 million, and Middle East with around 6 million cases (UNICEF, 2024).

Additionally, smaller practicing communities exist in other regions due to migration. Migration has internationalized the practice, leading to documented cases in Europe, North America, and Australia (Figure 1). Host countries face the dual challenge of prevention and providing culturally sensitive care for survivors (*European Institute for Gender Equality*, 2022).

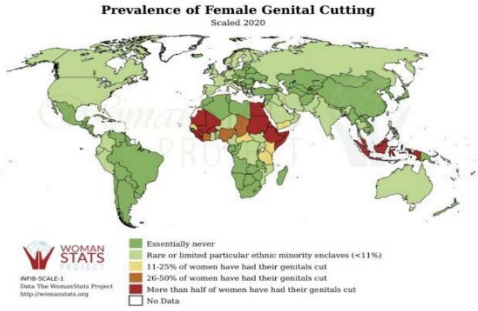

Figure 1 (Woman Stats Maps, 2022)

1.3. Definition and types of FGM

Type 1 (clitoridectomy): partial or total removal of the clitoris and or the cilorishod.

Type 2 (Excision): partial or total removal of the clitoris and labia minora with or without excision of the labia majora.

Type 3 (infibulation): its narrowing of the vaginal opening by cutting and repositioning the labia minora and majora.

Type 4: All other harmful procedures to the female genitals for no medical purposes example: pricking, piercing and incising (*WHO,2025*).

Each type varies in severity and health consequences. The typology is important for clinical care, legal definitions and monitoring interventions.

In addition, in many communities where FGM has been practing for ages, a quiet shift is taking place recently. Among the younger generation families are attempted to believe on practing the milder or less harmful version of FGM like type 1 and 2, which is referred to as Sunni. This change is not just about the medical risk that associates with it but it reflects a complex negotiation between tradition, religion and the growing awareness of the health and rights. In Sudan for example, a study found that many parents are choosing Sunni type instead of the extreme “pharaonic” type 3. As they see it as a compromise: it allows them to honor cultural expectations and religious beliefs while not putting their daughters through the most painful and dangerous practice of infibulation.

Community members often describe Sunni type as clean, Islamic and more humane, yet even this form is still a violation of girls’ physical bodies (Elmusharaf et al., 2006).

1.4. Social and cultural determinants of FGM

FGM persists not only as a public health concern but also as a deeply social and cultural tradition in many communities. It is strengthened by social expectations around gender roles, purity and honor. For example, girls are often subjected to FGM due to community pressure, the need for social acceptance, and fear of exclusion or dishonor if they remain uncut. For many families, mothers make the decision to protect their daughter's future especially in terms of marriage prospects and community standing (Sabahelzain et al., 2019).

Currently, FGM is associated with femininity, cleanliness and moral behavior. It is seen as a way to womanhood and a means to uphold the family dignity. These beliefs are so deep that even when individuals recognize the physical and emotional harm of the practice, they may still feel bound to continue it.

These determinants highlight that FGM is not merely a health issue but a complex social practice within cultural values and social expectations. Addressing FGM effectively requires culturally sensitive interventions that engage communities to challenge and change the underlying social norms and cultural beliefs sustaining the practice (El-Dirani et al., 2022).

1.5. Intersectionality and Vulnerable Populations

FGM effect girls and women who already face layers of social exclusion. Women with limited access to education, with disabilities, who live in conflict affected settings, internally displaced persons and refugees are particularly vulnerable.

These groups often lack access to protective legal frameworks. Education and health services are factors which also increase their risk of undergoing FGM and restrict their ability to speak out for their rights or even access healthcare.

To eradicate FGM, must address overlapping vulnerabilities ensuring that no group is left behind. This approach requires rights-based programs tailored to the specific needs and characteristics of diverse communities, taking into account ideological, ethnic, and socioeconomic differences (Williams-Breault, 2018).

1.6. Health consequences related to FGM

FGM results in severe and multifaceted health consequences affecting physical, obstetric, sexual, and psychological well-being. A comprehensive systematic review of 288, found that FGM leads to immediate complications such excessive bleeding, infections, urine retention and genital swelling, as well as long term complications such as urinary tract infections, painful intercourse, sexual dysfunction, and obstetric complications like prolonged labor and postpartum hemorrhage (Sarayloo et al., 2019).

A large meta-analysis by the world health organization, involving nearly 487,000 women across 30 countries confirmed that FGM increases that risk of prolonged or abstracted labor by 2.6 times, doubles the like hood of perineal tears, and raises the chance of requiring episiotomies and cesarean sections. It also highlighted risks of urinary tract infections, menstrual problems, and tissue damage such as keloids. Psychologically, women with FGM have nearly triple the risk of depression or anxiety and almost double the risk of PTSD (Pallitto et al., 2025).

Additionally, the reason to practice FGM after cultural and religious reasons is the intention of reducing women’s sexual desire, based on cultural beliefs about chastity and social control. Research consistently shows that FGM can negatively impact sexual functions (Berg & Denison, 2012)

A systematic review was done from 15 studies involving more than 6 thousand women. The findings revealed that women

who had undergone FGM had significantly lower sexual desires compared to women who had not undergone FGM (Pérez-López et al., 2020).

1.7. Religion aspect about FGM

FGM is not mentioned in the Quran, and there is no consensus among the Islamic scholars that it is a religious obligation. The four major Sunni scholars hold different views: some consider it recommended or obligatory, but these opinions are based on weak evidences and are not globally accepted. FGM is largely a cultural practice mistakenly associated with Islam in some communities. Most reputable Islamic authorities, including Al-Azhar University, have condemned FGM, emphasizing the Islamic principle of "do no harm" and urging to abandone the practice due to the significant harm it causes. Therefore, FGM should be understood by the communities as a harmful practice rather than a religious requirement (*UNDP,* 2020).

Moreover, FGM is practiced across different religious communities, such as Islam, Christianity and traditional African religions, though it is not mandated by any major religion. Researchdone in Burkina Faso - a religiously diverse country, reported that while Muslim women were more likely to have their daughters undergo FGM, their practice was influenced more by cultural and community factors rather than religious convictions. Christian communities also practiced FGM despite absent biblical foundation, and the traditional religions often incorporated FGM as part of cultural rites. This indicates that FGM is deeply embedded in social and cultural identities rather than religious obligations (Hayford & Trinitapoli, 2011).

1.8. Legal and policy frameworks

FGM is illegal in most countries where it is practiced. Therefore, it is supported by strong international and regional laws. The Important global agreements that condemn FGM

include the Universal declaration of human rights, the convention on the elimination of all forms of Discrimination Against women (CEDAW), the convention on the rights of the child (CRC), and the African Unions Maputo Protocol. The Maputo Protocol goes further by requiring countries to pass laws that ban all forms of FGM even when it is done by medical professionals. It also mandates that survivors receive the care and support they need (COP FGM, 2021; *FGM/C Research Initiative*, 2025).

Despite these legal frameworks, enforcement remains weak in many settings due to factors like lack of strong policy. This is due to several challenges, including lack of political commitment, gaps in the law and resistance from communities where FGM is deeply rooted (Lejore Sibamo & Bitew Workie, 2022).

1.9. FGM treatments

Treatment for FGM involves a combination of surgical, medical and psychological interventions in order to address the physical and emotional consequences of the practice.

Surgical treatment

Deinfibulation:

The is the most common surgical procedure for the FGM victims, especially Type 3 (Infibulation). It involves making an incision to open the sealed vaginal opening caused by the practice. This procedure can relieve problems such as difficulty urinating, painful intercourse, and complications during childbirth. The procedure is usually perfomed under anesthesia during pregnancy or labor by specialist doctors. However, it does not restore the removed tissue but it helps improve functions and reduce complications (Berg et al., 2017).

Clitoral and Labial Reconstruction:

This type of surgery is considerd cosmetic as it aims to improve the appearance and function of the genitalia. This procedure involves techniques such as rearranging local tissue, grafting tissue and fat grafting to recreate labia minora and improve clitoral sensation. Studies showed that this surgery can improve physical comfort, sexual function and psychological wellbeing. However, accessing these surgeries is limited and mostly available in specialized centers or private clinics (Foldès et al., 2012).

Psychological and emotional support:

Survivors of FGM experience psychological trauma, including anxiety, depression, PTSD, and feelings of shame or anger. Effective treatment for these cases includes trauma-informed care approaches such as:

- Counseling and Psychotherapy: one-to-one counseling that helps survivors to process whatever they went through in a safe, confident environment. Family therapy may also be helpful when cultural or family dynamics are involved.
- Cognitive behavioral therapy (CBT): this therapy helps survivors manage trauma related symptoms and reframe their negative thoughts.
- Eye movement desensitization and reprocessing (EMDR): a therapeutic technique that is effective in reducing the emotional impacts of traumatic memories (*CPD Online College*, 2024).

Before initiating treatment for FGM, it is important to emphasize on health education. This is because, providing accurate information about the health risks related to FGM and availabilities of medical and psychological care empowers

survivors and those who are at risk. Health promotion plays a crucial role when it comes to prevention and raising awareness within affected communities, educating them about the harmful consequences and promoting abandonment of the practice. The World Health Organization highlights that educational interventions targeting women and men within the affected communities is a key component of comprehensive care and prevention strategies (*WHO,2025*).

1.10. Community Efforts for FGM

Effective campaigns like the UNFPA-UNICEF Joint Program and Senegal's Tostan initiative are part of national and international efforts to eradicate FGM. Through health training and human rights education, the Tostan program engaged communities and promoted public declarations to end FGM. As a result, FGM significantly decreased within the communities that participated in this community-led strategy that aimed to uphold cultural customs while encouraging social change (Diop et al., 2008)

The UNFPA-UNICEF Joint Program operates in 18 countries including Senegal and it coordinates multi sectoral effort for the elimination of FGM. The program supports activities such as training health professionals, implementing alternative rites of passage, and providing services to survivors by integrating health, education, law enforcement and child protection sectors. These combined efforts demonstrate that the most effective way to reduce FGM is through integration of policies and service interventions with community empowerment and engagement (*UNFPA*, 2023).

2. CONCLUSION

FGM is not just a cultural tradition, it is a violation of human rights and a global challenge driven by gender inequality. Despite the effort done for decades, the practice still continues to affect millions, especially among vulnerable women with limitted education, displaced population or within communities with weak health and legal systems.

Ending FGM requires more than just legal prohibitions. It demands inclusive, community led action that promotes education, strengthens health services, empowers women and challenges hamful social norms.

REFERENCES

Berg, R. C., & Denison, E. (2012). Does Female Genital Mutilation/Cutting (FGM/C) Affect Women's Sexual Functioning? A Systematic Review of the Sexual Consequences of FGM/C. Sexuality Research and Social Policy, 9(1), 41–56. https://doi.org/10.1007/s13178-011-0048-z

Berg, R. C., Taraldsen, S., Said, M., Sorbye, I., & Vangen, S. (2017). The Effectiveness of Defibulation and Reconstructive Surgery Following Female Genital Mutilation/Cutting: A Systematic Review. The Journal of Sexual Medicine, 14(Supplement_4b), e246. https://doi.org/10.1016/j.jsxm.2017.04.223

COP FGM (2021). International and regional legal frameworks on FGM. https://copfgm.org/international-and-regional-legal-frameworks-on-fgm/ access date:01/06/25

CPD Online Collgede (2024). Strategies for Supporting FGM Survivors Effectively. https://cpdonline.co.uk/knowledge-base/care/strategies-supporting-survivors-fgm/ access date:02/06/25

Diop, N., Moreau, A., & Benga, H. (2008). Evaluation of the long-term impact of the TOSTAN programme on the abandonment of FGM/C and early marriage: Results from a qualitative study in Senegal. Reproductive Health. https://doi.org/10.31899/rh3.1000

El-Dirani, Z., Farouki, L., Akl, C., Ali, U., Akik, C., & McCall, S. J. (2022). Factors associated with female genital mutilation: A systematic review and synthesis of national, regional and community-based studies. BMJ Sexual & Reproductive Health, 48(3), 169–178. https://doi.org/10.1136/bmjsrh-2021-201399

Elmusharaf, S., Elhadi, N., & Almroth, L. (2006). Reliability of self reported form of female genital mutilation and WHO classification: Cross sectional study. BMJ, 333(7559), 124. https://doi.org/10.1136/bmj.38873.649074.55

European Institute for Gender Equality. (2022). Data Collection on Female Genital Mutilation in the EU, https://eige.europa.eu/publications-resources/publications/data-collection-female-genital-mutilation-eu?language_content_entity=en access date:02/06/25

FGM/C Research Initiative. (2025), Commissioning and curating research on a practice of global concern, https://www.fgmcri.org/ access date:03/06/25

Foldès, P., Cuzin, B., & Andro, A. (2012). Reconstructive surgery after female genital mutilation: A prospective cohort study. The Lancet, 380(9837), 134–141. https://doi.org/10.1016/S0140-6736(12)60400-0

Hayford, S. R., & Trinitapoli, J. (2011). Religious Differences in Female Genital Cutting: A Case Study from Burkina Faso. Journal for the Scientific Study of Religion, 50(2), 252–271. https://doi.org/10.1111/j.1468-5906.2011.01566.x

Lejore Sibamo, E., & Bitew Workie, S. (2022). Behavioral Barriers to Stop Female Genital Mutilation/Cutting in South Ethiopia: An Exploratory Qualitative Study of the Perspective of Women. International Journal of Women's Health, 14, 1073–1081. https://doi.org/10.2147/IJWH.S366961

Pallitto, C., Ruiz-Vallejo, F., Mochache, V., Stein, K., Vogel, J. P., & Petzold, M. (2025). Exploring the health complications of female genital mutilation through a

systematic review and meta-analysis. BMC Public Health, 25(1), 1387. https://doi.org/10.1186/s12889-025-21584-z

Pérez-López, F. R., Ornat, L., López-Baena, M. T., Pérez-Roncero, G. R., Tajada-Duaso, M. C., & Chedrau, P. (2020). Association of female genital mutilation and female sexual dysfunction: A systematic review and meta-analysis. European Journal of Obstetrics, Gynecology, and Reproductive Biology, 254, 236–244. https://doi.org/10.1016/j.ejogrb.2020.09.031

Sabahelzain, M. M., Gamal Eldin, A., Babiker, S., Kabiru, C. W., & Eltayeb, M. (2019). Decision-making in the practice of female genital mutilation or cutting in Sudan: A cross-sectional study. Global Health Research and Policy, 4(1), 5. https://doi.org/10.1186/s41256-019-0096-0

Sarayloo, K., Latifnejad Roudsari, R., & Elhadi, A. (2019). Health Consequences of the Female Genital Mutilation: A Systematic Review. Galen Medical Journal, 8, e1336. https://doi.org/10.22086/gmj.v8i0.1336

UNFPA. (2025). Annual Report of FGM Joint Programme: Addressing global challenges with local solutions to eliminate female genital mutilation https://www.unfpa.org/FGM2023AR access date:07/06/25

UNDP (2020), Abandon Female Genital Mutilation & Empower Families report, https://www.undp.org/egypt/projects/abandon-female-genital-mutilation-empower-families access date:04/06/25

UNICEF (2024). Female Genital Mutilation: A global concern. UNICEF DATA.

https://data.unicef.org/resources/female-genital-mutilation-a-global-concern-2024/ access date:04/06/25

WHO, (2025). WHO guideline on the prevention of female genital mutilation and clinical management of complications https://www.who.int/publications/i/item/9789240107281 access date:07/06/25

Williams-Breault, B. D. (2018). Eradicating Female Genital Mutilation/Cutting. Health and Human Rights, 20(2), 223–233.

WomanStats Project. (2025). WomanStats Maps https://www.womanstats.org/maps.html. access date:01/06/25

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