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Gender inequities and global health outcomes

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Gender has a great impact on the health of some of the most vulnerable populations in the world. Cultural biases against females result in: female infanticide, a lack of female immunisation, malnourishment due to neglect in infancy, sexual and physical violence resulting in injury and sexually transmitted disease, female genital mutilation/ cutting (FGM/C), mental illness, and health systems that do not adequately meet female needs. Female health is also damaged by a lack of focus from research, a disproportionate responsibility placed on females for caring for others, and economic and social situations that result in a lack of access for females to healthcare. Men also suffer from cultural expectations which lead them to disregard their own health, indulge in risky behaviours, and become involved in crime or war. Given that gender cuts across so many aspects of health, it is clear that addressing these cultural issues has a huge impact on the health of vulnerable populations. Globally, cultural change must be addressed through education, together with changes to social policy and legal and economic frameworks to increase female empowerment and encourage more equitable treatment.

Gender is one of the most significant issues undermining progress in global health outcomes, especially in vulnerable populations. This opinion piece will argue that gender is a social determinant of health and especially that the health of females is impacted negatively by cultural discrimination and a lack of equity. A plethora of evidence shows that before birth, and throughout their lives, females are subject to a range of practices that damage their health including: infanticide, neglect (especially in the early stages of life); physical and sexual violence that lead to injury and sexually transmitted disease; a lack of provision of targeted, high-quality, accessible health care; a lack of focus on women's health issues in research; and a disproportionate responsibility for acting as carers. This paper emphasises, with possible solutions, that it is only by addressing cultural biases relating to gender that improvements in the health of vulnerable populations can be achieved.

Mortality among females occurs due to gender discrimination even before they are born. The estimated number of "missing" women worldwide rose from 61 million to 126 million between 1970 and 2010: a rate of growth that is faster than that of the world population, and which is mostly accounted for by China and India.¹ For example, male sex-selection through female infanticide occurs in India because of beliefs that: males provide more economic benefits, females are only "temporary" members of the family who will disappear after marriage and so are not worth investing in, females carry the burden of an expensive dowry to be paid to a groom's family upon a daughter's marriage, having male offspring ensures that property is kept in the family, and that a male must light a parent's funeral pyre to allow them to reach the afterlife.²

The health of females who survive sex selection in vulnerable populations continues to be harmed throughout in-

fancy due to the lack of value placed on girls as compared to boys. For example, an analysis of immunisation data from the Indian National Family Health Survey found that that girls received immunisation for Bacille Calmette-Guérin (BCG), diphtheria, pertussis, and tetanus (DPT), and measles less often than boys; general age-appropriate coverage was under 50 per cent.³ Global health data also shows that girls are more likely to suffer from iron-deficiency anaemia, vitamin A deficiency and other nutritional disorders (female to male ratios: 1:48, 1:22 and 1:51, respectively) as a result of malnourishment and morbidity resulting from not being fed as well as boys.⁴

As they grow older, women in vulnerable populations also experience negative health outcomes because of injuries from violence and sexual assault by men. Evidence from surveys in 50 countries showed that between 10 and 50 per cent of women reported being physically assaulted by male partners.⁵ Intimate partner violence (IPV) was also considered specifically in Bangladeshi women from national health survey data (n=4467), showing that 53 per cent of married women had experienced physical violence, sexual violence, or both, from their husbands.⁶ More than a third of wives in India have been physically or sexually abused by their husbands, and this is more common in women who marry at a young age.⁷ Sexual violence also leads to an increased likelihood of Human Immunodeficiency Virus (HIV) or Acquired Immune Deficiency Syndrome (AIDS) in women. Women account for half of the world's known HIV prevalence, but in the Middle East and North Africa, prevalence among young females is higher than among males of a similar age.⁵

There is plentiful evidence, such as the earlier examples relating to IPV and sexual abuse, showing that gender inequity and social injustice are powerful drivers of negative

health outcomes for women across their life course. Research based in India showed that wives with higher education levels or better employment status than their husbands are more likely to be victims of IPV, suggesting that men in these situations were threatened and used violence to assert dominance over their partners.⁷

Female genital mutilation or cutting (FGM/C) is the partial or total removal of the female external genitalia for non-medical reasons, and is also a major issue that affects the health of women worldwide. A systematic review and meta-analysis of studies from the Middle East, Africa and some Western countries (the latter of which mainly represented females originating in Somalia) highlighted that this leads to immediate medical harm, including tissue damage, haemorrhage, shock, fever, infections and problems with urination and healing. In addition, FGM/C causes long-term negative gynaecological, sexual and obstetric health outcomes, including genitourinary infections, bacterial vaginosis, dyspareunia, prolonged labour, caesarean section and complications with delivery and menstrual problems. It is estimated that 125 million women and girls live with the effects of this FGC/M, and annually three million further girls are at risk of this procedure.⁸

A lack of social justice and cultural bias is also detrimental to female health because it results in health systems that do not meet female health needs or are actively harmful to it. In Saudi Arabia and South Asia, issues such as malnourishment and anaemia during pregnancy, and haemorrhages and sepsis during childbirth are rife because of medical staff with poor skills.⁵ A lack of access to safe sterilisation or abortion also contributes to high fertility, encouraging osteoporosis in post-menopausal women, and the birth of children with Down's Syndrome.⁷ Globally more than 500,000 women die in childbirth every year,⁵ and the World Health Organization reports that tens of thousands of women are even sexually assaulted in health care organisations.⁴ Research into female health conditions is also lacking, with global interest and serious research into reproductive tract infections, breast cancer and cervical cancer only recently occurring. This lack of research can have the biggest impacts on health outcomes for women in the most vulnerable populations. Health research inadequately addresses women's health issues by neglecting to: consider the impact of interactions between gender and health; disaggregate health data by sex, include female participants in research projects; and include female representation on ethics committees, research funding panels and advisory groups.⁹

Women's health also suffers through early marriage. In South Asia, up to half of women are married as children and in sub-Saharan Africa over a third. This contributes to issues such as unintended pregnancy, and pregnancy-related morbidity and mortality (perhaps caused by limited access to health facilities).¹⁰ Women's health is also negatively impacted because they are disproportionately placed in "carer" roles. Girls in developing countries are frequently expected to look after siblings at the expense of their own education, and this means that they are less likely to be health literate and take care of their own wellbeing.¹¹ In addition, when parents die due to HIV, it is often female family members in vulnerable populations who are left to

care for young children.⁹ Having such dependents may also mean that women in vulnerable populations cannot earn an income, which affects their ability to pay for medicines or care.⁹ Even women who can earn an income despite the burden of caring for others may not have sufficient time for rest and leisure, which also contributes to higher rates of morbidity.¹²

Gender inequities also have a negative impact on the health of males to some degree. For example, cultural expectations that place men in dominant, authoritarian roles mean that more men than women die from violence in fighting, crime and war.⁵ As it is also seen as masculine for men to disregard concerns about their own health, they smoke, drink and take drugs more than women, eat less healthily and engage more frequently in reckless behaviour, such as dangerous driving, and they are also less likely to seek health care generally.⁵

Men's reluctance to seek mental health help in particular has also been widely discussed in the media and globally, men are more likely to suffer from mental disorders of childhood, schizophrenia, substance use disorders, Parkinson's disease and epilepsy than women.¹³ However, females are more frequently disabled by all other mental and neurological conditions.¹³ In general, evidence suggests that men experience fewer negative impacts on health than women from social and cultural practises throughout their lives.

There is a wealth of evidence to support that addressing gender inequities would lead to vast health improvements for the world's vulnerable populations. Education, social policy, and legal frameworks that encourage a culture where women are valued is vital. Involving men to achieve these aims and to ensure that women are given agency to make decisions about their health is also key to success. World Health survey data from 57 countries from 2002-2004 showed that women's health was associated with education, household economic status, employment, and marital status.¹⁴ The education of women is linked to lower blood pressure, reduced obesity, a lower risk of disability, a reduction in mortality, and healthier offspring.⁵

Linked to education, cultural change through improved health literacy also has a positive impact on sexually transmitted disease. For example, in a sample (n=227) containing 78% African-Americans, those with lower health literacy had more negative treatment and health experiences.¹⁵ In a South African study relating to HIV epidemic, it was argued that HIV can be controlled best through education and policies that support female autonomy and economic empowerment. Such education or policies allow women to challenge cultural beliefs that men should control women, and that women should tolerate abuse.¹⁶

Economic empowerment and social structures that support women also have positive effects on their health behaviours. One study considered data from a household survey and interviews with women in six cities in Nigeria, focusing on economic empowerment, their own and their partners' attitudes to domestic violence, and the extent to which their partner prevented them from doing their own activities. This found that women who felt more empowered were more likely to use contraception, have babies that were delivered in proper health facilities and have skilled staff in attendance at birth.¹⁷ Sen and Ostlin (2007) described a

successful programme at Pekenene School in Botswana that provides facilities for girls to return to school with their babies after giving birth, and has a distance learning programme for girls' during maternity leave. The project also requires that if the father is at the school, he is required to help to look after the baby during break times.¹⁸

Interventions should involve men to be truly effective. One study analysed data from 58 evaluations of interventions with males of a wide range of ages that related to various aspects of gender and health, including reproductive health, fatherhood, gender violence, and the health of mothers and their children. Programmes were from North America (n=24), Latin American and the Caribbean (n=9), Europe (n=2), Sub-Saharan Africa (n=9), Middle East and North Africa (n=5), and Asia and the Pacific (n=9). It was found that well-designed programmes that included men were rated as having the biggest perceived outcomes on expression of gender, through changing attitudes and behaviour of both men and women.¹⁹

It should be noted that some progress in improving gender inequities in health has been made. For example, United Nations Millennium Development Goal five was to reduce the maternal mortality ratio (MMR) by 75% between 1990 and 2015. For 171 countries, the fall was lower than this but went from 385 deaths per 100,000 live births in 1990 to 216 in 2015, a fall of 44%.²⁰ The United Nations 2030 Agenda for Sustainable Development also emphasises that women's rights to education, economic resources and political participation have to continue to be realised to achieve positive health outcomes.²¹ Moreover, the United Nations have invested in services for sexual and reproductive health, gender-based violence, and empowering women and girls. UNFPA (United Nations Population Fund) estimate that between 2014 and 2017, the contraceptives they provided avoided 15 million unsafe abortions, 49 million unintended pregnancies and 125,000 maternal deaths.²¹

In conclusion, gender has a great impact on the health of some of the most vulnerable populations in the world. Cultural biases against females result in: female infanticide, a lack of female immunisation, malnourishment due to neglect in infancy, sexual and physical violence resulting in injury and sexually transmitted disease, FGM/C, mental illness, and health systems that do not adequately meet female needs. Female health is also damaged by a lack of focus from research, a disproportionate responsibility placed on females for caring for others, and economic and social

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REFERENCES

1. Bongaarts J, Guilмото CZ. How many more missing women? Excess female mortality and prenatal sex selection, 1970–2050. *Popul Dev Rev*. 2015;41(2):241–269. doi:[10.1111/j.1728-4457.2015.00046.x](https://doi.org/10.1111/j.1728-4457.2015.00046.x)
2. Vickery M, van Teijlingen E. Female infanticide in India and its relevance to Nepal. *J Manmohan Mem Inst Health Sci*. 2017;3:79–85. doi:[10.3126/jmmihs.v3i1.19181](https://doi.org/10.3126/jmmihs.v3i1.19181)
3. Corsi DJ, Bassani DG, Kumar R, et al. Gender inequity and age-appropriate immunization coverage in India from 1992 to 2006. *BMC Int Health Hum Rights*. 2009;9(1):S3. doi:[10.1186/1472-698x-9-s1-s3](https://doi.org/10.1186/1472-698x-9-s1-s3)
4. World Health Organization. Unequal, unfair, ineffective and inefficient. Gender Inequity in Health: why it exists and how we can change it. In: *Final Report to the WHO Commission on Social Determinants of Health*. Geneva; 2007. Accessed November 21, 2018. https://www.who.int/social_determinants/resources/csdh_media/wgekn_final_report_07.pdf
5. Ehrhardt AA, Sawires S, McGovern T, Peacock D, Weston M. Gender, empowerment, and health: what is it? How does it work? *J Acquir Immune Defic Syndr*. 2009;51(Suppl 3):S96–S105. doi:[10.1097/qai.0b013e3181aafd54](https://doi.org/10.1097/qai.0b013e3181aafd54)
6. Rahman M, Nakamura K, Seino K, Kizuki M. Does gender inequity increase the risk of intimate partner violence among women? Evidence from a national Bangladeshi sample. *PLoS One*. 2013;8(12):e82423. doi:[10.1371/journal.pone.0082423](https://doi.org/10.1371/journal.pone.0082423)
7. Raj A. Gender equity and universal health coverage in India. *Lancet*. 2011;377(9766):618–619. doi:[10.1016/s0140-6736\(10\)62112-5](https://doi.org/10.1016/s0140-6736(10)62112-5)
8. Berg RC, Underland V, Odgaard-Jensen J, Fretheim A, Vist GE. Effects of female genital cutting on physical health outcomes: a systematic review and meta-analysis. *BMJ Open*. 2014;4(11):e006316. doi:[10.1136/bmjopen-2014-006316](https://doi.org/10.1136/bmjopen-2014-006316)
9. Sen G, Östlin P. Gender inequity in health: why it exists and how we can change it. *Glob Public Health*. 2008;3(sup1):1–12. doi:[10.1080/17441690801900795](https://doi.org/10.1080/17441690801900795)
10. Santhya KG. Early marriage and sexual and reproductive health vulnerabilities of young women: a synthesis of recent evidence from developing countries. *Curr Opin Obstet Gynecol*. 2011;23(5):334–339. doi:[10.1097/gco.0b013e32834a93d2](https://doi.org/10.1097/gco.0b013e32834a93d2)
11. Sperling GB, Herz B. *What Works in Girls' Education: Evidence and Policies from the Developing World*. Council on Foreign Relations; 2004.
12. Månsdotter A, Lindholm L, Lundberg M, Winkvist A, Öhman A. Parental share in public and domestic spheres: a population study on gender equality, death, and sickness. *J Epidemiol Community Health*. 2006;60(7):616–620. doi:[10.1136/jech.2005.041327](https://doi.org/10.1136/jech.2005.041327)
13. Whiteford HA, Ferrari AJ, Degenhardt L, Feigin V, Vos T. The global burden of mental, neurological and substance use disorders: an analysis from the Global Burden of Disease Study 2010. *PLoS One*. 2015;10(2):e0116820. doi:[10.1371/journal.pone.0116820](https://doi.org/10.1371/journal.pone.0116820)
14. Hosseinpoor AR, Williams JS, Amin A, et al. Social determinants of self-reported health in women and men: understanding the role of gender in population health. *PLoS One*. 2012;7(4):e34799. doi:[10.1371/journal.pone.0034799](https://doi.org/10.1371/journal.pone.0034799)
15. Kalichman SC, Rompa D. Functional health literacy is associated with health status and health-related knowledge in people living with HIV-AIDS. *J Acquir Immune Defic Syndr*. 2000;25(4):337–344. doi:[10.1097/00126334-200012010-00007](https://doi.org/10.1097/00126334-200012010-00007)
16. Jewkes R, Morrell R. Gender and sexuality: emerging perspectives from the heterosexual epidemic in South Africa and implications for HIV risk and prevention. *J Int AIDS Soc*. 2010;13:6. doi:[10.1186/1758-2652-13-6](https://doi.org/10.1186/1758-2652-13-6)
17. Corroon M, Speizer IS, Fotso JC, et al. The role of gender empowerment on reproductive health outcomes in urban Nigeria. *Matern Child Health J*. 2014;18:307–315. doi:[10.1007/s10995-013-1266-1](https://doi.org/10.1007/s10995-013-1266-1)
18. Sen G, Östlin P. Unequal, Unfair, Ineffective and Inefficient. Gender Inequity in Health: Why it Exists and How We Can Change It. In: *Final Report to the WHO Commission on Social Determinants of Health*. ; 2018. Accessed November 21, 2018. http://hiaconnect.edu.au/old/files/Gender_%26_Health_Inequalities.pdf
19. Barker G, Ricardo C, Nasciemento M. Engaging men and boys in changing gender-based inequity in health: Evidence from programme interventions. Published 2007. Accessed November 28, 2018. http://www.who.int/gender/documents/Engaging_men_boys.pdf

20. Alkema L, Chou D, Hogan D, et al. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet*. 2016;387(10017):462-474. [doi:10.1016/S0140-6736\(15\)00838-7](https://doi.org/10.1016/S0140-6736(15)00838-7)

21. UNFPA. Annual Report 2017. Published 2018. Accessed November 21, 2018. <https://www.unfpa.org/annual-report>