REVIEW ARTICLE

Disparities in access to quality surgical care for women in resource-constrained settings: Bottlenecks and the way forward

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Abstract

Women seeking surgical care are burdened with gender disparities, particularly in resource-limited settings. Such disparities can lead to women often presenting late with advanced disease and poor prognoses. The current narrative review was planned to find evidence for gender disparities, their implications, challenges faced by women seeking surgical care, and strategies to address them. Potentiating from interplay between various societal, sociocultural, and economic barriers, the main challenges included inadequate autonomy, financial constraints, transport and referral issues, lack of experienced women surgeons, privacy concerns, surgeon distrust, and higher thresholds for seeking care. While research revealed these underlying causes, much work remains for governmental healthcare bodies, the international community, surgical leadership, policymakers, surgeons, and family members of patients to act on the highlighted issues. Unrestricted access to quality surgical care for everyone is of vital importance, and can translate into a significant decrease in preventable disabilities and deaths among women in resource-constrained settings.

Keywords: Women, Surgery, Healthcare disparities, Sexism.

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Introduction

Nearly 5 billion patients lack access to quality surgical care worldwide, with a majority of them residing in low- and middle-income countries (LMICs).[1,2] Owing to societal, sociocultural and economic barriers, women in LMICs are disproportionately impacted.[3-5] Rectifying these gender disparities in unmet need for surgical care is imperative to improve women health and prognoses. The current narrative review was planned to find evidence for gender disparities in access to surgical care, to highlight the various challenges faced by women seeking surgical care, and to suggest strategies that can be employed to improve the situation.

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Evidence for gender disparity

Nearly 30% of the global burden of disease is attributed to surgical conditions. Despite this, an estimated 5 billion people lack access to safe and affordable surgical care when needed, particularly in LMICs.[2,6-8] While impediments in access to surgical care come from interplay of various social, economic and cultural factors, gender remains among the most pertinent barriers. Significant proportions of women are uneducated in LMICs, making them more vulnerable and dependent on their caregivers. Consequently, women often have limited autonomy in health-seeking decisions.[3-5] Research has shown that most women require permission from their husbands to seek surgical care.[9] This further contributes to gender disparities in access to quality surgical care.

A study conducted in Malawi on general surgery patients concluded that only 31.2% patients seeking surgical care were females. Moreover, women were provided more non-operative interventions when compared to men.[10] These disparities were also highlighted in an Indian study on congenital cardiac surgeries among children with only 37.6% patients being females.[11] Similarly, only 39.9% of all patients seeking surgical care at a global charity in the Republic of Congo were females.[12] Studies from Ethiopia and Ghana on paediatric surgical admissions also demonstrated fewer admissions for female patients compared to males.[13] In Bangladesh and Pakistan, women are less likely to seek surgical treatment for cataract than men.[14,15] Among patients with end-stage renal disease (ESRD) requiring transplantation, women had 11% less access to transplantation than men despite comparable survival benefits, and this difference was more pronounced in older age groups[16] (Table). In addition to access to surgery, gender disparities also exist in quality of perioperative care. A study on patients undergoing wrist arthroscopy found that women were less likely than men to utilise preoperative imaging modalities.[17]

Implications of gender disparities

The consequences of disparities in access to surgical care can be devastating. Nearly 80% deaths from surgical diseases occur in LMICs, and they are more common

Table: Evidence of gender disparity in access to surgical care in resource-limited settings.

Study	Setting	Inclusion criteria	Gender distribution	Additional findings
Reid et al, 2019[10]	Malawi	All patients undergoing general surgery	Males 318 (68.8%), females 133 (31.2%)	• Only 54% of women underwent surgery within 24 hours of presentation compared to 70% of men (P = 0.01). • Women had significantly delayed time to presentation (adjusted mean difference of 136 hours later than men) (P = 0.05).
Chhabra et al, 2016[11]	India	Children diagnosed with congenital or rheumatic heart disease requiring cardiac surgery	Males 324 (62.4%), females 195 (37.6%)	• A slightly higher ratio of male to female patients was seen in urban areas when compared with the rural areas (1.71:1 in the urban setting and 1.64:1 in the rural setting, with a P value of 0.823).
Lin et al, 2017[12]	Republic of Congo	All patients presenting with a surgical condition	Males 725 (60.1%), females 482 (39.9%)	• Female sex was associated with higher odds of postoperative complication (OR 3.45).
Bohn et al, 2016[13]	Addis Ababa, Ethiopia	All paediatric patients aged 29 days to 14 years admitted via emergency or hospital ward	Males 4078 (59.4%), females 2788 (40.6%)	• The proportion of male admissions was significantly higher than female admissions in all age groups (p<0.0001).
Ahmad et al, 2015[14]	Pakistan	Patients aged >50 years from fishing communities in Kemari undergoing cataract surgery	Males 58 (40.0%), females 87 (60.0%)	• Women experienced substantially worse visual outcomes than men. • Compared with men, women were 4.38 times more likely to have borderline or poor visual outcome.
Tanchangya et al, 2015[15]	Bangladesh	All cataract surgery patients	Males 6513 (58.3%), females 4661(41.7%)	• The prevalence of cataract was higher in women than in men, indicating a greater need of treatment for women. Yet, more males than females received surgical treatment.
Segev et al, 2009[16]	United States of America	Patients on Medicare with end-stage renal disease requiring transplantation	-	• Women had 11% less access to transplantation than men.

OR: odds ratio.

among women.[12] For any given indication, female gender was associated with higher odds of postoperative complications than males (odds ratio [OR] 3.45).[12] This could be attributed to women presenting late with more advanced disease, impacting their prognoses. Compared to men, female patients had more delayed presentation (adjusted mean difference [AMD] 5.67 days, p=0.05), delayed surgical intervention (AMD 1.91 days, p=0.02), and prolonged length of hospital stay (AMD 1.67 days, p=0.05).[10] Women undergoing cataract surgery were also more likely to present late compared to men, translating into worse ophthalmologic complications.[14] In line with these implications and higher proportions of women in LMICs, recognising and rectifying these gender disparities is warranted.

Challenges and the way forward

Challenges experienced by women in access to quality surgical care can be

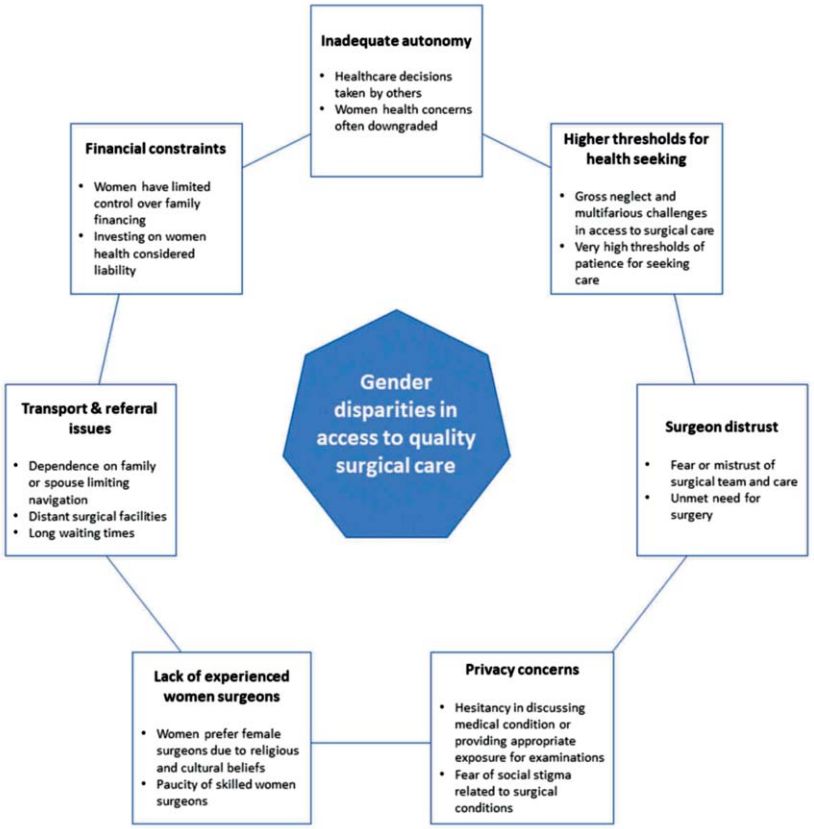

Figure: Mind-map of challenges faced by women seeking surgical care in resource-limited settings.

classified under the following domains: inadequate autonomy, financial constraints, transport and referral issues, lack of experienced women surgeons, privacy concerns, surgeon distrust, and higher thresholds for seeking care (Figure).

Inadequate autonomy: Gender-based differences in surgical care seeking stem from pre-existing sociocultural barriers.[18] In LMICs, women are often not equipped with adequate autonomy to take decisions regarding their own health. Instead, such decisions are mostly taken by the patient's husband, father, or mother-in-law.[19] In such cases, health concerns of women are often downgraded, and they present to hospital with advanced diseases, complicating their prognoses. This is further strengthened by evidence from India suggesting that women autonomous in their health decisions are more likely to seek care.[20] While direct evidence is limited, this scenario might be more pronounced in access to surgical care.

Autonomy in healthcare decisions has been associated with higher education, employment, exposure to media and awareness, and better household economic status.[21] Education continues to be a significant predictor of surgical care-seeking, owing to better awareness among women and increased financial stability to support their decisions.[20] Therefore, sustainable efforts targeted at educating and empowering women in LMICs can alleviate the gender disparities in surgical care. This can be achieved with a combination of both short-term solutions, such as implementing national distance learning programmes via radio, television and social media to educate women, and long-term solutions aimed at the establishment of schools particularly in rural and underprivileged areas.

Financial constraints: In most LMICs, financial implications of surgical care are borne through out-of-pocket expenditures.[22] This can disproportionately impact women, majority of whom are responsible for managing household only with limited control over family financing.[23] In addition, investing in women healthcare has traditionally been considered a liability due to longstanding gendered norms.[24] This situation necessitates the development of sustainable and efficient health financing initiatives by governmental regulatory bodies.[25] Monetary and logistical support from international community and health organisations can further improve the status quo for women requiring surgical care in LMICs. In addition, targeted efforts are required to increase job opportunities for women, making them more financially independent to take their own healthcare-related decisions.

Transport and referral issues: Another challenge faced by women seeking surgical care is navigating through the healthcare system. Because of their dependence on families or spouses, women usually require others to accompany them through the process. However, in cases of limited support from families, surgical care becomes more inaccessible for women, depriving them of timely surgical management.[24] Similar delays can also result from inefficient referral systems, which are widespread in LMICs. Compared to men, more women seeking surgical care reported long waiting times (22% vs 33%). In addition, distance to facilities capable of providing essential surgical care also impact women disproportionately (87% of women vs 81% of men).[24]

Such structural problems need to be addressed by expediting procedures at basic healthcare units and improving the infrastructure to provide better referral options.[26] Basic health units (BHUs) are often understaffed and require expansion of the existing healthcare force to be more efficient in providing timely referrals. To accompany women to surgical facilities, the authorities could employ non-healthcare personnel or establish volunteer services, which have proved successful in high-income countries (HICs).[24] In addition, women-only bus services can be introduced nationally to provide convenient, affordable, and secure transport options to women.

Lack of experienced women surgeons: As a result of religious and cultural beliefs, women often prefer female surgeons while seeking surgical care.[27] However, there is a paucity of skilled women surgeons in LMICs owing to an array of disparities faced by women surgeons.[28,29] First, the work environment is unfavourable for women with inadequate support for pregnancy and parenting, limited mentorship and sponsorship opportunities, widespread harassment, negative perceptions among the surgical community and patients, poor surgical identity, and limited opportunities for career advancement and leadership. Second, the surgical sphere is dominated by males, resulting in the exclusion of women from potential career development opportunities unless they conform to male standards. Lastly, women surgeons are hindered by societal pressures secondary to long-standing stereotypes and inordinate work-life expectations and conflicts.[29] Rectifying these disparities is imperative to incentivising more women to opt for surgical fields, which can in turn improve the health-seeking behaviour among women.

Privacy concerns: In various large-scale hospitals, a high turnover of patients may compromise privacy. This can contribute towards hesitancy among women in

discussing their medical condition or providing appropriate exposure for physical examination among multiple patients in the ward.[24] Providing privacy during consultations could reduce patient discomfort, while also allowing the surgeons to take more accurate histories. Obtaining informed consent before proceeding with physical examinations and appropriately covering the patients can further improve patient comfort and strengthen the patient-physician relationship. Women also reported of being afraid of social stigma related to their surgical condition.[24] This mandates that surgeons uphold the notion of doctor-patient confidentiality and ensure safeguarding of all hospital records to gain the confidence of their patients.[24] In addition, regular audits are required to investigate potential breaches of doctor-patient confidentiality, and a zero-tolerance policy towards such breaches should be institutionalised.

Surgeon distrust: Another challenge contributing to the unmet need for surgery among women is surgeon distrust. Fear or mistrust of surgical care was reported by 42% of women seeking surgical care in Ghana.[24] Re-establishing surgeon-patient trust is imperative, and can be achieved with surgeons providing reassurance to patients, allowing them to ask questions, explaining their laboratory results, avoiding being judgmental of patients, and involving patients in decision-making related to their care.[30]

Higher thresholds for seeking care: In line with gross neglect and the various challenges highlighted, women have also developed very high thresholds of patience for seeking care.[31] Because of this, women often have delayed presentation with more advanced diseases compared to men, and are subsequently more likely to have poorer prognoses.[10]

Conclusion

Women seeking surgical care are burdened with significant gender disparities, particularly in LMICs. While research has revealed the underlying causes of these disparities, much work remains for governmental healthcare bodies, the international community, surgical leadership, policymakers, and the family members of patients to act on the highlighted issues. Appropriate policies and programmes are necessary to ensure equitable delivery of surgical care for both genders, particularly in cases where differential surgical needs exist among men and women. Unrestricted access to quality surgical care for all is of vital importance, and such efforts can translate into a significant decrease in preventable disabilities and deaths among women in resource-constrained settings.

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