

Delay in Accessing Surgical Care and Its Determinants among Women in a Tertiary Care Teaching Hospital

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Abstract:

Background: Women's health has always taken a backseat and it is no different when it comes to the surgical specialties. Moreover, hospitals catering to the lower economic strata of society, such as government hospitals, present a rather unique set of problems. Although the lack of economic resources contributes significantly, several other factors such as lack of awareness and cultural misconceptions come into play. Furthermore with women still being considered the 'second gender' in Indian societies, the implications of the above factors is far more evident. Surgical care is thus sought only in life-threatening situations, thereby affecting surgical outcomes. In a country like India with varied practices and mindsets, the proportion of these contributing elements may also vary with region. Therefore, different geographical regions and communities need to be individually studied to formulate distinctive community-based solutions to ensure timely access to care. Hence via this study we attempted to understand the health seeking behaviour of our women population.

Methods: We conducted a survey in the in-patient general surgery ward of a tertiary care hospital namely Krishnarajendra Hospital, Mysore. Krishnarajendra hospital is the government run tertiary care multispecialty hospital in the district of Mysore.

Results: Lack of awareness was the most common cause of delay with 70% of the studied population reflecting the same, followed by economic factors (17%).

Conclusion: Sociodemographic factors play a massive role in the health seeking behaviour of women wherein lack of awareness is the most common cause of delay in accessing surgical care. This delay affects health outcomes. Further studies to gauge the various barriers in accessing surgical care amongst women ought to be performed on a larger scale to determine specific points of intervention.

Keywords: access to healthcare, gender gap, health seeking behaviour, access to surgical care, delay, global health, global surgery, women's health.

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Introduction

Women's healthcare has always taken a backseat in India. With a society that struggles to provide basic healthcare for its women population, surgical care access is even more so unsatisfactory.

Amongst the general population, 90% of the 1.4 billion populations lack timely access to surgical care [1]. The situation is far worse in rural regions by comparison, where only 6.81% [2] of the need for major surgical operations is met nationally. Furthermore, less than 80% of the rural population in the northern and northeast regions have timely access to care. [3]

From this data we can only speculate about the women population's lack of timely access to surgical healthcare and not confirm since detailed studies specific to gender disparity and access to surgical care have not yet been conducted in India. A study conducted by researchers at the All India

Institute of Medical Sciences (AIIMS), the Indian Statistical Institute, Prime Minister's Economic Advisory Council, and Harvard University examined the records of 2,377,028 outpatients who visited the AIIMS medical facility from January to December 2016.

The experts found only 37% of women got access to health care, as compared to 67% of men. [4] It is hence evident that much work ought to be done in achieving gender equity. However, rather than extrapolating such data on gender disparity and generalising it, it is the need of the hour to collect data relevant to surgical care.

In a country like India with varied practices and mindsets, the proportion of contributing elements affecting timely access to surgical care may also vary with region. Furthermore in hospitals catering to the lower-economic strata (such as government

hospitals) a rather unique set of problems come into play: factors such as lack of awareness, cultural misconceptions and social stigma.

One cannot deny that the male population too are affected by similar factors, but in women they are considerably more evident thereby acting as major barriers to accessing care and thereby affecting surgical outcomes.

Studies such as this can hence fill in gaps of knowledge and also bring out the nuances in socio-cultural influences by studying different communities individually.

This will aid massively with planning advocacy campaigns, policy-making and efficient resource allocation and achieving Universal Health Coverage and health equity with respect to gender disparity. Most importantly such research is vital to develop a National Surgical, Obstetric and Anesthesia Plan for India, which it much desperately needs. [5]

Materials and Methods

Study Design: We conducted a survey in the in-patient general surgery ward of a tertiary care hospital namely Krishnarajendra Hospital, Mysore. Krishnarajendra hospital is the government run tertiary care multispecialty hospital in the district of Mysore and offers subsidised healthcare catering majorly to those below the poverty line.

In the study, delay was defined as the time period between recognition of the presenting symptom by the patient and seeking care at KR Hospital. Female admissions who presented with a delay in

accessing surgical care were identified and interviewed through a detailed questionnaire. The inclusion criteria were female in-patients who presented with a delay in accessing surgical care and those who consented to the study. The study was conducted between the months May and June, 2023. Ethical committee clearance was obtained before the interviews commenced.

The primary goal was to determine the extent of delay, the cause and its attributable factors.

Data Collection: A detailed peer-validated questionnaire was used to interview thirty patients which included: education status, economic class, area of residence (urban/rural), comorbidities, place of first seeking care, extent of delay, reason for delay, awareness and knowledge about surgical condition, previous history of delay, medical complications due to delay. Delay was further classified as less than or equal to 6 months, 6 months to one year and more than one year. Patients' cause of delay was analysed verbatim and classified into lack of awareness, socio-cultural factors, economic constraints, distance and travel limitations, and others. Treating surgeons were further interviewed for their opinions via a Google form. Eight out of ten surgeons who were sent the form responded.

Statistical analysis: Descriptive statistics like mean and Standard Deviation were used for analysis of the data

Results

Results of the Questionnaire for Patients:

Table 1: Age, Majority of the women were of the ages between 41 - 50 years old

Age	f	Percentages
< 20	1	3.33%
21-30	7	23.33%
31-40	3	10%
41 - 50	9	30%
51 - 60	7	23.33%
61 - 70	2	6.66%
71 - 80	1	3.33%
Total	30	100%

Table 2: Residence, Majority of the women resided in rural areas

Residence	f	Percentages
Urban	6	20%
Rural	24	80%
Total	30	100%

Table 3: Education, Majority of women studied did not attend school at all

Education	f	Percentages
Did not attend school	18	60%
Up to 10th	11	36%
Up to 12th	0	
Degree	1	3.33%
Total	30	100%

Table 4: Socioeconomic class (by BG Prasad classification 2022^[6]). Majority of the women belonged to Class II i.e. Middle class

Socioeconomic class	f	Percentages
Class I (Upper Class)	1	3.33%
Class II (Upper Middle Class)	5	16.66%
Class III (Middle class)	10	33.30%
Class IV (Lower Middle Class)	8	26.66%
Class V (Lower Class)	6	20%
Total	30	100%

Table 5: Surgical Condition. Varicose veins, Carcinoma Rectum and Appendicitis were the most common surgical conditions that women studied presented with.

Surgical Condition	f	Percentages
Hernia	5	16.66%
Haemorrhoids	4	13.33%
Varicose Veins	2	6.66%
CA rectum	2	6.66%
CA breast	1	3.33%
Diabetic Foot	1	3.33%
Cholelithiasis	6	20%
Appendicitis	2	6.66%
CA gallbladder	1	3.33%
Conditions affecting the Thyroid (Solitary Nodule of Thyroid)	1	3.33%
Pain abdomen under evaluation	1	3.33%
Fibrous Histiocytoma	1	3.33%
Parotid Swelling	1	3.33%
Lipoma	1	3.33%
Obstructive Jaundice (secondary to Cholecystectomy)	1	3.33%
Total	30	100%

Table 6: Delay. Less than or equal to six months was the most common time period of delay

Delay	f	Percentages
<= 6 months	18	60%
6 months - 1 year	6	20%
> 1 year	6	20%
Total	30	100%

Table 7: Complication due to delay. More than half of the women presented with medical complications

Complications due to delay	f	Percentages
Yes	16	53%
No	14	47%
Total	30	100%

Table 8: Knowledge of disease. Majority of the women studied had either poor or average knowledge of the disease

Knowledge of disease	f	Percentages
Poor	14	46.66%
Average	14	46.66%
Good	2	6.66%
Total	30	100%

Table 9: Cause of delay. Lack of awareness was the most common cause of delay

Cause for delay	f	Percentage
Lack of awareness	21	70%
Sociocultural	5	16%
Economic factors	4	13%
Distance and travel limitations		
Others		
Total	30	100%

Results of the Questionnaire for Surgeons:

1. In your experience, what has been the major cause of delay in seeking surgical care amongst women?

Table 10: Practising surgeons opined 'lack of awareness' to be the most common cause of delay

Factors	f	Percentage
Lack of awareness	5	62.5
Economic Factors	1	12.5
Socio-cultural factors (including gender disparity)	1	12.5
Distance and travel limitations	-	
Others	1 (all of the above +shyness)	12.50%
Total	8	100%

2. In your experience, would you say there is a larger population of women in comparison to men who delay seeking surgical care?

Table 11: Majority of surgeons said that there is a larger population of women in comparison to men who delay seeking surgical care

	f	Percentages
Yes	5	62.50%
No	1	12.50%
Can't say	2	25%
Total	8	100%

3. Do you find that the factors preventing women from seeking surgical care are largely different from those preventing men from seeking surgical care?

Table 12: Majority of surgeons said that factors preventing women from seeking surgical care were largely different from factors preventing men from seeking surgical care

	f	Percentages
Yes	5	62.50%
No	1	12.50%
Can't say	2	25%
Total	8	100%

4. In your experience, have these factors been the cause for poor surgical outcomes in patients?

Table 13: Majority of the surgeons said that these factors contributed to poor surgical outcomes

	f	Percentages
Yes	7	87.50%
No	1	12.50%
Can't say	-	
Total	8	100%

5. Do you believe that these causes can be overcome with interventions at the community level?

Table 14: All participating surgeons unanimously agreed that these causes could be overcome by interventions at the community level

	f	Percentages
Yes	8	100%
No	-	
Can't say	-	
Total	8	100%

Discussion

In our study, the majority of the women belonged to the middle class as per BG Prasad classification. Several studies have previously concluded that socioeconomic status is an important factor in receiving surgical treatment.[7]

Our study finds that the majority of the patients who present with delay in accessing surgical care hail from rural regions. This is similar to Jadhev et al[8] which found that rural regions had a significantly smaller proportion of residents with timely access to surgical care compared with their and urban counterparts.

Most common reason for delay in accessing care in our study was found to be lack of awareness. Dworkin et al [9] similarly concluded that the most frequently reported barriers included not knowing care was needed.

However according to Forrester et al[10] reasons for not seeking surgical care when needed, as seen in three LMICs included no money for health care (Sierra Leone: n = 103; 55%), a person dying before health care could be arranged (all countries: 32%-43%), no health care facility available (Nepal: n = 11; 42%), and a lack of trust in health care (Rwanda: n = 6; 26%). This is also different from the results of Grimes et al[11] who found that key barriers included difficulty accessing surgical services in LMICs were due to distance, poor roads, and lack of suitable transport; lack of local resources and expertise; direct and indirect costs related to surgical care; and fear of undergoing surgery and anaesthesia. Comparably, Varela et al[12] studied the transportation barriers to access surgical care in Malawi and reported that lack of suitable transport, finances and prolonged travel time to a health care centre, all pose barriers to timely access of healthcare. They additionally found that a higher percentage of female heads of households claimed lack of financial resources to go to a hospital.

A study conducted in Malawi by Reid et al[13] compliments our hypothesis: fewer women present with surgical problems, and women experience delays in presentation, longer lengths of stay, and undergo fewer operations. Yeatman et al[14] also found that women spent six times as long seeking health care. It is to be noted that there is a dearth of studies in this part of South Asia exploring sociocultural determinants and access to surgical care.

Conclusion

Sociodemographic factors play a massive role in the health seeking behaviour of women wherein lack of awareness is the most common cause of delay in accessing surgical care. This delay affects health outcomes. Further studies to gauge the various barriers in accessing surgical care amongst women ought to be performed on a larger scale to determine specific points of intervention.

Limitations: The study population was limited to a small number of women in one particular tertiary care hospital. A larger population including diverse communities and geographical regions ought to be studied. Furthermore, the study did not include men and hence a definitive comparison between the two genders could not be performed.

Recommendations: Our study suggests that lack of awareness is the most common cause of delay in seeking surgical care. Hence, community programs

to educate locals about common surgical conditions ought to be implemented. Furthermore, residents of secluded and tribal areas ought to be advised about existing government schemes, programs and facilities pertaining to surgical care that they can access in times of need.

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