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Making healthcare more gender inclusive; experiences of older people with multiple disease conditions in primary care settings

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ABSTRACT

Background and Aim: To boost patients' satisfaction of older people with multimorbidity, it is necessary to investigate the relevant factors of patient satisfaction and to examine the contrasts in the factors according to gender. This study aims to investigate the factors of healthcare satisfaction based on gender among individuals with multimorbidity in Niger state north central Nigeria.

Methods: This is a descriptive cross-sectional study carried out between October 2021 to February 2022 among patients attending general out-patient department (GOPD) of 4 purposefully selected secondary hospitals in north-central Nigeria. A structured pre-tested questionnaire was used to elicit formation from 734 patients who were recruited into the study using a random sampling method. The selected participants have multimorbidity, aged 60 years or older and consented to participate in the study. The data were entered into JISC online data collection tool and exported to IBM SPSS version 27 for analysis. Mann-Whitney U test analysis was performed to compare the participant's mean satisfaction level and gender.

Results: The study reveals that males were more educated, but the females utilize the healthcare services more. It shows that females are less likely to be satisfied with factors that are linked to access and quality of healthcare, and financial burden of medical care. Whereas males are more likely to be satisfied with factors that relate to patient-physician interaction time and patient waiting time and confidence and trust in medical care.

Conclusion: Acknowledgement of female and male patients needs and satisfaction with services will lead to more realistic implementations of health directed policies that will be fundamental for delivery of high-quality healthcare services.

Introduction

Multimorbidity is having 2 or more chronic long-term conditions in one person affects about one quarter of adults globally. It is alarming because multimorbid patients have consistently been associated with poorer outcomes in terms of health, quality of care, and costs [1]. Despite the increase in life expectancy among lower- and middle-income countries over the last decades, the growing prevalence of multimorbidity has led to a decreased quality of life in patients with chronic diseases, especially in populations with limited resources [2], because most healthcare systems are not wholly intended nor satisfactorily prepared to provide personalized care to patients with multimorbidity [3,4]. Multimorbidity intensifies the physical complications, social hardships for patients, heavy burden for healthcare systems [5] and could affect overall perceived patient satisfaction with healthcare.

Patient satisfaction promote adherence to prescribed medication and follow-up [6], however, does not always signify the best outcomes in all cases [7]. Overall, researchers have identified perceived patient satisfaction to improve healthcare [7–13]. Moreover, a better understanding of these experiences would help to adapt healthcare needs of the patient with multiple chronic conditions and thereby improve their healthcare [14]. Several studies report patient's experiences in specific settings, but there is not coherent understanding of the overarching themes from the perspective of gender in patients with multimorbidity [15].

Determinants of patient satisfaction are (i) the personal preference of the patient, (ii) the patient's expectation, (iii) the response tendency of the patient due to personal characteristics, and the quality of care received [16], and (iv) the previous experience of the patient and the views of others, such as relatives and friends [17]. However, balancing between patients having a great healthcare experience and physicians providing great healthcare is almost always difficult to align.

Studies in the USA [18] and the UK [19,20] have found that patients with advanced age and literacy-deficient tend to have a higher degree of satisfaction than their younger and functionally literate peers. While some researchers argued that this could be due to lower expectations among older adults [20], others observed their understanding of standard requirements for health facilities may be limited because of their low educational background, and their current experiences may be outside of their expectations [21]. Some believed that older patients are also likely to be treated with more respect by physicians [22]. Gender differences in perception of patient satisfaction attract mixed feelings, with some claiming that female patients have a higher degree of satisfaction and others reaching an opposite conclusion [19,20]. Investigating patient satisfaction by gender is worthwhile not only because women are often the healthcare decision-makers in their families, but also, because quality improvement and research in women's healthcare could benefit from a gender analysis of patient satisfaction data and gender-sensitive perception of patient satisfaction measures [23]. Patients have a wide range of expectations regarding organizational aspects of care which should be taken into reasoning when considering likely improvements to the quality of primary care [24]. This has important public health implications, and measures should be undertaken to promote equitable healthcare delivery [25]. Lastly, improving patient perception of level of healthcare satisfaction positively is vital to high levels of life satisfaction. And studies have shown that it is essential to support the elderly to maintain a high level of life satisfaction, as the elderly with high life satisfaction tend to be more emotionally positive, maintain good health, and have a lower risk of mortality [26]

Previous studies have shown that prevalence of multimorbidity is higher among women than men [27], and that women use more healthcare facilities, particularly public funded healthcare, compared to men [28]. However, little is known on patient health care satisfaction based on

gender among individuals living with multimorbidity in Niger state north central Nigeria. To boost patients' satisfaction of older people with multimorbidity, it is necessary to investigate the relevant factors of patient satisfaction and to examine the contrasts in factors according to gender. This study aims to investigate the factors of healthcare satisfaction based on gender among individuals with multimorbidity. We, therefore, investigate the impact of gender on patients' satisfaction among individuals with multimorbidity in north central Nigeria.

Methods

The research consisted of a cross-sectional exploratory observational study using a random sample of people with multimorbidity aged 60 years and above who accepted participation in the study questionnaire. The study was conducted in an outpatient department of 4 purposefully selected secondary health facilities. The criteria for inclusion in study were to have multimorbidity, 60 years and older and consented to participate in the study. The investigations were carried out on 734 eligible participants by the researcher in a relaxed place, condition and ensured the anonymity of the individuals, respecting the ethical principles of the Declaration of Ethical of the College of Nursing, Midwifery, and Healthcare, Research Ethics Panel, University of West London and Authorization and Research, Ethics, and publication committee (REPC) of Hospitals Management Board, Minna, Niger state of Nigeria. Data were collected by a structured interviewer-administered questionnaire, entered JISC online data collection tool, and exported to SPSS version [27] for analysis. Detailed of the data collection of this study have been described elsewhere [29].

Measures

The outcome variable patient satisfaction was measured with a questionnaire (PSQ)-18 was adopted [30] on a Likert scale. It is the revised short-form version of PSQ-III and PSQ that retains many characteristics of its full-length counterpart. This includes general satisfaction, Technical Quality, Interpersonal Manne, Communication, Financial Aspects, Time spent with Doctor, Accessibility, and Convenience. And the gender (male and female) as the predicted variable. The morbidity was assessed by adopting the list of chronic diseases used in prospective urban and rural epidemiology (PURE) studies [31] because the disease on the list fulfills WHO criteria for chronic diseases.

Statistical analysis

Descriptive statistics were used to summarize the overall characteristics of the participants including gender, age, marital status, family structure, educational level, ethnicity, occupation, and level of income. Chi-square was used to test the statistical difference between gender and educational level. Mann-Whitney U test analysis was performed to compare the participant's mean satisfaction level and gender. The assumption for this test was fulfilled because the dependent variable was measured is ordinal (non-parametric) and our independent variable consisted of two categorical (male and female), and there is no relationship between the observations in each group or between the groups themselves.

Results

Table 1 shows cross-tabulation of socio-demographic features and multimorbidity. The socio-demographic characteristics of the respondents for this study include gender, age, marital status, family structure, educational level, occupational level, ethnicity, level of income and number of chronic diseases. A total of 800 patients aged 60 years and above were approached for inclusion in the study, 91.8% (734 out of 800) agreed to participate. 66 refused to participate for personal reasons. All four secondary health facilities attained or surpassed the minimum required sample size. About 60% of the respondents are female and the mean age of the sample is 67.3 years (male

66.3 years and female 68.1 years) see table 1. The most frequent marital status is married in 65.8% of the sample. The major family structure is extended family in 60% of respondents. A considerable proportion of the respondents does not have any form of education (62.9%) and own a business as their occupation (38.1%). Many of the respondents were from the major ethnic groups of the state (Nupe 27.8%, Gwarri 26.3%, and Hausa 23.7%). Less than fifteen thousand naira was reported in nearly two-thirds of the cases.

Table 1. *Shows cross-tabulation of socio-demographic features and multimorbidity (n=734)*

Socio-demographic variables	Multimorbidity Number of Chronic diseases				Total	%
	2	3	4	5		
Age group						
60-64	184	70	7	1	262	35.7
65-69	178	82	5	2	267	36.4
70-74	62	42	16	3	123	16.8
75-79	14	13	2	0	29	4.0
80 and greater	14	23	8	8	53	7.2
Gender						
Male	198	84	14	4	300	40.9
Female	254	146	24	10	434	59.1
Marital status						
Never married	5	4	2	0	11	1.5
Currently married	330	139	11	3	483	65.8
Divorced	13	6	1	1	21	2.9
Separated	11	5	2	1	19	2.6
Widow/er	93	76	22	9	200	27.2
The education level of the respondent						
Illiterate	248	172	29	13	462	62.9
Can read and write	25	8	2	0	35	4.8
Primary school level	54	17	3	0	74	10.1
secondary school	45	15	4	0	64	8.7
Tertiary school	65	17	0	1	83	11.3
Post-graduate	15	1	0	0	16	2.2
Family structure						
Nuclear Family	108	31	2	0	141	19.1
Three Generation Family	65	62	16	8	151	20.5
Extended Family	279	137	20	6	442	60.4
Occupation of the respondent						
Government staff	30	5	0	1	36	4.9
Own business	191	81	8	1	281	38.1
Involve in the family business	24	12	0	0	36	4.9
Company staff/ worker	26	4	0	0	30	4.1
Dependent	81	95	26	12	214	29.2
Retired	92	32	4	0	128	17.4
Others (specify)	8	1	0	0	9	1.4
level of income						
0-15k	269	167	29	12	477	65.0
16k-30k	86	30	6	2	124	16.9

31k-45k	18	9	3	0	30	4.1
46k-60k	22	5	0	0	27	3.7
greater than 60	57	19	0	0	76	10.4
The ethnicity of the respondent						
Gwarri	115	65	8	5	193	26.3
Hausa	103	58	9	4	174	23.7
Nupe	137	57	9	1	204	27.8
Others	97	50	12	4	163	22.2

Association between gender and educational level of the respondents

Table 2 shows the association between gender and educational level. There is a statistically significant difference in educational level between males and females. Males are more educated even though females utilize healthcare services more.

Table 2. *Association between gender and educational level among older adults with multimorbidity in north-central Nigeria.*

			The education level of the respondent						
		Illiterate	**Can read and write**	**Primary school**	**Secondary school**	**Tertiary school**	**Post-graduate**	**Total**	**Chi-square (p-value)**
Gender	Male	130	19	36	45	59	11	300	94.903** (<.001)
	Female	332	16	38	19	24	5	434	
	Total	462	35	74	64	83	16	734	
	chi-square is significant at the 0.01 ** level (2-tailed).								

Association between gender and patient satisfaction

A statistically significant difference was observed in mean values of patient satisfaction level of males and female with their healthcare pathway experiences. There is a statistical difference in the mean of the males and females in all the items of access to quality healthcare, see table 3. The mean values were mostly slightly higher in males than females. For items that relate to patients waiting time and patients-physician interaction time, the mean values were higher in females than males except for one item which is Doctors usually spend plenty of time with me. And in all items, except my medical bills are often beyond my reach, there is statistically significant difference in the means of males and females. For perceptions on the financial burden of healthcare the mean values of satisfaction are higher in males. And the item I feel confident that I can get the medical care I need without being set back financially was significant statistically. For perception of confidence and trust in medical care, the mean values were higher in females for 2 items, see table. The item sometimes doctors make me wonder if their diagnosis is correct is statistically significant and the mean value is higher in the males than female.

***Table 3**. Mann-Whitney U test association of satisfaction level and gender*

		Mean rank	Z (P-value)
Accessing quality care	I think my doctor's office has everything needed to provide complete medical care Male Female	417.49 332.95	-5.741 (0.001)
	Doctors are good at explaining the reason for medical tests Male Female	432.38 322.65	-7.137 (0.001)
	The medical care I have been receiving is just about perfect Male Female	417.96 332.62	-5.731 (0.001)
	When I go for medical care, they are careful to check everything when treating and examining me Male Female	413.03 336.03	-5.160 (0.001)
	My doctors treat me in a very friendly and courteous manner Male Female	396.49 347.46	-3.282 (0.001)
	I have easy access to the medical specialists I need Male Female	399.97 345.06	-3.727 (0.001)
	I can get medical care whenever I need it Male Female	408.44 339.20	-4.638 (0.001)
Patient-physician relationship and timing	Doctors act too businesslike and impersonal toward me Male Female	338.43 387.59	-3.273 (0.001)
	Those who provide my medical care sometimes hurry too much when they treat me Male Female	326.02 396.17	-4.722 (0.001)
	When I need emergency care, the waiting times are usually too long Male Female	338.90 387.27	-3.343 (0.001)
	I am dissatisfied with some things about the medical care I receive Male Female	322.26 398.77	-5.154 (0.001)
	Doctors usually spend plenty of time with me Male Female	391.52 350.90	-0.675 (0.007)
	I find it hard to get an appointment for medical care right away Male Female	342.51 384.78	-2.858 (0.004)

The financial burden of medical care	My medical bills are often beyond my reach Male Female	 371.25 364.91	 -0.425 (0.671)
	I feel confident that I can get the medical care I need without being set back financially Male Female	 386.70 354.23	 -2.236 (0.025)
Confidence and trust in medical care	I have some doubts about the ability of the doctors who treat me Male Female	 360.40 372.41	 -0.811 (0.417)
	Doctors sometimes ignore what I tell them Male Female	 355.61 375.72	 -1.346 (0.178)
	Sometimes doctors make me wonder if their diagnosis is correct Male Female	 389.04 352.61	 -2.618 (0.009)

From our previous study [29], patient satisfaction items were grouped into 4 dimensions:

- Accessing quality care.
- Patient-physician interaction time and waiting time.
- The financial burden of medical care.
- Confidence and trust in medical care.

Figure 1 shows the mean summary of the dimension by gender. The overall mean satisfaction score of males is higher than that of females in 2 dimensions i.e., access to quality care and financial burden of treatment, it can be interpreted that females are less likely to be satisfied with access and the quality of healthcare, and financial burden of medical care. Similarly, males are more likely to satisfied with the patient-physician interaction time and patient waiting time and confidence and trust in medical care.

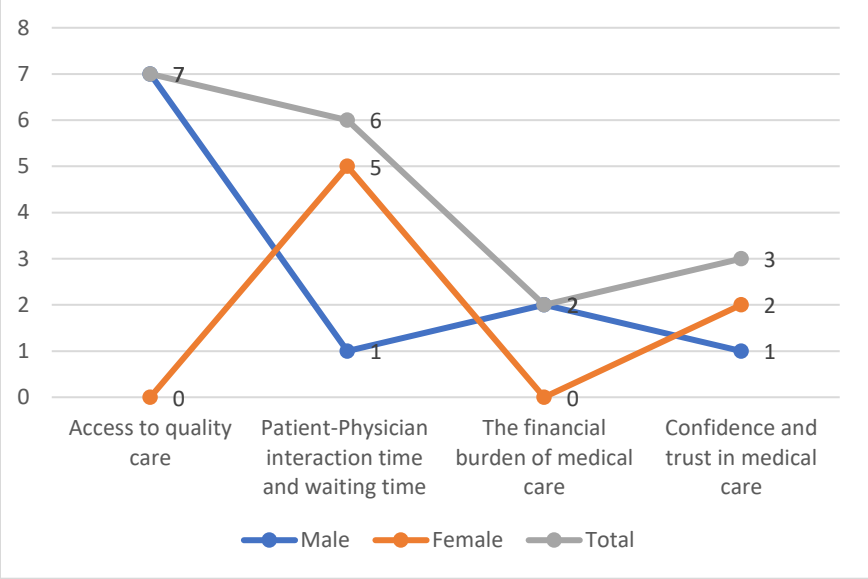

Figure 1. *Overall dimension score of satisfaction by gender*

Discussion

This study investigates the impact of gender on patients' satisfaction with healthcare among individuals with multimorbidity in north central Nigeria in a cross-sectional study. Patients' satisfaction is said to be influenced by the literacy level of the patients and has been adopted widely in developed countries as an index of health care quality [32]. However, the use of patient's satisfaction in low-and middle-income countries for quality measurement is inadequate [33].

In this study males were more educated than females, but females utilize healthcare services more. In ten out of eighteen items of satisfaction measured in this study, males were more satisfied than females, however the overall mean score satisfaction of females with medical care was higher in females than males. Likely because males were more educated than their female counterparts in our study. And the higher satisfaction level among women may justify the higher utilization of healthcare services despite their low education. Without doubt, the low level of education among the participants has contributed to the level of satisfaction seen in this study because two-thirds of the participants do not have any form of education. Our finding is in congruent with findings in the UK and USA that reported higher satisfaction among older adults and advance age/lower education for primary healthcare services [18]. This was buttressed by researchers who stated that older patients have lower expectations [34].

Gender differences in patient satisfaction are not straightforward however vary according to underlying cultural and social factors [35]. The inconsistency in the satisfaction score across items of satisfaction in studies may indicates that female and male patients may have different expectations regarding the practice of the organization [36]. For this study, females were more statistically significantly satisfied than males mainly in all items of patient-physician relationship and timing except doctors usually spend plenty of time with me. Although patient satisfaction with healthcare studies across gender among multimorbidity patients is not popular, our findings are tantamount to [37], which reported that staff responsiveness and communication with doctors and nurses were more influential factors of satisfaction for women.

This study does not look at the effect of physician gender on patient satisfaction like other studies that reported that the different expectations between female and male patients regarding the organization of the practice or different ways of organizing care delivery between female and male GPs could act on this satisfaction [38]. Again, while these differences were not significant in some studies [38] and stated that the differences were unlikely to be clinically relevant, it is largely statistically significant in our study across most items. Similarly, in single morbidity studies like patients with inflammatory bowel disease that measured quality of care, it was found that female patients reported lower satisfaction with their overall quality of care [39] Also of importance to note is that the gender disparities were generally larger for older patients with worse self-reported health status and in for-profit hospitals [40], bearing in mind that the participants in our studies are older patients having 2 or more chronic medical conditions.

Only three items do not show statistically significant differences in the mean satisfaction score between males and females, which include My medical bills are often beyond my reach, I have some doubts about the ability of the doctors who treat me, and Doctors sometimes ignore what I tell them. Therefore, we recommend that practitioners, hospital administrators, relevant stakeholders, and policymakers look for the results based on the findings of every single item of the patient's experience satisfaction as it is aggregated by gender instead of those based on overall patient satisfaction.

Conclusion and Limitations

Patient healthcare expectation could be gender driven, and acknowledgement of female and male patients needs and satisfaction with services will lead to more realistic implementations of health directed policies which is more gender inclusive that will be fundamental for delivery of high-quality healthcare services. Although our study contributed new perspectives around patient satisfaction among older people with multimorbidity in Nigeria, its findings cannot be generalized, however, they can be replicated elsewhere to increase its impact.

Compliance with Ethical Standards

I, the undersigned, give my consent for the publication of identifiable details, which can include text and/tables and/or figure and/or details within the article to be published in the above Journal. The authors confirm that the data supporting the findings of this study are available within the article [and/or] its supplementary materials.

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Conflict of interests

The authors declare no conflicts of interest.

Ethical approval

Ethical approval was obtained from the College of Nursing, Midwifery, and Healthcare, the Research Ethics Panel (Ethical Approval No. 1055), and authorization to collect data was sought from the Research, Ethics, and publication committee (REPC) of the Hospitals Management Board, Minna, Niger state of Nigeria.

Informed consent

The researchers read out details of the research to participants and provided them in writing. Participants could freely sign an informed consent form prior to participating in the study, and the individual's right to withdraw partially or completely was observed.

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