PERCEPTION OF HEALTHCARE PROFESSIONALS TOWARD PATIENT PARTICIPATION IN DECISION MAKING IN A TERTIARY INSTITUTION IN KANO, NIGERIA

BALARABE Ibrahim GayaFaculty of Nursing, Lincoln University College, Malaysia

UMAR AliyuFaculty of Nursing, Lincoln University College, Malaysia

Dr. REGIDOR III Poblete Dioso Lincoln University College, Malaysia

ADENIYI, Sarafadeen Diran (Ph.D) Lincoln University College, Malaysia

Abstract

Patient-centered healthcare refers to the provision of care that aims to address the needs and preferences of patients. In recent decades, there has been a noticeable shift in the healthcare sector towards a more patient-centered approach, encouraging active participation from patients in their healthcare decisions. The objectives of this study are to ascertain patients' preferences regarding their involvement in healthcare decision-making and assess healthcare professionals' attitudes toward patient participation in decision-making A cross-sectional descriptive study design was employed, focusing on healthcare professionals and patients .The study sample comprised a total of 720 respondents. Two instruments: the Patient-Practitioner Orientation Scale (PPOS) and the Control Preferences Scale were used for healthcare professionals and patients respectively. Basic descriptive statistics such as frequency tables, percentages, and means, t-tests and Pearson's chi-square tests was used for hypothesis testing. Mean age of patients was 43.2 ± 14.2 years, female (62.2%), married (77.8%) and working as civil servants (30.4%). The mean age of healthcare professionals was 38.7±9.0 years. Sixty percent of patients preferred a passive role in healthcare decision-making, while 96.5% of healthcare professionals exhibited a positive attitude towards patient involvement in healthcare decision-making. The mean score of Nurses on the Overall PPOS was 75.9±9.3, whereas that of medical doctors was 72.4±8.0, A significant statistical relationship was observed between the years of working experience of healthcare professionals and patient involvement in healthcare decisions (r = 0.160; p = 0.005). The study concluded that healthcare professionals displayed a favourable perception towards patients' involvement in healthcare decision-making

Keywords: Decision-making, Healthcare, Perception, Professionals



Introduction

Over the past four decades, the healthcare enterprise has been shifting towards more patient-centered healthcare that promotes patient participation in healthcare (Joseph-Williams et al., 2017). Patient-centered healthcare is care meant to solve the needs of patients and their preferences (International Alliance of Patient Organization [IAPO], 2006). The IAPO identified five ethics which is fundamental to the accomplishment of patient-centered healthcare. These are; respect for the patient's needs, preferences, values, autonomy, and independence; the right of the patient to have a choice to participate as a partner in making healthcare decisions based on their abilities and preferences; significant and dynamic participation in health care plans through sharing in decision making to ensure that patients are at the center of the planned design; Access and support; provision of access to safe, quality and suitable services; and the improvement and offering of age-suitable, educational, and culturally designed information that will enable the individual patients' to be well informed about their healthcare needs.

Involving patients in decision-making is a significant part of patient-focused care. Involvement of the patient in healthcare decisions most prominently rests on an ethical imperative based on a fundamental right to self-determination and is reflected in the right to consent to medical intervention (Masters, 2014). According to Kvæl et al., (2018), "Patient-centered care is more related to seeing the human being as a biological, psychological, and social Being to deliver respectful, individualized, and empowering services that implied patient participation and a nurse-patient relationship based on trust, empathy, and shared knowledge". Patient involvement in decision-making is justified on moral grounds and is in line with a patient's right to autonomy. Patient participation is also synonymous with Shared Decision Making (SDM)(Truglio-Londrigan et al., 2014).

Shared Decision-making (SDM) is a process that patients and healthcare professionals dynamically engage in, which is aimed at the patient's participatory role in healthcare decisions (Truglio-Londrigan et al., 2014). According to Whitney et al., (2006), the shared decision-making procedure involves a series of steps which include: the acknowledgment that a decision needs to be made; recognizing the possible courses of action; enumerating the advantages, disadvantages, and other possibilities; comparing the options and identifying one as being better than the rest; accepting or rejecting options resulting in the final choice; authorization of the final choice; and implementation of that choice.

Three decision-making models noted in modern literature include authoritarian, informed decision-making, and shared decision-making. (Charles, Gafni & Whelan, 1997 cited in Truglio-Londrigan et al., 2014). The authoritarian (paternalistic) model is where the healthcare provider carries out the care from the perception of knowing what is best for the patient and therefore makes all decisions. The informed decision-making model takes place as the evidence needed to make decisions is provided to the patient and the patient makes the decision alone. While shared decision-making model is characterized by sharing and negotiation towards cure decisions between the healthcare professional and the patient. The patient shares the responsibility with the healthcare professional in this model. The key characteristics of SDM are the participation of at least two parties; where both the patient and health professional take strides to participate in the process of treatment decision-making; information sharing occurs as a prerequisite to sharing in decision-making; finally decision is made, and both parties agree to the decision.



Research Method

For this study quantitative research approach was used. The study population comprised medical doctors, nurses, and patients attending outpatient and specialist clinics, with a total population size of 9,554. Medical doctors accounted for 110 individuals, representing 1.1% of the total target population, while nurses constituted 504 individuals, making up 5.3%. The majority of the study population consisted of patients attending outpatient department clinics and specialist clinics, totaling 8,940, which represented 93.6% of the overall population.

A sample is a subset of a population selected for study, and its size is determined using statistical methods to ensure representativeness. This study employed the Krejcie and Morgan (1970) formula, which is commonly used for determining sample sizes for finite populations. The formula incorporates parameters such as the population size (N), the assumed population proportion (P = 0.5), the table value of chi-square for one degree of freedom at a 95% confidence level ($X^2 = 3.841$), and a margin of error (d = 0.05). Applying this formula, the required sample size for each category of participants was calculated. For nurses, from a total population of 504, the computed sample size was 218. Similarly, the required sample for patients, out of 8,940, was 368, while for medical doctors, from a population of 110, the required sample size was 86. These calculations ensured a scientifically valid representation of each subgroup in the study.

To account for potential participant attrition, a 10% increment was applied to each category. This adjustment increased the sample size for nurses from 218 to 240, for medical doctors from 86 to 95, and for patients from 368 to 405. Consequently, the total sample size for the study was adjusted from the initial 672 to a final total of 740 participants. This approach ensured that the study maintained statistical power and reliability despite potential dropouts, thereby enhancing the validity and generalizability of the findings.

A questionnaire is a collection or sequence of questions designed to prompt information from a respondent when asked by an interviewer or completed unaided by the respondent (Odiwuor et al., 2015). The questionnaire contained the following areas: socio-demographic variables. Face and content validity of the instruments was carried out by given them to the supervisors and experts in the field of nursing and medicine. Despite the fact that the questionnaire tool that was used are already validated tool in several studies (Krupat et al., 2000). A pilot study was conducted with 10% of the total population in Murtala Muhammad Specialist hospital Kano to test the reliability of the instrument as modified. Ten percent of the patient and 10% of the physicians and nurses. A Cronbach's alpha for testing results of 0.75 and 0.69 was recorded for the PPOS and CPS respectively.

Data cleaning was done to check for inconsistent entries, data mistakenly entered, missing data, outliers, and duplicates before the actual analysis. Data collected from the questionnaires administered (PPOS) to the health care professionals (physicians and nurses) and patients using CPS were both entered into SPSS version 24 and analysed using descriptive statistics such as percentages frequency table, mean and standard deviation, and inferential statistics such as chisquare for categorical variables. Independent t-test was used to test hypotheses.



Journal Of Lianning Technical University
No: 1008-0562 Natural Science Edition

Results

The results are presented in frequency distribution table and percentages, with mean and standard deviation calculated where applicable. The data and analysis of data obtained from the study are presented in line with the objectives.

Table 1: Socio-demographic variable of Patients (n=405)

VARIABLE	F	0/0
AGE(Years)	<u> </u>	70
18-28	77	19
29-38	91	22.5
39-48	102	29.2
49-58	66	16.3
59-68	39	9.6
69-78	30	7.4
Mean (SD) 43.2±14.2		
Gender	1.50	27.0
Male	153	37.8
Female	252	62.2
Marital Status		
Married	315	77.8
Single	60	14.8
Divorced	18	4.4
Widow/Widower	12	3.0
Religion		
Islam	384	94.8
Christianity	21	5.2
Occupation		
Unemployed	105	25.9
Civil Servant	123	30.4
Business	111	27.4
Student	48	11.9
Others	18	4.4
Level Of Education		
Tertiary	183	45.2
Secondary	105	25.9
Primary	42	10.4
Informal Education	75	18.5
Residence		
Rural	112	27.7
Urban	293	72.3
Ethnic Group		
Hausa/Fulani	360	88.9
Yoruba	6	1.5
Ibo	3	0.7



Journal Of Lianning Technical University

No: 1008-0562

Natural Science Edition

Others	36	8.9
9 49-2		

Table 1 above shows the demographic variables of patients that participated in this study. The table shows that the mean age of patients is 43.2±14.2 years with the age range of 39-48 years being the highest 102(29.2%) and 69-78 years being the lowest 30(7.4%). The table also shows that majority are female 252(62.2%), married 315(77.8%), practice Islam as region 384(94.8%), civil servants 123(30.4%), had tertiary education 183(45.2%), live in urban area 293(72.3%) and are Hausa/Fulani by ethnicity 360(88.9%).

Table 2: Socio-demographic variables of Healthcare Professionals (N=315)

Variable	Nurses	Medical Doctor	Total	Percentage
	(n=226)	(n=89)		
AGE (Years)				
22-28years	42	9	51	16.2%
29-34years	37	23	60	19.0%
35-40years	46	31	77	24.4%
41-46years	44	14	58	18.4%
47-52years	35	10	45	14.3%
53-58years	22	2	24	7.6%
Overall Mean Age = 38.7±9.0	39.1±9.6	37.6±7.3		
Gender				
Male	84	66	150	47.6%
Female	142	23	165	52.4%
Marital Status				
Married	191	76	267	84.8%
Single	32	13	45	14.3%
Widow/Widower	3	0	3	1.0%
Religion				
Islam	175	85	260	82.5%
Christianity	51	4	55	17.5%
Ethnic Group				
Hausa/Fulani	144	71	215	68.3%
Yoruba	23	7	30	9.5%
Igbo	23	0	23	7.3%
Others	36	11	47	14.9%
Rank (Nurses)(n=226)				
ADNS	10		10	4.4%
CNO	64		64	28.3%
ACNO	28		28	12.4%
PNO	29		29	12.8%
SNO	53		53	23.5%
NO	42		42	18.6%
Medical Doctor (n=89)				
Consultant		15	15	16.9%

Journal Of Liaoning Technical University
ISSN No: 1008-0562

Matural Science Edition

Senior Registrar		26	26	29.2%
Registrar		48	48	53.9%
Years of Working Experience				
1-10	90	68	158	37.5
11-20	84	15	99	31.4
21-30	45	6	51	16.2
31-40	7	0	7	2.2
Overall Mean Years of	Mean=13.1	Mean=9.4±7.0		
Experience= 12.1±8.6	±9.0			

Table 2 shows the socio-demographic variables of health professionals comprising of 226 (71.7%) of nurses and 89(28.3%) of medical doctors. The overall mean age of health professionals is 38.7±9.0 years (39.1±9.6 for nurse; 37.6±7.3 for medical doctors). The age range of 35-40 years 77(24.4%) is the highest while 53-58 years 24(7.6%) is the lowest. Majority of the health professionals are female 165(52.4%), married 267(84.8%), practice Islam as religion 260(82.5%), and are Hausa/Fulani by ethnicity 215(68.3%). The table also shows that Nurses at the rank of CNO 64(28.3%) are the majority among Nurses while the rank of Registrar 48(53.9%) is the majority among the medical doctors that participated in this study. The mean years of working experience of the health professionals is 12.1±8.6 years. Majority of the health professionals have worked for 1-10 years 158(37.5%) while the least years of working experience is within the range of 31-40 years 7(2,2%).

Table 3: Summary of frequency and mean of sharing Subscale of nurses perception towards patient participation in decision making (n= 226)

PERCEPTION PATTERN	F	%	M±SD	SCORING RANGE
Decision sharing	217	96		
Paternalistic	9	4	37.4±6.9	From 1 to 54
TOTAL	226	100		

Cut off point: Sharing (patient centered) 28 -54; Paternalistic (practitioner centered) = 1-27

Table 3 shows the summary grading of sharing subscale of nurses perception towards patients participation in decision making. The table shows that almost all the nurses 217(96%) have positive perception towards decision sharing with patients while only 9(4%) have a negative perception (have paternalistic behaviour) towards sharing healthcare decision with patients. This means that most of the nurses have positive behaviour towards sharing healthcare decisions with their patients.

Table 4: Summary of frequency and mean of Caring Subscale of nurses perception towards patient participation in decision making (n= 226)

PERCEPTION PATTERN	F	%	M±SD	SCORING RANGE

High Caring	190	84.1		
Low Caring	36	15.9	38.5±5.6	From 1 to 54
TOTAL	226	100		

Cut off point: high Caring 28 -54; less caring = 1-27

Table 4 shows that more than four-fifth of nurses 190(84.1%) show high caring towards patient while 36(15.9%) are less caring in their responses to the patient participation orientation scale. This shows that most of the nursing caring toward their patients

Table 5: Pearson correlation between working experiences and patient-practitioners orientation scale score of health professionals (PPOS)

Correlations

		working experience	PPOS
Working Experience	Pearson Correlation	1	.160**
	Sig. (2-tailed)		.005
	N	315	315
PPOS	Pearson Correlation	.160**	1
	Sig. (2-tailed)	.005	
	N	315	315

A Pearson product moment correlation coefficient was computed to assess the relationship between years of working experience of healthcare professionals and their orientation to patient participation in healthcare decision making in Table 5. There was a weak, positive correlation between the two variables, r = .160, N = 315 which was significant (p = .005). This reveals that there is a significant correlation between years of working experiences of healthcare professionals and allowing patients participation in healthcare decision making about their healthcare. This means that with increasing years of experience a healthcare professional is likely to allow more patient participation in healthcare decision.

Discussion of Findings

The result from the study revealed the mean age of patients as 43.2±14.2 years with the age range of 39-48 years being the highest 29.2% and 69-78 years being the lowest 7.4%. Majority of the patients respondents are female 62.2%, married 77.8%, practice Islam as region 94.8%, civil servants 30.4%, had tertiary education 45.2%, live in urban area 72.3% and are Hausa/Fulani by ethnicity 88.9%. The healthcare professionals that participated in this study comprises of 71.7% nurses and 28.3% medical doctors. The overall mean age of health professionals was 38.7±9.0 years (39.1±9.6 for nurse; 37.6±7.3 for medical doctors). This means the nurses have a higher

mean age than the medical doctors. The age range of 35-40 years 724.4% is the highest while 53-58 years 7.6% is the lowest. Majority of the health professionals are female 52.4%, married 84.8%, practice Islam as religion 82.5%, and are Hausa/Fulani by ethnicity 68.3%. Nurses at the rank of CNO 28.3% are the majority among Nurses while the rank of Registrar 53.9% is the majority among the medical doctors that participated in this study. The mean years of working experience of the health professionals was 12.1±8.6 years. Majority of the health professionals have worked for 1-10 years 37.5% while the least years of working experience is within the range of 31-40 years 2.2%.

Findings from this study revealed that 60% of the patients prefers passive participation in healthcare decision making, while one-fourth 23.7% prefers collaborative participation and 16.3% prefers active participation in healthcare decision making. This means that most of the patients in this study prefer to play a passive role with regards to their healthcare choice and rely more on the healthcare professionals to make healthcare decisions on their health. This finding is slightly similar to what was reported by Redley et al., (2019) that 30.8% of patient, 25% and 44.2% preferred active, shared (collaborative) and passive participation in healthcare decision respectively in a study carried out in Australia. However these findings are contrary to that of Seo et al., (2014) who reported 58% of patients preferred participation in decision making and Brabers et al., (2017) that reported that most patient preferred participation in making decision on issues that affect them. These differences may be due to differences in geographical location of this present study and the others. While this study was carried out in Nigeria which is a developing country where health literacy is still very low among its population. The other two studies were carried out in Germany and United State of America with high health literacy level. It has been reported that health literacy plays a very important role in patient wanting to participate in healthcare decision (Brabers et al., (2017). Health literacy refers to personal and social resources needed for an individual to access, understand and use health information to make decision. Health information is readily available in the developed counties than in developing countries. Secondly Information and respect from the healthcare team towards the patients are important prerequisites for participation. When patient are not well informed about their condition or illness they may not be able to participate in their healthcare decisions (Yang, 2023).

Findings from this study revealed that 96.5% of healthcare professionals (Nurses and medical doctors) have positive perception towards patient participation in healthcare decision making. This is contrary to what was reported by Abiola et al., (2014) in a similar study carried out in Kano where 92.5% were paternalistic and 75.2% have the perception of not sharing decision with patients. This difference may be because this present study was carried out in one tertiary institution only while, the previous study involve four health institutions; two tertiary and two secondary.

It could also be because of time difference that could have change the opinion of healthcare practitioners over time. The most tenable reason may be because of time as the concept of patient participation in healthcare decision is the major focus of healthcare decision making process in the world over presently. On the caring sub-scale 84.8% of healthcare professionals showed caring behaviour. Findings of individual healthcare professional group showed that Overall PPOS mean score for Nurses was 75.9±9.3 while that of medical doctors was 72.4±8.0 on a scale of 108 points. Finding also revealed that 96% of nurses have positive perception towards patient

participation in healthcare decision making while, 84.1% showed caring behaviour towards patients on the two subscales of the PPOS. Similarly, 97.8% medical doctors had positive perception towards patient participation in healthcare decision, while 86.5% showed caring behaviour toward patients. The finding for medical doctors in this present study is contrary to Abiola et al., (2014) who reported that more than 75% of the doctors scored low on the total and the two subscale scores of the PPOS. This difference may be due to changes in the orientation of medical doctors over the time period in order to meet the current best practice of the world globally. The concept of patient participation is focus with regards to patient care as it is believed that the patients know more about their symptoms than the healthcare professional and should be taken as partner in every decision involving their health. Patient engagement in the decision-making process has numerous benefits, including decreased decisional conflict, increased patient knowledge, and improved health outcomes such as patient satisfaction and quality of life.

Conclusion

The findings from this study reveal important socio-demographic characteristics of both patients and healthcare professionals, as well as their attitudes towards patient participation in healthcare decision-making. The majority of patients were middle-aged, female, married, and predominantly of Hausa/Fulani ethnicity, with a significant proportion residing in urban areas. Healthcare professionals were mostly female nurses with a mean age of 38.7 years and an average of 12.1 years of work experience. The study highlights a generally positive perception of patient participation in decision-making among nurses, with 96% supporting shared decision-making and 84.1% demonstrating high levels of care towards patients. Furthermore, the study establishes a weak but significant positive correlation between years of professional experience and the likelihood of involving patients in healthcare decisions, suggesting that more experienced professionals tend to encourage greater patient participation. These findings underscore the need for continuous professional training to enhance patient-centered care approaches, ensuring that healthcare professionals at all experience levels foster inclusive decision-making practices.

Recommendations

- 1. Healthcare institutions should incorporate regular training programs on shared decision-making and patient-centered care approaches to reinforce positive attitudes among healthcare professionals, particularly those with fewer years of experience.
- 2. More experienced healthcare professionals should be encouraged to mentor younger colleagues on the importance of patient participation in healthcare decisions, leveraging their years of experience to instill best practices in decision-sharing.
- 3. Given the significant representation of female patients and healthcare professionals, policies should be developed to address gender-specific healthcare needs and ensure inclusivity in decision-making processes.
- 4. With the majority of participants being of Hausa/Fulani ethnicity, healthcare providers should receive cultural competency training to improve communication and engagement with diverse patient populations, fostering trust and better participation in decision-making.
- 5. As most patients reside in urban areas, efforts should be made to enhance healthcare services in rural communities through outreach programs, telemedicine, and capacity building of

rural healthcare providers to ensure equitable access to quality care and patient involvement in decision-making.

Reference

- Abiola, T., Udofia, O., & Abdullahi, A. T. (2014). Patient-doctor relationship: The practice orientation of doctors in Kano. *Nigerian Journal of Clinical Practice*, *17*(2), 241–247. https://doi.org/10.4103/1119-3077.127567
- Årestedt, L., Martinsson, C., Hjelm, C., Uhlin, F., & Eldh, A. C. (2019). Patient participation in dialysis care—A qualitative study of patients' and health professionals' perspectives. *Health Expectations*, 22(6), 1285–1293. https://doi.org/10.1111/hex.12966
- Baumann, L. A., & Brütt, A. L. (2022). Participation preferences of health service users in health care decision □ making regarding rehabilitative care in Germany A cross □ sectional study. July 2021, 125–137. https://doi.org/10.1111/hex.13356
- Brabers, A. E. M., Rademakers, J. J. D. J. M., Groenewegen, P. P., Van Dijk, L., & De Jong, J. D. (2017). What role does health literacy play in patients' involvement in medical decision-making? *PLoS ONE*, *12*(3), 1–12. https://doi.org/10.1371/journal.pone.0173316
- Büdenbender, B., Michel, M. S., & Alpers, G. W. (2023). When attitudes and beliefs get in the way of shared decision □ making: A mediation analysis of participation preference. November 2022, 740–751. https://doi.org/10.1111/hex.13699
- International Standard Classification of Occupations (ISCO). (2014). In *Encyclopedia of Quality of Life and Well-Being Research* (pp. 3336–3336). https://doi.org/10.1007/978-94-007-0753-5 102084
- Joseph-Williams, N., Lloyd, A., Edwards, A., Stobbart, L., Tomson, D., Macphail, S., Dodd, C., Brain, K., Elwyn, G., & Thomson, R. (2017). Implementing shared decision making in the NHS: lessons from the MAGIC programme. *BMJ (Clinical Research Ed.)*, *357*, j1744. https://doi.org/10.1136/bmj.j1744
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and Applying Research Paradigms in Educational Contexts. *International Journal of Higher Education*, 6(5), 26. https://doi.org/10.5430/ijhe.v6n5p26
- Krejcie, R. V, & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607–610.
- Krupat, E., Yeager, C. M., & Putnam, S. (2000). Patient role orientations, doctor-patient fit, and visit satisfaction. *Psychology and Health*, *15*(5), 707–719. https://doi.org/10.1080/08870440008405481
- Kvæl, L. A. H., Debesay, J., Langaas, A., Bye, A., & Bergland, A. (2018). A Concept Analysis of Patient Participation in Intermediate Care. *Patient Education and Counseling*, 101(8), 1337–1350. https://doi.org/10.1016/j.pec.2018.03.005
- Masters, B. R. (2014). Principles of Biomedical Ethics, Seventh Edition Eds: Tom L.



- Beauchamp and James F. Childress Oxford University Press, 2013. XVI, 459 Pages, US\$66.95, ISBN-13: 978-0-19-992458-5. *Graefe's Archive for Clinical and Experimental Ophthalmology*, 252(9), 1523–1524. https://doi.org/10.1007/s00417-014-2676-5
- Ng, C. J., Lee, P. Y., Lee, Y. K., Chew, B. H., Engkasan, J. P., Irmi, Z. I., Hanafi, N. S., & Tong, S. F. (2013). An overview of patient involvement in healthcare decision-making: A situational analysis of the Malaysian context. *BMC Health Services Research*, *13*(1), 1–7. https://doi.org/10.1186/1472-6963-13-408
- Redley, B., Mctier, L., Botti, M., Hutchinson, A., Newnham, H., Campbell, D., & Bucknall, T. (2019). *Patient participation in inpatient ward rounds on acute inpatient medical wards: a descriptive study.* 15–23. https://doi.org/10.1136/bmjqs-2017-007292
- Seo, J., Goodman, M. S., Politi, M., Blanchard, M., & Kaphingst, K. A. (2016). *Effect of Health Literacy on Decision-Making Preferences among Medically Underserved Patients. May*, 550–556. https://doi.org/10.1177/0272989X16632197
- Truglio-Londrigan, M., Slyer, J. T., Singleton, J. K., & Worral, P. S. (2014). A qualitative systematic review of internal and external influences on shared decision-making in all health care settings. *JBI Database of Systematic Reviews and Implementation Reports*, 12(5), 121–194. https://doi.org/10.11124/jbisrir-2014-1414