

RESEARCH PAPER

GENDER AND QUALITY OF NURSING CARE AS PREDICTORS OF HEALTH LOCUS OF CONTROL AMONG PATIENTS IN PUBLIC AND PRIVATE HOSPITALS

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ABSTRACT

Following the difficulties experienced by patients in getting quality health care services in Jos Metropolis, this study investigated the effects of nursing care and gender on health locus of control among patients in selected private and public hospitals in Jos Plateau State. 195 patients, 99 males and 96 females took part in the study. Their ages ranged from 16 to 55 years with a mean of 10.53 and standard deviation of 3.29. The Multi Health Locus of control Scale (Wallston and Wallston 1978) and the perceived Quality of Nursing Care Scale (PQNCS) Leinenen, Leinokilpi and Stalberg, (2001), were used to measure health locus of Control and Quality of Nursing Care respectively. Using a 2x2 factorial design and analysis of variance, the results indicated no significant gender influence on health locus of control, $F(1,191) = 0.291$, ($p < 0.05$), a significant perception of quality of nursing care on health locus of control, $F(1,191) = 14.184 = 0.0005$ ($p > 0.05$) and no significant interaction of gender and perception of Quality of Nursing Care on health locus of control $F(1,191) = 0.024$ $P = 0.877$ ($P > 0.05$). It is therefore recommended that hospital management should embark on training and retraining of health care workers in patient care relationships. Further study is also recommended in this areas especially on inpatient and out patients.

KEYWORDS: Gender and quality, nursing care, health, Jos, Quality of Nursing Care Scale (PQNCS).

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INTRODUCTION

The need to access quality health care delivery services is not negotiable in any civilized countries of the world. For a sick man or woman there is no better place to seek medical attention than in a highly equipped and professionally staffed hospital. No wonder sick people keep moving from one part of the world to another in search of quality health care services. In Nigeria it is a major challenge to find well-equipped and professionally staffed public or private hospitals especially in the rural areas. Both the Federal, State and local governments are confronted with fiscal constraints which force them to prioritize and restrict public expenditure on health delivery services. Consequently many government owned hospitals are in very serious financial difficulties which reduce the quality of health care services nationwide. Patients' needs such as the provision of modern medical facilities are often neglected in most private and public hospitals.



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Patients' Perceptions of the process and quality of health care received in healthcare institutions which are an important component of their treatment and subsequent recovery process is often jeopardized. There is therefore a compelling need to understand the relationship between patients' recovery from illness, health attitudes/ behaviours and patients perception of health care services received in the healthcare institution, which represent health locus of control.

Stein, Smith and Wallson, (1984), defined health locus of control as the degree to which individuals believe that their health is controlled by internal or external factors i.e controlled by powerful others such as medical professionals or is determined by fate, luck or chance. On the other hand internal beliefs characterize one's health condition as being the direct result of one's actions. It is widely accepted that health-related locus of control is significantly associated with a variety of health behaviors and outcomes like the ability to stop smoking, ability to lose weight, and adherence to medical regimen and rate of recovery from sickness. (Lewis, Morisky and Flggn, 1978, 1975; Coan, 1973).

Several theories have explained quality of nursing care, gender and health locus of control. For example, one dimension of gender theory emphasizes psychological, biological and socio-cultural determinants of health locus of control. Psychologically oriented theories emphasize intra-psychic processes governing gender development. (Kohlberg, 1996). Sociological theories focus on socio-structural determinants of gender role development and functioning. (Epstein, 1988). The biologically oriented theories also emphasize gender differences arising from the differential biological roles played by males and females in reproduction underlying gender- role development and differentiation. Another dimension is concerned with the nature of transmission models. Psychological theories typically emphasize the cognitive construction of gender conception and styles of behavior with the familial transmission model in which genes are posited as the transmission agent of gender differentiation across generation (Lorber, 1994).

Locus of control theories such as the social learning theory Bandura, (1977), attribution theory, Winer, (1974) have all emphasized the interaction of the environment and the human cognitive processes as building blocks for perception/ understanding the real world. Studies in the area of quality health care services and patients perception have often indicated positive associations between perception of quality of health care services and patients; recovery. For example, Peter, Peters, Viswanathan, Rgo, Mashkoor and Burnham, (2008), identified factors associated with client perceptions of quality of primary care services in Afghanistan in a cross-sectional survey of outpatient health facilities and found that clients reported relatively high levels perceived quality of health care services and the level of patient's recovery.

The review method include; in the absence of controlled traits, observational studies were reviewed to examine the relationship between nurse staffing and outcomes metanalysis tested the consistency of the association between nurse staffing and patients outcomes classes of patient and hospital characteristics were analyzed separately. Results indicated that higher registered nurse staffing was associated with less related mortality, failure to rescue, cardiac arrest, hospital acquired pneumonia and other adverse events. The effect of the increased registered nurse staffing on patients safety was strong and consistent in intensive care unit and in surgical patients. Greater registered nurse hours spent on direct patient care was associated with decreased risk of hospital related death and shorter lengths of stay in the hospital.

In Nigeria, Iliyasu, Abubakar, Lawan and Gayida, (2010) examined patients satisfaction with services in teaching hospital in the Northern part of the country. Structured questionnaires were administered on a cross section of 201 patients at the Aminu Kano teaching hospital. Results indicated that overall 80%of the patients were satisfied with the services received from the hospital, 17% were with patient provider relationship in patient service, hospital facilities and access to car. However, 30% of the patients were dissatisfied with waiting time and cost of treatment.



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Patients and their relatives complained about delayed appointments, missing folders, missing laboratory results and long appointments of ultra sound and other radiological investigations.

Ehimere, Nwaneri, Iheanacho and Akpali, (2011) accessed helpless patients' satisfaction with quality of care received in tertiary hospital in Enugu South East Nig. In a descriptive survey design using 105 helpless patients (i.e patients that need assistance with activities of daily living). Who responded to questionnaire administered, the results of the questionnaire analyzed indicated that helpless patients were satisfied with physical and the psychological care received but not quite satisfied with the spiritual care.

The satisfaction of patients with the care they received from healthcare providers especially nurses has become very important approach to the measurement of healthcare in recent times as against predominantly clinical and administrative approaches. This is because patients' satisfaction provides an index for compliance and noncompliance with care regimen. In Jos, capital of Plateau State, North Central, Nigeria, quality of healthcare services becomes very important because of the physical and psychological challenges created by the ethno-religious conflicts which has left many with bodily and psychological injuries. However reports from many private and public hospitals in Jos indicate poor healthcare service delivery attributed to poor medical facilities and attitudes of the medical staff. In some public hospitals it is speculated that doctors and nurses are so indifferent to the feelings and care of their patients that some patients die in the hospital unattended to in other hospitals it is also reported that some nurses even flog women in labour to stop them from shouting which results from labour pains. In most out patient's departments of public hospitals in Jos, waiting for hours to see doctors is a common sight except for private hospitals which are often too costly for average persons.

It is therefore very important to examine the following research questions:-

- What is the influence of perception of quality of nursing care on patients' health locus of control in hospitals in Jos?
- What is the influence of gender on health locus of control of patients in hospitals in Jos?
- What is the interaction effect of gender and perception of quality of nursing on health locus of control of patients in hospitals in Jos?

METHOD

PARTICIPANTS

The participants used in this study were 195 patients drawn from both public and private hospitals in Jos Metropolis who were randomly selected. Male patients were 99 and female patients were 96; the mean age of participants was 32.9 years with a standard deviation of 10.5. All participants were resident in Jos Metropolis at the time of the study.

INSTRUMENTS

Perceived Quality of Nursing Care Scale (PQNCS)

The Perceived Quality of Nursing Care Scale (PQNCS) is a 10-item scale that was developed by Leinonen, Leino-Kilpi and Stalberg (2001). The scale was constructed to identify quality nursing care and is comprised of five categories, preconditions for care, environment and progress of nursing process. The scale is measured on a 5 point Likert scale that ranged from fully agree (5) to fully disagree (1), with an alternative one "do not know" (O). a high score meant high quality nursing care. The content validity index for PQNCS of patients was 0.91, while the Cronbach's alpha coefficient for PQNCS of patients was 0.81.

The Multicultural Health Locus of Control Scale (MHLC)

The scale was developed by Wallston and Wallston (1978); the MHLC is a six point Likert scale, is an 18-item scale classified into three subscales: internal HLC, Powerful-others HLC, and Chance HLC. Each sub-scale contains six questions. For each question, participants choose one out of six answers ranging from "strongly agree" to "strongly disagree".



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The normative data of the scale show that the study subjects were 2388 men and 2454 women aged 40-70 years, who completed a questionnaire regarding socio-demographics, health-related behavior, such as smoking and drinking. The Cronbach alpha of the MHLC scale, was within the range 0.62 and 0.76.

DESIGN

The design adopted for the study is the 2x2 factorial design. The independent variables have two levels each: Perceived quality nursing care (Low and High); Gender (male and female). The study's dependent variable is Health locus of control (HLC). Below is a schematic diagram of the study design.

C	A		B	
	A1	A2	B1	B2
	A1C	A2C	B1C	B2C

KEY VARIABLES

A	=	Perceived Quality Nursing Care
A1	=	Low
A2	=	High
B	=	Gender
B1	=	Male
B2	=	Female
C	=	Health Locus of Control (HLC)

PROCEDURE

The researcher went to the Plateau Specialist Hospital, Dadinkowa Comprehensive medical centre, Bingham University Teaching hospital, and our lady of Fatimah hospital (OLA) at different times respectively. Permission was obtained from the ethics committees of the hospitals used, in form of written documents, except of Our Lady of Fatimah Hospital where oral permission was granted by the matron in charge; and questionnaires were administered after all these conditions were met.

For a period of one month, the researcher was introduced to patients on admission in various ward, and explained the purpose of the research to them, and having taken permission from the respective patients, administered questionnaires to those that agreed to participate in the study. The questionnaires were collected after 20 minutes in each hospital used.

A total of two hundred questionnaires were administered to participants, of this 5 were not valid, and so one hundred and ninety five (195) questionnaires were used for the study. Completed and valid questionnaires were then scored and analysed for statistical significance.



RESULTS

Table 1: Frequencies and Percentages of Demographic Data

		Frequency	Percentage %
Gender	Male	99	50.8
	Female	96	49.2
Religion	Christianity	164	84.1
	Islam	31	15.9
Marital Status	Single	56	28.7
	Married	137	70.3
	Divorced	2	1.0
Educational Qualification	Primary	15	7.7
	Secondary	79	40.5
	Tertiary	97	49.7
	Others	4	2.1
Perception of quality of nursing care	Low	74	37.9
	High	121	62.1

Table 1 shows that males accounted for 50.8% and females 49.2%; the participants religious affiliation showed that 84.1% were Christians, 15.9% were Muslims. Among participants, 28.7% were single, 70.3% were married and 1% were divorced; more so, 7.7% had primary education, 40.5% had secondary education 49.7% had tertiary education, while 2.1% had other forms of education. The socio-economic status data of the patients further indicated that 15.4% were of low economic status, while 75.4% and 9.2% were of the middle class and high class respectively. Scores on perception of quality nursing care indicated that 37.9% had low perception of the quality of nurses' care and 62.1% held high perceptions of the quality of care nurses rendered.

Table 2: Mean and Standard Deviation

	Mean Score	Standard Deviation
Age (years)	32.90	10.534
Perception of Nursing Care	36.39	5.241
Health Locus of Control	78.18	10.017

Table 2 indicates that the mean age of patients in the study was 32.9years (SD = 10.5); the total means score for participants on perception of quality nursing care was 36.39 with a standard deviation of 5.24, health locus of control mean score was 78.18 with a standard deviation of 10.02.

Table 3: Showing 2x2 ANOVA table for interaction effect

Source	Type III Sum of Squares	Df	Means Square	F-ratio	Sig
Corrected Model	1348.573	3	449.524	4.739	0.003
Intercept	10894421.465	1	10894421.465	11485.860	0.000
Gender	27.587	1	0.291	0.291	0.590
PQNC	1345.367	1	14.184	14.184	0.000
Gender *PQNC	2.283	1	0.024	0.024	0.877
Error	18116.145	191			
Total	1211311.000	195			
Corrected Total	19464.718	194			

*PQNC – Perception of Quality Nursing Care



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Result showed that there was no significant gender influences on Health locus of control, $F(1,191) = 0.291$, $p = 0.590$ ($p > 0.05$); with mean scores of 77.897 for males and 77.117 for females. This implies that gender was not a determinant of the level of health locus of control of patients in the study. Table 4 shows the mean summary.

Table 4: Estimated Marginal Means and Standard error for Gender

Gender	Means	Standard error
Male	77.897	0.990
Female	77.117	1.054

Result indicated that there was a significant perception of quality nursing care on health locus of control, $F(1, 191) = 14.184$, $p = 0.0005$ ($p < 0.05$); with mean scores of 74.783 and 80.231 for low and high perception of quality nursing care respectively. This means that a high perception of quality nursing care has influence on the attribution style of the patients. Table 5 shows the mean summary.

Table 5: Estimated Marginal Means and standard error of

Perception of quality nursing care	Means	Standard error
Low	74.783	1.143
High	80.231	0.887

Results indicated that there was no significant interaction of gender and perception of quality nursing, $F(1,191) = 0.024$, $p = 0.877$ ($p > 0.05$). This means that levels of gender and perception of quality nursing care did not have influence on the attribution style of the patients. Table 6 shows the mean summary.

Table 6: Estimated Marginal Means for Interaction Effect

Gender	Perception of quality nursing care	Means	Standard
Male	Low	76.286	1.503
	High	80.509	1.290
Female	Low	74.281	1.722
	High	79.953	1.217

DISCUSSION

Findings of this study indicate that there was no significant influence of gender on health locus of control. This is in line with the study of Xanthi, *et al.*, (2011) that examined gender differences with respect to personality traits and health locus of control and found no differences on health locus of control profile between the genders.

However, this contrasts the study of Wilson, Williams, Arheart, Bryant and Alpert, (1994) that examined the effects of race and gender on health locus of control (HLC); and found boys had higher scores no significant powerful others than girls. Again, Shehu and Mokagwathi (2008) in a case control study compared internal resilience factors and health locus of control and found males to be higher on internality loci than females.

Social and cultural factors may explain this lack of differential in health locus of control findings across gender. Patients on admission often get a lot of social for coping with making attributions regarding their ill health. Furthermore, gender according to the learning theology is a categorization by society and as such is only useful for role play and it does not affect traits.

Perception of quality nursing care had a significant influence on the health locus of control of patients. This agrees with the findings of John, Daren, David and Timothy (2002) that found relationships between patient perceptions of health locus of control and quality of care, with patient externalization predicating improvement in health. Also,



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Emmanuel, Acheme, Afoi, Gimba and Daniel (2011) assessed the quality of nursing care on patient's opinion in Ahmadu Bello University Teaching Hospital and found significant influence of nursing care on patient's attributions and satisfaction.

This could be explained on the basis that patients with lower perceived nursing care internalize it and make attributions regarding power others responsible for their health outcome place functional limitations regarding their health status as being controlled more by external factors. On the other hand, patients with higher perception of nursing care internalize these perceptions and make attributions based on internal factors, and as such internalize their will to recover. It is not proven whether there is a cause-and-effect relationship or which of these parameters the antecedent is. Related reports suggest that perception of control may positively influence functional outcome and disability levels.

The interaction of gender and perception of quality nursing care was not significant. Health locus of control is a state and not a trait, as such, the particular state of health locus of control of an individual could be different at different time depending on prevailing factors that are influencing the individuals, such as significant others, environment and physiological factors. Moreso, the respective environment was different for patients as regards the different hospitals they were in.

CONCLUSION

This study examined the influence gender and perception of quality nursing care on health locus of control of patients in public and private hospitals. Findings indicate that perception of quality nursing care was a significant factor in patient's health locus of control; however, gender was not a significant factor, there was no interaction effect, and so significant difference was found for health locus of control between patients in public and private hospitals.

The persistently low quality and inadequacy of health services provided in public facilities has made the private sector an unavoidable choice for consumers of health care in Nigeria. Ineffective state regulation, however, has meant little control over the clinical activities of private sector providers while the price of medical services has, in recent years, grown faster than the average rate of inflation. Private sector healthcare delivery in low and middle-income countries is sometimes argued to be more efficient, accountable, and sustainable than public sector delivery. Conversely, the public sector is often regarded as providing more equitable and evidence-based care.

RECOMMENDATIONS

Based on the outcome of this study, the following recommendations are made:

There is need for training and retraining of health care workers in patient care relationships in both private and public hospitals.

Efforts should be made by government to provide adequate facilities in the various departments of public hospitals to enhance better health care delivery.

In order to be able to manage the large volume of patients in the public hospitals, flexible appointment schedules should also be instituted to enhance quality health care service delivery.

Considering the limitations in the study, future studies should use larger number of hospitals across the length and breadth of Nigeria.

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REFERENCES

- Adrian, C., Sherman, Graham E. Higgs and Robert L. Williams (1997). Gender Differences in the locus of control construct. *Psychology & Health* 12 (2): 23-35.
- Answer, I. (2009). Perceptions of Quality of Care for Serious Illness at Different Levels of Facilities in a Rural Area of Bangladesh. *Journal Health Popul Nutr* 27 (3): 396-404.
- Bandura, A. (1977). Social Learning Theory. Englewood Cliffs N.J. Prentice Hall.
- Coam, R.W. (1973). Towards a Psychological Interpretation of Psychology. Periodicals, Inc. A Wiley Company
- Doran DI, Sidani S, Keatings M, Doidge D. (2004). An empirical test of the Nursing Role Effectiveness Model. *Advance Nursing*. 45 (3): 326-36.
- Emmanuel, A., Achema, G. Afoi, B.B., Gimba, S.M. Daniel, G (2012). Assessment of the Quality of Nursing Care In Ahmadu Bello University Teaching Hospital Zaria: Patients' Perspective *Continental Journal of Nursing Science* 3 (1): 16-22.
- Epstein, N. Brain, G, Steer, R.A Beck A.T. (1988). An Inventory for Measuring Clinical Anxiety. *Journal of Consult Clinical Psychology*, 56(6) 893-7
- Epstein, N. (1988). Deceptive Distinction: Sex, Gender and Social Orders Yale University Press.
- Kenneth, A; Wallston, Mitchell, J. Stein and Craig A. Smith. (1984). Form C. of the MHLC Scale. A condition specific measure of health Locus of Control. *Journal of Personality Assessment*. 63 (3) 534-553.
- Kohlberg L. (1996). The Myth of Gender Differences in Health: Social- Structural Determinants across adult ages in Britain & Finland. *Current Sociology*, 49 (3) 331-54.
- Lewis, F.M; Morisky, D.E and Flyn B.S. (1978) A test of the Construct Validity of Health Locus of Control effects on self-reported for hypertensive patients. *Spring*, 6(2) 138-48.
- Leinenan, L; Leinokilpi D. & Stalberg E.B. (2001) Validity and Reliability Coefficient of Perceived Nursing Care Scale. *Journal of Clinical Nursing*, 20; 1-2.
- Lorber, J. (1994) Paradoxes of gender Yale University Press.
- Lliyasu, Z., Abubakar, I.S Abubakar, S., Lawan, U.M, Gajida, A.U, (2010). Patients' satisfaction with services obtained from Aminu Kano Teaching Hospital, Kano, Northern Nigeria. *Nigerian Journal of Clinical Practice*, 13 (4): 371-378.
- Nylnad, J., Darren, L.J., David N.M.C (2002) Internal Health Status belief and lower perceived functional deficit are related among anterior cruciate ligament-deficient patients. The *Journal of Arthroscopic and Related Surgery*, 18 (5) 515-518.
- Ogaji, D.S, & Etokidem, A.J. (2012) Setting agenda for quality Improvement in a public hospital in Nigeria using the consumers' judgment *IOSR Journal of Business and Management* , 1, (4) 26-30.



Peter, M.H., Peters D.H., Viswanathan, K. Rao A and Burham G. (2008) Clients Perception of Quality of Primary Health Care services in Afghanistan. *International Journal For Quality Health Care*. Pp 1-8.

Shehu, J & Mokgwathi, M.M (2008) Health locus of control and internal Resilience factors among adolescents in Botswana: a case-control study with implications for physical education. *South African Journal for Research in Sport, Physical Education and Recreation*, 30 (2): 95-105.-

Wallston K.A. & Wallston B.S. (1978) Development of the Multidimensional Health Locus of Control. *Spring*, 6(2) 160-70.

Wilson, DK., Williams, Z.L., Arheart, K., Bryant, E.S., Alpert, B.S. (1994) Race and Sex Differences in health locus of control beliefs and cardiovascular reactivity. *Journal of Pediatric Psychology*, 19 (6): 769-774

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