

Fostering Elderly Healthcare Through the use of Geriatric Social Care Givers in the University of Calabar Teaching Hospital, Nigeria

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Abstract

Introduction: The commencement of the training of Geriatric Social Care Givers (GSCGs) in Nigeria (Sept 2024), was preceded by the training of Quality Assurance Assessors (QAAs) by the National Senior Citizens Centre, Abuja, under the auspices of the National Board for Technical Education – Centre of Excellence, Kaduna. This research aimed to unearth the place of the GSCGs in the care of elderly patients with a view to evaluating the demands of the elderly in enhancing their care.

Methods: A cross-sectional descriptive survey involving 211 consenting subjects (NHREC/07/10/2012). was conducted in the Geriatric Clinic of the Department of Family Medicine, University of Calabar Teaching Hospital, Calabar. A semi-structured self-administered questionnaire was used. A test-retest reliability coefficient of 0.8 was attained to ensure the validity of the questionnaire as a working instrument. Data were analysed using the statistical package for Social Sciences (SPSS) version 25. Descriptive statistics was used to summarize variables and results were expressed in tables as percentages, means and standard deviation. The level of statistical significance was set at $p < 0.05$, using chi-square test and Fisher's exact test where necessary.

Results: Statistically significant relationships were found between expectations and participants' age group ($p < 0.001$), gender ($p < 0.001$), level of education ($p < 0.001$), tribe ($p < 0.001$) and occupation ($p < 0.001$). Those who were married, lived in far urban residences and those with longer duration of illness had high levels of expectations.

Conclusion: In this study, the expectations of the elderly about healthcare services were high with significant association when compared with socio-demographic variables (age, gender, level of education, tribe and occupation). Healthcare providers should keep these expectations in mind during their clinical encounters with geriatric patients

Keywords: Geriatric Social Caregivers, Elderly Medical Care, Fostering Elderly Healthcare, National Senior Citizens Centre.

Background

Recently (September, 2024), the National Senior Citizens Centre (NSCC), Abuja, commenced a nationwide training of Geriatric Social Care Givers (GSCGs) in Nigeria. The upcoming integration of GSCGs into the healthcare of the elderly patients in Nigeria will certainly contribute to bridging the gap between gerontology and geriatrics in the course of time.

The emergence of Geriatric Social Care Givers: The commencement of the training of the GSCGs was preceded by the training of Quality Assurance Assessors (QAAs) under the auspices of the National Board for Technical Education – Centre of Excellence, Kaduna.^{1,2} Most of the QAAs were Family physicians along with geriatricians and other healthcare delivery personnel, drawn from accredited Training Centres made up of University Teaching Hospitals and Federal Medical Centres. Other QAAs were invited from established Senior Citizens Caring Homes across the country. Having received the needed training, the QAAs would then take on the step-down training of the GSCGs using standardized materials made available by the NSCC, which is the certificate Awarding Body for the GSCGs training.

Knowledge in Ageism and Geriatric Expectations in Elderly medical care:

Healthcare workers' knowledge, attitude and perception, play significant roles in the care of the elderly. Geriatric healthcare providers must have adequate knowledge of the changes and challenges associated with ageing including the basic needs of the elderly.^{3,4} This is vital because these needs must be met daily for the elderly without compromising their health and safety, and for them to be able to live independently for as long as possible. These needs include the basic and instrumental activities of daily living including exercise among others. It is reported that most healthcare providers have very poor knowledge of health conditions which are common with the elderly.^{3,6} Consequently, some healthcare providers harbour unhealthy and superstitious beliefs about caring for the elderly.^{3,4}

Aim: This research aimed to unearth the place of geriatric social care givers in the healthcare of the elderly patients in the University of Calabar Teaching Hospital, with a view to evaluating the demands of the elderly in enhancing their care. Specifically, this research set out to: explore the geriatric patients' expectations on how to be treated by geriatric social care givers in the University of Calabar Teaching Hospital (UCTH); explore the geriatric patients' expectations on the

provision of care by geriatric social care givers in the UCTH; and determine the relationship between the socio-demographic characteristics and expectations of geriatric patients attending the UCTH.

METHODS

This was a cross-sectional descriptive survey involving a total of 230 subjects, out of which 211 participated in the study, as 19 of them did not return their questionnaires. Thus, the response rate was 91.2% (211/230). Consequently, the results of 211 participants were analyzed.

The study was carried out in the Geriatric Clinic of the Department of Family Medicine, University of Calabar Teaching Hospital, located in Calabar Municipal Local Government Area of the Cross River State (CRS).

Study population: The study population consisted of elderly patients who were receiving care in the UCTH. Those who met the inclusion criteria were recruited into the study after being duly informed of the aims and objectives of the research. Upon obtaining their informed consent to participate in the study, they were formally enrolled for the study. The population to be studied was estimated to be about 440 over the two-month period of the study [seeing approximately 11 subjects per day x eight weeks of five days per week = 11x5x8 = 440].

Sample size determination: The sample size was calculated by applying Leslie and Kish single proportion formula for the study of a population less than 10,000.^{7,8}

$$nf = \frac{n}{1+(n-1)/N}$$

Where:

nf = the sample size when the population is less than 10,000.

n = the sample size when the population is more than 10,000.

N = estimated population size = 440

For a study of the population greater than 10,000. Cochran's formula was applied as follows:^{7,8}

$$n = z^2 pq/d^2$$

Where:

n = the desired sample size when the population is greater than 10,000.

Z_a = the standard normal deviate which was set at 1.96 and which corresponded to 95% confidence level.

p = prevalence of outcome of interest = 50%.⁸

q = variance = 1 - p = 0.5

d = degree of accuracy required was set at 5%.

Therefore n = (1.96)² × 0.5 × 0.5 / (0.05)² = 384.16

$$\text{Substituting for nf: } \frac{n}{1+(n-1)/N}$$

Therefore:

$$nf = 384.16 / (1 + (384.16 - 1) / 440) = 206$$

The calculated minimum sample size was 206. To make up for attrition, 10% of the estimated sample size, that is: 20.6 was added to make it 226.6, with a rounded figure of 230.

Sampling technique: The sampling interval for the study was then calculated using the formula.

$$k = N/n$$

Where: K = was the sampling interval

N = was the population to be recruited over the duration of the study which was 440.

n = was the sample size which is 230.

Therefore, the sampling interval

$$K = 440/230 = 1.9 \text{ (approximated to 2)}$$

A systematic random sampling technique was used for the study. The first participant was selected by simple random sampling technique, precisely by balloting. Subsequently, participants were recruited based on the sampling interval of 2 until the required sample size was attained. If after selection, a patient declined to give consent, the subsequent consenting participant was recruited into the study.

Selection criteria: Inclusion criteria – All consenting elderly patients (60 years and above) attending the UCTH Geriatric Clinic.

Exclusion criterion: Those who were critically ill.

Instrument for data collection: The instrument used for data collection was the questionnaire for exploring geriatric patients' expectations from geriatric social care givers. This was a modified semi-structured self-administered type questionnaire, which was developed, based on literature review and the objectives of the study. It was divided into 4 sections (A-D) which included:

Section A- For eliciting information on the socio-demographic profile of the respondents.

Section B- To explore the geriatric patients' expectations on how to be treated by geriatric social care givers. The options were based on a three-point Likert scale ranked from 1 to 3, ranging from: "Not important" scored as 1, "Important" scored as 2 to "Very important" scored as 3.

Section C- was designed to explore the geriatric patients' expectations on the provision of care by geriatric social care givers. The options were based on a three-point Likert scale ranked from: 1 to 3 ranging from: "Not important" scored as 1, "Important" scored as 2, to "Very important" scored as 3.

The questionnaire had been subjected to panels for face and content validity which included a Community Medicine Specialist and two others who are experts in statistics. Their modifications and suggestions were effected before final approval for administration of the study. Also, the reliability of the instrument was ensured via test-retest reliability testing on 10% of the sample size and the reliability coefficient determined was 0.8. The participants used for this preliminary

exercise, were subsequently not included in the study.

Study protocol: The researchers recruited two research assistants and trained them on the purpose of the study to ease data collection. The trained research assistants were attached to the clinic for the two months of data collection. Permission to perform this study in the Department was not a problem, since the principal investigator was the Head of the Department of Family Medicine at the time. The healthcare providers in the clinic were informed to gain their cooperation. At the beginning of each clinic day, the researchers and the assistants provided information about the study to the participants and those who volunteered and met the inclusion criteria were requested to sign an informed consent form, and confidentiality was assured.

Patients were recruited in the waiting room of the clinic so as not to disrupt the smooth running of the clinic. The hospital number of study participants were coded sequentially, and written on the questionnaire. Non-consenting patients were given care according to structured protocol and hospital procedures. The principal researcher went through the filled questionnaires to ensure proper completion, and number the questionnaires to aid entry into the software.

Data analysis: Data collected were collated, tallied and analyzed using the statistical package for social sciences (SPSS) software version 25.0. Descriptive statistics was used to summarise variables and results were expressed as percentages, means and standard deviation. Chi-square test (and Fisher's exact test where necessary) was used to test the significant association between variables. The level of statistical significance was set at p-value of <0.05.

Ethical consideration: Approval to carry out this study was sought for and received from the Health Research and Ethics Committee (HREC) of the UCTH. (NHREC/07/10/2012)

RESULTS

Socio-demographic characteristics: Table I shows that a total of 211 elderly patients participated in the study. There was a preponderance of females over males at a ratio of approximately 3:1. The ratio of the spread of the respondents across the age brackets was 3:2: 1 approximately, for the age brackets: 70 -79, 60 – 69 and ≥ 80 respectively

Table I: Socio-demographic characteristics of elderly patients accessing care at the Geriatric Clinic of Family Medicine Department in UCTH, Calabar

Variables	Frequency	Percentage
Age group		
60 – 69	73	34.6
70 – 79	104	49.3
≥ 80	34	16.1
Sex		
Male	51	24.2
Female	160	75.8

Marital Status		
Separated	8	3.8
Married	165	78.2
Divorced	7	3.3
Widowed	31	14.7
Education		
Primary	39	18.5
Secondary	103	48.8
Tertiary	69	32.7
Religion		
Christianity	191	90.5
Islam	8	3.8
African Traditional	12	5.7
Tribe		
Efik	135	64.0
Ibibio	37	17.5
Igbo	18	8.5
Hausa	4	1.9
Yoruba	12	5.7
Others	5	2.4
Occupation		
Still engaged	81	38.4
Not engaged	130	61.6

Geriatric patients' expectations on how to be treated:

Table II presents the responses of geriatric patients when asked about their expectations from the Geriatric Social Care givers on treatment approaches. This was done by providing various statements and asking the patients to rank their responses on a scale of 1 to 3 with 1 being "not important" and 3 being "very important."

Table II: Expectations among geriatric patients on how to be treated by Geriatric Social Care givers

Items	Responses		
	Not important (%)	Important (%)	Very important (%)
Treatment with respect and dignity	0 (0.0)	90 (42.7)	121 (57.3)
Communication that is not discriminatory	1 (0.5)	88 (41.7)	122 (57.8)
Not stigmatized	0 (0.0)	89 (42.2)	122 (57.8)
Not shouted at	0 (0.0)	84 (39.8)	127 (60.2)
A Safe and healthy environment	19 (9.0)	133 (63.0)	59 (28.0)
Not neglected but need attention	11 (5.2)	147 (69.7)	53 (25.1)
To understand and treat me as an elderly	14 (6.6)	145 (68.7)	52 (24.6)
Treatment with compassion and patience	19 (9.0)	50 (23.7)	142 (67.3)
Given assistance when needed	19 (9.0)	142 (67.3)	50 (23.7)
Not approached with bad attitude	8 (3.8)	87 (41.2)	116 (55.0)
Not queued with younger patients	20 (9.5)	83 (39.3)	108 (51.2)
Need privacy	23 (10.9)	80 (37.9)	108 (51.2)
Respect my right as an aged person	10 (4.7)	94 (44.5)	107 (50.7)
Respect my cultural background	6 (2.8)	94 (44.5)	111 (52.6)
Not partial because of my age	6 (2.8)	99 (46.9)	106 (50.2)
Be given priority attention	9 (4.3)	92 (43.6)	110 (52.1)

Carefully listen and hear me out	2 (9.0)	91 (43.1)	118 (55.9)
Treatment with empathy during end of life	7 (3.3)	87 (41.2)	117 (55.5)
Addressed by title, not name only	84 (39.8)	55 (26.1)	72 (34.1)

Geriatric patients' expectation in the provision of care by Geriatric Social Care givers: The response of geriatric patients when asked about their expectation from the Geriatric Social Care givers in terms of the provision of care is as shown in Table III. This was done by providing various statements and asking the patients to rank their responses on a scale of 1 to 3 with 1 being "not important" and 3 being "very important."

Table III: Geriatric patients' expectations from Geriatric Social Care givers in the provision of care

Items	Responses		
	Not important (%)	Important (%)	Very important (%)
Involved in care decision-making process	5 (2.4)	87 (41.2)	119 (56.4)
Need emotional support always	11 (5.2)	90 (42.7)	110 (52.1)
Assisted in feeding, bathing, dressing up, ambulating	14 (6.6)	113 (53.6)	84 (39.8)
Assisted in hygienic needs	16 (7.6)	109 (51.7)	86 (40.8)
Assisted to take medications in time, prepare meal, handle finance and do laundry	14 (6.6)	112 (53.1)	85 (40.3)
Educated on interaction of prescribed medications	7 (3.3)	97 (46.0)	107 (50.7)
Explain side effects of medications	7 (3.3)	89 (42.2)	115 (54.5)
Don't need plenty medications	6 (2.8)	88 (41.7)	117 (55.5)
Assisted in using assisted devices like wheelchairs	11 (5.2)	91 (43.1)	109 (51.7)
Assisted to exercise properly	10 (4.7)	94 (44.5)	107 (50.7)
Assisted in making use of basic communication technology such as telephone	11 (5.2)	95 (45.0)	105 (49.8)
Not treated as disease but treated as a person with health needs	1 (0.5)	94 (44.5)	116 (55.0)
Care giver to have a complete knowledge about care of the elderly	3 (1.4)	87 (41.2)	121 (57.3)
Not refusing to offer care on the ground of my age	3 (1.4)	96 (45.5)	112 (53.1)
To use verbal and non-verbal gestures to offer comfort when needed	13 (6.2)	106 (50.2)	92 (43.6)

Relationship between socio-demographic characteristics and geriatric patients' expectations

As shown in Table IV below, the relationship between socio-demographic characteristics of the geriatric patients and the level of their expectations from the Geriatric Social Care givers were explored using Chi-square test of independence.

Table IV: Relationship between socio-demographic characteristics and the level of geriatric patients' expectation from Geriatric Social Care givers, UCTH.

Variables	Level of expectation		χ^2	p-value
	Some expectation (%)	High expectation (%)		
Age group (yrs)				
60 – 69	24 (32.9)	49 (67.1)	22.83	< 0.001*
70 – 79	53 (51.0)	51 (49.0)		
≥ 80	28 (82.4)	6 (17.6)		
Sex				
Male	48 (94.1)	3 (5.9)	52.93	< 0.001*
Female	57 (35.6)	103 (64.4)		

Marital status	Separated	6 (75.0)	2 (25.0)	FET	0.103
	Married	75 (45.5)	90 (54.5)		
	Divorced	5 (71.4)	2 (28.6)		
	Widowed	19 (61.3)	12 (38.7)		
Education	Primary	37 (94.9)	2 (5.1)	47.28	< 0.001*
	Secondary	50 (48.5)	53 (51.5)		
	Tertiary	18 (26.1)	51 (73.9)		
Religion	Christianity	91 (47.6)	100 (52.4)	FET	0.075
	Islam	7 (87.5)	1 (12.5)		
	Traditional	7 (58.3)	5 (41.7)		
Tribe	Efik	41 (30.4)	94 (69.6)	56.70	< 0.001*
	Ibibio	30 (81.1)	7 (18.9)		
	Igbo	16 (88.9)	2 (11.1)		
	Others	18 (85.7)	3 (14.3)		
Occupation	Engaged	23 (28.4)	58 (71.6)	24.01	< 0.001*
	Not engaged	82 (63.1)	48 (36.9)		

*Significant p-value

Discussion

This study set out to identify the demands and expectations of elderly patients from the newly trained Geriatric Social Care Givers in the University of Calabar Teaching Hospital and found that the expectations of the participants was generally quite high. The need for recruiting and training of many more GSCGs and integrating them into the labour force to cushion the healthcare challenges of the elderly was unveiled by this report.

Socio-demographic characteristics: The majority (49.3%) of the patients belonged to the age group 60–69 years. This may be explained as resulting from the limited access of the senior citizens to the healthcare services, and probably poor risk factor control of chronic illnesses in our environment. However, an Iranian study reported a preponderance of 70 years and above.⁸ In similar studies done in Ghana and Egypt, most of the participants were between 60-69 years and less than 65 years respectively.^{9,10} More than three-quarters (75.5%) of the respondents were females. The female preponderance in this study may be due to the good health-seeking behaviour among women compared to men. It may also be a reflection of the gender profile among geriatric patients in the study centre. Equally as well, it could result from the fact that men tend to be occupied with life-sustaining tasks aimed at catering for their families rather than coming to the hospital, even at the expense of their health. This finding is similar to reports from elsewhere in which the majority of the respondents were female.^{10,11} Approximately, four-fifths of them (78.2%) were married. The majority (48.8%) attained up to secondary education. These findings show that most of the participants had good education, which ultimately could account for their high expectations from healthcare givers. The majority of them (90.5%) were Christians. This was because Christianity is the major religion in the study environment. Most (64.0%) of them belonged to the Efik tribe. This, again, was due to Efik being a major tribe in the

study area. Close to two-thirds (61.6%) of the participants were not actively engaged in any form of occupation. Being engaged in promising occupations could have ensured steady income sources which would empower the patients, enabling them to arrive at better decisions regarding their health, thus, influencing their expectations towards healthcare services.

Geriatric patients' expectations on how to be treated: The result of this study shows that majority of the geriatric patients had very high and important expectations from the GSCG in aspects stated below: Treating them with respect and dignity (57.3%) including respect for their right (50.7%). This finding is also reported in studies conducted in South Africa and Ghana, where most of the patients expected to be treated with respect for their persons.^{9,11} Majority expected using means of communication that were not discriminatory (57.8%), not to be shouted at (60.2%) and not to be approached with derogatory disposition (55.0%). These findings were equally in agreement with reports from South Africa and Ghana cited above, where most of the patients expected non-use of harsh words on them, health workers not to be rude but polite, including not to be cruel.^{9,11} In this study, most of the respondents expected that they should not be stigmatized (57.8%). This had been reported in a similar study conducted at Olabisi Onabanjo University Teaching Hospital, Ogun State, Nigeria, where participants expected friendliness from the healthcare givers.¹² This study shows that most of the participants expected to be given priority attention (52.1%) and not queued with younger patients (51.2%). This may be explained by their long experience of long waiting time through their dealing with the healthcare setting. Their being aged, weak and frail required that much attention should be inculcated into ensuring a very brief waiting time in their line of care. These findings were in consonance with those reported in studies carried out in South Africa, Ghana, Egypt and Hungary where the elderly patients expected priority care with short waiting time, and not to be queued up with younger patients.⁹⁻¹³ Most participants in this study expected to be carefully heard out (55.9%). This finding is somewhat similar to those reported elsewhere where the participants expected healthcare givers to understand them well, listen to their concerns with patience and answer their questions.^{9,14,15} Also, most respondents in this study expected to be treated with compassion and patience (67.3%), including showing empathy during end-of-life (55.5%). Reports from South Africa, Ghana and Germany indicated similar findings (compassion, patience and empathy) from the older adults.^{9,11,14} In this study, most participants also had high expectations on need for privacy (51.2%), for their cultural background to be respected (52.6%), and for non-partial care in lieu of their age (50.2%).

Geriatric patients' expectations in the provision of care: The result of this study shows that, regarding provision of

care, majority of the geriatric patients had high expectations in the following: To be involved in the care decision-making process (56.4%), and to be treated as a person not as a disease entity (50.0%). These findings align with reports by Nardoo et al, Eze et al and William-Robert et al, where participants expected issues to be discussed with them including better treatment approach, centred on the patient and not the disease.^{11,12,15} Most participants expected emotional support (52.1%), similar to reports in studies conducted in Germany and Poland.^{14,16} This study showed that most participants expected to receive explanations on interactions of prescribed medications (50.7%), explanation about side effects of prescribed medications (54.5%), including not being placed on plenty medications (55.5%). These findings correlate with those of previous research which documented avoidance of pill-burden, and provision of information about prescribed medications with their side effects as expectations of the elderly participants.^{11,12} Most of the respondents in this study had high expectations for assistance with using their devices (51.7%), and exercising (50.7%), as also documented in another similar study where participants expected to be assisted when necessary in their daily living.¹⁴ This study also showed that most participants expected the GSCGs to have adequate knowledge on elderly care (57.3%), and also, not to be refused care based of age (53.1%).

Relationship between socio-demographic characteristics and geriatric patients' expectations: The result of this study shows that those in the age group 60-69 years (young old), the females, those with tertiary education, those of the Efik tribe and participants who were still engaged had a high level of expectations. There were statistically significant relationships between the expectations and participants' age group ($p < 0.001$), gender ($p < 0.001$), level of education ($p < 0.001$), tribe ($p < 0.001$) and occupation ($p < 0.001$). These findings are comparable to those of Arafat et al who reported a significant relationship between the older adults' expectations and the socio-demographic factors (marital status, urban residences and duration of illness).⁹ In this study, those who were married, lived in far urban residences and those with longer duration of illness had high levels of expectations. However, one similar study found no significant association between the older adults' expectations and their socio-demographic factors (gender, marital status, education level, and insurance).¹⁰ Equally as well, a similar Nigerian study also found no significant association between the elderly patients' expectations and their socio-demographic characteristics (Age, gender, marital status, occupation, level of education and income).⁹

CONCLUSION

This is now the first Geriatric Social Care Givers' assessment profile in Nigeria, with a research study conducted in Calabar. We have documented the expectations of the geriatric patients

from GSCGs in a selected population of geriatric patients encountered at the Geriatric Clinic, UCTH. In this study, the expectations of older adults about healthcare services were high with significant association when compared with socio-demographic variables (age, gender, level of education, tribe and occupation). Healthcare givers should keep these expectations in mind during their clinical encounters with geriatric patients. They should pay more attention to the requirements related to age in an effort to identify and satisfy geriatric patients' expectations, thus, improving treatment outcomes. This calls for improvement for future geriatric–healthcare providers' relationship.

Recommendations: More targeted research on expectations of the elderly should be carried out in future to improve the level of care provided to geriatric patients. Specialized geriatric clinics should also be set up utilizing the results of this study. Further research (qualitative) is required regarding the unmet healthcare expectations of the elderly in our communities. There is also the need for more healthcare professionals' education regarding geriatric care.

To strengthen elderly medical care and promote the holistic well-being of senior citizens in need of healthcare, it is recommended additionally, that the University of Calabar Teaching Hospital, in collaboration with the Federal and State Ministries of Health, should formulate and implement a policy framework for the integration of trained geriatric social care givers into hospital services. This policy should establish guidelines for recruitment, training, scope of practice, and inter-professional collaboration between social care givers and medical personnel, with provisions for continuous monitoring, evaluation, and sustainability. The UCTH Management is in a good position to actualize this, since the Hospital has already gotten Quality Assurance Assessors as the ground force for the training of geriatric social care givers.

Limitations of the study: Clear limitations of this study are its cross-sectional and descriptive design, which do not allow for any interpretation of causality. Also, the study was conducted in the UCTH, Calabar. This means that there may not be much room for generalization because elderly patients in other institutions may have different expectations towards their medical care. Furthermore, the study involved the use of questionnaire which may have given the participants the opportunity to give responses they considered desirable and socially acceptable, thereby creating bias.

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