Communication barriers in healthcare delivery in Nigeria

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Abstract
Background: The role of effective communication between a patient and the health care provider cannot be over-emphasized. A patient who feels uncomfortable communicating with a health provider might not comply to instructions.The practice of good communication helps in building trust in relationships between healthcare providers and patients and enables better understanding of the patient's medical problems. This study therefore was conducted to determine various communication barriers and their resultant effects on healthcare delivery in Nigeria.
Materials and Methods: This was a descriptive cross-sectional study carried out among two hundred and twenty-eight women who gave consent. The study period was from November 2019 to January 2020.The study was conducted among pregnant women and nursing mothers that access health care in seven Primary Health Centres (PHCs) in ObotAkara Local Government Area of Akwa-Ibom state.Data was collected using both qualitative and quantitative methods.
Results: The age of the respondents ranged from 18 to 55 years. Health facilities utilised by respondents when sick were Primary Health Care Centers (35.1%), chemists 34.6% of the respondents, 22.8% general hospitals while 7.5% went to houses of health care providers for treatment. Reasons given by respondents on choice of health facility revealed 27.6% of the respondents reported nearness to place of residence, 17.1% availability of health workers, 15.4% friendly staff, understanding the language by 19.3% while empathy from staff was 4.8%. Majority (32.9%) didn't feel language was a factor that affected their compliance to medications.
Conclusion: Communication barriers exist in health care delivery. The commonest barrier is language.
Key words: Communication; Barriers; Health care delivery; Nigeria.

I. INTRODUCTION

Effective communication between healthcare providers and patients is crucial to improving health outcomes, patient satisfaction and delivery of operative healthcare services. Health promotion, accurate diagnosis, patient safety and compliance are all contingent on effective communication between medical personnel and patients.[1] The practice of good communication helps in building trust in relationships between healthcare providers and patients and enables better understanding of the patient's medical problems. This in-turn results in improved diagnosis and management of the patients' condition.

Several communication barriers exist in healthcare deliverysuch as time management, difficulties with rapport building, patients who are poor historians, physicians that do not explain the condition and management effectively to their patients, language, religion and culture of the patient and physician, and the physical set up of the clinic.[2] These barriers to communication contribute to reduced quality of healthcare delivery, adverse health outcomes and health disparities. Research has shown that improved care, medication adherence, patients understanding of diagnosis and treatment are closely linked to extent of communication between the patient and the health care provider (HCP).[3] Language barriers between a patient and the healthcare personnel affect comprehension of diagnosis and treatment as well as adherent to treatment instructions.[4,5]This can result in the doctor carrying out examination for an ailment that the patient may have erroneously communicated when he or she intended to describe another ailment. Difficulty to communicate effectively with health care professionals may contribute to lack of access to quality healthcare services.

Culture and socio-political factors may affect communication between medical personnel and patients.[6] Differences in beliefs, values and cultural practices may affect patients' expression of physical and emotional distress to his/her HCP whom is seen as not a member of his/her family. This may be difficult for patients with this culture to express certain conditions associated with physical or emotional problems. They may communicate differently to the HCP resulting in misled diagnosis and misguided treatment options.

Patients perception of their doctors have been documented to pose communication barriers between patients and their HCP.[7,8,9] Some patients view their doctors as 'supreme' deserving great respect. This cultural/professional dilemma affect the pattern of illness communication between patients and their doctors.

Communication between patients and their doctors can also be influenced by 'place of origin'.[10] Healthcare professionals might have subconscious biases towards patients who do not have same racial or ethnic groups as them. Such issues may interfere with communication between patients and medical professionals and in turn affect patients' response to recommendations, screening and treatment plans.

Non-verbal communication affects Doctor-Patient relationship. Differences in non-verbal communication including proxemics, kinesics and paralanguage impacts on the way patients communicate with their HCPs.[11]

Proxemics refers to the way people make use of the space around them unknowingly when communication.[12] This varies from culture to culture. Moving away or stepping aside, 'touch' and 'holding hands' are interpreted differently by persons depending on their cultural/ethnic background. Kinesics[13] refers to the way people move their body when communicating. Gestures, facial expressions, eye contacts and touching, describe body movements during communication. Kinesics vary from culture to culture. The simple act of smiling will mean different things for different ethnic groups. This can ultimately affect the way patients relate with their HCPs.

Paralanguage[14] includes variations in speech such as voice quality, volume, tempo, pitch,nonfluences (for example, uh,um,emm,ah etc.), laughing, yawning etc are often interpreted by people based on their ethnicity and culture. Nonverbal communication such as paralanguage can affect understanding of patient's relationship with the HCP if not recognised timely. A HCP who is unfamiliar with the patients' cultural differences may offend the patient unknowingly thereby interfering with communication.

Strategies such as the use of interpreters, training healthcare practitioners in cross cultural communication and enacting a law to assist patients who are unable to speak same language are some ways to reduce communication barriers in health care settings.[15]

Few studies exist on barriers to communication in health care. This study therefore was conducted to determine various communication barriers and their resultant effects on healthcare delivery in Nigeria.

II. MATERIAL AND METHODS

The study was conducted among pregnant women and nursing mothersthat access health care in seven Primary Health Centers(PHCs) in ObotAkara Local Government Area of Akwa-Ibom state. ObotAkara is one of the thirty-one local government areas in Akwa-ibom state located in south south region of Nigeria. The local government's headquarters is at NtoEdino. It occupies a land mass of 92 sq, meters (237km^2) with a total population of 148,281 (Census 2006). ObotAkara Local Government Area is located in North East of AkwaIbom State. It shares boundaries with EssienUdim, Ikono. Ini, IkotEkpene Local Government Areas in AkwaIbom State and Ikwuano and IsialaNgwa Local Government Areas in Abia State. The predominant language in ObotAkara is Annang and are farmers majorly by occupation.

Study Design
This was a descriptive cross-sectional study.

Study Location
This was a facility- based study done in seven Primary Health Care Centres in ObotAkara Local Government Area of Akwa-Ibom state, Nigeria.

Study Duration
 The study period was from November 2019 to January 2020. All the women that gave consent to participate in the study were included.

Sample size calculation
Sample size was calculated using the for this study was The sample size was determined using the formula
n=Z^{2}P^{2}q/d^2
Where

       n= minimum sample size
       Z= standard normal derivative (1.96)
       P = proportion of desired attribute
       q = 1-P
       d = desired level of precision (0.05)

Sampling technique
The study population was drawn from pregnant women and nursing mothers who attended clinic on days' data was collected. Those who gave consent were consecutively recruited into the study until the sample size was reached.

Data collection, analysis and presentation

Ethical clearance was obtained from the research/ethics committee of Abia State University, Uturu. The scope and objectives of the study was explained to participants and consent obtained prior to commencement of study. Data was collected using both qualitative and quantitative methods. Qualitative method was by one-to-one interviewwhile quantitative method was by the use of pre-tested semi-structured questionnaires administered to consenting participants. Self-administered method of response to the questionnaires was adopted by participants who were literate while interviewer administered for those who could not read.

Data on Socio-demographic characteristics of respondents, utilisation of health facilities by patients, reasons for use of preferred health facilities, factors that affect compliance to medications, effect of language to treatment compliance, need for an interpreter during consultations and patient management were obtained from respondents. Qualitative data was analysed by sorting and coding while quantitative data was analysed using statistical package for social sciences (SPSS) version 20.

III. RESULTS

As presented in Table 1, the age of the respondents ranged from 18 to 55 years. A majority (34.2%) of them were within 31-40 years with ages 51-55years following next (28.1%). Respondents between 18-20years were only 16 (7.0%). One hundred and twenty-seven respondents (55.7%) were married, 83 (36.4%) single, 10 (4.4%) widowed while 8 (3.5%) were divorced. Among the respondents, only 57 (25%) of them had tertiary education, 131 (57.5% secondary educational background, 17 (7.5%) primary education and 23 (10%) had no education. The Annang tribe represented the largest number of respondents (86%), while the Ibos represented the least (1%) . Most of the respondents were self- employed (62.5%), 24 (10.5%) were employed while 13.6% were students and unemployed. Only 6,1% of the respondents had one form of disability or the other.

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency	Percentage(%)
Age (years)		
< 20	16	7.0
21 – 30	49	21.5
31 – 40	78	34.2
41 – 50	21	9.2
51 and above	64	28.1
Total	228	100
Sex		
Female	228	100
Total	228	100
Marital Status		
Single	83	36.4
Married	127	55.7
Widowed	10	4.4
Divorced	8	3.5
Total	228	100
Highest Level of Education		
None	23	10
1^0	17	7.5
2^0	131	57.5
3^0	57	25
Total	228	100
Tribe		
Annang	196	86
Ibibio	25	11
Oron	6	2.6
Ibo	1	1
Total	228	100
Occupation		
Unemployed	31	13.6
Self employed	142	62.3
Employed	24	10.5

Student	31	13.6
Total 0	228	100
Disability		
Dumb	1	0.4
Deaf	8	3.5
Eye Problem	5	2.2
None	214	93.9
Total	228	100

Table 2 shows health facilities utilised by respondents when sick. Most of the respondents attended Primary Health Care Centres when sick (35.1%), chemists were utilised by 34.6% of the respondents, 22.8% went to general hospitals while 7.5% went to houses of health care providers for treatment.

Table 2: Utilisation of health facility when sick

Variable	Frequency	Percentage (%)
Chemist	79	34.6
Primary Health Centre	80	35.1
General Hospital	52	22.8
Health workers houses	17	7.5
Total	228	100

Table 3 shows reasons given by respondents on choice of health facility; 27.6% of the respondents reported nearness to place of residence as reason for choice of health facility attended, 17.1% reported availability of health workers, 15.4% friendly staff, understanding the language was reported by 19.3% while empathy from staff was 4.8%.

Table 3: Reasons for choice of health facility

Variable	Frequency	Percentage (%)
Nearness to place of residence	63	27.6
Availability of health workers	39	17.1
Friendly staff	35	15.4
Empathy from staff	11	4.8
Understand the language	44	19.3
Male preferences	26	11.4
Female preferences	10	4.4
Total	228	100

Table 4 shows priority care from health workers. On priority care from health care providers, the majority (31.6%) of the respondents preferred friendly staff as their priority care from health workers .

Table 4: Priority care from health workers

Variables	Frequency	Percentage (%)
Medications	36	15.8
Attention from health workers	53	23.2
Keeping to time	10	4.4
Friendly staff	72	31.6
Good communication of health condition	57	25
Total	228	100

Table 5 shows environmental preference for health facility. Ninety-six (42.1%) of the respondents had no preference to the environment as a factor for choice of health facility

Table 5: Environmental preference for health facility

Variables	Frequency	Percentage (%)
None	96	42.1
Quiet	20	8.8
Well ventilated	20	8.8

Well lit	50	21.9
Clean environment	42	18.4
Total	228	100

Table 6 shows factors that affect compliance to medications. Respondents indicated language barrier (43.9%) as one factor that could affect compliance to medications. Friendly attitude of health workers(46.9%) had the highest response for compliance to medications. Staff competence (9.2%) was given as a factor that can affect compliance to medications.

Table 6: Factors that affect compliance to medications

Variables	Frequency	Percentage (%)
Medications		
Staff competence	21	9.2
Language barrier	100	43.9
Friendly attitude of health workers	107	46.9
Total	228	100

Table 7 shows effect of language to treatment compliance. Seventy-five(32.9%) respondents reported language had no effect on treatment compliance. Forty(17.5%) respondents reported that language made for better understanding of prescription, 62(27.7%) accepted that language makes for better understanding of side effects.

Table 7: Effect of language to treatment compliance

Variables	Frequency	Percentage (%)
None	75	32.9
Better understanding of prescription	40	17.5
Better understanding of side effects	62	27.7
Better understanding of drug composition	16	6.9
Freedom of expression	35	15.4
Total	228	100

Table 8 shows need for an interpreter during visits to health facility. One hundred and ninety-seven (86.4%) of the respondents reported they didn't need an interpreter during visits to the health facility while 31 (13.6%) needed interpreter.

Table 8: Requires an interpreter during visits to health facility

Variables	Frequency	Percentage (%)
Yes	31	13.6
No	197	86.4
Total	228	100

Table 9 shows responses to ease of communication with health care provider. One hundred and thirty-four (58.8%) respondents reported they had very easy communication with health care providers while 10 (4.4%) had difficulty communicating with their health care provider.

Table 9: Ease of communication with health care provider

Variables	Frequency	Percentage(%)
Very easy	134	58.8
Easy	57	25
Difficult	27	11.8
Very difficult	10	4.4
Total	228	100

Qualitative data reporting
Interview 1
Interviewer/Interpreter: Good morning
Patient: Good morning
Interviewer/Interpreter: How do you do?
Patient: I am fine, thank you.
Interviewer/Interpreter: What tribe do you belong to?
Patient: Annang
Interviewer/Interpreter: Eh? Do you speak Igbo?
Patient: No, I speak Annang
Interviewer/Interpreter: So, Annang is the language of communication used in this health centre.
Patient: Yes
Interviewer/Interpreter: So you understand your health care provider perfectly?
Patient: Yes
Interviewer/Interpreter: Is Annang used to tell you how to take your medications, its dosages and side effects?
Patient: Yes
Interviewer/Interpreter: Do you face any challenges in communicating and understanding the health workers?
Patient: No, I don't.
Interviewer/Interpreter: Ok, Thank you for your time.

Interview 2
Interviewer/Interpreter: Good morning
Patient: Good morning
Interviewer: How are you today
Patient: I am fine, thank you.
Interviewer/Interpreter: Is this health center close to your house?
Patient: No
Interviewer/Interpreter: So what makes you come here?
Patient: This place is good
Interviewer/Interpreter: Why do yousay so?
Patient:The nurses treat me well if I have any problem
Interviewer/Interpreter: How do they communicate with you?
Patient: Annang
Interviewer/Interpreter: What of those that don't hear anang?
Patient: They speak English
Interviewer/Interpreter: What of who does not hear English?
Patient: We interpret for her.

IV. DISCUSSION

This study sought to determine the communication barriers in healthand their resultant effect in health care delivery in Nigeria. The study interviewed patients who presented to the health centres during the course of the study. Most of the respondents attended Primary health care centres when they have need to see a health care provider. Utilisation of health care facilities by individuals and families are determined by a lot of factors.[16]This study shows that patients in ObotAkara L.G.A where this study was conducted preferred to use Primary Health Care Centresas shown by 34.1% of them indicating this option as their preferred health care facility. This result is different from a study conducted in Ilorin Western Nigeria where 35.2% of the patients preferred private hospitals for health care.[17]Communities in ObotAkara are more rural than urban and being profit-driven, private hospitals will not thrive in this area where majority of residents are peasant farmers with few strangers. This study as against the Ilorin study[17] showed that Primary Health Centers are mostly utilised by residents in ObotAkaraL.G.A. , this is similar to a study carried out by Agofure and Sarki[18] in Kaduna where 97.1% of the respondents utilised PHCs more than any other health facility. The fact this study was limited to pregnant and nursing mothers might explain the predominant choice of PHCs for health care in the study area. In Nigeria, PHCs are closest to the population and forms the first point of contact with health care services. Its major service delivery are antenatal care and immunisation. Thus, it becomes easier for women to attend PHCs while pregnant or take their children for immunisation or for any other health care need. Results might vary with a mix of males and females as respondents. In keeping with findings from other studies[19,20] on factors that influence the use PHCs, this study showed that availability of health workers, prompt response time, friendly health personnel and good communication were some factors that influenced the choice of PHCs as their preferred health facility. As shown by other studies[21,22], language poses significant challenges to effective communication

in health care. Though the respondents in this study were majorly of the annang speaking tribe, there was positive affirmation that same tongue in communicating with health care professionals gave better understanding of medications prescribed, side effects of medication with overall effect of compliance to prescription. Although in this study, respondents did not have need for interpreters/translators while communicating with their caregivers,translators have been found to be invaluable during communication in multi-lingual settings.[23,24]There is need for more research on language barriers in health care. Some researchers[25] suggestions on further studies include; ways in which barriers affect health and health care, efficacy of linguistics access service interventions and costs of language barriers and efforts to overcome them.

Study Limitation
The respondents in this study were mostly indigenes of the same locality with few non-indigenes. Responses from the few non-annang speaking residents might not represent the population required to draw inferences.
Conclusion
The findings from this study revealed that effective communication between the patient and the caregiver is affected by a lot of factors including and not limited to language, ethnicity, patients preferences.
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Competing interests
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Authors contribution
The authors contributed equally to this research.

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