



Evaluation of pregnant women's ability to identify taxonomies of nonverbal communication channels of haptics and kinesics.

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Abstract

Communication surrounds us. Pregnant women are not exempt from some forms of communication with their healthcare providers during antenatal care. The purpose of this study was to ascertain pregnant women's ability to identify the taxonomy of haptics and kinesics as may be used during antenatal care. Participants for the study were pregnant women registered for antenatal care at the antenatal clinic of three Tertiary Health Institutions in South Eastern Nigeria. The instrument for data collection was questionnaire. Statistical analysis of data was performed using Chi-square, likelihood ratio and spearman correlation. Significant level was placed at $p < 0.05$. Findings showed that a significant number of pregnant women did not know the taxonomy of haptics ($X^2 = 0.610$, $p > 0.05$) nor the taxonomy of kinesics ($X^2 = 1.571$, $p > 0.05$). There was no strong association between awareness of nonverbal communication and knowledge of taxonomy of haptics ($r = -0.073$; $p > 0.05$) nor taxonomy of kinesics ($r = 0.176$, $p > 0.05$). Predominant numbers of pregnant women knew that smile is a form of nonverbal communication ($X^2 = 13.394$, $p < 0.05$). A strong association was observed between awareness of nonverbal communication and knowledge of smile as a form of nonverbal communication ($r = 0.331$; $p < 0.05$). The level of nonverbal communication awareness of the pregnant women did not guarantee knowledge of taxonomy of haptics and kinesics. The pregnant women were at home with expressions of nonverbal communication through body language such as smiles and nodding of the head. The study revealed that the nonverbal communication understanding of the pregnant women were superficial. Hence a formal inclusion of nonverbal communication as part of antenatal education is proposed.

Key words: Nonverbal Communication, Taxonomy of Haptics, Taxonomy of Kinesics, Pregnant Women

Introduction

Communication in its multifaceted nature is all embracing. It is everywhere and engaged in all the time. Even when silence, touch or smile is employed, communication is still at work. Nonverbal communication has been defined as the transfer and exchange of messages in any and all modalities that do not involve words (Knapp et al., 2013; Matsumoto, Frank, and Hwang, 2013). It can occur through nonverbal behaviours, physical characteristics, use of time, body movements or language and the attributes of the environment or context in which such communication is taking place (Cherry, 2021). Nonverbal behaviours are the dynamic actions of the face and body that are transmitted through multiple channels like facial expressions, vocal cues, gestures, body postures, interpersonal distance, touching, and gaze (Matsumoto et al., 2013). The channels or taxonomies of nonverbal communication that this study is focusing on however, are haptics and kinesics. While haptics represents touch, kinesics stands for all forms of body movement.

When discussing nonverbal communication however, the subjective elements of culture (attitudes, values, beliefs, and norms) must be noted because they impact nonverbal communication (Matsumoto and Hwang, 2016). In the present study, the context is antenatal care and the cultural demands of the healthcare providers and their clients/patients, the pregnant women. Nonverbal communication in the antenatal clinic is not only the body language or nonverbal communication of the healthcare provider and patients (pregnant women) but an embodiment of everything that contributes in facilitating care provision within that environment (Buller and Buller, 1987; Cherry, 2021). Therefore, this study was designed to evaluate the extent of pregnant women's ability to identify nonverbal channels of communication during antenatal care.

As a fundamental human activity, communication is the process of sending and receiving messages through verbal and nonverbal means. This translates into the creation and exchange of information, ideas, opinions and experiences between people. Though many people think communication is chiefly written or spoken, rarely focusing on the nonverbal aspect of communication (Okunna, 2018), some scholars see majority of communication as nonverbal (Ali, 2018; Cherry, 2021; Wilson, 2021).

Nonverbal communication affects interpersonal encounters ranging from police interviews to first dates, doctor visits, job interviews and advertising (Frank, 2018). Sometimes, people are good at interpreting these nonverbal communications, although some people are better at it than others. Females have been shown to decode nonverbal communication better than males (Canfield, 2002; Hall, 2006; Lausic, 2009; Gulabovska and Leeson, 2014).

Pregnancy is one of the most important periods in the life of a woman, a family and the society at large. Antenatal care is the routine health control of a presumed healthy pregnant woman without symptoms, in order to diagnose diseases or complicating obstetric conditions and to provide information about lifestyle, pregnancy and delivery (Yaya, Bishwajit, Ekholuenetale, Shah, Kadio and Udenigwe, 2017; Mulondo, 2020; Pervin, Sarker and Friberg, 2021). International instruments recognize communication as one of the eight domains of quality. This standard emphasizes that communication with pregnant women should be effective and respond to their needs and preferences (WHO, 2016; UNICEF, 2020).

In the taxonomy of haptics, people may use touch to communicate nonverbally. One of the categories of touch is the functional-professional touch which a doctor uses when conducting a physical examination such as abdomen palpation. A pat on the back, brush of the upper arm or a hug comes under the category of a friendship-warmth touch.

Kinesics, commonly referred to as body language, includes all forms of body and facial expressions of which the smile forms a part. This taxonomy of nonverbal communication provides important information that may not be contained in the verbal portion of the communication (Frank, 2018). Facial expressions like the smile are helpful as they may show hidden emotions that contradict or may sometimes affirm verbal statements.

Methods

The study was conducted using three randomly selected Tertiary Health Institutions. They were Chukwuemeka Odumegwu Ojukwu University Teaching Hospital (COOUTH) Awka, Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi and Enugu State University Teaching Hospital (ESUTH) Parklane, Enugu. These Tertiary Health Care facilities are situated within the South Eastern part of Nigeria. It was at the antenatal clinic of these Health Institutions that the participants were recruited and copies of the questionnaire were administered to them.

For this study, a total of 133 pregnant women were randomly recruited from the 3 Tertiary Health Facilities mentioned earlier. After filling the informed consent form, they participated in the study. The pregnant women were aged between 17years and 49years. They attended the antenatal clinic for care during their current pregnancies. The questionnaire was administered to 133 pregnant women. The content of the questionnaire was developed by the author and some experts in the field of health sciences. The questionnaire was composed of two sections. The first section covered demographics like gravidity and gestational age in current pregnancy. The second section focused on awareness of nonverbal communication, taxonomy of haptics such as touch, palpation, tap on the shoulder and part on the back and taxonomy of kinesics such as smile, nodding, eye contact and body language used during antenatal care. The questionnaire was pretested on randomly selected numbers of pregnant women. Ethical clearance was sought and obtained from the Ethics Committee of the Tertiary Health Institutions. Informed consent was also sought and obtained from the pregnant women before administration of the research instrument. The variables were expressed in percentages. The test statistics used for analysis of data were Chi-square, likelihood ratio and spearman correlation. Significant level was placed at $p < 0.05$.

Results

Table 1 show predominant numbers of the pregnant women were at second (40.5%) and third trimesters (46.5%) of current pregnancy while 13% were at first trimester of pregnancy. Similarly, 36.6% and 22.9% of the pregnant women were primigravida and secondigravidae respectively. In addition 22.1% and 18.4% were gravidae 3 and gravidae 4 respectively.

Table 1

Socio-demographic information of the pregnant women

| Gestational Age | frequencies | Percentages |
|------------------|-------------|-------------|
| First Trimester | 15 | 13 |
| Second Trimester | 47 | 40.5 |
| Third Trimester | 54 | 46.5 |
| GRAVIDITY | | |
| Primigravida | 48 | 36.6 |
| Secondigravida | 30 | 22.9 |
| Gravida 3 | 29 | 22.1 |
| Gravida 4 | 24 | 18.4 |

From table 2, amongst the 113 pregnant women that responded to awareness of nonverbal communication, 84(74.3%) claimed to be aware of nonverbal communication while 29(26.7%) were not aware of nonverbal communication. Amongst this 84 that claimed to be aware of nonverbal communication only 28 had knowledge of taxonomy of haptics while amongst the 29 that were not aware of nonverbal communication only 12 had knowledge of taxonomy of haptics ($X^2 = 0.610$, $p > 0.05$). There was also no significant association between awareness of nonverbal communication and knowledge of taxonomy of haptics ($r = -0.073$, $p > 0.05$).

Table 2

Crosstab presentation of nonverbal communication awareness and knowledge of taxonomy of haptics amongst pregnant women

| KNOWLEDGE OF TAXONOMY OF HAPTICS | | | | |
|----------------------------------|-----|-------|--------|--------|
| | | YES | NO | |
| Awareness NVC | YES | (28) | (56) | [84]* |
| | NO | (12) | (17) | [29]* |
| Total | | [40]^ | [73] ^ | [113]* |

$X^2 = 0.610$; $P = 0.435$ ($P > 0.05$)
 Spearman correlation (r) = -0.073 ; $P = 0.439$ ($P > 0.05$).

Key
 ()= responses by pregnant women; []^= Total responses along the columns
 []*= Total responses along the rows; { }*^= total number of responses

Table 3 shows, amongst 122 pregnant women that responded to awareness of nonverbal communication, 93(76.2%) claimed to be aware of nonverbal communication while 29(23.8%) were not aware of nonverbal communication. Crosstab presentation showed that amongst this 93 pregnant women that were aware of nonverbal communication only 86 knew that smile is a form of nonverbal communication ($X^2=13.394$, $p<0.05$). A significant association was observed between awareness of nonverbal communication and ability to identify that smile is a form of nonverbal communication ($r=0.331$, $p<0.05$). The likelihood ratio= 11.241, $p<0.05$.

Table 3

Crosstab presentation of nonverbal communication awareness and proportions of pregnant women that know that smile is a nonverbal expression

| Ability to identify Smile as a form of NVC | | | | |
|--|-----|--------|--------|----------|
| | | YES | NO | TOTAL |
| Awareness of NVC | YES | (86) | (7) | [93]* |
| | NO | (19) | (10) | [29]* |
| Total | | [105]^ | [17] ^ | [122]**^ |

$X^2 = 13.394$; $P = 0.000$ ($P < 0.05$)
 Likelihood ratio = 11.241; $P = 0.001$ ($P < 0.05$)
 Spearman correlation (r) = 0.331; $P = 0.000$ ($P < 0.05$)

Key
 ()= responses by pregnant women
 []^= Total responses along the columns
 []*= Total responses along the rows
 { }*^= total number of responses

From table 4, only 51 of the pregnant women responded to the question on the taxonomy of kinesics, out of which 41 claimed to be aware of nonverbal communication and 10 were not aware. However, out of the 41 pregnant women that claimed awareness of nonverbal communication, the proportion that correctly answered the taxonomy of kinesics 12 and those that did not know the taxonomy of kinesics 29 did not show any significant difference in crosstab presentation ($X^2=1.571$, $p>0.05$). There was no significant association between awareness and knowledge of taxonomy of kinesics ($r=0.176$, $p>0.05$). Likelihood ratio = 0.721 ($p>0.05$).

Table 4

Crosstab presentation of nonverbal communication awareness and knowledge of taxonomy of kinesics amongst pregnant women

| | | Knowledge of taxonomy of kinesics | | |
|------------------|-----|-----------------------------------|-------|-------|
| | | YES | NO | TOTAL |
| Awareness of NVC | YES | 12 | 29 | [41] |
| | NO | 2 | 9 | [10] |
| Total | | [13]^ | [38]^ | [51] |

$\chi^2 = 1.571$; $P = 0.210$ ($P > 0.05$)
 Likelihood ratio = 0.721; $P = 0.176$ ($P > 0.05$)
 Spearman correlation (r) = 0.176; $P = 0.218$ ($P > 0.05$)

Discussion

A predominant number of the pregnant women were at second and third trimesters of current pregnancy. This is mainly an attitudinal thing as most pregnant women often downplay antenatal visits during the early days of their pregnancy particularly for secondigravida (second pregnancies) and multigravida (multiple pregnancies). A study by Warri and George, (2020) in Nigeria, found that pregnant women place a low value on early initiation of antenatal care because of the perception that pregnancy is a normal health condition that doesn't require seeking health care. Another Bangladeshi study found that only 37% of women receive their first antenatal care before 16 weeks of gestation with 47% of pregnant women attending 4 antenatal care visits (Pervin, Sarker and Friberg, 2021). They reasoned that such low coverage of antenatal care might be influenced by socio-cultural beliefs, demographic variables and the performance of the health system.

Awareness of nonverbal communication was highly predominant among the pregnant women (Onyenekwe and Ekwenchi, 2021). Studies show that women are better adapted and better decoders of nonverbal communication than men (Hall, 2006; Lausic, 2009; Gulabovska and Leeson, 2014). This was shown in their ability to know that smile is a form of nonverbal communication. Similarly a considerable number of the pregnant women knew that touch is also a form of nonverbal communication. Contrastingly, though they knew that smile, nodding of head, body language, eye contact; and touch, palpation, tap on the shoulder, pat on the back; are forms of nonverbal communication, they could not identify appropriately the nonverbal channel each falls into. Significant numbers did not know those that fell into taxonomies of haptics or kinesics.

The above observation was also strengthened by the observations of no likelihood that awareness of nonverbal communication guaranteed knowledge of the nonverbal communication channels of haptics and kinesics. This could be explained based on our earlier report that most of the pregnant women claimed to have gone through formal or informal training in nonverbal communication without an existing curriculum (Onyenekwe and Ekwenchi, 2021). This might have been the reason for the shallow knowledge of nonverbal communication exhibited amongst these pregnant women.

The inadequate training in nonverbal communication through lack of a formal curriculum might have been responsible for the low level of knowledge of nonverbal channels of haptics and kinesics amongst the pregnant women. The finding also throws up the argument 'how then were the pregnant women aware that smile, nodding of head, body language, eye contact; and touch, palpation, tap on the shoulder, pat on the back; are forms of nonverbal communication but did not know the nonverbal communication channels they represent?' It leaves only one option- informal training. Possibly information on nonverbal communication was garnered from older multigravida, mothers, friends, even healthcare providers and other relatives, associates and other sources.

Being classified as a high contact culture, African, especially Nigerian, South East healthcare providers can optimize the nonverbal communication channel, haptics, in dispensing antenatal care. This category of touch (haptics) falls within the functional/professional touch that can be found between

a care provider and the patient being administered care. Since pregnant women have been found to desire such physical examination on presenting for antenatal care, the healthcare providers can use it for persuasion and gaining compliance from them in their treatment regimen without fear of litigation.

The knowledge that females are better decoders of nonverbal communication (Canfield, 2002; Hall, 2006; Lausic, 2009; Gulabovska and Leeson, 2014), should spur male and female healthcare providers in being circumspect about nonverbal communication signals they use in the course of providing antenatal care to their patients. A person who leans toward another, makes eye contact, and modulates his or her voice (that is, does not speak in a monotone) is seen as very immediate. Research evidence suggests that people who behave in a more immediate fashion are seen to be easily approachable. This also applies to impression of students about their Teachers. Use of facial expressions like the smile, nodding of head, forward lean have been shown to resonate through theory into having practical implications for the welfare of healthcare providers' patients.

Conclusions

It is clear that the extent of knowledge of taxonomies of nonverbal communication, haptics and kinesics, exhibited by the pregnant women was still considerably low. Awareness of nonverbal communication did not translate into knowledge of taxonomy of nonverbal communication channels of haptics and kinesics. It is advocated that knowledge of these channels be incorporated in the antenatal care regimen for the greater good and its optimal utilization by the pregnant women.

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