

Determinants of the Utilisation of Standardised Nursing Language among the Midwives of Tertiary Hospitals in Ekiti State, Nigeria

Ogunje, O. D¹, Sowunmi C. O², Ofem O. G³

^{1,2}Department of Nursing Science Babcock University Ilisan Remo Ogun State Nigeria

³Department of Medical Laboratory Science Babcock University Ilisan Remo Ogun State Nigeria

Abstract: Ability to clearly define and specifically delineate professional nursing role and its unique contribution to patient care using standard terminologies has been a challenge because of evolving professional development. The use of Standardised Nursing Language (SNL) helps nurse midwives understand patients' needs with precision, accuracy and unified intra-professional communication for effective practice. This study assessed the level of utilisation of SNL, assessed the knowledge level of nurse midwives, determined the influence of organisational support of the hospital management, examine the attitude of nurse midwives and ascertain the utilisation of SNL among midwives in selected hospitals in Ekiti State. A descriptive research design was adopted and total enumeration of 170 participants from the three tertiary hospitals in Ekiti State constituted the sample size. A self-structured questionnaire comprising of 52 items under 5 sections was used for the data collection. Face and content validity were ensured and the reliability of the instrument was established through Cronbach alpha and a reliability coefficient index of 0.85 was obtained. Data obtained were analysed using Statistical Package of Social Sciences (SPSS) version 23. Descriptive statistics of percentages, mean and standard deviations were used to provide answers to the three research questions. Inferential statistics of multiple regression was used to test hypotheses 1, 4 & 5 and one-way ANOVA was used for hypotheses 2 & 3 at 0.05 level of significance. Findings of this study revealed the mean age of 32, with 32(19.6%) of the participants within the age 30-34 years; while 55(33.7%) were 40- 49 years. Eighty-one (49%) of the participants had Bachelor of Nursing Science degree, 14 (8.6%) had MSc, 2(1.2%) had PhD. The study also revealed that mean scores of knowledge level in the three hospitals were 14.58 ±2.80, 12.94±4.17 and 14.12±3.87 respectively, mean values on attitudes were 25.47±4.70, 24.82±4.49 and 27.73±3.62. Nurse midwives' attitude ($p = 0.60$), knowledge ($p = 0.32$) and their demographic variables ($p = 0.39$) did not significantly determine utilisation of SNL. Organisational support ($p= 0.00$) significantly determined utilisation of SNL and there was no significant difference in the knowledge level of the midwives in the three hospitals ($p = 0.66$). In conclusion, nurse midwives knowledge of SNL was below average, a good percentage utilise SNL, knowledge, attitude and demographic variables did not significantly determine utilisation of SNL. It was suggested that the knowledge level of nurse midwives on SNL should be enhanced through comprehensive educational program and follow-up education, in- service training, seminars, Nursing Audit supervision, provision of up-to-date SNL materials to motivate and encourage appropriate utilisation of SNL.

Keywords: Knowledge, Midwives, Standardized Nursing Language, Organisational support, Utilization

1. Introduction

Standardised Nursing Language (SNL) an encompassing terminology for North America Nursing Diagnosis Association (NANDA), Nursing Intervention Classification (NIC) and Nursing outcome Classification (NOC). It is a dynamic, goal-oriented, non- static but on-going process of coding nursing care whose goal is delivery of quality care. Its application continues for as long as the nurse and the client have interaction which is directed towards change in the clients' physical or behavioural response(s) to illness. It enforces the professionalism of nursing by engaging clinical reasoning /thinking. It requires gathering data, making judgement (Nursing Diagnosis) from the data gathered, analysing a determined outcome, selecting appropriate intervention and evaluation of the patient response to the nursing intervention. There are more than 3.6 million nurses and they constitute the largest workforce in health care and spend as much as 50 per cent of their time in direct patient care (McMenamin, 2016). Thede and Schwiran, (2014), reported that majority of nurses midwives had inadequate knowledge of Standardized Nursing Languages. Some nurses feel that the use of labels that articulate the unique patient problem is redundant, vague and trivial (Olaogun *et al.*, 2017). Omission of SNL in documentation of nursing

care comes with a great challenge to nursing service and nurses in general. Getting a uniform nursing data is not practicable in the absence of SNL because with SNL, a consistent and uniform data is being generated and this makes it easy for nursing care record to be accessible and quantifiable (Okun, *et al.*, 2016). As such nursing action can be quantified across board and cost appropriately. An in-depth knowledge of this concept is indispensable if utilisation must be thorough. There is no SNL data in any Hospital in Ekiti State, Nigeria. Also, there has not been inclusion of nursing activities in the policy making of the State because nursing activities are not visible to the policy makers. Hence, the need to study the utilisation of SNL in the tertiary Hospitals in Ekiti State so as to identify factors that necessitated the gaps that exist and make necessary recommendations to the stakeholders on the utilisation of SNL for the purpose of documenting care within nursing profession and health team in general. This study aimed at assessing the level of utilisation, measurement of the knowledge level, assessment of organisational support, examination of the attitude and to ascertain the influence of selected demographic variables on Standardised Nursing Language among the midwives of tertiary hospitals in Ekiti State, Nigeria.

2. Materials and Methods

This descriptive cross-sectional study was carried out among midwives in Obstetrics and Gynaecological units of the three tertiary Hospitals in Ekiti State which include Federal Teaching Hospital Ido Ekiti (FTHI), Ekiti State University Teaching Hospital (ESUTH) and Afe Babalola Multi-system University Teaching Hospital Ado Ekiti (ABUTH). Ethical clearance was sought from the Babcock University Health Research Ethics Committee (No 692/19), Ilishan-Remo, Ogun State. A letter of Introduction was collected from the School of Nursing Science Babcock University Ilishan-Remo, Ogun State. Permission was also sought from the administration of the three tertiary hospitals used for the study. The midwives that participated in the study also completed the consent form. The Assistant Director (ADNS) and Coordinators of the Obstetrics and Gynaecology wards and units of the study centres were duly informed. The benefits of the structured questionnaire that determined demography, measures of the knowledge level, attitudes, organisational support, extent of utilization of Standardised Nursing Language among the midwives were communicated to them. Having gained their consent, a copy of the questionnaire was given to each of the midwives until all the participants were captured. The distribution of the midwives among the tertiary hospitals include; FTHI (70), ESUTH (57) and ABUTH (43), making a total number of 170 midwives. Copies of the instrument was pilot tested among the Midwives in Olabisi Onabanjo University Teaching Hospital Sagamu, Ogun State and was found to be reliable using correlated using Cronbach’s Alpha and parallel coefficient. Knowledge which is factual understanding of the Midwives on SNL, is categorised as follows: 22 items that cover the understanding of NANDA-I, NIC and NOC, total marks obtainable is 29. Scores from 0 to 14 was regarded as low knowledge, 15 to 20 was regarded as average knowledge, and 21 to 29 was regarded as high knowledge. Utilization level of the midwives of the three hospitals on SNL was assessed on three (3) levels or categorized as low (0-3), moderate/average (4-7) and high (8-10).

3. Results

Table 1: Demographic Characteristics of Respondents

Variables	Frequency N=163	Percentage %	
Age	20-24years	26	16.0
	25-29years	25	15.3
	30-34years	32	19.6
	35-39years	25	15.3
	40 - 49years	55	33.7
Academic qualification	Diploma	66	40.5
	BNSc	81	49.7
	MSc	14	8.6
	PhD	2	1.2
Designation	NOI-NOII	63	38.7
	SNO	43	26.4
	PNO	18	11.0
	ACNO	15	9.2
	CNO	18	11.0
	ADN	6	3.7
Hospitals	ABUTH.	43	26.4
	FTHI	68	41.7
	EKSUTH	52	31.9

KEY: BNSc.=Bachelor in Nursing Science, MSc.=Masters of Science, Ph.D= Doctor of Philosophy, NO=Nursing Officer, SNO= Senior Nursing Officer, PNO= Principal Nursing Officer, ACNO= Assistant Chief Nursing Officer, CNO= Chief Nursing Officer, AND=Assistant Director of Nursing, ABUTH

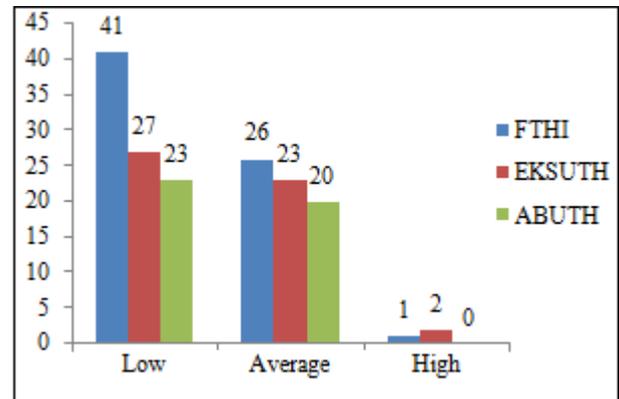


Figure 1: Summary of the Midwives Knowledge Level on Standardised Nursing Language

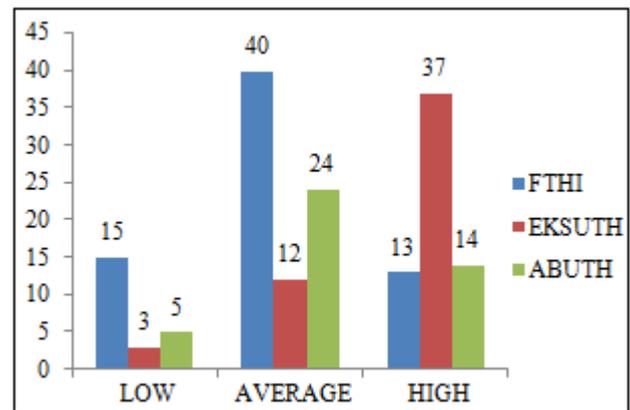


Figure 2: Summary of the Midwives Utilization of Standardised Nursing Language in the Three Hospitals

Table 2: Summary of midwives attitudes on utilisation of Standardised Nursing Language

Hospitals	N	Minimum	Maximum	Mean	Std. Deviation
ABUTH	43	10	50	25.47	4.7
FITH	68	10	50	24.82	4.49
EKSUTH	52	10	50	22.73	3.62

Table 3: Analysis of variance showing the level of significant determined by midwives attitudes on utilisation of SNL in Ekiti State Nigeria

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	1.611	1	1.611	0.276	0.600 ^b
	Residual	929.567	161	5.836		
	Total	941.178	162			

R= 0.041

R Square = 0.002

Adjusted R Square = -.004

a. Dependent Variable: utilisation

b. Predictors: (Constant), attitude

Table 4: Regression table showing the significant impact of knowledge on utilisation of SNL among midwives in Ekiti State tertiary Hospitals

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.597	.688		8.138	.000
	knowledge	.048	.048	.078	.998	.320

- a) Dependent Variable: utilisation
- b) Independent variable: knowledge

Table 5: Analysis of variance showing the significant impact of organisation support on the utilisation of SNL

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	144.307	1	144.307	29.156	0.000 ^b
	Residual	796.871	161	4.950		
	Total	941.178	162			

R = 0.392

R Square = 0.153

Adjusted R Square = 0.148

- a. Predictors: (Constant), organisational support
- Dependent Variable: utilisation

Table 6: One-way ANOVA showing the difference in knowledge level of the midwives of the three hospitals on SNL

ANOVA ^a						
Model		Sum of Squares	Degree of freedom	Mean Square	Frequency	Sig.
1	Regression	2.964	1	2.964	.190	.663 ^b
	Residual	2507.723	161	15.576		
	Total	2510.687	162			
a. Dependent Variable: knowledge						
b. Predictors: (Constant), Hospitals						

4. Discussions

Table 1, reveals that majority 33.7% of the participants were between 40years and above, followed by those who were aged 30 to 34years (19.6), few (16%) were from age 20-24years while least participation were between 25-29years (15.3%) and 35-39years (15.3%). The participants' age bracket was between 20 and 49 years with a mean age of 32years. In addition, majority (49.7%) of the participants were qualified as Bachelors of nursing sciences followed by (40.5%) who were in-view for the same profession while very few (1.2%) were Ph.D. holder. This implied that majority of the nurses were not resistant to learning. In this present study, close to half of the entire participants hold diploma, this may be a factor that militated against the practice of SNL in the sites of study. In line with this, Yihun and Solomon, (2018) reported that bachelor degree holder nurses were 4 times more likely to implement SNL in nursing process than diploma holders, which helps Nurses to avoid mistakes that are life threatening to the patient at the same time question efficiency of nurses (Olaogun *et al.*, 2017). With respect to designation, more than one-third (38.7%) of the participants were NOI-NOII officers, followed by SNO (26.4%), few (11%) were PNO while the least (3.7%) participants were designated as ADN. More than one third of the participants were nursing officers who may not be conversant with the nursing practices and their application which may militate against the practise of SNL,

this is in collaboration with the study by Abreu, *et al.*, (2016), that the time of introduction of standardised nursing language to student nurses is too late as it is not been introduced early enough hence young nurses gets to active service before struggling with the use and practice of SNL; hence, the delay in catching up with the new language. However, (68) of the participants were from Federal Teaching Hospital Ido, compare to the other selected teaching hospitals, Ekiti State University Teaching hospital (52) and Afe Babalola University teaching hospital (43). This might be as a result of the participants' population in the selected settings. All the midwives working in Obstetrics and Gynaecology participated in the research, this shows that the various hospitals of study do not have enough midwives to attend to their numerous patients. Ajayi *et al.* (2015) reported that the reasons for poor implementation of SNL are workload, inadequate staffing.

Figure 1 summarizes the knowledge level of the midwives of the three hospitals on SNL on three (3) levels categorized as high, moderate/average and low. The differences in the knowledge level of the midwives of the three hospitals on SNL were shown through their mean scores. The mean scores were 14.58 (50.3%), 12.94 (44.6%), and 14.12 (48.7%) for ABUTH, FTHI and EKSUTH respectively. It could be said from this report that midwives working at ABUTH were more knowledgeable of SNL compared to their counterparts in EKSUTH and FTHI respectively. ABUTH midwives were observed not to have high level of knowledge in this study, this may be due to the fact that it is a private tertiary hospital which may not have the funds to sponsor the midwives on the acquisition of higher SNL knowledge, unlike others which are owned by the government. Generally, majority of the midwives in the three teaching hospitals in the State had low knowledge of SNL. Olatubi *et al.* (2018), in a study carried out in three selected hospitals in Ondo State Nigeria reported that 26% of the respondents had high knowledge of SNL which is higher than that gotten from all the hospitals of study, they also added that SNL is not evenly circulated among nurses and midwives as it was also observed in this present study. Ajayi *et al.* (2015), Abiodun-Sanni, (2017), Fisseha and Fikuda (2014) & Yihun and Solomon, (2018), reported from several studies that poor implementation of SNL in nursing care is due to poor knowledge of SNL by the nurses. This an eye opener to the fact the knowledge of SNL is still very vague in the nursing community (Ajayi *et al.*, 2015).

Figure 2 shows the differences in the utilization level of the midwives of the three hospitals on SNL were shown through their mean scores. The mean scores were 6.28 (62.8%), 5.29 (52.9%), and 7.50 (75%) for ABUTH, FTHI and EKSUTH respectively. It could be said from this report that midwives working at EKSUTH utilised SNL more compared to their counterparts in ABUTH and FTHI respectively. It was observed in this study that EKSUTH midwives had the highest level of knowledge, therefore their highest level of utilisation of SNL is expected. Generally, all midwives in the three teaching hospitals in the State utilise SNL. This is in line with report by Ojewole and Samole, (2017), who reported that Nursing is a process in its entirety, it is an Art and a science that imbibe a step by step and orderly process

in conducting itself using the North American Nursing Diagnosis Association-International (NANDA-1) otherwise known as SNL. Olatubi *et al.* (2018) also affirmed that most participants in their research believed that SNL is crucial to quality nursing care. Although, Ajayi *et al.* (2015), reported that the absence of computer set for the practice of standardised nursing terminologies explains why the use of the practice is not possible in such settings

Table 2 reveals the attitudes of the midwives on utilisation of Standardised Nurses Language in the three hospitals: ABUTH had a mean score of 25.47 (50.94%), FTHI with a mean score of 24.82 (49.6%), and EKSUTH with a mean score of 22.73 (45.5%). It could then be deduced generally that the attitudes of the midwives on utilisation of Standardised Nursing Language was fair in ABUTH compared to the two hospitals. This study observed that the overall utilization level of Standardised Nurses Language in the three hospitals by midwives was 50.94% in ABUTH which signifies that the midwives have fair attitude towards utilisation of Standardised Nurses Language while FTHI and EKSUTH had poor attitude. This may be due to the fact the highest number of midwives involved in this research were from EKSUTH. Abiodun-Sanni, (2017) reported that attitudinal problems militate against the practice of SNL. In Sweden SNL is limited to those in the education field and a few hospitals, but they are ignored by most nurses in practice (Fisseha and Fikuda, 2014). Fisseha and Fikuda, 2014, reported a slightly higher attitude of the respondents in their study, they observed that diploma nurses left the of SNL to nurses that held BSc. degrees and above while some others viewed SNL as a waste of time. Few others argued that patients may not like to be cared for using nursing process. They view SNL as wordy and impracticable make its application and utilization unwelcome by nurses. (Fisseha *et al.*, 2017). Olatubi, *et al.* (2018) reported that some nurses opined that the use of SNL can be cumbersome. Ojewole and Samole (2017) also observed that at 24hours post admission, no significant increase was noted in the phase of nursing process using SNL in the recording. In a study conducted in the geriatric clinic of a university hospital in Sweden, it was found that nursing diagnoses comprised only 5% of all annual patient records, (Fisseha and Fikuda, 2014).

Table 3 shows no significant effects of attitude on utilisation of SNL in Ekiti State tertiary hospitals, Nigeria ($F_{(1, 161)} = 0.276, p=0.600 > 0.05$). This implies that the good attitude of the midwives were not inclined to utilisation of SNL. This might be as a result of wrong perception of nurses towards their years of experience and nursing process guidelines. More so, independent variable also yielded a coefficient of ($R=0.041$), meaning that about 0.41% of the variation is accounted by an independent variable (attitude). Table 4 shows no significant impacts of knowledge on utilisation of SNL in Ekiti State tertiary hospitals, Nigeria ($B = 0.078, t=0.998, p=0.320 > 0.05$). This implies that the knowledge of most participants were not inclined to the utilisation of SNL. More so, this revealed that knowledge has 0.78% contribution to the utilisation of SNL in Ekiti state tertiary hospital. Table 5 shows a significant impact of organisational support on utilisation of SNL in Ekiti State tertiary hospitals, Nigeria ($F_{(1, 161)} = 29.156, p = 0.00 < 0.05$).

This implies that organisational support were inclined to utilisation of SNL. More so, independent variable also yielded a coefficient of ($R=.392$), meaning that about 39.2% of the variation is accounted by an independent variable (organisational support). Ajayi *et al.* (2015) and Abreu *et al.*, (2016), affirmed that most hospitals do not train or sponsor nurses on workshops that will enhance their use of SNL. Ajayi, *et al.* (2015), emphatically submitted that the knowledge of SNL should be encouraged through comprehensive educational preparation and follow-up education which will encourage research at the same time help Nurses in their own personal research. The perception of lack of value by nurses can affect or discourage SNL use (Fisseha and Fikuda, 2014). Under staffing compared to the patient turnout is a barrier to the implementation of the nursing process (Fisseha and Fikuda, 2014). Poor organisational support, leadership, government and management policy militate against he practice of SNL. (Abiodun-Sanni, 2017).The results in Table 6 shows no significant difference in the knowledge level of the midwives of the three hospitals on SNL ($F_{(1, 162)} = 0.19, p = .66$).

References

- [1] Abiodun-Sanni, F. I., (2017). Knowledge and use of Standardised Nursing Language: A study among Nurses at federal Medical Centre, Owo, Ondo State, Nigeria. *Texila International Journal of Nursing*. 3(2), 12.
- [2] Abreu, J, Almeida, T.B. & Elizalde, M. A., (2016).Nursing diagnoses: Factors affecting their use in charting standardized care plans; *Journal of clinical Nursing science*.
- [3] Ajayi, A., Adeola, R., Daniel, O. & Stephen, N. (2015). Knowledge and utilization of standardised Nursing language among nurses in Jos university teaching hospital plateau state Nigeria. *International professional nursing journal and research*.
- [4] Fisseha, H. F & Fikuda, B, (2014). Application of Nursing process and its affecting factors among Nurses morking in Mekelle Zone Hospital. *A Journal of Nursing Research and publication*.
- [5] McMenamin, E. T (2016).National Health Alliance for Health information Technology Report. *Journal of Nursing Science*.
- [6] Ojewole, F O. and Samole, A. O. (2017). Evaluation of the nursing process utilization in a hospital in Ogun State. *A Journal of nursing midwifery science*.
- [7] Okun, S, William, M. Y, Sensemeir, J (2016). Enhancing the visibility of Nursing through SNL in the electronic Health Record. *UMB Digital Archive*. 29 (5) 305.
- [8] Olaogun, A.; Adeyemo, F. O. & Adubi, I. O (2017). Standardised Coded Language in Nursing. "*OJIN: The Online Journal of Issues in Nursing*". 13(1) DOI: 10.3912/OJIN.
- [9] Olatubi, M. I., Oyediran, O.O., Salau, O R. & Faremi, F. A (2018). *International journal of nursing knowledge*
- [10] Thede, L, O & Schwirian, P. M. (2014). A National survey of Nurses Experience and attitude and perception of the helpfulness of SNL in clinical care –online *Journal of issues in Nursing*.
- [11] Yihun, M & Solomon E (2018). Determinants of Nursing Process Implementation in North East Ethiopia: Cross-Sectional Study. *Nursing research and practice*.