Original Article

Bayero Journal of Nursing and Healthcare
bjnhc.nur@buk.edu.ng
Maiden Edition,
June 2019 . Pages 91-102.

Evaluation of Knowledge of Task Shifting and Task Sharing among Nurses in Murtala Mohammed Specialist Hospital Kano, Kano State

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Abstract:
Nigeria as one of the countries facing critical shortage of heath care workforce. Recently, Nigeria adopted task shifting and task sharing policy with the aim of addressing the heath care workforce requirement of all priority health programmes in the country and to meet the universal health coverage and health needs of the population. Knowledge of the policy is critical to its successful implementation. The aim of this study was to evaluate the level of knowledge of task shifting and task sharing among nurses in Murtala Mohammed Specialist Hospital Kano. A descriptive cross-sectional survey design was used in which 73 respondents were recruited using multi-stage sampling technique. The data was obtained using self-administered structured questionnaire and analysed using descriptive statistics. The results indicated that 49.3% of the respondents had more than 11 years of working experience. Only 8.2% were able to define the concept of task shifting and task sharing. Correctly, majority (61.6%) had never heard of task shifting before, however, 64.6%of the respondents understood all the key priority areas of task shifting while 58.1% were aware of the need for actualization of human resource for health. On the categories of task to be shifted,56.2% had average knowledge of the categories of task to be shifted. So also, it was revealed that task shifting has significant implication on Nursing practice P value <.000. It was empirically established that nurses had average knowledge of task shifting policy.

Keywords: *Knowledge, Assessment, Task shifting, Task sharing.*

Introduction

As the world faces a critical shortage of health workforce, task shifting policy is considered to be a panacea. Task shifting is the name given to a process whereby specific tasks are moved, where appropriate, to health care workers with shorter training and fewer qualifications. By reorganising the workforce in this way, task shifting can make more efficient use of existing human resources and ease bottlenecks in service delivery. Where further additional human resources are needed, task shifting may also involve the delegation of some clearly delineated tasks to newly created cadres of health care workers who receive specific, competency-based training (WHO, 2008).

Dawson, Buchan, Duffield, Homer and Wijewardena (2013) defined task shifting and

task sharing as a deliberate process, whereby the task to be shifted is defined and described, and where funding is moved to the new individual assigned to the task. Unlike informal and opportunistic task shifting/sharing deliberate strategies are accompanied by training, certification, and support.

Task shifting is considered as a public health initiative that takes a comprehensive approach, with intentions to address the health care workforce requirement of all priority health programmes in the country. In addition, task shifting is among strategies for accelerating the progress towards achievements of the health-related SDGs. As such, the policy focuses on key priority areas such as family and reproductive health and maternal and child health services (RMNCH), as well as HIV, TB, malaria and other communicable and non-communicable diseases in essential health services package (FMOH, 2014).

As reported by Dawson *et al*. (2013), shifting and sharing tasks may increase access to and availability of maternal and reproductive health (MRH) services without compromising performance or patient outcomes which may be cost-effective. In a study conducted to determine the effectiveness of task shifting in the management of non–communicable diseases (NCDs) in low and middle income countries, (Joshi, Alim, Kengne, Jan, Maulik, Peiris, & Patel 2014) concluded that task-shifting is a viable and successful model that is potentially cost-effective and clinically effective in the management of NCDs.

Kalibala, Okal, Zieman, Jani, Vu, Ssali, Birungi, Okoboi, Wangisi, Nabiryo,Lyavala, Etukoit, Buzaalirwa, Lubanga, Kiyingi, Ikapule, Nakyeyune, Nakibinge, Iutung, Waliggo, Nsamba, Wamanga, Kamya, Sentongo, and Yiga (2016) noted that more tasks are shifted from upper healthcare cadres to lower cadres than they are shifted from lower cadres to upper cadres. They noted further that the task of nurses to perform pre-clinical care was delegated to lay health workers (LHWs) while nurses were having the tasks of clinical assessment. Other categories of the task to be shifted include maternal and new-born healthcare as well as family planning, epidemic or communicable diseases like HIV/AIDS and other sexually transmitted infections, tuberculosis, and leprosy (Daily Nigeria, August 9th, 2018). Additionally, in a WHO-Commissioned Study on Task Shifting (2008) it was observed that task shifting practices for the delivery of HIV services can be categorised into four. It was also noted that tasks such as deworming, malaria treatment, prenatal care, routine treatment of childhood illnesses, and minor surgical procedures can be successfully delegated to members of the healthcare team other than the physicians (Spies, 2014).

Dawson *et al*. (2013) found that task shifting practice has sometimes been thwarted by professional bodies on the concern that sharing tasks will erode their power or affect patient safety. So also there are issues concerning from whom the tasks are being shifted and its appropriateness. As reported by Daily Nigerian newspaper of August 9, 2018, during a stakeholders meeting organised by Frontline Implementing Partners for Advocacy in Child and Family Health (PACFAH at Scale), nurses expressed fears over the policy thinking, that the policy could create room for more quackery, indiscipline, and malpractice in the health sector.

The absolute minimum requirement of health care workers (HCW) to population density recommended by World Health Organisation (WHO) for each country is 23 per 10,000 (World Health Organisation, 2008). Countries such as the United States and Canada have 11.93 and 12.09 doctors and nurses per 1,000 populations, respectively (O'Brien & Gostin, 2011). In Nigeria, health care workers (HCW) to population densities per 100,000 population ranges from 50.5 (FCT) to 1.9 in Yobe State, with the median state (Sokoto) having 8.9 medical doctors per 100,000 (Uribe, 2016). Information by States revealed densities of nurses and midwives taken together per

100,000 population and ranges from 5.9 (Zamfara State) to 96.5 (Imo State), with 24.7 per 100,000 (Niger State) as a median. In addition, the health workers in Nigeria are poorly distributed in favour of urban, tertiary health care facilities, and curative care. The shortage of health care workers (HCW) becomes critical to meet the universal health coverage and health needs of the population. As such, the idea of task shifting was adopted to promote rational redistribution of tasks among existing health workforce cadres (FMOH, 2014).

For the implementation of any policy to be a success, all the stakeholders need to be communicated. Nurses as stakeholders in the implementation of task shifting and task sharing need to be equipped with requisite knowledge of the policy. It is in this context that the researchers feel the need to evaluate the knowledge of nurses on task shifting and task sharing among nurses in Murtala Mohammed Specialist Hospital Kano.

Materials and Methods

Study Design and Instrument

A descriptive cross-sectional survey design was used for the study. The data was obtained using a self-developed structured questionnaire. The questionnaire consisted of four (4) sections; section A: Socio-demographic data of the respondents, section B: level of knowledge of task shifting among nurses and Section C: categories of the task to be shifted. The questionnaire was constructed using open-ended questions with a scoring system on the level of knowledge between good knowledge (70 – 100%), average knowledge (40 – 69%) and poor knowledge (0 – 39%). The target population of this study was all the nurses at Murtala Mohammed Specialist Hospital Kano which were 284 as obtained from the Head of Nursing Department (23rd Oct 2018).

Study Setting

Murtala Mohammed Specialist Hospital Kano located along Abdullahi Wase Road, Kofar Mata in Kano Municipal area, it is a state's own tertiary institutions positioned in the heart of Kano with the highest number of patients and few nurses. The hospital comprises of eleven (11) departments with a bed capacity of 1100 beds and 60 serving units. 284 Nurses are distributed in various departments as follows; Compound: 2, Medicine: 27, General outpatient department (G.O.P.D): 30, Perioperative: 31, Ophthalmology: 13, Maternity: 79, Surgery: 32, Orthopedics: 10, Pediatrics: 42, Anaesthesia: 12 and Ante-Natal Clinic: 6. The facility provides a wide range of specialty health services and also serves as a referral point for all the secondary health institutions in the state.

Sample Size and Sampling Technique

The sample size of this research was obtained using Taro Yamane (Yamane, 1973) formula with 95% confidence level

$n = N/1+N(e)^2$ Where: n= sample size required, N = number of people in the population, e = allowable error (%).

$$n = \frac{284}{1+284(0.1)^2}$$

= 99.6 rounded to 100

A multi-stage sampling technique was used. In the first stage, cluster sampling was used where each department was considered to be a cluster. In the second stage, simple random sampling was used to select four (4) departments namely; Ophthalmology, GOPD, Maternity, and Paediatrics. In the third stage, the researcher used proportionate simple random sampling to recruits the respondents according to the size of each department.

Ethical Considerations

Ethical approval was sought from the Ethics and Research Committee Kano State Ministry of Health. The researchers obtained a written approval with reference number MOH/off/797/T.I/1120 then submitted the letter to the management of Murtala Mohammed Specialist Hospital Kano before commencing the research. The principles of beneficence, maleficence, and confidentiality

were strictly observed. Informed consent from each respondent was sought before data collection.

Data Analysis

Data obtained were analysed using descriptive statistic (frequency, percentage, mean and standard deviation) with the aid of Statistical Package of Social Sciences (SPSS) version 23. Results were presented using frequency distribution tables and figures. Out of the 100 questionnaires distributed, only 87 were retrieved representing 87% retrieval rate. Out of the 87 respondents, only 73 questionnaires were 85% completed and therefore, the data analysis was based on the 73 questionnaires returned and completed.

3. Results

Table 1: Distribution of the Respondents' Socio-Demographics Characteristics

Variables	n =73	
	n	**%**
Gender		
Male	21	28.8
Female	52	71.2
Qualifications		
RN	12	16.44
RN/RM	27	36.99
BNSc	15	20.55
Others	19	26.03
Work Experience		
1-5years	18	24.7
6-10years	19	26.0
11 and above	36	49.3
Departments		
Opthalmology	13	17.8
GOPD	7	9.6
Maternity	28	38.4
Paediatrics	25	34.2

Table 2: Distribution of Respondents According to Knowledge of Objectives of Task Shifting

Variables	N=73	
	n	**%**
heard about task shifting and task sharing		
Yes	28	38.4
No	45	61.6
Correctly defining the concept of task shifting and task sharing		
Yes "a form of division of labour where the stipulated task is shared among health practitioners"	6	8.2
"is a process whereby delegation of duties/tasks are moved from where they are appropriate to less specialised workers"	67	91.8
"relegating of a task to lower cadre"		
"legal delegation of a task to lower ones (cadres)"		
No		
"bedside assignment of patients care"		
"knowledge skills shifting and sharing"		
"act of dividing the activities in the ward"		
"deals with the division of labour"		
"to decrease patient health care workers ration in order to have quality care"		

Key priority areas such as Family and Reproductive Health, Maternal and Child Health services (RMNCH), HIV, TB, Malaria in Essential health services package		
Yes	47	64.6
No	26	35.6
Actualization of Human Resource for Health (HRH) workforce needs through Task shifting and sharing		
Yes	43	58.9
No	30	41.1
Promoting the best use of competency and expertise of well-trained mid-level cadres to meet the health needs		
Yes	49	67.1
No	24	32.9
Expanding access to essential health care services to meet the set MDG targets		
Yes	42	57.5
No	31	42.5
Reducing maternal mortality and providing universal access to reproductive health through Task shifting		
Yes	47	64.4
No	26	35.6

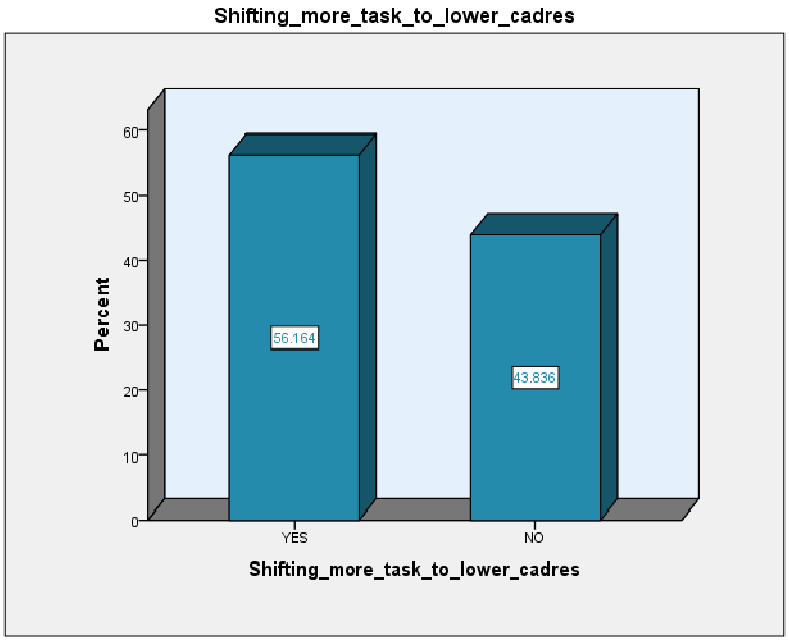

Figure 1: *Shifting More Task to Lower Cadres*

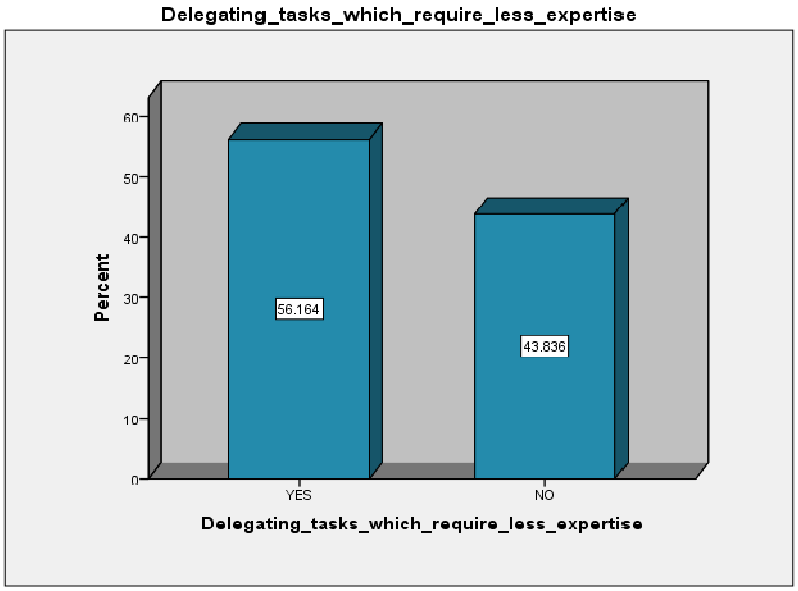

Figure 2: *Shifting only Task which Require Less Expertise*

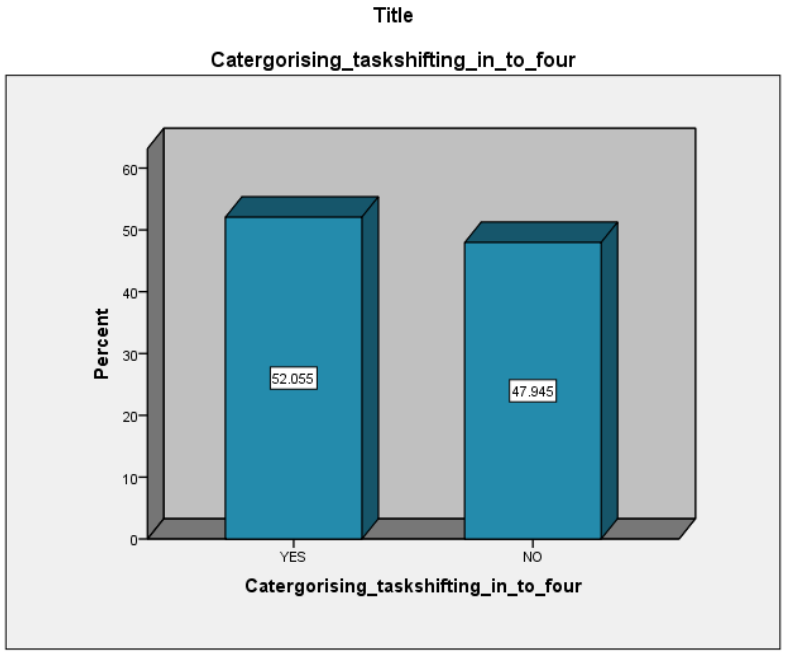

Figure 3: *Categorising Task Shifting into Four*

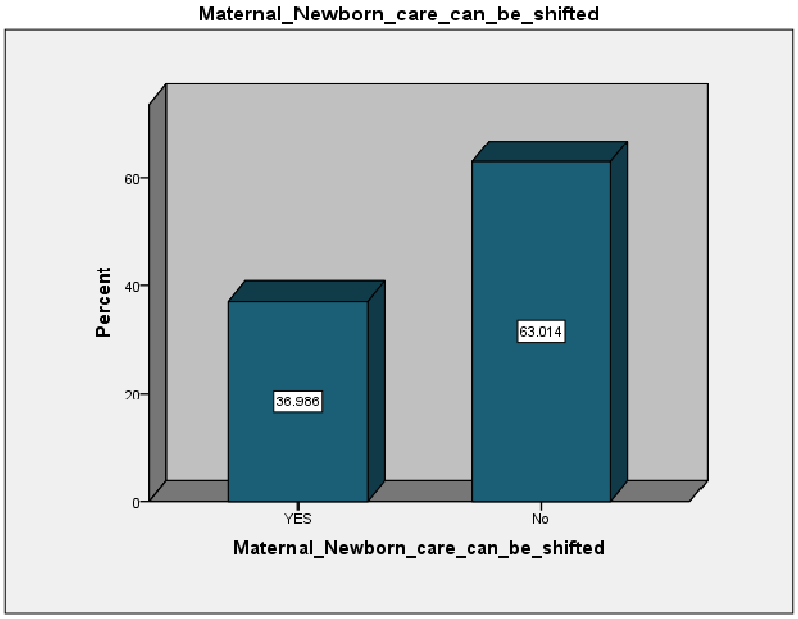

Figure 4: *Shifting Maternal and New-Born Care to Lower Cadres*

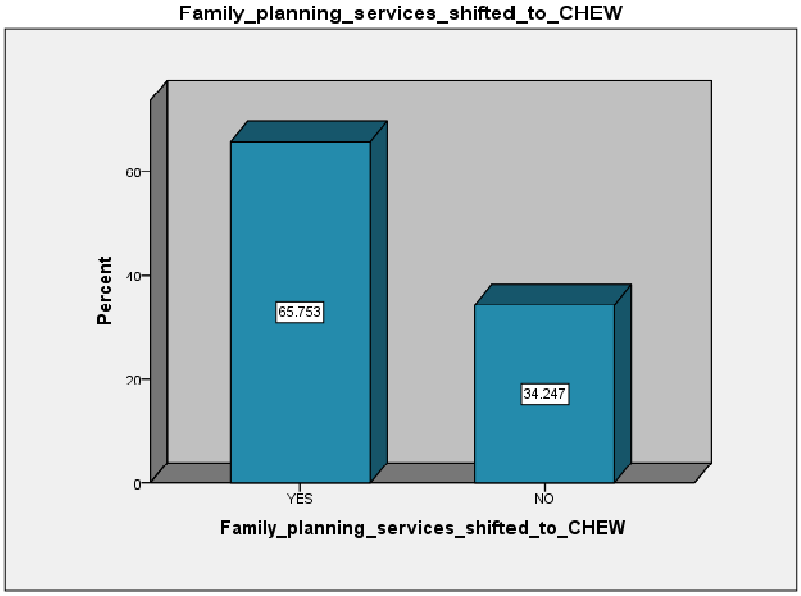

Figure 5: *Shifting Family Planning Services*

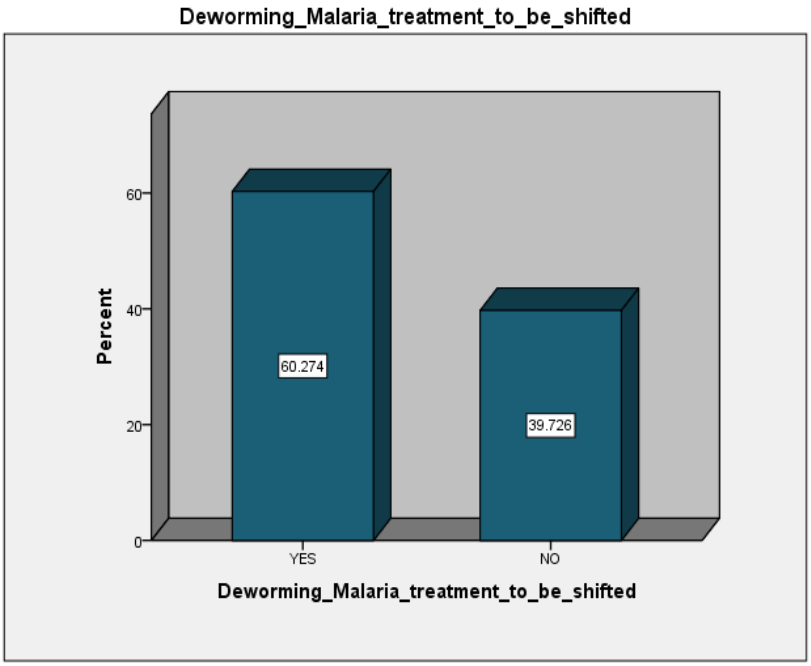

Figure 6: *Shifting Deworming Services, Malarial Treatment*

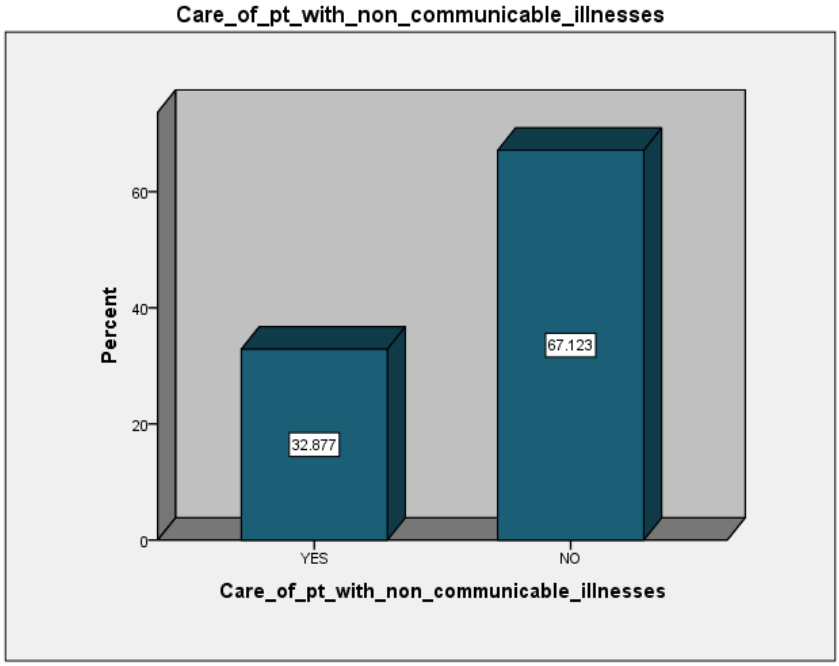

Figure 7: *Care of patient with Non - Communicable Diseases*

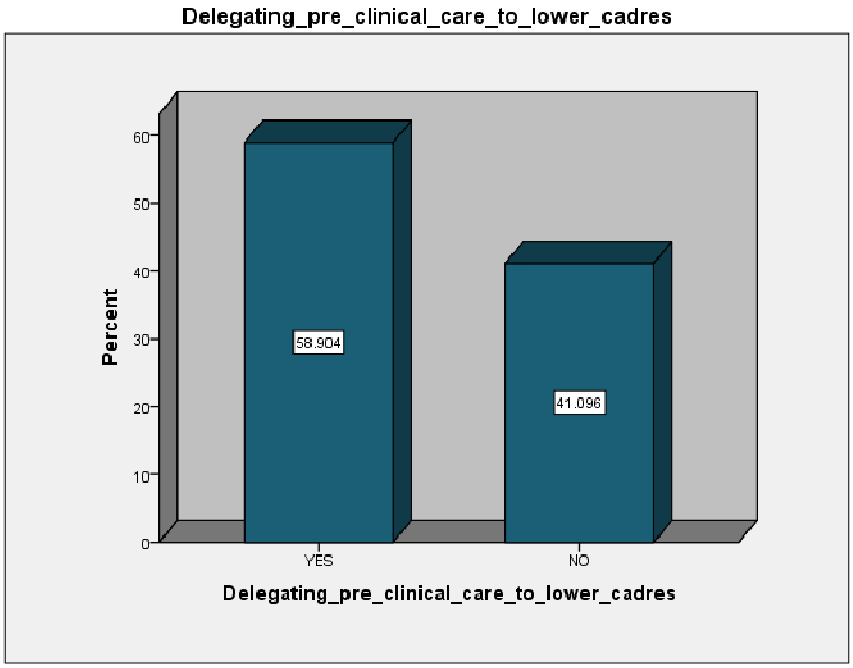

Figure 8: *Shifting Preclinical Care to Lower Cadres*

As shown in Table 1, 71.23% of the respondents were female; less than a quarter of the respondents (20.55%) had BNSc, almost half of the respondents (49.32%)had worked for 11 years and above. Finally, the highest numbers of respondents with 38.36% were from the maternity department.

Table 2 revealed that 61.6% have never heard about the policy, 91.8% couldn't define it or defined it wrongly. Also, 64.4% of the participants demonstrated knowledge of the key priority areas which are the focus of task shifting policy. The study further revealed that 58.9% of the respondents know that task shifting policy can help in the actualization of human resource for health. About 67% demonstrated good knowledge that task shifting and task sharing will promote the use of competency and expertise of mid-level healthcare cadre. With regards to the knowledge that task shifting can expand essential health services to meet the SDG target, only 57.5% of the respondents indicated average knowledge of the items. Moreover, 64.4% of the respondents stated that task shifting can reduce maternal mortality and provides easy access to reproductive health services.

Figure 1 indicated that 56.2% of the respondents have average knowledge that more tasks are shifted to the lower cadres, The questionnaire was constructed with a scoring system on level of knowledge between good knowledge (70 – 100%), average knowledge (40 – 69%) and poor knowledge (0 – 39%).

Figure 2 revealed that 56.2% knew that only tasks that require less expertise can be shifted to lower cadre, Figure 3 revealed that 52.1% of the participants answered correctly that task shifting in the delivery of HIV services can be categorised in to four while Figure 4 showed only 37% of the respondents knew that maternal and newborn care are among the categories of task that can be shifted successfully. Figure 5 indicated that 65.8% of the respondents knew that family planning services can be shifted to CHEW; Figure 6 revealed that 60.3% knew that deworming, malarial treatment and treatment of routine childhood illness can be shifted; Figure 7 illustrated that 32.9% of the respondents knew

that care of patients with non-communicable illnesses like cardiovascular risk screening and treatment can be shifted from nurses to lower cadres, lastly, Figure 8 revealed that more than half (58.9%)of the respondents demonstrated knowledge that preclinical care can be successfully shifted to lower cadre.

Discussion

The findings revealed that less than a quarter had BNSc, this finding affirmed the findings of a study conducted by Odusanya and Taiwo(2001) in Lagos. Also, the study revealed that almost half of the respondents had 11 and above years of work experience. Furthermore, findings showed that from the four departments selected for the study, the highest percentage 38.4% of the respondents were drawn from maternity followed by Paediatrics with 34.2%.

The study further revealed that two-third of the respondents had never heard about task shifting before and only a few (8.2% respondents) defined the concept correctly indicating poor knowledge of the policy. So also, more than half of the participants demonstrated knowledge of the key priority areas of task shifting as Family and Reproductive Health, Maternal and Child Health services (RMNCH), as well as HIV, TB, Malaria and other communicable and non-communicable diseases. This goes in line with the statement by Federal Ministry of Health Policy Document (2014) which stated that key priority areas of task shifting include Family and Reproductive Health, Maternal and Child Health services (RMNCH), as well as HIV, TB, Malaria and other communicable and non-communicable diseases. On whether task shifting and sharing can promote the best use of competency and expertise of well-trained mid-level cadres to meet Nigeria's population health needs, slightly above half of the nurses reported yes which corresponded with the statement in the Nigeria Task Shifting and Task Sharing (TSTS) policy documents (2014). The current study further revealed that little above half of the respondents showed some level of knowledge that task shifting and sharing can help in expanding access to essential health care services to meet the set SDG targets. This finding is in line with the goal statement in the Nigeria Task shifting and Task Sharing (TSTS) policy documents (2014). Moreover, this study findings indicated that few majority of the respondents demonstrated agreement that task shifting can reduce maternal mortality and provide universal access to reproductive health services, this finding corroborates with the findings by Dawson, *et.al* (2013) which stated that task shifting and sharing may increase access to and availability of maternal and reproductive health (MRH) services without compromising performance or patient outcomes and may be cost-effective.

In evaluating the knowledge of the categories of the task to be shifted, the study identified that little above half of the respondents reported to have known that more tasks will be shifted to lower cadres than to upper cadres. The finding is in line with the report by Kalibala, *et.al* (2016) which found that tasks were more likely to be delegated to and from Health care providers at the bottom of the rank. The study further revealed that only slightly above half of the respondents know that in delivering HIV/AIDS care, task shifting practices are categorised in to four; these findings corresponded with WHO commissioned study on Task shifting which stated that evidence supports a broad categorization of task shifting practices into four types i.e. Task shifting I, II, III and IV (WHO, 2008). With regards to whether task such as maternal and new-born healthcare including abortion care, neonatal resuscitation can be shifted to lower health workers cadre, majority of the respondents showed lack of knowledge of the items which can be seen in figure 4, this finding is in contrary to the findings by Deller, Tripathi, Stender, Otolorin, Johnson, &Carr (2015) which stated that with training, task such as maternal and new-born healthcare including abortion care, neonatal resuscitation can be shifted successfully to lower cadre. The study findings also revealed that slightly above half of the participants

58.9% knew that task like pre-clinical care such as admission procedure, recording of vital signs can be delegated to lower cadres; this is similar to the findings by Kalibala *et.al* (2016) which showed that the task of nurses to perform pre-clinical care was delegated to lay health workers (LHWs).

Conclusion and Recommendations

It was empirically established that nurses had average knowledge of task shifting policy which was aimed at increasing access to services currently included in the essential health package in an effort to significantly reduce Nigeria's unacceptably high mortality rates and to achieve set Sustainable Development Goal (SDG) targets for the country. It becomes imperative for the supervising ministry at both federal and state-level to communicate the policy widely and in every forum so that all the stakeholders will have an insight for the implementation to be successful. The regulatory body of nursing shall conduct a review of the training curriculum and consider its inclusion.

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