

Comparative Analysis of Nurses' Knowledge in the 2018 Mandatory Continuing Professional Development Programme (MCPDP) in Ogun State

OWOEYE, Isaiah Dada¹; SODIMU, Jeminat Omotade²; ANYANWU, Bibiana Chinonye³ & Olowolafe, Emmanuel Omoniyi⁴

Abstract

The update of professional knowledge is important in clinical practice. The aim of the study is to compare nurses' knowledge in the 2018 MCPDP. A descriptive prospective of pre and post one shot designed was used for the study in Ogun state, Nigeria. The population for the study were 841 participants (nurses). The instrument was pre and post tests records. Data were analyzed using the Statistical Package for Social Sciences (SPSS) and Kendall's Tau correlation coefficient was used to state the strength of the relationship in the participants' knowledge. Ethical approval was obtained from the Ogun State Ministry of Health Committee on MCPDP. The result revealed a significant difference between the entry knowledge and exit knowledge of the participants ($P(0.00) < 0.05$; $r=0.463$). More than half of the respondents (53.5%) had good grade at the Pretest, while majority had Excellent grade at the post test. Mental health/Psychiatric nursing module had the highest knowledge based with 61.5% at the Pre-test and 90.7% at the Post test. However, Medical-surgical nursing recorded 100% lowest knowledge based in both Pre and Post tests. The study suggest exploration of other teaching methods and motivation for learners in Medical surgical nursing modules.

Keywords: Knowledge, MCPDP, Pretest, Post test. Programme.

Introduction

Professional update is an important aspect of professional obligation set by most regulatory bodies in enhancing the performance of her practitioners. It is a programme that is set to elicit a desirable behaviour in the practitioners in their practice areas as it seeks to making individual to keep abreast with information relevant to his or her practice settings. The impartation of knowledge delivers a cognate professional experience to the participants thereby boosting the level of information required in making critical thinking and decision in the clinical area (Ghadirian, Salsali & Cheraghi, 2014). The package of professional update programme take into cognizance the information that is beneficial to the professional in the practice environment with the sole aim of giving the best to the consumer of services in that area. According to Ortega (2015), with technological advancement and research of this century, it is expedient that nurses should get informed in their training to deliver an evidenced based nursing practice to the patient.

Most professionals in the health care industries have commenced the professional update a long time ago. Some professional groups like Medicine, physiotherapy, Accountancy etc have always being utilizing it as a means of updating their practitioners for professional growth. In the recent time, nursing in Nigeria joined the league of professionals using professional updates for their practitioners. Before the inception of the programme, nurses could be said to be using residual and obsolete knowledge in practice.

¹ FWACN, Msc Nursing, RPN, RNE, RN. Department of Nursing science, College of Medicine and Health Science, Afe Babalola University, Ado-Ekiti, Ekiti state.

e-mail:owoeyeid@abuad.edu.ng DL: 08034252290.

² Msc Nursing, PGDE, BNSC, RPHN, RM, RN.School of Nursing, Idi-Aba, Ogun state

³ RN, RM, RNE, RPoN, BSc Nursing, M.Sc Department of Nursing, College of Medicine, Lagos state University

⁴ RN, RM, RPHN, Msc, Department of Nursing science, College of Medicine and Health Science, Afe Babalola University, Ado-Ekiti, Ekiti state.

Nurses' attitude and knowledge to the learning expectations are predictors of the outcome of the care to be rendered by the nurses (Faronbi, Adebawale, Faronbi, Musa & Ayamolowo, 2017). It is therefore important that a re-orientation is needed to change the attitude and improve the practices through an obvious practice-based knowledge which could be delivered in the professional update programme.

The cultivated attitude to learning could be measured in terms of performance of nurses on scores. This could show in the grades. The overall measurement of the change due to current information learnt is bridging the gap in theory and practice which could reflect in the increase in nursing care rendered (Ajani & Moez, 2011). The presentations of stimuli in form of learning experiences is aimed at updating and aid learning, away from residual repertoire of knowledge gained in the time past. It is the change in behaviour that would determine if the nurse actually learns something new within the period of MCPDP programme. Therefore the study is set to investigate the pre and post learning experiences of nurses within Nine (9) series of MCPDP programme.

Statement of the Problem

Learning is a relatively permanent change in the behaviour of an individual. It is the amount of knowledge acquired that would change attitude and this could be measured in the change in the behaviour, vis-a vis the practice in the clinical settings. There is a strong correlation between understanding the theoretical concepts of nursing and the display of high prowess in clinical decision making and proficiency in the clinical practice (Ajani & Moez, 2011). Over the time, nurses are said to be using residual knowledge in practice without updating to keep abreast with current evidence based practice. It is the advent of MCPDP that occasioned the move from this orientation of using residual knowledge to keeping abreast with the current information. Although some nurses did kick against the development but they are mandated by principles to engage in the exercise for the renewal of their licenses. This resistance to change and compulsion by law to engaging in the exercise may not necessarily make some learn as some will block their minds and gain little or no information with the residual knowledge initially possessed. Literatures have reported the readiness to learn as a factor that facilitate learning in an individual and scholars in the behaviour change school of taught line also extol this assertion (Aliakbari, Parvin, Heidari & Haghani, 2015). It is this that prompted the researcher to investigating in determining if there is a significant changes in the learning experiences of the MCPDP participants within Nine (9) series of the programme.

Objectives for the study

1. To determine the relationship between the entry knowledge and exit knowledge of the participants.
2. To determine the ranking order in knowledge based among the participants.
3. To identify the modules with highest and lowest knowledge base among the participants.

Literature Review

Mandatory Continuing Professional Development Programme (MCPDP) for nurses came into fruition in March 2010 following the brainstorming of the Nursing Council executives on the need of her members to keep in touch with up-to-date information in their areas of practice (Emmanuel, 2012). This effort is geared towards the Council's mandate in maintaining excellence in nursing education and practice through acquisition of an evidence based information to guide the practice. The programme is packaged for all the cadres of Nigerian nurses as a pre-requisite for renewal of their licenses. The need for the programme could be speculated to have risen from the fact that nursing is a professional course with an orientation to the public in its dynamic nature. Nursing profession has been improving her practice in accordance to giving the best to the dynamic nature of the society. The trend in the standardization of nursing practice and certification is occasioned by the development of stronger evidence from theory which is being integrated into practice for the benefit of the clients (Ghadirian, Salsali & Cheraghi, 2014). Hence the need for continuing education with the like of MCPDP to keep nurses informed. It is also pertinent to know that the twenty first century era of nursing practice requires an evidence based practice to inform all action undertaken in the practice area. According to Ajani & Moez (2011), professional update is the key to the nurses' stability in merging theory in nursing to clinical practice at any point in time, therefore the point of learning new trends in the profession could be through a structured programme like MCPDP.

The ultimate aim of the MCPDP programme is to increase the knowledge base of the practicing nurses through her structured learning experiences in different areas in nursing. The translation of the learning experiences to effective care to the benefit of the consumers of health is the hallmark of the workshop programme (Kumari, Devi & Narayani, 2016).

In order to facilitate this, The Nursing and Midwifery Council of Nigeria in conjunction with the State Ministries of Health planned and package these learning experiences that are rich enough to meeting the sole aim of the programme as conceived by the Council. Nursing council selected the learning experience that makes up the update programme in line with the desired competence to be elicited in the individual (Filipe, Silva, Stulting & Golnik, 2014). The learning goals are well spelt-out and resource person are advised to abide by this principle. The state Ministries in turn organizes resource person that are seasoned professional nurses of repute to teach the content of those learning experiences. Nursing Council is also mindful of the fact that environment mediate and facilitate learning, therefore she prescribes conditions for the selection of the halls where the teaching is to be held. Some of the environmental variables considered by the Council in selecting the facility to be used for the teaching are; Congenial spacious hall for the participants, functional public address system, effective audio-visual aids, comfortable convenience rooms for the participants and other timely administrative gadget to facilitate the teaching.

The development of an appropriate area to validate proficiency on the job is step to making the workshop for credit award a veritable means for knowledge update (Kumari, Devi & Narayani, 2016). In order to ensure that the aim of the programme is not defeated, but to impart the needed knowledge to the participants, the Nursing and Midwifery council of Nigeria mandated among others that, the participants must meet the criteria to be eligible for the award of the MCPDP certificates tagged with three (3) credits units (Plateau MCPDP, 2016). One of the criteria is that the participant must attend all the teaching session packaged to deliver recent information. At the long run, there will be best practice among nurses and an optimal increase in the quality of nursing care delivery in clinical areas. A total of Six credits unit (an equivalent of 60 continuing education credit/contact hours within each three-year cycle of licensure) is required for the update of licenses (PCN, 2013). The implication is that more exposure to learning experiences is required by the Council for a professional nurse to update his or her knowledge to renewing the license. In other to create room for diverse knowledge acquisition, Nursing council approve the workshop and programme from other professional group and tagged her credit units on it according prerogative of the council judged by the course contents of such programmes. The MCPDP of the Council now take into an account the conferences, seminar, workshop, Annual General Meeting of other specialties in nursing upon the approval by the Council (TRCN, 2008). Some of these organizations attract 2 credits or 3 credits as the case may be. Some organizations that are given such opportunities in mandating knowledge through hard earned contact units are International Council of Nurses (ICN), West african College of Nursing, Workshop of National Association Nigeria Nurses and Midwives (NANNM). The Council also accept the evidence of attendance of Professional continuing education programmes for the renewal of licences for the nurses in diaspora.

The MCPDP teaches a self-directed improvement and facilitate a sense of self esteem in a participant towards a desired will to improve on the care being rendered to clients (Filipe, Silva, Stulting & Golnik, 2014). The participants who see the need to get an update in areas of practice make himself or herself available to participate in the programme as prescribed by the Council. Some participants could also be sponsored for the programme by their employees based on the need assessment of such organization. The organizer of the programme do mandate that the prospective resource persons booked for the programme fashioned out Multiple choice questions in the areas of the units they are to take. These questions are coupled together and are administered to the participants in form of Pre-test to determine the entry behaviour and Post-test to determine how far the objective and aim of the programme are achieved on individual. It is pertinent to know that the knowledge acquired through this learning will have a great influence of the care that the participants are to render in the clinical areas and other areas of practice.

Methods and Materials

A descriptive prospective of pre and post design one shot designed was used for the study. The study area was Ogun state. The target populations were registered nurses with various areas of specialization who registered for the 2018 MCPDP organized in Ogun state. The population computed for the study was participants who registered for 2018 edition of MCPDP. Sample size of 841 were computed from the records. The instrument used for data collection was records of the participants' pre and post tests in the workshops organized in 2018. The verified records from the authority were used. Data were collected at the end of every workshop where the pre test and post test were conducted. The collected data were analyzed using the Statistical Package for Social Sciences (SPSS) and Kendall's Tau correlation coefficient was used to state the strength of the relationship in the participants' learning experiences. Ethical approval to access the record for the research was obtained from the Nursing service division of the Ogun State Ministry of Health in conjunction with the Ogun state Committee on MCPDP.

Results

There is no significant relationship between the entry knowledge and exit knowledge of the participants. The result reveals that there is a significant difference between the entry knowledge and exit knowledge of the participants. The null hypothesis is rejected $P(0.00) < 0.05$; $r=0.463$ (Table 1). The ranking order in knowledge based among the participants showed that in the pretest 41.5% had poor grade, 53.5% had Good grade while 5% had Excellent grade. However the results of the post test revealed that 19.7% had Poor grade, 38.2% had Good and 42.1% had Excellent grade. The Pretest is $X = 1.9$; $SD = \pm 0.91$, while the Post test is $X = 2.9$; $SD = \pm 1.45$ (Table 2). Modules with highest and lowest knowledge base among the participants, the result shows that Medical surgical nursing held in the month of April had the lowest knowledge based with low score evaluation of 100% in Pre-test and same 100% in Post test, while Psychiatric/Mental health nursing held in the month of July had the highest knowledge base with high score evaluation of 61.5% at the Pre-test and 90.7% at the Post test (Table 3).

Table 1: Relationship between entry knowledge and exit knowledge of the participants.

| KENDALL'S TAU_B CORRELATION | | POST TEST KNOWLEDGE |
|-----------------------------|-------------------------|---------------------|
| PRE TEST KNOWLEDGE | Correlation Coefficient | .463** |
| | Sig. (2-tailed) | .000 |
| | N | 841 |

Since $P(0.00) < 0.05 = \text{SIGNIFICANT}$; $r=0.463$

Table 2: Ranking order in knowledge based among the participants.

| Knowledge | Grade or Rank of knowledge | | | | Total | Descriptive |
|-----------|----------------------------|----------------|-------------------|-----------------|-----------------------------|---|
| | Poor (<50) | Good (50-59) | Very good (60-69) | Excellent (>70) | | |
| Pre-test | 349 (41.5%) | 261 (31%) | 189 (22.5%) | 42 (5%) | 841 (100%) | $X = 1.9$; $SD = \pm 0.91$ Mode=<50; Average mark=54 |
| Post-test | 166 (19.7%) | 100 (11.9%) | 221 (26.3%) | 354 (42.1%) | 841 (100%) | $X = 2.9$; $SD = \pm 1.45$; Mode=>70 Average mark=64 |

Table 3: Modules with Highest and Lowest knowledge based among the participants.

| MODULES | | Pre-test knowledge | Post test knowledge |
|---|------------------|--------------------|---------------------|
| | | N (%) | N(%) |
| Psychiatric/Mental Health Nursing I(March) | Low | 84(70.6%) | 85(71.4%) |
| | Average | 29(21.4%) | 34(28.6%) |
| | High | 6(5%) | - |
| | Total | 119(100%) | 119(100%) |
| Community health Nursing I (April I) | Low | 16(34%) | 3(6.4%) |
| | Average | 19(40.4%) | 7(14.9%) |
| | High | 11(23.4%) | 24(51.1%) |
| | Very high | 1(2.1%) | 13(27.7%) |
| Total | 47(100%) | 47(100%) | |
| Medical-Surgical Nursing (April 2) | Low | 62(100%) | 62(100%) |
| | Total | 62(100%) | 62(100%) |
| Adolescent Sexual Reproductive & Youth Friendly Service (ASRYHF) (JUNE) | Low | 41(35.7%) | 7(6.1%) |
| | Average | 56(48.7%) | 16(13.9%) |
| | High | 18(15.7%) | 43(37.4%) |
| | Very high | | 49(42.6%) |
| Total | 115(100%) | 115(100%) | |
| Psychiatric Nursing II (JULY) | Low | 12(12.5%) | 2(2.1%) |
| | Average | 25(26%) | 7(7.3%) |
| | High | 47(49%) | 33(34.4%) |
| | Very high | 12(12.5%) | 54(56.3%) |
| Total | 96(100%) | 96(100%) | |
| Elimination of mother to child transmission | Low | 21(21.6%) | |

| | | | |
|---|------------------|------------------|-----------------|
| of HIV infection (EMTCT) (AUGUST) | Average | 32(33%) | 11(11.3%) |
| | High | 37(38.1%) | 31(32%) |
| | Very high | 7(7.2%) | 55(56.7%) |
| | Total | 97(100%) | 97(100%) |
| Emergency Obstetric & Newborn (EMONC) (SEPT) | Low | 34(42%) | |
| | Average | 34(42%) | 2(2.5%) |
| | High | 13(16%) | 22(27.2%) |
| | Very high | | 57(70.4%) |
| Total | 81(100%) | 81(100%) | |
| Clinical management of Rape, FGM & psychological support (NOVEMBER) | Low | 42(40.4%) | 5(4.8%) |
| | Average | 29(27.9%) | 10(9.6%) |
| | High | 23(22.1%) | 22(21.2%) |
| | Very high | 10(9.6%) | 67(64.4%) |
| Total | 104(100%) | 104(100%) | |
| Community/public Health Nursing II | Poor | 37(30.8%) | 2(1.7%) |
| | Average | 37(30.8%) | 13(10.8%) |
| | High | 34(28.3%) | 46(38.3%) |
| | Very high | 12(10%) | 59(49.2%) |
| Total | 120(100%) | 120(100%) | |

Discussion

Relationship between the entry knowledge and exit knowledge of the participants: The result reveals a significant difference between the entry knowledge and exit knowledge of the participants. The null hypothesis is rejected $P(0.00) < 0.05$; $r=0.463$. In a similar study by Shivaraju, Manu, Vinaya & Savkar (2017), it was revealed that there was a significant relationship between a post test and a pretest academic input of learners, $P < 0.05$. In another study by Kumari, Devi & Narayani (2016) revealed that there is a significant difference in Pre test and post test evaluation of nurses on care of patient with Central venous access devices, P -value is 0.0001. In a study by Munezero et. al (2018) on nurses' knowledge and skill on Cardiopulmonary resuscitation training, the result showed a statistical significant relationship in the CPR knowledge and Skill ($P=0.02$)

Ranking order in knowledge based among the participants. The results show that in the pretest 41.5% had poor grade, 53.5% had Good grade while 5% had Excellent grade. However the results of the post test revealed that 19.7% had Poor grade, 38.2% had Good and 42.1% had grade. A study by Shivaraju, Manu, Vinaya, & Savkar (2017) gave a ranking order in performances of the test takers, where the scores of below 5 was rated a lower score, 5 and 8 was rated as average and more that 8 indicated high grade. Based on these rating, the study further stated that 64.1% scored low, 35.9% had average score while 21.79% had a high score. In another study by Yogendra & Andrew (2017) where the ranking order was pegged at Distinction, Upper credit, Lower credit and pass, the results showed that 31.43% of the respondents had Upper credit, 22.86% had lower credit, while 45.71% had a Pass grade. In this present study, the Pretest is $X = 1.9$; $SD = \pm 0.91$, while the Post test is $X = 2.9$; $SD = \pm 1.45$. This is incongruence to a study by Kumari, Devi & Narayani (2016) on nurses on care of patient with central venous access devices where Pretest knowledge $X = 26.9$; $SD = \pm 2.8$ and Post test $X = 34.8$; $SD = \pm 2.5$

Modules with highest and lowest knowledge base among the participants. The result shows that Medical surgical nursing held in the month of April had the lowest knowledge based with low score evaluation of 100% in Pre-test and same 100% in Post test. This is similar to a study by Quaddumi & Khawaldeh (2014) where 73% of the respondents score low in Pressure Ulcer Prevention which is an aspect of Medical surgical nursing. Psychiatric/Mental health nursing held in the month of July had the highest knowledge base with high score evaluation of 61.5% at the Pre-test and 90.7% at the Post test. The study is in consonant with a study by Oducao RMF & Penuela AC (2014), where all respondents performed fairly well in other courses but had an outstanding performance and ranked number one (1) in Psychiatric nursing as a course. The study further argued that psychiatric nursing seems to be a course that students could extrapolate ideas unlike others that could be abstract. A study by Ahmed & Ahmad (2017) posited that those who had a lower grade were termed to be having a surface learning, while those classified to obtain higher grade had a deep learning techniques.

Conclusion

The study concluded that there is a difference between the entry knowledge and exit knowledge of the participants. Majority of the respondents had good grade at the Pretest of the year MCPDP, while majority had Excellent grade at the post test of the MCPDP year. Mental health/Psychiatric nursing module had the highest knowledge based in the 2018 MCPDP while, Medical-surgical nursing recorded the lowest grade in knowledge based. The study therefore suggest different teaching methods and a higher level of motivation should be instituted by the instructors taking Medical surgical nursing, while token economy should also be integrated as a strategy to encourage the learners.

Acknowledgement: A special appreciation to the South West, Nigeria MCPDP Committee and Ogun State Coordinators of MCPDP for nurses.

References

- Ahmed A & Ahmad N (2017). Comparative analysis of Rote Learning on High and Low Achievers in Graduate & Undergraduates. *Jurnal of Education & Educational development*. Vol 1.No.1
- Ajani K & Moez S (2011). Gap between knowledge and practice in nursing, *Procedia Social and Behavioral Sciences* 15 (2011) 3927–3931 WCES-2011.
- Aliakbari F, Parvin N, Heidari M & Haghani F (2015). Learning theories application in nursing education, *Journal of Education Health Promotion* 4 (2). Doi 10.4103/2277-9531.151867.
- Emmanuel, K (2012). Re: Module Mandatory Professional Development Programme For Nurses, retrieved from <http://www.naijanursesforum.com/viewtopic.php?t=15>.
- Faronbi JO, Adebowale O, Faronbi GO, Musa OO & Ayamolowo SJ (2017). Perception knowledge and attitude of nursing students towards the care of older patients, *International Journal of Africa Nursing Sciences* **Volume 7, 2017, Pages 37-42**.
- Filipe HP, Silva ED, Stulting AA & Golnik (2014). Continuing Professional Development: Best Practices, *Middle East African Journal of Ophthalmology*, Apr-Jun; 21(2):134-141. Doi:10.4103/0974-9233.129760.
- Ghadirian F, Salsali M & Cheraghi MA (2014). Nursing professionalism: An evolutionary concept analysis, *Iranian Journal of Nursing and midwifery Research*. Jan-Feb; 19(1): 1–10.
- Khashi'ie NS, Said RM, Zainal NA & Miswan NH (2017). A Comparison Study of Students' Performance in Pre and Post Result of A Mathematics Competency Test. *MATEC Web of Conferences* 87 , 04001 (2017). DOI: 10.1051/ mateconconf/20178704001
- Kumari V, Devi S & Narayani A (2016). A study of pre and post test knowledge score of nurses on care of patient with central venous access devices in selected oncology hospital of Bangalore, retrieved from <http://internationalscholarsjournals.org/download.php?id=342368654774359930.pdf&type=application/pdf&op=1>
- Munezero JBT, Atuhaire C, Groves S & Cumber SN(2018). Assessment of nurses knowledge and skills following cardiopulmonary resuscitation training at Mbarara Regional Referral Hospital, Uganda. *Pan Afr Med J*. 2; 30: 108
- N & MCN (2017). Guidelines for Continuing Education Programme for Private Providers, retrieved from <https://www.nmcn.gov.ng/docs/GUIDELINES%20FOR%20PRIVATE%20PROVIDERS%20OF%20MCPDP%20IN%20NIGERIA.pdf>
- Oducado RMF & Penuela AC (2014). Predictors of Academic Performance in Professional Nursing Courses in a Private Nursing School in Kalibo, Aklan, Philippine. *Asian Pacific Journal of Education, Arts and Sciences*, Volume 1, No 5
- Ortega, M., Cecagno, D., Llor, A. M., de Siqueira, H. C., Montesinos, M. J., & Soler, L. M. (2015). Academic training of nursing professionals and its relevance to the workplace. *Revista latino-americana de enfermagem*, 23(3), 404–410. doi:10.1590/0104-1169.0432.2569
- Pharmacists Council of Nigeria PCN (2013). Mandatory Continuing Professional Development (Mcpd) Programme For There-Certification Of Pharmacists In Nigeria Modules X, Xi, Xii Pharmacists Council Of Nigeria Abuja, retrieved from http://www.pcn.gov.ng/files/MCPD_brochure.pdf
- Plateau MCPDP (2016). Mandatory Continuing Professional Development Programme for December 2016, retrieved from <http://www.nursingworldnigeria.com/2016/11/plateau-state-mandatory-continuing-professional-development-program-mcpdp-for-december-2016>

- Qaddumi, J & Khawaldeh, A (2014). Pressure ulcer prevention knowledge among Jordanian nurses: a cross-sectional study. *BMC Nurs* **13**, 6 doi:10.1186/1472-6955-13-6
- Ross K, Barr J & Stevens J (2013). Mandatory Continuing Professional Development requirements: What does this mean for Australian nurses. *BMC Nurs*. 2013; 12: 9. Published online 2013 Mar 27. doi: 10.1186/1472-6955-12-9
- Shivaraju PT, Manu G, Vinaya M, Savkar MK. Evaluating the effectiveness of pre- and post-test model of learning in a medical school. *Natl J Physiol Pharm Pharmacol* 2017;7(9):947-951.
- Teacher Registration Council of Nigeria (TRCN) (2008). Manual Of The Mandatory Continuous Professional Development Programme, 2008 Revised edition, retrieved from <https://www.trcn.gov.ng/PUBLICATION/MCPE%20REVISED%202008.pdf>