



Original Article

Assessing the Faculty Development Needs in Nursing Colleges of Khyber Pakhtunkhwa: A Cross Sectional Study

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ABSTRACT

Nursing faculty are the key players in shaping the students by providing quality education. Faculty development is a crucial element of nursing education, and need assessment is fundamental and initial step for planning effective faculty development programs. **Objective:** To identify the needs of nursing faculty to facilitate teaching at Baccalaureate level in Nursing Colleges Khyber Pakhtunkhwa. **Methods:** A Descriptive Cross-sectional study was carried out in KPK in 2022. Overall, 242 participants from 14 colleges were involved in the study. Sample size was calculated through Raosoft software with 95% confidence interval, 5% margin of error, 50% hypothesized prevalence and 650 population. An adopted questionnaire was used to collect the data, its Cronbach's alpha score is 0.968. The Questionnaires were filled by the faculty. The questionnaire had two sections; demographic section and faculty responses. Data were analyzed through SPSS version-22. **Results:** Out of 242 faculty, 238 completed the questionnaire with a response rate of 98.34%. Majority of the participants were male (66%), most of the participants (70%) were > 50years of age, the largest proportion being lecturers (82.8%) and 69% participants were with <3years of teaching experience. The common teaching activities practiced by the participants were lecture (81.1%). The finding showed that the participants were having moderate to lower level of knowledge in four components. **Conclusions:** The priority areas identified for faculty development were OSCE, PBL, selecting assessment instrument for students' evaluation, IT and computer skills. This study reinforces the need for effective faculty development program to train the faculty in these identified areas.

INTRODUCTION

Faculty members are the backbone of education system because they are the key players in shaping the students by providing quality education. As the forefront nurse leaders, they require a balanced academic and clinical teaching experience. The transformation of nursing education promoting professional nurses to face the challenges in real world, so the nurse educators must consider the strategies to facilitate the nurse students throughout their careers to reflect the goals of nursing education [1]. Faculty development is an essential element of education, and need assessment is fundamental and initial step for

planning effective faculty development programs. In response to major transformation in health care delivery system, health education, scientific research and society need, the faculty roles and responsibilities are significantly changing [2, 3]. Faculty are now expected to be an outstanding teachers, innovative researchers, proficient practitioners, effective managers, and inspiring educational leaders. However, faculty have been insignificantly equipped for these roles, specifically for teaching. Therefore, globally increasing consideration has been placed on the strategy and execution of effective

courses to persistently improve the abilities of educational faculty in teaching and other advance areas [4]. The benefits of need assessment are not restricted to its outcome but spread to the process itself through generating motivation leading to advanced faculty engagement and inspiration with increased possibility of behavioral change [5]. World health organization (WHO) emphasizes the need of quality nursing education for preparing the competent nurses with adequate knowledge, attitude and skills. WHO also defined eight core competencies that a nurse educator should possess [6]. In educational organizations effective planning is essential to achieve maximum output by utilizing the scarce resources and services. The realistic and structured planning required more accurate and comprehensive information; therefore, the process of need assessment is considered more crucial [7]. A need assessment is an organized method to explore the gaps between present and desired performance of educators to make effective plan [2]. In health education faculty development includes all those activities that health care professionals follow to enhance their knowledge, attitude and skills as a facilitators, mentors, managers and researchers [3]. The primary purpose of faculty development is, enlightening the educator's knowledge and proficiency in three diverse divisions i.e., management, teaching and research that strengthen the faculty' skills to perform their job [8]. Based on previous studies' finding the faculty needs assessment were; knowledge of computer skills, familiarity of statistical software and digital library, analysis of academic tests, designing the lesson plan, oral test, MCQs test, familiarity with administrative laws and principles, instructional methods, assessment of learners and learning process, instructional design and curriculum development [9, 10]. A study conducted in medical faculty of Saudi Arabia revealed that, the improving and refining different teaching methods, skills and approaches were among the most essential features in faculty-perceived effectiveness [11]. A study of two medical colleges of Dow University of Health Sciences, Karachi showed that; the greatest difference between present and desired knowledge of medical faculty were course and curriculum planning, essay and MEQs assessment, and evaluation of professional behavior [12]. Similarly, a study carries out for faculty development across Pakistan. According to this study there are five factors that could encourage or obstruct faculty development. Which include awareness and convenience, organizational support, fundamental leadership, politics and individual factors. Similarly teaching and learning, support for researchers, support for teaching and national curriculum were explored as areas of interests for faculty development [13, 14]. As faculty

development is an essential aspect to bring change in clinical practice. Therefore, the nurse educators require specialized skills and knowledge to prepare qualified nurses for safe patient care [15]. A situational analysis of nursing education revealed that; India is facing numerous challenges; which includes improving the current curriculum to enhance the health care system in the country and, strengthening the nurse educator knowledge by providing greater opportunities to obtain advanced qualification [16]. It reflects the current situation of nursing education in Pakistan. Needs assessment is a fundamental step for faculty development because it helps an organization to explore the gaps that inhibit to achieve its desired goals. In the developing countries like Pakistan, particularly in KPK where there is shortage of qualified nursing faculty, the developmental needs become more significant to be explored. In Pakistani context there is no published study found on similar topic. So, this unique study was carried out to explore the perceived developmental needs of nursing faculty in KPK and provide guidance to policy makers and authorities for faculty development program implementation to bring changes in future.

METHODS

It was a Descriptive Cross-sectional study carried out in nursing colleges of KPK from September 2021 to March 2022. Overall 242 participants from 14 colleges (public and private) were involved in the study by adopting non Probability convenient sampling technique. Sample size was calculated through Raosoft software with 95% confidence interval, 5% margin of error, 50% hypothesized prevalence and 650 population. Approval letter was obtained from Director INS-KMU. Permission was granted from all the department' heads of nursing colleges. Written voluntary informed consent was taken from individual participant before administering questionnaires and confidentiality was guaranteed. Nursing faculty of either gender, teaching to Generic BSN or Post RN BSN with six months of experience were included in the study. The Nursing Faculty who have done MHPE and CHPE were excluded. Data were collected through adopted and validated 5-point Likert scale Questionnaire, its Cronbach's alpha score (0.968) [12]. The questionnaire was divided into two sections. Section "A" is consisting of questions regarding socio-demographic variables of the participants such as age, gender, academic rank, teaching experience etc. Section "B" consist of 15 items. These are related to teaching strategies and students' assessment. Data were collected via a self-administered questionnaire after explaining the study purpose and taking written consent. The questionnaires were handed over to faculty and were requested to return the completed questionnaire. A total

238 out of 242 distributed form were received with a response rate of 98.34%. The Statistical Package for Social Sciences Software (SPSS version 22.0) was used to analyze the data. Descriptive analysis were performed. Percentages, frequencies, tables, pie and bar charts were used for study variables.

RESULTS

With a response rate of 98.34%, 238 nursing faculty participated in the study. Demographic features of the study group are presented in Table-1.

Table 1: Demographic characteristics of study group

Variable	N (%)
Total participants	23(100)
College	
Public	49(20.59)
Private	189(79.41)
Age	
> 50 years	167(70.17)
40-50years	48(20.17)
< 40years	23(9.66)
Gender	
Male	158(66.3)
Female	80(33.6)
Qualification	
BS Generic	98(41.18)
Post RN	93(39.08)
MS Nursing	46(19.33)
PhD	1(0.42)
Academic rank	
Associate Professor	2(0.84)
Assistant Professor	8(3.36)
Lecturer	197(82.77)
Demonstrator	12(5.04)
Principal	19(7.98)
Teaching Experience	
< 3years	163(68.49)
4-9years	59(24.79)
9 - 19years	13(5.46)
20years and above	3(1.26)
Teaching activities	
Lecture	193(81.09)
Tutorial	6(2.52)
Clinical	23(9.66)
Lab teaching	6(2.52)
Others	10(4.20)

Table-2 gives the frequency and percentages of participants with limited knowledge, moderate knowledge and substantial knowledge for different educational domain. Using adapted Likert scale questionnaire in teaching methodologies and assessment tools. it was found that, the participants were having moderate to lower

level of knowledge in four components i.e., IT and computer skills (46%) followed by assessment using OSCE (46%), facilitating PBL (42%) and selecting assessment instrument(39%).

Table 2: Frequency and percentages for educational domain

Educational domain	Limited Knowledge	Moderate Knowledge	Substantial Knowledge
Teaching and learning concept	15(6.3%)	56(23.5%)	167(70.2%)
Course and curriculum planning	24(10.1%)	58(24.4%)	156(65.5%)
Educational objectives	15(6.3%)	47(19.7%)	176(73.9%)
Lecture and large group teaching	13(5.5%)	69(29.0)	156(65.5%)
Teaching in Tutorials	20(8.4%)	64(26.9%)	154(64.7%)
Teaching communication skills	13(5.5%)	47(19.7%)	178(74.8%)
Teaching bed side and clinical	12(5.0%)	77(32.4%)	149(62.6%)
Facilitating PBL	29(12.2%)	69(29.0%)	140(58.8%)
Giving feedback	16(6.7%)	62(26.1%)	160(67%)
IT and computer skills	36(15.1%)	74(31.1%)	128(53.8%)
Selecting assessment instrument	25(10.5%)	71(29.8%)	142(59.7%)
Assessment using essay and MEQs	17(7.1%)	54(22.7%)	167(70.2%)
Assessment using MCQs	13(5.5%)	52(21.8%)	173(72.7%)
Assessment using OSCE	36(15.1%)	76(31.9%)	126(52.9%)
Assessment of professional behavior	18(7.6%)	44(18.5%)	176(73.9%)

DISCUSSION

Although the knowledge regarding teaching strategies, student assessment and learning is crucial for all nursing faculty. The findings of the current study are fundamental for planning effective nursing faculty development programs. The current study result shows that there is predominance of male faculty (66%), most of the participants are > 50 years of age this is in contrast to research conducted in Wah medical college, male faculty were 31.11% and the 54.4% participants' age were between 25-35 years [17]. The teaching activities practiced by the participants were lecture (81.1%) which is close to research conducted in Dow University [12]. The least practicing activities of the participants in teaching were; clinical (9.7%) followed by tutorial (2.5%) and lab teaching (2.5%), as bed side teaching, supervision and regular feedback provision are the key for professional skills competencies [18]. In current study finding 46% participants were having moderate to limited knowledge in IT and computer skills, this finding is supported by a study that, highest level educational need for faculty was computer skills [8]. The participants in similar percentage (46%) were having moderate to limited knowledge in assessment using OSCE which is in contrast the study finding, that shows; 82.4% and 77.8% of faculty were aware about the OSCE and OSPE respectively [19]. Similarly, another study by Memon revealed around 60% participants considered OSCE as preferred mode of assessment [20]. In facilitating PBL, 42% participants were having moderate to limited knowledge, as it is one of the well-recognized modalities of teaching that promote self-directed learning supported by other study [14]. In selecting assessment instrument 39%

participants were having moderate to limited knowledge, a study by Alonzo *et al.*, showed almost similar finding of limited use of assessment strategies[21].

CONCLUSIONS

Most faculty members in Nursing Colleges of Khyber Pakhtunkhwa need further training in some educational domain to improve their academic performance. The assessed and identified priority areas for faculty development were OSCE, PBL, selecting assessment instrument for students' evaluation, IT and computer skills. This study reinforces the need for effective faculty development program to facilitate the teaching by targeting these identified domains. The study provides important information on the perceived faculty development needs, which are not only useful for planning faculty development programs in this particular province but also insightful for other provinces.

Authors Contribution

Conceptualization: MN

Methodology: MN

Formal analysis: S, MI

Writing-review and editing: SA, DM, MI

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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