Prioritizing Training Needs for Nurses in the Government Hospitals of the Ha'il Region, Saudi Arabia: Future Directions for Educational Developers

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Prioritizing Training Needs for Nurses in the Government Hospitals of the Ha'il Region, Saudi Arabia: Future Directions for Educational Developers

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Abstract

Background: The assessment of training needs can help establish the current performance or knowledge levels related to certain essential nursing activities. The purpose of this study is to determine the training needs of the staff nurses of the government hospitals in Ha'il Region, Saudi Arabia.
Methods: This study employed a cross-sectional–correlational approach with 230 staff nurses of the government hospitals in the City of Ha'il. Random sampling was used to ensure the representativeness of the sample.
Results: The nurses perceived training activities as very important (6.22 ± 1.09) in their work but performed the necessary activities only moderately (5.21 ± 1.44). Position was strongly positively correlated with management ($r = 0.796$; $p < 0.003$). In terms of current performance, age had a strong positive correlation with administration ($r = 0.659$; $p < 0.001$) and management ($r = 0.675$; $p < 0.001$). The participants suggested quality management system (96%) as the area that is most in need of training.
Conclusions: Findings on the importance of training needs suggest that positions were strongly positively correlated with management. With regard to the perceived current performance, age had a strong positive correlation with administration and management. The participants suggested quality management system as the area that is most in need of training.

Keywords: healthcare providers, hospitals, needs assessment, professional, Saudi Arabia

INTRODUCTION

Training needs analysis (TNA) is critical for determining the educational needs of healthcare personnel and for ensuring that service needs are addressed adequately.[1] It helps define which professional skill gaps must be addressed and what the characteristics of prospective trainees should be. However, as has been true in the past, training is frequently developed and implemented without performing a TNA; this situation is attributable to either the lack of time and resources or the failure to use research evidence to inform practices. Although healthcare institutions often fail to conduct the comprehensive and effective assessment of training needs,[2] TNA is important because it can help an organization achieve its goals. Consequently, training is widely recognized as a tool for the development of healthcare personnel because it is beneficial only when it is tailored to the needs of the intended recipients.[3] Given that service delivery is continually evolving, healthcare providers must keep their abilities updated.

Several scholars concur that TNA is a systematic process that entails setting corporate goals, acquiring and analyzing competency data, and assessing the gaps between existing and future requirements.[4,5] Predictably, TNA has been reported to have a considerable effect on employee efficiency.[6] Hamilton asserted that the implementation of a TNA exercise could aid in the construction of a tailored information skills training program.[7] Such an approach would allow for the identification and remediation of knowledge, skills, and other performance requirements. Significant progress toward an organization's stated objectives requires understanding what works well and what needs to be changed. To this end, TNA is essential for determining the gaps between what is currently in place and what is considered necessary for effective training. The results of a needs assessment can assist in identifying the areas and individuals that require training.[8]

A well-structured TNA can assist organizations and sectors to avoid wasting resources on unproductive training and focus on must be done to accomplish their goals.[9] In modern-day work environments, employees must be able to accomplish complicated jobs efficiently, cost-effectively, and safely. Personnel who do not meet specified standards or perform at the expected level must be trained adequately. The gap between the actual and the expected job performances suggests that training is required. Consequently, the prime purpose of a TNA is to determine the gap between the required and the current levels of performance.[10] Nonetheless, communications with nurses via TNAs have been frequently overlooked when designing consistent and

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specifically developed educational strategies.[11] Indeed, comprehensive TNAs are generally disregarded when establishing professional training for nurses.[9,12] In previous studies, the necessity for ongoing professional development was ranked as more important than research and auditing. The evidence shows that the majority of responders needed instruction in management, communication, clinical skills, and research methodology.[13]

A solid foundation of education and continuing professional growth is imperative to enable a range of/and great duties for nurses.[12] Healthcare professionals should have a foundation built on the best available knowledge, the use of effective educational tools, and planned action theories to comprehend and effect change in practice contexts.[14]

The current study is of paramount importance because an assessment of training needs can help establish current performance or knowledge levels in relation to specified activities and the optimal required performance and knowledge levels. Prior to selecting the optimal solution and reporting findings to management, a TNA organizer must understand the problem thoroughly and examine all alternatives, not merely the training. While training needs assessments were previously conducted for the nurses in the hospitals of the Ha'il Region, they directed more attention toward helping the nurses map out their potential career paths than to other aspects. With these considerations, this current study aimed to determine the training needs of the staff nurses, which are to be used as the basis for the future directions of the educational developers of the government hospitals in Ha'il Region, Saudi Arabia.

METHODS

This study employed a cross-sectional design to determine the training needs of the staff nurses of the government hospitals in Ha'il Region, Saudi Arabia.

The study was conducted in four government hospitals in Ha'il Region: Ha'il General Hospital, King Khalid Hospital, King Salman Specialist Hospital, and the Convalescent Hospital. The sample for this study comprised the staff nurses who had been working with the aforementioned hospitals. The inclusion criteria for the study were as follows: (a) nurses who had been with the hospital for at least 3 months to ensure that they already know their needs and (b) nurses who sent their contact information (e.g., email and WhatsApp) as a means to send them Google Forms. The researchers employed a simple random sampling strategy with the use of a lottery through a computer program to ensure the representativeness of the samples. The RAOSOFT online calculator (http://www.raosoft.com/samplesize.html) was used for this purpose: 230 nurses, out of 556 eligible potential participants, were invited to participate in the study. The

power of the test was set at 95% with a 5% margin of error.

A questionnaire was distributed to the participants by using Google Forms. The respondents were instructed to read the informed consent before proceeding to answer the questions. The participants were given at least 15 min during their break or leisure time to complete the questionnaire. They were assured that all information gathered would be treated with the highest confidentiality. Data were collected between January and March 2022.

This study adopted the Hennessy Hicks Training Needs Analysis Questionnaire, which has been assessed psychometrically for validity and reliability. It has been accepted by the World Health Organization as a tool for evaluating training.[15] Each item in the basic questionnaire was assessed on a seven-point scale in two ways: How important the task was to the respondent's job (Rating A) and how well the task was being completed or performed (Rating B). The areas or individuals requiring training the most could be feasibly identified when the importance and performance scores were compared. A high score discrepancy was indicative of the great need for training.

The 30 tasks in the basic questionnaire were divided into five categories: research/audit (items 3, 6, 7, 9, 15, 21, 25, and 26), communication/teamwork (items 1, 5, 8, 13, 14, and 27), clinical tasks (items 10, 12, 17, 18, 22, and 24), administration (items 2, 20, and 29), and management/supervisory (items 4, 11, 16, 19, 23, and 30). This division facilitated the comparison of the training requirements for each category.[14]

The questionnaire was subjected to content validity analysis to ensure relevant and purposeful measurement. The adapted and modified questionnaire was pre-tested in the City of Ha'il. The Cronbach's α coefficient of the questionnaire was computed to measure internal consistency and reliability and was 0.91.

The Statistical Package for Social Sciences Version 26 was used to analyze the data. Descriptive statistics (i.e., frequency, percentage, and weighted mean) were used to determine the characteristics of the participants. Pearson's r correlation was used to determine the association between the demographic characteristics and the importance of/and the current state of the completion of the training.

This study commenced with the approval of the Ministry of Health–Ha'il Region with the IRB log number 2022-3. Permission was obtained from the hospital directors of each participating institution. The Institutional Review Board of the University of Ha'il granted ethical approval to this research.

RESULTS

The demographic characteristics of the participants are presented in Table 1. The majority of the participants were married (65.7%) and most were in the age range of 31–35 years old (50%). At least 43.6% had sufficient experience with 6–10 years of experience and held a staff nurse position (59.6%).

The level of importance and current performance and the mean differences of the subcategories of the activities are summarized in Table 2. The nurses were noted to perceive activities as very important (6.22 ± 1.09) in their work but performed the necessary activities moderately well (5.21 ± 1.44). Notably, research/audit had the highest mean difference (1.96), followed by management task (1.89).

The correlations between the demographic characteristics and the importance of the activities are presented in Table 3. Civil status was weakly positively correlated with research/audit ($r = 0.249$; $p < 0.23$), communication/teamwork ($r = 0.326$; $p < 0.000$), clinical task ($r = 0.241$; $p < 0.001$), administration ($r = 0.293$; $p < 0.001$), and management task ($r = 0.205$; $p < 0.003$). Age was weakly correlated with research/audit ($r = 0.217$; $p < 0.001$),

communication/teamwork ($r = 0.357$; $p < 0.001$), clinical task ($r = 0.351$; $p < 0.001$), administration ($r = 0.309$; $p < 0.001$), and management task ($r = 0.305$; $p < 0.001$).

TABLE 1. Demographic characteristics of the participants (N = 230)

Demographics	Frequency	Percentage
Civil status		
Single	79	34.3
Married	151	65.7
Age		
20–25 years old	22	9.6
26–30 years old	39	17.0
31–35 years old	115	50.0
36 years old and above	54	23.4
Years of experience		
Less than 5 years	54	23.5
6–10 years	98	42.6
11 years and above	78	33.9
Position held		
Staff Nurse	137	59.6
Charge nurse/Head nurse	66	28.7
Managerial (Supervisor)	27	11.7

TABLE 2. Level of importance and current performance and mean differences

Subcategories	Importance	Current performance	Mean Difference
Research/Audit	6.15 ± 1.08	4.19 ± 1.81	1.96
Communication/Teamwork	6.25 ± 1.10	5.97 ± 1.12	0.28
Clinical task	6.31 ± 1.02	5.93 ± 1.23	0.38
Administration	6.36 ± 1.08	5.82 ± 1.16	0.54
Management task	6.03 ± 1.15	4.14 ± 1.89	1.89
Average	6.22 ± 1.09	5.21 ± 1.44	

TABLE 3. Correlation between demographic characteristics and the importance of the activity

Demographics	Research/ Audit	Communication/ Teamwork	Clinical task	Administration	Management task
Civil status	0.249[*]	0.326[**]	0.241[**]	0.293[**]	0.205[**]
Age	0.217[**]	0.357[**]	0.351[**]	0.309[**]	0.305[**]
Years of experience	0.163[*]	0.133[**]	0.185[**]	0.683[**]	0.721[**]
Position	0.132[*]	0.198[**]	0.139[*]	0.191[**]	0.796[**]

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

TABLE 4. Correlation between demographic characteristics and perceived current performance

Demographics	Research/ Audit	Communication/ Teamwork	Clinical task	Administration	Management task
Civil status	0.258[*]	0.326[**]	0.241[**]	0.293[**]	0.297[**]
Age	0.231[**]	0.357[**]	0.351[**]	0.659[**]	0.675[**]
Years of experience	0.214[*]	0.313[**]	0.285[**]	0.323[**]	0.210[**]
Position	0.146[*]	0.198[**]	0.139[*]	0.191[**]	0.196[**]

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

TABLE 5. Suggested TNA of the participants

Suggested training needs	Frequency	Percentage
Quality management system (e.g. quality appraisal)	221	96.0
Evidence based practice and research (e.g. Appraising evidence and application to practice)	210	91.3
Infection control and management (handling cases of infection)	197	85.6
Interpersonal relationship (e.g. communication process)	145	63.0
Basic life support for all nurse at all position	110	47.8

Years of experience had a weak correlation with research/audit ($r = 0.163$; $p < 0.013$) and clinical task ($r = 0.133$; $p < 0.001$) but a strong relationship with administration ($r = 0.683$; $p < 0.001$) and management ($r = 0.721$; $p < 0.001$). The present position held was found to be weakly related to research/audit ($r = 0.132$; $p < 0.045$), communication/ teamwork ($r = 0.198$; $p < 0.003$), clinical task ($r = 0.139$; $p < 0.004$), and administration ($r = 0.191$; $p < 0.004$) but was strongly positively correlated with management ($r = 0.796$; $p < 0.003$).

The correlations between demographic characteristics and perceived current performance are presented in Table 4. Civil status had a weak positive correlation with research/audit ($r = 0.258$; $p < 0.017$), communication/ teamwork ($r = 0.326$; $p < 0.001$), clinical task ($r = 0.241$; $p < 0.001$), administration ($r = 0.293$; $p < 0.001$), and management ($r = 0.297$; $p < 0.003$). Age had a weak positive correlation with research/audit ($r = 0.231$; $p < 0.001$), communication/teamwork ($r = 0.357$; $p < 0.001$), and clinical task ($r = 0.139$; $p < 0.035$) but a strong positive correlation with administration ($r = 0.659$; $p < 0.001$) and management ($r = 0.675$; $p < 0.001$).

Table 4 shows that the years of experience were weakly positively correlated with research/audit ($r = 0.214$; $p < 0.013$), communication/teamwork ($r = 0.313$; $p < 0.001$), clinical task ($r = 0.285$; $p < 0.005$), administration ($r = 0.323$; $p < 0.001$), and management ($r = 0.210$; $p < 0.001$). Position demonstrated a very weak positive correlation with research/audit ($r = 0.145$; $p < 0.27$), communication/ teamwork ($r = 0.198$; $p < 0.003$), clinical task ($r = 0.139$; $p < 0.035$), administration ($r = 0.191$; $p < 0.004$), and management ($r = 0.196$; $p < 0.003$).

The top five training needs suggested by the participants are presented in Table 5. They suggested that quality management system (96%) required the maximum training, followed by evidence-based practice and research (91.3%), infection control and management (85.65%), interpersonal relationship (63%), and basic life support (47.8%).

DISCUSSION

The purpose of this study is to determine the training needs that are to be used as the foundation for the future directions of the educational developers of the staff nurses of the government hospitals in Ha'il Region, Saudi Arabia. In this study, research/audit and management tasks were perceived as the training needs of the participants. This result implies that any training was immediately addressed. Such an approach would enable the nurses to perform their tasks efficiently. Therefore, the nurses in this study thought that the activities were highly useful in their work. This work supports previous studies[13,16,17] that found that nurses with low self-perceived competency required further training. Nurses have diverse requirements. Their perceived and actual needs change with time, place, and clinical caseload. Their needs also differ in accordance with the environment in which specialized practices and resources are needed to perform specific jobs. These results suggest that nurses have both the potential for and a broad foundation for career growth because of hospital policies on training. Such training additionally aids nurses in their personal development. In accordance with personality theory, TNA can be used as a technique for transactional analysis and systematic psychotherapy for personal growth and transformation.[13] The participants in this survey stated that they needed training to assist with their personal development. In the future, TNA should be undertaken on a regular basis to create a continuous evaluation cycle of professional development and training.[18] It can encourage long-term commitment by offering high-quality professional development and training. In this study, a weak positive correlation was found among civil status, age, years of experience (not in administration and management), and position but not among management and research/audit, communication/ teamwork, clinical task, and administration and management tasks. These results implied that regardless of these demographics, the importance of the training activity must be considered, and a need to undertake such an activity (e.g., research/audit, communication/ teamwork, clinical task, administration, and management task) exists. Such a result indicates that nurses can understand the significance of these duties and their inability to perform them to their full potential. This situation is indicative of the great need for the stated duties and, in some cases, training. It further suggests that when the opportunity arises, nurses will accept training programs on the aspects covered. Similar results were found by an Indonesian study on midwife training needs.[15] Prioritizing training requirements is nearly impossible owing to the equal relevance of all duties.[19] This study supports the need for the further

development of curricula. Nevertheless, providing high-quality academic and health services with limited resources is difficult.[20]

By contrast, years of experience were found to have a strong relationship with administration and management. This relationship indicates that with the increase in the years of experience, the need of professionals for administration and management training increases. Kieft *et al*. reported that nurses with low experience have low inclination to respond effectively to difficult care circumstances.[21] Numerous practicing nurses have complained about junior nurses' lack of competency.[22] Moreover, younger and less experienced nurses are more apprehensive and less confident than older nurses when making independent decisions.[23] Nurses with at least 5 years of experience in the field are usually selected for specialized training programs. Tsang *et al*. demonstrated that top-level managers (more experienced nurses) did not fully comprehend training needs in various categories.[17] The truth is, nurses will still require appropriate training regardless of how long they have worked in a clinical setting. Therefore, nursing services must continue to make changes in team alignments and cultural changes at all levels of nursing to ensure that everyone understands the nursing direction and strategy. A successful program fosters teamwork, reinforces commitment, and promotes professional ambition in the career path.

The nurses' positions were found to be strongly positively correlated with management. This result indicates that the nurses' understanding of the importance of the training activity increases as their career advances. This finding substantiates the results of several studies.[24–27] Kvas *et al*. reported that management and nursing care are most important at this level of leadership.[25] Leaders require substantial training in the areas of creativity, interpersonal interactions, customer service, and interdisciplinary relationships.[28] They generally have the strongest connections with various groups of individuals. They also serve as a link between the first and third levels of management by coordinating actions with other healthcare professionals, and, to a significant degree, communicating with patients. Although leaders are in charge of large groups of coworkers, they are involved only in a small fraction of the actual nursing care.[29] Leaders also require further training in the areas of implementation skills, technique implementation, communication, and ethics, as well as a constructive approach toward education.[25] They are largely involved in the actual delivery of nursing care. This finding suggests that nurse leaders should be conscious of the importance of their leadership role and that they should undergo professional development, which should have begun during their undergraduate years.

Concerning the participants' current performance, this study found a weak positive correlation among civil status, age (not on administration and management tasks), years of experience, and position and among research/audit, communication/teamwork, clinical task, administration (not on age), and management (not on age). These results indicate that regardless of these demographics, nurses perceived their current performance of an activity as important. This situation could additionally indicate that the respondents were conscious of the implications of their duties and their inability to complete them to their full potential. As a result, the nurses expressed the desire to gain additional skills and knowledge to ensure the efficiency and safety of nursing care and to fulfill service needs. Again, training is imperative for filling in the gaps in these jobs. Clinical nurses require training to expand their knowledge and develop crucial abilities.[16] Wang *et al*. and Omaswa showed that training courses are imperative and are a prerequisite for healthcare employees, especially nurses, to improve practice.[30,31] Accordingly, specific training workshops should be established with input from nurses on different facets of nursing care, aspects that need to be updated, emerging clinical practices, interaction, and leadership. Such an approach is expected to improve the analytical reasoning, outcome, and even conflict-resolution skills of nurses. It may also improve their research and administrative skills. Overall, it provides a sense of success, career satisfaction, and an inclusive organizational objective.

By contrast, the strong positive correlation of age with administration and management shows that as nurses age, their performance in their training activities on administration and management improves. The majority of the nurses in a study by Adewole *et al*. were middle-aged, indicating that they had have substantial work experience as clinical nurses.[16] A study that investigated the characteristics that influence continuing education participation found that age had an effect on the rate of profiting from continuing education, with nurses profiting from it more than other workers.[9] Moreover, as nurses age, their interest in evidence-based methods increases.[32] This result is in line with the findings of a recent qualitative study that found that the majority of nurses interviewed affirmed that their perception of performance was shaped by their clinical experience.[21] The findings of this study show that in-service training is essential in the clinical sector and educational programs, where nurses participate in training to the fullest extent possible. These characteristics will help the health system's organizational performance, thus improving individual and community healthcare outcomes.

The study participants suggested quality management system as the area that was most in need of training. Indeed, the number of hospitals applying for accreditation is increasing, and quality management

systems are one of the required criteria for accreditation. After quality management system, evidence-based practice and research, infection control and management, interpersonal relationships, and basic life support were considered as areas that need training. This situation indicates that the nurses had significant training gaps in a variety of areas, including administration, collaboration, patient care, and research. The results of other investigations corroborated this finding.[16,33] These findings support conducting training programs frequently to include input from nurses on gray areas in nursing care, components that need to be updated, emerging clinical practices, communication, and management. This approach will improve the nurses' critical thinking, decision-making, and even conflict-resolution skills. Moreover, it will improve their research and administrative skills. Comprehensively, it provides a sense of success, job satisfaction, and an inclusive organizational objective.

This study has implications for nursing education programs and clinical training. Thorough, evidence-based planning in terms of expectations, resources, implementation plans, and careful supervision to assess effectiveness should be utilized to address needs. Inasmuch as they engage with patients' lives, the competence of health practitioners should not be challenged. This situation means that financial restrictions or other circumstances should not prevent eligible health staff from receiving in-service training.

The strength of this study lies in its utilization of the most widely used tool that permits comparisons across categories and measurements of training demands within broad categories. Indeed, the instrument can be customized in accordance with the target that can be used alone or in conjunction with others. Nonetheless, this study has a limitation. Specifically, it was conducted during the COVID-19 pandemic, which may demand specific training. Therefore, follow-up research using other methods (e.g., qualitative/mixed methods) is recommended to address specifically vital training needs.

CONCLUSIONS

The nurses who participated in this study maintained that training activities are imperative in their work but performed the necessary activities moderately well. The study participants suggested that quality management system was the area that required the most training.

ACKOWLEDGEMENT

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