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Liaquat Medical Research Journal is the print, online, double blind, peer-reviewed, quarterly released journal devoted to publishing innovative biomedical research and scholastic / academic content from all fields of medical sciences, concentrating on innovative clinical, diagnostic and perspective preventive research.

Aims & Scope

The Journal aims to publish research in all fields of clinical, diagnostic, experimental & preventive areas related to medical sciences to disseminate scholastic work among clinicians and scientists around the globe.

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Table of Contents

Research Articles

01	***Quality of Nursing care in the perspective of Nurses at Tertiary Care Public Hospital, Karachi***	*Page 01-08*
02	***Prevalence of Positive Montoux Test in the Province of Sindh***	*Page 09-11*
03	***Leadership style employed by Nurses' Directors and Principals at Nursing Education Institutes, Hyderabad***	*Page 12- 16*
04	***Effect of Environmental Factors on Job Performance among Nurses of Tertiary Health Care Sector***	*Page 17-21*
05	***A rare case of anterior abdominal wall abscess due to transmigrated fish bone from transverse colon.***	*Page 22-25*

Research article

Quality of Nursing care in the perspective of Nurses at Tertiary Care Public Hospital, Karachi

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Abstract

Quality care is essential for patient safety and positive outcome. Nurses have to play pivotal role in patient care. This study was aimed to explore quality of nursing care in perspective of nurses at a tertiary care public hospital Karachi, Pakistan. A descriptive cross-sectional study was conducted at a tertiary care public sector hospital. Data was collected by using a pre-defined questionnaire. Activities in four dimensions including patient satisfaction, prevention of complications, functional re-adaptation health promotion are almost always fulfilled while, well-being and self-care and responsibilities and rigor were less executed. Nurses are empathetic and show respect to the patient but not engaged in acre process.

Key words: Nursing, nursing care, Quality care, standard care. Tertiary care

Introduction

Quality of health care standard is an essential part of patient safety and positive outcomes. In United States of America (USA) approximately 250,000 deaths account for laps in quality care1-3. Studies have been conducted to explore quality of care taking into account only patient's perspective, though nurses have a key to play in this regard4-5. Therefore it is important to consider nurse's perspective in quality care. Registered nurse (RN) practice in a therapeutic and professional relationship with individuals and their attendants6. Nurses provide safe and quality care and are also responsible to perform comprehensive assessment, interpret information and make critical decisions, administer medications and execute other necessary interventions7. This study was aimed to assess quality of nursing care in perspective of nurses as there is strong need to quantify overall magnitude of problem so that policy can be established.

Methodology

Descriptive cross-sectional study was conducted at tertiary care public hospital Karachi, Pakistan from September 2017 to December 2017. All the staff Nurses working in cardiology and cardiac surgery departments who had spent at least three months in the institution and willing to participate were included using convenient sampling technique.

An adopted questionnaire "Nurses' perceptions and practices: contributions to care quality" was used for data collection. It is a Likert scale with four options; Never, Rarely, Often and Always, consisted of 25 items categorized in seven dimensions; Patient satisfaction, Health promotion, Prevention of complications, Well-being and self-care, Functional readaptation, Nursing care organization, Responsibility and rigor. The tool is valid and reliable having Crohncach's alpha of 0.940a.

Permission was taken from Chief Nursing superintendent; thereafter proceed to the respective participants and explained objectives and purpose of the study then asked to give consent in written form. After it, questionnaire forms were distributed in participants and explained each point of questionnaire for minimizing the error. Each form was checked at the time of collection to make sure of their completion on spot. Statistics/Data Analysis software (STATA), version 12.1 was used for data analysis.

Results

A total of 44 nurses participated in the study with mean age of 35.36 (SD ±9.12) years. Majority of participants were female (ie 63.64%). There was a predominance of staff nurses (93.18%) while 6.82% were head nurses. More than half (59.09%) of the participating nurses have three years RN qualification followed by Bachelors of Science(BSN) degree (ie 40.91%). With regards to department of work, most of the respondents were from CCU (27.27%), followed by Cardiac ward (22.73%), CICU and Cardiac Surgery ICU (18.18%) and Cardiac Surgery Ward (13.64%). There was a high proportion of nurses (45.45 %) having experience of six to ten years (Table 1).

In the results of the scale "Nurses' perceptions and practices that contribute to quality care, within the dimension of Patient satisfaction (Table 2) most participants replied Always at the of 72.73%). Within context of dimension Health Promotion most participants (68.18%) replied Rarely (Table 3).

In response to activity "Nurses use the hospitalization time to promote healthy lifestyles", majority replied Often (50 %) (Table 4). Responses of "Well-being and Self-care" are summarized in Table 5. Responses of functional re-adaptation are summarized in Table 6. Responses of nursing care organization are given in Table 7, while responsibility and rigor was summarized in Table 8.

Table 1: Demographic Characteristics

Variable	Frequency	Percentage
Age	35.36"	9.12**
Gender		
Male	16	36.36
Female	28	63.64
Nursing Qualification		
RN	26	59.09
BSN	18	40.91
MSN	NIL	00.00
Department		
Cardiac ward	10	22.73
CICU	08	18.18
CCU	12	27.27
Cardiac Surgery Ward	06	13.64
Cardiac Surgery ICU	08	18.18
Designation		
Head Nurse	03	6.82
StaWurse	41	93.18
Total Work Experience		
Less than one Year	02	4.55
1 — 5 years	10	22.73
6 — 10 years	20	45.45
11 — 15 years	04	9.09
16 — 20 years	02	4.55
21 years and above	06	13.64

Table 2: Patient Satisfaction

	n	%	n	%	n	%	n	%	N	%
"Nurses show respect for the abilities, beliefs, values and desires of individual patient".	02	4.55	04	9.09	06	13.64	32	72.73	44	100.0
"Nurses are constantly seeking to show empathy in interactions with the patient"	00	00	08	18.18	10	22.73	26	59.09	44	100.0
"Nurses involve cohabitants of individual patient in the nursing care process"	04	9.09	28	63.64	04	9.09	08	18.18	44	100.0

Table 3: Health Promotion

	n	%	n	%	n	%	n	%	n	%
"Nurses identify the health situation of the population and the resources of patient".	02	4.55	30	68.18	10	22.73	02	4.55	44	100.0
"Nurses use the hospitalization time to promote healthy lifestyles".	02	4.55	12	27.27	22	50.00	08	18.18	44	100.0
"Nurses provide information that generates cognitive learning and new abilities in the patient".	04	9.09	16	36.36	12	27.27	12	27.27	44	100.0

Table 4: Prevention of Complications

	n	%	n	%	n	%	n	%	n	%
"Nurses identify potential problems of the patient".	06	13.64	18	40.91	10	22.73	10	22.73	44	100.0
"Nurses prescribe and perform interventions to prevent complica-tions".	04	9.09	02	4.55	20	45.45	18	40.91	44	100.0
"Nurses evaluate the interventions that help prevent problems or minimize undesirable Acts."	02	4.55	10	22.73	18	40.91	14	31.82	44	100.0

Table 5: Well-being and Self-care

	n	%	n	%	n	%	n	%	n	%
"Nurses identify patient's problems that will help improve the patient's well-being and daily activities."	02	4.55	20	45.45	16	36.36	06	13.64	444	100.0
"Nurses prescribe and perform interventions that will help improve the patient's well-being and daily activities."	2	4.55	22	50.00	16	36.36	4	9.09	44	100.0
"Nurses evaluate the interventions that help improve the patient's well-being and daily activities."	4	9.09	16	36.36	20	45.45	04	9.09	44	100.0
"Nurses address problematic situations identified that will help improve the patient's well-being and daily activities."	06	13.64	20	45.45	10	22.73	08	18.18	44	100.0

Table 6: Functional Re-adaptation

	n	%	n	%	n	%	n	%	n	%
"Nurses ensure continuity of nursing service provision."	0s	00	04	49.09	16	36.36	24	54.55	44	100.0
"Nurses plan discharge of patients according to each patient's needs and community resources."	04	9.09	10	22.73	06	13.64	24	54.55	44	100.0
"Nurses optimize the abilities of the patient and his/her cohabitants to manage the prescribed therapy."	06	13.64	16	36.36	20	45.45	02	4.55	44	100.0
"Nurses teach, instruct and train patients for adaptation and teach, instruct and train patients what is required for functional readaptation''	06	13.64	08	18.18	12	27.27	18	40.91	44	100.0

Table 7: Nursing Care Organization

	n	%	n	%	n	%	n	%	n	%
"Nurses know how to handle the nursing record system."	00	00	06	13.64	06	13.64	32	72.73	44	100.0
"Nurses know the hospital's policies."	02	4.55	08	18.18	06	13.64	28	63.64	44	100.0

Table 8: Responsibility and Rigor

	n	%	n	%	n	%	n	%	n	%
"Nurses show responsibility for the decisions they make and for the acts they perform and delegate, aiming to prevent complications."	00	00	08	18.18	20	45.45	216	36.36	44	100.0
"Nurses show responsibility for the decisions they make and for the acts they perform and delegate, aiming to ensure well-being and self-care of patients."	2	4.55	16	36.36	16	36.36	10	22.73	44	100.0
"Nurses show technical/scientific rigor in the implementation of nursing interventions aiming to prevent complications."	00	00	08	18.18	18	40.91	18	40.91	44	100.0

"Nurses show technical/scientific rigor in the implementation of nursing interventions that help improve the patient's well-being and daily activities."	02	4.55	18	40.91	18	40.91	06	13.64	44	100.0
"Nurses refer problematic situations to other professionals, according to the social mandates."	04	9.09	08	18.18	10	22.73	22	50.00	44	100.0
"Nurses supervise the activities that support nursing interventions and the activities they delegate."	04	9.09	16	36.36	14	31.82	10	22.73	44	100.0

Discussion

The results of demographic data of participants revealed that the mean (+SD) age of the participants was 35.36 (+9.12) years. There was majority of female (63.64%) and staff nurses (90.91%). Most of the participating nurses (59.09 %) have Three Years Registered Nurse (RN) qualification. It is matter of concern that there is no any single nurse, having Master degree in Nursing. According to Barret, there is a significant relationship between quality care and level of nurses education' and recommended to increase qualified nurses in specialized care units, but Abdul Rahman et al. do not agree with their findings". A high percentage of nurses (45.45 %) have experience of six to ten years. Regarding the scale "Nurses' perceptions and practices that contribute to quality care", in the dimension "Patient Satisfaction" mostly participants replied Always in the activities "Nurses show respect for the abilities, beliefs, values and desires of individual patient while providing nursing care." and "Nurses are constantly seeking to show empathy in interactions with the patient". The main area of concern is most of the nurses replied Rarely (63.64%) in the activity "Nurses involve significant cohabitants of individual patient in the nursing care process." Understanding patient's abilities is important to involve them as a shared partner in health care." Patients' perceived their involvement in care seemed to be associated with their attitudes about their illnesses and recovery and preferred shared decision making " About "Health Promotion dimension", most of the nurses answered Rarely in the statements "Nurses identify the health situation of the population and there sources of patient/family and community" and "Nurses provide information that generates cognitive learning and new abilities in the patient". A study conducted by Ribeiro, Martins and Tronchin , majority of nurses replied often, which is differ from this study while most of the participants in this study responses Often in "Use the hospitalization time to promote healthy lifestyles", which is in line with their study. These finding are significant for concern. Nurses are the foundation of patients' behavioral changes by means of approaches focused on health promotion". But, the findings of this study recommend that this may not be executed by nurses in hospital setups. In the dimension Prevention of Complication, results showed that nurses often perform and evaluate intervention to prevent complication but they are rarely able to identify potential problems of the patient. These finding differ from the results

of the aforementioned study. According to American Nurses Association, nurses must increase their efforts for development and implementation of nursing actions to support promotion of health and prevention of disease/ illness and disability'. With regards to dimension "Well- being and Self-care", most of the participants replied rarely while few answered Always which are oppose to the findings of the study by Martins et al. The findings suggest that there is a strong need to focus on this domain as it is necessary for a healthy recovery. In the context of "Functional Re-adaptation", majority of respondents answered Always in the activity Nurses ensure continuity of nursing service provision. Continuity of care insures high quality care and cost effectiveness. If care is episodic, chronically ill patients might develop adverse effects and complications; results in high expenses and poor outcome.

Most of the nurses replied Always in this study for the activities "Nurses plan discharge of patients according to each patient's needs and community resources and Teach, instruct and train patients for adaptation and teach, instruct and train patients what is required for functional Re-adaptation"; mostly answered often in the response of "Nurses optimize the abilities of the patient and his/her cohabitants to manage the prescribed therapy". Mabire et. al. did a study and reported that discharge planning helps in transition from hospital to home care and decrease post-discharged complications and adverse events but comprehensive discharged planning did not benefit the patients results in less readiness and frequent readmission within 30 days". Most of the respondents answered Rarely in the activities "Nurses show responsibility for the decisions they make and for the acts they perform and delegate, aiming to ensure well-being and self-care of patients", "Nurses show technical/scientific rigor in the implementation of nursing interventions that help improve patient's well-being and daily activities" and "Nurses supervise the activities that support nursing interventions and the activities they delegate." Even after delegating activity, it is the responsibility of the nurses to supervise subordinates for patient safety and prevent unwanted outcomes. Nurses are professionally and legally responsible for providing care, decisions taken and its consequences.

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Research article

Prevalence of Positive Montoux Test in the Province of Sindh

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Abstract

Tuberculosis is a global health emergency. At present this disease has a prevalence of >1% in Pakistan. This study was designed to evaluate the prevalence of positive montoux tests in the province of Sindh. It is a cross-sectional study carried out at various branches of Diagnostic and Research Laboratory LUMHS from January 2017 to September 2017. Mantoux test was done by injecting a regular dose of 5 Tuberculin units (0.1ml) into the skin intra-dermally. The results were read between 48-72 hours after the dose and the indurated area was measured in millimeters. A total of 3121 patients including 1614 males and 1507 females were included. Mean age of study population was 14.6 years (range 1-95 years).

Out of 3121 patients 316 (10.1%) were positive, including 185 females and 131 male patients. Citywise distribution showed that 223 were from Hyderabad and Jamshoro, 62 from Mithi 14 from Sukkur and 4 from other cities.

Keywords: Tuberculosis, prevalence, montoux test.

Introduction

Tuberculosis is a global health emergency. Pakistan is reported to be at 8th position in having highest burden of Tuberculosis in the world. At present this disease has a prevalence of >1%. According to the United Nation's specialized agency, reported incidence of tuberculosis in Pakistan as 23 out of every 100,000 individual in the year 2001[1]. Tuberculosis has posed severe threats to the human health even in this modern era of technological and medical excellence and has become a gigantic experiment to diagnose and manage. This incidence is even more predominant in less developed areas of the country. The reason might be the lack of awareness and less advanced facilities in these areas. Malnutrition due to poverty and ignorance with repeated infections make children more susceptible for tuberculosis by weakening their immunity. This infection rate can be controlled by early and proper diagnosis with prompt treatment. For correct diagnosis, key helping factors are histopathological detection of granulomatous lesions, identification of bacilli and chest x-ray along

with clinical findings[2].

One of the main and established screening method for TB is tuberculin skin also known as Mantoux test. It is cost effective and easy to perform and interpret. It detects the delayed type hypersensitivity reaction against the Purified peptide derivative. However, there linger some uncertainties regarding the sensitivity, specificity and the outcome of previous BCG vaccine on cut-off dimension of positive Mantoux interpretation[3]. This study was aimed to found out the prevalence of Mantoux test positivity in Sindh.

Material and Methods

It is a descriptive, one time observational study carried out at various branches of Diagnostic and Research Laboratory LUMHS in Sindh from January 2017 to September 2017. Mantoux test is done by injecting a regular dose of 5 Tuberculin units (0.1ml) into the skin intradermally.

Results

Basic statistical tools were used for the analysis of data. A total of 3121 patients advised by physician's clinically on the basis of symptoms of pulmonary tuberculosis like fever, productive cough and weight loss were included. Mean age of the study population was 14.6 years (range 1 to 95 years). There was a little male dominance in the study sample with 1614 (51.7%) males and 1507 (48.3%) female patients in the study sample. Out of total 3121 patients 2805 (89.9%) were negative and 316 (10.1%) were positive. from 316 positive patients 185 were females and 131 male patients and most belonged to Hyderabad and Jamshoro (n= 223), Mithi (n=62), Sukkur (n=14), Mirpurkhas (n=4) and remaining from small cities including Kandiaro (n=6), Tando Adam (n=4), Kandhkot (n=2) and Tando Allahyar (n=1).

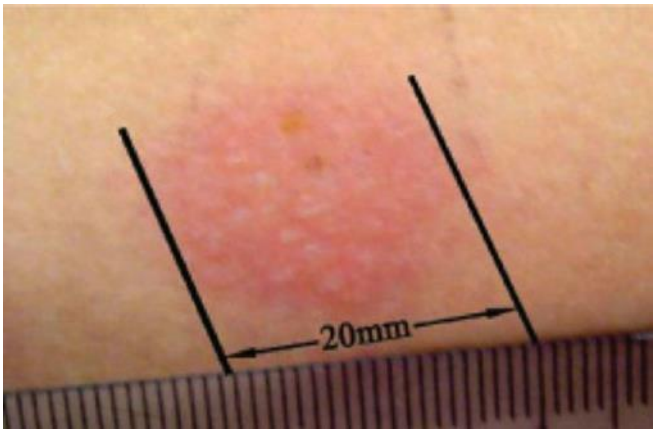

Figure 1: Skin appearances after 72 hours of a positive test achieved.

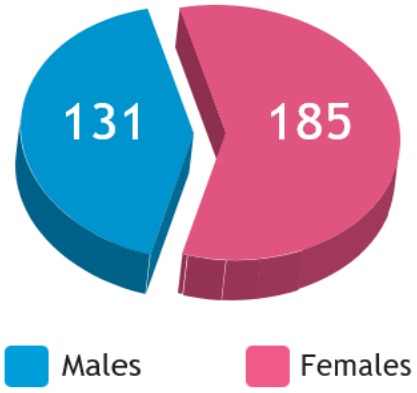

Figure 2: Male to female ratio in positive MT patients

Discussion

In this study frequency of positive MT was observed among Sindh natives. In our results the mean age was found 14.6 years ranging from one to 95 years old and the proportion of positive MT population is female i.e. 185 females vs. 131 males, Jamil B. et al showed similar findings. The mean age of their study population was 24 years ranging from one to 84 years and their diseased population

had more females as compared to males4. According to national curriculum of tuberculosis for MBBS students of Pakistan, sixty thousand people died due to TB in 20095. There has been no survey done in Sindh to identify the true prevalence of this gruesome disease, this study gives a rough idea how grim the situation is in the second most populated province of Pakistan.

Conclusion

Scientific research on the MT has revealed that a diagnosis of active case of tuberculosis is never made exclusively on the results of this test so it was stated that MT has minimum part in the diagnosis of active tuberculosis.

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Research article

Leadership style employed by Nurses' Directors and Principals at Nursing Education Institutes, Hyderabad

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Abstract
Leaders who are able to observe their behavior by themselves as well as the effects of their leadership on workforce are capable enough to adjust to a better style of leadership. This study was intended to evaluate the dominant style of leadership employed by nurses' leaders at nursing education institutes. Overall 10 Nurse's leaders were selected from ten Public as well as Private School of Nursing as participants by purposive sampling out of which one was Director nursing and nine were Principals at their respective institutes. A descriptive cross-sectional study was conducted by using self-reported questionnaire soughed for data collection. For data analysis SPSS for window version 20.0 was used for descriptive statistics such as frequency distribution (x), percentage (%), means (x-) and standard deviation (SD) respectively. In the study, four leadership styles were assessed: authoritative, democratic, facilitative, and situational. Study findings revealed that the leadership styles practiced by greater part of the Nurses Leaders are Authoritative in Nursing Education Institutes.

Keywords: Leadership, Leadership Style, Nurse Leaders, Authoritative leadership style

Introduction

According to American Nurses Credentialing Center (ANCC), "Nursing leadership matters in today's healthcare environment, experiencing extraordinary intense reforms. Contrary to the requirements of leadership yesterday to achieve stability and growth, the leaders of today must transform their organizational values, beliefs and behavior"[1]. Because it depends upon the demonstration of style or performance by supervisors or managers whilst dealing with sub- ordinates. Leadership is a significant factor that molds actions of employees for attaining the goals set forth by organizations[2]. To be an effective nurse manager (NM) it is required to continuously enhance the scope of responsibility along with the knowledge, skills, and attitudes in depth[3].

Leadership in any organization commences to run with the values, behaviors and attitudes. In case of Nurses the entrancement in leadership skills could be a probability, pursuit of career, or for the short-lived basis. Thus for the sake of achieving effective and winning leadership outcomes one of the most

critical elements is its effective leadership. Among various rational for nurses to turn over or leave the jobs in Nursing include excessive workload, non-favorable work setting, however aberrant style of leadership is leading concern above all[4]. By means of adopting the leadership style which is effective nurse managers or leaders can offer high-quality and conducive environment to staff nurses that can enhance job satisfaction, line of work and intent for retention in an organization 5. The profession of nursing is people-oriented which is focused on humanism that may affect the way of leadership6. During times of remarkable changes in an organization the role of nursing leader is quite challenging and difficult due to complexity and convoluted health system reform.

The superlative as well as favorable work setting, increases the tendency of leaders to control strategies not only in managing conflict but also to enhance people's ability to work collaboratively with efficiency. It turns out to be crucial on behalf of a leader to accomplish organizational goals through emphasizing equivalently for rational and expressive aspects of contradictory issues despite the fact with the purpose to resolve conflicts or disputes which can happen at any stage within the hierarchy of an organization2. This study focuses on evaluation of the pattern of style of leadership used by nurse leaders through their self- assessment in order to boost up their awareness regarding an effective style of leadership for improved and successful outcomes in nursing education institutions.

Methodology

Consisted of 10 nurse leaders (04 women and 06 men) from government as well as private nursing institutes; the selection of sample was made by means of non- probability purposive sampling method. All the participants subjected in the study consented and were well informed concerning the intention of the study along with assurance of protecting the provided information confidentially. Overall 10 questionnaires were distributed and 100 percent returned back with complete information provided. The study used Self developed self- report questionnaire comprises of 16 items to facilitate measures of constructs with the complete range of leadership behaviors. For the assessment of tools' validity, pilot study was done on three senior nursing instructors. Participants were asked for reading a short statement on the subject of a precise leadership behavior, showing the scores in the right-side column against each question ascending from (Not me at all= 0 ; A bit like me = 1 point; Much like me = 2 points; and Exactly like me = 3 points). Scoring of survey was based on the scoring key provided on the questionnaire to encourage the labeling of a leader as Authoritative, Democratic, Facilitative and Situational.

Results and discussion

Descriptive statistics of all variables included in the study shows that the participants were primarily males (ie 60%), while 40% were females .The age range of the subjects was between 38 and 63years where 70% of the participants fall between 38 – 50 years, and 30% were lying between 51 - 63 years (Mean= 46 and SD±7.05). The maximum educational level as reported by participants was MS Nursing (40%), with the greater part of study participants (60%) having experience of below 5 years' for being principal school of nursing (Mean=1.4 and SD= 0.5). The type of institute revealed that 60% of respondents were Government employees and 40 % were working in private settings in Hyderabad/ Jamshoro. Further, scrutiny was made determine the leadership ability in order to distinguish Authoritative, Democratic, Facilitative and Situational leadership styles and it was found that, greater part 60 % employed Autocratic, 20 % Facilitative and 10 % was rated for both 10% Democratic, situational style of leadership.

Study variable (n = Participants for Question)	Frequency (%)
Gender Male Female	06 (60%) 04 (40%)
Age 38 – 50 51 – 63	07 (70%) 03 (30%)
Length of service as Nurse leader <5 years >5 years	06(60%) 04(40%)
Title of designation Director Principal	01 (10%) 09 (90%)
Type of institute Government Private	06 (60%) 04 (40%)
Qualification Bachelor in Nursing Masters in Nursing	06 (60%) 04 (40%)
Style of leadership Authoritative Democratic Facilitative Situational	06(60%) 01 (01%) 02 (02%) 01(10%)

Table 1: Demographic Tabulation

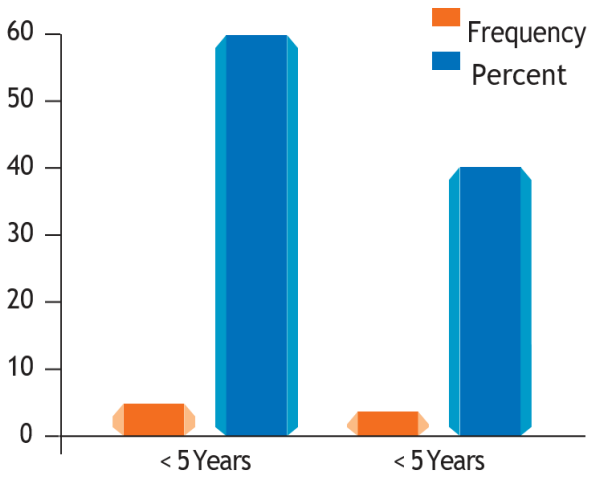

Figure 1: Length of service

Table 3: Scale[7,8]

Descriptive Statistics			
	Mean	Std. Deviation	N
Style of leadership	1.8	1.13529	10
I'm glad to act as the spokesperson for our group	2.4	0.69921	10
I'm determined to push projects forward and get results	2.3	0.82327	10
I am good at organizing other people	2.2	0.91894	10
I set myself high standards and expect others to do the same for themselves	2.4	0.69921	10
I believe teams work best when everyone is involved in taking decisions	2	0.8165	10
I enjoy working on committees	2	0.8165	10
I don't mind how long discussions last, so long as we consider every angle	2.1	0.73786	10
I think all group members should abide by formal decisions, so long as we follow proper procedures	2	0.94281	10
I'm good at bringing out the best in other people	1.7	0.67495	10
I think people should be allowed to make mistakes in order to learn	1.8	0.78881	10
To me well-being of the members is the most important thing for a group	1.9	0.56765	10
Love helping other people to develop	1.6	0.84327	10
I don't consider myself as a 'leader'but can take on a leadership role when required	1.6	0.69921	10
Good adaptability to different situations	1.8	0.63246	10
Can see situations from many different perspectives	1.7	0.67495	10

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individual or one situation. It is vital for nurse leaders to recognize the pattern of training that already have the affinity to generate Autocratic leadership style9. Nurse leader can be well fitted in place to lead only by means of education and training about various theories and styles of leadership.

Limitations

While assessing manager's style of leadership, it was unlikely to manage some of the perplexing factors such as the impact of organizational environment, structure as well as the availability of leaders themselves. Additionally, study results were entirely based on self-report by participants. The likelihood of variation along with the desirability of social aspect for response selection on the scales of research variables could not be reduced.

Recommendations

Further it is recommended that educational programs for nursing ought to incorporate training of nurse managers in order to recover leadership skills and their mirror image, in the course of which they prove themselves through better leadership style respectively.

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Research article

Effect of Environmental Factors on Job Performance among Nurses of Tertiary Health Care Sector

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Abstract

This study was designed to assess effects of environmental factors on job performance among nurses of tertiary health care sector. A cross-sectional study was conducted. A total of 200 nurses were selected from Services Hospital Lahore, Pakistan. This study reveals that the physical environment plays the important role on job performance which is already cited in literature and also affects retention of the staff. Materialistic facilities, surroundings, a physical condition, worry capability affects tremendously on the performance of the workers. This study suggests that performance may be improved by addressing safety, infection control measures, and environment temperatures and supplies availability.

Keywords: Environmental Factors, Job Performance, Nurses.

Introduction

Career routine is an extremely important aspect argumentative winner of an organization 1. Disorganized career routine is associated with lesser efficiency which leads to less cost-effectiveness and weakening of general managerial effectiveness2-3. Healthy occupational routine as actions to be completed towards accomplishing the organization's aims and intents4. Healthier job routine is the fundamental concept of today's work place for patient centered care 5 and for business success and employee satisfaction 6.

Nurses are significant part of health structures thereafter better performance is expected from them, and performance of nurses is closely linked to the output and worth of concern conditions surrounded by wellbeing of the concern organizations. For this motive, it was significant on the way to identify factors influencing appropriate delivery of the system 7. Nurses' performance in the health care system can potentially be dependent on the familiarity, skills, motivation and favorable environment 8. Although there are many factors which can affect the performance, such as a superior profitable location, a stiff

employment promote, and aged personnel. However, in many studies it is hypothesized that good environmental factors act as a buffer against low satisfaction levels that can lead to poor performance9. Moreover, environmental factors also influence the place of work by increasing professional pressure which is the leading cause of burnout and poor performance hence, more attention has to be given to the conducive environment for the high productivity of the employees, patient satisfaction, and low turnout and can even increase the revenue of the organization 10. Thus it's the employer responsibility to give proper working environment so that the routine of workers meet the preferred values. Unfortunately nurse are still struggling with the lower two levels defined by the Maslow framework11. It is also stated that the work place incivility is the major cause of the staff leaving their present position12. The objective of the study was to assess the effects of environmental factors on the job performance among nurses of tertiary health care sector. This study will help nurses to know about contact of job green factors on nurses' employment routine. Secondly, this study will help the organization to aware about the study result, which it will helpful to overcome weakness.

Methodology

A cross-sectional study was adopt to reply the investigate inquiry. Logical, traverse-sectional learn aim was be deployed used for this study. The study was conduct in the Services hospital, Lahore, Pakistan. Inclusion criteria are those staff nurses in all departments in services hospital who show willingness to participate in study and those who are present during the time of data collection. Participants who concur to contribute in the study and indication the learned assent form and Willingness to fill the self-administered questionnaire. The exclusion criteria, the Students Nurses, and Head nurses or nurses in the administration department.

A number of research studies use the Slovin's formula for obtaining the sample size. Denoting by n, the sample size, was given as n=N/1+ (N) (E) 2 where N is the population size and e is the margin of error 13-14. Sample size of the study was calculated as 200. The convenient sampling strategy was adopted for this study. From Beomcheol, (2006) study, questionnaire variables were chosen 15. Moreover in the independent variable data was collected against age, gender, mother tongue, level of education, years of experience. Instrument of workplace environment was adopted from AWASES, (2006) which contains 8 items as independent variables. The instrument was about the physical environment and the availability of the supplies in the work place environment e.g., safe environment, necessary instruments are available, equipment's are working condition, contamination control plan procedures were accessible and that sterilized solution for security of employees and patients are available.

The data compilation procedure was in progress after receiving the consent from the University of Lahore, and from the management of Services hospital. Pre-testing of the survey on 15 % of the participant was carried out. Involvement in the study was life form unpaid; no reimbursement, aid or monetary incentive was obtainable. Data entry was done in SPSS. The data was stored in hard and soft copies. Out of 200 participants age distribution was given as 18-25 years, 25-35 years, 35- 50 years and above 50 years, reside in union (Less than 1 year, 1-5 years, 6-10 years, and above 10 years), married category (married, single), and requirement (Nursing diploma, specialization, Post RN and others).

Result

The Around 70% (n= 140) of the respondents were single and rest of them were married. In the age group of above 50 years only 23 (11.5%) of the participants lie. Only 12.5 percent of the participants (n=21) were having work experience more than 10 years. A summary is given in Table 1. The overall mean score of the work place environment tool was 4.1 and its standard deviation was 1. Moreover the overall mean score of the job performance was 4 (SD ±0.7). The work environment tool was on likert scale. It had 8 items, each have the five values for the participants to score on. Around 54 percent of the participants were agree that their workplace is really safe. Only 8 % individuals do feel that they are not secure at their workplace. A summary is presented in Table 2. Regarding the layout of the workplace around 90 (45%) agree and 32 (n=16) strongly agreed that it is good. A total of 73(36.5%) of the participants agreed that they have the comfortable temperatures at work place and 39% of the participants said that the instruments provided at their workplace were most of the time in working condition. On the subject of availability of the supplies 4.5% and 11% of participants were strongly disagree and disagree respectively. Surprisingly 9% of the nurses revealed that they are not even privileged to have antiseptic solution at their workplace. Only 36.5% participants stated that they have well defined infection control strategy. 31% of the participants showed their neutral response on being the top performer. Majority of the nurses agreed 75(37.5%) that they are among the top 10 percent of the frontline performer. Where 30(15%) are well aware about operational system than others. A summary of the results is presented in Table 3. In this study the correlation coefficient (r) equals to 0.987, indicating a strong positive relationship ($p< 0.001$). Multivariate linear regression is summarized in Table 4, persons who reported to have better work place environment have significantly ($p= .001$) better performance as the β is positive 0.48.

	Frequency	Percent
Gender		
Female	200	100.0
Age		
18-25	50	25
25-35	74	37
35-50	53	26.5
Above 50	23	11.5
Stay in organization		
Less than 1Year	50	25
1-5Years	59	29.5
6-10Years	66	33
Above 10Years	25	12.5
Marital Status		
Married	60	30
Single	140	70
Qualification		
Nursing diploma	145	72.5
Specialization	25	12.5
Post RN	14	07
Other	16	08

Table 1: Demographic characteristics of study population

Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My work environment is safe and Free from hazards.	16(8)	18(9)	51(25.5)	73(36.5)	42(21)
My work place has Good workplace layout.	15(7.5)	23(11.5)	40(20.0)	90(45)	32(16)
My work place has Comfortable temperature.	15(7.5)	26(13.0)	51(25.5)	73(36.5)	35(17.5)
Necessary instruments are available at my work place.	10(5)	22(11)	56(28)	59(29.5)	53(26.5)
Instruments available at my work place in working conditions.	10(5)	19(9.5)	52(26)	78(39)	41(20.5)
Materials and supplies sufficient at my work place.	9(4.5)	22(11)	48(24)	75(37.5)	46(23)
Antiseptic hand solution for safety of team and patients is obtainable at my work place.	9(4.5)	18(9)	54(27)	67(33.5)	52(26)
Infection control strategy guidelines are Available at my work place.	10(5)	14(7)	52(26)	73(36.5)	51(25.5)

Table 2: Work Environment related variables

Table 3: Job Performance variables

Variables I am a top performer.	Strongly Disagree 12(6)	Disagree 13 (6.5)	Neutral 62 (31)	Agree 62 (31)	Strongly Agree 51(25.5)
I am in the top 10 percent of frontline employees here.	12(6)	16(8)	61 (30.5)	75(37.5)	36(18)
I am very dedicated to satisfying the needs of customers.	13(6.5)	12(6)	61 (30.5)	81(40.5)	33(16.5)
I know what customers expect better than others.	11(5.5)	17 (8.5)	43(21.5)	97(48.5)	32 (16)
I know more about menu items than others.	11(5.5)	18 (9)	58 (29)	78 (39)	35 (17.5)
I know more about operational system than others.	16 (8)	19 (9.5)	55 (25)	85(42.5)	30(15)

Table 4: Regression for Work Place Environment Factors Associated with Job Performance

Variables		Standard Error	T	P value
Constant	**2.178**	**.177**	**12.286**	**.001***
Work place environment	**0.480**	**0.042**	**11.491**	**.001***

Discussion

This is the first study in Pakistan on the green factor and its effects on career routine among nurses in Lahore, Pakistan to best of author's knowledge. Thus the study presents first information of factor which affect job act. Job presentation is a very important factor in growth of any organization 1-3,16 . Moreover, this study reveals that good working conditions pursue the nurses to be dedicated towards patients needs. This is in agreement with other studies which says that better job environment is the core build of today's labor rest for patient centered care 6-7 . The direct and positive relationship between conducive environment and high productivity by the employees is also coherent to other studies which further relate it with more patient satisfaction, and low turnout and can even increase the revenue of the organization 9-11, 18. The present study showed that safety among all the working conditions is necessary which is also discussed extensively in other studies 2, 10, 14, 18 . These studies reveal that the physical environment plays the important role on job performance which is already cited in literature the retention of the staff 7,9,14 .

The significant factors in the physical settings were the accessibility of the equipment's and the co-operation of the staff. It is consequently imperative for employer to supply inappropriate working environment to make sure that the performance of staff meet the much loved values. Moreover, majority of the nurses provide this information that they do not have the availability of the hand wash solution whereas. Pittet et al., (2000) also shared that compliance to hand washing can only increase if recourses like soap and water are available15. Proper temperature of the work place is as important as food and

water13, which is quite evident in the present study also, nurses who are satisfied with the indoor temperature were more perceptive to patient need than others. In the last we can conclude that for the nurses there is evidence that better workplace environmental is strongly related to better work place environment.

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Case report

A rare case of anterior abdominal wall abscess due to transmigrated fish bone from transverse colon.

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TITLE OF CASE

Transmigration of fish bone to the anterior abdominal wall after perforating transverse colon is a rare and unique condition in particular resulting in anterior abdominal wall abscess.

INTRODUCTION

This report presents a case of a 42 years old Caucasian male, presented to the Accident and Emergency department with upper abdominal pain and sepsis for three weeks. Computed Tomography showed a sealed perforation of the transverse colon with 10x5 cm abscess adjacent to the colonic bowel containing a fish bone. This was a delayed presentation which required emergency laparotomy due to abscess formation. Therefore, we reviewed the literature and summarized our unique case presentation.

BACKGROUND

Presentation of ingested foreign bodies causing Gastrointestinal tract perforation in general population is not common, however can occur relatively more frequently in adults in cases of pre- existing internal hernia or Meckel's diverticulum. According to the available literature more than 75% of swallowed foreign bodies get impacted at the cricopharyngeal sphincter of the esophagus, and those successfully pass this sphincter and reach the stomach 90% of them successfully pass through the intestine, with only few remaining can cause impaction and potentially resulting in severe complications [1]. There was a case reported of a patient with advanced gastric cancer with oesophageal stenosis, where a 13-cm-long artificial oesophageal stent which passed through whole gastrointestinal tract without causing any perforation or impaction[2]. Therefore a case of a small fish bone causing bowel perforation is probably a rare occurrence in an otherwise healthy individual. Those patients having existing small

bowel disease are at higher risk of perforation or if the impaction is at a site of acute angulation such as the areas of junction of the parts of the tract including ileocecal and recto- sigmoid areas [3-5]. Thus the presented caseappears to be rare.

CASE PRESENTATION

A 42-year-old Lithuanian, Caucasian male presented to our Accident and Emergency department with a three-week history of upper abdominal pain. His symptoms got worst during the last week. The patient was otherwise fit and well and denied any significant past medical history or abdominal procedures. He remembered losing his lower denture one month back and was concerned. On examination, he was flushed and in moderate pain. His temperature was 38.1°C and his heart rate was 103 beats per minute. His blood pressure was 138/98 mmHg, his oxygen saturation was 95% on room air. His abdomen was generally soft but there was a palpable lump in the area above and to the left of the umbilicus.

INVESTIGATIONS

His laboratory tests showed a white blood cell count of $14.6x10^9$ and his C-reactive protein was 213 mg/L. His abdominal x-ray was unremarkable. A computed tomography of the abdomen was performed. A large, 9x6 cm, hypo dense lesion was noticed arising from the anterior abdominal wall just cranial to the umbilicus was seen. Significant inflammatory changes in the surrounding tissues and a linear foreign body were noticed within this lesion (figure 1). These features were suggestive of an abdominal wall abscess which was extending deeper into the peritoneal cavity. It was in close contact with the transverse colon, but there was no evidence of perforation or fistula formation (figure 2).

TREATMENT

The patient was admitted and consented for an open drainage and an exploratory laparotomy. The operating findings were as follows; a 10x5 cm abscess cavity was seen just below the anterior abdominal wall containing a long fish bone which was removed. The transverse colon was inspected and there were nosigns of perforation or fistula formation. The abscess was drained, and the peritoneal cavity was washed with saline. The abdominal wall was closed with a loop PDS1 en masse closure. A Redivac drain, size 10Fr, was placed in the abscess cavity. The skin was stapled. Co-amoxiclav (1.2g/8 hourly) and metronidazole (500mg/8 hourly) were given intravenously for five days.

FOLLOW-UP AND OUTCOME

He made an uneventful recovery. His drain was removed on second post-operative day and the patients was discharged back home on day five. The patient was followed up in clinic for a period of six months. The wound healed without any complications.

DISCUSSION

In the accident and emergency department presentation of the Ingested foreign body is not infrequent clinical presentation though more commonly seen in children, but it rarely presents with perforation of the GI wall [1], traversing through fat and then causing abscess in the anterior

abdominal wall is even rarer. Commonly the foreign bodies get impacted at the narrow parts of the bowel or the angulations [2, 3]. There are some reports in the literature suggesting perforations through weakened walls such as the areas with Meckel's diverticulum [4]. Perforation of the colon seen at the recto-sigmoid, however other than the recto-sigmoid junction are so infrequent, that only a limited number of cases have been reported till date [3,5]. Furthermore the presence of the abscess is extremely rare. The abdominal abscess in the presented case was located in front of the transverse colon. Perforation of the small intestine could be a possibility; due to the reason that foreign body, perforation of the large intestine tends to present with longer clinical duration as compared to the perforation in the jejunum or ileum [3]. In this case, we speculated perforation of the large intestine as the most likely site and the fish bone could have perforated the transverse colon due to movements of the colon (both propulsive and churning). The other reason for considering this possibility was the shape of the fish bone, it sharp and thin enough that the perforation site spontaneously without causing any major trouble to the gut wall. The abscess in this case was later developed as foreign body reaction of the body which

took some time to develop, allowing the patient to remain asymptomatic without any significant clinical deterioration for one month.

LEARNING POINTS/TAKE HOME MESSAGES

1. Elective drainage under imaging (ultrasound/CT) along with the use of antibiotics could be an option for cases.
2. Following the standard management protocol our patient underwent drainage without any bowel resection.
3. Patient has rapid uneventful recovery.

PATIENT'S PERSPECTIVE

I thought initially that it was a lost denture but was relieved after surgery and came for follow up till 6 months and everything thankfully got better.

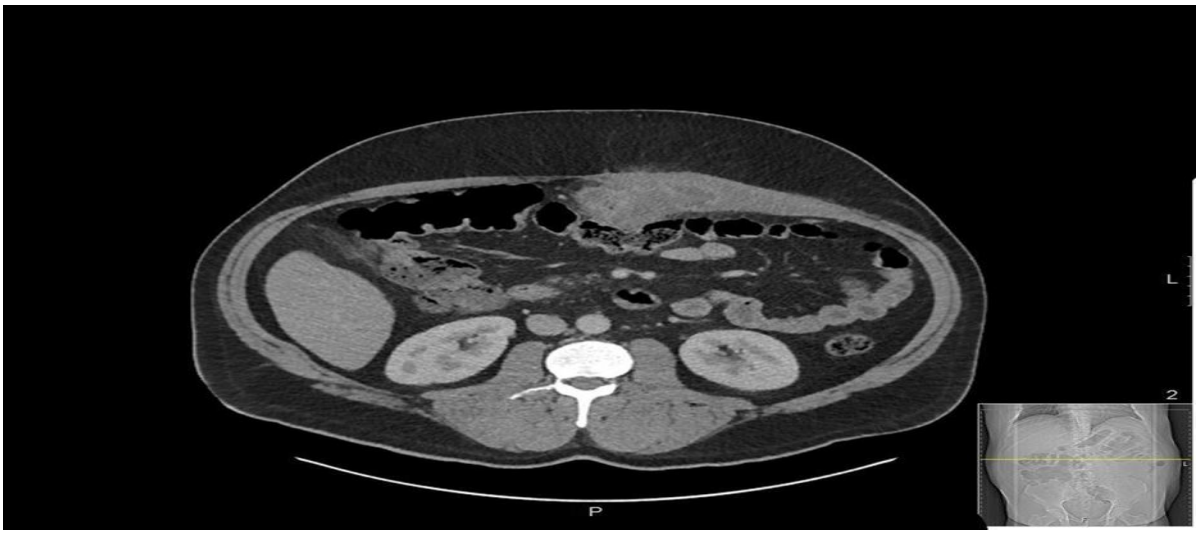

Figure 1: Sagittal view showing fish bone and site of abscess.

Figure 2: Coronal view showing site of anterior abdominal wall abscess.

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