

INDEXING



Aims and Scope

Nursesearcher (Journal of Nursing and Midwifery Sciences) is a semi-annual, open access, double blind peer-reviewed international journal that aims to foster the production and dissemination of knowledge that is directly relevant to all areas of nursing practice.

Topics of interest include:

- Nursing education
- Community nursing
- Specialist nursing topics
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- Nursing role in COVID-19 and other infectious diseases
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Abbreviations

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Provide a context or background for the study (i.e., the nature of the problem and its significance). State the specific purpose or research objective of, or hypothesis tested by, the study or observation; the research objective is often more sharply focused when stated as a question. Both the main and secondary objectives should be made clear, and any pre-specified subgroup analyses should be described. Give only strictly pertinent references and do not include data or conclusions from the work being reported.

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The Methods section should include only information that was available at the time or plan of the protocol. All information gathered during the conduct of study should be included in the result section.

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Present your results in logical sequence in the text, tables and illustrations, giving the main or most important findings first.

Do not repeat in the text all the data in the tables or illustrations; emphasize or summarize only important observations. When data are summarized in the results section, give numeric results not only as derivatives (for example, percentages) but also as the absolute numbers from which the derivatives were calculated, and specify the statistical methods used to analyze them. Table font should be 10 and caption should be below table and figure.

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DISCUSSION

Discuss your findings by comparing your results with other literature

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Cook NR, Rosner BA, Hankinson SE, Colditz GA. Mammographic screening and risk factors for breast cancer. American Journal of Epidemiology. 2009 Dec; 170(11): 1422-32. doi: 10.1093/aje/kwp304.

If there are more than six authors, write *et al.* after the first six names.

CONCLUSION(S)

Conclusion should elucidate how the results communicate to the theory presented as the basis of the study and provide a concise explanation of the allegation of the findings.

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Provide the list of individuals who contributed in the work and grant details where applicable.

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NURSEARCHER

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The Impact of the COVID-19 Pandemic on the Nursing Profession

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The COVID-19 pandemic has had a profound impact on the healthcare system and the nursing profession, exposing both the strengths and weaknesses of our healthcare system. Nurses, who make up the largest segment of the healthcare workforce, have been on the front lines of this pandemic, providing care to those who are sick, and working tirelessly to keep themselves and their patients safe. In this editorial, the impact of the COVID-19 pandemic on the nursing profession, and the need for immediate action to support and protect nurses is discussed as they continue to provide essential care to those in need. The COVID-19 pandemic has put an enormous strain on the nursing profession, as nurses have been called upon to provide care to a rapidly increasing number of patients. This has required nurses to work long hours, often under challenging and hazardous conditions, and to adapt to rapidly changing protocols and guidelines. The stress and strain of this work has taken a toll on the mental and physical health of many nurses, who have been at increased risk of exposure to the virus due to their close contact with infected patients. In addition to the physical and emotional toll of this work, nurses have also faced significant economic challenges, including reduced hours, pay cuts, and job loss. This has left many nurses struggling to make ends meet and to support themselves and their families. The COVID-19 pandemic has also highlighted the need for increased support and resources for the nursing profession, including better personal protective equipment (PPE), improved working conditions, and access to mental health resources. The shortage of PPE, particularly during the early stages of the pandemic, was a major concern for nurses, and many reported feeling unprepared and at increased risk of exposure to the virus. In addition, the pandemic has also exposed the need for increased investment in the nursing profession, including increased funding for nursing education, research, and the development of new technologies that can help nurses provide high-quality care. This includes the need for increased access to telehealth technologies, which can help nurses provide care to patients in remote and underserved areas, and the development of new tools and technologies that can help reduce the spread of infectious diseases. The impact of the COVID-19 pandemic on the nursing profession has also reinforced the need for better working conditions and increased job security for nurses. This includes the need for fair pay, flexible scheduling, and access to paid time off, including paid sick leave [1]. In conclusion, the impact of the COVID-19 pandemic on the nursing profession has been significant, and has exposed the need for immediate action to support and protect nurses as they continue to provide essential care to those in need. This includes increased investment in the nursing profession, improved working conditions and job security, and access to mental health resources. As a society, we must do everything in our power to support and protect our nurses, who play a critical role in the healthcare system, and who are working tirelessly to care for those in need.

Reference

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Review Article

Analysis of a Health Care Delivery System of Pakistan and Canada

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ABSTRACT

Health care is an important sector of any country as it is related with public health. This article compares the healthcare delivery systems of two countries, Pakistan and Canada, with the aim of identifying similarities and differences and making recommendations for improvement. The study was conducted using a comparative approach, examining the healthcare systems' structures, policies, processes, and outcomes. The findings suggest that while both countries have strengths and weaknesses in their healthcare delivery systems, Canada's system is more comprehensive, with a higher level of access, quality, and equity. The study highlights the need for Pakistan to improve its healthcare system by increasing the availability of resources, strengthening the healthcare infrastructure, and ensuring the quality of care. The authors also suggest that Canada can improve its system by focusing on reducing healthcare costs, improving the efficiency of its system, and increasing access to care. This article provides valuable insights into the healthcare delivery systems of both countries and serves as a reference for policymakers and healthcare professionals seeking to improve the health outcomes of their populations.

INTRODUCTION

Health is considered as fundamental right of every human being, According to WHO "health is complete state of physical, mental and social wellbeing not merely the absence of diseases" [1]. In the past, the health care system was traditionally disease focused but now a days the whole picture of health care system has been changed, and is focusing on health promotive and preventive services. Health of whole nation depend upon the provision of health care services by the government. Health care delivery system is organization of people and their aim to provide the health care services to the individual to fulfil their health needs [2]. The fundamental purpose of good health care delivery system is to provide preventive, promotive, curative services to population and affordable cost of health expenditure for whole nation [3]. Moreover, an effective health care delivery system requires enough

resources to fulfill the basic health needs of the whole nation thus every country should invest large amount to develop good and effective health system as according to WHO every developed and developing country should invest 5% of total budget on health and health related services. Many developing countries are fulfilling the WHO recommendation to attain the health for all e.g., Egypt spend 5% of total budget on health. But some countries are still struggling but unable to maintain proper health budgeting as Pakistan is still unable to meet the Millennium Development Goals (MDGs) and maintaining the budgeting [4]. On the other hand, health insurance is also helpful for maintaining the low-cost healthcare delivery system. Insurance helps manage health expenditures with the insured money. In the health insurance population of the country, people pay a small amount and from this amount,

the insurance company pays for all health services, including the cost of medical and surgical expenditures. All developing countries maintain health insurance cards and private health insurance projects to provide relief to their residents [5].

Health care delivery system of Pakistan

Pakistan is developing country with highest population growth and is struggling and attempting hard to accomplish the MDGs which was formulate to meet the fundamental health needs of developing nations [6]. Population of Pakistan is increasing with rate of 3% and increasing population is the highest burden on the economy of Pakistan [7]. Although, Pakistani government has made remarkable changes and progress in health care delivery system but still Pakistan health care delivery system has many aspects lacking with highest maternal mortality ratios, morbidity, burden of communicable diseases low life expectancy and malnutrition in children [6, 8]. Health care delivery system of Pakistan consists of private and governmental organization. Unfortunately, about 70 % population is served by the private sector and only 30% population is receiving health services from governmental health care settings [6]. Pakistan has 1167 hospitals for whole population of Pakistan which is not enough for 1.8 billion populated countries including 5334 basic health units (BHUs), 560 Sub health centers, 4712 Rural health centers, Dispensaries, 905 Maternal and child health (MCH) and 288 Tuberculosis centers [9]. As Pakistan have larger number of health care centers but it is not enough for 1.8 billion population. Moreover, in the past, Pakistan was following traditional method of health care system which was mostly limited to disease treatment but during last decade Pakistani government has changed its strategy and approach to health care delivery system which consists of disease prevention, health promotion, and curative treatment [3]. Current health care delivery system of Pakistan is comprising preventive, curative, promotive and rehabilitative services. The health care delivery system is consisting of private sector and public sectors, public sector is controlled by two sectors known as federal government and provincial government. Governmental sector comprises of following line of hierarchy. Firstly, Federal government includes ministry of defense which consist of military hospital cantonment boards and ministries which is consisted of research institutes, and hospitals. Secondly, provisional government is consisting of provincial department of health, primary, secondary and tertiary care. Private sector comprises on major hospitals, non-governmental organization, hakeem, homeopathic and other traditional healers [10]. The health care delivery system of Pakistan is shown in following Figure 1.

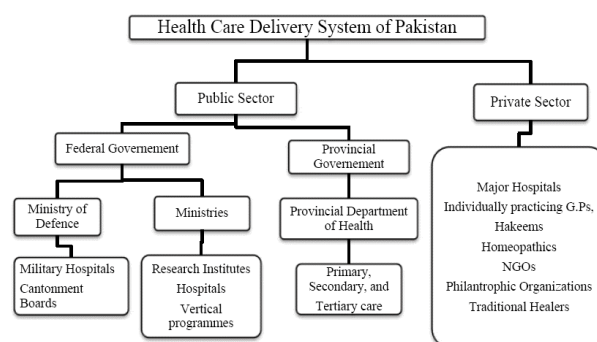


Figure 1: Health care delivery system of Pakistan

Strength of the Pakistani health care delivery system

Major strength of the Pakistani health care delivery system is an outreach primary health care at the community level by lady health workers, lady health visitors and community midwives which are most trusted health care team member at the community level and they work to provide the health care services at the population residence level, this also support the primary health care system of Pakistan, Since 2000, significant progress has been made in the healthcare delivery system and health indicators, largely due to partnerships between the public sector, private sector, and NGOs. Despite having high population growth and high maternal and child mortality ratios, Pakistan has achieved this progress [10]. A major step forward was taken in recent years with the initiation of the Prime Minister's National Health Program on December 31, 2015, which provides health insurance cards for the poor population [11]. The main aim of this program this program is to give coverage for 15 districts of the Punjab, Baluchistan, (FATA) and Islamabad and these health insurance cards will cover the medical and surgical treatments which will reduce the burden of medical expenditures on the pocket of poor people [12]. Furthermore, 3227113 individuals have availed the health insurance card [11].

Challenges faced by health care delivery system of Pakistan

Recently, Pakistan has low health budget and spending very low amount of 50 billion on health, which is 0.4% of total budget of Pakistan. It is not enough for 7th most populous country of world and it is not fulfilling the recommendations of WHO which is to spend the 5% of total budget of every country whether it is developing country or not. In the relation of 5% to 0.4% is nothing just a little bit support for health of population [10]. Low budgeting of Pakistan health care system is unable to give coverage to the preventive, promotive and curative services. Pakistan is also facing the corruption issues in small budgeting and major part of this budget was spent in past in Punjab and KPK, Sindh and FATA. Inefficiency, lack of regularization,

Inequitable distribution of scarce resources are major issues facing by health department in Pakistan [13]. Furthermore, health services are not distributed equally throughout the country which give raise to mortality and morbidity as health care facilities are different in Punjab that's why mortality and morbidity ratios are low than Sindh and Baluchistan [3]. Moreover, Pakistan has a great shortage of the health care professional and trained birth attendants in rural and urban areas and health care profession is facing this issue since last decade but the efforts of the government in this regard are not enough to minimize this issue [12].

Health care delivery system of Canada

Canada has a population of 35.1 million, and its healthcare delivery system is funded by the government. The government takes responsibility for health expenditures and provides the same healthcare facilities to all Canadian citizens and permanent residents. The Canadian government provides all types of preventive, curative, and promotive health services, but does not cover expenses for cosmetic and beauty surgeries [14]. Canada health care system has also government and private sectors and 70% of expenditures are provided by the government and 27.6% is paid by the private sector. Figure 2 is showing that 71% of health expenditures are paid by government and 24 %by private sector, 1% by social security, 1% by municipal

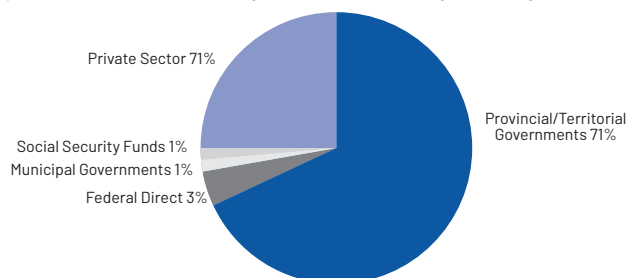


Figure 2: Canada health expenditures, 2010

Strength of Canadian health care delivery system

Canada government spends more than 2000\$ on health which is about 100\$ billion dollars [15]. Canada government is spending large amount on health and health related services, giving wide coverage of health services to its residents. Moreover, Canada has strong health care insurance system and health insurance of Canada government is covering all population and providing equal health facilities without any biasness. Canada has strong primary health care system which consider as the base of health. Primary health care facility has expert physician which provide free consultation to all population without any difference and government pays attractive wages to their primary health care provider to make them motivated to their work and responsibilities [16].

Challenges face by Canadian health care delivery system

Canada has impressive health care system but this system has some cons still. As for emergency services people have to wait long and follow full protocols of the health system. Canadian people have to wait within queue for their emergency cases and they have to follow all protocols which increases the suffering and pain of the patients [17]. Canadians pays a larger amount as tax than Americans, most of the province pays 10% taxes of whole income. For poor families and low-income families, it becomes impossible to pay this tax rates [18]. There is a great shortage of health care providers in Canada which makes the problem for sick patient and organization as well as for the government too [19].

Analysis of the Pakistan health care delivery system with Canadian health delivery system

The health care delivery system of Canada and Pakistan have pros and cons for their population and face challenges but both countries are trying to provide best health care services to their population. The allocation of health care budget of Pakistan is not enough according to its population growth. Moreover, due to high population growth it is not enough in the comparison of Pakistan. Canada has less population and have high health budget and this financing of the Canadian government makes a huge difference in providing best health care facilities [2]. Health insurance is being provided by the both countries but health insurance system of Canada is well organized and giving full coverage for all types of health care services for all population but in the comparison the Pakistan has started this health insurance program recently, that's why insurance system is not still in full working conditions and not providing health insurance facility to all population on equality basis. Pakistani government and policy makers should follow the strategies and policies of those countries who successful health insurance system for all population like Canada and USA has well organized health insurance system. Pakistani government is investing in the health insurance system alone, private sectors and insurance companies can play a very supportive role to minimize the burden of health insurance expenditures [11]. A well-organized health insurance system of any country can be of very help in minimizing the burden of country economy and well-organized health insurance system will give great relief to common man from the expenditures of healthcare service. Both countries are facing the shortage of health care providers according to the need of population. Government should develop strategies to overcome the shortage of the health care provider they should initiate the programs to motivate the health care provider to entered in the government job. Government should give them

attractive wages. Furthermore, the government should appoint the health care providers according to the need of country's population[20].

Strategies

Pakistan is a developing country and should allocate the budget and available resources to overcome the weakness of the health care delivery system. Health policies should be planned on equality basis and Pakistan has to put great focus on primary health care services. On the other hand, Canadian government should focus on the active emergency care procedure to minimize the suffering of their population and taxes from low-income families should be less than those who have higher income. Both countries should minimize the shortage and maximize the number of health care provider and these countries should focus on 1:1 ratio to give best patient centered care. Evidence base practice should be promoted. Recourses should be divided equally throughout the country because it is the fundamental right of every individual to have the best health care and it also the major responsibility of the state to distribute the health resources equally to provide standard health care system to whole population.

CONCLUSIONS

Finally, Pakistani health care delivery system and Canadian health care delivery system has different challenges and issues. Health of any country is fundamental need of the population and there is no doubt that health care delivery system is a complex domain and health needs changes with the passage of time. Governments of all countries should make policies and strategies according to need of people and should revise these policies to maintain the health system.

Conflict of Interest

The authors declare no conflict of interest

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Original Article

Knowledge Attitude and Practice Factors on Parents Regarding Immunization

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ABSTRACT

Immunization is a process by which people get immunity against infectious diseases. **Objective:** To assess the Knowledge, Attitude and Practice Factors of parents regarding immunization. **Methods:** A descriptive cross sectional research study design was used to assess "knowledge, attitude and practice factors of parents regarding immunization" conducted among 134 people at EPI center of Jinnah Hospital, Lahore. The population was targeted through convenient sampling technique. **Results:** The overall result of study shown that parents having good knowledge (70.1%), positive attitude (83.6%) and good practice factors (59%), toward infant immunization. Parents of child had good knowledge and positive attitude about infant immunization. Immunization was significantly associated with people education. The Cronbach alpha, Bartlett's and KMO values have been checked to ensure the validity and reliability in our context. The values showed that positive and significant results and tools were considered as reliable and valid for performing statistical analysis. **Conclusions:** The findings of this study showed that the most of the participants have good knowledge and positive attitude towards the immunization, but still one third population had poor knowledge and negative attitude toward immunization due to the lack of knowledge and religious beliefs about the immunization were reported as the major barriers towards the immunization. The study results showed that health related practice factors were appropriate as health care worker who were daily at EPI center and gave significant guidance to the parents.

INTRODUCTION

Immunization protects life and saves from infectious diseases. People are more prone to infection who are unimmunized. Immunization is a process by which people get immunity against infectious diseases. Through immunization most of childhood diseases may be protected and eliminated [1]. In 1978, The Extended Program on Immunization (EPI) was begun in Pakistan. The reason of this program is to anticipate the children by immunizing them against numerous illnesses like diphtheria, tuberculosis, poliomyelitis, pertussis, lockjaw and measles [2]. Officially, Polio vaccine was introduced in 1994 in Pakistan [3]. Respectively, routine immunization is provided to the public through The Extended Program on Immunization (EPI). But there are many weaknesses of routine immunization and polio campaigns [4]. Through immunization people are vaccinated against many diseases and make body as stronger enough to resist an

infectious disease. Vaccine stimulates the human body to make antibodies against infectious diseases [5]. Vaccine contains the same germ that causes the disease. But in vaccine, germ is in killed or weekend form so that it does not make you sick. When your body is immunized, body thinks that it has been infected with disease and body make antibodies against antigen. These antibodies live in your body for a long time and memory cells help to fight against antigen of many different diseases [6]. If an infected germ enters in your body, your body already have antibodies against that germ and it will reduce the symptoms of disease before it occurs. So, vaccination is much safer than disease [7]. In Pakistan, polio cases are still present. In recent times, immunization is one of the most successful ways to treat Polio. Therefore, there is need to learn about the importance of vaccination in Pakistan [8]. In other countries many diseases have been easily and successfully

eliminated through immunization. Although, polio is vanished all over the world, but countries like Pakistan, Afghanistan, India and Nigeria, are still facing the cases of polio. Therefore, 3rd world countries should implement immunization programs for public health. Immunization is a critical activity for all wellbeing. Through schedule immunization millions of children prevent from irresistible illness and death. But in developing nations more than one million deaths annually occur [9]. Pakistan still not so good. In Pakistan 84 polio cases were still present in 2020 [2]. Roughly, 90,000 children are still facing polio and measles and 20,000 children pass yearly. This mortality rate is due to negative attitude about immunization. This can be treated by vaccination and people priority to health care system. In few regions of Pakistan immunization scope is expanded from 5% to 84%, in spite of this 58% of children right now are unimmunized [10]. Pakistan has the third most burden of child mortality. Death rate can be reduced by modifying the behavior and people's attitude that specially effect child health. This way, health status of nation can be improved [11]. Literature has discussed about many studies on immunization but the rate of unimmunized children is still high. The study aimed to check the knowledge, attitude and practice factors of parents because they have very important role in child immunization. The point to assess is why Pakistan not succeeded with respect to immunization. Although, Pakistan Government is working hard to immunize every child of country, social media are also motivating and inspiring individuals about immunization but still individuals' behavior toward immunization is very poor [12, 13].

METHODS

The descriptive cross sectional research study design was used. The study setting was the EPI department of Jinnah Hospital Lahore. The study took approximately 09 months. The targeted population of study was the parents along with children visiting to the EPI center of Jinnah Hospital Lahore. The study sample was calculated by using Slovin's formula. A questionnaire was used to assess knowledge, Attitude and Practice of parents towards vaccination.

RESULTS

Table 1 shows that age group 20-30 years were 83(61.9%), those with age group 31-40 years were 40(29.9%), those with age group 41-50 were 9(6.7%) and those having age group above >50 years were only 2(1.5%), those who were male 29(21.6%) and those who were female 105(78.4%), those who were single 11(8.2%), those who were married 121(90.3%) and those were widows 2(1.5%), who were uneducated 38(28.4%), those who have primary education were 8(6.0%), those who have middle education were

8(6.0%), those who have Matric education were 19(14.2%), those who have intermediate education were 24(17.9%), and those who have bachelor's education were 37(27.6%).

Variables	Frequency (%)	Cumulative percentage
Age		
20-30	83(61.9%)	61.9
31-40	40(29.9%)	91.8
41-50	9(6.7%)	98.5
>50	2(1.5%)	100.0
Gender		
Male	29(21.6%)	21.6
Female	105(78.4%)	100.0
Marital status		
Single	11(8.2%)	8.2
Married	121(90.3%)	98.5
Widow	2(1.5%)	100.0
Education		
No Education	38(28.4%)	28.4
Primary	8(6.0%)	34.3
Middle	8(6.0%)	40.3
Matric	19(14.2%)	54.5
Intermediate	24(17.9%)	72.4
Bachelors	37(27.6%)	100.0

Table 1: Demographic variables of participants

Table 2 shows that from total participants who respond about the question, "Vaccination prevents infectious diseases", those who respond "yes" were 128(95.5%) and those who respond "no" were 6(4.5%). About the question, "Infants should start a vaccination program just after birth", those who respond "yes" were 123(91.8%), and those who respond "NO" were 11(8.2%). About the question, "Is it necessary to vaccinate a breast feeding infant", those who respond "Yes" were 112(83.6%) and those who respond "No" were 22(16.4%). About the question, "Is vaccination harmful", those who respond "Yes" were 17(12.7%) and those who respond "No" were 117(87.3%). About the question, "Do you know about the side effects of EPI vaccines", those who respond "Yes" were 88(65.7%) and those who respond "No" were 46(34.3%). About the question, "Do you know when the next vaccination date is for your infant", those who respond "Yes" were 127(94.8%) and those who respond "No" were 7(7.2%).

Questions	Frequency (%)	Cumulative percentage
Vaccination prevents infectious diseases?		
Yes	128(95.5%)	95.5
No	6(4.5%)	100.0
Infants should start a vaccination program just after birth?		
Yes	123(91.8%)	91.8
No	11(8.2%)	100.0
Is it necessary to vaccinate a breast feeding infant?		
Yes	112(83.6%)	83.6
No	22(16.4%)	100.0

Questions	Frequency (%)	Cumulative percentage
Is vaccination harmful?		
Yes	17(12.7%)	12.7
No	117(87.3%)	100.0
Do you know about the side effects of EPI vaccines?		
Yes	88(65.7%)	65.7
No	46(34.3%)	100.0
Do you know when the next vaccination date is for your infant?		
Yes	127(94.8%)	94.8
No	7(5.2%)	100.0

Table 2: Response to the questions regarding vaccination

Table 3 Shows that from total participants who respond about the question, "Do you think vaccination side effects are dangerous", those who respond "Yes" were 28(20.9%) and those respond "No" were 106(79.1%). About the question, "Do you think vaccination important only for non-serious diseases", those who respond "Yes" were 33(24.6%) and those respond "No" were 101(75.5%). About the question, "Do you think vaccination makes infant sick", those who respond "Yes" were 44(32.8%) and those respond "No" were 90(67.2%). About the question, "Do you think all children should be vaccinated", those who respond "Yes" were 123(91.8%) and those respond "No" were 11(8.2%). About the question, "Do you think vaccination makes infant for death", those who respond "Yes" were 24(17.9%) and those respond "No" were 110(82.1%). About the question, "Have you recommended vaccines to others", those who respond "Yes" were 110(82.1%) and those respond "No" were 24(17%).

Questions	Frequency (%)	Cumulative percentage
Do you think vaccination side effects are dangerous?		
Yes	28(20.9%)	20.9
No	106(79.1%)	100.0
Do you think vaccination important only for non-serious diseases?		
Yes	33(24.6%)	24.6
No	101(75.4%)	100.0
Do you think vaccination makes infant sick?		
Yes	44(32.8%)	32.8
No	90(67.2%)	100.0
Do you think all children should be vaccinated?		
Yes	123(91.8%)	91.8
No	11(8.2%)	100.0
Do you think vaccination makes infant for death?		
Yes	24(17.9%)	17.9
No	110(82.1%)	100.0
Have you recommended vaccines to others?		
Yes	110(82.1%)	82.1
No	24(17.9%)	100.0

Table 3: Response to the questions regarding vaccination

Table 4 shows that from total participants who respond about the question, "Are you given information about the current vaccine", those who respond "Yes" were 80(59.7%)

and those respond "No" were 54(40.3%). About the question, "Did the health care worker tell you the next immunization schedule", those who respond "Yes" were 130(97.0%) and those respond "No" were 4(3.0%). About the question, "Did your infant develop a problem after vaccination", those who respond "Yes" were 25(18.7%) and those respond "No" were 109(81.3%).

Questions	Frequency (%)	Cumulative percentage
Are you given information about the current vaccine?		
Yes	80(59.7%)	59.7
No	54(40.3%)	100.0
Did the health care worker tell you the next immunization schedule?		
Yes	130(97.0%)	97.0
No	4(3.0%)	100.0
Did your infant develop a problem after vaccination?		
Yes	25(18.7%)	18.7
No	109(81.3%)	100.0

Table 4: Response to the questions regarding vaccination

DISCUSSION

This descriptive cross sectional research study examined "knowledge, attitude and practice factors of parents regarding immunization". The study results show that total respondents who respond to the study majority were females 105(78.4%) within the age group 20-30 years were 83(61.9%). It showed that people who participated in this study majority were married 121(90.3%). The tool used for "knowledge, attitude and practice factors of parents regarding immunization" was adopted. The KMO, Bartlett's test and Cronbach alpha values had been checked to ensure the validity and reliability in our context. Data normality was also checked. Approximately 94(70.1%) participants had a good understanding of the EPI target diseases, 86(64.2%) were aware of the EPI system, and 128 (95.5%) of respondents indicated that immunization protects infectious diseases based on the knowledge item assessment. Similar results were seen by Kagone *et al.*, and Sanou *et al.*, where majority of participants showed positive attitude towards EPI system [14, 15]. While about 40 people (29.9 %) still had inadequate awareness on vaccinations. The majority of respondents 112 (83.6 %), agreed that it is necessary to immunize breast feeding infants, while 117 (87.3%), disagreed. Similar results were seen by Marinati *et al.*, which showed that knowledge influences the basic immunization in infants [16]. About 129(96.3%) of the parents agreed to vaccinate their child fully, while 123(91.8%) believed that children should start an immunization program as soon as they are born. And only 88 of the participants, or 65.7%, were aware of the negative effects of vaccination. Our study revealed that respondents with educated parents who attend higher education were more likely to be knowledgeable than

respondents without educated parents. Approximately 112 respondents (83.6%) had a positive attitude regarding vaccination, while 22 respondents (16.4%) had a negative opinion. Studies by Zhang *et al.*, and Wu *et al.*, showed similar results in nurses and postpartum mothers respectively [17, 18]. The majority of respondents 126(94.0%) thought that following the recommended immunization schedule was crucial, and 110 (82.1%) indicated that just 24 (17.9%) of immunizations result in baby deaths. About 110 (82.1%) of the parents said they would advise others to get their shots, and 123(91.8%) believed that all infants should get their shots. Moreover, one third of the respondents believed that vaccination side effects are harmful and only significant for minor illnesses. Similarly, 50(37.3%) of parents thought that babies typically received too many vaccinations. The purpose of this study was to determine whether those who were more knowledgeable than illiterate persons were those who had a favorable attitude about new born vaccination. According to our research, married people were more likely to have a favorable attitude toward infant vaccinations. This finding may be related to the fact that mothers are typically the ones who take their kids to their child's immunization appointments. About 79(59.0%) of the study's participants have good practice criteria for immunization. The majority of parents, 128(95.5%), expressed happiness when their children received vaccinations, and 89(66.4%) of them received greetings from the medical staff. In addition, 80(59.7%) of respondents received information about their child's most recent vaccination, while only 52(38.2%) received information about the dose of the vaccine and 130(97%) received information about their child's upcoming immunization schedule. Additionally, 25(18.7%) of the infants had issues after receiving a vaccination. Our study showed that increased immunization knowledge enables people to encourage effective immunization practices. Additionally, as mom's awareness about vaccinations increased, they were also able to adopt a positive outlook. They were then urged to finish the immunization, and as their knowledge grew, so did their capacity to practice more and their trust in immunization of infants [19, 20].

CONCLUSIONS

The results of this study revealed that the majority of respondents had strong awareness of and a favorable attitude toward vaccination. However, it was revealed that the main obstacles to immunization were the one-third of the population who had insufficient information and a negative attitude toward vaccination due to ignorance and religious beliefs regarding immunization. To increase people's acceptance of vaccines, special attention should be paid to educating them about immunization.

Interventions should be customized to the target participants who are most likely to be associated with poor knowledge and unfavorable attitudes toward immunization. Our study found that people generally have a favorable opinion about immunization. However, some people still have a bad attitude and insisted to get immunized their child because they think it would make them die, get disabled or get sick. To increase people's knowledge, attitudes, and behaviors about immunization and vaccine-preventable diseases, health education and health promotion activities are required. To confirm the results of this study, however, requires additional findings. The current study targeted only one organization so the result findings are not generalizable. The study recommends that the importance of immunization need to be explain to those who have no knowledge and poor attitude regarding immunization.

Conflicts of Interest

The authors declare no conflict of interest.

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Original Article

Knowledge of Community Members of Ali Raza Abad Regarding the Role of Government Authorities and Non Government Organization in Solid Waste Management

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ABSTRACT

Communities have the prime responsibility to reduce the quantity of waste generated; the segregation of waste and this community should have proper knowledge regarding solid waste management. **Objectives:** To assess knowledge about the role of solid waste management authority, and NGOs in solid waste management in Lahore. **Methods:** This was a cross-sectional descriptive study. A questionnaire was designed for this study to gather data from participants. The items of the questionnaire were generated from the literature, and from formal conversations with experts. **Results:** In this study 91% replied that NGOs were not functioning in the Ali Raza Abad Lahore community. Do the community Stakeholders arrange the awareness program regarding solid waste management in your community, 93% replied no. **Conclusions:** The conclusion of this study was that mostly people don't know their role regarding solid waste management, the role of the NGOs, and the role of solid waste management authority. The solid waste is a need to urgently manage. People of the community have lack of knowledge about who is responsible for the solid waste. This is a very broad issue which made a source of many other problems that have a fatal effect on health as well as whole life.

INTRODUCTION

One of the biggest issue faced developing nations today is solid waste management (SWM). Examples of the increasing need for proper and scientific sanitation in urban and rural areas include the occurrence of various epidemics and the deterioration of environmental conditions. For instance, the dengue outbreak in Pakistan, particularly in Lahore, was more severe because the local population was not properly informed about the prevalence of dengue [1-3]. People mostly throw the solid waste in front of the doors, streets, roads and at open place where from many diseases produce and effects the environment

of the communities and become epidemics. In many countries of the world there is proper set up of waste of solid materials but there is more need to work on it. However, as communities are the primary source of garbage generation, a waste management system cannot be successful without their active involvement. Communities are primarily responsible for reducing the amount of waste produced and for segregating waste. Due to physical obstacles that prevent traditional refuse collection vehicles from accessing these communities, such as narrow lanes and unpaved roads, NGOs, a lack of

political power on the part of low-income communities brought on by the unauthorized and unplanned nature of their neighborhoods, and a lack of technical and financial resources on the part of local governments to serve low-income neighborhoods, these communities suffer the most from inadequate solid waste services. Lack of Community awareness about solid waste management affects the life of people of community like Health Effects including diseases e.g. Typhoid, cholera, hepatitis, plague, skin diseases etc [4-6]. Air Pollution, Water Pollution, Land Pollution etc. The most obvious environmental damage caused by the solid waste is aesthetic and the Ugliness of street, and the destruction of the country side by uncontrolled dumping of city [7]. From one country to another, solid waste management takes on many different forms and functions. No matter the scale, these differences can be partially attributed to the socioeconomic, financial, legal, and political factors that are in place at that level. There is a definite need to balance the desire for more efficient waste management with the limitations that local or national governments are subject to. Some localities have set up their own solid waste collection system, with or without official aid, and have temporarily surmounted these challenges. Some NGOs are also involved in the disposal of solid garbage. Socio-cultural minority groups frequently participate in the collection and recycling of informal waste, which emphasizes their exclusion and poor social standing. These groups frequently have their headquarters in low-income communities. Here, recycling and sorting operations take place. Poor environmental conditions are frequently a result of this. People from the community play specific roles in the management of solid waste, both at home and in the community [8-10]. In my study I use the theory of planned behavior (TPB) because my instruments are most likely according to this theory like knowledge of community about the role of solid waste management in the community were used in this solid waste management program as a framework in understanding, explaining and predicting behavior. From this theory we were able to acknowledge the community about the solid waste management. From this we checked the knowledge of behavior regarding solid waste management. If the people will have the knowledge about the solid waste and solid waste management they will show the good behavior regarding solid waste management [11, 12]. The least move of industry to solid waste is mainly needing payment to the poor doing a play of the part, feeble amount of knowledge about new technologies and high money put into business needed for changing the processes grouped in two without so strong controlling apparatus [13, 14]. Factory or company should treat especially hazardous waste coming

out from polluting industrial and agriculture unit, which generated these under governmental control [15]. The purpose of this study to formulate suggestion and recommendation for improving present system of solid waste management.

METHODS

It was the cross-section descriptive study. Involving the survey and interview of adult male, female and younger of community Ali Reza Abad Lahore project area. It was demarked area of Lahore. The target population was the male and female living in Ali Raza Abad, range of age is 20-45 years and those who showed the willingness to fill the consent for the research. All those clients which were not fit in the inclusion criteria was excluded. 60 samples were selected. A questionnaire was designed for this study to gather data from participants. The items of the questionnaire were generated from the literature, and from formal conversations with experts and research supervisor. Respondents were informed about the purpose of the research and could decide whether or not to participate. The data could help to assess knowledge about the role of community stakeholders regarding Solid waste management at Ali Raza Abad. Respondents' selections were on the base solely upon the selection criteria for inclusion in the study. Confidentiality was insured by requesting respondents to refrain from writing signature, as each respondent decided independently whether or not to participate, and respondents could withhold and or withdraw their participation. An e-mail address of the researcher was include in the consent form thus ensuring accessibility of the researcher should any respondent wish to discuss anything and/or obtain a copy of the research report. Statistical computer software for data analysis and processing.

RESULTS

According to figure 1 do you know the role of NGOs for the managing solid waste management in the community 5 respondents were yes and 55 were no.

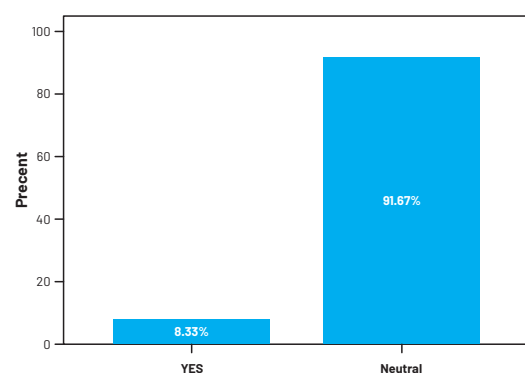


Figure 1: Do you know the role of NGOs for the managing solid waste management in the community.

According to figure 2, 63% were yes that political authority is not playing their proper role in the solid waste management and 37% were reply no that political authority have no plying their role.

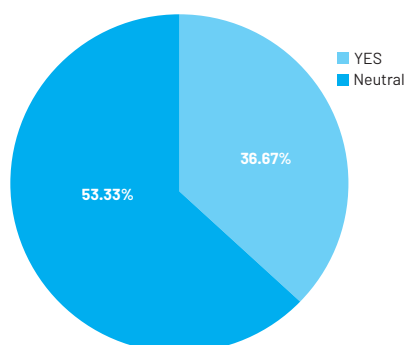


Figure 2: Do you know the role of political authority in your community regarding solid waste management?

According to figure 3, 5.3 93% replied that there is no awareness programmed are conducted and 7% were replied that awareness programmed are conducted in the community.

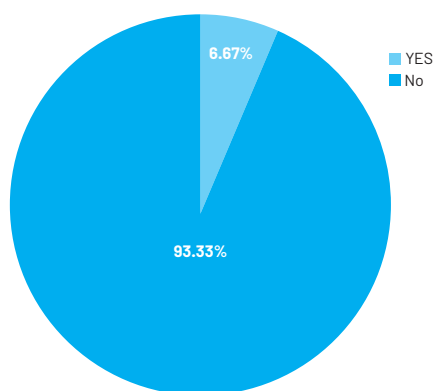


Figure 3: Does the community stock holders arrange the awareness programmed regarding solid waste management in your community?

According to table 1, 42 participants respond solid waste authority have no their role in the solid waste management and 18 were replied they don't know the role of solid waste management authority. 57% were cleared the place of solid waste and 43 % were not cleared about the placement of solid waste.

Questions	Yes n(%)	No n(%)
Do you know the responsibilities of solid waste management authority in solid waste management?	18 (30%)	42 (70%)
Are you cleared about solid waste placement?	34 (56.7%)	26 (43.3%)

Table 1: Question about solid waste management

DISCUSSION

Low-to-middle-income populations generate mostly organic wastes, but high-income populations produce more waste paper, metals, and glass. The composition of

solid wastes also varies with income. Recycling, incineration, waste-to-energy conversion, composting, or landfilling are all methods of managing municipal solid waste. In many towns around the world, landfilling is favored for the disposal of solid waste. Waste undergoes physical, chemical, and biological transformations in landfills, which function as ecological reactors. So landfill liners, the depth of the soil cover, leachate collection, landfill gas recovery, and flaring facilities are important considerations for sustainable landfilling [16]. Due to their exorbitant cost, these cutting-edge procedures are generally impractical in developing nations. In fact, in around 63% of countries, the only method employed for garbage collection/segregation is untrained rag-picking [17]. In our study only few (8.33%) respondent know the role of NGOs for the managing solid waste management in the community. In Indonesia, neighborhood associations exist to foster community members' collaboration. In Indonesia, waste banks (WBs) are local recycling initiatives that perform the duties of neighborhood groups. They come to the conclusion that NGOs, the government, and consulting businesses ought to support community-based WB programs. This study has also shed considerable light on the fact that residents' motives to engage in the community-based WB program are influenced by their preferences for political parties, which has resulted in a reduction in the amount of waste collected. [18]. In our results it was showed that only 63% give the answer yes that political authority have no playing their role. According to the report, Ludhiana City's of India governmental commitment, personnel facilities, public and commercial sector involvement all played a big part in how well solid waste management was implemented. The study also identified a number of administrative issues that had an immediate impact on implementation, including insufficient staffing, insufficient land for final waste disposal, a lack of an integrated solid waste management plan, public ignorance, insufficient resources, and lax enforcement of laws and regulations. It has been suggested that effective waste management in the Punjabi city of Ludhiana be achieved by providing sufficient resources, motivating employees, offering financial incentives for recyclable items, creating a strong policy, incorporating technological innovations, receiving support from political leadership, encouraging waste reduction, composting, and recycling techniques [19]. In this study 57% were cleared the place of solid waste and 43 % were not cleared about the placement of solid waste. Due to administrative issues such as lack of space for final dumping, composting, and recycling, the solid waste management strategy has not been successful in its implementation stage [20].

CONCLUSIONS

The conclusion of this study was that mostly people don't know their role regarding solid waste management, the role of the NGOs, and the role of solid waste management authority. The solid waste needs to be urgently managed. Stakeholders are not playing their proper role regarding solid waste management. People of the community have lack of knowledge about who is responsible for the solid waste. This is a very broad issue which made a source of many other problems that have a fatal effect on health as well as whole life.

Conflicts of Interest

The authors declare no conflict of interest

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Original Article

Nursing Students Knowledge About Utilization of Information and Communication Technologies Facilities at Allama Iqbal Medical College, Lahore, Pakistan

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ABSTRACT

Technology is basically the scientific use of knowledge to solve problems practically, which also includes the invention of modern and useful tools and techniques. **Objectives:** To check the Nursing Students Knowledge About Utilization of Information and Communication Technologies Facilities. **Methods:** A questionnaire based cross-sectional study was conducted among nursing students. Questionnaire comprised of different question regarding the factors influencing ICT usage and nursing students knowledge towards the use of ICT. The questionnaire was distributed among hundred nursing students. **Results:** Students have good knowledge about ICT, but their use is limited. ICT facilities like photocopier, printer, E-library and functional ICT laboratories were lacking. Unreliable power supply, a lack of ICT technical support, and a lack of managerial encouragement were identified as the culprits. **Conclusions:** ICT resources were scarce, and there were no basic amenities. The use of ICT is largely impacted by unstable power supplies, a lack of technical assistance for ICT, and a lack of management motivation and support.

INTRODUCTION

Information is processed, organized and structured data. It provides context for data and enables decision making. Communication is the process in which thoughts, views, ideas and information are exchanged and transferred by voice or signals. It usually includes the interaction between the person and his surrounding environment [1]. Technology is basically the scientific use of knowledge to solve problems practically, which also includes the invention of modern and useful tools and techniques [2]. Information and communication technologies (ICT) are related terms to IT that includes all communication technologies, internet networks, all modern communication devices, social media networks and other information and communication technologies methods and applications [3]. At present age, Information and Communication Techniques (ICTs) are been used in every

aspect of daily life. Today every field, including business, education, industrial fields and entertainment mean, are influenced by latest information and communication techniques [4]. In the digital era of ICT, new communication methods and techniques for exchanging information has showed visible progress in economic and business fields. Advancement in research and scientific methods has also assisted the researchers in their projects [5]. Belay, conducted a research study at Gondar University in 2017, in which he discussed that how In higher education systems, the universities need to focus on roviding practical means to approach the ICT services. According to his study, a big portion of health sciences' students were not cognizant about ICT and thus never had consumed it to benefit themselves. Even though some students were aware of ICT, but more than half of the students among

them didn't know how to operate Microsoft office [6]. Besides familiarity to ICT, the educational status and background of the family and perception of training in ICT have strong rather a positive affiliation with ICT application. Similarly, rural students are less likely to use ICT. Since students are inadequately using ICT, there is a dire need of pupil centered computer labs, and development of teaching to raise student performance and consequently their utilization [7-9]. Including ICT in nursing subsequently leads to upgraded quality of care, and education of not merely health professionals but patients too. Associated to health care workforce, nurses constitute the largest health provider group, hence administration of ICT has positive impacts in their practice [10, 11]. ICT amazingly promotes client centered health at a low expenditure, by information sharing and reduced travel time. ICT decreases the time length spent for documentation by the nurses [12, 13]. The use of ICT has changed educational criteria too. Digital teaching methods and learning techniques has also introduces effective teaching and learning strategies. To identify the issues affecting the use of ICT facilities by students [14, 15].

METHODS

We employed a cross-sectional study design to learn about the use of information and communication technologies among nursing students at CON, AIMC, and JHL. We adopted a convenient sampling approach because it allows us to collect data more easily and quickly in a college setting. To find out the findings of our study, we chose 100 student nurses as a study population. The sample size is computed using statistics' population proportion formula. We collected data using a standardized Questionnaire with two components. Both sections used a 5-point Likert scale (Strongly Agreed SA, Agreed A, Neutral N, Disagreed D and Strongly Disagreed SD). A decision mean of 3.0 or higher was regarded agreement, while a decision mean of less than 3.0 was considered discontent with the item. In the first part of questionnaire, we ask about the resources and facilities which are provided to students by the institutions. Same like rt scale is used for this part. By second part we investigate about the factors that affect the usage of ICT facilities by the students. A questionnaire was issued to all student nurses, and adequate time was allotted for each student to complete the questionnaire. Each student took about 15 minutes to complete the questionnaire. The questionnaire was simple to understand, however questions were explained for clarity. We were also given information about the goal of our research. Descriptive analysis was used to examine the acquired data. SPSS version 25 was used to arrange and run the data. Following processing, data presented in frequency and percentage

tables. The two most essential criteria to evaluate the data collection instrument are validity and reliability. In this study content, validity was assessed by the panel of field experts who checked the appropriateness and relevance of the question in relation to the study objectives. The reliability coefficient of our questionnaire is 0.7. We collected data by following ethical considerations i.e. with willingness of each participant and without harming anyone. We ensured the integrity and quality of data and maintained the confidentiality and autonomy of the participant.

RESULTS

Table 1 answers the question that what forms of ICT items are presented for use by nursing students in CON, AIMC, JHL. The analysis of this section revealed that half of the respondents strongly disagreed on their college's availability of computer facilities. About 41 students strongly accepted to the fact that their college has no internet facilities. 47% revealed that the college did not have facility of photocopy machine and printer to students. About one third of respondents strongly agreed that their college did not encompass E-library. 44 of nursing students denied the presence of functional ICT laboratory in their college.

Questions	Strongly disagree n(%)	Disagree n(%)	Neutral n(%)	Agree n(%)	Strongly Agree n(%)
My college has computer facilities that I use for my college work.	50 (50%)	20 (20%)	8 (8%)	16 (16%)	6 (6%)
My college has no internet facilities	12 (12%)	11 (11%)	8 (8%)	27 (27%)	41 (41%)
My college has no overhead projector	9 (9%)	5 (5%)	23 (23%)	46 (46%)	17 (17%)
My college provides facility of photo copy machine and printer to students.	47 (47%)	19 (19%)	8 (8%)	15 (15%)	11 (11%)
My college does not have E-library.	13 (13%)	20 (20%)	13 (13%)	16 (16%)	38 (38%)
My college had functional ICT laboratory	44 (44%)	17 (17%)	7 (7%)	17 (17%)	15 (15%)

Table 1: Respondent's availability of ICT resources/facilities

This section describes the factors that influence the utilization of ICT materials by students of CON, AIMC, JHL. After analyzing this table, it was concluded that 16% of the students lacked training in ICT usage. 34 students did not have access to ICT facilities. More than half of the students responded that there was paucity of ICT technical staff in the college. 26 students strongly disagreed on not considering ICT to be crucial in changing anything in learning (table 2).

Questions	Strongly disagree n(%)	Disagree n(%)	Neutral n(%)	Agree n(%)	Strongly Agree n(%)
I lack training in the use of ICT	13 (13%)	22 (22%)	19 (19%)	30 (30%)	16 (16%)
I don't have access to ICT facilities	6 (6%)	34 (34%)	12 (12%)	35 (35%)	13 (13%)
Erratic power supply in my college affects my use of ICT	11 (11%)	14 (14%)	29 (29%)	30 (30%)	10 (10%)
There is a lack of ICT technical staff in my college.	6 (6%)	12 (12%)	11 (11%)	33 (33%)	38 (38%)
I don't consider ICT to be important in changing anything in learning	26 (26%)	28 (28%)	23 (23%)	11 (11%)	12 (12%)

Table 2: Factors affecting the use of ICT facilities by students/respondents

DISCUSSION

The use of information and communication technology (ICT) for the delivery of healthcare in industrialized nations has been extensively studied, with the majority of these nations achieving significant progress. On the other hand, there are many more eHealth pilots in developing nations than there are full-scale implementations. Some explanations for the "pilotitis" in the eHealth sector in poor nations include a lack of infrastructure, projects supported by donors, and a lack of qualified staff to oversee these eHealth initiatives. ICT deployments in the health industry are significantly impacted by the issue of health workers' lack of ICT expertise [16]. More than half of the students responded that there was paucity of ICT technical staff in the college. A study from Ethiopia showed that only 46% of respondents who were students used ICT; only 51% of respondents had knowledge of ICT; 47% had never used electronic communication (such as email or chat rooms); and 39% had never used Microsoft Office. The findings indicated that students' understanding was insufficient and their use of ICT was subpar. In order to enhance teaching, promote student performance, and equip the college with student-centered ICT computer laboratories, the institution should continue investing in professional development for its faculty [17]. In tertiary education, the use of ICT to improve or assist teaching and learning has grown in significance. ICT is used far less frequently in education programs in developing countries than it is in developed ones. Some of the factors cited for such gaps include the lack of enough financial resources, poor Internet connectivity, a paucity of qualified teachers, and improper policies in underdeveloped nations. In spite of this, there is rising interest in ICT use in educational settings in developing nations. Additionally, a number of nations have tried recent government-led initiatives to increase access to ICT in classrooms [18]. More than half of the respondents, according to the report, agreed that

there were no ICT facilities. The 2014 claim that respondents had easy access to ICT resources for use in learning, such as overhead projectors, was refuted by this finding. The cause was found to be the fact that nursing students had themselves focused on clinical practice majorly in clinical setting [19, 20]. Major strength of this study is that, this study gives the current baseline data about the utilization of ICT among nursing students of CON,AIMC, that will be helpful for improvement of availability of ICT tools in nursing field, as it is the first study conducted in this region on this topic. A large sample size was needed to validate findings. In current study sample size is not large enough to generalize findings to population

CONCLUSIONS

From the findings of the study the researchers concludes that nursing students utilized ICT facilities such as computer and internet in learning. For the students engaged in the learning process, some fundamental ICT resources including overhead projectors, photocopiers, and printers were not easily accessible. In addition to the lack of some ICT facilities, CON and AIMC lacked essential ICT resources such computers, internet access, an E-library, and an operational ICT lab. ICT resources were scarce, and there were no basic amenities. The use of ICT is largely impacted by unstable power supplies, a lack of technical assistance for ICT, and a lack of management motivation and support.

Conflicts of Interest

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Original Article

Validity of Standardized Guidelines of Intra-Aortic Balloon Pump Care Among Nurses on Hospital Stay of Cardiac Patients

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ABSTRACT

Intensive care unit nurses simply need to be aware of monitoring because the intra-aortic balloon pump is a mechanical device that boosts the myocardial oxygen perfusion and cardiac output in cardiac patients. In our country, there were no written guidelines for nurses on how to check the patient properly. **Objectives:** To check the validity of standardized guidelines in small groups of nurses to provide interventions for preventing possible complications to reduce the length of stay in intensive care units. **Methods:** A Pilot study was carried out on 10 % of the total number of nurses (10 nurses in the interventional group and 10 in the control group of the implementation of standardized guidelines) who have been working at Punjab institute of cardiology hospital. The pilot study was done to test the applicability, transparency, consequence, and feasibility of the study tool and sequence of quotations to maintain consistency. The necessary modifications were done, and the final form is developed. **Results:** Reliability of standardized guidelines were excellent after using small group of these guidelines were implemented on large sample size 72 nurses were trained with the help of educational session and booklet made according to guidelines randomized control trial (RCT) according to these guidelines nurses provide all care to patient with intra-aortic balloon pump speedy recovery and also reduce the length of stay in cardiac ICU. **Conclusion:** We concluded that these standardized guidelines should be implemented on a large sample of cardiac intensive care unit nurses.

INTRODUCTION

The duration of the patient's stay in the intensive care units is a unique consequence. The bad outcome was defined as the length of stay exceeding the normal length of stay by 5 days, or 120 hours. A significant component of intensive care units is outcomes prediction. This is true for prognosis evaluation, cost determination, health care management, monitoring, and new guidelines to shorten stays in intensive care units while still delivering high-quality treatment [1]. Safe practices and enough knowledge of nurses can't achieve without proper training and educational session because only a classroom setting can't improve the nurse's practices clinical exposure makes them easy to hemodynamic effects, and expert problem solving assure critical care nurse that they can efficiently manage the Intra-aortic balloon pump challenge. Still, a

number of studies reported that the knowledge of the majority of intensive care unit nurses tested was found to be inadequate. When nurses provide care to a patient who is on the intra-aortic balloon pump she has to be very responsible in providing the satisfactory care practices [2]. It is essential for improving patient care to better the sources, and that duration should be addressed to improve the intensive care units, to continuously monitor care indicators and identify risk factors that lower quality. A lengthier stay in the intensive care unit is not only more expensive, but it is also a key sign of how well cardiac patients are receiving critical care [3]. In another study post-operative and patient outcomes with intra-aortic balloon pump support require according to standardized guidelines nursing care their ability to effectively predict

postoperative complication hospital stay and mortality is uncertain no standard currently exists these assessment tools are not routinely utilized in the care of the patient with an intra-aortic balloon pump. Wide variation based on competency and experience. A valuable care time-efficient cost-effective reduce the length of stay and mortality [4]. The ability to deliver quality nursing care practices on hemodynamic effects and skillful problem-solving critical care nurses can effectively manage the intra-aortic balloon challenge using the standardized guidelines regarding intra-aortic balloon pump care to achieve the best outcome for patients managed and control the adverse events. The cardiac nurse caring for coronary artery disease patients requires standardized guidelines [5]. In another study post-operative and patient outcomes with intra-aortic balloon pump support require according to standardized guidelines their ability to effectively predict postoperative complications hospital stay and mortality is uncertain no standard currently exists these assessment tools are not routinely utilized in the care of the patient with an intra-aortic balloon pump. Wide variation based on competency and experience Valuable care time-efficient cost-effective reduce the length of stay and mortality [6]. Another retrospective study to evaluate the effect of Intra-aortic balloon pump therapy on activity tolerance of 46 patients awaiting heart transplantation resolved Intra-aortic balloon pump therapy increase the physical activities in patients awaiting by-pass surgery improved strengthening decrease clinical indicators delivering the standardized care by nurses and significantly shortening the length of hospital stay [7]. Furthermore, a research study was conducted in 2009 which results showed that only 20% nurses have knowledge about the complication and only 19 % of nurses knows how to take a particular action and use the standardized guidelines regarding the care of Intra-aortic balloon pump patients for shorting of stay in intensive care units [8]. It was the necessity of the nursing profession to deliver standard care of the patient with intra-aortic balloon pump. It was evident in previous studies that only flow sheet was used for intra-aortic balloon pump record which was also used for the ventilation of patient. There was not any evidence or documentation to use of standardized guidelines for the care of patient with intra-aortic balloon pump which hampered the nursing care and increase the patient stay in hospital and also increase mortality rate [9]. The early practice of intra-aortic balloon pump gives the best outcome in high-risk cardiac patients it reduces the intensive care units stay and mortality elevated renal function show indicator of high mortality with several potential complications such as renal failure 34.6% and limb ischemia 3(2.9%) the finding of the study that the

morbidity and mortality was higher in cardiac patients. The post-operative mortality of intra-aortic balloon pump was 29.1% the benefit of timely producer of intra-aortic balloon pump improving the clinical outcomes of patients and reduce the stay and mortality [10]. To achieve the greatest results for a patient maintained with an intra-aortic balloon pump, nursing staff needs particular abilities. The circulatory system must be understood by the nurse in order to continuously assess and measure appropriate changes in the patient's state. The significance of using simulation techniques to maintain knowledge and abilities for patients using intra-aortic balloon pumps [11]. A meta-analysis was conducted in 2014 which includes the nurse's practices regarding the intra-aortic balloon pump and the results of 7 % of studies were the same that nurses don't have knowledge regarding the intra-aortic balloon pump care-related complication that's why to increase the length of stay in ICU. critical care unit nurses have adequate practices regarding the care of the intra-aortic balloon pump [12]. A substantial level of nursing skills are needed for intra-aortic balloon pump therapy due to the hardware's intricacy and the need for constant observation to avoid potential problems. To truly concentrate on this group of patients, attendants should combine caution with cautious and deliberate evaluation skills. The medical provider should conduct competent clinical evaluations and ensure accurate and trustworthy impressions. Evaluations and impressions specific to effort, the ability of the intra-aortic balloon pump, and probable problems should be accepted [13-15]. In Pakistan limited the all cardiology hospitals in cardiac care units no guidelines used for intra-aortic balloon pump patients so I developed the standardized guidelines for reduced the length of stay to minimize the complication and in written form document helpful for nurses to checked the patients according to standardized guidelines. It is the necessity of prominence care standardized guidelines of the nursing profession to deliver standard care but there is no proper documentation for the care of the patient with intra-aortic balloon pump properly structured checklist for intra-aortic balloon pump care shows the useful for nursing process and also provide the data for quality assurance studies. The only flow sheet is using for intra-aortic balloon pump record which also uses the ventilated patient. Educational intervention for management of Intra-aortic balloon pump patient care will increase nurse's performance to minimize hospitalization stay and decrease the mortality rate.

METHODS

The Pilot study was carried out on 10 nurses. Randomly, 10 nurses were included in the current study. Polit study was conduct to check the effect of standardized guidelines.

Research was conducted in intensive care units Punjab Institute of Cardiology Lahore. The study was carried out in the cardiac intensive care units of the Punjab Institute of Cardiology in Lahore. The tool was developed tested for clarity and feasibility A, demographic variable performance for nurses B, nurse's practices standardized guidelines on care of patients with intra-aortic balloon pump.

RESULTS

The developed tool was examined by a panel of two professors of cardiac surgery, head of cardiac surgery Unit-1 and 2 chiefs per fusionist of Punjab Institute of Cardiology Jail Road Lahore. Three critical care nursing experts and one English expert to determine whether the included items were clear and easy understandable in table 1 to achieve the aim of the study test and retest reliability was evaluated by using SPSS with Cronbach's α value of 0.743 that is good for nurses standardized guidelines indicating reliability of the developed data collection tool in table 1 demographic data.

Demographic data	n (%)
Age in years	
<25 years	6 (60%)
>25 years	4 (40%)
Educational status	
GNM	2 (20%)
Post B.Sc. Nursing	5 (50%)
Post basic BSC nursing	3 (30%)
MSN	0 (0%)
Years of experience in intensive care unit	
<5 years	5 (50%)
>5 years	5 (50%)
Previous experience	
Yes	10 (100%)
No	0 (0%)

Table 1. Demographic data of studied nurses

Reliability of standardized guidelines were excellent after using small group of these guidelines that will be implemented on large sample size 72 nurses who trained with the help of educational session and booklet made according to guidelines randomized control trial (RCT) according to these guidelines nurses provide all care to patient with intra-aortic balloon pump speedy recovery and also reduce the length of stay in cardiac ICU table 2.

Common Mean	1.770
Common Variance	.186
True Variance	.059
Error Variance	.127
Common Inter-Item Correlation	.284
Reliability of Scale	.908
Reliability of Scale (Unbiased)	.922

Table 2: Reliability Statistics of data of studied nurses

In table 3 every point would be assessed on SPSS version 25

and show clearly each point in details link are available who use these guidelines for the betterment of patient's care and reduced the burden of intensive care units & hospitals. The scale mean for spine position is 42.40 if item deleted and 43.55 for urine.

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Spine Position	42.40	32.989	.755	.906
vitals	42.55	33.839	.410	.912
Radial and pedal pulse	42.50	34.053	.396	.912
Urine	42.55	33.208	.530	.910
Don't Flex Legs	42.50	32.053	.806	.904
Log Roll	42.50	32.474	.717	.906
Check Backflow	42.50	32.053	.806	.904
Change Rhythm	42.60	32.042	.726	.906
Monitor Insertion Sight	42.50	32.789	.652	.907
Augmentation Pressure	42.40	35.516	.149	.916
Manual Flushing	42.45	33.629	.526	.910
Neurological Assessment	42.40	33.305	.677	.907
Daily Pathology	42.50	34.579	.292	.914
Monitoring Renal Function	42.40	33.305	.677	.907
Observe Bleeding	42.70	32.747	.564	.909
Monitor Pain	42.45	33.208	.619	.908
Check skin bundle	42.50	32.789	.652	.907
Observe Pressure Area	42.65	35.503	.091	.919
Oxygen Supply	42.45	32.997	.665	.907
Daily X-Ray	42.45	33.418	.572	.909
Remove Catheter, Check Pressure	42.45	34.261	.390	.912
After Removal Check Position	42.40	35.095	.247	.914
After Removal Check Bleeding	42.35	34.029	.607	.909
Thrombus Formation	42.50	34.579	.292	.914
Maintain Documentation	42.35	34.976	.338	.913

Table 3: Item-Total Statistics

DISCUSSION

Patients with complex, severe heart failure frequently employ intra-aortic balloon pumps (IABPs) as a temporary mechanical assistance (HF). The transfemoral artery is the most typical route taken for the percutaneous installation of an IABP, which restricts patient mobility and encourages deconditioning when support is required for an extended period of time. In order to place the IABP in the descending thoracic aorta, alternative sites (transthoracic) have been used with a surgical approach through the ascending aorta, right or left axillary, or subclavian artery, primarily with the use of a conduit (either a Dacron [Invista, Wichita, Kansas] graft or vein cuff). However, many patients who need ongoing mechanical support and are candidates for orthotopic heart transplantation (OHT) [16, 17]. This pilot study test and retest reliability was evaluated with Cronbach's α value of 0.743 that is good for nurses standardized guidelines indicating reliability of the developed data collection tool. All healthcare services must include high-quality care. The advancement of medical and health services has moved from quantitative to more qualitative factors. The concept of quality care is multifaceted and can be viewed from a variety of angles,

including organizational, professional, and patient views [18, 19]. A pilot study can be used for a variety of things, including developing and testing the suitability of research instruments, determining whether a full study is feasible, designing and testing the protocols for the larger study, setting up and testing the sampling and recruitment strategies, gathering preliminary data, learning about effect sizes, and training research assistants [20].

CONCLUSIONS

We concluded that these standardized guidelines should be implemented on a large sample of cardiac intensive care unit nurses. Practices of intensive care unit nurses through doing intra-aortic balloon pump continuing education sessions nursing procedures must be strictly followed when caring for patients who are attached to an intra-aortic balloon pump.

Conflicts of Interest

The authors declare no conflict of interest

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Original Article

Conflict Management Among Nurses in Tertiary Care Hospital Lahore

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ABSTRACT

Conflict amongst healthcare workers has been noted as a problem in healthcare settings all around the world. **Objective:** To analyze the most frequently occurring conflict management strategy utilized by nurses in the hospital setting. **Methods:** A descriptive cross sectional study design was used to carry out this study. The study was conducted in Mayo hospital, Lahore attached to King Edward Medical College, Lahore. Sampling size of 122 cases was calculated with 95% confidence interval and 6% margin of error. Random sampling method was used to collect data from nurses. Data were analyzed through SPSS V.21 using descriptive statistics (frequencies, and percentages). **Results:** A total of 122 female nurses were recruited and analyzed in this study. Majority of nurses were aged between 25-30 years, 45(36.8%). This study showed that there are conflicts among nurses in a hospital setting. Comparison of the subjects' conflict management strategy mean scores according to length of time in nursing position revealed differences in frequency of occurrence of the five strategies. The strategy of avoiding was the most frequently utilized behavior in all categories except the category of time in position of less than 1 year. The results of this descriptive study revealed that the most frequently occurring conflict management strategy utilized by this sample was avoiding. **Conclusion:** Findings of this study conclude that nurses who practice in the hospital setting tend to approach conflict with concern for the other party's wishes.

INTRODUCTION

In healthcare settings all throughout the world, staff conflict has been noted as a problem [1]. Personal differences, unclear work descriptions and tasks, role incompatibility, and organizational problems like high levels of stress, a lack of resources, and uncertain employment are the most frequent causes of conflict inside a healthcare facility [1]. According to studies, interpersonal conflict among healthcare workers had a negative influence on stress levels, job satisfaction, and the efficacy of teams [2]. Stress at work like this frequently causes absences and high turnover [3]. Also, it appears that the cooperation of health care professionals has an impact on the quality of health services delivered and the application of quality-improving techniques [4]. Conflict is characterized as genuine or imagined conflicts between people who have different beliefs, values, or objectives.

Moreover, it is a process that starts when someone feels compelled, senses obstruction from the other, and begins to oppose. It is a mental conflict brought on by incompatible or conflicting desires, wishes, or demands [5]. Since the middle of the 19th century, the nursing profession has seen major transformations. Within the context of the practice of many nursing responsibilities that were unthinkable fifty years ago, the field of nursing knowledge has broadened. Throughout the past 20 years, in response to developments and needs in the health sector, the roles of nurse manager and head nurse have undergone significant evolution [6]. All nurses, regardless of their position, must successfully manage conflict in order to maintain quality patient care because conflict is also one of the primary obstacles and largely depends on the conflict management strategies used [7]. Changes in

the care model, which aims to break free from the dominant medical model and vertical power structures, have created a need for communication, interpersonal interactions, and management training. This is necessary for the nurse's actions to be stronger and more credible [8]. As a result, the abilities that depend on sophisticated business knowledge and managerial skills are becoming more and more important for success in the employment market [9]. Hence, the use of managerial abilities and leadership contribute to how well nurses function in these changing work environments [9]. According to management theory, there are five types of conflict resolution behavior: competition, collaboration, compromise, avoidance and accommodation [10]. Assertion and cooperation are the intentions that determine the type of conflict management strategy used in a situation, where assertion refers to an attempt to confront the other party and cooperation refers to an attempt to find a workable solution [11]. Conflict resolution behavior can range from cooperation to confrontation. Based on their leadership and conflict resolution abilities, nurse managers have a significant impact on the nursing staff, other members of the healthcare team, and patient care [12]. The ability to learn conflict communication competencies is one that can be applied to any role. An effective leadership intervention is coaching. Nurse managers can increase staff nurses desire to stay on the job if they employ the right dispute resolution techniques [13]. Many organizational-culture issues that affect team dynamics, retention, and work satisfaction are faced by nurse leaders. There are generational factors, variations in culture, race, and beliefs, variations in practice, and varying degrees of nursing education and training [14]. In light of patient experience, health outcomes, regulatory compliance, and reimbursement, the corporate culture's impact on patient care must also be taken into account [15]. Conflict is inevitable and a normal component of all human relationships; it exists in all facets of life and in all organizations [16]. All healthcare organizations now have goals and targets in place to raise the standard of patient care. Because nurses are the primary frontline staff who engage with patients, learning to settle conflict is essential to delivering effective and efficient patient care and achieving financial success [17]. In addition, it has been noted from our clinical experience that nurses frequently deal with challenging circumstances that have a negative impact on their ability to deliver high-quality patient care [18]. To maintain high-quality patient care, it's critical to support those nurses who struggle with conflict management [19]. So, this study was conducted to assess how a conflict management programme affected the standard of patient care. The question addressed in this

study was: What is the predominant or most frequently occurring conflict management strategy utilized by nurses in the hospital setting?

METHODS

Descriptive cross sectional study design was used to carry out this study. The study was conducted in Mayo hospital, Lahore attached to King Edward Medical College, Lahore. It is one of the big public hospital of Lahore. At the time of data collection, the population of nurses is 1500. Therefore, this organization was selected for present study. This study was completed in 03 months. Sampling size of 122 cases was calculated with 95% confidence interval and 6% margin of error [20]. Random sampling method was used to select the sampling units. Data were gathered from Mayo Hospital in Lahore's emergency, medical, surgical, and intensive care units, among other important departments. To gather the data, a random sample procedure was used to choose all of the nurses in these departments. The participants written informed agreement to participate in the study was obtained first. After that, participants were randomly assigned to complete a self-administered questionnaire. Inclusion Criteria: Registered female Nurses, aged between 20-50 years. Nurses with at least Diploma holder. Having at least one-year experience. Exclusion Criteria: Nurses who were not available during data collection. Nurses with any chronic/ mental illness. Information was gathered from all of Mayo hospital Lahore's key departments, including the emergency, medical, surgical, and intensive care units. To gather the data, a random sample procedure was used to choose all of the nurses in these departments. Firstly, written informed consent to participate in the study was taken from the participants, then a self-administered questionnaire was randomly distributed among the participants. One week time was given to the participants to complete the perform. Seventy percent of the participants returned filled perform and 20% did not returned the questionnaire. They were given more time to complete the perform and they returned it after one week. The questionnaire consists of two sections including, socio demographic characteristics of the participants, conflict management tool. In first section, the socio-demographic characteristics included age, marital status, job experience, and educational status. In second section, the 30-question developed by Thomas-Kilmann Mode Instrument was used. Data were analyzed through SPSS V.21 using descriptive statistics (frequencies, and percentages). Quantitative variables were measured as median, mean and standard deviation. The normality distribution of the variables was assessed using the Kruskal-Wallis test and the Mann-Whitney U test.

RESULTS

A total response of 122 female nurses was recorded and analyzed in this study. Majority of nurses were aged between 25–30 years, 45 (36.8%) followed by 31–35 years, 40 (32.8%). Most of nurses were married, 83 (68%). More than two-third, 67 (54.9%) of participants had more than 5 year of work experience. Most of, 55 (44.3%) held diploma nursing, while 36 (29.5%) had generic BSN degree (Table 1).

Variable	Group	Frequency (%)
Age	25–30 year	45 (36.9%)
	31–35 year	40 (32.8%)
	36–40 year	22 (18%)
Marital Status	Single	37 (30.3%)
	Married	83 (68%)
	Divorced	1 (0.8%)
	Widow	1 (0.8%)
Job Experience	One year	24 (19.7%)
	2–5 years	31 (25.4%)
	greater than 5 years	67 (54.9%)
Education	master degree	11 (9%)
	Generic BSN	36 (29.5%)
	Post RN	21 (17.2%)
	Diploma Nursing	54 (44.3%)

Table 1: Demographic characteristic of participants

This study showed that there are conflicts in a hospital in Lahore. Table 2 illustrates the responses of different department nurses towards conflict management. Effective management of conflict include using of a variety of styles rely on the conflict circumstances. The research question was: What is the predominant or most frequently occurring conflict management strategy utilized by nurses in the hospital setting? The most frequently occurring conflict management strategy in this sample was avoiding. The mean score for avoiding was 8.07. The mode was 8 and the median was 8. Rank order, means, and standard deviations for the five conflict management strategies are presented in Table 2.

Strategy	Rank order	Mean \pm SD
Avoiding	1	8.07 \pm 2.25
Accommodating	2	7.12 \pm 2.15
Compromising	3	7.10 \pm 2.06
Collaborating	4	5.01 \pm 2.22
Competing	5	2.70 \pm 2.18

Table 2: Rank Order, Means, and Standard Deviations of Conflict Management Strategy

Note. Rank order reflects the most frequently utilized strategy to the least frequently utilized strategy

DISCUSSION

The findings of this study are similar to those found during the review of literature. Cavanagh (1988) reported the most frequently occurring conflict management strategy for 64 full-time female intensive care registered nurses who

completed the study instrument was avoiding ($x = 8.0$) [20]. The least frequently occurring strategy was competing ($x = 3.2$). The sample consisted of predominantly baccalaureate and advanced degree nurses. Another similarity of the present study and Hightower's (1986) study is the variation in the most frequently utilized strategy according to the age variables [21]. Hightower reported that a sample of 160 predominantly female managerial and administrative nurses who completed the study instrument utilized avoiding as the most frequently occurring strategy. The mean score was 7.26 and the standard deviation was 2.40. However, subjects who were age 29 years or less utilized compromising most frequently. Hightower instructed the subjects to respond to the questionnaire as subordinates. The most frequently occurring conflict management strategy in the present study was avoidance. Avoiding is described by Thomas and Schmidt (1976) as an unassertive approach to managing conflict which reflects behaviors of difference and often apathy [22]. Thomas further identified that the scheme of conflict management strategies forms a hierarchical sequence. When the usual conflict management behavior fails to be effective in a conflict situation, the next conflict management behavior comes into play and so forth. The rank order from the highest to the lowest for this sample was: avoiding, accommodating, compromising, collaborating and finally competing. Avoiding and accommodating are unassertive strategies. Compromising is intermediate for both assertiveness and cooperation. Collaborating is an assertive approach, whereas, competing is also assertive but dominating.

CONCLUSIONS

Based upon the findings of this study and cognizant of the limitations of the study, the following conclusions are presented: Nurses who practice in the hospital setting tend to approach conflict with concern for the other party's wishes. Nurses who practice in the hospital setting may tend to avoid confrontation. The following implications are presented based upon the findings of this study: Nurses who practice in the hospital setting need to become aware of conflict management behaviors. Nurses who practice in the hospital need structured learning opportunities to learn conflict management strategies. Nurses should become aware of how conflict is managed in the hospital setting. Identification of how conflict is handled in the hospital setting has significance for nursing's role in the hospital setting and the health care system. Based upon the findings of this study, the following recommendations are made for further study regarding conflict management. A correlational study should be conducted to investigate nurses' perceived power and use of conflict management strategies. A study should be conducted utilizing a random

sample from a larger hospital setting. A study should be conducted to investigate subjects' responses to specific conflict situations in which the other party is identified, such as nurse physician conflict.

Conflicts of Interest

The authors declare no conflict of interest.

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