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Research Article

ASSESS NURSES KNOWLEDGE, ATTITUDE AND PRACTICES REGARDING PHLEBITIS IN MEDICAL AND SURGICAL UNIT OF SERVICES HOSPITAL LAHORE.

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Abstract:

Background: *Quality of care is closely related to knowledge, attitude and practices of nurses. Phlebitis is commonly seen in medical and surgical unit of services hospital Lahore. Studies at different countries and different sectors done on nurses knowledge, attitude and practice related to phlebitis but no study was done in services hospital Lahore.*

Purpose of study: *Purpose of this research study was to assess nurse's knowledge, attitude and practices regarding phlebitis in medical and surgical unit of services hospital Lahore.*

Method: *A Descriptive, cross sectional study done. Population was staff nurses of medical and surgical unit of services hospital Lahore, sample size was 80 with 5% of confidence error and 95% confidence interval. Questioner with reticle scale strongly agree, agree, satisfied, disagree and strongly disagree were filled. Data was analyzed by using SPSS version 20 and results are shown in form of tables and bar charts.*

Results: *According to results 77.54% nurses were aware regarding phlebitis whereas 22.6% nurses were not aware about phlebitis. 90.64% nurses had favorable attitude whereas 9.36% nurses had unfavorable attitude. 48.8% nurses were performing standard practices while inserting, managing and removing cannula whereas 51.2% were not performing substandard practices in services hospital Lahore.*

Conclusion: *Most of nurses had knowledge about phlebitis and favorable attitude regarding care of intravenous cannula. At some area of questions lacking seen in knowledge among nurses. But still they didn't follow the standard guidelines and had poor practices regarding care of intravenous cannula instead of having knowledge about them. That's why rate of phlebitis is high nationally as well as internationally.*

Limitation: *First exposure to research individually so fear of errors.*

Key Words: *Knowledge, attitude, practice, phlebitis, nurse.*

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INTRODUCTION:

Peripheral intravenous cannula is routinely used in patients who are admitted in hospital. So there are many possibilities that the patients develop infection at the cannula site or into blood circulation and causes the serious risks for their lives. One of the most common complications of intravenous cannula is phlebitis. However, it is common but can be avoided if appropriate measures can be taken to handle the cannula with hygienic measures. According to Coomarasamy, Wint, and Saleh (2014) nearly 90% of hospital patients having cannula on their admission and develop complications one of which is phlebitis.

According to McCallum & Higgins (2011) Phlebitis is inflammation of vein generally its inner lining tunica intima, with redness, pain and swelling of affected area. There are many causes of phlebitis such as Mechanical (Cannula rubbing and irritating the vein), Chemical (medicine and hypertonic solutions irritate the vein) and infective (organisms such as staphylococcus aureus entering from skin to the vein).

According to Salguero-Oliveria, Parreira, and Veiga, (2012) rate of phlebitis is different in various locations, at international level rate is 3.7% to 67.24%. According to Dychter, Gold, Carson, and Haller (2012) phlebitis is very common problem seen in patients having intravenous cannula, It happened in 50% or 75% in patients with infective diseases.

Rate of phlebitis not only high at international level but it is higher in Pakistan as well. A study conducted in Pakistan showed the rate of phlebitis is 75% and it is most commonly seen in patients having the elements such as catheter of wide bore, material of catheter, time more than 72 hours, high concentrated medicines, solutions (hypertonic), electrolytes (potassium) and negligence of hygienic measures such as hand washing while managing the intravenous cannula. (Pasalioglu & Kaya, 2014).

It is observed that the patients in the medical and surgical unit of services hospital Lahore commonly develop phlebitis. Due to which they have established swelling and pain at effected site and pyrexia (high grade fever) due to infected cannula. It was observed that staff nurses have lack of knowledge about the leading causes of phlebitis and poor practice to handle the intravenous cannula. Studies on nurse's knowledge, attitude and practices related to phlebitis done in different sectors but no such study conducted in services hospital Lahore. According to Yogisutani (2010) study done in Bandung showed that rate of phlebitis is high, which is related to knowledge of

nurses, their attitude and practices related to care of intravenous cannula. Hospital administration trying to apply standard operating procedures for infusion of drugs, value of hand washing before and after the procedures and conducting the educational and training programs for staff nurses once a year.

METHODOLOGY:

Data was collected from Staff nurses in medical and surgical unit of services hospital Lahore. There were 4 units come under medical ward and 4 units come under surgical ward. Total Population of medical and surgical department was 100, Total 50 staff nurses were working in medical unit and 50 staff nurses were working in surgical unit of services hospital Lahore.

Inclusion criteria:

Diploma nurses were included in this study, due to shortage of staff students were working in the wards as assistant but data was not collected from them.

Exclusion Criteria:

Student/Junior nurses, doctors and other employs were excluded in this study.

Sampling Technique:

Simple Random sampling technique was used to collect data through questioner, in which staff nurses were randomly selected no any preplan was done for the selection of participants. The reason of this technique was that it could be easily conducted and is less biased.

Research Design:

Descriptive cross-sectional design was chosen to get result from data collection. Cross section in a way that it was conducted for short time and data was collected only at one interaction with participants. Descriptive study just give information about environment, situation and our variables there is no any intervention included. As through this research information was collected about variables knowledge, attitude and practice and phlebitis. In this study design result were shown in form of frequencies, tables and graphs. The answers displayed through % age, which could be easily understand by anyone.

Data Analysis:

Data analysis done by SPSS version 20.

Ethical Consideration:

Research permission was taken from Mr. M. Afzal Principal at University of Lahore in form of approval letter and further permission was taken by Dr. Omer Farooq Balooch, Medical Superintendent of services

hospital Lahore to conduct research study in medical and surgical unit of services hospital Lahore.

RESULTS:

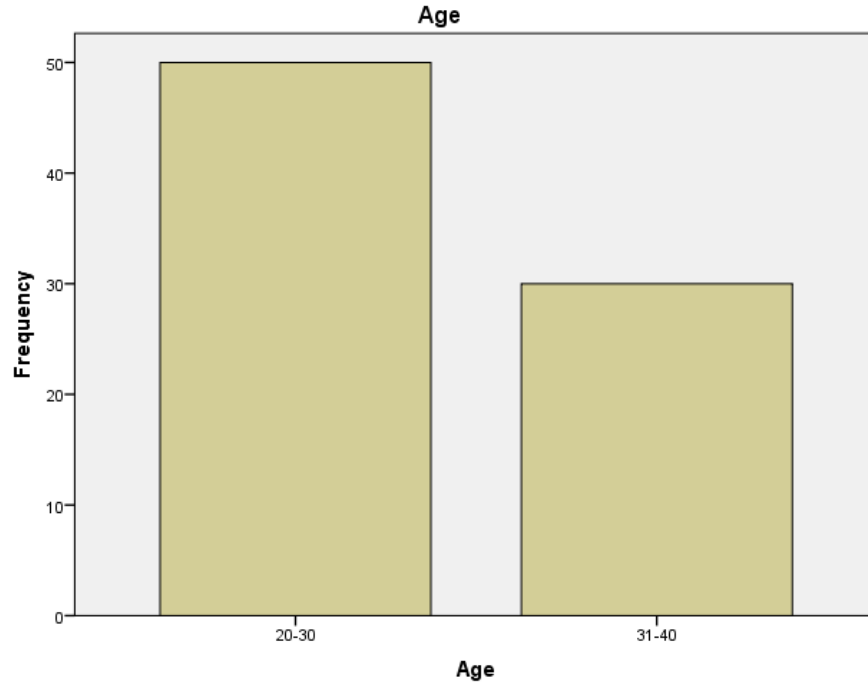


Figure 1:

Figure 1 showed the demographic data of age total responders were 100 from which 50 responders come into age group 20 to 30 year and 30 responders comes into age from 31 to 40 years. This shows that more responders of this study were till 30 year of age. The reason for choosing only female category was that all staff nurses in services hospital are females only 7 staff were males so the data only collected from females to get valid results.

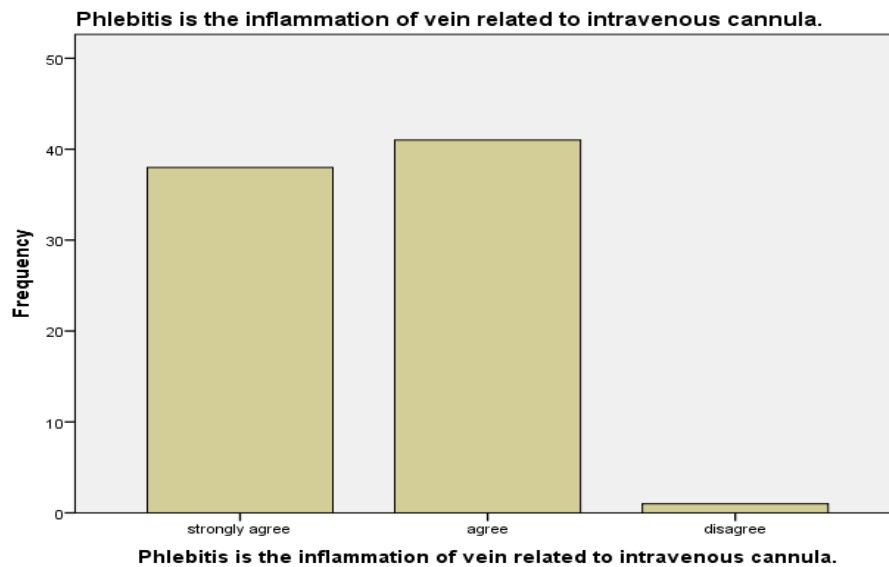


Figure 2

Figure 2 shows results of question 1 that n due to intravenous cannula 38 (47.5%) participants response strongly agree, 41 (51.3%) answered agree, only 1 (1.3%) said disagree about this question. So the result show that almost all nurses of services hospital Lahore know that phlebitis is inflammation of vein related to intravenous cannula.

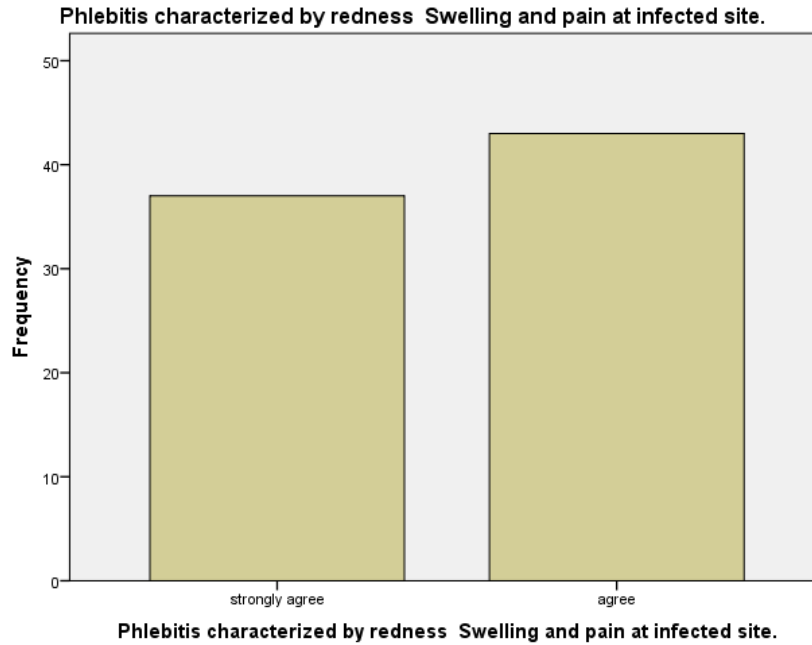


Figure 3

Figure 3 shows result about question 2 that Phlebitis characterized by redness, swelling and pain at infected site. 37 (46.3%) participants respond into strongly agree and 43(53.8%) said agree no one respond into disagree, it means staff nurses of services hospital Lahore are well known about signs of phlebitis.

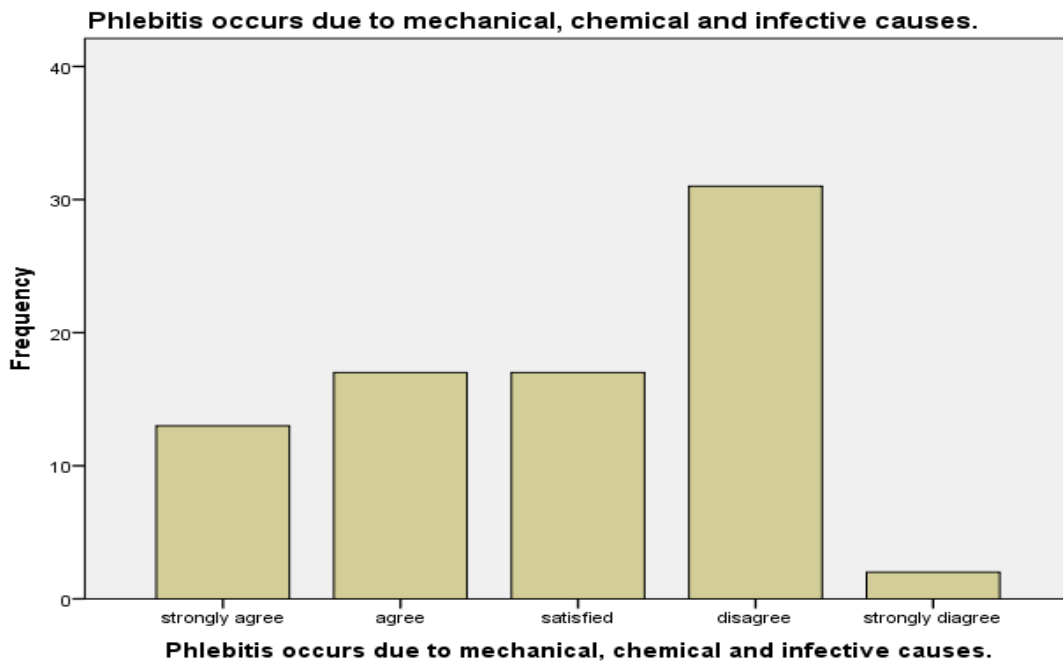


Figure 4

Third question was about the causes of phlebitis 13(16.3%) participants respond strongly agree, 17(21.3%) respond into agree and satisfied, 31(38.8%) disagree and 2(2.5%) strongly disagree. This result showed that a large number of nurses didn't know about the mechanical, chemical and infective causes of phlebitis.

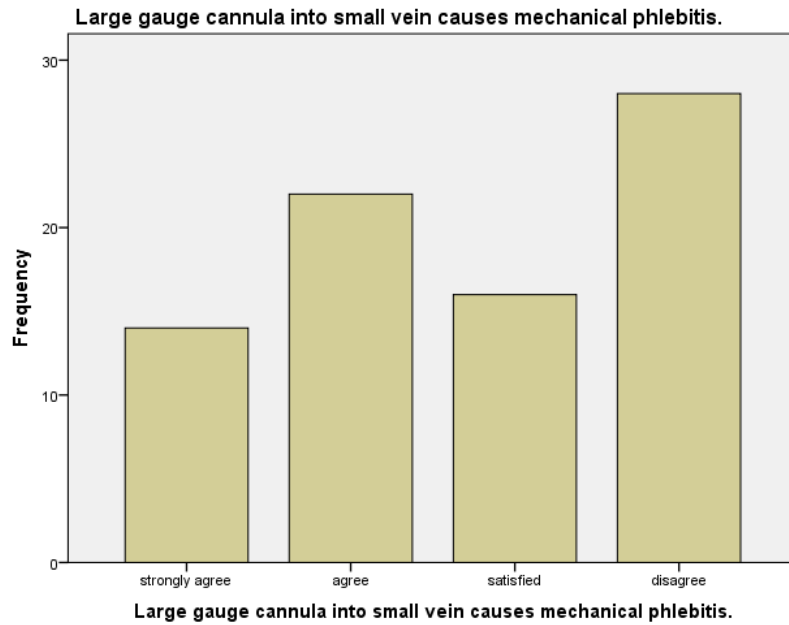


Figure 5

From the above figure, about question 4 large gauge cannula causes mechanical phlebitis 14(17.5%) participants respond strongly agree to the question, 22 (27.5) were agree, 16 (20%) were satisfied and 28 (35%) respond disagree. Through result we can say that some staff nurses know about this question but a large number of them didn't know.

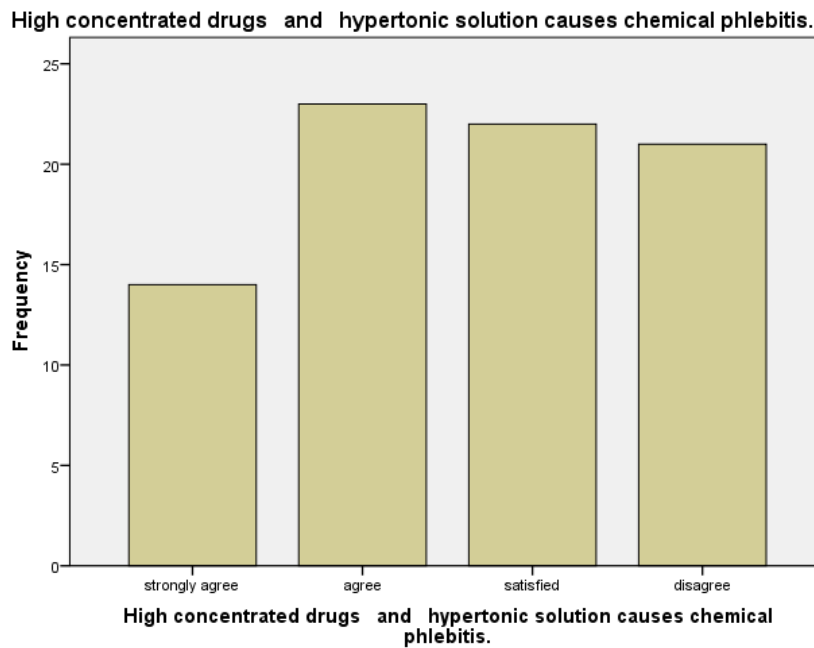


Figure 6

According to figure 6 which shows result for question 5 that high concentrated drugs and hypertonic solution causes chemical phlebitis 14 (17.5%) respond strongly agree, 23(28.8%) respond agree, 22 (27.5%) respond satisfied 21 (26.3%) respond disagree

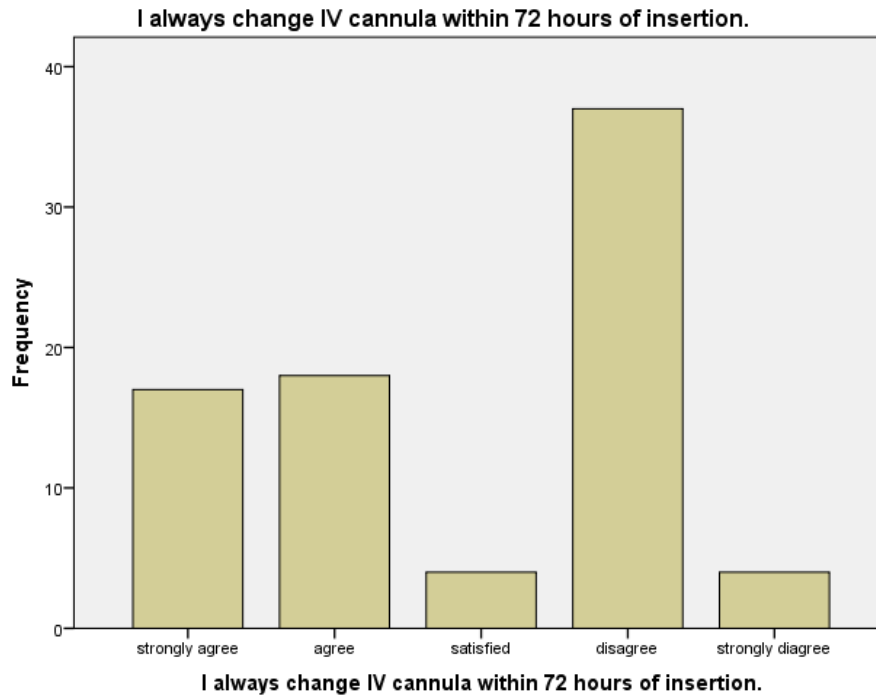
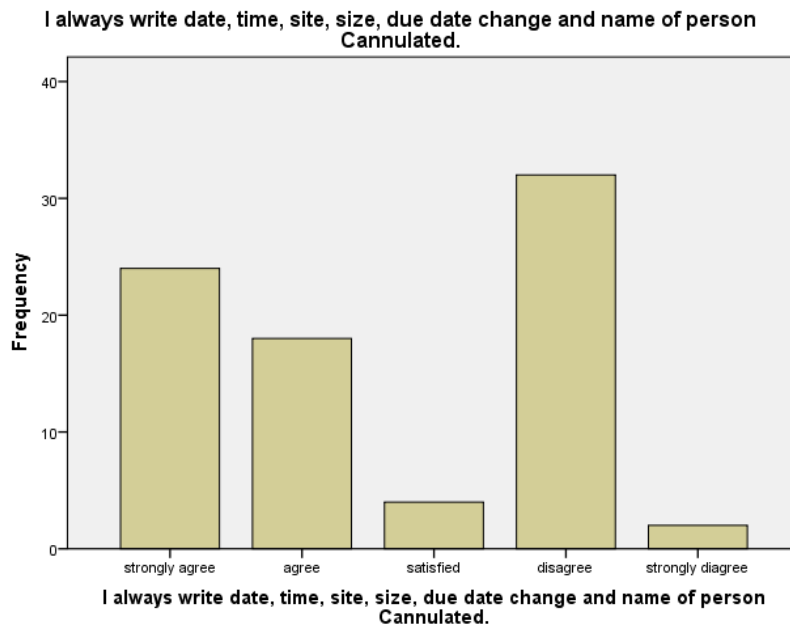


Figure 7

Figure 7 is about question 16 that I change cannula within 72 hours of insertion.17 (21.3%) participants respond strongly agree, 18(22.5%) respond agree, 4(5%) respond satisfied and 37(46.3%) respond disagree and 4(5%) respond strongly disagree. This result show that most of the nurses of services hospital Lahore didn't change cannula wit in 72 hours of insertion.



DISCUSSION:

Phlebitis is commonly used term among health care providers, so it is well understood when asked by anyone related to medical profession. Most of nurses in services hospital Lahore know about phlebitis that it is inflammation of vein related to intravenous cannula. This research showed that 47.5% response strongly agrees and 51.3% answered agree, only 1.3% said disagree about this question. According to Infusion nurses society (2011) nurses have knowledge that phlebitis is inflammation of vein which occur as adverse effect related to intravenous cannula.

Nurses knowledge is appreciable about question that close observation and monitoring of intravenous cannula site must be done in routine, 45% respond into strongly agree, 42% into agree, 10 % into satisfied and 2.5% respond into disagree. It means most of the nurses know that close and regular monitoring of intravenous cannula must be done. According to Arbaee (2013) a study conducted in Malaysia based on nurses knowledge and practice towards care and maintenance of intravenous cannula showed result that most nurses have knowledge about care of cannula. In his study it was noticed that 75.9% nurses have knowledge about care and maintain intravenous cannula and its regular monitoring and observation while 24.1% have no knowledge about it.

Nurses showed lack of knowledge about causes of phlebitis 16.3% respond strongly agree, 21.3% respond into agree and satisfied ,38.8% into disagree and 2.5% into strongly disagree. This result, showed that most of nurses didn't know about the mechanical, chemical and infectious causes. According to George and Muninarayanappa (2013) study result showed that most of nurses have no knowledge about the causes and standard care of Intravenous cannula. Cannulation is very common procedure; it must be done by trained person who is expert in this procedure. Nurses are at front to maintain cannula so they should know about the proper handling of intravenous cannula, adverse effects and their causes. Education through seminar can enhance their knowledge and can decrease phlebitis as well.

Nurse's attitude checked about the importance of hand washing regarding prevention from infection. Question was responded by 55.0% nurses into strongly agree, 38% into agree 1.3% into satisfied and 5% are disagree. So the data showed that nurses have favorable attitude regarding care of peripheral intravenous cannula and prevention from complications. According to Nightingale," The first priority of the hospital is that it should not give any

harm to the sick" Hands of health care providers are major source of source in prevention of nosocomial infection. So the nurses should be aware about the importance of hand washing and its proper methods so the rate of hospital acquired infection can be decreased. According to Nair, Hanumantappa, Hiremath, Siraj, and Raghunath (2014) hand washing is an important measure to prevent transmission of infection and reduce risk of health care related infections, study conducted in India showed result that 45 out of 46 nurses said that they knew about proper techniques of hand washing, this data showed that nurses know about the method of hand washing and its importance.

CONCLUSION:

Nurses have good knowledge about phlebitis and having favorable attitude, but still they are not performing standard practices in their clinical setup. At some area of questions there was found lacking in nurses knowledge. Nurses must have enough knowledge toward care of cannula and its adverse effects that are fatal for patient's life. One way to enhance their knowledge and improve their practices is conducting seminars, workshops and introduces new strategies by organization and concerned authorities. It will be proved beneficial not only for nurses but for patients as well and will resulting in enhance nurse's knowledge, improve their practices and prevent the patients from complications.

LIMITATIONS:

- It was my first exposure to conduct research individually, so there was fear and confusion.
- As the information regarding nurses knowledge, attitude and practices based on their responses that can be biased and interfere with results.

RECOMMENDATIONS:

- Seminars and workshops must be held to increase knowledge of nurses regarding care of intravenous cannula and related complications such as phlebitis.
- Training programs should be conducted by organization to improve nurse's practices regarding care of intravenous cannula.
- Supervisors should be visited to wards to observe whether nurses performing standard practices or not while inserting, managing and removing of intravenous cannula.
- Standard practices should be revised from time to time for the memorizing and effective practices by the health care providers.

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