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A descriptive study to find out the knowledge and practices of staff nurses regarding administration of IV therapy in selected hospital of Gwalior, M.P.

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Abstract

Introduction: Intravenous therapy is the parenteral administration of fluids, medications, nutritional support, blood products and the transfusion of blood. Fluids are delivered through a vascular access device, which is inserted into a peripheral or central vein.

Intravenous therapy may be used to correct electrolyte imbalances, to deliver medications, for blood transfusion or as fluid replacement to correct, for example, dehydration. Compared with other routes of administration, the intravenous route is the fastest way to deliver fluids and medications throughout the body. Some medications, as well as blood transfusions and lethal injections, can only be given intravenously.

Method Research Approach: Research design was descriptive research approach. The Conceptual Framework was based on Imogene M. King's Goal attainment theory. Setting of the Study study was conducted in the BIMR Hospital, Gwalior. Purposive sampling technique was used for 50 staff nurses of BIMR Hospital, Gwalior. The tool developed which includes

Description of the Tool

The tool comprised of three sections

Section - A: Consists of demographic characteristics of nurses seeking information such as age, gender, professional qualification, total clinical experience, availability of necessary equipment's for IV therapy, any in service educational programme attended, frequency of IV therapy per day.

Section- B: Consists of 30 items pertaining to knowledge regarding administration of IV therapy. It has six part mentioned below.

Part I: Consists of 3 items related to general introduction of IV therapy.

Part II: Consists of 5 items related IV site and IV device.

Part III: Consists of 6 items related to IV fluid and calculation.

Part IV: Consists of 5 items related to insertion of IV device.

Part V: Consists of 4 items related nursing care in IV therapy.

Part VI: Consists of 7 items related to complications of IV therapy and prevention complications.

Score: There were 30 items. Each item has four options with one most appropriate answer. The maximum score for correct response to each item was "one" and incorrect was "zero". Thus for 30 items these were 30 correct responses with 30 maximum obtainable scores.

Section-C: Consists of 24 items pertaining to practice of IV therapy.

Score: There were 24 items. Each item has two options such as yes, no. Statements carry scores as follows: Yes – 2 and No –1 mark.

Keywords: study, knowledge, practice, staff nurse, IV therapy

Introduction

Intravenous therapy is the parenteral administration of fluids, medications, nutritional support, blood products and the transfusion of blood. Fluids are delivered through a vascular access device, which is inserted into a peripheral or central vein.

Intravenous therapy may be used to correct electrolyte imbalances, to deliver medications, for blood transfusion or as fluid replacement to correct.

Research Design

The research design selected for the present study was non experimental design.

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Target Population

Staff nurses working in BIMR Hospital, Gwalior.

Accessible Population

50 Staff nurses working in BIMR Hospital, Gwalior

Sample and sample size

The sample of this study comprised of 50 staff nurses of BIMR Hospital, Gwalior.

Sampling Technique

Purposive sampling technique was used to draw the sample.

Criteria for Selection of Sample**Inclusion Criteria**

1. Staff nurses who are working in the BIMR hospital.
2. Staff nurses who are willing to participate in study.
3. Staff nurses who are available at the time of data collection.
4. Staff nurses who are ANM, GNM, B.Sc., PB. B.Sc.

Exclusion Criteria

1. Staff nurses who are not available at the time of study.
2. Staff nurses who holding M .Sc. nursing degree.

Development of Tool

A structured knowledge questionnaire was prepared to assess the knowledge of staff nurses regarding administration of IV therapy. An observation check list was prepared to assess the practice of staff nurses regarding administration of IV therapy.

The following steps were carried out in preparing the tool.

1. Literature review.
2. Preparation of blue print.
3. Consultation with guide, co-guide, subject experts.
4. Content validity
5. Reliability

Description of the Tool

The tool comprised of three sections

Section - A

Consists of demographic characteristics of nurses seeking information such as age, gender, professional qualification, total clinical experience, availability of necessary equipment's for IV therapy , any in-service educational programme attended , frequency of IV therapy per day.

Section- B

Consists of 30 items pertaining to knowledge regarding administration of IV therapy.

Section-C

Consists of 24 items pertaining to practice of IV therapy.

Pilot study

Pilot study was conducted in KM & KDG Hospital, Gwalior. The investigator used purposive sampling technique to select the samples from the total population. 5 samples were selected for the study.

Findings of the Study

The major findings of the study are

1. Findings related to demographic characteristics.
2. Findings related to knowledge.

3. Findings related to practice.
4. Findings Related to correlation between knowledge and practices
5. Findings Related to association between knowledge and their demographic variables

Findings Related to Demographic Characteristics

- Majority of staff nurses (56%) were in the age group of 31 to 40 years.
- Majority of the staff nurses were female (79%).
- Majority of the staff nurses were B.Sc. nursing (44%).
- Majority of the staff nurses (50%) has clinical experience between 6-10 years clinical experience. literates among them 34% are having primary education.
- Majority of them (96%) are found that necessary equipment's for administration of IV therapy available in the ward.
- Majority of the staff nurses (56%) are attended in service educational programme related IV therapy.
- Majority of the staff nurses (38%) are administering IV therapy >20 times in day.

Findings Related to Knowledge

- Overall knowledge mean score was (14.16%) with (3.60) standard deviation.
- In the area of General introduction of IV therapy, mean score of knowledge score was (44) with (6.92) standard deviation.
- In the area of IV site and IV device, mean score of knowledge score was (27.4) with (11.5) standard deviation.
- In the area of IV fluids and fluid calculation, mean score of knowledge score was (24.16) with (8.47) standard deviation.
- In the area of IV device insertion, mean score of knowledge score was (26.60) with (3.36) standard deviation.
- In the area of IV device insertion, mean score of knowledge score was (16.5) with (1.73) standard deviation.
- In the area of complication and prevention of complication, score of knowledge mean score was (16.42) with (8.84) standard deviation.

Findings Related to practice

The overall mean practice score was (39.84) with (1.40) standard deviation.

Findings Related to correlation between knowledge and practices

There is mild positive correlation found between knowledge and practice of staff nurses.

Findings Related to association between knowledge and their demographic variables

- There is no significant association between age and knowledge
- There is significant association between gender and knowledge.
- There is no significant association between professional qualification and knowledge.
- There is no significant association between total clinical experience and knowledge.

- There is no significant association between availability of IV therapy equipment's and knowledge.
- There is no significant association between attended in service educational programme knowledge.
- There is no significant association between frequency of administering IV therapy per day and knowledge.

Conclusion

Findings related to Demographic Characteristics

Majority of staff nurses (56%) were in the age group of 31 to 40 years, (79%) of the staff nurses were female and (44%) of them were B.Sc. nursing, (50%) of them had 6-10 years clinical experience. (96%) of staff nurses found that all necessary equipment's available in ward for IV therapy. (56%) of the staff nurses attended in service educational programme related IV therapy and (38%) of them are administering IV therapy >20 times in day.

Findings Related to Knowledge staff nurses

Overall knowledge mean score was (14.16%) with (3.60) standard deviations.

Findings Related to practices of staff nurses

Practice means score was (38.84%) with (1.40) standard deviations.

Findings related to correlation between knowledge and practice of staff nurses.

There is mild positive correlation founded between knowledge and practice of Staff nurses.

Findings related to association between knowledge and selected demographic characteristics of staff nurses

There was significant association with demographic variable gender and no Significant association with other demographic variables such as age, professional qualification, total clinical experience, equipment available in ward, attended any in service education programme.

Recommendation

On the basis of the findings of the study following recommendations have been made:

- A similar study can be replicated on a large sample to generate the findings.
- A comparative study can be done between different hospitals.
- An experimental study can be undertaken with control group for effective comparison.
- A study can be conducted by including additional demographic variables.
- A comparative study can be conducted between nursing students of different batch.

Limitation of the Study

- The study was limited to BIMR Hospital, Gwalior.
- Small number of subjects (50) restricted generalisation of the result.
- Sample was selected from only one hospital of Gwalior; hence the generalisation can be made only for sample studied.

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