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Assessment of the Efficacy of Demonstration Techniques in Enhancing ASHAs' Knowledge and Practice of First Aid Management for Dog Bites and Minor Injuries in Rural Bhopal

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Abstract

Background: *The individuals administering first aid, commonly referred to as first aiders, assume responsibility for the entire situation, including the injured individual and the nature of the injury or illness. They possess the understanding of what actions to avoid, in addition to what actions to take, thus preventing common errors often made by untrained individuals despite good intentions. Furthermore, they recognize that their knowledge and proficiency in first aid can significantly impact the outcome, potentially determining the contrast between life and death, temporary and permanent disability, and swift recovery versus prolonged hospitalization.* ***Objectives of the Study:*** *(i) To evaluate the initial knowledge of accredited social health activist (ASHA) workers concerning the first aid management of dog bites and minor injuries due to falls. (ii) To determine the impact of demonstration sessions on enhancing the knowledge of ASHA workers regarding the first aid management of dog bites and minor injuries from falls. (iii) To compare the knowledge scores of ASHA workers before and after the demonstration sessions. (iv) To investigate the relationship between the pre-test and post-test knowledge scores and selected variables.* ***Research Hypotheses:*** H_1***:*** *There is expected to be a notable rise in post-test knowledge scores concerning first aid for minor injuries among ASHA workers in a chosen rural region.* H_2***:*** *A notable correlation is anticipated between demographic variables and post-test knowledge scores concerning first aid for minor injuries among ASHA workers in a specified rural locality.* ***Method of Data Analysis:*** *Data were analyzed according to the objectives of the study and by using appropriate statistical techniques and are presented in the form of tables, graphs, and diagrams. Descriptive (mean, standard deviation, frequencies, percentage) and inferential (unpaired t-test, chi-square test) statistical methods were used to find significance in fetal outcome in normal and anemic mothers. The Karl Pearson correlation coefficient was employed to determine the correlation between maternal anemia and fetal outcomes.* ***Results:*** *Analysis involves a thorough investigation of the components and structure of something. In research, analysis entails calculating specific measures and identifying patterns of relationships among groups of data. This article deals with the analysis and interpretation data obtained from 60 ASHAs with the help of self-administered structured questionnaire to assess knowledge and practice regarding first aid for minor injuries.* ***Conclusion:*** *This article outlines the conclusions, implications, limitations, suggestions, scope, and recommendations of the study. The main objective of the study was to evaluate the knowledge of ASHA workers in a chosen rural area of Bhopal.*

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Keywords: First aid, falling, minor injuries, demonstration, ASHA

INTRODUCTION

First aid encompasses immediate assistance provided to an individual who has encountered an injury or sudden illness. This assistance may involve self-help or home care if professional medical aid is unavailable or delayed. Additionally, it entails offering comforting words, displaying a willingness to assist, and instilling confidence through the demonstration of competence. According to the 2010 St John's guidelines, first aid extends beyond aiding accident victims on the roadside; it also involves comforting the injured and potentially life-saving actions. For certain self-limiting illnesses or minor injuries, immediate medical attention may not be necessary if proper first aid is administered. The primary goals of first aid are to preserve and safeguard life, prevent further harm or deterioration of health, and contribute to the individual's recovery. The universally recognized symbol for first aid is a white cross displayed on a green background [1, 2].

NEED FOR THE STUDY

According to the World Health Organization's 2011 data, approximately 950,000 children worldwide succumb to injuries annually. The National Crime Records Bureau indicates that around 15% to 20% of fatal injuries involve children, with approximately 30 to 40 children requiring hospitalization for every recorded death. In 2009, there were approximately 22,766 fatalities resulting from childhood injuries, accounting for 8.2% of total deaths, while 20% to 25% of children required hospitalization due to injuries.

An experimental investigation was undertaken to evaluate the knowledge and application of first aid among primary school teachers. The results revealed a notable increase in both the knowledge and practical skills of primary school teachers in managing selected minor injuries, as evidenced by their post-test scores compared to their pre-test scores. Additionally, studies conducted in various regions worldwide indicate a consensus among teachers regarding the common occurrence of epistaxis, dental injuries, and minor abrasions resulting from sports or play activities among primary school children [3–5].

OBJECTIVES

- To evaluate the initial understanding of Accredited Social Health Activist (ASHA) members regarding the first aid procedures for dog bites and minor injuries caused by falls.
- To determine the impact of instructional demonstrations on ASHA members' proficiency in administering first aid for dog bites and minor injuries from falls.
- To compare the levels of knowledge before and after the instructional demonstrations.
- To investigate any correlation between the pre-test and post-test knowledge scores and their respective variables.

HYPOTHESES

- ***H_1:*** There will be a notable rise in post-test knowledge scores in comparison to pre-test scores concerning first aid for minor injuries among ASHA members in a chosen rural locality.
- ***H_2:*** There will be a substantial correlation between demographic variables and the post-test knowledge scores concerning first aid for minor injuries among ASHA members in the selected rural area.

ASSUMPTIONS

The study assumes that

1. ASHA members may possess certain knowledge regarding first aid for minor injuries.
2. The demonstration may enhance ASHA members' understanding of first aid for minor injuries.

DELIMITATION

The study is delimited to

- 60 ASHA members employed in a designated rural region.
- Those present during the data gathering period.
- Those who expressed readiness to take part in the research.

REVIEW OF LITERATURE

Review of Literature Related to Giving Awareness Regarding First Aid Management Program to School Children

In a cross-sectional interventional study conducted in India in 2010, the aim was to develop a first aid health kit for schools, equipped with appropriate drugs and equipment, and to enhance school health services by involving teachers and providing them with training to respond effectively during school hours. The study was conducted across 100 government schools in Chandigarh and the Union Territory of India, encompassing a total of 90,839 children. Results indicated that only 6% of schools had health care or first aid kits before the intervention, but this number increased substantially to 87% post-intervention. The availability of basic health equipment in schools also showed variable improvement during the post-intervention phase. Furthermore, findings revealed that 65% of schools had mechanisms in place to refer sick children to government health centers, and 16% to private clinics. Initially, 65% of teacher in-charges responsible for health and medicine were uncertain about taking appropriate action or decisions, but this uncertainty decreased to none post-intervention. Additionally, the availability of common drugs like paracetamol increased from 16% before intervention to 71.7% afterwards. Moreover, teachers' knowledge about common drugs used for various ailments like fever increased from 71% to 86.9%. The study concluded that raising awareness among school administrators and educators about the importance of school health resulted in significant enhancements, including the development of health kits and the strengthening of school health services [6–9].

RESEARCH METHODOLOGY

Research methodology pertains to the methods employed to organize a study and to collect and analyze data systematically.

Research Approach

Considering the chosen issue and the intended goals, a quantitative evaluative research approach was deemed suitable for the current investigation.

Research Design

A research design serves as a framework for executing a study, aimed at enhancing control over variables that might affect the accuracy of results. Considering the identified issue and the desired outcomes, a quantitative evaluative research approach was deemed suitable for this study. Evaluative research involves assessing the effectiveness of a particular program, practice, procedure, or policy in practical settings.

Variables Under Study

The variables for the present study are:

- *Independent variable*
  - Demonstration on the first aid management of dog bites and minor injuries due to fall among ASHAs.
- *Dependent variable*
  - Knowledge scores measured by ASHAs' knowledge regarding first aid management of dog bites and minor injuries due to fall among ASHAs.

Research Setting

This pertains to the locality where the research was carried out. The current study took place in a designated rural area in Bhopal. The selection of this setting was based on its suitability for conducting the research, accessibility to the samples, and the researcher's familiarity with the environment.

Population

This refers to the entire group of ASHA workers included in a study. The target population for this research comprised ASHA workers employed in a specific rural area of Bhopal.

Sample

A sample refers to a portion of the population chosen to partake in a research investigation. In this study, the sample was comprised of ASHA workers employed in a designated rural area of Bhopal.

Sample Size and Sampling Technique

The study involved a sample size of 60 ASHA workers employed in a specific rural area of Bhopal. Non-probability purposive sampling was utilized as the sampling technique.

Criteria for Selection of Sample

Sample selection criteria were determined by factors such as budget, logistical considerations, research design, and participants' capability to engage in the study. Two sets of criteria, namely inclusion and exclusion criteria, were established for participant selection.

DESCRIPTION AND DEVELOPMENT OF THE TOOL

- *Section I:* This section has demographic data on eight items namely, age, religion, education income, marital status, type of family, year of experience, and source of information.
- *Section II:* This section contains a structured questionnaire on knowledge regarding the first aid management of dog bites and minor injuries due to fall among ASHAs.
- *Section III:* This section contains observation checklists related to dog bites and falling. It consists of introduction, definition, purpose of first aid, principle, first aid kit, common injuries, use of dressing and bandage, and prevention of minor injuries.

PILOT STUDY

The pilot study was done on 6 ASHAs working community health center Kolar Road, Bhopal. The pre-test was conducted on July 15, 2018 followed by the administration of planned teaching program on the same day. Post-test was administered on August 9, 2018. The findings of the pilot study revealed that there is a mean increase of 20 ± 4 knowledge scores after the administration of demonstration on first aid for minor injuries. Item analysis was done, and questions were modified as per difficulty and discriminative index values [10–13]. The pilot study revealed no significant shortcomings in the tool devised by the researcher. Additionally, it demonstrated the effectiveness of the demonstration and confirmed the feasibility of the final study.

PROCEDURE FOR DATA COLLECTION

Formal approval to conduct the study was secured from the Chief Medical Officer (CMO) of the designated nursing college in Bhopal. A schedule for data collection was meticulously planned, ensuring each participant's cooperation and guaranteeing the confidentiality of their responses. On average, data collection sessions lasted around 40 minutes.

Pre-test

The structured knowledge questionnaire was employed to evaluate the understanding of ASHA regarding first aid for minor injuries. The questionnaire consisted of 20 items to assess knowledge, along with a 10-step checklist for dog bites and a six-step checklist for falls. Each correct response was assigned a score of '1', while incorrect answers received a score of '0'.

STRUCTURED TEACHING PROGRAM

Demonstration

Training sessions were conducted to demonstrate the proper procedures for administering first aid in cases of minor injuries, specifically focusing on the management of dog bites and injuries from falls, among ASHAs.

Post-test

The post-test was administered on July 29, 2018, to evaluate the acquired knowledge. Participants received a score of '1' for each correct response and '0' for each incorrect response.

DATA ANALYSIS PLAN

The data collected were analyzed according to the study objectives, employing both descriptive and inferential statistical methods. A data analysis plan was developed in consultation with experts in both statistics and nursing. Inferential statistics were utilized to make the following determinations:

- Paired t-tests and Wilcoxon test were employed to assess the effectiveness of the structured teaching program and to test hypotheses.
- Chi-square test was utilized to identify any associations between knowledge and demographic variables.

ANALYSIS AND INTERPRETATION OF DATA

Section I: Distribution of Selected Demographic Variables

Table 1 and Figure 1 depict that 23.33% of the subjects were from the age group 20 to 24 years, 31.66% were from 25 to 29 years, 30% were from 30 to 34 years, and 15% were from 35 years and older.

Table 2 and Figure 2 depict that 46.33% of the subjects were Hindus, 26.66% were Muslim, and 26.66% were Christian, and 0% were from other religions.

Table 3 and Figure 3 depict that 48.33% of the subjects had completed 10th standard, 33.33% had completed 12th standard, and 18.34% were graduates.

Table 4 and Figure 4 depict that 38.33% of the subjects were having salary of INR 500–1000, 26.66% were having salary of INR 1001–1500, 18.33% were having salary from INR 1501 to 2000, and 16.68% were having salary above from INR 2001.

Table 5 and Figure 5 depict that 43.30% of the subjects were married, 31.60% were unmarried, 13.30% were separated, and 11.60% were widowed.

Table 6 and Figure 6 depict that 33.3% of the subjects were from nuclear family, 38.3% were from joint family, and 28.4%were from extended family.

Table 1. Distribution of subjects according to age.

S.N.	Age (years)	Frequency (*F*)	Percentage (%)
1.	20–24	14	23.33%
2.	25–29	19	31.66%
3.	30–31	18	30%
4.	More than 35	09	15%
	Total	60	100%

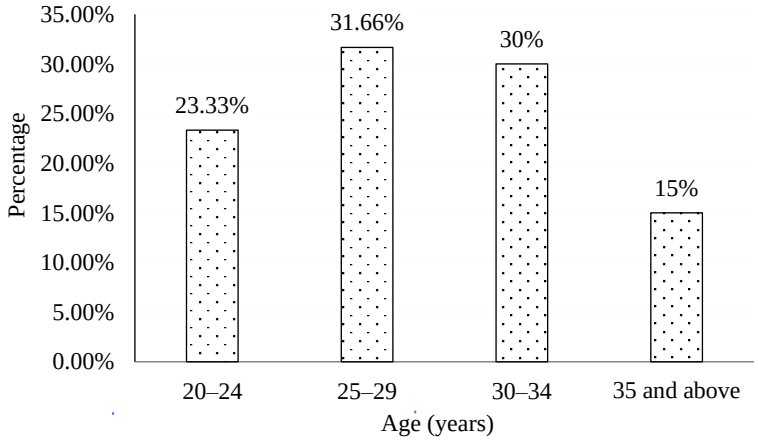

Figure 1. Graph showing distribution of subject according to age.

Table 2. Distribution of subjection according to religion.

S.N.	Religion	Frequency (*F*)	Percentage (%)
1.	Hindu	28	46.66%
2.	Muslim	16	26.66%
3.	Christian	16	26.66%
4.	Other	0	0%
	Total	60	100%

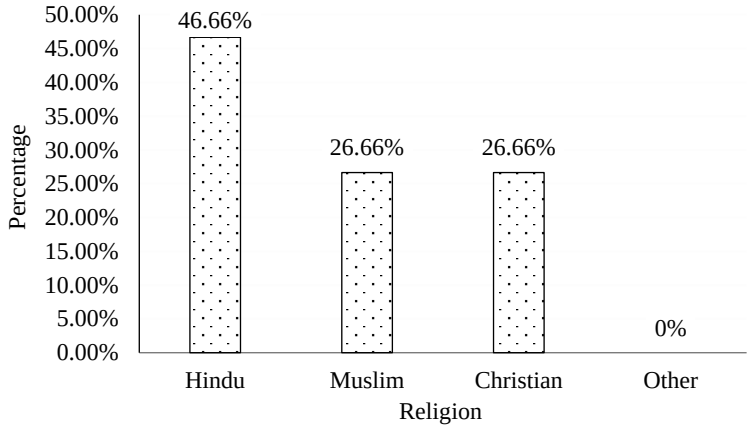

Figure 2. Graph showing distribution of subjection according to religion.

Table 3. Distribution of subjection according to qualification.

S.N.	Educational qualification	Frequency (*F*)	Percentage (%)
1.	10th standard	29	48.33%
2.	12th standard	20	33.33%
3.	Graduate	11	18.34%
	Total	60	100%

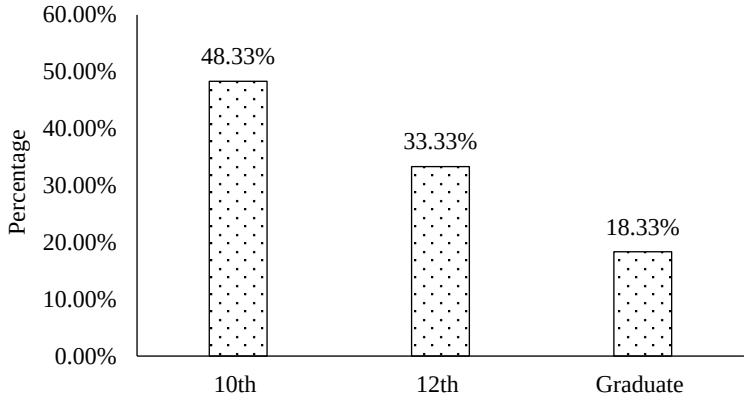

Figure 3. Graph showing distribution of subjection according to educational qualification.

Table 4. Distribution of subjection according to monthly income.

S.N.	Income (INR)	Frequency (*F*)	Percentage (%)
1.	500–1000	23	38.33%
2.	1001–1500	16	26.66%
3.	1501–2000	11	18.33%
4.	2001 and above	10	16.66%
	Total	60	100%

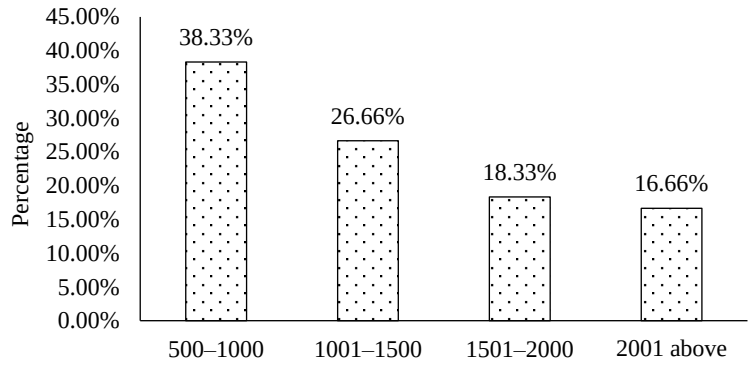

Figure 4. Graph showing distribution of subjection according to monthly income.

Table 5. Distribution of subjects according to marital status.

S.N.	Marital status	Frequency (*F*)	Percentage (%)
1.	Married	26	43.3%
2.	Unmarried	19	31.6%
3.	Separated	8	13.3%
4.	Widowed	7	11.6%
	Total	60	100%

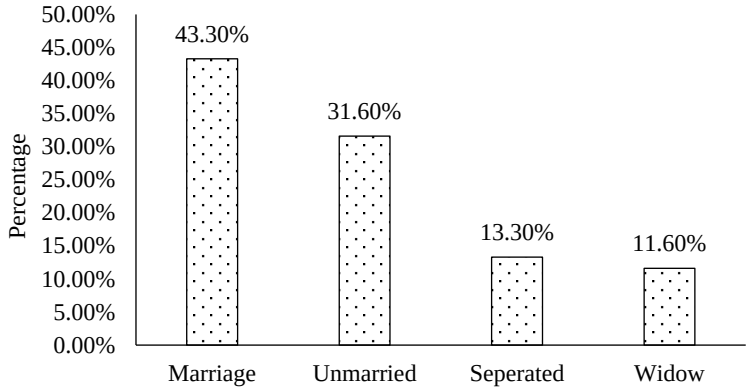

Figure 5. Graph showing distribution of subjects according to marital status.

Table 6. Distribution of subjects according to type of family.

S.N.	Type of family	Frequency (*F*)	Percentage (%)
1.	Nuclear family	20	33.3%
2.	Joint family	23	38.3%
3.	Extended family	17	28.4%
	Total	60	100%

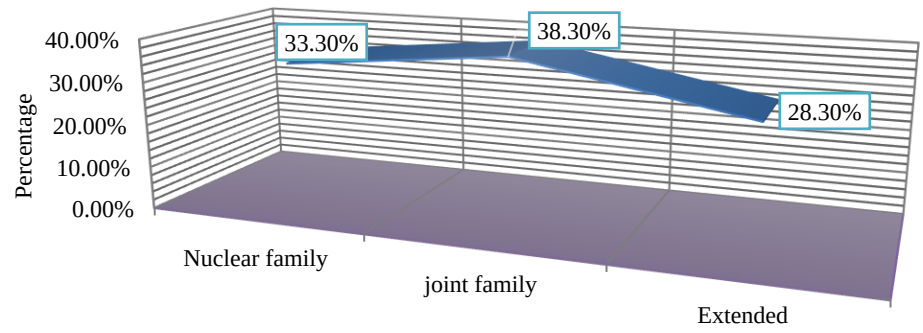

Figure 6. Graph showing distribution of subjects according to type of family.

Table 7 and Figure 7 depicts that 33.60% of the subjects had experience from 1 to 2 years, 30% had experience from 3 to 4 years, 16.60% had experience from 5 to 6 years, and 16.89% had experience of 7 to 8 years.

Table 8 and Figure 8 depicts that 5% of the subjects were trained, 30% were self-learnt, 43.30% gained information from mass media and health workers, and 11.70% had no knowledge.

Table 7. Distribution of subjection according to years of experience.

S.N.	Years of experience	Frequency (*F*)	Percentage (%)
1.	1–2 years	22	36.6%
2.	3–4 years	18	30%
3.	5–6 years	10	16.6%
4.	7–8 years	10	16.8%
	Total	60	100%

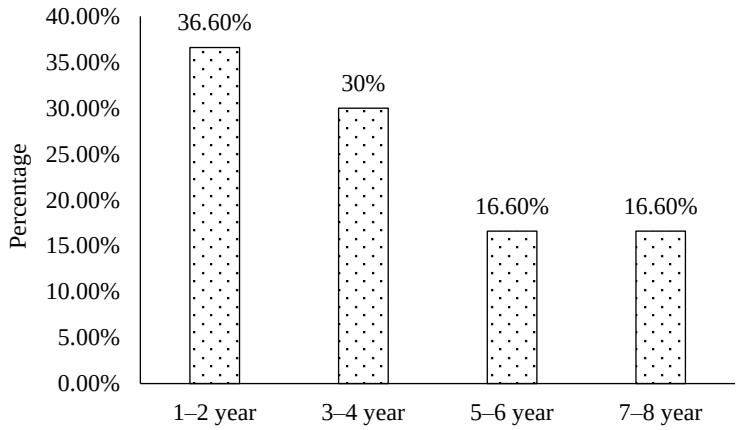

Figure 7. Graph showing distribution of subjects according to years of experience.

Table 8. Distribution of subjection according to source of information.

S.N.	Source of information	Frequency (*F*)	Percentage (%)
1.	Training	9	15%
2.	Self-learning	18	30%
3.	Mass media	26	43.3%
4.	Health worker	7	11.70%
	Total	60	100%

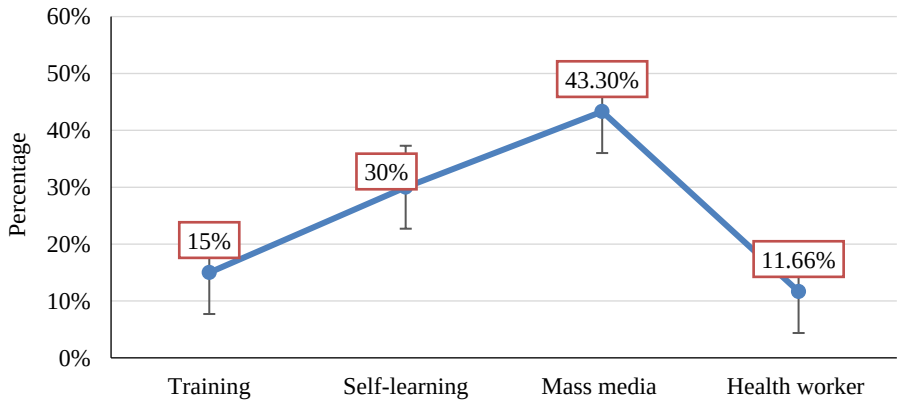

Figure 8. Graph showing distribution of subjects according to source of information.

Section II: Assessment of the Effectiveness of Knowledge Score of ASHA Regarding First Aid Management in Pre-test and Post-test Knowledge

Table 9 and Figure 9 depict the assessment of the effectiveness of knowledge scores through pre and post-tests, which can be a valuable measure of learning outcomes.

Section III

Table 10 and Figure 10 depict the assessment of the effectiveness of a practice-based test, specifically focused on dog bite scenarios, through pre- and post-tests.

Table 11 and Figure 11 depict the assessment of the effectiveness of a practice-based test focusing on falling scenarios through pre- and post-tests.

Section IV

Table 12 shows that comparison of knowledge and practice score were the relation between the knowledge and practice.

Section V: Finding Out the Association Between the Pre-test Knowledge Score Regarding First Aid Management and Selected Demographic Variable

Table 13 depicts the association between the knowledge of ASHA regarding first aid management of dog bite and minor injuries due to fall and selected demographic variables.

Table 9. Assessment of the effectiveness of knowledge score during pre- and post-tests (n = 60).

Area	Poor	Average	Good	Mean	Mean%	SD
Pre-test	10 (16.66%)	50 (83.33%)	0	7.86	13.1%	2.013
Post-test	0	1 (1.66%)	59 (98.33%)	2.46	4.1%	1.38
Degrees of freedom, *df*	59					
Paired 't' test	2.428					
Level of significance	Table value 3.324 Significant					

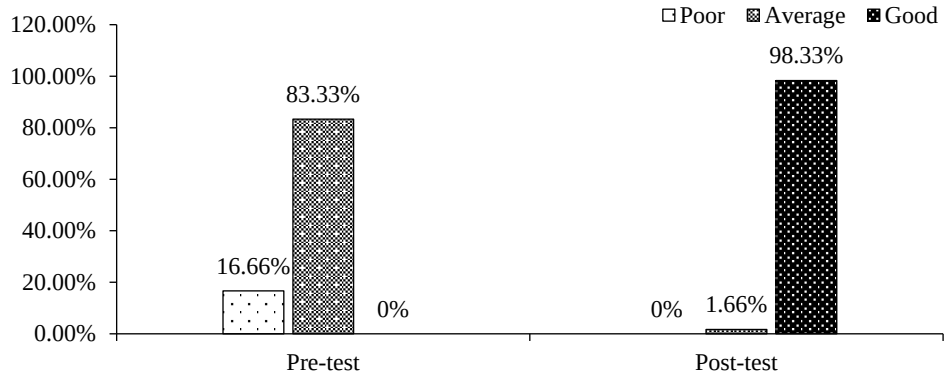

Figure 9. Graph showing assessment of the effectiveness of knowledge score during pre- and post-tests.

Table 10. Assessment of the effectiveness of practice (dog bite) score during pre- and post-tests (n = 60).

Area	Poor	Average	Good	Mean	Mean%	SD
Pre-test	59 (98.33%)	1 (1.66%)	0	1.68	2.8%	0.51
Post-test	1 (1.66%)	11 (18.33%)	48 (80%)	8.78	14.63%	0.71
Degrees of freedom, *df*	59					
Paired 't' test	3.98					
Level of significance	Table value 3.324 (P > 0.001) significant					

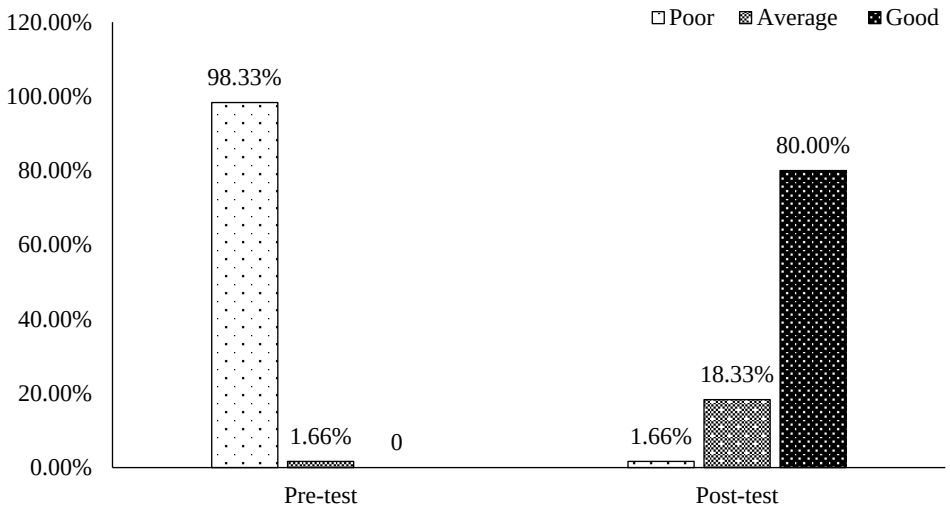

Figure 10. Graph showing assessment of the effectiveness of practice (dog bite) score during pre- and post-test.

Table 11. Assessment of the effectiveness of practice (falling) score during pre- and post-tests (n = 60).

Area	Poor	Average	Good	Mean	Mean%	SD
Pre-test	56 (93.33%)	4 (6.66%)	0	1.41	1.41%	0.69
Post-test	0	4 (6.66%)	56 (93.33%)	5.33	8.88%	0.93
Degrees of freedom, *df*	59					
Paired 't' test	3.460					
Level of significance	Table value 3.324 (P > 0.001) significant					

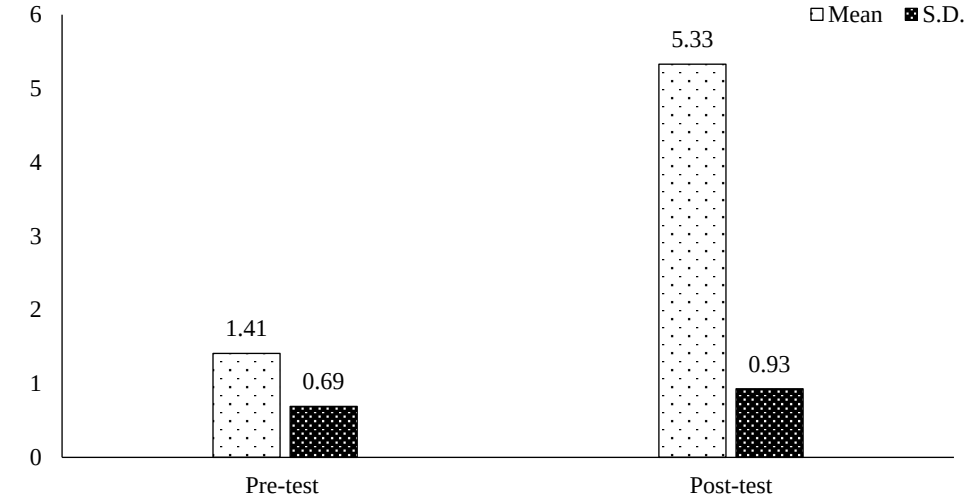

Figure 11. Graph showing assessment of the effectiveness of practice (falling) score during pre- and post-test.

Section VI: Finding Out the Association Between the Practice Score Regarding First Aid Management and Selected Demographic Variable

Table 14 shows the association between the practices score (dog bite) of ASHA regarding first aid management selected demographic variables. It shows that there is significant association between education, so hypothesis (H2) is accepted only with this variable and no association between religion, type of family, education, marital status, year of experience, source of information and residence.

Table 12. Comparison of knowledge and practice score of ASHA regarding first aid management.

Area		Pre-test	Post-test	Degrees of freedom, *df*	Paired "t" test	Level of significance
Knowledge score	Poor	10 (16.66%)	0	59	2.428	Table value 3.324 ($P > 0.001$) not significant
	Average	50	1			
	Good	0	59 (98.3%)			
	Mean	7.86	2.46			
	Mean %	13.10%	4.10%			
	SD	2.013	1.38			
Practice score (dog bite)	Poor	59 (98.33%)	0	59	3.982	Table value 3.324 ($P > 0.001$ significant
	Average	1	0			
	Good	0	60			
	Mean	9.05	1.68			
	Mean %	15.08%	2.80%			
	SD	0.71	0.51			
Practice score (falling)	Poor	56 (93.33%)	0	59	3.46	Table value 3.324 ($P > 0.001$) significant
	Average	4	4			
	Good	0	56			
	Mean	1.41	5.33			
	Mean%	1.41%	8.88%			
	SD	0.69	0.93			

Table 13. Association between the knowledge of ASHA regarding first aid management of dog bite and minor injuries due to fall and selected demographic variables.

Demographic variables	Poor	Average	*df*	X^2 Value	Table Value	Level of significance
Age in years						
20–24 years	10	47	3	7.194	7.81	Significant at 0.05 level
25–29 years	1	1				
30–34 years	0	1				
More than 35 years	0	0				
Religion						
Hindu	7	21	3	2.853	7.81	Not significant at 0.05 level
Muslim	2	14				
Christian	1	2				
Other	0	0				
Education						
10th standard	6	23	2	0.992	5.99	Not significant
12th standard	2	18				
Graduate	2	9				
Monthly income						
500–1000	3	20	3	1.34	7.81	Not significant at 0.05 level
1001–1500	3	13				
1501–2000	2	9				
2001 and above	3	7				
Marital status						
Married	4	22	3	3.176	7.81	Not significant at 0.05 level
Unmarried	5	14				
Separated	0	8				
Widowed	2	5				
Type of family						
Nuclear	8	15	2	8.4058	5.99	Significant at 0.05 level
Joint	1	21				
Extended	2	13				

Years of experience						
1–2 years	5	17	3	3.788	7.81	Not Significant at 0.05 level
3–4 years	1	17				
5–6 years	3	7				
7–8 years	1	9				
Source of information						
Training program	0	9	3	3.333	7.81	Not Significant at 0.05 level
Self-learning	4	14				
Mass media	4	22				
Health worker	2	5				

Table 14. Association between the practices score (dog bite) of ASHA regarding first aid management and selected demographic variables.

Demographic variables	**Poor**	**Average**	***df***	**X^2 value**	**Table value**	**Level of significance**
Age in years						
20–24 years	56	1	3	0.309	7.81	Not significant at 0.05 level
25–29 years	2	0				
30–34 years	1	0				
More than 35 years	0	0				
Religion						
Hindu	28	0	3	2.795	7.81	Not significant at 0.05 level
Muslim	15	1				
Christian	16	0				
Other	0	0				
Education						
10th standard	29	0	2	6.165	5.99	Significant at the 0.05 level
Graduate	10	1				
Monthly income						
500–1000	23	0	3	5.3201	7.81	Not significant at 0.05 level
1001–1500	16	0				
1501–2000	11	0				
2001 and above	9	1				
Marital status						
Married	26	0	3	4.1252	7.81	Not significant at 0.05 level
Unmarried	18	1				
Separated	8	0				
Widowed	7	0				
Type of family						
Nuclear	20	0	2	1.662	5.99	Not significant at 0.05 level
Joint	22	1				
Extended	17	0				
Years of experience						
1–2 years	22	0	3	2.3511	7.81	Not significant at 0.05 level
3–4 years	17	1				
5–6 years	10	0				
7–8 years	10	0				
Source of information						
Training program	9	0	3	1.3295	7.81	Not significant at 0.05 level
Self-learning	18	0				
Mass media	25	1				
Health worker	7	0				

Table 15. Association between the practices (falling) of ASHA regarding first aid management and selected demographic variables.

Demographic variables	Poor	Average	*df*	X^2 value	Table value	Level of significance
Age in years						
20–24 years	53	4	3	2.087	7.81	Not significant at 0.05 level
25–29 years	2	0				
30–34 years	1	0				
More than 35 years	0	0				
Religion						
Hindu	24	4	3	4.8922	7.81	Not significant at 0.05 level
Muslim	16	0				
Christian	16	0				
Other	0	0				
Education						
10th standard	27	2	2	1.1473	5.99	Not significant at 0.05 level
12th standard	18	2				
Graduate	11	0				
Monthly income						
500–1000	22	1	3	3.8901	7.81	Not significant at 0.05 level
1001–1500	15	1				
1501–2000	11	0				
2001 and above	8	2				
Marital status						
Married	24	2	3	7.468	7.81	Significant at 0.05 level
Unmarried	19	0				
Separated	8	0				
Widowed	5	2				
Type of family						
Nuclear	19	1	2	5.103	5.99	Significant at 0.05 level
Joint	23	0				
Extended	14	3				
Years of experience						
1–2 years	21	1	3	0.596	7.81	Not significant at 0.05 level
3–4 years	17	1				
5–6 years	9	1				
7–8 years	9	1				
Source of information						
Training program.	9	0	3	1.768	7.81	Not significant at 0.05 level
Self-learning	16	2				
Mass media	24	2				
Health worker	7	0				

Table 15 shows the association between the practices (falling) of ASHA regarding first aid management and selected demographic variables. It indicates a notable correlation between marital status and type of family, thereby confirming hypothesis (H2) solely concerning these variables. However, no correlation was found between religion, age, education, years of experience, income, source of information, and residence.

RESULTS

Analysis involves a thorough scrutiny of the components of a structure. In research, analysis entails the computation of specific measures while also seeking patterns of relationships within groups of data. This article deals with the analysis and interpretation data obtained from 60 ASHAs with the help of self-administered structured questionnaire to assess knowledge and practice regarding first aid for minor injuries.

SUMMARY

This article deals with analysis of the findings of the data collected from 60 ASHAs from community health center Kolar Road, Bhopal. Experimental statistics were employed to analyze the data regarding the knowledge and practice of first aid for minor injuries among ASHAs.

This article discusses the main discoveries of the study and deliberates on those findings in relation to the study's objectives and hypotheses. The pre-testing of ASHA regarding first aid for minor injuries shows less knowledge in all aspects. This indicates the need for imparting necessary education and information on first aid.

MAJOR FINDINGS

The major findings of the study are summarized as follows:

Findings Related to Demographic Variable

Out of 60 samples

- Of the samples 23.33% were in the age group of 20–24 years, 31.66% 25–29 years, 30% 30–34 years, and 15% were 35 years and above.
- Most of them were Hindu (46.66%) with Muslims 26.66% Christians 26.66%, and other religions 0%.
- 48.33% of them had qualification up to 10th standard, 33.33% up to 12th standard, and 18.34% were graduates.
- 33.30% of them are from nuclear family, 38.30% from joint family, and 28.30% are from extended family.
- Majority of them (38.33%) have family income between INR 500 and 1000, 26.66% between INR 1001 and 1500, 18.33% between INR 1501 and 2000, and 16.66% had income above INR 2001.
- Majority of them are married (43.30%), with 31.60% unmarried, 13.30% separated, and 11.60% widowed.
- Majority (36.60%) had 1 to 2 years of experience, year of experience, 30% had 3 to 4 years of experience, 16.60% had 5 to 6 years of experience, and 16.60% had 7 to 8 years of experience.
- The source of information for 15% was training, 30% self-learning, 43.3% mass media, and 11.70% from health worker.

ORGANIZATION OF THE FINDINGS

The findings of the study were organized as items of the objectives tested. The data are represented under the following headings:

SECTION A

- Frequency and proportion distribution of ASHA based on sociodemographic factors.
- Frequency and proportion distribution of ASHA based on their variables.

SECTION B

- To compare the findings of first aid for minor injuries.
- Comparison of knowledge and practice (dog bite).
- Comparison of knowledge and practice (falling).

SECTION C

Association of knowledge and practice score regarding first aid for minor injuries with their selected demographic variables.

SOCIODEMOGRAPHIC VARIABLE

A study conducted in the Ashanti Region of Ghana to examine the epidemiological characteristics and home-based treatment practices for childhood burns. Children aged 0 to 5 years with reported burn incidents were identified through a community-based multisite survey. A standardized questionnaire was administered to 630 mothers of these children to gather information on their socio-demographic backgrounds and the circumstances surrounding the burn incidents. It was found that 92% of the burns occurred at home, with the kitchen (51%) and house yard (36%) being the most common locations. The study concluded that traditional remedies were the most commonly chosen first-aid treatment. Since a significant number of burns occurred during playtime between meals, particularly when children engaged in activities involving fire in the house yard, the study suggested that providing alternative play options and community play areas could help reduce the incidence of burns among these children. Additionally, the study recommended intensifying education on first-aid management of burns, with a focus on alternatives to traditional remedies. These findings were further supported by a comparative study that evaluated the effectiveness of a demonstration on knowledge regarding first aid management of dog bites and minor injuries from falls among ASHAs. The study utilized purposive sampling, with a sample size of 60 [14–18].

FINDINGS RELATED TO KNOWLEDGE SCORE DURING PRE- AND POST-TESTS

It was found that at pre-test 13.1% mean% and mean 7.86, and SD 2.013, whereas at post-test mean 2.46, mean% 4.1%, and SD 1.38; $df = 59$, paired t test 2.428, level of significance table value 3.324 significant.

FINDING RELATED TO PRACTICE (DOG BITE)

There was a difference found in the practice scores between pre-test and post-test by criteria. In the pre-test poor score is 98.33%, average is 1.66%, and good is 0%. In the post-test poor knowledge score is 0%, average is 0%, and good is 100%. In pre-test knowledge score is 15.08% and it is in the post test up to 2.8%. Hypothesis H1 is thus accepted.

Supported Study

A study in Australia combined two methods of data collection. The author used information from injury surveillance data of a major metropolitan hospital and data from a large community survey consisting of interviews with 3093 randomly selected persons in 1992. The survey revealed that only 12.5% of the victims sought hospital treatment and 40% went to the doctors, leaving 58% of people who did not seek any medical advice. According to the survey findings, the rate of attacks was determined to be 2.85% annually. Conversely, data collected from emergency units indicated that the rate of individuals injured was 0.63% per year. The survey participants were not queried about their age at the time of the accidents, preventing an assessment of which age group faced the highest risk of being bitten. However, hospital admission data revealed that children aged four and under were attacked and required hospital treatment twice as frequently as adults aged 21 to 59 years.

FINDING RELATED TO PRACTICE (FALLING)

A significant different was found in practice scores between pre-test and post test of practice by criteria. In the pre-test poor score is 93.33%, average is 6.66%, and good is 0%. In the post-test poor knowledge score is 0%, average is 6.66%, and good is 93.33%. The pre-test knowledge score is 1.41% and it is in the post-test up to 8.88%. Thus hypothesis H1 is accepted.

Supported Study

In 2005 data collected by the Warrington Falls Management and Prevention Service from 121 persons referred to the service, show that of these, more than one third (40.33%) had experienced between two and five falls in the previous 12 months, 36 (29%) stated they had fallen ‘several’, ‘numerous’ or an

'unknown' number of times, 23 (19%) had experienced one fall, 15 (12%) had not experienced any falls at all, 5 (4%) had experienced 10 or more falls, and 2 (2%) had experienced 6 to 9 falls.

FINDINGS RELATED TO THE COMPARISION

Out of 60 ASHAs, in pre-test knowledge, 16.66% had poor knowledge, 83.33% had average knowledge, and 0% had good knowledge and practice score (dog bite) in ASHAs 98.33% had poor knowledge, 1.6% had average knowledge, and 0% had good knowledge. Practice score (falling) in ASHAs was 93.33% poor knowledge, 6.66% average knowledge, and 0% good knowledge.

Post-test knowledge of ASHAs: 0% of poor knowledge, 1.66% of average knowledge, and 98.33% good. Practice score (dog bite), 0% of poor knowledge, 0% of average, and 100% of good knowledge. Practice score (falling), 0% of poor knowledge, 4.66% of average, and 93.33% of good knowledge.

FINDINGS RELATED TO ASSOCIATION WITH SOCIODEMOGRAPHIC VARIABLE

On the assessment, it was found that the sociodemographic variables age (chi value 7.194) and type of family (chi value 8.4058) were found significant. Other variables, such as religion, income, qualification, marital status, experience, and source of information were not found significant according to score.

FINDIND RELATED TO PRACTICE (DOG BITE) SCORE

On the knowledge and practice checklist (dog bite), it was found that the sociodemographic variable education (chi value 6.165) was found significant. Other variables, such as age, religion, monthly income, marital status, type of family, year of experience, and source of information were found not significant according to score.

FINDIND RELATED TO PRACTICE (FALLING) SCORE

On the knowledge and practice checklist, it was found that the sociodemographic variables marital status (chi value 7.468) and type of family (chi value 5.103) were found significant. Other variables, such as age, religion, monthly income, education, year of experience, and source of information were found not significant according to score [19, 20].

CONCEPTUAL FRAMEWORK

The Von Bertalanffy conceptual framework was utilized as the basis for this study.

LIMITATIONS

The study has the following limitations

- The sample size in this study was limited to 60 participants, thus making generalization challenging.
- Findings of the study are specific to the Community Health Center, Kolar Road, Bhopal area, potentially reducing the study's credibility.
- The absence of a control group in the study may diminish its credibility.
- There was no effort made to control for extraneous variables, thereby limiting the generalizability of the findings.
- The study focused solely on measuring knowledge and did not address other domains such as attitudes and practices.
- The data collection tool used in the study was not standardized and was created by the investigator for the specific objectives of the study.

NURSING IMPLICATIONS

The results of the current study have relevance across different domains of nursing, including clinical practice, education, research, and administration. Nurses can do extensive research in the area and research can be helpful in spreading awareness and education related to first aid and health. The health assigned teacher can be oriented to the common injuries/problem which need first aid in the school area. They can be oriented about the first process, and the authorities should allow them to conduct mock

drill to improve knowledge and skill of nurses. Hospitals should have emergency teams ready with the primary goal to provide first aid. Community health nurses should provide health education regarding first aid to the school health assigned teacher. Nurses can do extensive research in the area and the research can be helpful in improving knowledge among the society about the importance of first aid and health assigned teacher in schools.

RECOMMENDATIONS

On the basis of the study, following suggestions are given for further studies:

- An analogous research endeavor could be undertaken on a broader scale, aiming for potential generalizability to a larger populace.
- A comparative investigation could be conducted to evaluate the efficacy of computer simulation in contrast to other methods.
- Exploring the possibility of incorporating a control group design into future studies could enhance the methodological rigor.
- The integration of first aid topics within community health centers could be explored for potential implementation.
- Investigating the readiness of sports teachers to address minor injuries among ASHA workers could offer valuable insights.
- Exploratory research designs could be employed to discern the most effective teaching strategies for first aid regarding minor injuries among ASHA workers.

CONCLUSION

This article discusses the conclusions, implications, limitations, suggestions, and scope of the study, which aimed to evaluate the knowledge of ASHA workers in a specific rural area of Bhopal. The study involved the selection of ASHA workers using purposive sampling techniques and the collection of data through an observational checklist (dog bites and falls) to assess ASHA practices. The data underwent analysis and interpretation using both descriptive and inferential statistical methods. Conclusions were drawn based on the findings of the study, which encompassed various aspects.

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