



A Study to Assess the Effectiveness of Health Teaching for Management of Dog Bite among Adults Residing in Selected Slums of PCMC Area in Pune City

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ABSTRACT

A quasi experimental study to assess the effectiveness of health teaching regarding management of dog bite among adults residing in selected slums of PCMC in Pune city was conducted by Mr. Subhash Sharma.

The objectives of the study were

- 1) To assess the knowledge level regarding management of dog bite among adults residing in selected slums of PCMC in Pune city.
- 2) To assess the effectiveness of health teaching regarding management of dog bite among adults residing in selected slums of PCMC in Pune city.
- 3) To find an association between the level of knowledge of adults and selected demographic variables.

As per Rosenberg Health Belief Model conceptual framework was made which include the four construct representing the perceived threat and net benefits; perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. The quasi-experimental one group pre test post test research design was used for the study; the group consisted of 60 samples that were selected on the basis of the sampling criteria and non probability convenient sampling technique set for the study.

A structured interview schedule was the type of tool developed by investigator to explicit information from adults. The tool was finalized and both the tool and the health teaching were translated into Marathi and the pilot study was done on 10 samples at Balajinagar slums where the samples are similar to Gavalimatha slums. Thus, the feasibility of the study was established.

The content validity of the tool was determined by 20 experts. The value of reliability coefficient was (.84%), which suggested that the tool is highly reliable. The data collection for the main study was conducted from November 2nd to December 2nd 2009 in Gavalimatha slums of PCMC in Pune city.

Based on the objectives and the hypotheses the collected data was analyzed by using descriptive and inferential statistics. The tests used were calculation of frequency, percentage, mean, standard deviation, 't' test and the ANOVAs. The level of significance set for testing the hypothesis was 0.05.

Major findings of the study were:

In the experimental group of the study, majority (30%) of the adults fall in the age group of 29-38 Years. The demographic data of the study also reveals that greater part (38.3%) of adults had an educational status of secondary level and among which 57% were house wives and the (55%) bulk of them earned Rs. 3001 – 5000/ month and hardly 13% of them earned above Rs. 5000 & above. The presence of pet dog was only (15%) while (20%) had experience of dog bite and experience of dog bite in family members were (15%) and (13.3%) had taken anti rabies vaccination.

Paired 't' test was applied to know whether this increase in mean knowledge score was statically significant, Since 'P' value was less than 0.05 (P value= 0.001) investigator can concluded at 5% level of significance and 59 degree of freedom that there was significant change in mean knowledge score, which means that Health teaching on management of dog bite was effective. The 'p' value calculated to find out the association between the selected



demographic variables and an increase in knowledge level was $<<0.05^{**}$, with relation to age and income. This suggested that there was significant association between increase in knowledge level and demographic variables. This was done by applying ANOVAs & 't' test.

On the basis of the findings of the study, it is recommended that:

- A similar study can be done on a larger sample.
- A study can be conducted to assess the knowledge and practice regarding management of dog bite among adults.
- A comparative study can be done between urban slums and rural slums.
- A study may be conducted to evaluate the effectiveness of planned health teaching versus other methods of health teaching on the similar problem.
- A study can be done on association between various demographic variables, which were significant, on larger samples.

KEYWORDS

PCMC - Pimpri- Chinchwad Municipal Cooperation, STP - Structured Teaching programme, WHO - World Health Organization SD - Standard Deviation, NS- Non Significant, DF - Degree of Freedom

INTRODUCTION

Everyday a number of people fall victim to dog bites. About 30,000 people die of rabies annually, which accounts for 80% of 36,000 deaths reported to the WHO. In India 96% of the rabies is due to bite from dogs which are mostly stray. The W.H.O. estimated India's total dog population to be 25 million in 1998 and at 50 million in 2001, which reveals that present dog to human ratio is approximately 1:20 (W.H.O, 2001). Hence, this calls for the need of study among adults, the investigator has tried to find their knowledge on the topic.

OBJECTIVES

1) To assess the knowledge level regarding management of dog bite among

adults residing in selected slums of PCMC in Pune city.

2) To assess the effectiveness of health teaching regarding management of dog bite among adults residing in selected slums of PCMC in Pune city.

3) To find an association between the level of knowledge of adults and selected demographic variables.

Hypothesis:

The level of significance chosen for the entire hypothesis was 0.05 level of significance.

H₀: There will be no significant difference between pre test and post test knowledge related to Management of dog bite among adults.



H₁: There will be significant association between demographic variables and knowledge of Management of dog bite among adults.

Conceptual framework

The conceptual framework selected for the present study is based on, 'Rosenberg Health Belief Model'. This is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by social psychologists Hochbaum,

As per Rosenberg Health Belief Model, a conceptual framework was made which included the four constructs representing the perceived threat and net benefits; perceived susceptibility, perceived severity, perceived benefits, and perceived barriers.

MATERIALS AND METHODS

The quasi-experimental one group pre-test post-test research design was used for the study. The group consisted of 60 samples that were selected on the basis of the sampling criteria and non probability convenient sampling technique set for the study. The type of tool was a structured interview schedule which was developed by the investigator, to explicit information from adults. The tool was finalized and

both the tool and the health teaching were translated into Marathi. The pilot study was conducted on 10 samples at Balajinagar slums where the samples were similar to Gavalimatha slums. Thus, the feasibility of the study was established. The content validity of the tool was determined by 20 experts. The value of reliability coefficient was (.84), which suggested that the tool is highly reliable. The data collection for the main study was conducted from 2nd November to 2nd December 2009 in Gavalimatha slums of PCMC in Pune city.

ANALYSIS AND FINDINGS OF THE STUDY

➤ Finding related to demographic characteristics

The main findings of the study were-

- Majority (30%) of the adults fall in the age group of 29-38 Years, among which 35% male and 65% Females were participated in the study.
- The greater part (38.3%) of adults has an educational status of secondary level and among which 57% were house wives and (55%) of them earn in the range of Rs. 3001 – 5000/ month and hardly 13% of them earn in the range above Rs. 5000 & above.
- The presence of a pet dog is only (15%) and (20%) had experienced dog bites in the samples and experience of dog



bite in family member were (15%) and (13.3%) were having experience of anti-rabies vaccination.

➤ **Findings related to knowledge scores before and after imparting the knowledge**

The majority (57%) of adults in pre-test of experimental group had an average knowledge score (8-14), where as in post-test majority (100%) of the adults had a good knowledge score (15-20). The knowledge scores of the samples shows a marked increase as seen in the post-test score of the experimental group, which indicates that the teaching was effective in increasing the knowledge of the samples regarding management of dog bite.

➤ **Findings related to effectiveness of health teaching on management of dog bite among adults.**

The findings shows that pre-test knowledge score was 9.52 and post-test knowledge score was 19.03. Since 'P' value was less than 0.05 (P value= 0.001). The researcher can conclude at 5% level of significance and 59 degree of freedom that there was significant change in the mean knowledge score. It means treatment (Health teaching on management of dog bite) was effective.

➤ **Finding related to relationship between knowledge and selected variables of adults**

The 'P' value calculated to find out the association between the selected demographic variables and an increase in the knowledge level was $<<0.05^{**}$, with relation to age and income. This suggested that there was significant association between increase in knowledge level and demographic variables. This was done by applying ANOVAs & 't' test.

CONCLUSION

The conclusion drawn from the findings of the study are as follows: The 't' test was performed to find the effect of health teaching on the management of dog bite among adults residing in the selected slums of PCMC in Pune city. It revealed that there was highly significant gain in knowledge of adults in the post test who had been supplemented with the health teaching regarding management of dog bite. The correlation finding was done to find the relationship of increase in knowledge level with selected demographic variables, by using one way analysis (ANOVA), and calculating the 'p' value.

Implications:

The findings of the study have implications in nursing research.

➤ **Community Health Nursing practice**



Nurses working in the community setup can benefit from such researches, as it will provide more insight regarding the preventive aspects of dog bite. Every community health Nurse should know the importance of the preventive aspect with regard to this health problem in the community. Nurses can provide health education and counseling to promote awareness about the management of dog bite.

➤ **Nursing education**

The nursing teachers can use the result of the study as an informative illustration for the students. Nursing education should help in inculcating values and a sense of responsibility in the students to educate the parents of children with such diseases and to foster the practice of health education to the community.

➤ **Nursing administration**

The Nurse administrator can utilize this type of planned health teachings in order to use this study to enhance the knowledge of the students, staff nurses and community. Nursing administration can depute nurses for various workshops, conferences, and special courses; In-service education programs can also be arranged for the nursing staff.



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