



EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME (STP) ON KNOWLEDGE REGARDING ACTIONS AND ADVERSE EFFECTS OF COMMONLY USED OVER-THE-COUNTER MEDICATIONS AMONG STUDENTS OF A SELECTED DEGREE COLLEGE AT PILKHUWA, DIST. HAPUR UP

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ABSTRACT

Introduction: Over-the counter (OTC) medicines has traditionally been used to treat self-limiting minor ailments. These drugs are available at the pharmacists without a doctor's prescription. Many of the medications you have in your medicine cabinet at home are OTC, from the pills you take for fever and toothache (acetaminophen, ibuprofen, or aspirin) to common cough and cold (cough syrup). Many of these medicines are even used for children. However, recent studies have reported that some OTC drugs present serious health risks and side effect.

Objective: The main aim of this study was to assess the effectiveness of Structured teaching Programme (STP) on knowledge regarding Actions and adverse effects of commonly used over-the-counter (OTC) medications among students of a selected Degree college at Dist. Hapur.

Material and Methods: One group pre test post test design was adopted to accomplish the objectives of the study. 60 degree college students were selected as a sample for the study. The structured teaching programme was prepared by the investigators focusing on the actions and adverse effects of commonly used over-the-counter medication among degree college students. The existing knowledge was assessed using structured knowledge questionnaire.

Results: Findings of the study revealed that in pretest 3.33% had very good knowledge, 31.66% had good knowledge and 65% had average knowledge.

KEYWORDS : Assess, Effectiveness, Structured Teaching Programme, Adverse effects, Over The Counter medications, Students

INTRODUCTION

Over-the-counter drugs, known as OTC drugs in short, are drugs available at the pharmacists without a doctor's prescription. It is not surprising that a number of drug interactions involving analgesics have been reported. In 2007, people were shocked at the news that several little children suffered from serious adverse events, some of them fatal, after taking OTC cough and cold medicines as reported by the Philadelphia Medical Examiner's Office. It is also observed that the arbitrary use of additional drugs other than prescribed medication is known to be a huge part of drug sales. Studies have shown that non-prescription drugs can be a potential risk for patients who are also taking other pharmaceutical preparations or are having concomitant disease. Misunderstanding of over-the-counter cold products is common and could result in harm if medications are given inappropriately. Label language and graphics seem to influence inappropriate interpretation of OTC product age indications. Poorer parental numeracy skills may increase the misinterpretation of these products.

OBJECTIVES:

The objectives of the present study were:

- To assess the knowledge of students on the actions and adverse effects of commonly used over-the-counter medication.
- To administer Structured teaching programme to the students to increase their knowledge level.
- To find the effectiveness of structured teaching programme on commonly used over-the-counter medication among students in terms of their knowledge gain.
- To find an association between pre test knowledge score of students on over the-counter medication and selected demographic variables such as Age, Gender, Class of studying, Purchase of medicine without prescription etc.

REVIEW OF LITERATURE

A cross-sectional study of 572 university students of Karachi, Pakistan was conducted to determine the prevalence, attitude and knowledge of self-medication, which revealed 76%, had used self-medication. Analgesics, antipyretics and antibiotics were the commonly used drugs for self-medication; 50.1% said that most common reason for self-medication was previous experience. 87% thought that self-medication was harmful whereas 82.5% of the subjects thought it was necessary to consult a doctor before taking a medicine.

A cross-sectional study was conducted in Kolkata on the consumption, compliance and awareness about antibiotic utilization amongst the urban community, upon 500 respondents, comprising of 250 adults and 250 children who did consume antibiotics in the previous three months. Antibiotic consumption without prescription was evident amongst 41.2% of adults in comparison to that of 8.4% in children and

awareness pattern regarding antibiotics were reported to have been more in the children group (16.4%) while compared to the adults (8%). The study concluded that high over-the-counter sale and inadequate compliance to antibiotic medication needs further intervention approach towards information, education and communication.

A study was conducted to investigate patient awareness of the proper use and frequency of side effects in non steroidal anti-inflammatory drug (NSAIDs) users in Jordan. Two hundred and twelve patients were included in this study. The results revealed that overall NSAIDs use during last year was 69%. Diclofenac was the most used NSAID. Majority of the patients (58%) reported having side effects upon NSAIDs-use; gastrointestinal upset was the most frequently reported side effect. Patients' awareness regarding proper NSAIDs use was poor, and pharmacist role in counseling was inadequate.

A study was conducted on the effectiveness of an awareness programme on the actions and adverse effects of commonly used over-the-counter medications among the lay people of Manipal. The sample consisted of 50 employees working in Syndicate Bank and ICDS Bank, selected by purposive sampling technique. The findings revealed that there was a significant difference between the post-test and pretest knowledge score ($t_{49}=10.3, P < 0.05$), which indicated that the awareness programme was effective in increasing their knowledge.

METHODOLOGY

Research Approach: Evaluative

Research Design: one group pre test post test

Settings of the study: JMS Group of Institutions, Dist. Hapur

Population: students from science stream i.e. B.Sc. (biology or mathematics stream)

Sample: B.Sc. students from I year, II Year and III Year

Sample size: 60

Sampling technique: Purposive random sampling

Inclusion Criteria:

The criteria for the subject in the study were:

1. Students studying in a selected degree college of Dist. Hapur, UP.
2. Students who were pursuing B.Sc. degree course with biology or mathematics stream and were in first year, second year and final year.
3. Who knows English very well.
4. Student in the age group of 17-25 years.
5. Students who were willing to participate in the study.
6. Students who were available at the time of the study.

TOOLS AND DATA COLLECTION

The tools were prepared and validated by the experts from Medical and Nursing field.

Tool I: Demographic data consisted of eight items such as Age, Gender, Class of studying, Religion, Source of information, Drug purchased without prescription, Noticeable reaction to drug, Family members in the medical field etc.

Tool II: Self structured knowledge questionnaire consisted of total 40 items divided into 2 sections. Section I comprised of 15 questions of multiple choices and section II comprised of 25 true or false statements.

RESULTS

Section 1: Data on distribution of demographic variables
The data on demographic variables showed that maximum samples (41) were in the age group of 17-19 years, (36) students were male, students belonged to Hindu religion were (48), (26) students had friends/ relatives/neighbors as their source of information, (44) students had no noticeable reaction to drugs and out of 60 samples (24) students had non medical professionals as their relatives.

Section 2: Data on knowledge score regarding Actions and adverse effects of commonly used Over- the-counter (OTC) medications.

Table No 1: Distribution of subjects based on pre test knowledge score. N=60

S. No.	Level of knowledge regarding (OTC) medication	Frequency	%
1.	Poor (0 – 10)	00	0.00%
2.	Average(11-20)	39	65%
3.	Good (21 – 30)	19	31.66%
4.	Very good (31 – 40)	02	3.33%

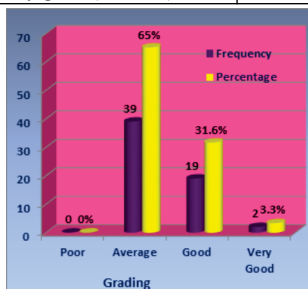


Fig. No. 1: Cylindrical diagram showing the frequency and percentage distribution of knowledge score

Section 3: Data showing the effectiveness of structured teaching Programme.

Table No. 2: The Mean, Median, Mode, Range and Standard Deviation Values

S. NO		MEAN	MEDIAN	MODE	RANGE	SD
1.	Pre Test	18.73	19	20	6-30	5.27
2.	Post Test	27.57	28	28	24-32	2.12

Table no 3: Comparison of pre test and post test knowledge score.

Knowledge level	Pre test		Post test	
	Frequency	%	Frequency	%
Very good	2	0.0%	6	1%
Good	19	65%	54	90%
Average	39	31.6%	00	0.0%
Poor	00	3.3%	00	0.0%

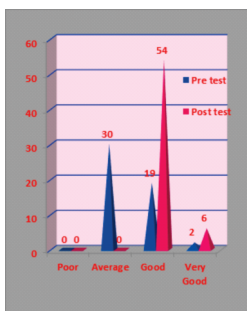


Fig No 2: Cone diagram showing the frequency distribution of pre test and post test knowledge scores.

Table 4: 't' test showing the effectiveness of the STP on the actions and adverse effects of commonly used over-the-counter medication on the students N=60

	Mean	Mean difference	Median	SD	't' value
Pre test	18.73	8.84	19	5.27	5.51
Post test	27.57		28	2.12	

Section 4: Data on association of mean pre test knowledge score regarding OTC (over the counter) medications and selected demographic variables.

S. NO.	Demographic variable	Chi-square	Table value	DF	Inference
1.	Age	19.31	5.99	2	S
2.	Gender	0.31	3.84	1	NS
3.	Religion	0.65	3.84	1	NS
4.	Class of study	14.8	5.99	2	S
5.	Drug purchased without Prescription	8.25	5.99	2	NS
6.	Source of information	19.66	5.99	2	S
7.	Drug reaction	8.91	3.84	1	NS
8.	Close relative / family members	39.15	9.49	4	S

S- Significant
NS- Not – significant

In the above table, chi- square was calculated to find out an association between knowledge and selected demographic variables. There was significant association of Age, Class of studying, Source of Information and Close relative/ family members in the medical field with the knowledge score.

DISCUSSION

The data on demographic variables showed that maximum samples (41) were in the age group of 17-19 years, (36) students were male, students belonged to Hindu religion were (48), (26) students had friends/relatives/neighbors as their source of information, (44) students had no noticeable reaction to drugs and out of 60 samples of students (24) had non medical professionals as their relatives. In pre test only 19 samples had good knowledge score, 30 samples had average knowledge score, and only 2 samples had very good knowledge score. In post test and 54 samples had good knowledge score, 6 samples had very good knowledge score. Pre test mean score was 18.73 and post test mean score was 27.57 with the mean difference 8.84. Standard deviation of pre test was 5.27 and of post test was 2.12. The calculated 't' value of pre test knowledge score ($t_{59}=5.51, P<0.05$) is higher than the table value which depicts the effectiveness of STP in terms of knowledge gain.

IMPLICATIONS

NURSING PRACTICE: Nursing invisage and provision of support system of the youth community, patient and family members. A nurse must acquire knowledge regarding over the counter medications and their side effects on frequent use.

NURSING EDUCATION: Education faces tremendous challenges in keeping pace with the changes in nursing practice to maintain its high quality. Course curriculum of the nursing should emphasize upon over the counter medication and its prevention. Students should be taught in detail over the counter medication and their prevention.

NURSING RESEARCH: No profession can exist without research to develop its body of knowledge to test its strategies to ensure that action makes a difference. There is need of extensive and intensive nursing research in the area over the counter medication and their prevention degree college students .emphasis should also be laid on the publication of finding of research based evidence for nurse practitioners. Future research can be conducted at different areas.

NURSING ADMINISTRATION: Over rapidly changing and expending world makes its necessary for us as nursing to increase our knowledge and skills concerning many aspects of over the counter medication and their prevention degree college students. Nurses' administrator should develop nursing practices standards, policies and manuals for over the counter medication and their prevention among degree college students.

RECOMMENDATIONS

On the basis of findings the following recommendation were offered for the future researches:

- The Study can be replicated on a large sample in different settings, so that the findings can be generalized to a large population.
- A study can be conducted to assess the knowledge regarding over the counter medication and their prevention among teachers at different levels.
- Similar study can be replicated using different strategies viz. planned teaching program (PTP).
- A comparative descriptive study can be carried out on the degree college students.
- A follow up study can be conducted to assess the retention of knowledge regarding over the counter medication, their side effects and their prevention among degree college students.

CONCLUSION

The detailed analysis of the study led to the following conclusions: after the implementation of STP there was a significant increase in the terms of knowledge score. It was calculated by 't' test. There was a significant association of age, class of study, source of information and close relative/family member with the knowledge score.

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