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RESEARCH ARTICLE
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IMPACT OF HOUSEHOLD POISONS AWARENESS PROGRAM ON KNOWLEDGE AND ATTITUDE AMONG PRIMARY SCHOOL CHILDREN'S IN URBAN MAHARASHTRA.

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Abstract

Background & Aim: Children's are future of our society, accidental deaths by consumption of poisons is among children's is quite common. A house which is safe heaven for children also harbors many poisons which children are not aware of. This study aims to assess and improve the knowledge of children's regarding household poisons.

Methodology: Seven primary schools were selected for this study of 4th and 5th standard. Pre-test was conducted using validated questionnaire consisting 18 questions. Later awareness program was conducted regarding household poisons. After 2 weeks of awareness program post test was conducted to assess the improvement in their knowledge regarding house hold poisons.

Results: On Comparison of mean of Pre-test and post-test, it showed significant differences ($p<0.001$) on knowledge and attitude of students on issues of household poisoning before and after health education

Conclusion: Timely education of children's about house hold poisons can improve their knowledge about preventing poisoning and safe guard their life.

Keyword: House-hold poison, Accidental poisoning, Children's

Introduction:

Childhood is a phase of life in which many things are explored with curiosity by children and then the surroundings may become dangerous place if the chemical compounds used daily for many purposes in and around the house are unintentionally ingested or inhaled or touched by the children. Many children get intimidated with colorful drugs, cosmetics and improperly stored poisons and get fatally intoxicated. Hence it is necessary for children to get educated about household poisons. House hold poisons are primary toxic substance which children's get exposed to very easily. Majority of poisoning among adolescents and adults are intentional [1,2,3] while most of the pediatric poisoning cases are preventable and accidental[4,5], caused by easy availability of toxic substances for children in houses. Household products including medicinal compounds, cosmetics & toiletries, detergents, disinfectants, organic solvents, petroleum products, pesticides and contaminated food are most

common means of poisoning in children globally as well as in India.[6,7] Pediatric poisoning is a significant cause of morbidity and mortality responsible for 0.33% to 7.6% of total admissions in pediatric wards at various hospitals across India and household poisons are the prime reason.[8,9]
Knowledge about common household poisons is lacking not only in children's but also in adults. In a study from India, around 20 percent of medical students and more than 65 percent of non-medical students were found unaware of the hazards caused by household poisons.[10]
Prevention of poisoning through health education programs targeting children have been conducted worldwide[11,12,13] and it was found to be very useful means to reduce the burden of the problem. But in India, there is dearth of data regarding evaluation of effectiveness of educational interventions on prevention of childhood poisoning. Hence under the present study, health education on household poisons will be given to primary school children and its effectiveness will be assessed. Proper education and knowledge of poisons from early life is important among children.

Objectives:
1. To study knowledge and attitude towards household poisons among primary school children.
2. To assess the effectiveness of Household Poisons Awareness Program on knowledge and attitude among primary school children.

Methodology:
The study was being conducted over period of two months in seven primary schools in urban area. One division of 4th and 5th standard each was selected randomly among the seven primary schools. In total of 490 Primary school students attainted the study, their class and roll no were recorded, so that pre-test and post- test were conducted on same students. Agreement for implementation of the awareness program was obtained from the school authorities and assent forms from the parents were collected consenting to participate in the study on behalf of students.
Validated pre-test questionnaire consisting 18 questions addressing knowledge and attitude towards household poisons was given to all the students before intervention of the health education program and their prior knowledge was assessed. Faculty trained and well versed with health education program conducted didactic lectures followed by video demonstration and demonstration of specimens of various poisons. Information regarding common agents involved in childhood poisoning, common household poisons, instructions for prevention of poisoning and primary care for poisoning conditions was provided during this program in form charts, picture and video presentation. Evaluation of the program was carried out 2 weeks later in the form of post-test questionnaire administered to the same students. Data thus collected in the form of pre-test and post-test was analysed. Data collected was entered in MS excel worksheet and was analysed using SPSS version 20.0. Paired 't' test was used to study the significant improvement of knowledge and attitude about household poisons by comparing pre-test and post test results.

Observation and results:
The awareness program was conducted on 490 students of 5th standard between age group 10-12 years. The study compared the means of pre-test and post-test using paired t-test analysis. The pre-test mean was 12.30 and standard deviation was 3.595±0.16 and post-test mean was 14.21 and standard deviation was 3.597±0.162 (Table-1). The comparison of mean showed significant differences ($p<0.001$) on knowledge and attitude of students on issues of household poisoning before and after health education (Table-2).

Table-1 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreTest	12.30	490	3.595	.162
	PostTest	14.21	490	3.597	.162

Table-2 Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 PreTest & PostTest	490	.714	.000

Discussion:

Education is important part of one's life which is started early in life. Poisoning which is topic of stigma to discuss among adults is also a common prevalence among children's, educating the children's about this is need and will be help them throughout their life as we seen our study students who were least knowledgeable about household poisons showed significant($p<0.001$) improvement after session of health education. The results are similar study conducted by Kebriaee-zadeh J,[13] were they conducted poison prevention program on children's and showed significant($P<0.001$) improvement. Though accidental poisoning is common among children' s not many studies is directed towards educating children's. Some focused on parental knowledge towards only safe management of only medicines[14] which showed only 70% of parents properly stored medicines which indicate lack of knowledge even among parents. Similarly, some studies focused on mother's[15] as she is considered as first teacher, in them the results showed about 96% of them lacked knowledge in house hold poisons which indicate a serious requirement of health education. In another study focused on conducting education program of house hold poisoning[16] towards mother which showed statistically significant improvement in mean before and after education program which shows importance of such education program in improving knowledge as done in this study. In one of the meta-analysis[17] studied effectiveness of different interventions to promote poison prevention behaviours in households with children, showed intervention with education and low cost/free equipment elements was effective in promoting safe storage of medicine and house hold products which in the way pave the road for their future as they themselves becomes parents. Though many studies are focusing on poisoning prevention, but studies are lacking in access the knowledge of children and improving them, which will be beneficial to the society.

Conclusion:

To conclude household poisoning is prevalent in children's and timely education of children's about house hold poisons can improve their knowledge about preventing poisoning and their hazardous effects. School based health education and awareness programs improve the children's knowledge about prevention of poisoning and hence schools provide a good opportunity for prevention. Primary school children form the most vulnerable group for household poisoning and accidental poisoning; hence educating those children about household poisons is crucial in prevention. In the present study efficacy of the intervention in the form awareness program will be evaluated in terms gain in knowledge and change in attitude and based on the results more such programs will be planned in future.

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