



ASSESS THE KNOWLEDGE AND ATTITUDE OF MOTHERS ABOUT THE AIR POLLUTION AND ITS HEALTH HAZARDS AMONG CHILDREN IN SELECTED VILLAGES OF HARYANA

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ABSTRACT

According to World Health Organization, more than three million children under five die each year from environment-related causes and conditions. The study is to assess the knowledge and attitude of mothers about the Air pollution and its health hazards among children in selected areas of Haryana. A cross-sectional based study among mothers of children was conducted in selected rural areas of Haryana. One hundred mothers were selected. The result shows that mothers need more knowledge and positive attitude to prevent air pollution. The knowledge level of mothers related to air pollution among children was 40% and the level of practices were with 56% need more positive approach to prevent from air pollution.

Key words- Air Pollution, Mothers , Children , Knowledge and Practices

Introduction

Air Pollution levels remain dangerously high in many parts of the world. New Data from World Health Organisation shows that 9 out of 10 people breathe air containing high levels of pollutants. World health Organization estimates that around 7 million people die every year from exposure to polluted air. People living in low and middle income countries the burden

estimates reflect the very significant role air pollution plays in Cardio Vascular diseases illness and death. World Health Organisation estimates that in 2016, some 58% of out door air Pollution related Pre mature deaths were due to ischemic heart diseases and strokes and while 18% deaths were due to chronic obstructive pulmonary diseases and acute lower respiratory infections respectively and 6% of deaths were due to lung cancer. A 2013 assessment by World Health Organisation's International agency for Research on Cancer (IARC) concluded that out door air pollution is carcinogenic to humans with the particulate matter component of air pollution most closely associated with increased cancer incidence, especially lung cancer. An association also has been observed between outdoor air pollution and increase in cancer of the urinary tract.

In India an estimated 1.5 million people died from the effects of air pollution in 2012 according to world Health Organization data, globally air pollution both indoor and out door caused nearly 7 million deaths, or 11.6% of deaths in 2012, making it the world's largest single environmental health risk, according to world Health Organization statistics 2016.

An increasing number of Indian Cities are now measuring and reporting their air Pollution levels to World Health Organisation and the number of such cities globally has nearly doubled to 3000 in 103 countries since 2014. Dr. Randeep Guleria, head of the department of pulmonology and sleep disorders at the All India Institute of Medical Sciences in Delhi, we see the acute effects of air pollution especially in young children and the elderly and in people suffering from chronic obstructive Pulmonary diseases and heart diseases.

In Haryana some cities in the state are experiencing alarming levels of air pollution. According to the latest available data the Haryana State Pollution control Board some cities their high concentration of PM 10 (particulate matters with diameter of 10 microns or less) and PM 2.5 (Particulate matter less than 2.5microns) form of air pollution which can causes severe health Problems. According to the information, Faridabad and Gurgaon from Haryana have high concentration of PM 2.5 particulate matters less than 2.5 microns form of air pollution which is considered the most serious. This is the high time to make them aware about the air pollution and its side effects.

Objectives

1. To assess the knowledge of mothers regarding the Air Pollution and its Health Hazards among Children
2. To assess the Practices of mothers regarding the Air Pollution and its Health Hazards among Children

Review of Literature

Ruwang, YinYingYang,et.,al (2014) conducted a study to assess the status of, and factors associated with, residents' knowledge, attitudes, and practices (KAP) related to air pollution and respiratory health of children in Shanghai, we conducted a cross-sectional survey. Demographic factors associated with residents' knowledge were identified by multiple logistic regressions. The questionnaires were completed by 972 participants, half from the Shanghai Children Hospital and the other half from the Jiading communities. Half of the participants' scores of knowledge and attitudes were equal or greater than 8.0 on a 9-point scale, over 75% of respondents' practice scores were equal to or less than 4.0. Our studies demonstrated a significant difference of average knowledge scores between the two groups ($t = 1.27, p < 0.05$). The parents' educational level (OR = 1.89, 2.48) and average annual household income (AAHI) (OR = 2.37, 2.40, 2.12) were the two strongest factors on knowledge awareness.

Shatha M Niazi., 2017 conducted a study to identify the most important health problem which infants suffer from as a result of environment pollution and assess of mother knowledge about mode of disease transmission. The study was carried out in three hospitals (Al-monsour teaching hospital, Al-kadmia teaching hospital, and in Ibn El -baladi) in Baghdad city in order to collect the study sample. A purposive sample of (100) infants lying in Baghdad hospitals suffering from health problem. The questionnaire was adopted and developed from the (WHO) scales by the research to measure these variables. The statistical procedure which were applied for the data analysis and assessment of the result by descriptive statistics (frequency F, percentage %, mean of score and relative sufficiency). Majority of sample was (34%) in the age groups 3-4 months, followed by (24%) in the age 1-2 months. As for infected infants, the majority of male cases (54%) was greater than female cases (46%). (38%) was intermediate schools and (26%) was secondary schools.

(54%) had under medium nutrition during pregnancy, followed by medium (26%). (40%) was fed by using the artificial feeding

Methodology

A cross sectional Questionnaire based study among mothers was conducted in selected rural areas of Haryana. Hundred Mothers were involved in this study. A predesigned pretested semi structured questionnaire was prepared for data collection. The mothers were explained about the rationale of the study and were assured privacy. The tool was developed by the researcher with the guidance of experts. The questionnaire includes

- I. Demographic data
- II. Knowledge regarding Air pollution and its Health hazards among Children
- III. Practices regarding Air pollution and its Health hazards among Children

The Pilot study was conducted before the main study and it elicited that the study was feasible. The tool was found to be highly reliable and valid. During the data collection the researcher introduced herself to each subject and they were informed about the purpose of study

Results

Table.No:1 .Assessment of Level of Knowledge regarding Air pollution and its Health Hazards among Children

Knowledge Level	Percentage (%)
Adequate Knowledge	35
Partial Knowledge	40
Inadequate Knowledge	25

Figure. No:1. Percentage of Knowledge regarding Air pollution and its Health Hazards among Children

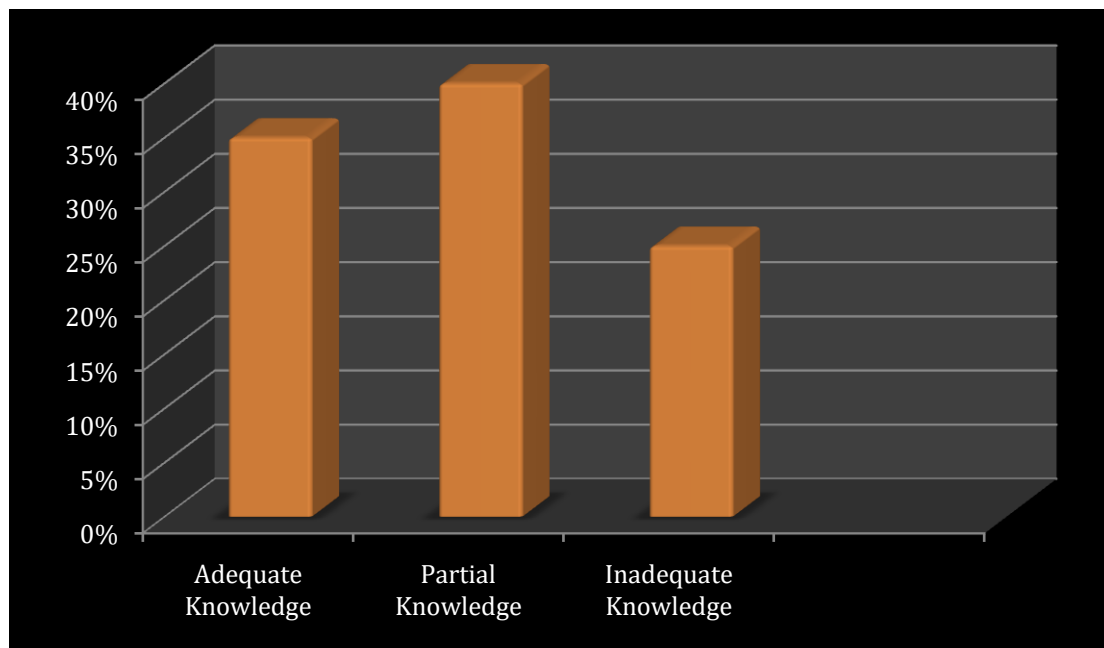
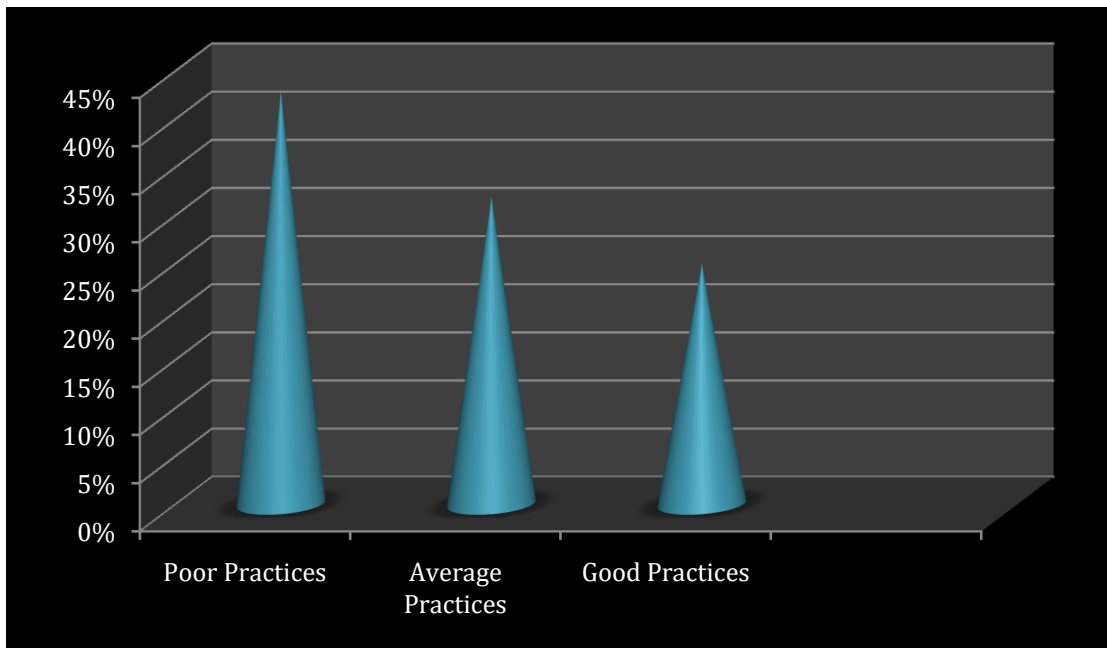


Table.No: 2 Assessment of Level of Practice Regarding Air pollution and its Health Hazards among Children

Practice	Percentage (%)
Poor Practices	56
Average Practices	23
Good Practices	21

Figure.No: 2 Assessment of Level of Practice Regarding Air pollution and its Health Hazards among Children



Discussions

The present study reveals that the majority of mothers level of knowledge about air pollution and its health hazards to children are average with 35% and poor Knowledge with 40%,they need more education related this and the practices among mothers related to the airpollution were poor with 56% .Need improvement in indoor air pollution and they must be educated on major health hazards.

Conclusion

Knowledge and practice about air pollution are essential subjects for Childrens health. For children with air pollution-related diseases, knowledge and attitude of parents play a determining role in this respect. Almost all of the People should understand that improving the air quality is the responsibility of every citizen. The joint action of governments and all citizens should be effectively utilized for an enhanced control the currently serious problem of air pollution in India.

References

1. Masjedi MR, Jamaati HR, Dokouhaki P, Ahmadzadeh Z, Taheri SA, Bigdeli M, Izadi S, Rostamian A, Aagin K, Ghavam SM. The effects of air pollution on acute respiratory conditions. *Respirology*. 2003;8(2):213–30. [[PubMed](#)]
2. WHO, World health organization, public health and the environment, Geneva 2009, country profile of environmental burden of diseases.
3. Sudarmadi S, Suzuki sh, Kawada T, Netti H, Soemantri S, Tri Tugawati. A survey of perception, knowledge, awareness and attitude in regard to environmental problems in a sample of two different social groups in Jakarta, Indonesia, *Environment, development and sustainability*
4. Nipadhkar VP, Rangnekar K, Tulaskar P, Deo S, Mahadik S, Kakade MA. Poor awareness and knowledge about indoor air pollution in the urban population of Mumbai, India. *Journal of Association of Physicians India* 2009 Jun;57:447-50.
5. WHO guidelines for indoor air quality: dampness and mould. [online]. Available from: URL:http://www.euro.who.int/_data/assets/pdf_file/0017/43328/E92645.pdf.
6. Mishra V, Dai X, Smith RK, Lasten M. Maternal exposure to biomass smoke and reduced birth weight in Zimbabwe. *Annals of Epidemiology* 2004 Nov;14(10):740-7