Knowledge Regarding Household Air Pollution

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Abstract

Around 2.6 billion people cook using polluting open fires or simple stoves fuelled by kerosene, biomass (wood, animal dung and crop waste) and coal. Each year, close to 4 million people die prematurely from illness attributable to household air pollution from inefficient cooking practices using polluting stoves paired with solid fuels and kerosene. Household air pollution causes non communicable diseases including stroke, ischemic heart disease, chronic obstructive pulmonary disease (COPD) and lung cancer. Close to half of deaths due to pneumonia among children under 5 years of age are caused by particulate matter (soot) inhaled from household air pollution.

Material & Methods: In the present study non-experimental descriptive research design was used. Data collected on 100 samples. A Non-probability convenience sampling technique was used to collect data from the samples. Tool was constructed to identify the demographic variables, and a set of self structured questionnaires on knowledge regarding household air pollution Result: 45(45%) of people were having average knowledge, the remaining 41(41%) were having good knowledge and 14(14%) had poor knowledge regarding household air pollution among people. The mean of the level of knowledge regarding household air pollution among people is 5.76 with SD is ± 1.89.

Conclusion: Majority of People are having average knowledge regarding household air pollution. Based on the current findings, the mass awareness programme needs to be organized by the health care people as part of community health services to prevent hazards due to household air pollutions.

Keywords: Knowledge, Assess, Household air pollution, People

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Introduction

Around 2.6 billion people cook using polluting open fires or simple stoves fuelled by kerosene, biomass (wood, animal dung and crop waste) and coal. Each year, close to 4 million people die prematurely from illness attributable to household air pollution from inefficient cooking practices using polluting stoves paired with solid fuels and kerosene. Household air pollution causes non communicable diseases including stroke, ischemic heart disease, chronic obstructive pulmonary disease (COPD) and lung cancer. Close to half of deaths due to pneumonia among children less than 5 years of age are caused by particulate matter (soot) inhaled from household air pollution. Aiming the household air pollution, the current research is conducted with the objective to assess the knowledge of people regarding household air pollution.

Material & Methods

The quantitative research approach was used for this study. The total sample size was 100. Non probability purposive sampling technique was used for select the sample. It included among people of age 21-51above years. The self structured questionnaire tools used to collect data from the participants of this study.

The questionnaire consist two section Demographic section & knowledge section. The demographic section consist demographic variable i.e. Age, Education and Gender. Knowledge section consist 10 items to assess the knowledge level of percipients it includes the meaning, definition, pollutant, causes, health effect, prevention of household Air Pollution. The scoring system was categorized into good, average, and poor. The tool was validated by nursing experts. The ratability of tool was calculated by test and re-test method and it was found that "1". Pilot study was conducted to assess the feasibility of the study on 10 samples with their consent. The collected data was analyzed using frequency and percentage method and association was done by using chi-square method.

Result

Section-I: Demographic section

29 (29%) of the Samples were in the age group of 21–30 years of age, 37 (37%) were in the age group of 31–40 years of age, 30 (30%) were in the age group of 41–51 years of age, and 4% were in the age group of 51and above. 26 (26%) of women were received basic education. 42% were secondary school graduates, 23% were postsecondary graduates, 9% were graduates. 35% were male and 65% were male.

Section-II: Knowledge regarding Household Air Pollution

Table 1

Knowledge Level	*Frequency*	*Percentage*
Poor (0 - 03)	14	14%
Average (04 - 06)	45	45%
Good (07 - 10)	41	41%

n=100

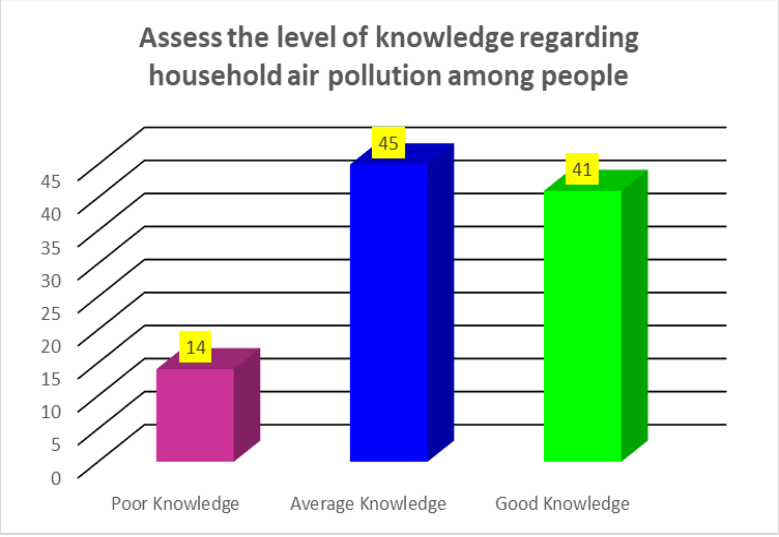

Fig.1: Level of knowledge regarding household air pollution among people

Table No.1 & Figure 1 shows majority (45%) of the people were having average, 41% good and (14%) poor knowledge regarding household air pollution.

N =100

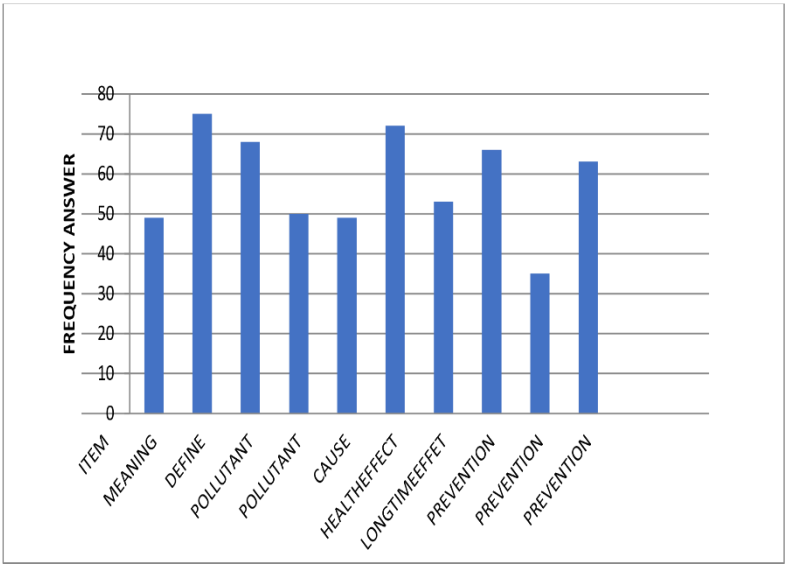

Fig.2:- Bar diagram representing item wise analysis

Figure 2 reflect that maximum participants had average knowledge about the definition, pollutant, health effect, and prevention of household air pollution & below average knowledge about the meaning, cause and prevention.

Section-III: Association of level of Knowledge with Selected demographic variables

There was no evidence of a significant association between knowledge results and the chosen demographic factors, such as school status and gender. Accepting the age, research revealed a association between knowledge results and the chosen demographic characteristics.

Conclusion

Majority of People are having average knowledge regarding household air pollution. Based on the current findings, the mass awareness programme needs to be organized by the health care people as part of community health services to prevent hazards due to household air pollutions

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