

Role of a Structured and Interactive Lecture in Improving the Knowledge of School Children Toward Asthma and its Control

Sir,

In today's modernizing world, noncommunicable diseases (NCDs) have emerged as a significant contributor toward premature morbidity and mortality. Chronic respiratory diseases (CRDs) are one of the major killers among NCDs, and are affecting more than 1 billion people globally.^[1] Among the CRDs, asthma remains a major global public health issue, affecting approximately 339 million globally, in both developed and developing nations. Asthma is ranked 16th among the leading causes of years lived with disability and 28th among the leading causes of disability-adjusted life years lost.^[1,2] Thus, asthma is a major contributor of productive losses in a nation, which further translates to direct and indirect economic losses.

The prevalence of asthma among children and adults has been reported to be 6% and 2%, respectively.^[1] Lack of knowledge toward asthma is a major barrier toward seeking timely and appropriate care.^[3,4] The strategies by the World Health Organization for control of asthma identify the significant role of primary prevention in the control of asthma and other CRDs, by increase in knowledge and public awareness, causing the reduction or avoidance of personal exposure to the common risk factors and recognition of the disease. The role of individual enlightenment as well as active community participation has been highlighted for the primary prevention of asthma.

Keeping the above background in mind, a structured and interactive 1 hour lecture was conducted by subject expert among 14-16 years old school going children, covering the basics of asthma, its prevention and management. This was followed by a 20 minute question answer session. A short adapted 20 item questionnaire, developed based on study by Franken *et al.*^[5] was self administered to 120 students before the lecture to assess baseline knowledge on epidemiology, causation, prevention and management of asthma. Same was administered again to assess post lecture change.

Each item in the 20-point questionnaire was graded, with one mark being assigned to each correct answer and zero for each incorrect answer or blank response. The mean pretest score of the students regarding the knowledge of asthma was 11.38, with a standard deviation of 4.56. The pretest scores were highly variable among the students, with the lowest total score being 2.0 and the highest being a score of 17.0.

There was a significant increase in the scores of students after the structured lecture and interactive session, with the mean posttest score of students coming out to be 18.25, with a standard deviation of 1.12. The distribution of posttest scores showed much lesser variability compared to the pretest ones, with all the scores ranging from 16.0 to 20.0. Using the paired *t*-test, $P < 0.001$ was obtained, thus showing a statistically

significant improvement in the knowledge scores of the students, following the lecture and interaction.

Based on the above findings, it is recommended that the education of the vulnerable and key populations should be done on this important health issue of Asthma.

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Conflicts of interest

There are no conflicts of interest.

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