

Student's Corner

Letter to the Editor

Indoor air pollution: an avoidable health risk factor

Madam, a person is exposed to a variety of health risk factors each day. Some are avoidable and some unavoidable. Indoor air pollution (IAP) is one of the avoidable risk factors that we can do something about. According to a study by WHO, Indoor air pollution caused by the use of solid fuels in houses contributes to more than 1.6 million premature deaths each year in the developing countries.¹ Indoor air pollution has always been denied in Pakistan and less importance has been given to this environmental hazard by the government. Currently there is no law governing the level of hazardous substances at household level in Pakistan.

The major contributor of IAP in Pakistan is biomass fuel that it is used in four fifths of all households in Pakistan. It is responsible for variety of health risks. The IAP generated by the biomass fuel is well associated with chronic bronchitis especially in women of rural areas of Pakistan because of using wood, dung cake, rice straws etc for cooking instead of proper gas fuel.^{2,3} To improve the IAP in rural areas proper gas stoves should be used in the kitchen and if it is not possible improved stoves should be constructed for burning of biomass with least emission of fuel gases.⁴ Other factor which increases the IAP especially in Pakistan is indoor radon levels which increase the development of lung cancers due to their exposure.⁵

IAP has always been a health risk for children. Pneumonia due to IAP is one of the major causes of morbidity and mortality rate in children world-wide. Other associated disorders in children are chronic bronchitis, lung

cancer, low birth weight and cataract²

Despite of hazardous health effects Indoor Air Pollution has not been able to become a recognized health hazard at the policy level in Pakistan because we have insufficient scientific data on it.² Studies should be done to evaluate the levels of different indoor air pollutants at different places so that we may have proper evidence to tackle this dilemma. Both governmental and non-governmental organizations in collision which each other have to progress in this regard to reduce the health risks associated with it as it is one of the health risk factors that can be avoided by proper and effective measures.

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References

1. Mestl HE, Aunan K, Seip HM. Health benefits from reducing indoor air pollution from household solid fuel use in China - Three abatement scenarios. *Environ Int.* 2007 Apr 30.
2. World Health Organization. Indoor air pollution and child health in Pakistan. Report of a seminar held at the Aga Khan University, Karachi, Pakistan, 29 September 2005. Available from: URL: http://www.who.int/child_adolescent_health/documents/9241594169/en/index.html
3. Akhtar T, Ullah Z, Khan MH, Nazli R. Chronic bronchitis in women using solid biomass fuel in rural Peshawar, Pakistan. *Chest.* 2007; 132: 1472-5.
4. Khushk WA, Fatmi Z, White F, Kadir MM. Health and social impacts of improved stoves on rural women: a pilot intervention in Sindh, Pakistan. *Indoor Air.* 2005; 15: 311-6.
5. Matiullah , Ahad A, Rehman S, Mirza ML. Indoor radon levels and lung cancer risk estimates in seven cities of the Bahawalpur Division, Pakistan.