

Incidence of Acute Respiratory Infections among male children

AYAZ AHMED¹, ANILA ZAREEN², ABDUL SAMAD MEMON³, ZUHAIB AHMED QAZI⁴, ABDUL SATTAR JAMALI⁵, AIJAZ AHMED⁶, RANA MUHAMMAD AKHTAR KHAN⁷, MOSHAYYADAH AKHTAR⁸

ABSTRACT

Aim: To determine the incidence of acute respiratory infections under five year's male children.

Study design: Descriptive cross-sectional.

Place and duration of study: Dera Chahal, a semi urban area of Lahore, January 1st to 31st March 2015.

Methods: This was a descriptive cross sectional study conducted on 100 children of semi-urban area of Lahore. Purpose of this study was to identify incidence of acute respiratory infections among male children under the age of five years. Questionnaire and field guide was used for data collection. Interviews were taken from the mothers having children under the age of five years. Data was entered in computer and analyzed by using software SPSS-version 22.

Results: This study exposed that incidence of acute respiratory infections was 31%. The male children under the age of five years involved in study selected by simple random sampling and were from similar socio economic situation.

Conclusion: The study established that acute respiratory infections cases were more in under five years' children sharing their bed room with 2 or more people, among all 60% of the children were aged between 12-59 months.

Keywords: Acute Respiratory Infections, Incidence, Male Children, Under five years age.

INTRODUCTION

Acute respiratory infections are presently particular principal cause of death in children below five years of age in the world¹. Acute respiratory infections annually kill a predictable two million children under the age of five. As considerable as 60 percent of acute respiratory infections globally are associated to environmental conditions². Acute respiratory infections are internationally spread, while it has different impacts between developing and developed states. In both developing and developed countries, most children under 5 years of age experience among 4 to 6 episodes of acute respiratory infections annually. The overpowering majority of acute respiratory infections deaths and severe illness episodes are due to acute lower Respiratory Infections³; about 4.2 million ALRI deaths are estimated to happen among all age groups; of these 1.8 million are estimated to ensue among children 1-59m⁴. Majority of deaths are

avoidable and curable through simple, affordable interventions⁵. The incidence of acute respiratory infections in children aged less than 5 years is estimated to be 0.29 and 0.05 episodes per child-year in developing and industrialized countries respectively, which translates into 151 million and 5 million new episodes each year, respectively. Utmost cases occur in India (43 million), China (21million), Pakistan (10 million), Bangladesh, Indonesia and Nigeria (56 million each)⁶. According to Pakistan Demographic Health Survey, acute respiratory infections incidence in children under five years of age in Pakistan is shocking. It provides data of acute respiratory infections considering age, sex, cooking fuel and income, but does not mention outdoor pollution as one of the risk factors for acute respiratory infections⁷.

MATERIAL & METHODS

This descriptive cross-sectional study was conducted during the period of January 1st to 31st March 2015. This study was conducted at Dera Chahal, (a semi urban area of district Lahore) Punjab province of Pakistan. Study population was male children under five year's age. Male children under 5 years of age in joint family system were included in the study. Children having history of allergies, psychological infirmity and protein energy malnutrition were excluded from the study. Simple random sampling technique

¹Lecturer Community Medicine

²Asst Professor Pediatrics, Avicenna Medical College Lahore,

³PGR, Forensic Medicine, LUMHS Jamshoro,

⁴Lecturer Community Medicine,

⁵PGR, Cardiology NICVD Karachi,

⁶Medical Practitioner Karachi

⁷Professor Community Medicine, ⁸Lecturer Community Medicine, Avicenna Medical College Lahore.

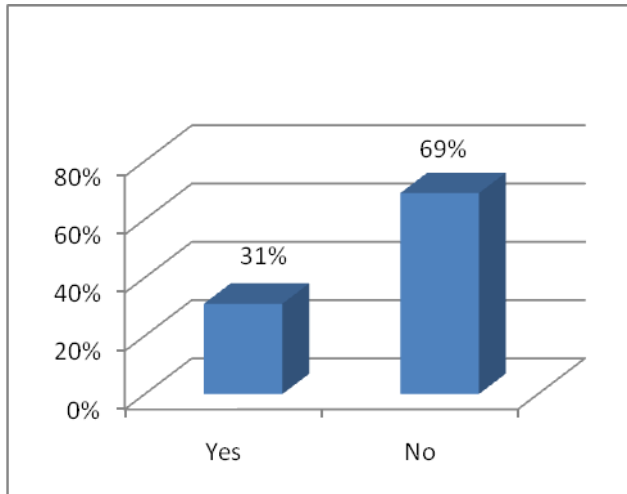
Correspondence to Dr. Ayaz Ahmed; E 196/A, St. 1, Cantt. View colony Bhattachowk Lahore, E-mail: drayazchandio@gmail.com

(Probability sampling) was used. For sample size approximation through formula: $(n=100)$; So, quoted male children; under five years age, included methodically from Dera Chahal, a semi urban area of District Lahore, Punjab Province of Pakistan.

RESULTS

This study exposed that incidence of Acute Respiratory Infections was 31%. The male children under the age of five years involved in study selected by simple random sampling and were from similar socio economic situation. This study was carried out at Dera Chahal, a semi urban area of District Lahore, Punjab Province of Pakistan. A self generated pre tested questionnaire and field guide was used for data collection. Interviews were taken from the mothers having male children under the age of 5 years, 13 children were excluded due to pre-decided cited criterion. Children under five years age from acute respiratory infection in last 2 weeks.

Incidence of acute respiratory infections among male children



DISCUSSION

This study quantified that incidence of acute respiratory infections was 31%, among The male children under the age of five years from Dera Chahal, a semi urban area of District Lahore, Punjab Province of Pakistan. The children involved in the study were from similar socio economic settings. Literacy rate in mothers was low, 83% of the mothers were illiterate and only 17% of the mothers attained the educational level up to intermediate, 92% of the mothers were house wives. Father's education was also low, 56% were reported as illiterate, and 22% of the fathers were government employees. Acute Respiratory Infections cases were

more under five children sharing their bed room with 2 or more people, correspondingly acute respiratory infections were reported more in children of illiterate mothers. The findings of our study are similar to various studies for respiratory problems like tonsillitis and acute pharyngitis were pragmatic among the identical age and gender group⁸.

CONCLUSION

Our research study determined that, generally 31%, under five year's children from Dera Chahal, a semi urban area of District Lahore, Punjab Province of Pakistan. 60% of the children were aged between 12-59 months. Results from the present study may be useful and to be used for further research studies.

RECOMMENDATION

Badly-behaved may be tackled through planned health education, behavioral change communication (BCC) of parents especially mothers, subsequently and periodically done to achieve objectives. An electronic and non-electronic media like television, radio and newspapers should be used to enhance knowledge of mothers about problem. NGOs should be involved to argument at masses to shrink these problems. Strengthening of research, advocacy, networking and sustainable social mobilization.

Acknowledgement: We are grateful to all those who gave us authorization to conduct this research study as well as all the participants; participated in the research study.

REFERENCES

1. The World health report; Reducing Risks, Promoting Healthy Life Geneva: World Health Organization; [Online] assessed on [Nov. 2014]
2. World Health Organization; [Online] assessed on [Nov. 2014] available at: <http://www.who.int/ceh/en>
3. Rudan I, Boschi-Pinto C, Biloglav Z, Mulholland K, Campbell H: Epidemiology and etiology of childhood pneumonia. Bulletin of the World Health Organization 2008, 86:408-416B
4. Simoes AF, Cherian T, Chow J, Shahid-Salles S, Laxminarayan R: Acute Respiratory Infections in Children. In Disease. Control Priorities in Developing Countries; 2nd edition. Washington: Oxford University Press; 2006.
5. WHO [Online] assessed on [Nov. 2014] <http://www.who.int/mediacentre/factsheets/fs178/en/index.html>
6. Scott JA, Brooks WA, Peiris JS, Holtzman D, Mulholland EK. Pneumonia research to reduce childhood mortality in the developing world. J Clin Invest. 2008 Apr; 118(4):1291-300
7. Pakistan Demographic Health Survey. (PDHS) [Online] assessed on [Nov. 2014]
8. World Bank 2003, 'Health Impacts of Outdoor Air Pollution' South Asia Urban Air Quality Management Briefing, pap

