

ABSTRACT

Sri Lanka is identified as one of the highest prevalent countries with asthma. Also asthma is one of the common disease among admissions to the paediatric wards in the country. Yet, quality and safety of paediatric asthma management at the in ward setting have not been assessed. Present study was conducted to describe the quality of care in management of asthmatic children with regard to compliance with guidelines and describing the patient safety by determining the prevalence of prescribing errors. Furthermore, caregiver knowledge and preventive practices on asthma and satisfaction regarding care provided while in the ward was studied. Also, effectiveness of a health education intervention to caregivers of in ward asthmatic children with respect to improving clinical outcomes of the child and caregiver knowledge and preventive practices was assessed.

This study was carried out in the district of Gampaha in Sri Lanka in government hospitals with paediatric units during the period of September 2010 to March 2011 in three phases.

A descriptive cross sectional design used to describe the quality of care in management of asthmatic children admitted to paediatric wards in district of Gampaha by determining the extent of compliance with guidelines and describing the patient safety by determining the prevalence of prescribing errors. Sample of 577 children diagnosed by consultant paediatrician were selected. Data collection instruments were IAQ I and three record sheets. Compliance with guidelines according to 11 indicators and prevalence of different types of prescribing errors were expressed in percentages.

Descriptive cross sectional study was carried out to describe the knowledge on risk factors of asthma, secondary prevention practices among caregivers and satisfaction of caregivers on management of the in ward asthmatic children. Self-administered questionnaire were used among the 577 caregivers of children and knowledge on

asthma, preventive practices and satisfaction was categorized according to appropriate cut off values. Using bivariate and multivariate logistic regression, associated factors were identified for poor knowledge on asthma, preventive practices and satisfaction.

An experimental study was carried out with 86 and 91 caregivers of asthmatic children in intervention and control group to determine the effectiveness of a health education intervention with respect to preventing recurrent attacks and improving knowledge on caregiving. Health education booklet was prepared by PI to be used as the intervention and its validity was assessed by experts in the field. Caregivers were given a summary sheet to record child's symptoms daily and outcome was evaluated at three months and six months.

The 11 indicators with compliance to guidelines were assessed in Proportions: children with assessment of acute severity of asthma - 100%, children with systemic corticosteroid therapy at first prescription - 88.9%, oral steroid therapy at first prescription - 69%, chronic asthma severity assessment - 31.19%, caregivers who got health education on triggering factors of asthma - 62.0%, caregivers who got health education on what to do during asthma attack - 37.1%, caregivers who got health education on how to use the inhaler - 68.8%, prescribed a long term use of a steroid inhaler - 54.5%, scheduled follow up appointments - 90.6%, caregivers with a diagnosis card at discharge - 100.0%, complete discharge summary on diagnosis card or clinic book - 74.4%

Prevalence of prescribing errors for ten different prescribing errors varied from 0% to 52%. Among caregivers of asthmatic children good knowledge on asthma was observed in 64%. Caregivers been educated less than O/L and duration of prophylaxis treatment for less than one year were identified as associated factors for having poor knowledge on asthma. Among caregivers of asthmatic children good preventive practices were observed among 58.4%. Only 52.7% of the caregivers of asthmatic children were satisfied with the inward management of the child.

Health education intervention significantly decreased GP/OPD visits in intervention group compared to control group at three months and six months follow up. Also

clinical outcome of the asthmatic child is improved and further caregiver knowledge on asthma and preventive practices were improved.

Conclusions and recommendations

It is necessary to carryout routine clinical audits in wards to assess the extent with guidelines of management of patients. Since the prevalence of some prescribing errors were very high, it is necessary to introduce a format to be followed for prescriptions. Hospital administrations need to improve sanitary and caregiver facilities in wards. Health education using a standard asthma health education booklet is necessary to be introduce among the caregivers and individual explanation and discussion with caregiver by a medical officer would improve the clinical outcomes of the child.