Respiratory morbidity in general/family practice

A L P de S Seneviratne1, S Samaranayake2, S Paranavitana2, K P Piyasena2, P R Siriwardene2, A Gamage2, T Silva2


Abstract

Objective: To identify the impact of respiratory problems in general practice. This will include the prevalence of respiratory problems, morbidity pattern and their relationship to age, sex, and need for referral.

Methodology: This was an observational-descriptive study conducted in some of the general practice clinics. All were given the task of collecting data in a standard flow chart. These were age, sex, ethnicity, reason for encounter and diagnosis, according to the respiratory rubric in the International classification of primary care (ICPC). This study was conducted from the 1st of April 2007 to 31st of May 2007.

Data was analyzed using SPSS.

Results: The study sample consisted of 5643 patient encounters related to respiratory problems. This accounted to 30% of daily general practice consultations. The male to female ratio were almost equal. 48.7% of the study sample were in the paediatric age group (<12year & 4.3% were elders (>65years). Cough (46.5%) wheezing(11.2 nasal congestion & discharge(10.2%)were the common presenting symptoms. 36.1% were diagnosed as URTI, 21.2% as Bronchial Asthma and19.6% had evidence of LRTI. The referral rate to a chest physician was less than 1%.

Conclusion: The results demonstrated that respiratory problems are common reasons for encounter in general practice. Therefore it is important to update the knowledge of General Practitioners in this field.

Introduction

Respiratory symptoms are most frequent reasons for consultation. A study conducted in 2000 by the Institute of Policy Studies to identify the reasons for encounter in general practice in Sri Lanka showed that the respiratory problems were the commonest, general and unspecified symptoms, digestive problems and musculoskeletal symptoms being in the descending order1. The prevalence and morbidity of these conditions are on the rise. As general practitioners are the first contact care doctors they are bound to see the bulk of these conditions.

The researchers of this study were the members of the College of General Practitioners of Sri Lanka (CGPSL).

This was one of the initial studies conducted in order to determine the current morbidity pattern of respiratory problems encountered in general practice. This will help to identify topics when educating primary healthcare workers.

Objectives

Our general objective is to identify the impact of respiratory problems in general practice.

The specific objectives were to describe the prevalence of respiratory problems, morbidity pattern, relationship to age, sex and ethnicity and need for referral.

Finally the researchers will formulate practice guidelines for common respiratory problems identified in this study.

Method

Setting

In the clinics of full time GPs practicing in several districts in Sri Lanka. The districts are Clombo, Gampaha, Kalutara and Kandy.

Subjects

Patients attending these practices. They were from the following areas. Kalutara, Panadura, Aluthgama, Beruwala, Horana, Nugeoda, Kalubowila, Kohuwala, Maharagama, Boralsgamuwa, Ratmalana, Mt. Lavinia, Dehiwala, Moratuwa, Panadura, Mawanalla, Kegalle, Kandy, Piliyandala, Kesbawe, Boralasgamuwa, Bulathsinhala, Seeduwa, Katunayake, Ja-Ela and Veyangoda. These areas are urban, suburban and rural. Therefore this sample could represent the general distribution in Sri Lanka.

Design

Observational descriptive study based on reasons for encounter.

Study instrument

A flow chart included the following details:

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1 Senior Lecturer, Head/Department of Family Medicine, University of Sri Jayewardenepura, Nugegoda.
2 Member, College of General Practitioners of Sri Lanka.
Respiratory morbidity in general/family practice

- GP’s name and address,
- Patient’s details – date of birth, age, gender, ethnic group,
- Contact details – reason/s for encounter/presenting complaint/diagnosis/disease according to the ICHPPC symptoms (R01-29) and diagnosis/disease (R70-99) rubrics were recorded. The data analysis was done using the SPSS.

Results

This study was conducted from the 1st of April 2007 to 31st of May 2007. The total number of patient encounters were 19138. Number of patients with respiratory problems were 5643. Thirty percent of all patient encounters were related to respiratory illnesses.

The gender distribution male: female were equal.

Table 4. Disease distribution

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>URI</td>
<td>36.2</td>
</tr>
<tr>
<td>Asthma</td>
<td>21.2</td>
</tr>
<tr>
<td>Acute bronchitis/bronchiolitis</td>
<td>19.6</td>
</tr>
<tr>
<td>Hay fever/bronchitis</td>
<td>4.2</td>
</tr>
<tr>
<td>Sinusitis acute/chronic</td>
<td>4.1</td>
</tr>
<tr>
<td>Sore throat</td>
<td>1.9</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>1.1</td>
</tr>
<tr>
<td>COPD</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Bronchial asthma with allergic rhinitis comprised 25.4%.
Rate of referral to chest physicians were <1%.

Discussion

There had been few morbidity studies conducted in Sri Lanka. Most of them were before 1999. The only local study we could compare is the IPS Private Clinic Survey done in 20001. Out of 3364 patient encounters the commonest system involved was respiratory, accounting for 24.2%. Out of 19138 patient encounters.

In comparing the disease rubrics in the IPS study asthma was diagnosed in 24.4% to 21.2% in this study 1. The URI and LRTI percentages were 20.3% and 8.8% in IPS study and 36.2% and 19.6% in this study. This shows that the respiratory infections are on the rise in Sri Lanka though there is no significant difference in bronchial asthma though it is a common respiratory disease seen by the GPs. A notable feature in this study is the low prevalence of COPD accounting for <1%.

In the IPS study and this study cough, wheeze and runny nose were the commonest respiratory symptoms encountered by the GPs.

Studies conducted in developed countries have shown a steady rise in asthma and COPD. A large population based survey conducted in China showed that the overall prevalence of COPD was 8.2% (men, 12.4%; women, 5.1%). COPD is prevalent in individuals 40 years of age or older in China2.

A study in the general population of Verona in 1998 to assess the prevalence of asthma and asthma-like symptoms showed that wheezing was reported by 11.3% of males and 8.0% of females1. The allergic rhinitis and hay-fever prevalence was 16.9% with no differences owing to sex or age. In our study too wheezing was reported in 11.2% and runny nose and hay fever in 10.2%.

Conclusions

The results demonstrated that respiratory problems are common reasons for encounter in general practice. 99%

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of them are managed at the primary care level by general practitioners. The commonest reasons for encounter were cough, wheeze and nasal congestion/runny nose. It is important to update the knowledge of GPs in this field. Bronchial asthma, URI and LRTI were the most common diseases encountered by the GPs. The CGPSL should concentrate in educating the GPs in this regard.

Now that the morbidity pattern in respiratory conditions identified, the researchers will prepare practice guidelines for common symptoms identified in this study such as cough, wheeze and runny nose.

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References