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<td><strong>Author(s)</strong></td>
<td>Lam, TP; Lam, KF</td>
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<tr>
<td><strong>Citation</strong></td>
<td>Hong Kong Medical Journal = Xianggang Yi Xue Za Zhi / Hong Kong Academy Of Medicine, 2001, v. 7 n. 2, p. 146-149</td>
</tr>
<tr>
<td><strong>Issued Date</strong></td>
<td>2001</td>
</tr>
<tr>
<td><strong>URL</strong></td>
<td><a href="http://hdl.handle.net/10722/45118">http://hdl.handle.net/10722/45118</a></td>
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Family doctors’ attitudes towards patient self-management of upper respiratory tract infections

Objectives. To determine the clinical attitudes and behaviour of family doctors in Hong Kong towards patient self-management of upper respiratory tract infections, and factors which may influence this practice.

Design. Questionnaire survey conducted between February 1999 and April 1999.

Setting. Hong Kong College of Family Physicians.

Participants. Members of the Hong Kong College of Family Physicians.

Results. A total of 730 family doctors completed a postal questionnaire on self-management of upper respiratory tract infection, giving an overall response rate of 71.9%. The majority (95.2%) of respondents agreed that patients should be advised on self-management. More than two thirds (69.7%) of respondents also considered patients should be advised on self-medications for upper respiratory tract infection. Nearly two thirds and one third of respondents stated they would advise more than 60% of patients on self-management and self-medication, respectively. A close association was noted between the doctor’s view on the usefulness of antibiotics for upper respiratory tract infection and patient advice regarding self-management and self-medication strategies.

Conclusion. Doctors with certain characteristics are more likely to advise patients with upper respiratory tract infection on self-management and self-medication for upper respiratory tract infection.

Introduction

Upper respiratory tract infections (URTIs) are by far the most common diagnosis made in general family practice in Hong Kong, accounting for...
34.6% of all diagnoses, according to a morbidity survey conducted by the Hong Kong College of Family Physicians. Upper respiratory tract infection is also a common diagnosis worldwide and is responsible for a significant proportion of primary care consultations. Many patients may attend their family doctor because they believe antibiotics are useful for URTIs. There is however, an increasing realisation that for most acute respiratory illnesses—common cold, sore throat, otitis media, sinusitis, and bronchitis—treatment with antibiotics is likely to be of only marginal benefit to individual patients. Despite this, 12 million antibiotic prescriptions were written for colds, URTIs, and bronchitis during 1992 in the US alone. This equates to approximately 21% of all antibiotic prescriptions for adults in the US in that year.

Antibiotic prescribing for URTIs has been shown to have multiple consequences, including higher consultation rates, increased re-attendance rates, and the emergence of drug-resistant bacteria. Effective negotiation, communication and information sharing appears to be crucial when dealing with parents and their young children with acute respiratory illness. Observational studies investigating the quality of consultations in family practice, have shown that when psychosocial problems are addressed, prescribing of antibiotics falls. The objectives of this study were, therefore, to determine the clinical attitudes and behaviour of family doctors in Hong Kong towards self management of URTIs, as well as the factors influencing these attitudes and behaviours.

Methods

This study forms part of a larger research project, investigating the management of URTIs by family doctors in Hong Kong. All 1016 fellows, members and associate members of the Hong Kong College of Family Physicians normally residing in Hong Kong were sent an explanatory letter and a questionnaire for completion between February 1999 and April 1999. Information including age, sex, years of clinical practice, postgraduate qualifications, formal vocational training in family medicine, type of clinical practice (private versus public), and any special clinical interests, together with clinical attitudes and behaviour with regard to patient self-management of URTI, was requested. Each questionnaire comprised two sheets.

Data were analysed using Statistical Package for Social Sciences (Windows version 8.0; SPSS Inc., Chicago, US) for preliminary summary statistics. As the majority of variables were ordinal values, an ordinal logistic regression analysis was carried out for each variable of interest. The statistical significance of potential explanatory variables—continuous variables (such as age and years of practice), discrete variables (such as sex, and type of practice) and ordinal variables (responses to some questions) —were tested by the likelihood ratio test using JMP (Windows version 3.2; SAS Institute Inc., Cary, North Carolina, US).

Results

By early July 1999, 733 questionnaires had been returned after three mailings. Three questionnaires were returned because of incorrect addresses. Thirty-one respondents were asked to complete questionnaires because they had overlooked the second page. The overall response rate was 71.9% (730/1016). The response rate was higher among fellows (83.6%) than in members (75%) or associate members (63.5%).

Respondents included 560 males, 167 females, and a further three respondents who declined to disclose their sex. Age of respondents ranged from 24 to 78 years (median, 40 years). As expected, the older the respondent, the longer the years of clinical practice (correlation coefficient, r=0.974, P<0.001). There were more family doctors working in the private than the public sector (62.9% versus 37.1%). Ninety percent of respondents had special clinical interests, including internal medicine (30.0%), paediatrics (16.6%), obstetrics and gynaecology (7.8%), dermatology (5.6%), and surgery (4.0%).

The majority of respondents (695/730; 95.2%) indicated that patients should be advised on simple self-management for URTI, for example, bed rest and oral fluids, whereas 4.5% (33/730) did not agree with this approach. These responses were related to practitioner age (P<0.0001), and years of clinical practice (P<0.0001). Older, and more senior family doctors were more likely not to advise patients on self-management practices (P<0.0001 for both variables).

Most respondents (509/730; 69.7%) also thought patients should be advised on the use of simple self-medications for URTI, such as paracetamol and antihistamines, whereas 29.6% (216/730) did not agree with such advice. Responses were related to age (P<0.05), years of clinical practice (P<0.05), type of practice (P<0.05), special clinical interest (P<0.01) and postgraduate vocational training in family medicine (P<0.05). Older doctors (P<0.0001), more senior
doctors (P<0.0001), those in private practice (P<0.0001),
and practitioners with special clinical interests in
surgery and surgical specialties (P<0.001) were less
likely to advise patients on self-management includ-
ing simple self-medications. Family doctors with formal
postgraduate vocational training in family medicine,
however, were more likely to support self-management
by patients (P<0.01). Furthermore, if a doctor was more
likely to advise patients of simple self-management,
his/her was also more likely to advise patients on the
use of simple self-medications (P<0.001).

Family doctors were also asked how frequently they
would advise patients on simple self-management for
URTIs. Two thirds of doctors responded that they would
advise self-management for over 60% of patients with
URTI (Table 1). This practice was related to their age
and years of clinical practice, with older, and more
senior doctors less frequently advising patients of
self-management (P<0.001 for both variables). Doctors
who thought patients should be advised of self-
management (P<0.0001), including self-medications
(P<0.0001) however, more frequently advised patients
of these practices. A close relationship was noted with
respect to whether the doctor advised his/her patients
on self-management for URTI, and tendency to pre-
scribe antibiotics for this condition. The more likely it
was that the doctor prescribed antibiotics for URTI,
the less likely it was that he/she would advise his/her
patients on self-management (P<0.05). If the doctor
thought antibiotics were useful for URTI (P<0.05),
he/she more often prescribed antibiotics (P<0.01);
and the more patients the family doctor believed were
expecting antibiotics (P<0.05), the less frequently he/
she would advise on self-medications.

Approximately one third of doctors indicated
that they would advise more than 60% of patients with
URTI on the use of self-medications (Table 2). Doctors
in private practice were more likely to advise the use of self-medications than their public practice
counterparts.

Table 1. Responses to the question ‘How often do you advise patients on simple self-management (eg bed rest, oral fluids) for their upper respiratory tract infection?’

<table>
<thead>
<tr>
<th>Frequency (%)</th>
<th>Respondents, n=730</th>
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</thead>
<tbody>
<tr>
<td>0-19</td>
<td>79 (10.8)</td>
</tr>
<tr>
<td>20-39</td>
<td>70 (9.6)</td>
</tr>
<tr>
<td>40-59</td>
<td>91 (12.5)</td>
</tr>
<tr>
<td>60-79</td>
<td>113 (15.5)</td>
</tr>
<tr>
<td>80-100</td>
<td>375 (51.4)</td>
</tr>
<tr>
<td>Missing data</td>
<td>2 (0.3)</td>
</tr>
</tbody>
</table>

Table 2. Responses to the question ‘How often do you advise patients on simple self-medications (eg paracetamol and antihistamines) for their upper respiratory tract infection?’

<table>
<thead>
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<th>Frequency (%)</th>
<th>Respondents, n=730</th>
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</thead>
<tbody>
<tr>
<td>0-19</td>
<td>251 (34.4)</td>
</tr>
<tr>
<td>20-39</td>
<td>113 (15.5)</td>
</tr>
<tr>
<td>40-59</td>
<td>130 (17.8)</td>
</tr>
<tr>
<td>60-79</td>
<td>105 (14.4)</td>
</tr>
<tr>
<td>80-100</td>
<td>125 (17.1)</td>
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<tr>
<td>Missing data</td>
<td>6 (0.8)</td>
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Discussion

This questionnaire survey reveals the approach to man-
agement of patients with URTI taken by family doc-
tors in Hong Kong. Upper respiratory tract infection
accounts for a significant proportion of primary care
consultations, consuming important health care re-
sources. It is therefore reassuring to note in this regard
that the vast majority of respondents believed pa-
tients should be advised of simple self-management
strategies for their URTI. The data gathered, however,
also indicates that only approximately two thirds of
respondents were regularly advising self-management
for more than 60% of patients seen with URTI. This
raises the issue of how the remaining patients with
URTI are managed by their family doctors. Are these
patients given medications that they do not need? Do
family doctors teach individual patients what they
need to know about their illnesses?

In addition, it is interesting to note that approxi-
mately one third of respondents said that they would
advise more than 60% of patients with URTI to
regarding the use of self-medications. Doctors in private
practice appeared more in favour of this approach than
doctors in public practice. This refutes the commonly
held view that private doctors might be less motivated to
educate patients on health care for fear of losing patients.

The negative relationship between the doctor’s view
on the usefulness of antibiotics and their advice on
self-management and self-medication highlights the
importance of educating primary care doctors on this
important issue. It also confirms the close relationship
between inappropriate management and increased
health care utilisations.

Patients now expect their doctor to provide them
with necessary information on their illness. Surveys,
such as this study, provide information on how closely
this expectation is currently matched with clinical
reality.
Conclusion

This study has identified major factors affecting family doctor’s advice to patients on self-management and self-medication for URTIs. These findings are important to understand the clinical behaviour of doctors in managing the most common condition in family practice.

Acknowledgement

This study was made possible by a grant from the Committee of Research and Conference Grants of the University of Hong Kong. We would also like to thank research assistant Mr K Wong for his valuable assistance with the statistical analysis.

References

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