

Analgesics: a comparison of therapeutic knowledge and inter-professional liaison between general practitioners and community pharmacists

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SUMMARY

The aim of this study was to ascertain general practitioners' (GPs') and pharmacists' knowledge of analgesics, to establish professional opinion on their use, and to assess the extent of pharmacist input into the prescribing of analgesics. Pharmacists displayed a better knowledge of analgesics than their colleagues in general practice, but had little input into the prescribing decisions made by GPs. Pharmacists' knowledge is not being put to best use in contributing to the preparation of practice formularies, and links between these two health professional groups need to be developed further.

Introduction

ANALGESIC drugs are popular prescription items and include both simple analgesics and non-steroidal anti-inflammatory drugs (NSAIDs). In spite of the high incidence of side-effects, NSAIDs account for about 20 million National Health Service prescriptions written in Britain each year.¹ Prescribing advice on NSAIDs in particular has been addressed in *Current Problems in Pharmacovigilance*,² and is regularly revised in the *British National Formulary*. The importance of having an up-to-date working knowledge of medicines is recognized by both the medical and pharmacy professions, and is reflected in their encouragement of members to participate in continuing education. Likewise, assessment of current practice is becoming more acceptable to all professions through the process of audit. Evaluation of knowledge is less often tackled and is potentially more threatening for participants.

We are not aware of any studies that compare the knowledge and opinions of GPs and pharmacists. Pharmacists have been actively trying to extend their role as providers of drug information and advisers on health related issues. Evidence already exists that some community pharmacists assist in the compilation of formularies,³ but this appears to be infrequent.

The aims of this study were to ascertain GPs' and pharmacists' knowledge of analgesics, to establish the professional opinion of their use, and to assess the extent of pharmacist input into the prescribing of analgesics.

Method

Following a pilot study, a questionnaire was constructed for distribution to GPs and community pharmacists. This addressed aspects of practice, such as review procedures, and factors influencing the prescribing and selling of analgesics. Analgesic knowledge was assessed using multiple-choice questions. Each correct answer was allocated a score of one, and an incorrect answer a score of zero. The maximum score possible was 13. The questionnaire was posted to randomly selected GPs ($n = 250$, total population = 987) and pharmacists ($n = 250$, total population = 930) throughout Northern Ireland in January 1995. Non-responders were sent a second questionnaire in March 1995, and, if necessary, a third in May 1995.

Results

The final response rate was 60% for GPs and 41% for community pharmacists. There was no statistically significant difference in the sex of responders and non-responders for either profession ($\chi^2 = 0.65$, $P > 0.05$ for pharmacists; $\chi^2 = 0.02$, $P > 0.05$ for GPs). Pharmacists ($\chi^2 = 4.43$, $P = 0.03$) and GPs ($\chi^2 = 12.68$, $P = 0.0004$) who had been practising for more than 10 years were significantly less likely to respond. GPs were significantly more likely to respond than pharmacists ($\chi^2 = 14.17$, $P = 0.0002$).

Thirty-six GP responders (24%) used an analgesic formulary at the time of the questionnaire. Their prescribing of analgesics was influenced by other partners (76%), drug representatives (53%), and pharmacists (17%). Only 12% of pharmacists stated that they had an input into GPs' prescribing of analgesics.

The knowledge section of the questionnaire was analysed separately, based on 250 returns. The reliability value of 0.73 (Kuder-Richardson formula 20⁴) indicated that the questionnaire was suitable for making a comparison of the performance between the professional groups. Pharmacists performed significantly better on eight questions (logistic regression, $P < 0.05$). These were concerned with aspects of drug use, including adverse drug reactions (ADRs) and contraindications (CIs). GPs performed significantly better on one question only (logistic regression, $P < 0.05$), which was a case study. The distribution of scores obtained in the knowledge section by both professions is shown in Figure 1. The mean scores were 47% for GPs and 63% for pharmacists. Neither the number of years in practice ($P = 0.36$, analysis of variance (ANOVA)), nor the sex of the responder had a significant influence on total score ($P = 0.58$; ANOVA). However, there was a significant difference between the scores of the two professions ($P < 0.0001$; ANOVA).

Discussion

This paper strengthens the argument for improved collaboration between GPs and community pharmacists, particularly in formulary development. From the results of this survey, pharmacists displayed a better knowledge of analgesics than their colleagues

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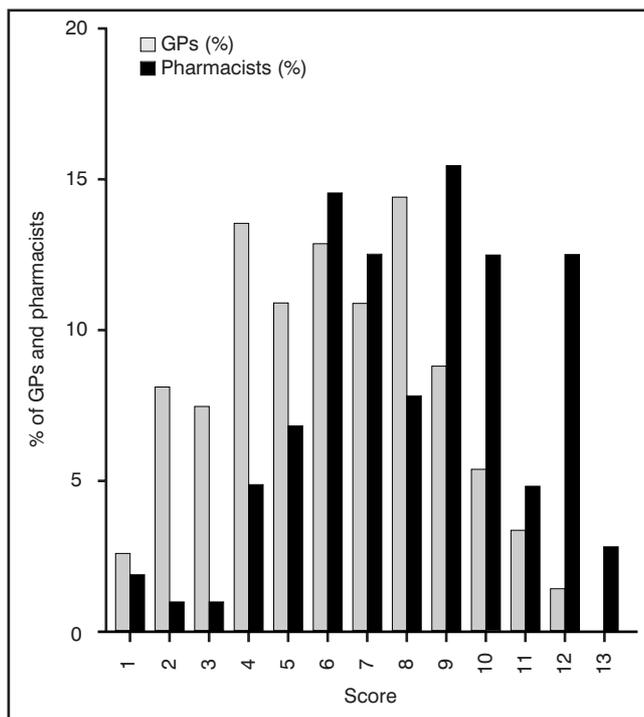


Figure 1. Distribution of scores obtained by GPs and pharmacists in a questionnaire on analgesics.

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in general practice. Pharmacists, as part of their professional practice, may be more likely to consult reference texts, which may have contributed to their higher scores. Nevertheless, the knowledge that pharmacists have is not being put to best use in contributing to the preparation of practice formularies. Encouragingly, 63% of those pharmacists who had no role in developing analgesic formularies were eager to do so. Already, some links exist between these two health professional groups, and this type of professional liaison would help develop these links further.⁵

This study highlights some areas of close agreement between pharmacists and GPs; for example, poor compliance and incorrect analgesic were the main reasons for poor pain control indicated by both professions. However, there was some divergence of opinion with respect to issues such as the use of topical analgesics and NSAID and prostaglandin analogue combinations. This reinforces the need for agreed analgesic prescribing guidelines that make use of GPs' clinical expertise and pharmacists' knowledge of ADRs and CIs.

This study concentrates on only one group of drugs, but the results may encourage GPs to view the local community pharmacist as a relevant and useful information source on other drug-related issues.

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