BOWEL SYMPTOMS: A SURVEY AT PHARMACIES IN WESTERN AUSTRALIA.

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Abstract

Background: Many people in Australia consult pharmacists as the first point of contact when seeking medical advice, therefore it is important that the pharmacist can appropriately decide whether to provide an over-the-counter treatment or advise a consultation with a doctor.

Methods: A questionnaire was administered to clients at eighteen community pharmacies in Perth, Western Australia over 15 weeks. Seventy-four clients seeking over-the-counter treatment for haemorrhoids were invited to complete an anonymous, previously validated questionnaire based on symptoms of colorectal disease.

Results: A response rate of 63.5% was recorded; respondents had a mean age of 43 years. More than half the respondents presented with rectal bleeding, the majority indicating that the blood was mixed with the stool. 40% of respondents indicated that they had experienced a change in bowel habit, which had persisted for over a month in most (66.7%) cases. Twenty percent of those surveyed presented with slime and / or blood in their bowel motion, and almost one in three presented with abdominal pain. Respondents' attitudes to completing the questionnaire were overwhelmingly positive.

Conclusions: The symptomatic profiles of clients who present with anorectal symptoms suggest that there are a significant proportion of clients who may benefit from medical consultation to rule out underlying conditions such as colorectal cancer. Responses from participants also suggest that the questionnaire model for obtaining symptomatic information from clients is a useful and acceptable intervention in a community pharmacy setting.

Background

In Australia, community pharmacists are amongst the most highly accessible health professionals. Whilst the traditional role of the pharmacist has been the dispensing of medicines on prescription, this is expanding ever rapidly into the provision of primary health care.[1,2,3] Pharmacists frequently advise people about health concerns because there is no charge for pharmacist advice, and there is no requirement to make an appointment so waiting times are minimal.[1,4] Primary care in a community pharmacy setting includes the sale of non-prescription medicines (unscheduled, 'pharmacy' or 'pharmacist only' medicines),[1,2] provision of general health information and advice,[1,5] and referral to other health care professionals where appropriate.[1,5] Referral, especially to general practitioners, is of importance because community pharmacy customers may fail to recognise the importance of many signs and symptoms, and the pharmacist frequently has to review the suitability of product requests.[5] Community pharmacy customers may request either specific products or products to treat specific symptoms, and it has been demonstrated that both product-based and symptom-based requests are often inappropriate, often requiring the pharmacist to suggest other treatments or courses of action.[6] This is especially true in the case of potentially life-threatening conditions.

The symptoms associated with haemorrhoids are often non-specific and can be attributed to a wide range of gastrointestinal conditions, with colorectal cancer as a key differential diagnosis.[7, 8, 9] The prognosis for colorectal cancer deteriorates with later detection, therefore it is important that early signs are recognised and the customer referred for further medical investigation when indicated. The Royal Pharmaceutical Society of Great Britain practice guidelines outline a number of trigger points for referral of clients with colorectal symptoms, including rectal

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bleeding; persistent change in bowel habit, especially looser motions; abdominal pain; a right sided abdominal mass and unexplained iron deficiency anaemia.[10] There are no equivalent practice guidelines published by an official body in Australia. Specific anorectal symptoms are strongly associated with colorectal cancer, for example an increased frequency of bowel motions that is worse in the morning has a relative risk of 2.32 for colorectal cancer.[11] These symptoms may often be self-treated by customers using products available in pharmacies. As such, the pharmacist needs to obtain an adequate amount of symptomatic information to determine which treatment, if any, is appropriate, and refer where further medical investigation is warranted.

It has been shown by Evans MJ et al. (2005) and Lohrisch D et al. (1978) that pharmacists do have the necessary knowledge and skills to decide whether to treat or refer symptomatic customers.[12, 13] However, this study aims to determine the proportion of community pharmacy customers who present with significant symptoms.

Clients who suffer from haemorrhoids will typically present with symptoms such as rectal bleeding, sensation of incomplete evacuation following a bowel motion and local irritation and itching.[9] The development of haemorrhoids may be preceded by constipation.[9] Symptoms of colorectal cancer include persistent rectal bleeding, a change in bowel habit, abdominal cramping, faecal urgency and unexplained iron deficiency anaemia.[14] These symptoms are similar and it may only be the detail of symptoms that differentiates them. For example, a small quantity of blood that is seen only on the toilet paper following a bowel motion is likely to be a result of haemorrhoids, but blood mixed with the stool warrants further investigation. Clients who report suffering from constipation are at a lower risk of colorectal cancer than those with diarrhoea, or alternating diarrhoea and constipation. [9, 10,11,14,15]

Haemorrhoids may be considered an embarrassing condition. Previous studies have focused on similar embarrassing problems such as vulvovaginal candidiasis..[16] They suggest that many people, are likely to be reluctant to disclose their symptoms, especially in the detail that is necessary for health care professionals to make appropriate recommendations.[17,18] Whilst some people are uncomfortable discussing personal issues such as their health in the setting of a community pharmacy, it has

been shown that most people trust their local community pharmacist, feel that their privacy is well maintained, and often demonstrate considerable trust in all pharmacy staff.[18,19] In a 2006 Reader's Digest survey, pharmacists ranked fifth on a list of the most trusted professions, and trust has been cited as the primary reason that people seek information from pharmacists.[20,21] This study aims to determine the attitudes of pharmacy customers to completing written questionnaires about their anorectal symptoms.

The use of written materials and screening methods in a community pharmacy setting has been previously successfully evaluated.[22, 23, 24] It was hypothesised that a survey of clients with colorectal symptoms could be used to screen for clients at risk of colorectal cancer. Colorectal cancer is currently one of the most prevalent cancers in Australia, and is also responsible for 12-13% of cancer related deaths.[25] Current screening methods involve participant using a faecal occult blood test and ensuring regular colonoscopies are performed for people with risk factors.[14,26] However, clients who are not eligible to participate in the national bowel screening program would particularly benefit from close questioning when presenting to a pharmacy with colorectal symptoms.

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The use of written materials to screen for several chronic or life-limiting diseases in community pharmacy have been studied, and in many instances these written materials have been used when referring these clients to general practitioners.[27] Given that clients had already taken the time to complete a detailed symptom-based questionnaire, it was thought that this questionnaire could be incorporated into a referral process for at-risk clients. The extent to which clients would agree to community pharmacists passing this information to their general practitioner is not clear and requires further investigation.

The objectives of this study were to determine:

- whether there are community pharmacy customers who present with anorectal conditions that would benefit from detailed questioning regarding their symptoms;

- whether certain customers who request treatment for anorectal conditions present with risk factors and specific symptoms associated with colorectal cancer, or other serious conditions;
- the acceptability of a written symptom-based questionnaire within a community pharmacy setting; and
- the potential for the utilisation of written materials in a more formalised referral process to general practitioners.

Methods

Ethical approval for the project was obtained from the Curtin University of Technology Human Research Ethics Committee (PH-06-2007).

The questionnaire used in this study is known as the Patient Consultation Questionnaire (PCQ). It is a validated survey previously administered to patients in the United Kingdom prior to attending a specialist colorectal clinic. The PCQ is a 60-item questionnaire of colorectal symptoms (combinations of symptoms, if any, their duration and their progression) and medical and family history.[15] The questionnaire was shown to have both high specificity and sensitivity, and a high numerical weighted score generated from the results had a strong association with colorectal cancer, and also other serious colorectal conditions such as inflammatory bowel disease and diverticular disease.[15] For the purposes of this research, the survey also included a number of questions relating to the participants' attitudes to completing the questionnaire.

As this was a student project with limited resources the survey excluded questions on family history such that it was not possible to determine a 'risk score' for each respondent and therefore formally identify those who were at highest risk of colorectal disease. Had it been possible to identify these people there would have been an ethical obligation to follow up the cases with a cost to the researcher.

A convenience sample of community pharmacies in the Perth metropolitan area were recruited to participate in this study and agreed to distribute the PCQ to customers.

Staff at participating pharmacies was informed that any customer who requested treatment for haemorrhoids or anorectal symptoms indicative of haemorrhoids should be invited to be included in the study. Clients under the age of 18, or who were otherwise unable to give informed consent, were excluded.

Pharmacy staff was visited by the student approximately once a week to collect completed surveys and discuss informal observations made by pharmacists about the study.

At the end of the data collection period consisting of a total of fifteen weeks, all remaining surveys were collected from participating pharmacies. Data from the completed questionnaires was entered into Microsoft Excel for Windows® using numerical coding for responses. The data was then analysed using SPSS for Windows®.

Results

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Seventy four people were invited to participate in the survey. Forty-seven completed surveys were received. The response rate was therefore 63.5%. Over half (51.1%) of the clients surveyed had presented with rectal bleeding. In the majority of cases (82.6%), the blood was reported as fresh or bright, however one patient indicated that the blood was old or dark, and three clients reported a mixture of both. Of those who reported rectal bleeding, 11 (47.8%) stated that the blood was seen on the toilet paper only. Two people reported that the rectal bleeding was mixed with the stool. Six people with rectal bleeding indicated that a large amount of blood was seen in the stool. See Figure 1.

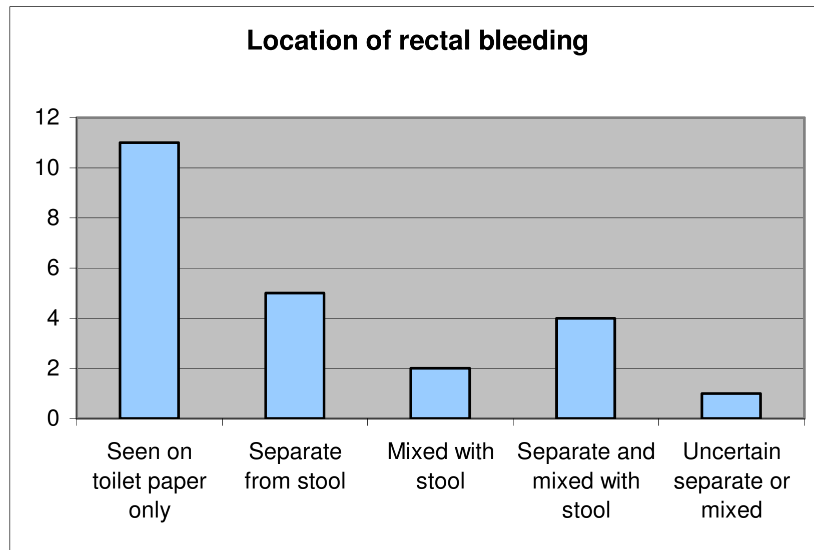

Figure 1. Location of rectal bleeding as described by respondents

Forty percent of respondents reported experiencing a change in bowel habit. In this study, 38.1% of people with an altered bowel habit indicated that they had suffered from diarrhoea, consisting of 17.8% of the total sample. Six respondents indicated that there was an increased frequency of bowel motions that was worse in the morning. Another 38.1% indicated that they suffered from constipation. The remaining 14.3% indicated that they had suffered from alternating diarrhoea and constipation. See Figure 2.

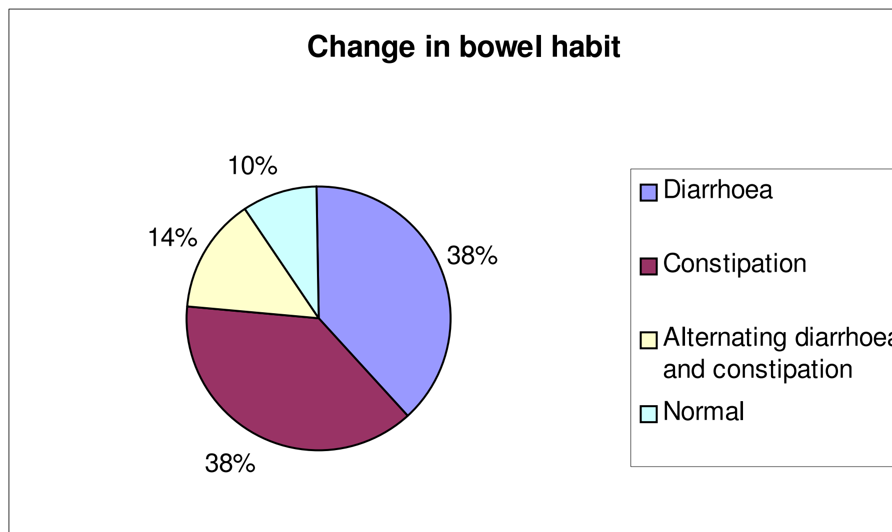

Figure 2. Bowel habit changes as described by respondents

Only 10 out of the 23 (43.5%) clients who presented with rectal bleeding had sought treatment within a month of the onset of symptoms. Three clients reported that the rectal bleeding had been present for between six and twelve months, two stated that they had noticed bleeding for one to two years, and five out of the twenty-three clients who presented with rectal bleeding had experienced symptoms for over two years. Similarly, two thirds of clients who presented with altered bowel habit had suffered from symptoms for over a month, with 7 respondents (15.6% of the total sample) indicating that the change had been present for over two years. See Figure 3.

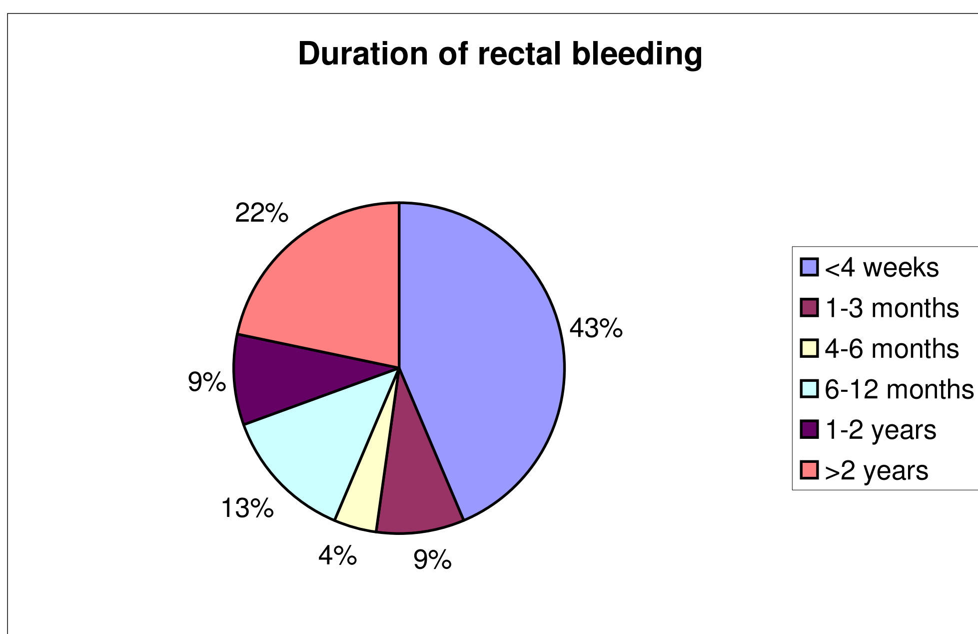

Figure 3. Duration of presence of rectal bleeding

Forty percent of respondents in this study had not sought the advice of a general practitioner before presenting to the community pharmacy with symptoms. Many of these presented with “red flag” symptoms that warrant further investigation, including two with blood mixed with the stool and four with a persistent change in bowel habit.

Thirteen people (28.9%) who participated in this study presented with abdominal pain. Eleven of these people also indicated that they suffered from bloating. Unexplained weight loss was present in eight respondents (17.8%) and a loss of appetite was reported in five (11.1% of the total sample).

Eighteen of the forty-five clients who requested haemorrhoid products indicated that they were taking some form of regular medication, as shown below in figure 4.

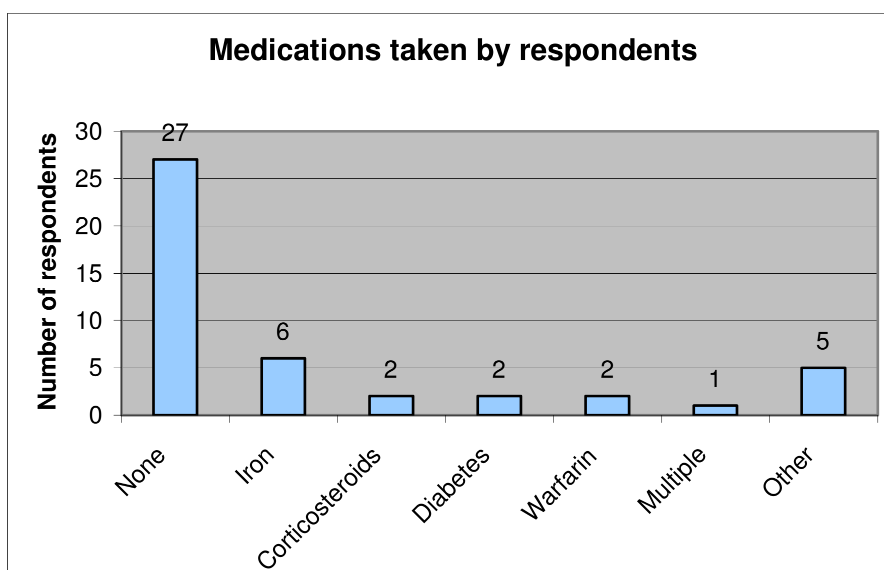

Figure 4. Medications taken by survey respondents

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Several pharmacists mentioned during this study that people are frequently embarrassed when seeking haemorrhoid treatment, and may be reluctant to discuss their symptoms. 73.3% of respondents indicated that they would prefer to complete the questionnaire without assistance, with only 13.3% preferring the help of pharmacy staff.

86.7% of respondents indicated that the questionnaire was easy to complete. Thirteen respondents (28.9%) strongly agreed, and twenty-one respondents (46.7%) agreed that they were comfortable completing the questionnaire. The importance of privacy was highlighted as 75.6% of respondents indicating on a Likert scale, that it was important that they were able to complete the questionnaire in a quiet or private area. 66.7% of respondents also indicated that they were more comfortable completing written symptom based questionnaires than discussing their anorectal symptoms verbally with

Pharmacy staff. See Figure 5.

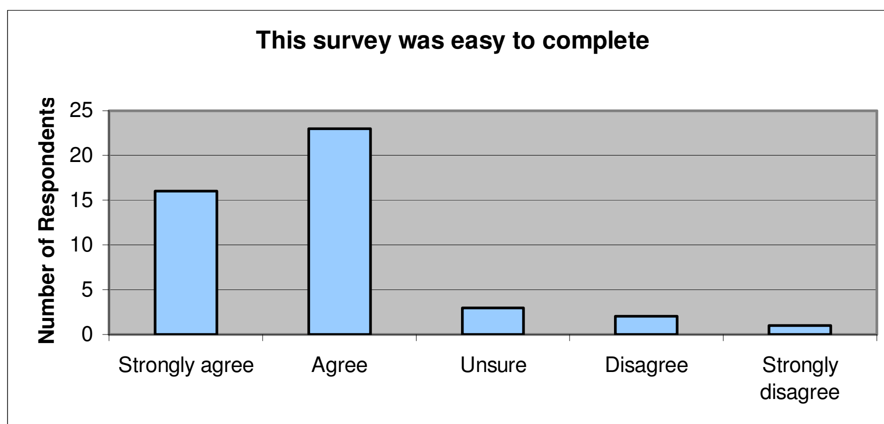

Figure 5. Ease of completion of questionnaire

Discussion

The symptomatic presentation of community pharmacy customers who request over the counter treatment for haemorrhoids as determined in this study demonstrates that many may not be presenting simply with haemorrhoids. The high incidence of rectal bleeding, altered bowel habit, abdominal pain and unexplained weight loss, particularly when they occur in the same patient, suggests that there are several occasions when a community pharmacist may need to refer a customer for a medical consultation. A detailed history of these symptoms is required to make an appropriate judgement on whether to treat or refer a patient, for example the amount of blood noticed by the customer may suggest a significant colorectal lesion, or the colour of blood may indicate bleeding further up the gastrointestinal tract.[15]

Also of particular concern is the prolonged duration of symptoms, with many clients apparently waiting for months before seeking advice. 50.1% of respondents with rectal bleeding, 33.3% of respondents with altered bowel habit and 33.3% of respondents with local anorectal symptoms indicated that these symptoms had persisted for over six months. Because the prognosis for many diseases, including colorectal cancer, worsens with late diagnosis, it is important that people are encouraged to seek advice sooner. What was not evaluated in this study was whether clients had tried treatments for these symptoms in the past. It is possible that some

clients have been presenting regularly and have been self-medicating for long periods without success, in which case urgent referral is indicated.

A number of clients who completed this questionnaire indicated that they took some form of regular medication. These people are likely to visit their local community pharmacy on a regular basis to obtain supplies, thus there is an opportunity to advice people who present with symptoms but may not consider it important to seek the advice of a doctor. In addition, several medications mentioned specifically in the questionnaire will have a bearing on cancer risk.[28, 29]

It also appears that a screening tool such as this questionnaire would be largely acceptable to clients if implemented in a community setting. Customer satisfaction with the questionnaire was high, with people reporting the exercise both easy and unobtrusive. One issue that may require further consideration however is the question of privacy. What this study did not address was how many of the respondents were actually given the opportunity to complete the survey in a private area, as it was observed that very few pharmacies have dedicated private spaces, and of those that do, the extent to which they are used is unclear. However the majority of customers reported being more comfortable completing written questionnaires about embarrassing symptoms than discussing symptoms verbally with pharmacy staff.

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It was also found that the majority of respondents (68.9%) would agree to allow the community pharmacist to pass copies of the completed surveys to their general practitioners if they felt that a medical consultation was required. There is therefore the potential for a more formalised referral system to be established between the community pharmacist and the general practitioner, especially given the increasing role of the pharmacist into the provision of primary health care. This preliminary study suggests that clients would be happy for liaison between health care professionals to occur, including a formal referral process, where appropriate. However, I urge caution when interpreting these results in view of the potential for bias given the limited response rate and lack of information about the attitudes of non-responders.

Conclusions

The symptomatic profiles of clients who present with anorectal symptoms suggest that there is a significant proportion that may benefit from pharmacist intervention and referral, to rule out potentially serious underlying conditions such as colorectal cancer. Responses from participants also suggest that the questionnaire model for obtaining symptomatic information from customers is a useful and acceptable format within a community pharmacy setting.

Further research is needed to determine what proportion of community pharmacy customers that request haemorrhoid treatment are diagnosed with colorectal cancer or other colorectal conditions.

Competing interests

The author declares no competing interests

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