

SELF CARE OF MINOR AILMENTS: A SURVEY OF CONSUMER AND HEALTHCARE PROFESSIONAL BELIEFS AND BEHAVIOUR

I. BANKS The Mens Health Forum, London UK

ABSTRACT

BACKGROUND: Most minor health problems can be managed by people with medicines that they purchase. However minor ailments remain the subject of many NHS consultations with doctors and generate substantial numbers of prescriptions.

OBJECTIVE: To investigate the attitudes and behaviours of consumers and healthcare professionals to discover what motivates and inhibits self care of common minor health problems.

METHODS: On-line surveys were conducted with 1317 consumers, 131 GPs, 130 Nurses and 159 Pharmacists from England and Wales. In addition 401 patients attending pharmacies to collect prescriptions self-completed a questionnaire.

RESULTS: Many consumers with a new minor ailment self treat (52%), or do nothing (22%). However behaviour is repetitive, with 62% choosing to visit a GP or nurse if a prescription was issued on the last suffering occasion. Conversely, past experience with self care appears to build confidence with 84% choosing this for new episodes. Pharmacists are willing to offer advice, but spend relatively little time doing so, with few consumers appearing to consult them for minor conditions. GPs and consumers disagree about the latter's confidence and willingness to self care and patients' experiences do not support GPs' claims to recommend self care often.

CONCLUSIONS: Consumer and GP behaviour in relation to managing minor ailments appears to have changed little over the last 20 years. A recommendation for self care must become what consumers expect to hear when they consult their GP for minor illness. Similarly doctors and nurses in general practice need 'permission' to meet that expectation and not prescribe for minor health problems.

Key words: Minor Ailments, Self Care, Pharmacy, Prescription, Consumer, Doctor, Pharmacist, Nurse.

INTRODUCTION

Consumer research sponsored by the Proprietary Association of Great Britain (PAGB) in 1987 and 1997¹ using comparable methodology established that minor health problems are very common (91% of consumers had suffered at least one problem in the last 6 months). An apparent willingness of consumers to self-manage these ailments is tempered by a degree of dependency on their local general practitioner (GP) and by lack of self confidence, which may lead them to abandon self care and visit a doctor before this is needed (as judged by the GPs consulted).

This 'doctor dependency' was further examined by a study in 2007^2 which sought to quantify the number of visits to general practice generated by minor ailments and the associated costs, in terms of doctors' time consumed and prescriptions generated. The results were quite startling. Minor ailments alone (i.e. excluding those consultations involving another condition) accounted for 18% of GP workload, or on average 1 hour per day for every doctor. Over 90% of these consultations resulted in a prescription, adding an estimated £371 million to the £1.5 billion of National Health Service (NHS) costs associated with GP time consumed.

The 'top ten' minor ailments (Back Pain, Dermatitis, Heartburn and Indigestion, Nasal Congestion, Constipation, Migraine, Cough, Acne, Sprains and Strains and Headache) accounted for 75% of total minor ailment consultations. Nearly half of these were for patients in the 16 to 59 year age bracket. These findings suggest that both patients and their doctors may be expending unnecessary time in dealing with minor conditions for which effective self care options exist.

The UK is a leader in increasing access to medicines by reclassifying them from 'prescription only' status and an increasing number of medicines have become available from pharmacies for purchase under a pharmacist's supervision ('P' status), with some available more widely when pharmacist supervision is not required (GSL status). These important changes in access to medicines in the UK over the last 30 years do not appear to have lessened the dependence of consumers on doctors. In turn, general practitioners, faced with a rising tide of serious medical conditions in an aging population, do not appear to have confronted the misplaced expectations of younger people with minor illnesses, for whom self care may be the obvious first choice.

Any attempt to address this evident inertia requires an understanding of the behaviour and attitudes of consumers and those that they choose to consult. For this reason, the PAGB commissioned TNS Healthcare (a Kantar Company) to conduct a survey with consumers, pharmacists and GPs/Nurses, in 2009.

METHODS

Between April and June 2009 TNS conducted on-line surveys³ with: 1317 (target 1300, 1000 England 300 Wales) nationally representative consumers (1017 England, 300 Wales), 131 GPs (100 England, 31 Wales), 130 Nurses (100 England, 30 Wales; including 46 Nurse Prescribers) and 159 Pharmacists (129 England, 30 Wales). These pharmacists were employed in a mix of pharmacy types: independents (63), small multiple pharmacy chains (76) and large multiples e.g. Boots/Lloyds pharmacies (20).

Consumers were screened to exclude some categories: e.g. those <15 years and >60 years, members of the medical professions and those working for market research companies, advertising agencies and pharmaceutical companies. Those that had completed a previous survey within 3 months were also excluded as were those marking a 5 – point scale on their

interest in health and well being issues as 'not at all interested'. The remaining consumers were accepted sequentially with quotas applied to gender, decade of age and UK region to ensure a nationally representative sample. Consumers had to answer all questions in sequence to complete the survey and therefore the sample represented only fully completed surveys.

Consumers were asked to provide demographic information³ and then were surveyed³ as to their experiences with, and attitudes to, the treatment of minor ailments. A general definition of minor ailments was given at the beginning of the interview: 'Throughout the questionnaire we have referred to minor ailments, by this we mean those conditions which do not pose a major health risk and can be managed with non-prescription medication bought from a pharmacy or supermarket. Where we have talked about self-treating a minor ailment, we mean treating conditions with non-prescription medication or home remedies without consulting a GP/Nurse.'

A list of conditions for which self care options exist in the 'OTC directory' ⁴ of non-prescription products (Table 1) was given. Data was collected on the nature of ailments (selected from this list) suffered in the recent past and on the actions taken to treat them. Attitudes governing these behaviours were then explored by rating statements on a five point scale from 'Strongly Disagree' to 'Strongly Agree'.

Table 1: List of minor ailments available for selection in consumer on line survey

| EAR / NOSE / THROAT Colds | MUSCULO-SKELETAL Back pain | PROBLEMS WITH BABIES/ SMALL CHILDREN |
|------------------------------|-------------------------------|---|
| Coughs | Muscular pain | Cradle Cap |
| Ear ache | Sprains | Infantile colic |
| Flu | Strains | Nappy rash |
| Gingivitis | | Teething |
| Mouth ulcers | SKIN / SCALP PROBLEMS | _ |
| Nasal congestion | Acne | OTHERS |
| Oral thrush | Athlete's foot | Conjunctivitis |
| Sore throat | Cold sores | Cystitis |
| | Dandruff | Haemorrhoids |
| GASTRO-INTESTINAL | Dermatitis | Hay fever |
| Constipation | Eczema | Headache |
| Diarrhoea | Fungal nail infections | Migraine pain |
| Heartburn | Head lice | Period pain |
| Indigestion | Insect bites & stings | Thrush |
| | Verrucas | Travel sickness |
| | Warts | Threadworm |

Additionally 401 patients attending pharmacies to pick up prescriptions were asked to complete a paper-based survey questionnaire³. This recorded the conditions for which they were collecting prescriptions and whether this reflected a new or repeat prescription for a recurring ailment. Information on the consultation leading up to the prescription was also collected.

Doctors, Nurses and Pharmacists also completed an on-line questionnaire³ about their current practices in relation to minor illnesses as well as their beliefs and attitudes on the subject.

RESULTS

The consumer sample³ was split evenly by gender (51% female 49% male) and socioeconomic status (50% ABC1 and 50% C2DE) with a representative spread of ages (8%, 15%, 21%, 24%, 21% and 10% for the age groups 15-17, 18-24, 25-34, 35-44, 45-54, and 55-59 years respectively). Consumers came from a spread of UK regions with Wales accounting for 23% to meet the preset requirement for 300 respondents.

Consumers reported suffering a wide range of minor ailments in the last 6 months. Figure 1 shows all complaints that accounted for more than 15% of the ailments reported.

Minor ailments suffered in last 6 months - all above 15% 57 43 41 Headache 35 Back pain 29 23 Muscular pain 21 Diarrhoea Period pain Flu 16 Heartburn Dandruff 15 15 Migraine pain 15 Nasal congestion

FIGURE 1: Minor ailments suffered in the last 6 months, % reporting (all conditions representing more than 15 % of responses) (Base: all ailments 3927)

Consumer Q2. What minor ailments have you or your child/children suffered from in the last 6 months? Please only choose the ailments your child/children have suffered from if you have taken responsibility for how they should be treated.

Patients collecting prescriptions³ for minor ailments were treating a somewhat different range of conditions (Figure 2), and several of these (notably acne and allergies) were generating relatively high numbers of repeat scripts.

A high proportion of (41%) of consumers claim to self medicate with medicines which they purchase without advice or have already at home. A similarly high proportion (44%) of patients collecting prescriptions also claimed to have bought a medicine to self treat before the consultation. Figure 3 summarises these data and shows that relatively few people seem to consult pharmacists for advice when buying self medication for these ailments. This may mean that they are self-selecting from the relatively limited range of medicines available on the General Sales List.

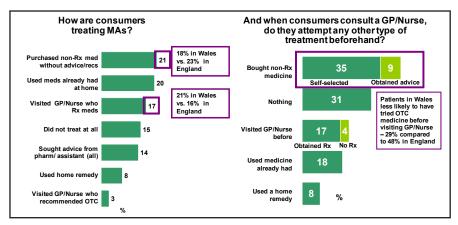
Minor ailments collecting Rx for

Eye infection
Constipation/diarrhoea
Acne
Acne
Thrush
Allergies
B
Coughs/cold/ffu/sore throat
Cystitis
TOther pain
Other pain
Other pain
Other skin conditions
Heartburn/indigestion
Ear ache
Other
Thrush
B
Allergies
B
Toughs/cold/ffu/sore throat
Cystitis
Toughs/cold/ffu/sore throat
Toughs/cold/ffu/sore throat
Cystitis
Toughs/cold/ffu/sore throat
Cystitis
Toughs/cold/ffu/sore throat
Toughs/cold/ffu/s

FIGURE 2: Nature of minor ailments collecting prescriptions (Rx) for (% of total prescriptions)

Patient Q4. What condition(s) is this prescription for? Q3. Is this prescription for a recurring minor ailment?

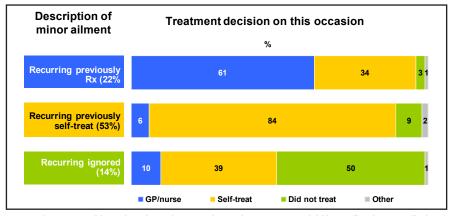
FIGURE 3: First action in treating condition and if consulted a GP/Nurse action taken prior to visit



Consumer Q3a – How did you treat condition in first instance (Base: all ailments – 3927)

Patient Q6 – Before this visit had you done anything else to treat this condition? (Base: all valid responses – 399)

FIGURE 4: Action in treating minor ailment (if this was described as a recurrence of a previous ailment)



 $Consumer\ Q3b-How\ would\ you\ describe\ each\ minor\ ailment\ that\ you\ or\ your\ child\ has\ suffered?\ (Base:\ all\ ailments-3927)$

When the problem is one that they have encountered before (Figure 4), consumers tend to repeat the action that they took on a previous occasion. However if the problem is a new one (Figure 5) there is a high likelihood that consumers will try self care first, and only consult if they run into trouble. There was a trend for behaviour positive to self care to be associated with: females, ABC1 socioeconomic status /higher earners, older consumers, white British ethnicity, prescription payers, and full time workers.

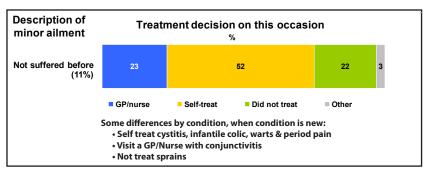


FIGURE 5: Action in treating a minor ailment not previously suffered

Consumer Q3b - How would you describe each minor ailment that you or your child has suffered? (Base: all ailments - 392)

GPs claim to recommend self care in a relatively high proportion of cases (Figure 6). However this is not borne out by the recollection of patients collecting scripts, the majority of whom do not recall a discussion of self care as an option for the present occasion or in the future (78% and 67% respectively).

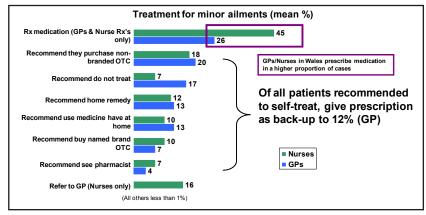


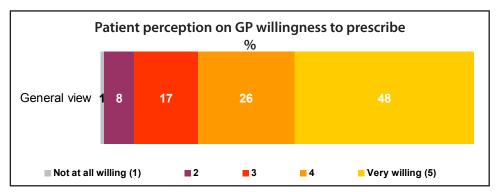
FIGURE 6: Action taken by GP or Nurse when consulted for a minor ailment

GP/Nurse Q3. Thinking about the patients that consulted you for a minor ailment in the last month, for approximately what proportion of these patients did you....(Base: GPs 131 -, Nurses - 84, Nurse prescribers - 46)

On the other hand a high proportion of patients receiving a prescription perceive that GPs/Nurses are willing or very willing to prescribe (Figure 7).

Consumer attitudes to self care are generally positive (Figure 8). Reasons for favouring self treatment include confidence, especially when previous experience was good, and convenience. Furthermore they give largely sound reasons for why they would abandon self care (Figure 9).

FIGURE 7: Patient (collecting prescription) rating of how willing GP was to prescribe a medication on this occasion



Patient Q9 – How willing was your GP to prescribe medicine on this occasion? (Bases: all valid respondents – 395)

FIGURE 8: Rating of reasons (all options listed) for self treating by consumers (% rating Agree and Strongly agree)

| % top two box score (agree + strongly agree) | 0-10 | 10-19 | 20-29 | 30-39 | 40-49 | 50-5 | 9 6 | 0-69 | 70-79 | 80-89 | 90- 100 |
|--|------|-------|-------|-------|-------|------|-----|------|-------|-------|------------|
| If have successfully self treated before, will try again | | | | | | | | | | | |
| Don't want to waste GP/Nurse time | | | | | | | | | | | |
| Confident treating minor ailments because they are not serious | | | | | | | | - | | | |
| Its quicker than waiting for an appointment | | | | | | | • | | | | |
| Pharmacists can give sufficient advice | | | | | | | • | | | | |
| More convenient to visit GP/Nurse | | | | | | | • | | | | |
| Benefits of self care make paying for non-Rx medicine worthwhile | | | | | • | | | | | | |
| For some minor ailments GP cannot help | | | | | | | | | | | |
| Non-Rx medicine is just as effective | | | | | | | | | | | |
| More likely to buy non-Rx medicine if condition embarrassing | | | | • | | | | | | | |

Q7. Below is list of statements relating to reasons why you might choose to self-treat a minor ailment. Using a 5 point scale, to what extent do you agree or disagree with each statement?

FIGURE 9: Rating of reasons (all options listed) for visiting GP/nurse (% rating Agree and Strongly agree)

| % top two box score (agree + strongly agree) | 0-10 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90- 100 |
|--|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| If self care has failed would go to GP/Nurse | | | | | | | | | | |
| As time goes by worry & need reassurance from GP/Nurse | | | | | | | | | | |
| Always vist GP nurse with young child | | | | | | | | | | |
| Encouraged by family/friend | | | | | | | | | | |
| Want to keep good relationship with GP | | | | | | | | | | |
| GP/Nurse Rx more effective treatments | | | | 1 | | | | | | |
| Might indicate something more serious | | | | | | | | | | |
| Not confident to judge if minor | | | | | | | | | | |
| Wouldn't pay for non-Rx medicine when can get Rx for free (Wales only) | | | | | | | | | | |
| Pharmacist can't provide advice | | | | | | | | | | |
| Its cheaper to get a Rx than buy non-Rx medicine | | | | | | | | | | |

Q6. Below is list of statements relating to reasons why you might choose to visit your GP/Nurse for a minor ailment.

Using a 5 point scale, to what extent do you agree or disagree with each statement?

These positive attitudes are somewhat more prevalent in consumers from the ABC1 socioeconomic categories.

Patients already having received a prescription for a minor ailment, agree with a spread of reasons for their visit to a GP/nurse (Figure 10), some of which may represent justification of their choice. However a fairly high proportion of these patients believe that GPs /Nurses can prescribe more effective treatments for minor ailments.

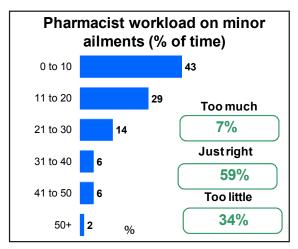
FIGURE 10: Patient rating of reasons (% rating Agree and Strongly agree) for seeing GP/nurse on the present occasion (i.e. visit which generated the prescription they are collecting).

| % top two box score (agree + strongly agree) | 0-10 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90- 100 |
|--|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| GPs/Nurses Rx more effective treatments | | | | | | | | | | |
| Already tried self care but wasn't effective | | | | | | | | | | |
| Concerned that could be linked to more serious condition | | | | | | | | | | |
| Encouraged by family/friend | | | | | | | | | | |
| Have good relationship with GP/Nurse | | | | • | | | | | | |
| Previously been Rx medication | | | | | | | | | | |
| Didn't know I could buy something for this condition | | | | | | | | | | |
| Don't have confidence to treat | | | | | | | | | | |
| More convenient to visit GP/Nurse | | | | | | | | | | |
| Rx was cheaper | | | | | | | | | | |
| Was already visiting GP/Nurse for something else | | | | | | | | | | |
| Wouldn't trust pharmacist advice | | | | | | | | | | |

Patients Q7. Below is a list of reasons why people might decide to visit the GP/Nurse to obtain a prescription rather than buy a treatment. To what extent did each reason influence your decision to visit the GP/Nurse to obtain this prescription?

Pharmacists in this survey say they spend variable amounts of time advising on minor ailments, with the majority happy with the proportion of their day this activity consumes (Figure 11). Despite the rather low numbers of consumers that seem to actively seek a pharmacist's opinion, pharmacists claim to be pro-active in offering advice (Figure 12).

FIGURE 11: Pharmacist estimate of time spent advising consumers on minor ailments and judgement of suitability of this estimate



Pharmacists – Q1a. What proportion of your working day do you spend advising customers/giving recommendations on minor ailments? Q1b. Do you feel this is.... (Base: all pharmacists)

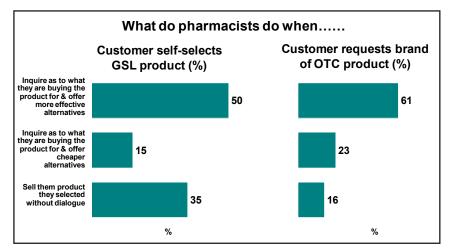


FIGURE 12: Pharmacist action when consumers self – select products or request a specific brand

Pharmacist Q6. Sometimes customers self-select a product or request a specific brand of OTC product for a minor ailment without asking for any advice, in each of the following situation would you... (Base: all respondents)

Healthcare professionals differ somewhat in their beliefs relating to self care (Figure 13), and GPs in particular seem to be less than enthusiastic in recognising the role of pharmacists. Interestingly GPs agree strongly with a statement suggesting that they encourage self care, indicating at least an aspiration to behave in this way. However, their scores for other statements indicate that they also believe that consumers may not know when to self treat, or may lack the confidence or simply prefer not to do so.

FIGURE 13: Healthcare professional (GP nurse and Pharmacist: rating of statements on attitudes to self care (% rating Agree and Strongly agree)



Q7. Using a 5 point scale, to what extent do you agree or disagree with the following statements relating to your attitudes towards patients self-treating minor ailments rather than visiting the GP/Nurse?

When consumers get advice, what Health Care Professionals recommend for minor ailments appears to be a powerful influence on their choice of what to purchase for self-medication (Figure 14).

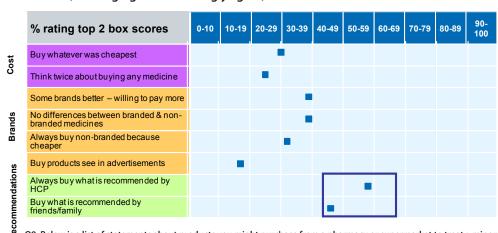


FIGURE 14: Consumer rating of statements about products that they may purchase to treat a minor aliment (% rating Agree and Strongly agree)

Q9. Below is a list of statements about products you might purchase from a pharmacy or supermarket to treat a minor ailment. Using a 5 point scale, to what extent do you agree or disagree with each statement?

DISCUSSION

This extensive survey generated a large volume of information, but some strong messages emerged. I have focussed on quantitative data gathered from the complete populations surveyed, rather than on data examining possible differences in behaviour relating to individual conditions or subpopulations of consumers.

Surveys of 'remembered' behaviour in consumers are open to obvious bias. However the results can be partially validated by consistency with previous surveys and, as in the present exercise, with comparison to real outcomes in the form of 'patients' collecting prescriptions for minor ailments. There is also value in questioning how healthcare professionals believe they behave and comparing this with the reported experiences of those consulting them. Where there is a mismatch, we have to question what is preventing the professionals from behaving in the way that they may recognise as optimal.

The definition of 'minor ailment' used in this study is arbitrary but pragmatically considers as relevant non-serious medical conditions for which there are effective self care options available. However, it is arguable whether or not conditions that persist and necessitate repeat visits or prescriptions (such as acne and allergies in the current survey and 'dermatitis' in previous work) should be included. Nonetheless, 6 of the 10 conditions previously noted to account for the majority of GP visits² featured amongst the 13 most reported complaints in this survey, namely: coughs, headache, back pain, heartburn, migraine and nasal congestion. However, some of the commonest complaints, e.g. the common cold, sore throat, muscular pain, period pain and diarrhoea, did not feature prominently as reasons to consult a doctor. Clearly the nature of the healthcare problem has considerable bearing on the willingness of consumers to consult and equally on their confidence to self treat.

It is striking that consumer behaviour in relation to minor health problems seems to reflect their previous experience and become repetitive. So if a minor ailment was treated with the

issuing of a prescription in the past, consumers are highly likely to present for a prescription again. Similarly, those that previously self treated their condition or did nothing, are very unlikely to do something different on the present occasion. Interestingly, when there is no prior experience to refer to, consumers claim a relatively high willingness to self treat.

Attempts to categorise consumers that behave in particular ways according to age, sex, socioeconomic status and geography reveal broad tendencies only. Those that self treat tend to be: females, in ABC1 socioeconomic groups or higher earners, older consumers, white British ethnicity, pay for their prescriptions, or are full time workers. On the other hand those that consult a GP practice tend to include more people that are: living in Wales (where there is no prescription charge), in C2DE socioeconomic groups or lower earners, exempt from the prescription charge (due to low income) and consumers with children. Perhaps unsurprisingly we can conclude that cost and convenience have some influence on behaviour in relation to self care.

Regardless of demographic considerations, consumers express positive attitudes towards self care and recognise benefits such as earlier treatment and saving GP time. Positive experiences with self care understandably lead to greater confidence in dealing with the next episode. However beliefs that prescribed medicines are 'more effective' are more prevalent than healthcare professionals may realise, and can only be reinforced when prescriptions are issued for minor ailments. Consumers will always need the option to consult a doctor when self care fails or for reassurance when problems persist, but there is a clear opportunity to build on an apparent widespread affirmation of self care as an acceptable first option for minor illness.

Doctors and nurses in general practice are a resource under siege from the inexorable rise in demand that accompanies the aging of the UK population. In this context, it is extraordinary that so much time is expended in consultations for minor ailments. That so many consultations result in a prescription is equally surprising when so much effort has been expended to increase access to effective medicines for self treatment. The doctor-dependent culture that underlies this state of affairs has shown few signs of change in the last two decades. This study shows that behaviour in relation to self care of minor ailments is habitual and therefore change will only occur when habits are broken. Fortunately this study also provides some clues to inform a strategy for change.

Consumers do not seem enthusiastic to consult pharmacists of their own volition at present. Pharmacists appear to spend relatively little time consulting on minor ailments and their visibility as a resource to consult may be a factor in consumer behaviour. Pharmacists claim to be proactive in offering advice on minor ailments, and this will be crucial to encourage self care with the newer 'P' medicines. GPs, and to a lesser extent nurses seem to be less than wholehearted in their endorsement of the pharmacist's role. Without GP/nurse recommendations to discuss minor ailments with pharmacists, consumers may self-select medicines that may not be optimal for their needs. This in turn may lead to unnecessary consultations and prescriptions.

Consumers respond positively to recommendation, indeed this appears to be amongst the

most powerful influences on choices in relation to minor ailments. Doctors and nurses believe that they already recommend self care options in consultations for minor illness but consumer experiences and measurable outcomes such as prescriptions issued, do not bear this out. There are several reasons why GPs may not, in reality, behave as they would wish to. Doctors appear to believe that patients lack the confidence to treat minor ailments and are unwilling to consider self care. So it is perhaps unsurprising that they see writing a prescription as an attractive alternative to a possibly lengthy discussion with a patient they assume will be reluctant to self treat.

The outcome of a GP consultation is partly determined by the expectations on both sides, and if habits are to change, so must these. There are examples of campaigns that have shaped consulting behaviour⁵: the belief that GPs will routinely prescribe an antibiotic for sore throat has largely disappeared. This may partly explain why sore throat is the 5th commonest reported minor illness in this survey but only the 14th most common minor ailment in GP consultations. What is needed is a more general reinforcement of self-reliance in treating the common afflictions that we all suffer.

Someone considering consulting their GP for one of the 'top 10' minor ailments could be conditioned to expect a self care recommendation – and therefore be encouraged to explore that option first. For this to be successful in breaking the habit of consultation, GPs must fulfil the expectation that a prescription will be issued only after self care options have been exhausted. To achieve this it may be necessary for there to be explicit 'permission' in the form of an NHS policy on minor illness, perhaps supported by training in specific consultation skills.

Correspondence to: Dr. Ian Banks, The Mens Health Forum, 32-36 Loman Street, London SE1 0EH. email ian.banks@emhf.org

Disclosure: This paper discusses the findings of a study commissioned and funded by the Proprietary

Association of Great Britain (a trade organization which represents the manufacturers of over-thecounter medicines and food supplements in the United Kingdom).

The PAGB invited Dr Ian Banks to review the findings of this survey and give his independent view.

lan Banks is president of the European Men's Health Forum. He is a visiting professor on European Men's Health at Leeds Metropolitan University in England, a member of the British Medical Association Council and the president of Men's Health Forum England & Wales.

Financial interests: none relevant.

REFERENCES

- 1. Every Day Healthcare 1997 (Pagb.co.uk/information/research/html#tns) Accessed Feb 2010
- 2. Minor Ailment Workload in General Practice (Pagb.co.uk/information/research/html#tns) Accessed Feb 2010

3. The following supplementary information is available for this paper:

The full on – line questionnaire instrument used for Consumers

The full on – line questionnaire for GPs and Nurses

The full paper questionnaire used for patients collecting prescriptions

Full demographic information for the consumer and patient samples

This information is available on request from editor@selfcarejournal.com and will be archived on the SelfCare website

- 4. The 'OTC Directory' (PAGB): The Directory includes details of OTC products, updated annually and is mailed to GPs and other healthcare professional groups across the UK. Online version: http://www.medicinechestonline.com/
- 5. Smith GE, Smith S, Heatlie H, Bashford JN, Hawker J, Ashcroft D, Millson D, Verlander NQ, Warren R. What has happened to antimicrobial usage in primary care in the United Kingdom since the SMAC report? description of trends in antimicrobial usage using the General Practice Research Database. J Public Health (Oxf). 2004 Dec;26(4):359-64.