

Patients' views of general practitioners' provision of medicine information leaflets

Amber Young BPharm (Otago), PGCertPharm (Otago), PGCertGPP (UK), MPS;^{1,2} June Tordoff BPharm(Hons), MPharm, PhD, MRPharmS, MPS;¹ Sebastian Moore BA, BPharm;¹ Alesha Smith BSc, MSc, PhD¹

¹ School of Pharmacy, University of Otago, PO Box 56, Dunedin 9054, New Zealand ² Corresponding author. Email: amber.young@postgrad.otago.ac.nz

ABSTRACT

INTRODUCTION: Giving patients medicine information leaflets with oral information could help improve patient understanding about their medicines. Some health professionals believe patients do not want to receive leaflets or find them too difficult to understand so do not provide them.

AIM: To investigate Dunedin general practitioners' (GPs) provision of medicine information leaflets from patients' reports and to examine patient views about the leaflets provided.

METHODS: Patients collecting prescriptions from community pharmacies in Dunedin, New Zealand, between December 2016 and February 2017 were asked to complete a survey. Responses were entered into SurveyMonkey and data were exported into Excel for analysis.

RESULTS: Of the 151 survey respondents, over three-quarters (79%) did not receive a medicine information leaflet from their GP in the last 6 months, although most believed it important to receive one. Many participants felt that leaflets improved their knowledge and helped them take their medication correctly. Most participants liked the leaflets they received, although over half (60%) would like a short summary leaflet. Patients did not commonly search for more information than their GP provided.

DISCUSSION: Some patients may not seek further information about their medicines other than during consultation. Although rarely given, most participants who received leaflets from their GP appreciated them. Most participants read and understood leaflets they were provided, although ready access to a one- to two-page summary leaflet may be preferable. Technology could enable GPs to easily provide leaflets to patients in their care.

KEYWORDS: Medicine information leaflet; patient communication; patient education; general practitioner.

Introduction

Patients require information about their medicines to ensure they are used safely and effectively.¹ Patients have access to health information from many sources, but some patients prefer to receive drug safety information from their GP.² However, discussions with patients about their medicines may be limited in practice, and access to GPs for medicine information following an appointment may be difficult or costly.^{3,4} Furthermore, patients struggle to remember information that has been discussed at point-of-care^{3,5–9} and they may not understand orally communicated drug information.^{10,11} This is a common problem internationally, with studies showing that patients often feel they are not ade-quately informed and may not even understand why a medicine is prescribed.⁴

Ideally, oral information should be supported by a medicines information leaflet because they can

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WHAT GAP THIS FILLS

What is already known: In New Zealand, it is not mandatory to provide patients with written information about their medicines. Although patients should ideally be given written and oral information about their medicines, many health professionals believe patients do not want to receive medicine information leaflets.

What this study adds: Patients in Dunedin are not often provided with medicine information leaflets by their general practitioners, but do wish to receive them. Most patients read leaflets when they are provided and think that leaflets improve their medicine knowledge and help them take their medicines correctly.

increase patients' understanding of their medicines.^{8,12} Provision of information leaflets is mandatory in many countries and usually manufacturer-produced consumer medicine information leaflets are provided with dispensed medicines.¹³ In New Zealand, providing information leaflets is not mandatory and leaflets in use are produced either by drug manufacturers or independent organisations.¹³ Information leaflets are also not mandatory in Australia, and they are often forgotten or deliberately withheld.9,14 Similarly, New Zealand research has shown that general practitioners (GPs) rarely provide patients with medicine information leaflets.¹⁵ The reasons that GPs may withhold leaflets include their perception that leaflets are too long or confusing and difficult for patients to understand, or their concern that patients will worry about possible side-effects and not take the medicine.¹⁶ However, it is not known if these concerns are shared by their patients.

The aim of this study was to investigate Dunedin GPs' provision of medicine information leaflets from patient reports and to examine patient views on leaflets they were provided.

Methods

The study survey was based on previously validated questionnaires for health professionals¹⁵ and pilot tested on 10 members of the public to ensure validity for this group. Minor changes for clarification were made (see final questionnaire in Appendix 1). A sample size of 150–200 participants was intended, based on studies using similar sample sizes to investigate medicine information in primary care (ranging from 80 to 143 participants).^{15,17,18}

S. Moore administered the survey in community pharmacies in Dunedin between December 2016 and February 2017. Patients aged \geq 18 years attending a pharmacy with a prescription were invited to complete the survey. As an incentive, participants could enter a draw to win one of two NZ\$50 supermarket vouchers.

All responses were entered into SurveyMonkey (San Mateo, CA, USA) by participants, or on behalf of participants by S. Moore. Data were exported and analysed in Microsoft Excel (Microsoft Corporation, Redmond, WA, USA). The study's design meant that data analysis was limited to a descriptive analysis. For patients who had received leaflets, we report how they received it, their preferences and opinions of the leaflets they were given and whether they read it. Analysis of data from all respondents was then undertaken to assess when they would like to receive leaflets and how they prefer leaflets to be given (paper copies, digital versions, full-text or short summaries). The University of Otago Ethics Committee approved the study (D17/007).

Results

There were 151 respondents to the survey. Most were female (70%), spoke English as their first language (99%) and all eligible age groups were represented (Table 1). Participants' highest qualifications were lower than that of the general population,¹⁹ with over half educated only to secondary-school level (54%).

Receiving medicine information leaflets

Most participants (n = 119; 79%) had not received a medicine information leaflet from their GP in the last 6 months. Almost two-thirds (n = 93; 62%) believed it was very important to receive leaflets about new medicines. For repeat medicines, fewer participants (n = 33; 22%) thought it was very important to receive a leaflet.

Of the respondents who had received a leaflet (n = 32; 21%), over half had either discussed the leaflet with their GP or their GP had drawn

attention to specific sections (n = 9, 28% and n = 8, 25% respectively). Most participants who received leaflets felt that it had improved their knowledge (n = 23; 72%) and half (n = 16; 50%) believed it had helped them take their medication correctly. One third (n = 11; 34%) thought the leaflets encouraged them to take their medication as instructed.

Opinions on provided leaflets

Overall, 97% (n = 31) liked the leaflet they received. Over half liked its appearance (n = 19; 59%) and 75% (n = 24) believed it contained relevant and findable information. Most agreed they could read and understand it (n = 23; 72%), but 9% (n = 3) thought it was too long. Two-thirds of participants had read the full leaflet (n = 21; 66%) and 10 (31%) had partially read it. Only one participant (3%) had not read the leaflet. Over half said they had not kept the leaflet (n = 18, 56%) but 44% (n = 14) had kept it.

When and how patients want information

Most participants (n = 116; 77%) would like to receive a leaflet from their GP when prescribed a new medicine, while 5% (n = 8) preferred not to be given one at all. Approximately half of participants wanted to receive a leaflet when new information becomes available (n = 82, 54%), when the medicine is associated with serious side-effects (n = 80, 53%) or when there is a change in the brand (n = 72; 48%).

Most respondents (n = 120, 80%) would prefer a paper leaflet to a digital alternative. Over half (n = 90; 60%) preferred a one- to two-page summarised version of a leaflet (summary leaflet) rather than a comprehensive leaflet, or a summary leaflet with the option of receiving more information.

Participants mostly never sought further information (n = 50, 33%), or sought more information less than half the time (n = 47; 31%).

Discussion

Patients are usually given information orally, but written information should also be provided to ensure patients are fully informed, and to remind them of information and instructions for use.¹ Most participants in this and other studies consider it Table 1. Demographics of participants

Characteristics	Total <i>n</i> = 151 <i>n</i> (%)					
Gender						
Female	105 (69.5)					
Male	46 (30.5)					
Highest completed qualification						
No qualifications	7 (4.6)					
Secondary school	82 (54.3)					
Postgraduate diploma	29 (19.2)					
Bachelor's degree	18 (11.9)					
Postgraduate degree	15 (9.9)					
Age (years)						
18–19	7 (4.6)					
20–29	16 (10.6)					
30–39	20 (13.2)					
40–49	39 (25.8)					
50–59	25 (16.6)					
60–69	22 (14.6)					
>70	22 (14.6)					
First spoken language						
English	149 (98.7)					
Bengali	1 (0.7)					
Chinese	1 (0.7)					

important to receive medicine information leaflets from their GP.⁹ However, when providing leaflets with medicines is not a legal requirement (as is the case in New Zealand), they are often not given.^{13–15}

In New Zealand, previous research has shown that GPs avoid providing leaflets because of concern that patients cannot understand them, assumed patient indifference to leaflets, patients' having taken the medicines before, and belief that pharmacists provide leaflets.¹⁶ Yet, almost all participants who had received a leaflet from their GP appreciated it and had no difficulty in understanding the information it contained. Some participants did have difficulty understanding the content, and other research indicates that manufacturer-produced leaflets may be poorly suited to patients' requirements in style and readability.^{8,13,20} However, participants in this study with qualifications higher than secondary school were underrepresented, indicating that

patients with potentially lower literacy still appreciate leaflets being provided to them.

Previous New Zealand-based research found that GPs provided leaflets to inform patients, aid medicines adherence, prompt discussion and to reinforce instructions and benefits of medicines.¹⁵ Most participants who received a leaflet in this study read it fully and agreed that leaflets improved their knowledge and helped them take their medicines correctly, showing this achieves their GPs' intended purposes.

Discussing leaflets could benefit patients who have difficulty understanding them but time pressures can affect information provision. System technological improvements might facilitate this process by alerts suggesting leaflet provision and automated leaflet printing within GP prescribing software. Further investigation is needed to establish whether automatic provision would alleviate time restraints at point-of-care.

There is evidence to suggest that patients increasingly search for information digitally,^{21,22} but most participants in our study preferred a paper leaflet rather than a digital alternative. Perhaps further encouragement and support from health care providers about reputable web-based information would help patient engagement. Most participants preferred the idea of a one- to two-page summary and health professionals prefer to provide summary leaflets so this format may be more suitable than lengthy manufacturer-produced leaflets. However, actively providing summary leaflets to patients is not common practice.¹⁵ Action by governments and health professional bodies may be needed to ensure patients have access to tailored information leaflets that suit their needs.^{1,23}

Some patients may want more information about their medicines than GPs currently provide, yet two-thirds of participants in this study did not look for further medicines information from other sources.^{14,24,25} Patients may need encouragement to be proactive and ask for more information from their GPs.

Limitations

As this was a small study, there are limitations to what can be gleaned from the data. Results may not represent other patients in Dunedin or in other more ethnically and age-diverse parts of New Zealand. Most participants spoke English as their first language and understanding written communication may differ for people who did not originally speak English.

We did not collect information on the medicines patients were prescribed, so no conclusions can be drawn as to the types of medicines more likely to prompt leaflet provision, although earlier research indicates leaflets are more likely to be provided with higher-risk medicines.¹⁵ This study did not confirm the type of leaflets participants received, so differences between manufacturer-produced leaflets and leaflets from independent organisations were not explored.

There is a risk of recall bias with participants being asked to remember the previous 6-month period. Participants may also not remember exactly who provided them with leaflets, with the questionnaire being administered in a pharmacy. Attempts were made to mitigate this risk by orally explaining to participants that the focus was on GP provision of leaflets before they completed the questionnaire, as well as in the questionnaire. Some participants may have still been confused and inadvertently answered about pharmacist provision of leaflets.

So far, there is no consensus on who should provide information leaflets. Both pharmacists and GPs are required to ensure patients are fully informed about their medicines. Further research is required to determine who should provide what information, at what time, and in what format. This could contribute to clearer guidance for GPs and pharmacists.

Conclusion

Patients value having leaflets provided to them with new medicines, but this may not commonly occur in practice because it is not a mandatory requirement in New Zealand. Patients should be encouraged to ask and look for information about their medicines from reputable sources. Ensuring they receive leaflets along with oral discussion about their medicines could help them take their medicines safely and improve their knowledge. Further research is required to determine patient preferences of the different leaflets available and the perceptions of patients from a larger sample of the population.

Competing Interests

The authors declare that they have no competing interests.

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ORIGINAL RESEARCH PAPER

ORIGINAL RESEARCH: SHORT REPORT

Appendix 1. Questionnaire

1. Are you currently taking any prescription medicines?

○ Yes

- $^{\bigcirc}$ No (thank you for your time, we have no more questions)
- 2. Have you received any information leaflets about your medicines from your doctor in the last
 - 6 months?

○ Yes

 \odot No (go to question 10)

If there has been more than one information leaflet about your medicines given to you, please think about the most recent example when answering the following questions

3. How did they use this leaflet with you?

- Provide a leaflet only, without talking to you about it
- \odot Provide a leaflet, ask you to read it and come back if you had any questions
- \odot Draw attention to specific sections of the leaflet and spoke to you about these sections
- Talked about the sections of the leaflet that you felt were important (for example, possibly answering a question you may have had)
- \odot Discussed the entire leaflet
- Other (please specify in box below)
- 4. Did you feel that this leaflet was helpful because: (you may select more than one option)
 - It improved your knowledge about your medicine
 - It helped you take your medicines correctly
 - It encouraged you to take your medicines as instructed (for example, you did not stop the medicine before it was supposed to stop, or you did not miss doses)
 - $\odot\,$ None of the above, the leaflet was not helpful
 - Other (please specify in box below)

5. For the following question, we are wanting to know what you thought about the style of the leaflet

	Yes	No	Don't know
Did you like how the leaflet looked (the leaflet's design)?			
Could you find the information you were looking for?			
Do you think the leaflet had relevant information in it?			
Could you read and understand the information in the leaflet?			
Did you think the leaflet was too long?			

6. Overall, would you say you liked the leaflet?

- \bigcirc Yes
- No
- \odot Don't know

7. Did you read this leaflet?

- $^{\circ}$ Yes, I read the leaflet fully (go to question 9)
- $^{\bigcirc}$ Yes, I partially read or skim read the leaflet (go to question 9)
- \circ No

8. Why did you not read the leaflet? (you may select more than one option)

- \odot I didn't need to, the doctor told me all I needed to know
- \odot I have taken this medicine before
- \odot I am only taking the medicine for a short time (less than 2 weeks)
- \odot It was too difficult to read and understand
- \odot The leaflet was too long
- \odot I didn't think it was important
- $^{\circ}$ Other (please specify in box below)

9. Did you keep this leaflet?

○ Yes

O No

10. How important is it for you to receive medicine information leaflets from your doctor about the following: (*tick the appropriate option in each line*)

	Not important	Somewhat important	Very important
New medicines			
Repeat long-term medicines			

- **11. When would you** *like* **to receive a medicine information leaflet from your doctor?** (*you may select more than one option*)
 - Before you are prescribed a medicine to get information about the benefits of the medicine and its possible side-effects before you decide to take it
 - When you are prescribed a new medicine
 - When you are prescribed a repeat medicine
 - Every 6–12 months for repeat medicines
 - When there is a change in the brand of your medicine
 - $^{\bigcirc}$ When new information about the medicine becomes available
 - $^{\circ}$ When you are prescribed a medicine that is associated with serious side-effects
 - I would prefer to receive the leaflet at the pharmacy
 - I'd prefer not to be given medicine leaflets
 - Other (please specify in box below)

12. How would you like to receive information about your medicines? (you may select more than one option)

- A paper copy printed by doctor or pharmacist
- A digital (printable) copy emailed to you
- A digital (printable) copy in a patient portal (patient portals are online websites provided by GPs, where patients can access their health information and interact with their general practice)
- A digital (printable) copy on a website
- \odot Other (please specify in the box below)

13. What would you prefer:

- A short one- to two-page summary leaflet about your medicines
- A short one- to two-page summary leaflet about your medicines, with the option to choose more information to be included in your leaflet
- \odot A comprehensive leaflet containing all the information about a medicine
- 14. How often do you seek additional information about your medicines, other than that given to you

by your doctor or pharmacist?

- $^{\circ}$ All of the time
- $^{\bigcirc}$ More than half of the time
- \odot Half of the time
- \odot Less than half of the time
- \odot None of the time
- Not applicable

15. What is your gender

- Male
- Female

16. What is your highest level of formal education?

- \odot No qualification
- \odot Secondary school (high school)
- Postgraduate diploma (for example nursing or teaching diplomas, or advanced trade certificates)
- \odot Bachelor's degree
- Postgraduate degree

17. What age (years) bracket are you?

- 18–19
- 20-29
- 30-39
- 40-49
- 0 50-59
- 0 60-69
- $\odot > 70$

18. Is English your first language?

- Yes
- $^{\circ}$ No, my first language is.....