

Open to interpretation: patients' understanding of prescription medication label directions. *A qualitative study.*

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Taking medication with/without food

Well you wouldn't really know whether you could take it with a meal or not. [The label] should tell you before food or after food.
- Participant 2 on label 7

Expressing dose frequency as time periods

[It] would be good if there was a period of the day to take it.
- Participant 17 on label 5

Background:

In Australia, phrasing of prescription medication label (PML) directions in pharmacy practice is not evidence based. While international studies have attempted to identify some characteristics of PML directions that may support/impece patient understanding, no study has invited patients to share their understanding of PML directions in depth.

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Methods:

Semi-structured face-to-face interviews were conducted with inpatients at Sir Charles Gairdner Hospital, a metropolitan tertiary teaching hospital. Participants were selected based on a defined set of inclusion/exclusion criteria and consultation with the relevant clinical staff to ensure they were appropriate for interview. Ten PMLs containing different directions and phrasing (Table 1) were presented in a random order to each participant, and participants were invited to provide their insight using an interview guide. Responses were audio-recorded and transcribed verbatim. A thematic analysis was conducted using the Framework Method to identify common themes shared between participants. Multiple researchers independently analysed the same data to ensure validity and reliability of the findings.

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Aim:

To explore hospital patients' understanding of PML directions and identify how hospital patients would like PML directions to be phrased.

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Results:

Twenty interviews were conducted. Data saturation was reached by the 15th interview. Participants expressed a desire for PML directions to explicitly specify whether medications need to be co-administered with food. While participants demonstrated a variety of interpretations of named time periods (e.g. morning), they commonly expressed a desire for the use of named time periods, with/without specific times (e.g. 8am in the morning). Participants highlighted that the use of dose frequency as hourly intervals (e.g. every 12 hours) and number of times per day (e.g. twice daily) were sometimes confusing, and commonly misinterpreted PMLs with lengthy directions that had overlapping information.

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Conclusions:

When phrasing PML directions, pharmacists should consider how a patient might interpret the directions. Particular attention should be paid to avoid including overlapping information, and to the phrasing of dose frequencies and food co-administration

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Directions phrased using multiple sentences

...if you didn't read all the label, some people might take two tablets in the morning.
- Participant 6 on label 6

Expressing dose interval in hours

...You'd have to work out, once you take one, you'd have to work out when to take the next one.
- Participant 5 on label 2

Using time periods with specific times:

It could be written to take one tablet in the morning at 'X' time and take second tablet 'X' time.
- Participant 8 on label 5

Number	PML direction
1	Take 1 tablet every day. Take at 8am.
2	Take 1 tablet every 12 hours.
3	Take ONE tablet ONCE daily.
4	Take 1 tablet every day. Take in the morning.
5	Take ONE tablet TWICE daily.
6	Take 2 tablets every day. Take 1 with breakfast and 1 with dinner.
7	Take 2 tablets every day. Take 1 at 8am and 1 at 5pm.
8	Take TWO tablets TWICE daily.
9	Take 2 tablets in the morning and 2 tablets in the evening.
10	Take 2 tablets at 8am and 2 tablets at 6pm.

Table 1

