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Perceptions of Dutch primary healthcare providers regarding alcohol health warning labels: A qualitative study

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Abstract

Aims: In 2019, alcohol caused 2.6 million deaths worldwide. A policy option to address this health burden is the use of health warning labels on alcoholic products. However, the important perspectives of primary healthcare providers on this policy option have not been investigated until now. This study explored Dutch primary healthcare providers' perspectives on alcohol health warning labels in general, on their content and format in particular, as well as the labels' perceived impact, including on alcohol-related professional practices.

ethod: This qualitative study used semi-structured interviews with Dutch primary healthcare providers aged 18 to 67 years. Participants were recruited via convenience sampling. A coding scheme was developed guided by the I-Change Model. Thematic analysis was used for data analysis. Themes were predetermined using the I-Change Model and adapted according to the data.

Results: Thirteen Dutch primary healthcare providers were included. Results showed that although most participants doubted the effectiveness of alcohol health warning labels in changing their own and others' behaviour, the majority supported their use and believed they would increase others' awareness of alcohol-related risks. Participants preferred labels that were specific, clear, and more visible, and believed the labels would positively impact discussions with patients.

Conclusion: Primary healthcare providers generally support alcohol health warning policies, and reported that these labels may positively influence their discussions of alcohol with patients. They should be considered important stakeholders in strengthening labelling policies.

Introduction

Alcohol is causally linked to over 200 illnesses, health issues, and injuries. In 2019 alone, 2.6 million fatalities globally were attributed to the detrimental effects of alcohol, constituting 4.7% of total deaths that year (World Health Organization [WHO], 2024). In the Netherlands, 59% of the adult population does not adhere to the alcohol guidelines of the Netherlands' Health Council, which recommends consuming up to one alcoholic beverage containing around 10 grams of alcohol per day, or abstaining from alcohol (Statistics Netherlands, 2020; Trimbos-instituut, 2023). Despite the well-documented adverse effects of alcohol on health, public awareness of associated risks is lagging behind, especially for alcohol as a risk factor for cancer (Neufeld et al., 2024). One way to increase this awareness is through the use of warnings on product labels (Correia et al., 2024; Kokole et al., 2021). A 2013 review on enhanced labelling identifies five elements, including a list of ingredients, nutritional information, serving size, definitions of moderate intake, and health warning labels, as potentially beneficial to consumers (Martinez-Montilla et al., 2020). Evidence from a 2024 systematic review indicates that health warnings can increase knowledge, depending on the label content (with low certainty), as well as lead to lower selection of alcoholic beverages and reduced drinking prior to driving (moderate certainty; Zuckermann et al., 2024). The World Health Organization (WHO) calls on its member states to provide consumer information through alcohol health warning labels (WHO, 2024).

Primary healthcare providers have a significant responsibility in imparting knowledge about the dangers of alcohol consumption and play a vital role in recognising and providing support to individuals displaying early indications of risky or problematic alcohol use (Abidi et al., 2020). A

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2023 review found a significant link between primary healthcare providers' alcohol consumption and their preventive practices, such as screening and counselling (Romero-Rodríguez et al., 2023). Healthcare providers who drank more were less likely to provide advice to patients regarding the health risks of alcohol use. Since healthcare providers are also alcohol consumers who would be exposed to warning labels in the same way as the general population, and given that providers' own attitudes and consumption habits influence their professional practices, any change in their perceptions and behaviours due to warning labels may occur (Al-hamdani & Smith, 2015; Romero-Rodríguez et al., 2023). Such changes might thus also have an effect on how they discuss alcohol with their patients.(Al-hamdani & Smith, 2015; Romero-Rodríguez et al., 2023). In the Netherlands, over 90% of physicians drink alcohol (Geuijen et al., 2023). Therefore, the perspectives of primary healthcare providers on the warning labels are valuable, as any changes in their perception of alcohol might also translate to their practice.

The perspectives of primary healthcare providers with regard to alcohol health warning labels however have only been partially explored in a single study thus far, demonstrating the need for further exploratory research on the perspectives of this under-researched population (Al-hamdani & Smith, 2015). Additionally, previous studies highlight the importance of conducting further qualitative research in the field of alcohol health warning labels (Hassan & Shiu, 2018; Joyce et al., 2023).

This study thus addresses the question: *What are the perceptions of Dutch primary healthcare providers regarding alcohol health warning labels?* The purpose of this research is to gain insight into primary healthcare providers' general perceptions of alcohol health warning labels, including their perceived impact (both overall and on providers' own alcohol consumption, awareness of related risks, and their alcohol-related professional practices), and their preferences regarding content and format. using the I-Change Model as the theoretical framework.

Method

Study design and type

This stand-alone study used a qualitative approach with semi-structured interviews, aligning with the exploratory nature of the research question (Kallio et al., 2016).

Sample and recruitment

Participants were recruited based on the following criteria: (a) age range of 18 to 67 years, aligning with the legal purchasing age (18 years) and retirement age (67 years) in the Netherlands; (b) occupation as primary healthcare providers, referring to healthcare providers serving as initial points of contact within the Dutch health system (van den Muijsenbergh & van Weel, 2019), and (c) proficiency in Dutch, as the alcohol health warning labels (hereafter *warning labels*) were presented in Dutch, and Dutch is the primary language in the Netherlands' primary care settings. Individuals without a healthcare degree, such as medical students, were excluded from the study as they lacked authorisation to work with patients.

Recruitment utilised convenience sampling through email, in-person, telephone, and social media, with transparency about the study's purpose, time commitment, and lack of incentives to address potential concerns. Although convenience sampling was used, factors such as age, profession, experience, and province of residence were included to achieve a diverse sample. Participants were recruited through personal and professional networks; therefore, the researcher and participant were often acquainted prior to the study. Eighteen participants were approached, of whom four declined participation, citing time constraints, and one did not respond. Interviews continued until data saturation was achieved, following Polkinghorne's (1989) recommendation of a sample size ranging from five to twenty-five participants, and Fusch and Ness's (2015) suggestion of reaching data saturation when no new themes are derived. While recruitment was still in progress, two researchers (JV and EE) analysed the interview transcripts to determine if saturation had been reached. Additionally, efforts were made to include participants only if strictly necessary, given the heavy workload of Dutch primary healthcare providers.

Procedure

The interview guide was developed by the researcher (JV) in cooperation with the research team (Appendix A). The interview guide was developed based on the constructs of the I-Change Model, along with other pertinent themes identified by the research team based on the existing literature. The I-Change Model is a behavioural change model that strives to explain the acquisition of health behaviour and its determinants to translate science into practice (de Vries, 2017). According to the I-Change Model, behavioural change is a process that occurs in three stages: the pre-motivational (awareness), motivational (motivation), and post-motivational (action) phases, with each of these stages having different factors that play an important role. The I-Change Model was used to structure the perceived influence of alcohol health warning labels and preferred message factors (content and format) of these alcohol health warning labels on the three different stages of behaviour change. The content of these messages was derived from prior research and input from the research team. The designs of the labels (Appendix B) were developed collaboratively by the research team and a WHO designer and were, along with the messages, presented to participants via a Google Slides presentation. To assess the different formats, the message 'Alcohol increases your risk of cancer' was consistently incorporated into all designs to ensure that evaluations were not influenced by variations in message content. The interviews were conducted between 7th and 30th April 2024. All interviews were conducted via Microsoft Teams to reduce travel burden, lasted between 25 to 40 minutes, and were audio recorded.

Ethics

All procedures conducted in this study adhered to the ethical standards outlined in the 1964 Helsinki Declaration (World Medical Association, 2013). Ethical approval for this

research was automatically granted by Maastricht University's Ethics Review Committee FHML, approved through the Master's programme ethics procedure as no sensitive issues were identified in the questionnaire. Additionally, participants provided both verbal and written informed consent prior to the interviews.

Analysis

The data analysis followed several steps adapted from Braun and Clarke (2006). Firstly, interviews were transcribed using the transcription option in Microsoft Word and anonymised by the researcher after each session. Two researchers, the initial researcher (JV) and another Master's student (EE), familiarised themselves with the transcripts post-interview. Following this, the same researchers developed a coding scheme in cooperation with another member of the research team researcher (DK). The I-Change Model was used as a deductive framework to establish foundational codes, and the emergence of subthemes was complemented with inductive coding. The two researchers (JV and EE) initially applied the codes to two interviews to evaluate the developed coding scheme, and then adapted it accordingly.

Following this, the researchers independently coded the interviews, using the adapted coding scheme. Inter-coder reliability was assessed using percentage agreement to increase the reliability (O'Connor & Joffe, 2020). This process continued until an appropriate percentage agreement of 80–100% was achieved, which occurred after three interviews were coded, yielding a percentage of 83% (McHugh, 2012). Thereafter, themes were identified by the initial researcher using thematic analysis. The final report was compiled according to the Standards for Reporting Qualitative Research (SRQR; O'Brien et al., 2014).

Results

Thirteen Dutch primary healthcare providers participated in this study. The sample consisted of eight women and five men, with ages ranging from 24 to 66 years. Most participants (n = 8) were between 18 and 39 years old, three were aged 40 to 59, and two were aged 60 or older. The participants represented a variety of health professions, including physical therapists (PT; n = 3), dieticians (DTN; n = 2), general practitioners (GP; n = 2), and speech therapists (ST; n = 2), with single representatives from dentistry, kinesitherapy (KT), nursing, and osteopathy. In terms of professional experience, six participants had fewer than 10 years of experience, six had between 10 and 39 years, and one had more than 40 years. Most participants were based in the province of Limburg (n = 9), while two were from Noord-Brabant, and two from Zuid-Holland.

The key findings of this study are summarised in Table 1 and the themes are elaborated on in detail in the paragraphs below.

Table 1

Summary of key findings

Themes	Details
General perceptions of the alcohol health warning labels	Primary healthcare providers generally support alcohol health warning labels. Most of them described alcohol health warning labels as acceptable for themselves. Opinions were divided regarding the acceptability for others.
Use and views of labels and alcohol health warnings	Most primary healthcare providers believed that alcohol health warning labels would not influence their own or others' alcohol consumption. However, some believed that alcohol health warning labels could raise individuals' awareness. Most participants would discuss alcohol health warning labels with friends and family.
Perceptions of alcohol health warning content	Perceptions regarding four different categories of alcohol health warning labels content were assessed. Regarding causal language, most primary healthcare providers preferred *'alcohol increases the risks of…*'. For framing, a slight majority of the participants preferred the negative framing *'drinking alcohol increases…*', whereas almost half preferred the positive framing *'drinking less alcohol reduces…*'. Most primary healthcare providers favoured using the signal word 'warning' before the message. For the type of message, most preferred the warning that includes specific types of cancer.
Perceptions of the alcohol health warning label format	Perceptions regarding four categories of alcohol health warning label format were assessed. For the colour scheme, almost all primary healthcare providers believed that a combination of black, red, and yellow would be the most effective. Regarding the use of an image, most participants preferred the pictogram, as it draws attention and is acceptable. For the positioning, all perceived a label on the front of a product as more visible and therefore effective. Almost all primary healthcare providers preferred an alcohol health warning label that would cover one-third of the label.
Influence of alcohol health warning labels on discussion of alcohol with patients	Half of the primary healthcare provider frequently discussed alcohol with their patients. The majority of the participants believed that alcohol health warning labels would positively influence their discussions of alcohol with patients.

General perceptions of the alcohol health warning labels

Primary healthcare providers (hereafter *healthcare providers*) were asked about their awareness of and involvement with current alcohol health warning labels (hereafter *warning labels*). They were also asked about their attitudes towards and perceived acceptability of enhanced alcohol health warning labels.

Most of the healthcare providers were aware of the pregnancy pictogram on current alcohol labels, and some mentioned the 18+ pictogram, the slogans 'Enjoy, but drink in moderation' and 'Don't drink and drive'. They occasionally read the labels, particularly noting the alcohol percentage. Almost all voiced support for having enhanced warning labels on alcohol products, since they believed it is important to provide more information about the harms of alcohol, which is necessary for individuals to make informed decisions when consuming or buying alcohol. One participant mentioned: *'I think people could be warned more because I believe it is very important for people to make a conscious choice. They should make a decision based on that* [warning labels], *whether to take it or not.'* (KT, F, 30y, 2024). However, two healthcare providers expressed opposition to the warning labels, believing they were patronising or ineffective, as one of them described: *'I think often the risk of labels is that it is patronising. You may not, you may not, you get this, you get cancer, you get all kinds of scary things.'* (GP, F, 30y, 2024). Some doubted the feasibility of warning label policy implementation due to the reluctance of the alcohol industry.

Almost all of the healthcare providers described warning labels as acceptable for themselves. Nonetheless, one expressed that he would find it unacceptable if an image was used. When asked how they perceived warning label acceptability in their social environment, the answers were mixed: half of the healthcare providers mentioned that the people around them would find it acceptable and in favour of being informed, while others believed the people around them would find them unacceptable, considering it a form of patronisation, annoying, or a breach of privacy, as one described: *'I certainly think there are patients who have some opinions about that, such as finding it excessive, unnecessary, or irritating.'* (GP, F, 47y, 2024).

Use and views of labels and alcohol health warnings

Participants were asked about their opinions on the role of labels in general and warning labels specifically in influencing decision-making, and the perceived influence of enhanced warning labels on alcohol purchasing, consumption, and awareness of the related risks. Half of the participants expressed that alcohol labels in their entirety influence their alcohol purchases, as a more appealing label increased the likelihood of buying the product. However, current warning labels did not affect their purchases, and none of them believed that these warning labels are effective in changing consumers' behaviour, since they are too small, go unnoticed, depict risks that are already known by everyone, and are not taken seriously. When asked about the potential effectiveness of enhanced warning labels (see Appendix B), the majority believed that this would not influence their own behaviour or awareness of alcohol-related risks, as they were already familiar with the presented information. However, some mentioned that messages detailing information regarding specific types of cancer would increase their awareness, since this was new to them.

The majority of the participants believed that enhanced warning labels would not influence others' alcohol consumption, stating arguments such as the fact that alcohol is too socially accepted, that not everyone is concerned about the risks, and that tobacco warning labels have been ineffective. As one participant stated when asked about the perceived effect of alcohol health warning labels:

> *Yes, not on me. Zero effect, I think. I think for the people around me also zero. I still find that difficult. I think they are people who make a conscious choice, people who are familiar with the risks. But there will certainly be a group of people who are not familiar with the risks. But then I doubt to what extent that has any effect. Maybe on some, it has no effect at all.* (DTN, M, 47y, 2024).

However, the majority did believe that enhanced warning labels could increase others' awareness, especially regarding the long-term risks, as one participant stated: '*The part about becoming aware of* the *long-term consequences, that will change.'* (PT, M, 28y, 2024). Additionally, they believed warning labels could shift perspective, particularly among those who consume more alcohol.

Most of the healthcare providers reported that they would discuss warning labels with friends and family, since they believe alcohol consumption is still too normalised, and think that warning labels could help start conversations. As one participant described:

> *If that* [warning label] *were on a label of alcohol, I might even say something to my friends like, 'Oh look, how nice or how well formulated. Did you actually know that? Or should we skip this one?* (KT, F, 30y, 2024).

Perceptions of alcohol health warning label content

The healthcare providers were invited to share their perspectives regarding the following four categories for the content of enhanced warning labels: (a) causal language, (b) framing, (c) signal words, and (d) type of message. The demonstrated messages per category are shown in Appendix B.

For expressions indicating causality, most of the healthcare providers preferred the message 'alcohol increases the risks of', since it was often seen as more thoughtful, friendly, and closer to reality compared to the message 'alcohol causes cancer'. However, some considered it weak and too abstract. The causal language 'alcohol causes' was considered the strongest and most captivating claim but was also seen as too black-and-white, as it makes the contentious assertion that drinking alcohol directly causes cancer. As one described:

> *And alcohol causes cancer... I think that's a bit exaggerated. It is not always so clear- cut. I mean, you cannot get cancer from just taking one sip of alcohol,*

> *right? So, I think that statement is a bit exaggerated.* (KT, F, 30y, 2024).

The message 'alcohol can cause…' was considered clear, short, strong, and more nuanced. However, some believed it is easy to downplay, too black-and-white, and less strong.

For framing, a slight majority of the participants preferred the negative framing 'drinking alcohol increases your risk' as it was considered clear, transparent and concrete, as one stated: *'Yes, the second one, I actually like that one too. Because, yes, it is just clear, from drinking alcohol increases your risk and then very specifically of getting cancer.'* (ST, F, 24y, 2024). However some argued that it is too patronising. The other half preferred the positive framing 'drinking less alcohol reduces your risk', as it was considered friendly, and less patronising, as one mentioned: *'Yes, it is less patronising that way. It allows you to feel more like you're making the choice yourself to reduce.'* (PT, F, 39y, 2024). Nevertheless, others argued that it was unclear what 'drinking less' entails, that it is too complicated due to the use of double negatives, and that it is not strong enough. No one favoured the ambiguous message 'enjoy, but drink responsibly', as it was perceived as provoking jokes, and to be meaningless.

The majority of the healthcare providers favoured the inclusion of the signal word 'warning' at the beginning of the statement, as it would strengthen the message and catch attention, as one mentioned:

> *Yes I think that is a good thing. A statement like "alcohol increases the risk of cancer" could still come across as just an innocent note on a label. But a warning feels more direct, like saying, 'Hey, be aware of the risks.' And I think that's a good approach. So yes, I'd be more impacted if there were an actual warning.* (KT, F, 30y, 2024).

However, the minority argued that it is patronising, forceful, and distancing and that the message is shorter and stronger without signal words.

For the type of message participants were shown warnings related to general health, cancer, pregnancy and violence. Most of the healthcare providers favoured the warning including specific types of cancer, as it was perceived as new knowledge, and therefore would increase awareness and raise questions, as a participant stated: *'Yes, because that one also raises some immediate questions. I think, doesn't it have something to do with other forms of cancer? I would immediately delve further when I see that.'* (PT, F, 39y, 2024). However it was also described as hard to read for low-literate individuals and too lengthy. The warning 'alcohol harms your health' was considered clear, but obvious, and insignificant. The general cancer warning was considered new information, understandable, clear, and with greater attention value, compared to the general health message. The pregnancy warning was perceived as clear and necessary, although some argued that individuals were already aware of this risk and that it could be shortened. The message referring to alcohol and violence was perceived as recognisable and logical, although some found it less catchy and relevant, and too abstract.

Other preferences brought up by the participants included rotating message topics, an easy-to-read text, and messages that include QR codes linking to information on how to access help. Other risks mentioned that could be presented on the labels include fertility, neurological, and addiction issues, and short-term risks such as impaired concentration levels.

Perceptions of the alcohol health warning label format

The participants were asked to provide their opinions regarding the following four categories for the format of the enhanced warning labels: (a) positioning, (b) colour scheme, (c) image, and (d) size. The demonstrated formats of messages per category are shown in Appendix B.

For the positioning, all healthcare providers perceived a warning label on the front of the bottle as more visible, more effective, and less appealing. However, half of the healthcare providers preferred the position at the back of the bottle, as they favoured a more appealing label.

For the colour scheme, almost all healthcare providers believed that a combination of black, red, and yellow would be the most effective, as it stood out the most. However, this scheme was also noted as the least acceptable, as one GP described:

> *Then you actually notice right away that the middle one stands out the most. Because of the combination of yellow-black with the red border around it. The only question is whether you should start presenting it that way. But on the other hand why not? For me it is allowed.* (GP, F, 30y, 2024).

The colour yellow was deemed adequate for people with dyslexia but was also seen as disturbing. Only one participant preferred the white label with a black frame, finding it the most acceptable one:

> *Yes, now we're getting into the territory of finger-wagging: 'Guys, guys, alcohol is really bad.' If you add that colour, more and more alarm bells start ringing. Is that the intention—that if you want to use something, twenty alarm bells have to go off at once? I'd find that rather annoying; it could make people push back. No, I wouldn't go for something that loudly screams 'alcohol is bad'.* (PT, M, 66y, 2024).

Regarding the use of an image, most of the participants preferred the pictogram, as it drew attention and felt to be acceptable. Nevertheless, four healthcare providers preferred the image of a cancer patient, believing it was the most effective. However, it was also considered violent, shocking, extreme, going too far, and not politically correct, as one stated:

> *Yeah, I find the last one where you see a patient lying down quite intense. It is very confrontational, which is probably the intention. Personally, though, I find it hard*

> *to handle. For instance, if I see a sick woman lying here right now, I find it very distressing. So I would prefer the second option, like an icon, something less confrontational for people.* (ST, F, 24y, 2024).

Almost all healthcare providers preferred a warning label that would cover one-third of the label on the bottle, believing it would be more effective, easier to read, clearer, and more noticeable compared to smaller warning labels. One healthcare provider was not in favour of a larger warning label, arguing that it would draw too much attention and therefore people would reject it.

Influence of alcohol health warning labels on discussion of alcohol with patients

Healthcare providers were asked if they discussed alcohol with their patients and what influence enhanced warning labels would have on these discussions. Seven of the healthcare providers never or almost never discussed alcohol with their patients. Four discussed alcohol on a weekly basis, and two discussed alcohol daily. Most of those who did discuss alcohol did so when they suspected overuse. Others discussed it in terms of complaints related to the patients they were seeing in their profession. One healthcare provider mentioned finding it challenging to discuss alcohol with her patients because she feared receiving answers to which she wouldn't know how to respond.

The majority of the healthcare providers believed that warning labels would positively influence their discussions of alcohol with patients. They mentioned that warning labels could serve as a lead to start a conversation, reduce the barrier of having a difficult conversation, and potentially lead to patients raising more questions, as one mentioned:

> *Yes, that's nice in itself. I always find it helpful to have a starting point for initiating a conversation, to make a topic discussable. And having something concrete, like discussing that label, provides a good framework. I think that can be valuable, yes.* (DTN, M, 47y, 2024).

Additionally, one healthcare provider mentioned that the warning labels could be shown during the consultation. Nevertheless, three of the healthcare providers doubted whether it would influence their discussions. Some wondered if it would actually make people more afraid to speak up about their alcohol use and others believed that patients would raise more questions but still be reluctant to talk about their own consumption. One healthcare provider believed that the warning label wouldn't influence their consultation, as this had been the case with tobacco warning labels.

Discussion

This study explored Dutch primary healthcare providers' perspectives on alcohol health warning labels. Results showed that most primary healthcare providers doubted the effectiveness of alcohol health warning labels in changing their own or others' behaviour, but still supported their use, believing they would raise awareness of alcohol-related risks. Overall, the majority of primary healthcare providers believed alcohol health warning labels would positively impact their discussion of alcohol with patients.

As this is the first study that assessed the perspectives of primary healthcare providers towards alcohol health warning labels, comparisons are made with studies focusing on the general public. The results of the present study align with the findings of the systematic review of Joyce and colleagues (2023), which indicated a general positive attitude towards alcohol health warning labels among the general public of English-speaking countries. However, reviews on the actual impact of alcohol health warning labels on drinking behaviour suggested potential for changing behaviour (Clarke et al., 2021; Joyce et al., 2023; Zuckermann et al., 2024). For the perceived influence of alcohol health warning labels on awareness, this study's findings align with the results of Joyce and colleagues (2023), as the participants believed alcohol health warning labels could raise awareness. Additionally, an actual increase in awareness of alcohol-related cancer risks after exposure to alcohol health warning labels among the European public has been demonstrated in the study of Correia and colleagues (2024).

Regarding content, the findings of the present study align with the review of Giesbrecht and colleagues (2022), which recommended the use of messages presenting specific risks, such as cancer rather than general alcohol risks. However, this study's findings on causal language differ from those of Giesbrecht and colleagues (2022), as their study emphasised a need for strong causal language, possibly because the studies assessed only perceived effectiveness and not acceptability. For framing and signal words, studies on alcohol health warning labels have shown mixed results (Hassan & Shiu, 2018; Kokole et al., 2021).

For the format of the warnings, this study's results corroborate previous findings (Dossou et al., 2023; Giesbrecht et al., 2022; Lacoste-Badie et al., 2022; Morgenstern et al., 2021; Pechey et al., 2020), which suggest that image and text messages are perceived as the most effective but least acceptable, whereas larger, more colourful labels, presented on the front of the bottle are seen as having more impact.

However, although this and previous studies' findings advocate for more visible and attention-grabbing alcohol health warning labels, special attention should be given to the Extended Parallel Process Model, especially for the potential inclusion of images. The Extended Parallel Process Model is a psychological framework used to explain how people respond to fear appeals, which are messages designed to scare individuals into adopting safer behaviours (Witte, 1992). This framework underscores that when individuals perceive a high threat but lack self-efficacy to cope with the desired behaviour, the message can lead to defensive responses such as denial or avoidance (Witte, 1992). Therefore, it is essential to balance threat communication with efficacy of the individual to mitigate potential resistance or opposition to the desired behaviour in enhanced alcohol health warning labels. Examples of efficacy messages can be drawn from previous tobacco health warning label studies, such as providing general statements

about quitting efficacy or information about quitting (Strahan et al., 2002).

The finding that only a minority of primary healthcare providers frequently discuss alcohol with their patients was corroborated in the study by Abidi and colleagues (2020). The perceived influence of alcohol health warning labels on discussions with patients has not been studied previously; however, Correia and colleagues (2024) indicated that alcohol health warning labels could stimulate discussions about alcohol with family and friends. This suggests alcohol health warning labels could also potentially encourage discussions with patients.

Strengths and limitations

A strength of this study is that it is the first to assess the perspectives of primary healthcare providers regarding alcohol health warning labels. The use of semi-structured interviews facilitated a dynamic interaction, which enabled the researcher to probe deeper into participants' responses, capturing detailed personal insights that a more structured approach might have missed (Kallio et al., 2016). Another strength is the broad range of primary healthcare providers that were included in this study, ensuring a diverse range of perspectives that enhanced the study's comprehensiveness and relevance to the broader population of primary healthcare providers. Lastly, the assessment of inter-coder reliability further strengthened the validity and reliability of the findings (O'Connor & Joffe, 2020).

However, this study is not without methodological limitations. Firstly, although a broad range of primary healthcare providers was included, and women are overrepresented in Dutch primary healthcare (Statistics Netherlands, 2023), participant characteristics were not equally represented, potentially increasing the likelihood of sampling bias (Merriam & Tisdale, 2015). The uneven distribution and limited number of participants across professions are notable, given their varied expertise and potential perspective differences. Secondly, the acquaintance between the researcher and participants could introduce bias, as participants might respond to align with perceived expectations of the researcher (Merriam & Tisdale, 2015). To reduce this, the researcher emphasised data confidentiality during recruitment and interviews. Lastly, while practical, using percentage agreement to assess inter-coder reliability may not be as robust as other measures like Cohen's kappa, as it leaves room for subjectivity and potential discrepancies in the coding process (O'Connor & Joffe, 2020).

Recommendations

Given this study's limitations, further qualitative studies are needed to assess the perceptions of the Dutch general public and different professions among primary healthcare providers regarding alcohol health warning labels. Additionally, future research in real-world settings is necessary to evaluate the actual impact of enhanced alcohol health warning labels on all elements of the I-Change Model.

Alongside other studies, this study reveals a generally positive attitude towards enhanced alcohol health warning labels, and that these labels effectively raise awareness about alcohol-related risks, and can potentially facilitate discussions between primary healthcare providers and patients. Therefore, a policy to address enhanced alcohol health warning labels is necessary, particularly due to the substantial health burden caused by alcohol, inadequate awareness of alcohol-related risks in the European Union (EU), and insufficient discussions about alcohol with patients in the Netherlands. Primary healthcare providers who support alcohol health warning labels can play a pivotal role in advocating for this policy and should be regarded as important stakeholders by policymakers.

Conclusion

This study showed that the majority of the primary healthcare providers interviewed supported alcohol health warning labels and believed they would influence other consumers' awareness of alcohol-related risks, although they doubted their effectiveness in changing their own and others' behaviour. Overall, the participants preferred a specific, clear, and more visible label. They believed that alcohol health warning labels would positively influence their discussions about alcohol with patients. The perspectives of primary healthcare providers can significantly enhance alcohol health warning label policy for both the Netherlands and the EU.

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Declaration of Interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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