# Discussing alcohol and cancer with patients: Knowledge and practices of general practitioners in New South Wales and South Australia

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# Background

Alcohol is associated with several cancers; however, the Australian community has low awareness of the link between alcohol consumption and cancer. Little information exists regarding when and why general practitioners (GPs) discuss alcohol with patients.

# **Objectives**

The objective of this article is to explore GPs' attitudes and practices when discussing alcohol with patients. This includes awareness of alcohol recommendations and evidence of the alcohol-cancer link, and discussion around barriers and enablers to encouraging patients' alcohol behaviour change.

#### Method

Semi-structured qualitative interviews were conducted with 28 GPs.

# Results

GPs did not routinely ask patients about their alcohol consumption or advise on drinking recommendations. Many had a broad understanding of alcohol as a cancer risk factor, but knowledge of the causal mechanisms and current evidence was limited.

# Discussion

GPs are trusted health advisers. Providing them with up-to-date evidence on the alcohol-cancer link and drinking recommendations may encourage routine patient screening of alcohol consumption and delivery of simple education on the harms of long-term drinking.

Icohol is a Group 1 carcinogen.1 Alcohol consumption is a risk factor for mouth, pharynx, larynx, oesophagus, breast, bowel and liver cancers.<sup>2</sup> About 3200 cancer cases are attributable to the long-term consumption of alcohol each year in Australia.3 The risk of developing cancer increases with increased consumption, and there is no 'safe limit' of consumption.<sup>2,4</sup> The Australian government recommends that people drink no more than two standard drinks per day, and no more than four on any occasion (Box 1) to reduce the risk of long-term and short-term harm, respectively.5

Australians are largely unaware of the National Health and Medical Research Council (NHMRC) alcohol guidelines; only 5% are able to correctly identify safe levels of alcohol consumption for short-term and long-term harm.<sup>6</sup> Nearly 20% of Australians drink at levels that place them at lifetime risk of harm, including cancer.7 Less than half of the community is aware that alcohol is linked with cancer.<sup>8,9</sup> Therefore, improving awareness is a priority, particularly as evidence strengthens on the link between alcohol and cancer.10

One strategy to increase awareness of alcohol-related harms is the provision of information by trusted authorities. As one of the most trusted and accessible sources of health information, 11 who are in contact with more than 85% of the population at least once per year, 12 general practitioners (GPs) can play an important part in raising awareness of alcohol-related harm (including the link with

Research has shown that GPs do not routinely monitor patients' alcohol consumption, especially when patients' consumption does not appear to have an impact on their health.<sup>11,13</sup> Further, GPs noted that screening for high consumption is difficult, and discussing alcohol consumption with patients can be stigmatising.<sup>14</sup> There has been no research conducted

in Australia or internationally that has investigated whether GPs discuss alcohol consumption as a risk factor for chronic diseases including cancer. We also have little information regarding GPs' attitudes about alcohol as a risk factor for chronic diseases, their knowledge of the link between alcohol and cancer, and when and why GPs discuss alcohol with patients. This information is essential to inform practice recommendations. The objectives of this study were to:

- determine GPs' attitudes and practices when discussing alcohol with patients
- determine GPs' awareness of alcohol recommendations and current evidence on alcohol as a cancer risk factor
- · explore barriers and enablers for addressing education and health behaviour change in patients.

#### Methods

GPs in New South Wales and South Australia were recruited by a market research company to participate in a study on patient conversations about lifestyle and chronic disease. Those who expressed an interest were sent the participant information sheet and completed a screening questionnaire that collected demographic information

used to stratify GPs into specific groups. The questionnaire took into account patient load (high, medium, low), geographic location (New South Wales, South Australia; metro, regional, rural) and socio-economic status of patients based on the Socio-Economic Indexes for Areas (SEIFA)<sup>15</sup> of the GP's practice. Recruitment continued until there were no new themes emerging in the interviews.

Eligible participants completed a semistructured telephone interview conducted by a qualitative research specialist. The interviews were 20-60 minutes in duration, and the following topics were covered in the open-ended format:

- types of GP-patient discussions about alcohol
- knowledge, use of and reactions to the NHMRC guidelines
- knowledge of the link between alcohol and cancer
- reactions to evidence statements<sup>4</sup> on alcohol-related cancer risk
- barriers and enablers to discussing alcohol with patients.

The interviews were audio-taped for analysis. Content analysis was used to summarise and describe key themes in four broad topic areas identified a priori:

- discussions with patients about alcohol
- awareness of alcohol recommendations
- · awareness of the alcohol-cancer link
- response to evidence on cancer risk. Two authors (LW, NC) listened to eight randomly selected interview recordings. After this, common themes were identified and a coding frame developed through discussion, consistent with recommended practice.<sup>16</sup> The remaining interviews were coded independently by the same authors.

This research was approved by the Cancer Council NSW's Ethics Committee (NHMRC #EC000345, application reference #285). The project was funded by Cancer Council Australia, Cancer Council NSW and Cancer Council SA.

# Results

The sample size for the study was 28 participants. GPs were diverse with respect to location, socioeconomic status and patient load, with the exception of GPs from rural South Australia who were unable to be recruited (Table 1). These GPs either stated that they did not participate in research or they did not respond to the invitations to participate.

# Discussions with patients about alcohol

Most of the GPs surveyed considered preventive health as one of their core roles. As such, issues such as weight, smoking, alcohol consumption, diet and physical activity were major focuses of their practice. Many GPs reported that, although they enquire about patients' alcohol consumption during initial consultations, they do not routinely discuss alcohol unless there is a health issue directly affected by their alcohol consumption. This mirrors the perception GPs have about the general public's view of alcohol:

There's a general perception that smoking is bad but not with alcohol ... If you try to tell someone about standard drinks, they don't get the message. With alcohol, they don't think it harms them, they don't think it does anything to their health.

# Box 1. Australian guidelines to reduce health risks from drinking alcohol<sup>5</sup>

# National Health and Medical Research Council (NHMRC) guidelines to reduce health risks from drinking alcohol

#### Long-term harm

For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.

For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.

# Children under 15

Parents and carers should be advised that children under 15 years of age are at the greatest risk of harm from drinking. For this age group, not drinking alcohol is especially important.

# Young people 15-17 years of age

For young people aged 15-17 years, the safest option is to delay the initiation of drinking for as long as possible.

#### Pregnant women or those planning pregnancy

For women who are pregnant or planning a pregnancy, not drinking is the safest option.

# Women who are breastfeeding

For women who are breastfeeding, not drinking is the safest option.

There were specific situations when GPs discussed alcohol with patients:

- 45-49 year health check
- with young people they suspected were binge drinking
- if there was evidence of alcoholism, dependence or addiction
- if there were abnormal biochemistry results, including liver function tests.

Alcohol was most commonly discussed with patients presenting with weight gain, hypertension, cardiac risk or diabetes. In the absence of these circumstances, GPs identified that patients generally do not ask about alcohol consumption. Further, there was a perception that patients either could not correctly estimate or deliberately underestimated their consumption:

Patients never really tell me the truth about how much alcohol they take. So I send them for blood tests liver function, sugar levels, iron and triglycerides might be high.

Some GPs mentioned the 'therapeutic benefits' of alcohol, particularly red wine. Several participants perceived that the alcohol industry has an influence on the general practice profession:

Very happy to attend symposium run by a reputable independent professional. Someone who is not allied with wine

promotion. There are cardiologists in Adelaide who own vineyards ...

Others GPs noted that the evidence for the benefits of alcohol is not convincing and has reduced in recent years:

I encourage people not to start these days, whereas 10 years ago, maybe I would have said a glass of red would do vou good.

# Alcohol guideline awareness

Most GPs were aware of the NHMRC guidelines and have used them to define safe drinking levels. However, understanding of the details of specific guidelines varied. Many quoted both aspects that were correct but also outdated aspects. For example, several GPs were unaware that current guidelines are the same for men and women. Participants tended to advise lower levels for women than is currently recommended, and either the correct or one to two standard drinks higher for men than is currently recommended. Almost all GPs recommended having at least two alcohol-free days each week, which is no longer in the guidelines, but likely to be beneficial. Some thought the type of alcohol mattered, with red wine being more acceptable:

I do stress the importance of giving yourself a break during the week two to three days altogether [with] no alcohol. Never in excess of two drinks of good quality red wine if that's what they want to drink, that's for a male and half that for female.

Although less common, the view of 'low-risk' consumption held by some GPs reflected the importance of low quantity and infrequent drinking occasions, such as one to two nights a week or only on social occasions. One GP stated that emerging evidence suggests there is no safe level of consumption:

Because of current evidence, which is still in flux, I believe the balance in falling on the side of no alcohol is better than some alcohol.

What GPs believed to be 'moderate-risk' and 'high-risk' drinking varied. 'Moderate risk' tended to be one or two standard drinks higher than what the GP believed was recommended in the NHMRC guidelines as 'low-risk' drinking. This ranged from more than two to more than four standard drinks on any occasion for men, and more than one to more than three for women. Binge drinking was sometimes mentioned as 'moderate-risk' drinking.

| Oh  |              | Number of participants (%)* |                 |          |
|---|--------------|-----------------------------|-----------------|----------|
| Characteristics                           |              | New South Wales             | South Australia | Total    |
| Location                                  | Metropolitan | 13 (46)                     | 6 (21)          | 19 (68)  |
|   | Regional     | 5 (18)                      | 1 (4)           | 6 (21)   |
|   | Rural        | 3 (11)                      | O (O)           | 3 (11)   |
| Patient load                              | High         | 10 (36)                     | 2 (7)           | 12 (43)  |
|   | Medium       | 5 (18)                      | 2 (7)           | 7 (25)   |
|   | Low          | 6 (21)                      | 3 (11)          | 9 (32)   |
| Socioeconomic status of patient catchment | High         | 6 (21)                      | 4 (14)          | 10 (36)  |
|   | Medium       | 9 (32)                      | 1 (4)           | 10 (36)  |
|   | Low          | 6 (21)                      | 2 (7)           | 8 (29)   |
| Total                                     |              | 21 (75)                     | 7 (25)          | 28 (100) |

'High-risk' drinking was defined in terms of quantity, frequency, dependence and evidence of damage. These factors were not always mutually exclusive. The quantity associated with 'high-risk' drinking ranged from more than three or four to more than eight standard drinks per day for men and slightly lower for women. 'High risk' was also defined as drinking more than the guidelines every day or simply drinking every day. Alcohol dependence, binge drinking, and evidence of liver damage were commonly mentioned when describing 'high risk':

High risk if they drink every day, say a bottle, but then they are alcoholics, they are dependent, and they run high risk of cardiometabolic syndrome and probably a much higher risk of anything to do with GI [gastro-intestinal] tract including oesophageal cancer, stomach cancer, bowel cancer.

As long as your liver function tests are normal and you're not overweight everything seems to be okay with you then four drinks is probably reasonable.

# Awareness of the alcohol and cancer link

Although the GPs commonly discussed alcohol consumption in the context of cardiovascular disease, diabetes and weight management, cancer was not uppermost in their minds. However, most GPs mentioned various cancer types when prompted, including liver and bowel cancer. Despite this, participants did not identify all of the cancers that have been linked with alcohol consumption, particularly oral and oesophageal cancers. This suggests that many GPs have a broad understanding of alcohol-related cancers but not a detailed knowledge of the associated cancer types:

[There's] good evidence that alcohol increases chances of colon cancer and pretty sure that there is some evidence now of breast cancer in women. I'm not sure what other cancers specifically but overall there is an increased risk of cancer development in people who consume alcohol.

There were mixed views about the causal link between alcohol and cancer. While some GPs recognised that alcohol causes some cancers, a few thought that the only alcohol-related cancers were secondary to liver damage and not directly linked to consumption. A minority of participants believed there was no mechanistic link:

Alcohol consumption doesn't cause cancer but chronic liver disease can lead to cirrhosis and then cancer, long-term.

# Response to evidence on alcohol and cancer risk

When presented with evidence statements on alcohol and cancer risk, responses were mixed. Some GPs accepted the evidence and indicated that they would be prepared to make patients aware of it:

That's interesting, that's news. If they've got the figures, it's my job to point it out to people and then they make the decision. I'm quite happy to make people aware of it because that's my job.

Others questioned it, believing the associations between alcohol and cancer were purely correlational, or that the strength of the relationship was weak. For some, uncertainty about the evidence was a barrier to informing patients of the alcohol and cancer link:

Generally I agree on the binge drinking. Not sure what they base the evidence on. I'd like to see exact numbers. Several GPs were concerned that messages to avoid alcohol were unrealistic, not culturally acceptable and would be met with resistance. Generally, advising patients to limit consumption was more palatable:

I have no problem with the message, it's just a hard sell. I'd recommend reducing the number of drinks rather than no drinking at all. We have enough trouble getting people to cut back, so [we] would get resistance getting people to stop

completely.

Several factors influenced GPs' discussions of alcohol and cancer risk. These factors included:

- relevance to the patient's medical and social circumstances
- · current drinking patterns
- perception of how they would respond
- concern about losing credibility
- professional judgement about the best motivator for the particular individual.

There was some scepticism that telling patients to limit consumption would change behaviour. Reasons for this included:

- patient's tendency to downplay the risk ('everything causes cancer')
- · lag time between consumption and cancer development
- perception that patients may not want to reduce consumption.

These issues deterred some GPs from providing information about limiting consumption:

I wouldn't tell someone to stop drinking but I would give the information and leave it up to him.

# **Discussion**

The GPs in our study considered preventive health to be an important aspect of their work, particularly in educating patients on the health risks associated with lifestyle and diet. This is consistent with previous research. 17 As was found in previous studies, 11,13,14 very few GPs reported discussing alcohol with their patients unless the patient raised it or there was evidence that alcohol might be contributing to a health problem. There is a missed opportunity to inform patients who do not fit this criterion who may be drinking above recommended levels, and to provide information about the risks of alcohol consumption on health, particularly cancer.

GPs may not be able to identify which patients consume alcohol at levels above the guidelines because of under-reporting by patients, or unfamiliarity with the current Australian drinking guidelines by both patients and GPs. 18 This was confirmed by the current study. These,

combined with a lack of importance placed on moderate alcohol consumption as a cancer risk factor, warrants action to increase awareness of reduced alcohol consumption for cancer prevention, and awareness of and adherence to the drinking guidelines.

The finding that some GPs were either unaware or unconvinced of the strong link between alcohol and cancer is consistent with research from the UK.19 This was one of the barriers to discussing the association between alcohol consumption and increased cancer risk with patients. It is important that GPs receive information about current evidence on the link between alcohol and cancer risk as it may enable them to discuss the risks and recommendations with patients. This is important in light of the time and resourcing challenges faced by GPs in providing high-quality patient education, conflicting practice priorities and staying abreast of research advancements. Further training and patient materials may also be necessary to provide GPs with strategies to raise alcohol consumption with patients.20

As with any qualitative research, the results are limited by sample size and demographic composition. The results may not be generalisable to all Australian GPs. Regardless, our study included GPs with varying caseloads and patients in various socioeconomic areas. The results give an indication of the barriers GPs face when discussing alcohol with patients.

# Implications for general practice

The social and physical environment in Australia has normalised alcohol consumption at levels higher than recommended to maintain health.21 As GPs are trusted health advisers and the public has low awareness of the NHMRC guidelines and the link between alcohol consumption and chronic disease, including cancer, many patients will not be aware if their GP does not educate them. To increase the population's knowledge of the long-term risks of alcohol consumption and assist in preventing up to 3200 new cases of cancer each year,3 we recommend that GPs routinely screen patients for alcohol consumption and deliver simple education around cancer risk associated with long-term use, even at low levels. Providing GPs with up-todate evidence on the alcohol-cancer link and current recommendations may facilitate this.

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