## Introducing alcohol as a drug in medicine reviews with pharmacists: Findings from a co-design workshop with patients

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**Short title:** Talking about alcohol in medicines reviews

**Abstract**

*Introduction and Aims*

Alcohol poses a range of potential problems to people taking medications, but health professionals are usually not comfortable talking about drinking with patients. The Medicines and Alcohol Consultation (MAC) aims to increase the capacity of pharmacists to conduct person-centred reviews in which alcohol is regarded as another drug to be discussed alongside medications. This paper explores sensitivities in discussing alcohol and views on the legitimacy of the MAC intervention concept at a pharmacy-user intervention co-design workshop.

*Design and Methods*

A co-design workshop was held with 14 people recruited from UK community pharmacies who regularly drank alcohol and took medications for long term conditions. This formed one element of a broader, iterative, intervention co-production process. Workshop discussions were audio-recorded and analysed thematically.

*Results*

The basic intervention concept resonated well, though not entirely unproblematically. Participants were interested in receiving information on how medications interact with alcohol and how this might affect their own conditions, with which to make their own informed choices. Linking alcohol use to medicines gave legitimacy to pharmacists to raise alcohol in medicines reviews. Sensitivity in talking about alcohol was linked to vulnerability to negative judgement.

*Discussion and Conclusions*

Changing the framing of alcohol in medicines reviews, away from being regarded as a ‘lifestyle issue’ to being considered a drug directly linked to medicines use, safety and effectiveness, was welcomed by participants in this study.

**Key words**: Alcohol, community pharmacy, complex intervention, co-design, qualitative

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**Introduction**

This co-design workshop formed a small but important part in the development of the Medicines and Alcohol Consultation (MAC) intervention by the UK National Institute of Health Research (NIHR) funded CHAMP-1 research programme. The MAC is a co-produced complex intervention which aims to increase the capacity of pharmacists to conduct person-centred medication reviews in which the subject of alcohol consumption is included [1]. The workshop was attended by potential recipients of the intervention. This paper explores their views on proposed ways of introducing alcohol into a conversation principally concerned with prescription medicines and on the supporting rationale for introducing alcohol into the medicines review context. While providing valuable material in developing the intervention, the findings provide further contextual material on discussing alcohol as part of routine interactions with community pharmacists.

Alcohol is linked to poor health in various and complex ways, and presents some degree of risk to all those who use it [2, 3]. This includes a range of potential problems associated with taking medications for long term conditions; directly via its impact on health and well-being and indirectly by potentially reducing adherence to, or the safety or effectiveness of, pharmaceutical treatments. Community pharmacists in the UK are private contractors engaged by the National Health Service (NHS) to provide local pharmaceutical services. In England, since 2005 this has included medicines reviews for patients taking new, high risk or multiple medications. Medicines reviews aim to: improve patients’ understanding of their medicines; highlight problematic side effects and, where appropriate, propose solutions; improve adherence; and reduce medicines waste [4, 5]. From 2012, a ‘healthy-living advice’ component has been added which expects pharmacists to include advice on alcohol, smoking, physical activity, nutrition, weight management and/or sexual health in their reviews [6]. Despite the introduction of these advanced services, community pharmacists are still primarily seen in terms of medicines dispensing [7].

Our early ethnographic studies showed the cursory nature, or indeed omission, of an alcohol consumption check as part of a ‘healthy living’ section in medication reviews, alongside wider uncertainties about the place of alcohol interventions in UK community pharmacy practice [8, 9]. To date, UK community pharmacists have received little guidance on alcohol interventions and are not confident about their role or practice in this area [10, 11]. The only guidance available is on screening and brief intervention [12], and the only randomised controlled trial conducted in community pharmacy found this offered no benefit to patients [13]. Studies with other health professional groups show that community pharmacists are not unique in lacking confidence. GPs are not always comfortable when talking about alcohol, and the implementation of alcohol interventions has been inhibited by a sense that patients are unwilling to recognise or disclose their risky alcohol consumption, alongside concerns about professional role adequacy, role legitimacy and role support [14-16]. There are many uncertainties about brief interventions , including doubts about the strength of the evidence in primary care, where existing research is most extensive [17, 18]. This has led to calls for new intervention paradigms in that setting. For example, rather than standalone decontextualized efforts to address alcohol consumption, integrating conversations about drinking within routine practice, ensuring those conversations address issues that matter to patients [16, 18-21].

CHAMP-1 qualitative studies highlighted the importance of understanding how health professionals initiate and conduct conversations about alcohol, in light of the inherent complexities of such conversations [8, 22]. We found that patients taking multiple medicines were open to the idea of talking with a pharmacist about alcohol as part of a medicines review if this was sensitively done, routine and its relevance was made clear [23]. Interviewees’ own drinking was largely perceived to be non-problematic and judged in comparison to stereotypical conceptions of alcohol dependence problems (see also [24]). Most interviewees had received routine advice from health professionals on alcohol consumption but continued with their usual patterns of drinking [25].

Community pharmacists delivering medicines reviews in England are required to be accredited in ‘patient-centred’ consultation skills [26]. General Pharmaceutical Council Standards for Pharmacy Professionals published in 2017 emphasise ‘person-centred’ care, which means placing the interests and perspectives of the patient at the heart of consultations [27]. There is limited research on the nature of interactions in community pharmacy consultations, and what there is provides few indications of person-centred consultation practice [28, 29]. A systematic review of interventions to promote a patient-centred approach in clinical consultations recommends the active pursuit of ways of involving healthcare consumers in their design, planning and delivery [30]. Engaging users as active co-creators within the research and intervention development process is encouraged on the basis that those affected by research have valuable contributions to make [31, 32]. Co-design methods are also being introduced in health services development [33, 34].

Building on findings from our qualitative studies, conceptual discussions and literature review, we conducted co-design workshops which sought additional input from potential users and recipients (pharmacists and pharmacy-users) on an early version of the consultation component of the MAC intervention. The draft MAC consultation guide included examples of ways for community pharmacists to introduce the subject of alcohol in a medicines review. Alcohol is presented as a legitimate subject for enquiry, another drug to be discussed alongside medicines and the conditions for which these are being taken. This draws on the public health call for the clear identification of alcohol as a drug [35], and moves away from a more familiar framing of alcohol as a ‘lifestyle’ issue to one directly within the pharmacist’s sphere of expertise. In light of the gap identified in earlier CHAMP-1 studies between people’s stated willingness to discuss alcohol with a pharmacist without seeing the relevance of such a discussion to their own drinking, and seeking enhanced proof of concept, we conducted qualitative analysis of workshop members’ sensitivities about talking about their own drinking in a medicines review.

**Methods**

The study received NHS Health Research Authority research ethics approval (Yorkshire & the Humber—South Yorkshire Research Ethics Committee REC reference 17/YH/0406). The findings are drawn from constructionist thematic analysis of a dataset featuring workshop members’ discussions about talking about their drinking with a pharmacist [36]. The framework in which the data were generated was a participatory and deliberative workshop context. The design of the workshop drew on methods from community-based participatory research [37] and prior experience of using participatory deliberative and consultative methods in research priority setting [38]. The workshop planning and facilitation team included CHAMP-1 researchers, a Patient and Public Involvement group (PPI) co-applicant (MO) and PPI representative (DL). The wider PPI group advised on recruitment strategy and helped design and pilot workshop content.

Recruitment to the workshop was pragmatic, aiming to maximise diversity over a four week period in a sample of people who were potentially eligible for medicines reviews because they took medication for long term conditions and also regularly drank alcohol. A researcher (SM) conducted 17 site visits lasting between two and seven hours at six pharmacies and an over 50s centre in a small city in the North of England. The workshop was held in an accessible city centre community venue and lasted for five hours. Participants received a £10 shopping voucher and travel expenses. Lunch and refreshments were provided. Small group and whole workshop discussions were audio-recorded and transcribed. This provided a data set for examining discussion content and how decisions were reached. Participants provided signed consent.

The workshop comprised interactive activities and discussions focusing on two ‘case studies’ of different ways a draft consultation guide might be used. These were presented orally by the lead facilitator (MM) and again by facilitators in small groups. Oral presentation was used because the suggested phrases were designed to initiate interaction and it was clear from prior discussions in the PPI group that people responded differently to spoken words rather than reading text. There was a particular focus in the workshop on the early part of the MAC consultation in which the subject of alcohol is raised and information given and received. A ‘guidebook’ (appendix S1) was prepared for workshop facilitators emphasising the eliciting of participants speaking from their own direct experience. This was based on learning from earlier studies that rather than talking about their own drinking, people tended to generalise or talk about the drinking of others.

Working in small groups, participants discussed and voted (using a red, green or amber ‘traffic light’ system) on how to introduce the subject, provide the rationale and hold a conversation in this particular context. Suggestions were fed back and discussed in the whole workshop. At the end of the workshop participants were invited to give feedback on their experience of participation. In addition, the lay co-investigator and PPI chair (MO) provided a verbal report on the workshop experience based on participant observation throughout the day. These data were discussed in the PPI group, alongside the results of the workshop, to inform the design of future CHAMP-1 public-facing group work. The workshop transcript was also coded using NVivo and thematically analysed within a social constructionist epistemology concerned with how knowledge of drinking alcohol is constructed and understood in relation to health [36]. Initial analyses (conducted by MM and SM) were discussed and refined in meetings with the wider multi-disciplinary research team, including commenting on a report of draft themes and their implications. Sensitivities in discussing alcohol and views on the legitimacy of the MAC intervention were identified as key themes and these were further developed through additional discussions in the author team, including lay co-investigators who were involved in the workshop (MO, DL).

**Results**

*Participants*

Over 400 individuals were approached and given a flyer about the workshop, 36 of whom provided contact details. 12 agreed to attend the workshop and 10 attended on the day. In addition, one attendee had responded to an electronic flyer distributed to groups for older people and people with specific long-term conditions. Three additional people also attended who were participants or had expressed an interest in taking part in our previous interview study [23], making a total of 14. Table 1 provides details of locations visited with area levels of relative deprivation as measured in the English Index of Multiple Deprivation [39] and the number of people successfully recruited from each site. Pharmacy ownership is categorized using the schemata of Bush and colleagues [40].

Table S1.

Of the 14 people who attended the co-design workshop, 13 were patients and one was a carer (a perspective identified as important by members of the PPI group). There was little ethnic diversity in the sample achieved. The mean age of participants was 64 (median 66) and most were retired. Participant demographic details, prior experience of medicines reviews in community pharmacy and frequency of drinking are reported in Table 2 below. Drinking frequency was determined by asking question 1 of the Alcohol Use Disorders Test (AUDIT-C) – see below [41]. Current or last occupations included software engineer, bus driver, personal assistant, electronics engineer, nurse, part-time administrator and teacher. Participant identifiers maintain anonymity while indicating gender identity.

Table S2.

*Alcohol as a drug*

Workshop members said that there was already plenty of existing information on “drinking too much”. The opportunity to think about alcohol as a drug that interacts with medicines and health, rather than as a ‘lifestyle’ issue, resonated with them. Rather than generic alcohol and health information, they were interested in information on how medications interact with alcohol and how this might affect their own conditions:

Alcohol can be a big factor in health issues and you don’t always know about it (M -07).

You are going to get ill faster if it counteracts some of your medicine’s effects (F -12).

I think a lot of people don’t realise it is a drug (F-09).

I don’t think I wonder if this is going to make x tablet not work properly, I just think I enjoy a glass of wine (F-04).

There was a consensus that people taking medication were entitled to such information and they wanted this to be more freely available. Being asked general questions by a pharmacist about alcohol consumption that were not clearly linked to medications was less welcome, as was the idea of being asked about their drinking repeatedly by health professionals:

…every doctor I see speaks about it (M-05).

… Duplication … if they are all trying to get the message across… it dilutes what they are trying to say because you get fed up (F-02).

Some people were particularly focused on short-term effects and interactions, for example time restrictions between taking medicines and drinking alcohol:

I have this confusion about whether or not you can take your meds with alcohol… My mother thinks that if she doesn’t take the medication [directly] with the [alcoholic drink] then that’s OK (F-06-carer).

There was some discussion and recognition of a current disconnect in workshop members’ own thinking about alcohol, medication and health:

Don’t you think we are all wearing blinkers, we all know alcohol isn’t good for you… [and] taking alcohol with medicines is not a good idea? ... I take tablets for blood pressure and the alcohol is negating the tablet... If I stop drinking, could I stop needing the medications? (M-11).

I’m on six tablets a day. I’ve never had any side effects to drinking with these tablets ...I know one of them is an anti-depressant tablet. And I know the next morning, if I’ve had an over the top night then I feel different. And I know it is the alcohol … that is having an effect … I have found if I … go to the pub and have a few drinks and I forget to take my tablets …the evening ones *…*so that’s one very relevant for me(M-14)

The man who spoke about “wearing blinkers” talked about seeing his blood pressure readings going up when he drank but, “conning yourself into thinking it’s alright” (M-11).

There was a general sense in the workshop that framing alcohol as a drug whose use had potential implications for their conditions and medicines opened up different ways of thinking about it. This was a way of approaching the subject they had not come across before. One woman who said she had not thought about alcohol in these terms introduced the term, “poison” when talking about its potential toxicity:

I never thought about alcohol as being a poison…I’ve never connected the two…I’ve got enough wrong with me and I do want to live. I don’t want to shorten my life…If I’m poisoning my system then I’m shortening my life (F-10).

There were some negative responses to the phrase “alcohol is a drug” when heard in the case study consultation examples. For some it triggered criminalised connotations of illicit ‘drug use’ rather than drug as medicine, as seen in this small group exchange:

I don’t like that word [drug] …if someone said to me alcohol is a psychoactive substance, it affects the way you think and feel, I would relate to that (PPI facilitator)

…to call it a drug-it’s sort of dismissive (F-04)

…and to the person who likes their chateau de fete, it’s not another drug, it’s a superb work going back years (M-01)

…OK, we don’t like them saying it’s a drug but should people be educated to know that it is a drug? (F-04)

…but you think of medicines as something that makes you better (M-01)

It’s about getting a balance between ‘you are a drug addict’ and ‘it’s a medicine’ (PPI facilitator).

*Legitimacy of pharmacists discussing alcohol*

Although most people at the workshop had experienced a discussion about their medicines with a pharmacist in a consultation room or on the phone, they did not remember much about it. They were unfamiliar with the names of the reviews and reasons for conducting them. Most wanted more information about their purpose and a chance to prepare for any type of medicines review:

Why can’t Joe Public have the proper words? This, ‘can I have a little chat’ is, oh, I don’t know. I think more information on the whole thing (F-02).

Given that pharmacists are experts in medicines, it was not considered to be intrusive if they asked questions about alcohol if the conversation was focused on alcohol’s relationship to the safety and effectiveness of medicines. However, a few people at the workshop did not know that community pharmacists were experts on drugs, and there was a view that many people just saw pharmacists as shop keepers:

I don’t think most people really know what a pharmacist is, I think this group is not normal (M-01).

I think that’s the most important thing. Most people don’t know how well qualified they [pharmacists] are about medicines. They should know (F-02).

There were gaps in knowledge about the professional role of a pharmacist amongst those who knew the pharmacist had medicines expertise. In the course of discussion people asked whether pharmacists had to keep up to date with new drugs, whether they had personal indemnity insurance, whether they had training in talking to people, and whether they had to maintain confidentiality in the way that GPs do. There was, nonetheless, agreement that pharmacists could usefully help link information about alcohol to explanations of the benefits of medication, what people were taking, why and for what effect.

Participants agreed that alcohol should be introduced by a pharmacist early on in the consultation, explaining why and asking for permission to include it (asking ‘if that’s ok’). They also agreed that the discussion of alcohol should be kept linked to medicines and conditions, otherwise people might be concerned about why they were being asked ‘personal’ rather than ‘medical’ questions. Warnings on patient information leaflets and labels alone were not considered good enough on the basis that they were often not read; warnings about alcohol did not give clear reasons and they got lost amongst lots of other off-putting information about the harms the medicines can do:

… [the print is] is so small you can’t read them [and if you do] … you can scare yourself to death (F-08).

People were expected to take these medicines despite the plethora of small risks described and cautions about alcohol could be interpreted in a similar way.

It was agreed that any medications and alcohol consultation with a pharmacist should be friendly, not overly pharmacological, contain relevant information to the medication being used, be non-judgemental and leave people free to make up their own minds. A coaching style was preferred:

I want explaining what happens… does it do any harm? Does it make any difference? …that would be alright for me and at least then you know and you can make your own mind up… The more you know the more choices we can make (M-14).

How pharmacists get this tailored information across to people without seeming judgemental was considered particularly important, as was seeing the discussion as more than about giving or receiving information, although this was clearly central. The tone of the consultation was as much of a factor as the content and there was an important balance to be struck between putting, “the facts across” and letting people make their own choices:

It’s a suggestion, not an order. Sits fine. I’m like most people, I hate being told what to do (M-11).

I’d want advice but I’d want my own choice in whether I took that advice …you’ve got to put it across in a way that they want to be receptive to it, but also you…don’t want to feel like they [pharmacists] are on your back (F-12).

Some were very resistant to being told what to do and others wanted more opportunity to talk about their own concerns in the consultation but not for it to be “wishy washy” and lacking the professional advice and information expected of a pharmacist:

…because he is a professional and he is offering advice, and that advice should be given in a way that is strong without giving instruction, rather than it being so open ended that it’s up to you (M-07).

People wanted the subject of alcohol to be raised sensitively and not to feel as if they were being ‘targeted’. Most agreed that it was not the pharmacist’s job to tell you to stop drinking. If they thought they were being told they were doing something wrong, people said they might “step back” or close down within a consultation: because “nobody likes to be told that they are doing wrong do they?” (F-10).

Some people reported “shaking off” previous advice that they had received to cut down drinking. One woman said her pharmacist has told her to cut down on her drinking but afterwards her response was, “whatever” (F-13). Another man thought he might pay more heed if the pharmacist was to warn him more specifically about why she should not drink on a particular medicine:

This general thing, ‘oh you shouldn’t drink’, I think is a load of rubbish - I mean people have been doing it for centuries... But I think if the pharmacist came and explained what the counter reaction was between the alcohol and a certain drug, then I would say, ‘oh I’ve got to listen to that’ (M-05).

This man said that he was already very open about reporting his drinking with health professionals, although it was over the recommended limit, and these encounters had not changed his drinking. However, the re-framing of alcohol as a drug which might interfere with his treatment led him to say:

…if it did highlight something where one particular drug that I had to rely on was being affected by the alcohol, wasn’t working effectively, then I would have to seriously consider and I would want to know (M-05).

The workshop members were very sensitive to anything in a consultation that they interpreted as “pointing the finger” i.e., sounding judgemental, or anything that might trigger their own negative judgements of themselves:

Every one of us would feel slightly uncomfortable no matter how the questions are put because we all immediately think, ‘oh, I’ve done something wrong’ (M-05).

I think oh my God, I must have been told this and I didn’t listen or…I didn’t realise. I should realise… feeling stupid …and bad for why did I do that? ... I’d hate the idea of taking medication and it only working half the time because I was drinking as well. I’d feel guilty about the waste. If you are going to take a medication you want it to work (F-02).

Although people were keen on the proposed intervention, they were unsure whether pharmacists had the experience and “people skills” required. People wanted a conversation with a pharmacist who seemed interested, confident and at ease rather than inattentive or reading from a script.

**Discussion**

Rather than general, de-contextualised information about alcohol consumption levels, workshop members wanted explanations of why and how drinking may affect their medications and their conditions. There was a clear consensus that it was comfortable to have a discussion about alcohol alongside medications as long as the pharmacist made clear links to a person’s own medicine and conditions and the tone was not perceived to be lecturing or judgemental. The workshop showed that the concept of alcohol as a drug, and perhaps more specifically, use of the word ‘drug’ itself, needs careful handling in consultations in order to avoid unwelcome reactions. This was despite being generally regarded as congruent with medicine reviews. At times throughout the workshop, the more familiar practice of pharmacists giving safety information about immediate, specific alcohol and medicines interactions displaced discussion of the wider consideration of the hazards of drinking for long term conditions.

Enquiries about drinking when taking medicines threatened potential discomfort at being accused of ‘doing the wrong thing’. Unlike the normalized practices of self-medicating with alcohol to get to sleep or reduce pain disclosed in our interview study [25], taking alcohol alongside medication can be clearly flagged as something to be avoided. This makes the practice more ambiguous, raises social desirability concerns, and potentially violates the imperative to own responsibility for one’s health [42, 43]. Sensitivity in talking about alcohol was linked to peoples’ individual sense of vulnerability to negative judgement. A health professional raising the subject at all could trigger a ‘white coat’ effect akin to irrational feelings of guilt when seeing a police officer. Studies in other health care settings have linked this fear of opprobrium to reluctance to raise issues in consultations [44]. Even for those convinced that their drinking was not a ‘problem’, questions about alcohol use in a health context can elicit negative emotions, including feeling judged or guilty. This may be particularly so for those whose drinking is heavier or defined as hazardous or harmful as a result of screening, yet do not see in themselves anything close to stereotypical images of problem drinking [24]. Such stereotypes and the stigmatization of alcohol dependence can impact on the experience of everyday encounters with health professionals in unhelpful ways [40, 42].

The sensitivity of talk about alcohol identified at the workshop highlighted the importance of finding a link to alcohol in a medicines review consultation that made sense in terms of the person’s own medicines and health. Rather than the observed current practice of ignoring alcohol or giving generic advice [8], a person-centred approach (placing the interests and perspectives of the patient at the heart of a consultation) would seek to help the person think about where alcohol might be a relevant factor to discuss. Participants began to identify such links to their own medicines and conditions among themselves during the workshop. The approach suggested resonates with findings of Bergen et al in a US GP primary care context that patients are broadly receptive to behaviour-change advice (e.g. reducing alcohol use), but only when it is formulated as a treatment plan for a particular medical condition or symptom of concern to the person [45].

Findings from this study need to be understood within its limitations. Participants, inevitably, were those open to helping with the research and able to attend a day-long event. The workshop was small and not ethnically diverse. Recruitment in the busy community pharmacy dispensing and retail environment was challenging, as indicated by the high number of people approached in order to find those interested, eligible and able to attend. Strikingly, the sensitivity to feeling judged when discussing alcohol in a health context was still high amongst people who were willing to attend an alcohol workshop and were interested in receiving the intervention. Anonymous feedback and MO’s PPI observer report said the workshop itself was comfortable, non-judgemental, enabled two-way dialogue and there was confidence that participants’ input “will make a difference” to the intervention (appendix S2).

Findings from this co-design workshop and further workshops held with pharmacists were used to review and produce a second version of the MAC intervention with a clearer grounding in what person-centred consultation practice meant from the point of view of people receiving medicines reviews. Findings were discussed with the programme PPI and pharmacist advisory groups and used to develop the next iteration of the MAC used in a feasibility study and later tested in a pilot trial [46]. Framing alcohol as a drug has been consolidated as a core feature of the MAC, for which further intervention development work is ongoing.

**Conclusion**

Changing the framing of alcohol itself, and relatedly how the subject is raised by community pharmacists, was welcomed by participants, and was thus supported in this study. This moves alcohol away from being regarded as a lifestyle issue to one directly linked to medicines use, safety and effectiveness, and the conditions for which they are prescribed.

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