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Enhancing alcohol screening and brief intervention among people receiving opioid agonist treatment: qualitative study in primary care.

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Enhancing alcohol screening and brief intervention among people receiving opioid agonist treatment: qualitative study in primary care.

1. Background

Problem alcohol use is common and associated with considerable adverse outcomes among patients receiving opioid agonist treatment in primary care, e.g. chronic liver disease, opioid overdose and depression (Hartzler et al., 2010). Furthermore, research has indicated that substance users are common victims of stigmatization (Farnaz Etesam and Assarian, 2014). People who are stigmatized use specific strategies including secrecy, withdrawal, and social isolation to limit the stress caused by a label, which means accessing and treating these patients is a challenge (Earnshaw et al., 2013).

In Ireland, 35% of patients attending GPs for methadone treatment also had problem alcohol use (Ryder et al., 2009), and a subsequent qualitative study highlighted the need for interventions to address this problem (Field et al., 2013). A randomised controlled trial (RCT) indicated that the dissemination of clinical guidelines plus clinical and educational support resulted in significant improvements in screening for hepatitis C among people with substance use problems in GP in Ireland (Cullen et al., 2006).

Screening, brief intervention, and referral to treatment, is a public health approach to the delivery of treatment services for substance use disorders (SUDs) (Agerwala and McCance-Katz, 2012). While there is some evidence against using brief interventions for people with complex needs (Young et al., 2014, Saitz, 2010, Glass et al., 2015), there is an extensive literature supporting the effectiveness of SBI for patients since its introduction in the 1980s (Babor et al., 2007, Kristenson et al., 1983). Previous research has demonstrated the effectiveness of screening and brief interventions for reducing alcohol use among the general population in primary care (Kaner et al., 2009). However, while early therapeutic interventions have reduced problem alcohol use by 10-35% (Whitlock, Polen, Green,

Orleans, & Klein, 2004), a systematic review indicated they are not routinely implemented in primary care (Klimas et al., 2013b). Furthermore, baseline data indicated only 19% of patients receiving OAT had been screened for problem alcohol use in the previous 12 months (Klimas et al., 2015b).

This paper reports a qualitative evaluation of a primary care based complex intervention to promote screening, brief intervention and referral to treatment by GPs for patients receiving opioid agonist treatment. Brief interventions for problem alcohol use are relatively short conversations or other efforts that seek to detect people who drink alcohol at a level that is risky or harmful to health and motivate them to do something about it (Babor and Higgins-Biddle, 2001). While educational interventions that promote screening / treatment for problem alcohol use are promising tools to help practitioners adopt these new practices, previous research has suggested factors such as a lack of confidence, motivation, discomfort or negative attitudes towards alcohol or drug users have resulted in their inconsistent use by GPs (Korthuis et al., 2010, Klimas et al., 2012). Furthermore, a systematic review found that inadequate training is one of the barriers to the implementation of screening and brief intervention (Anderson et al., 2004).

Therefore, we offered GPs an intensive two hour training seminar on implementing screening, brief intervention and referral to treatment, along with follow-up practice visits and referral resources. This paper aims to explore GPs' and patients' experience of this intervention, specifically its feasibility, acceptability and possible effectiveness.

2. Methods

2.1 Setting

This qualitative study was conducted at eight general practices, in two of Ireland's four health regions as part of the Psychosocial INTerventions for Alcohol use among problem drug users

(PINTA) study, which used a controlled pre-and-post intervention design to establish the feasibility of a complex intervention to promote SBI for problem alcohol use among opioid agonist patients (Klimas et al., 2013a). Participants (GPs, patients) were surveyed on addiction care processes before and after the intervention (3 months). For this qualitative study we recruited all eight GPs who had received the complex intervention (See Table 1).

Addiction care in Ireland is provided through a four tier model of care as outlined in the National Drugs Rehabilitation Framework (Doyle and Committee, 2010). Where lower tier levels of care are not successful (i.e. screening, BI), more intensive interventions should be offered (i.e. inpatient treatment). In Ireland, the majority of patients attend primary care for opioid agonist treatment. To prescribe methadone, GPs must complete special training and are subject to clinical audit (Keenan and Barry, 1999). GPs who prescribe methadone for less than 15 patients are referred to as “level 1 GPs” and those prescribing for 15 or more as “level 2”. Level 2 GPs must complete more advanced training and more regular audit.

2.2 The complex intervention

Informed by the Medical Research Council (MRC) ‘Framework for design and evaluation of complex interventions to improve health’ (Campbell et al., 2000), the ‘complex intervention’ aimed to integrate two strands necessary for successful implementation of SBI. Firstly, we delivered an educational package for GPs on screening and brief intervention for problem alcohol use among patients receiving opioid agonist treatment in primary care (Klimas et al., 2014).

The second strand of the complex intervention was to ask the GPs who received the education package to carry out SBI on the patients they had recruited for the study using the AUDIT questionnaire (Klimas et al., 2015a).

Widely used in primary care and developed to identify hazardous drinkers (i.e. increased risk of alcohol-related problems, though harm has not yet occurred), harmful drinkers (who have had recent physical or mental harm from their drinking) and people with alcohol dependence (Babor and Higgins-Biddle, 2001), the 'AUDIT' demonstrates sensitivities and specificities comparable, and typically superior, to those of other self-report screening measures. While more succinct screening tools are available (Seale et al., 2006), the test-retest reliability and internal consistency of the AUDIT are favourable (Reinert and Allen, 2007).

2.3 Participants

Patients (n=14) were recruited by the research team from study practices whose GP had received the complex intervention (n=8) (see Table 1 & 2 for details).

<insert Table 1 about here>

<insert Table 2 here>

Patients were purposively selected from those study patients (n=106) who had participated in the quantitative evaluation (Klimas et al., 2015b). With purposive sampling the researcher samples particular settings, persons, or events deliberately selected for the important information they can provide that cannot be acquired as well from other choices (Teddlie and Yu, 2007). The GP sample included all GPs who had received the complex intervention as part of the PINTA study (two 'level 1' and six 'level 2' GPs). For patients, the purposive sampling framework initially focussed on those patients whose GP had received intervention training. However, in line with the simultaneous analysis and collection of data that is an integral part of qualitative analysis, after four interviews we decided to further direct the focus to all patients who had scored ≥ 8 in an AUDIT as part of the study (Babor and Higgins-Biddle, 2001). The reason for this was that of the first four interviews conducted, two patients had not consumed alcohol since adolescence, and the other two rarely consumed

alcohol. As the purpose of the study was to elicit patients' lived experience of alcohol use and the intervention, it was decided to purposively sample patients whose alcohol use was in the hazardous/harmful or dependent categories of the AUDIT. Sampling continued until data saturation had been reached to the extent that the data that had been collected and analysed was sufficient to address the research question and provide a variation of experiences.

2.4 Data Collection

Ethical approval was provided by the Irish College of General Practitioners' Research Ethics Committee. During patient recruitment, GPs informed the potential participants of study objectives and procedures, provided written study information and asked them to provide informed consent to participate. Researchers collected signed consent forms from GPs and telephoned patients directly.

For pragmatic reasons, all interviews were carried out by telephone as previous research indicated a comparison between face to face and telephone interview transcripts revealed no significant differences in the interviews (Sturges and Hanrahan, 2004)

Semi-structured interviews were carried out with eight GPs (mean duration = nine minutes) between January and April 2015 (at least three months after intervention) using a topic guide which explored:

- Experiences of training – positives and negatives, previous training.
- Approaches to screening for alcohol among this cohort of patients.
- Implementing the intervention into practice – barriers and enablers.

Semi-structured interviews were carried out with 14 patients (mean duration = 14 minutes) between October 2014 and February 2015 (at least three months after intervention) following a topic guide which also explored:

- Attitudes towards alcohol use.

- Experiences of screening / treatment for problem alcohol use.
- Attitudes towards screening / treatment for problem alcohol use.

2.5 Data analysis

Interviews were transcribed verbatim. Thematic analysis followed a deductive thematic process outlined previously (Braun and Clarke, 2006). As such, the ‘keyness’ of a theme was not necessarily dependent on quantifiable measures, but in terms of whether it captured something important in relation to the overall research question. The process was facilitated by a qualitative software package NVivo 10 (Thomson Reuters Inc.). All data was anonymised and GPs were given a practice code (e.g. GP 10), while patients were given a practice and patient code (e.g. 10.4). The first author (a social psychologist with extensive experience in using qualitative methodologies) analysed and coded the data until he felt the themes identified were an accurate reflection of participants’ experience of the intervention. When analysing the transcripts it was important to let the data ‘speak for itself’ because while researcher bias can never be eliminated in qualitative research, it was important to minimise bias that could occur from having prior knowledge of the literature. Researcher bias during the data analysis was also minimised by having the data independently analysed by the fifth author who has extensive expertise in qualitative analysis but was not familiar with the addiction literature. Final themes were agreed between the two authors and the last author audited the final analysis.

3. Results

3.1 *Thematic analysis*

GPs and patients agreed that problem alcohol use was a concern for some patients receiving opioid agonist treatment, and that primary care is an ideal place to address the issue.

GPs thought using the AUDIT to screen this cohort of patients and conducting a brief intervention (if necessary) was feasible. However, four GPs claimed using the AUDIT to regularly screen patients was challenging due to time and resource constraints, while two GPs thought it was not necessary as problem alcohol use could be detected through general discussion, visual cues, and their familiarity with the patient. However, patient data revealed that discussions about alcohol happened rarely, if at all (in the absence of the intervention). Furthermore, patients who were concerned about their alcohol use were reluctant to raise the issue with their GP. The analysis of the data identified six key themes (see Figure 1).

<insert Figure 1 here>

3.2 GPs

3.2.1 **The intervention can enhance patient care**

All GPs stated that they had not previously taken part in training to promote screening and brief intervention for problem alcohol use. They reported finding the training session informative, and in addition to increasing their awareness of problem alcohol use they thought it was something they could incorporate into everyday consultations with patients receiving opioid treatment.

“I think overall it was quite good and I learned some things I wasn’t aware of.” (GP 13)

“The training was very enjoyable and a motivating aid. I would be more conscious of the alcohol issue, I would be more inclined to be asking about it now” (GP 2)

3.2.2. Implementing the intervention into practice is feasible yet challenging

At the training session, GPs were encouraged to implement the intervention with patients who had been recruited for the study. While all GPs felt it would be feasible to carry out the intervention after the training, only one GP screened all the patients who attended his practice and he reported that he found this both feasible and effective. The AUDIT was also commended for facilitating a more “sensitive way of screening” and initiating a discussion around problem alcohol use.

“I actually screened all 10 of my methadone patients with the AUDIT questionnaire and two scored high. Without formally using the AUDIT, I wouldn't have known. I advised them on the dangers, and now they are doing much better” (GP 10)

“It is a much easier way to actually ask about alcohol and it feels less... accusatory...I have...found it a much more comfortable way to actually get the alcohol history done than the old way of, do you drink, how much do you drink...I...find running through the questionnaire just runs much easier for me.” (GP 10)

The above extract emphasises the potential utility of screening and delivering a brief intervention for evaluating and treating problem alcohol use in this cohort of patients. However, some GPs found implementing the intervention challenging and cited time constraints as a key issue in preventing them from carrying it out.

“We've a massive big practice here, it's a warzone, so we don't have time to screen. We ask them about their drinking habits, but we don't go into details about units or anything” (GP 3)

“Private practice may be different, but we have a big GMS practice, there could be 10 sitting outside at any one time, so there isn't the time to complete questionnaires” (GP 6)

However, some GPs felt that if alcohol screening was a compulsory component within the methadone programme, where there was a requirement to meet certain standards for a medical review / audit, they would be more likely to formally screen.

“I know if I am going to be audited that I have to have my hepatitis serology up to date and so I am motivated to do that...So similarly if...having a documented alcohol screen in the last

year is an audit requirement in terms of the methadone programme I think that that would be much more likely to be done.” (GP 10)

The role of electronic medical records was also identified as a facilitator to screening, particularly where the AUDIT could be integrated within practice software to facilitate reminders to screen, in addition to aiding a paperless practice.

“I mean certainly within our Helix Practice Manager which is the practice software we have it is possible to set up reminders.” (GP 10)

“Unless it is actually loaded on to our IT system I won’t use it...I am not going to take a form out of the desk...it has got to a stage where it is particularly busy...forms were sent out by the ICGP on diabetes years ago, and if you go around to most practices, no one uses them anymore.” (GP 16)

3.2.3 Overlooked and underestimated

GPs who claimed time was the main reason for not implementing the intervention also minimised the prevalence and harms associated with alcohol for this group of patients, claiming they would know which patients had problem alcohol use through familiarity from weekly appointments.

“I don’t think alcohol is really an issue for this cohort. We’re seeing them every week, we would know if they were drinking, they would turn up drunk. (GP 3)

“When I enquire about alcohol use, it doesn’t seem to be a problem amongst methadone or heroin users” (GP 6)

3.3 Patients

3.3.1 Concerns about drinking

Although two patients reported they didn’t drink alcohol and a further five reported they did not have any concerns about their drinking, seven patients indicated problem alcohol use was an important issue to be addressed.

“It causes me a lot of problems. I have been hospitalised a lot. Also I have lost jobs, I have lost relationships, places that I lived in, ah the list goes on” (Participant 10.4)

“I don’t actually enjoy drinking. I suppose I use it more as a form of escape because I don’t get out, you know, and especially since I’m not working, it’s harder, I find it harder to cut back” (Participant 6.8)

Most patients interviewed had a family history of problem alcohol use. Key triggers for the onset of their alcohol problems included boredom, problematic interpersonal relationships and alcohol as a form of avoidant coping mechanism.

“When I was younger I would say I probably had problems with drink but that was from the childhood I had, there was no discussion back then. It was all just hid in a bottle of vodka.” (Participant 13.4)

Adverse psychosocial outcomes resulting from excessive alcohol consumption included absenteeism from work, financial loss, drink related violence / arguments, health problems (seizures, hospitalisation) and legal repercussions (drunk driving, drinking in work, imprisonment). For some participants, reaching a crisis point resulted in their decision to seek help, others experienced a phase of self-evaluation with increasing age and family responsibilities and decided it was time to stop drinking.

“I have also drank in work on the job. Drunk driving I admit to that even though I get embarrassed about it. Anyone who knows me will tell you I’ve had a problem with drink...a few courts cases, drunk and disorderly.” (Participant 9.1)

“I’d got myself up to drinking a litre and a half of vodka a day so I had the alcoholic seizure...and _____ was with me and...only because of him...I would have...died...The doctor in the hospital...said to me, ‘That’s your body just saying ‘I can’t take anymore’ basically after years of abusing it’” (Participant 3.3)

3.3.2 Alcohol use is not routinely discussed

Of the seven patients that reported concerns about their alcohol consumption, only one reported their GP had screened for alcohol use using the AUDIT.

“Yes, well he asked me to fill in a form, he was really good, he talked to me about the dangers, you know, especially with being on methadone” (Participant 10.8)

The remaining patients who had concerns about their alcohol use reported that discussions about alcohol consumption were either never initiated by their GP, or were only discussed when they initially registered with the practice.

“No we have never discussed my drinking, they will ask me how I’m doing, you know in a general way. But you know we have never really discussed drink. ... Well I haven’t thought it was that serious yet anyway, you know” (Participant 2.6)

“I think when I first moved to this doctor we talked about whether I drank or not, but I don’t think we have talked about it since” (Participant 12.6)

3.3.3 Patients’ fears

Most participants reported having a positive relationship with their GP and felt they could discuss their concerns about alcohol use, particularly where GPs offered reassurance, respect and the patient did not feel judged. However, some participants had negative experience of their encounters with GPs, which included short consultations, stigma and perceived lack of interest, which would therefore deter them from talking to their GP about alcohol.

“No Dr. XXX has never treated me in any way disrespectful. I have been in clinics...over the years...and I have dealt with loads of doctors and loads of chemists...and they have all treated me like I’m a scumbag...Only for Dr. XXX treated me the way he treated me I wouldn’t be as normal as I am, I probably wouldn’t even be here to be honest.” (Participant 13.4)

“They [GPs] are very easy to hand out medication... He had no interest...[GPs should] be a bit more friendly...don’t be too quick to get people in and out. You are sitting there for hours waiting to...be in and out in like two seconds.” (Participant 12.8)

Patients who admitted having concerns about their alcohol use also reported their reluctance to raise the issue with the GP because of fear of having their methadone dose reduced.

“I suppose I would seriously kind of guard my prescription if you know what I mean, and I wouldn’t want to say anything that he might think that he shouldn’t be giving me it, or giving me as much” (Participant 2.8)

“Yeah I would be afraid to say it to the doctor because there has been a fair few deaths from alcohol and methadone, so if I have been drinking alcohol I don’t tend to admit it”
(Participant 16.1)

4. Discussion

Our findings suggest that a complex implementation intervention (education, practice support, referral resources) may enhance the capability of primary care to deliver alcohol screening and brief intervention for patients receiving opioid agonist treatment. Though feasible and acceptable to practices and patients, there are challenges to its consistent implementation. This is consistent with recent literature which suggests that effective screening and brief intervention for problem alcohol use requires physician training (Klimas and Cullen, 2014) and systematic changes in workflow (Klimas et al., 2015c), concerns about competing priorities and the need for additional resources for successful screening and brief intervention implementation (Rahm et al., 2014).

The specific challenges to the effective implementation of the complex intervention from GPs’ perspective were perceived time constraints and problem alcohol use being underestimated among this group, which is consistent with a systematic review that highlighted that alcohol use is often overlooked and underestimated in patients recovering from drug dependence (Staiger et al., 2013).

While time constraints cannot be ignored in busy practices, especially those located in socio-economically disadvantaged areas (Carr-Hill et al., 1996), administering the AUDIT questionnaire takes approximately five minutes and it is recommended that it is carried out once annually, especially among at-risk groups, (Babor et al., 2001, Crowley, 2005).

Furthermore, care could be enhanced by integrating this instrument within electronic medical records and a multidisciplinary team-based approach (Harris et al., 2014, Muench et al.,

2014). However with increasing pressures on general practice in Ireland, consideration should also be given to using a shorter screening instrument by way of the Single-Question Alcohol Screening Test (Smith et al., 2009).

GPs who minimised the importance of problem alcohol use also claimed they would be able to identify problem alcohol use through clinical cues and / or general discussion. Considerable evidence suggests that such an approach to diagnosis can only identify a minority of patients with an alcohol use disorder (Reinert and Allen, 2007) (Meneses-Gaya et al., 2009). As such, some GPs may have overestimated their capability and thus did not benefit from the educational intervention. Ensuring GPs appreciate the value of routinely (as opposed to when 'clinically indicated') addressing problem alcohol use with patients on OAT should therefore be a focus of future interventions. Other issues particular to Ireland in addressing problem alcohol use in this cohort of patients are that most inpatient treatment centres for problem alcohol use lack specialised facilities to accommodate patients receiving OAT. Risk of overdose and often the need to leave the centre to collect their methadone prescription means most inpatient treatment centres offer very limited access to patients receiving OAT. Furthermore most free or low cost facilities for co-existing drug and alcohol disorders have age restrictions (often under 24), and with patients receiving OAT being an aging population (Cullen et al., 2007, Ryder et al., 2009, Klimas et al., 2015a), this means many are excluded from attending.

To the best of our knowledge, this is the first qualitative study to examine the capability of primary care to address problem alcohol use among patients receiving OAT (Klimas et al., 2015c). By using purposive sampling, the aim was to focus on particular characteristics of a small sample of the population which best enabled us to answer the key research questions.

We are not claiming that the sample being studied is representative of the population, rather it was chosen solely to explore the lived experiences relating to the research questions under

study (Gergen, 2001). To increase the acceptability of the qualitative data it was independently analysed by a second author, and audited by the last author. In addition, we used a standardised alcohol screen to establish level of drinking among participants, which further strengthened validity and triangulation of the qualitative data.

Our findings indicate that alcohol screening, brief intervention, and referral to treatment is inconsistently implemented in primary-care based OAT. This paper has highlighted multiple reasons for this including GPs overestimating their ability to detect problem alcohol use without formal screening, the AUDIT being too time consuming to administer, and arguably not appropriate for people with complex needs, and lack of referral to treatment options for problem alcohol use for this cohort. However going forward we believe a multi-faceted complex intervention to support these practices, informed by the MRC Framework and consisting of education, use of a more efficient screening instrument, practice support, and appropriate referral resources will be feasible and acceptable in practice, but requires time management, and greater acknowledgement by GPs of the seriousness of problem alcohol use for this cohort of patients.

5. Conclusion

While it is likely that we recruited practices and patients who were more positively disposed toward the intervention, we have learned that patients fear discussing (and doctors may overestimate their ability to identify) problem alcohol use. Further evaluation by way of a definitive randomised efficacy trial is required with a focus on further development of the intervention (to help GPs and patients to recognise the importance of problem alcohol use and merits of routine screening), and addressing the issues highlighted in this paper of using the AUDIT for this cohort of patients.

Paper presented at the following scientific meetings.

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McCombe, G., Klimas, J., Henihan, AM., Swan, D., Anderson, R., Cullen, W. (2015) Experiences of a complex intervention to identify/treat problem alcohol use among patients receiving opiate substitute treatment in primary care settings in Ireland : A qualitative study of patients’ and GPs’ experiences. AUDGPI 18th Annual Scientific Meeting. Queen's University, Belfast.

Disclosures

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Table 1. Practice ID, Practice location, *Methadone Prescribing Level*, *No. of patients recruited*

Table 2. *Individual Patient Characteristics.*

Table 1 *Practice ID, Practice location, Methadone Prescribing Level, No. of patients recruited*

GP (id)	Location	Methadone Prescribing Level	No. of Patients Recruited
2	HSE Dublin/Mid Leinster	1	2
3	HSE Dublin/Mid Leinster	1	1
6	HSE Dublin/Mid Leinster	2	2
9	HSE Dublin/Mid Leinster	2	1
10	HSE Dublin/Mid Leinster	2	3
12	HSE Dublin/Mid Leinster	2	2
13	HSE Mid West	2	1
16	HSE Mid West	2	1

Table 2: *Individual Patient Characteristics*

Patient	Gender	Age	First Injected	First Methadone Use	Methadone Dose	Audit Score
1	Male	42	21	24	50	24
2	Male	52	23	27	65	0
3	Female	34	19	20	95	18
4	Female	45	20	23	75	10
5	Male	33	18	19	100	28
6	Female	48	19	22	60	14
7	Male	38	19	21	85	6
8	Female	40	17	21	55	0
9	Male	39	19	23	90	12
10	Female	44	23	25	70	7
11	Male	36	19	22	60	10
12	Male	45	20	22	65	15
13	Female	38	16	20	80	19
14	Male	42	22	23	40	12

The AUDIT questionnaire was used to establish level of problem alcohol use (i.e. low-risk drinking = 0–7, hazardous = 8–15, harmful = 16–19, dependent = 20+).

Figure 1: GP and patient themes

