GPs' views on identifying patients at-risk of psychosis: a qualitative study

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Abstract

Background

Early intervention in people with an at-risk mental state (ARMS) for psychosis can decrease the rates of transition to psychosis. GPs play a key role in the identification of this patient group but very few studies have explored GPs' awareness of ARMS.

Aim

To explore GPs' views and experiences of identifying patients with ARMS, and the barriers and facilitators to identification.

Design and setting

In-depth semi-structured interviews were held with GPs working in the South West of England.

Method

A topic guide was used to ensure consistency across interviews. This guide was revised to incorporate a definition of ARMS, as after conducting a few interviews it became clear that some GPs were not familiar with this construct. The interviews were audio recorded and analysed thematically.

Results

Twenty GPs were interviewed. Some GPs were not familiar with the concept of being at-risk of developing psychosis, and they perceived that they may not have the right skills to identify this patient group. Other barriers to identifying patients with ARMS related to patients not presenting or disclosing psychotic symptoms, and the structure and provision of NHS services such as lack of continuity of care, short appointments, and high thresholds for accessing secondary care services.

Conclusion

Identifying ARMS in primary care can be difficult. Provision of training for GPs, development of policies that support continuity of care, and improved access to specialised services and treatment could help improve the identification of this patient group.

Keywords: At-risk mental state (ARMS), semi-structured interviews, general practice, psychosis

How this fits in ?

Previous research showed that GPs have limited knowledge about the insidious symptoms of psychosis but we know very little about the difficulties that GPs face in identifying patients at-risk of psychosis. This is the first study that used semi-structured interviews to explore GPs' experiences of this patient group. We found that some GPs were not familiar with the concept of being at-risk of developing psychosis. Whereas this could, in itself, be a barrier to identifying ARMS patients, other barriers were present which related to patients not consulting or disclosing psychotic symptoms, lack of continuity of care and high thresholds for accessing secondary care services.

INTRODUCTION

Psychotic illnesses are one of the leading causes of disability worldwide (1,2). The outcome of psychotic illnesses is poor, with most people never making a full recovery (3). Yet it is possible to identify those at high-risk of developing psychosis using validated criteria and psychometric instruments (4). This is important because early intervention has been shown to reduce rates of transition to psychosis by approximately 50% (5–8).

Individuals with an at-risk mental state (ARMS) for psychosis (synonyms: ultra-high risk; clinical high-risk) are characterized by having a substantial decline in psychosocial functioning and either attenuated psychotic symptoms that may last from a few months to five years, brief intermittent psychotic symptoms which remit spontaneously, or a strong genetic vulnerability to psychosis (9,10).

GPs are usually the first point of contact with health services for people with early signs of psychosis, and they play a key role in referring patients to specialized services (11). However, identification of ARMS patients in primary care is not straightforward given the non-specific nature of ARMS presentation, and the high comorbidity with common mental health problems, such as depression and anxiety (12,13).

Very few studies have explored GPs' awareness of ARMS. Two studies have shown that GPs have limited knowledge of the features of early psychosis (14,15), and another showed that GPs' subjective norms (i.e. perception of whether other GPs identify ARMS and would approve of them doing so) were the most important predictor of ARMS identification (16). However, to our knowledge, no study has explored in detail GPs' views of ARMS patients, or the difficulties they face in identifying this population. The aim of this study was to investigate GPs' views and experiences of identifying patients with ARMS.

METHODS

Recruitment and sampling

Between March and July 2019, GP practices in the south west of England were informed about the study via two local Clinical Research Networks (CRNs). Practices interested in supporting the study contacted their CRN and passed on the contact details of one or two GPs, in their practice, who were willing to be interviewed. These details were then passed to the research team.

GPs from 21 practices expressed interest in the study. We purposefully selected 16 GP practices that varied in terms of their deprivation score, list size and the demographic characteristics of their patient populations, and in terms of whether or not the practice was in a catchment area where secondary care services were commissioned to work with ARMS patients. We then interviewed the individual GPs who had expressed an interest in the study, across these 16 practices. We reimbursed the GP practices for GPs' time.

Data collection

A topic guide was used to ensure consistency across the interviews. The guide included questions about the recognition, identification and management of ARMS patients, current and optimal treatment in primary and secondary care, advantages and disadvantages of early identification, and facilitators and barriers to early identification.

All interviews were conducted by the lead author (DS), who is a PhD student with experience of conducting mixed method studies. During the first seven interviews, DS referred to ARMS patients as "patients at-risk of psychosis" or "people who are showing early signs of developing a psychotic illness". However, as data collection continued it became increasingly clear that some GPs were not familiar with this term. Therefore, the topic guide was changed so that at the start of each interview, DS gave a clear definition of ARMS patients: "people who have mild or short-lived psychotic symptoms - such as hearing voices that are just fleeting in nature, or having odd ideas or paranoid beliefs that have not yet formed into strong delusional convictions that are not amenable to rational argument. So these people would not clearly meet the threshold for a psychotic disorder such as schizophrenia, but nevertheless have some symptoms that suggest they might be in the process of developing a psychotic illness." The wording of some of the questions was also changed, i.e. ARMS patients were now referred to as "patients with mild or short-lived psychotic symptoms". In addition, DS openly asked GPs if they recognised this patient group: "Have you come across the concept of an at-risk mental state for psychosis? Is this a patient group you recognise?" All GPs working in areas where the Early Intervention Services were commissioned to work with ARMS (6 GPs) were interviewed with the second topic guide, as they were recruited later to the study.

Analyses

Data collection and analyses were conducted in parallel so that insights from early interviews informed later data collection, and to ensure data collection continued until data saturation was reached, i.e. no new themes emerged in the later interviews. All the interviews were audio

recorded, verbatim transcribed, and analysed thematically. KMT and DS independently read and coded a sample of transcripts. They then met to discuss their coding and interpretation of the data. After testing and agreeing the coding frame, all transcripts were uploaded to NVivo and coded electronically. Data under specific codes were then retrieved and summarised in a table where rows presented each interviewee and columns the different codes. Doing this enabled the researchers to look across and within the interviews, to highlight common themes and deviant cases.

RESULTS

Characteristics of GPs interviewed

In total, 20 GPs were interviewed. Ten of the interviews were held by telephone, and 10 in person at their practice. On average, interviews lasted approximately 30 minutes. Eight of the GPs interviewed were females. GPs were aged 32 to 63 years (mean: 46.0 years (SD 8.6)). The average (median) number of years working as a GP was 14 years (IQR:11.5, 25). One of the GPs interviewed had an additional qualification in mental health, and another GP had an additional qualification in addictions.

Findings

Findings are presented below under two main headings: recognition of ARMS and facilitators/barriers to identifying ARMS in primary care. Quotes have been reproduced to illustrate some of the points made.

Recognition of ARMS

When using the first version of the topic guide, some GPs asked for clarification about what was meant by ARMS. These GPs were unsure whether we were referring to individuals who had certain risk factors associated with psychosis, such as use of illicit drugs or a trauma history, whether we were referring to people who had already had a psychotic illness and were now at risk of relapse, or whether we were referring to patients with mild psychotic symptoms.

> *“It’s not something I’ve heard of before I came across this study… I didn’t know whether you meant people who might have risk factors, you know, maybe there’s risk factors to psychosis in the same way that there is for heart attack or whether you meant people with early symptoms of psychosis." (GP1)*

After clarifying the meaning, some GPs mentioned that, in their view, these patients were psychotic, rather than at risk of developing psychosis.

> *"At the beginning when you're defining what you mean by a person at risk of psychosis is somebody with mild psychotic symptoms … to my mind … they're not at risk of psychosis, they have a psychosis, it's like having a mild broken leg, you either do or you don't." (GP6)*

After revising the topic guide and asking GPs directly whether they recognised this patient group, most GPs reported that they were familiar with the ARMS concept but said they rarely saw these patients. GPs also mentioned that it was uncommon for patients to present with isolated mild or short-lived psychotic symptoms, and recognised that in most cases, these mild psychotic symptoms occurred in the context of depression, anxiety, sleep difficulties, use of drugs or alcohol, life difficulties or personality disorders. GPs did not refer to these patients as ARMS but rather described them as patients with "*emerging psychosis*" (GP20), or patients with "*soft signs of psychosis*" (GP4).

However, it was evident that a few GPs still struggled to recognise such patients, and mentioned that having worked for many years, they had not seen anyone that they would view as having ARMS. They explained that the patients they had seen with psychotic symptoms either presented in a florid state or had recurrent psychosis.

Most GPs stated that identifying ARMS patients was important as it would help patients understand their symptoms better, provide them with information on where to seek help, and improve patients' outcomes.

> *"My understanding is that … early intervention significantly improves outcomes. I don't know whether that means that it prevents the onset of psychosis or whether it helps when if it does come on, helps people to manage it so it doesn't get worse." (GP13)*

However, some GPs also mentioned potential disadvantages of identifying ARMS patients such as the stigma of having a mental health label, the risk of over-labelling people, and potentially creating unnecessary worry for symptoms that may have resolved on their own.

> *"We may be labelling these people as at risk of developing psychosis but a) not have any effective sort of intervention for them that reduces their risk of progression to psychosis and b) create potentially a lot of unnecessary worry." (GP5)*

Facilitators and barriers to identifying ARMS

Clearly whether a GP recognises this patient group would affect identification of patients with ARMS. When directly asked what factors helped or hindered the process of identifying these patients, GPs expanded on their earlier comments and mentioned factors that related to patients and GPs' knowledge, and the NHS.

Patient related

Most GPs said that ARMS patients did not usually consult in primary care, and that they would only see patients with mild or short-lived psychotic symptoms once or twice a year. However, there were also a few GPs who mentioned that, within the last five years, they had not seen anyone that they would classify as ARMS. In contrast, a couple of other GPs reported that they would see patients with mild psychotic symptoms on a monthly basis. The latter GPs were working in student surgeries or deprived areas. Many GPs mentioned that patients with psychotic symptoms consult only after they had transitioned to psychosis.

> *"I think we probably see that relatively rarely actually because people do not present until … people around them have reached such a level of concern that they push them into presenting whether the patient themselves want to or not. So with subtle symptoms people tend to hide and people around them tend to confabulate and pretend that it's not happening." (GP6)*

GPs felt that some symptoms, such as paranoia, low insight or low mood could, in themselves, constitute a barrier to consulting as they resulted in patients not understanding that their thinking was not grounded in reality or lacking in motivation to make an appointment. GPs also thought that ARMS patients did not consult because of the stigma associated with mental illness, fear of acknowledging or disclosing psychotic symptoms, and lack of awareness about what constitutes a mental illness and how to seek help.

> *"If it's mild symptoms and a patient is sort of coping or functioning in the community … people may not think of that as being a medical problem… there's probably a lack of awareness as to what symptoms actually are abnormal and therefore merit help, and if it does need help who's the best person to go for." (GP12)*

Some GPs also mentioned that those who did consult did not always feel comfortable disclosing their psychotic symptoms. Instead, patients consulted for other symptoms such as depression, anxiety or sleep problems.

"They won't come telling you this is what's going on. You ask people questions to try and establish it and they often lie, not deliberately but because they're frightened, they don't want to admit that these things are happening." (GP6)

One GP mentioned that making young people aware of the risk factors for psychosis using modes of communication familiar to them, such as information posted online, would be beneficial for enabling an early identification of this patient group.

GP related

Some GPs mentioned that they may not have the skills to identify ARMS, and may not be asking patients the right questions.

"I guess there is that barrier of GPs not identifying the people because they don't have the skills to do that, they don't have the experience to pick up on that and they're not asking the right questions, not looking for the right symptoms." (GP2)

It was suggested that one reason for this was because some GPs had limited training in mental health.

Some GPs also mentioned that ARMS was not on their radar. Their focus was on more common mental health illnesses, such as depression and anxiety. A few GPs explained that once a patient met the criteria for a more common mental health illness they would not always screen for psychotic symptoms. This could be due to time constraints, or to GPs not remembering or having the knowledge to ask the right questions.

"I wonder whether once somebody's come along with a plausible diagnosis and one that I'm comfortable managing such as depression … I wonder whether I don't ask any questions about psychosis… maybe I'm missing them because I'm not asking the right questions, I'm focussing more on the depression and the psychosis side of things isn't coming out if I haven't asked the question." (GP12)

Some GPs also reported that as mild psychotic symptoms usually occurred in the context of other mental health illnesses, teasing them apart could be quite difficult.

"If somebody's drinking as well then that's very difficult, how much of it is drugs and alcohol and how much of it is the underlying condition really … it's very difficult sometimes trying to tease that out." (GP16)

However, there were some GPs who recognised this patient group. These GPs were more likely to work in areas where secondary care services offered treatment to ARMS patients, or to work in surgeries with a higher prevalence of young people. One GP also mentioned that,

in their surgery, patients with more common mental health illnesses were seen by a mental health nurse who was skilled at asking people questions about psychosis, and thus, in their view, the risk of missing ARMS people in that surgery was quite low.

A couple of GPs also mentioned that making GPs more aware of the importance of identifying ARMS, the effectiveness of treatment, referral routes and availability of services for these patients would motivate them to identify these patients.

> *"I can certainly think of patients that … I wouldn't be surprised if they developed psychosis at some point in the future but … a) I'm not aware of any treatment that can prevent progression, b) I don't think they would be willing to engage with any sort of treatment and c) I wouldn't know how to refer anyway." (GP 5)*

Structure and provision of services

When asked about factors that would facilitate the identification of ARMS patients, most GPs mentioned that establishing a good rapport would help patients build trust and put them at ease with disclosing psychotic symptoms, as well as help GPs place patients' symptoms in context, to aid clinical formulation.

> *"Often it's difficult if you don't know the patient where you're … dealing with a personality disorder or whether you're dealing with someone who's prodromally in a pre-psychotic state." (GP8)*

However, building trust is related to continuity of care, and having enough time in consultation, factors which are not under GPs' direct influence.

Some GPs also mentioned that booking an appointment was not always easy, and the appointments were too short, particularly as these patients may struggle to bring their psychotic symptoms to the forefront of their narrative.

Many GPs reported the threshold for accessing secondary care as very high, and that patients often fell through the gaps in that they were too severe for primary care, but not severe enough for secondary care. These high thresholds might have deterred GPs from identifying potential ARMS given the realities of referring.

> *"I can't think of a patient that I referred to secondary care in the last couple of years who has met the threshold that they set sort of being seen really. It's extremely difficult to get patients to be reviewed … It's not that we're reluctant to refer people, it's just*

that we're realistic and realise that actually they're unlikely to get seen if we do try to refer them." (GP5)

When asked about the barriers to identifying ARMS patients, one GP mentioned that *"maybe a reluctance to not know, not do it [identify ARMS patients] 'cos you don't know what you're going to do with them" (GP9).* A few GPs also mentioned that not being able to offer patients any treatment once they have been identified as having ARMS could be disheartening.

DISCUSSION

Summary

This is the first study to investigate GPs' views and experiences of identifying patients with ARMS in primary care. We found that GPs may not be familiar with the concept of being at-risk of developing psychosis which is a barrier to identifying ARMS patients. Some GPs mentioned that they may not be asking the right questions, and would benefit from more training on the early symptoms of psychosis. GPs also reported that mild or short-lived psychotic symptoms often occurred in the context of other mental health disorders, which made the identification of ARMS patients difficult. However, there were also GPs who recognised this patient group, but reported that potential ARMS patients rarely consulted in primary care. In addition, GPs also mentioned that patients did not always feel comfortable disclosing psychotic symptoms or were not always willing to be referred to specialist services. Those GPs who worked in areas where secondary care services were commissioned to offer treatment to ARMS patients seemed to be more likely to recognise this patient group.

The challenges of working within a health care system where resource limitations impose restrictions on appointment availability and length of consultations, as well as a lack of continuity of care were also mentioned as having a negative impact on identifying patients with ARMS. However, GPs being open, non-judgemental, and able to establish a good therapeutic relationship could facilitate the identification of this patient group.

GPs reported that identifying patients with ARMS and referring them for treatment would improve patients' outcomes. However, there may be potential disadvantages associated with ARMS identification, such as the stigma associated with having a mental health label, the issue of over-labelling and potentially creating unnecessary worry at a time when GPs had little to offer patients in terms of providing effective interventions or referring them to specialist services.

Strengths and limitations

We interviewed both male and female GPs, with a range of clinical experience and who worked in areas where secondary care services were or were not commissioned to work with ARMS. We continued data collection until saturation had been reached, and while this helped us ensure a wide range of views, we are aware that there may be GPs who hold different views to the ones presented here. As some GPs were unfamiliar with the concept of ARMS, we revised the original topic guide, and gave GPs a definition of ARMS. This helped us ensure that GPs understood the patient group we were interested in, but doing so might have sensitised participants to this concept. As mentioned earlier, after we changed the topic guide, most GPs said that they were familiar with this patient group. This might be because about half of the GPs interviewed with the second topic guide worked in areas where secondary care services were commissioned to offer treatment to ARMS patients, but it could also be because providing a definition helped them recall patients who they had consulted presenting with ARMS or encouraged them to give what they thought were more socially desirable answers.

Comparison with existing literature

Our findings are consistent with other studies that have shown that GPs have difficulties recognising insidious symptoms of early psychosis (14,15). However, our study extends these findings by shedding light on the factors that facilitate or hinder ARMS identification in primary care. The only study that has so far investigated the factors predictive of ARMS identification used a semi-structured discussion with GPs to inform the construction of a questionnaire that was later applied to GPs working across England (16). That study found that GPs' subjective norms (i.e. perceived professional influence) were the strongest predictor of identifying ARMS in primary care. Our study used semi-structured interviews and found that the identification of ARMS patients is a complex process that arises from interplay of factors related to patients, GPs, and challenges of working within the NHS.

GPs in our study reported that they rarely saw patients with mild psychotic symptoms, which is consistent with findings of Simon et al (2009). GPs also mentioned that there was a tendency for patients to consult only after their symptoms got worse, and potentially transitioned to psychosis. Some support for this comes from a population-based cohort study which showed that 50% of 18-year olds and 30% of 24-year olds who met criteria for a psychotic disorder had not sought professional help (17,18). However, other studies have shown that people with schizophrenia visited their GPs 43% more than controls in the 6 years before their index diagnosis (19), and that increasing frequency of consultations in primary care was a strong predictor of psychosis (20). This indicates that many people at-risk of psychosis are indeed

consulting, but the non-specific nature of early symptoms of psychosis and high comorbidity with more common mental illnesses may hinder identification as ARMS (20–22).

The identification of ARMS patients could be further complicated by the fact that patients who consulted did not always bring the psychotic symptoms at the forefront of their narrative. Consistent with our results, one previous Australian study showed that the main reason for the first referral on the pathway to a high-risk service was for non-specific symptoms such as self-harm or deterioration in functioning (12). The authors also suggested that people at risk of psychosis may have only consulted once the associated symptoms of depression or anxiety became distressing.

Most GPs reported that identifying ARMS would be beneficial in terms of improving patients' outcomes. However, some GPs also mentioned that patients may feel stigmatized by being identified as being high-risk, and there may also be the issue of potentially over-labelling people. Other researchers have discussed the ethical issues surrounding the identification of ARMS patients, including the tension between normalising people's symptoms whilst carefully monitoring them, and that between the benefits of people knowing that they are ARMS and self- or public-stigmatisation (23–25).

Even though the transition rates to psychosis are quite low (i.e. around 20% in the first year) (26), ARMS patients have an increased risk of developing other poor outcomes (27). While more research is needed to identify specific interventions for ARMS, recent evidence shows that nonspecific psychosocial interventions (e.g. supportive psychotherapy focusing on social relationships or family problems, assistance with accommodation or education, monitoring and crisis management) were also helpful at improving patients' outcomes (28,29). Therefore, it is important that clinicians identify patients with ARMS and intervene early.

Implications for clinical practice

Clinical guidelines recommend that people who may be at-risk of developing psychosis should be referred without delay to specialist services for assessment (30). However, our study shows that GPs may not be familiar with the ARMS concept, indicating a need for GPs to receive more information and training on how to identify and manage this patient group. Continuity of care is likely to be a key factor in ARMS identification as it improves the therapeutic relationship and may lead to increased likelihood of patients disclosing psychotic experiences. Therefore, appropriate level of prominence should be given to the development of policies and implementation of initiatives that would support continuity of care in GP practices. At the same time, access to specialist services should be improved so that once GPs identify potential

ARMS patients, there is a pathway for them to be assessed by specialist services and offered treatment.

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Ethical approval

South West-Cornwall & Plymouth Research Ethics Committee (formerly South West-Exeter Research Ethics Committee), Reference 18/SW/0037, 29.03.2018.

Competing interests

The authors declare no conflict of interests

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