Can more appropriate support and services be provided for people who attend the Emergency Department (ED) frequently? – NHS staff views

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**ABSTRACT (300 words)**

**Background**

Interventions designed to help Emergency Department (ED) staff manage frequent attenders (FA) are labour intensive and only benefit a small sample of FAs. We aimed to utilise the in-depth knowledge of health professionals with experience of working with ED FAs to understand the challenges of managing this group of patients and their opinions on providing more appropriate support.

**Methods**

Semi-structured interviews were conducted with medical and nursing ED staff, mental health liaison nurses and GPs. Interviews covered: definitions and experiences of treating frequent attenders and thoughts on alternative service provision. Vignettes of FAs were used to elicit discussions on these topics. Thematic analysis of transcribed interviews was undertaken.

**Results**

Twelve health professionals were interviewed. Three groups of frequent attenders were identified, people with: long term physical conditions, mental health problems and health related anxiety. Underlying reasons for attendance differed between the groups, highlighting the need for targeted interventions. Suggested interventions included: improving self-management of long-term physical conditions; creating a ‘go-to’ place away from the ED for patients experiencing a mental health crisis; increasing the provision of mental health liaison services; and for patients with health related anxiety, the role of the GP in the patients care pathway was emphasised, as were the benefits of providing additional training for ED staff to help identify and support this group.

**Conclusion**

Interventions to address frequent attendance should focus on re-direction to and liaison with more appropriate services, located on the hospital site or in the community, tailored for each identified patient group.
WHAT THIS PAPER ADDS

Section one: What is already known on this subject

- Previous research on frequent users of Emergency Departments (ED) has shown that their attendances are usually associated with complex, social, emotional and health related problems.
- Current approaches designed to manage this group of patients (e.g. case management) have been successful but are labour intensive and only reach a small sample of the frequent attender population.
- Existing studies investigating frequent attenders (FA) have tended to focus on quantitative analyses of data sets, with the opinions of frontline ED staff (who have experience working with ED FAs) being largely neglected.

Section two: What this study adds

- In this qualitative study, we sought to address the research gap by interviewing frontline ED and mental health service staff (who have experience working with FAs) about their experiences of managing ED FAs and their opinions on alternative pathways of care.
- Participants in our study challenged the assumption that there is something universally similar about FA, identifying three different groups (long-term physical conditions, mental health and health related anxiety) which require separate interventions.
- Based on the findings from the staff interviews, interventions designed to help manage ED FAs should focus on re-direction to and liaison with more appropriate services, located on the hospital site or in the community, tailored for each identified group.
INTRODUCTION

Frequent users of healthcare account for a disproportionate number of attendances at Emergency Departments (ED) with 4.5% of patients contributing to 21-28% of all ED visits.[1] Their attendances are usually associated with complex underlying social, emotional and health related problems,[2] which are difficult to address within the ED environment alone.[3] Frequent attenders (FAs) have higher rates of outpatient visits and inpatient admissions, and are at increased risk of death.[4] It is therefore important to develop and implement interventions to meet their unmet needs.

A recent systematic review identified three interventions which use multidisciplinary approaches to help ED staff manage FAs: case management; individualized care plans; and information sharing.[5] However, these approaches are labour intensive and only reach a small proportion of the overall FA population. They also rely on prior awareness of cases so have limited potential for implementation on a wider scale.

The opinions of frontline staff have been largely neglected within the FA literature. A significant proportion of the literature focuses on analyses of quantitative data sets,[6-7] which downplays the complexities associated with FA. Health professionals who have experience of working with ED FAs have invaluable knowledge about the management of this group of patients. By utilising this in-depth knowledge we should be able to develop more effective interventions which would better meet the healthcare needs of FAs and reduce their dependence on the ED.

In this qualitative study, we aimed to address the research gap by interviewing frontline staff about the challenges experienced when managing FAs and their opinions about alternative pathways of care.

METHODS

Design and setting

A qualitative research design,[8] within a phenomenological theoretical framework was used to conduct in-depth semi-structured interviews with a purposive sample of healthcare professionals recruited from a single National Health Service (NHS) hospital site (Northern General Hospital) within the Yorkshire and Humber (Y&H) region of the UK. It has an adult-only (16 years and over) ED which provides unscheduled care to over 100,000 patients per year. At the time of the study, there was a mental health liaison (MHL) service located in an office adjacent to the ED, available 7 days a week, 7am until midnight. Whilst the core function of the MHL service was to work with the ED, they also provided cover for the whole of Sheffield Teaching Hospitals NHS Foundation Trust. There was no
co-located primary care service located on the hospital site. Data was collected from October 2015 to January 2016.

Participants

Health professionals were purposively selected to represent both medical and nursing ED staff and MHL nurses. General Practitioners (GP) from the same hospital site with a clinical and academic interest in the topic were also invited to participate. The study was first introduced to health professionals via an ED Consultant working at the hospital by e-mail or face to face, and interested participants were asked to contact the study Research Assistant to arrange an interview.

Procedures

A semi-structured interview guide was designed to explore how the interviewees understood and defined frequent attendance; their experiences of working with this group of patients; and their suggestions for alternative service provision. Three anonymised real case examples of FAs (‘vignettes’) were presented as a way of eliciting discussion about how interviewees currently manage FAs (see supplementary information).

The interview guide was developed by consulting previous literature and through discussion between the authors who include a Professor of Emergency Medicine and Professor of Applied Psychological Therapies. A pilot interview was conducted with one participant and adjustments were made to the interview schedule accordingly. Further iterations of the interview schedule were made as data collection progressed.

Written informed consent was obtained from all participants prior to interview. Semi-structured in-depth, one-to-one interviews were then conducted by two of the authors (SA, LC). All interviews were audio-recorded and took place in a private room on the hospital site or over the telephone, at the convenience of the participant. The median duration of the interviews was 39 minutes (minimum 19 minutes, maximum 65 minutes).

Ethical considerations

A UK National Research Ethics Committee granted ethical approval for the conduct of the research (ref 15/YH/0337).

Analysis

The qualitative interviews were recorded, transcribed verbatim and analysed thematically. NVivo (QSR International 10) was used to help structure the analysis, with systematic efforts to check and
refine developing categories of data. Themes identified in the early phases of data collection helped inform areas of investigation in later interviews.

One of the authors (SA) reviewed a sample of transcripts and developed the initial framework. Two authors (SA, LC) then independently coded a sample of the data using the framework and although consistency was high between the coders, some minor amendments to the framework were introduced. One author (SA) then coded the rest of the data using the final framework. Selection of key themes was done in consultation with all authors.

RESULTS

Sample characteristics

In total, 12 health professionals were interviewed (Table 1). Data saturation was reached at this point.

Table 1: Sample characteristics

<table>
<thead>
<tr>
<th>Job Role</th>
<th>Number</th>
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<tbody>
<tr>
<td>Emergency Department Consultant</td>
<td>4</td>
</tr>
<tr>
<td>Emergency Department Nurse</td>
<td>4</td>
</tr>
<tr>
<td>Mental Health Liaison Nurse</td>
<td>2</td>
</tr>
<tr>
<td>General Practitioner (GP)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
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</tbody>
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Reasons for frequent attendance

Participants in our study outlined perceived reasons for frequent attendance at the ED and three distinct groups were discussed, people with: long-term physical conditions; mental health problems (including drug and alcohol misuse); and health related anxiety / Medically unexplained symptoms (MUS) (See table 2)
<table>
<thead>
<tr>
<th>Reasons for frequent attendance</th>
<th>Reasons for frequent attendance (Illustrative quotes)</th>
<th>Potential interventions and associated challenges</th>
<th>Potential interventions and associated challenges (Illustrative quotes)</th>
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<tbody>
<tr>
<td><strong>Long-term physical health conditions</strong></td>
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<td>They may attend the ED because they are not appropriately managing their health condition, resulting in exacerbations of their symptoms.</td>
<td>“They don’t want to listen to the fact that they should change their lifestyle, they should stop smoking, they should eat healthier. If they decided that they don’t want to do any of those things then you can only go to a certain point” (Nurse)</td>
<td>They could benefit from greater advice on self-management strategies to reduce the number of exacerbations experienced. It was acknowledged that these services are already available but questions were raised about the extent to which patients are engaged with these services.</td>
<td>“Most of these patients who are using the services like this are the ones who don’t engage with whatever services they’ve been offered [...] if they don’t volunteer to access these services then it’s going to be a real problem before we start.” (Consultant)</td>
</tr>
<tr>
<td><strong>Mental health problems</strong></td>
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<tr>
<td>During the out-of-hours period there is often nowhere for patients with a mental health problem to go to when they experience a crisis.</td>
<td>“People with psychiatric problems tend to come to A&amp;E just because there’s nowhere else for them to go at night.” (GP)</td>
<td>Creating a go to place away from the ED for mental health patients who experience a crisis. Having a 24 hours a day, 7 days a week mental health liaison service available for ED staff to refer mental health patients to.</td>
<td>“Something will happen that will cause some instability, some stress for them and it’s needing somewhere to go, and A&amp;E becomes that place for people, cos there isn’t anywhere else [in the city] for people to go to. That’s the biggest gap in services.” (Mental Health Liaison Nurse)</td>
</tr>
<tr>
<td><strong>Health related anxiety / Medically unexplained physical symptoms (MUS)</strong></td>
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<td>It was acknowledged that there may be an underlying psychological stressor manifesting itself as a physical symptom, but due to time constraints within the ED, staff often cannot fully explore this. Since patients are unlikely to receive an answer about what is causing their symptoms they may continue re-attending until they do. Due to the varied and non-specific nature of their symptoms this group are at</td>
<td>“So that patient after waiting around in the A&amp;E for 7 or 8 hours could go home completely none the wiser about what caused their chest pain. They just knew it wasn’t a heart attack but then if it, I guess is that happens again they might be more likely to come back” (Consultant)</td>
<td>Continuity of care was seen as particularly important because it would give the clinician they time they need to explore and review any underlying psychological issues with the patient. The role of General Practitioners (GP) was believed to be important in the facilitation of this process. Providing additional training for ED staff to help them to identify and support this group of patients.</td>
<td>“It’s the kind of thing where they have to build up over time so it’s the kind of thing the GP needs to do, is suggest it; plant the seed, the next time they see the patient, you know, see if they’re more amenable to it and then after seeing them a few times saying “look you know, isn’t it about time we got you to have some cognitive behavioural therapy for this?” (Consultant)</td>
</tr>
</tbody>
</table>

“I think you need effective training of
| greater risk of being over-investigated which may reinforce their health seeking behaviour. | so they have to rely on a few tests which might just reinforce the patient’s point of view that they need to be here” (Consultant) | health professionals and communication in recognition of health anxiety and it’s about the language that you use […] training health professionals in brief cognitive behavioural therapy” (GP) |
Long-term physical conditions

One group of FAs were characterised as those with long-term physical conditions, such as chronic obstructive pulmonary disease, chronic heart failure or diabetes. Their admissions were usually due to exacerbations of their symptoms. Whilst our participants perceived this group as having a legitimate need for medical attention, it was acknowledged that some patients may experience more frequent exacerbations because they are not appropriately managing their health condition. For example, although they may receive community based support, their adherence may be low or they may have been given advice but have struggled to follow this, or in some cases, chosen to ignore it.

Mental health problems

Study participants highlighted that during the out-of-hours period there is often nowhere for patients with a mental health problem to go to when they experience a crisis. There was also a perception by some that this group may not be engaging with the support services available to them. For example, the immediacy of the medical care in the ED was seen as appealing to patients relative to the longer term treatment options available in the community.

Health related anxiety / MUS

Our participants reported that patients with health related anxiety were harder to identify compared to other FAs. They often present with vague physical symptoms, which after further investigation cannot be linked to a physical condition. It was acknowledged that there may be an underlying psychological stressor manifesting itself as a physical symptom but due to time constraints within the ED, staff often cannot explore this fully. In these instances, the patient is unlikely to receive an answer about what is causing their symptoms and therefore may continue to attend because they want to find out what is wrong.

Our participants also expressed difficulty in explaining to a patient that their symptoms could be caused by an underlying psychological problem. There was a view that the patient may think that ED staff are just ‘fobbing them off’. If the patient is unwilling to accept the possibility that their symptoms may be psychological rather than physical, then they may not be able to access the most appropriate treatment options.

Additionally, ED staff highlighted that due to the varied and non-specific nature of their symptoms this group are at greater risk of being over investigated. Health professionals want to reassure themselves that there is nothing physically wrong before the patient is discharged and therefore
unnecessary investigations may be performed. This process of over investigation may reinforce the patient’s health seeking behaviour.

**Potential interventions and associated challenges**

Health professionals in this study challenged the assumption that there is something universally similar about frequent attenders, and correspondingly described potential interventions for each group. (See table 2)

**Long-term physical conditions**

Interviewees suggested that patients with long-term physical conditions may benefit from greater advice on self-management, to reduce the number of exacerbations experienced. It was thought that community specialist nurses could educate patients on the link between anxiety and exacerbations and could develop care plans to help better manage these patients. Participants acknowledged that these services existed, but were unsure about the extent of patient access or engagement.

**Mental health problems / MUS**

Interviewees were aware of some mental health services already available, including mental health specialists, case workers and drug and alcohol support groups. Within the ED, staff have access to the MHL service, to whom they can refer patients. The MHL team checks the patient’s mental health record and assesses support requirements.

The MHL team was described as helpful by ED staff but provision was limited. Due to staff shortages, the MHL team can only accept referrals for the most severe cases and at the time of the interviews they did not offer a 24 hour service. One MHL nurse suggested that a ‘go-to’ place, away from the hospital for patients who find it difficult to manage acute exacerbations could provide an important service.

**Health related anxiety**

Generally, there was uncertainty amongst interviewees about the best way to manage patients with health related anxiety. It was suggested that an intervention to support this group of patients should be based in primary care, rather than the ED. Continuity of care was seen as particularly important because it would give the clinician the time they need to explore and review any underlying psychological issues with the patient. Specifically, the role of the GP in the patient’s care pathway was emphasised by several participants.
A number of patients in this group were reported to present at the ED with chest pains and after further investigation they are found to have had a panic attack. It was suggested that these patients could be taught to recognise the signs of a panic attack and what to do when it happens. It was believed that this could help empower them to take control of future problems without needing to attend the ED.

However, it was acknowledged that it is difficult to identify whether the patient’s chest pain is due to an anxiety attack or a more serious underlying physical health condition. Therefore, it was recommended that ED staff should receive training to help them identify and best support this group of patients.

**DISCUSSION**

In this qualitative study, our participants identified three different groups of FAs (those with long-term physical conditions, mental health problems and health related anxiety / MUS). These are similar to those identified in previous research.[3,9] The perceived underlying reasons for attendance differed between the groups, supporting the view that frequent attenders are not a homogenous group.[10] Subsequently, our participants stressed the importance of designing targeted interventions and, moving away from the existing one-size fits all approach (such as case management).

In our study, suggestions for interventions to address frequent attendance at the ED, included:

- providing greater advice about self-management approaches for people with long-term conditions;
- creating a ‘go to’ place away from the ED for patients who experience a mental health crisis, particularly during the out-of-hours period;
- increasing the provision of MHL nurses within the hospital, as well as extending the MHL service to cover the out-of-hours period; and for patients with health related anxiety, the role of the GP in the patient’s care pathway was emphasised, as were the benefits of additional training to help staff identify and support this group.

We observed that staff perspectives on the options for the appropriate care of these three groups of FAs was usually seen to be outside of the ED, yet at the same time, participants reported limited awareness of alternative services. Our participants were unable to reflect on what alternative services already existed and what impact it would have if patients used those instead of the ED. Future research should take into consideration the wider health system and the links between primary/community and secondary care when thinking about where best to implement an intervention to address frequent attendance at the ED.
There is increasing evidence to show that interventions such as telehealth, symptom-based-action plans and homecare can help patients to better self-manage long-term physical conditions, reducing the number of exacerbations experienced.[11-13] There is also increased interest in the use of e-health – the use of information and communication technology (the web, computers and smart phones) to improve health and healthcare,[14] but the current evidence base is inconclusive. Nevertheless, our participants felt that experiencing some exacerbations of symptoms is inevitable and in many circumstances it is appropriate for the patient to be dealt with within the ED.

For patients who present with mental health problems, Williams et al,[2] recommended that where they are known to psychiatric services, joint planning meetings with the ED, the patient’s GP, primary consultant physician, and psychiatric team should be arranged. However, this is time consuming and often challenging to coordinate. Alternatively, participants in our study described the benefits of having access to a MHL team based within the hospital site, a view supported by other studies.[15] MHL teams have access to the patient’s psychiatric record and so are well placed to assess the support needs of patients arriving at the ED with mental health problems. However, whilst there is some evidence that these services improve waiting times and readmission rates of mental health patients, this is largely based on uncontrolled studies and a lack of data from the UK.[16] Furthermore there is considerable variation across England both in the availability of liaison psychiatry services in general hospitals and in models of service delivery.[17] Further research is needed to establish the clinical and cost-effectiveness of MHL services in helping manage frequent users of EDs who present with mental health problems.

Another suggestion made by health professionals in our study was to create a go-to place away from the ED for mental health patients. This was based on the evidence that some mental health patients experience poorer ED care compared to other patients.[18] However, it is often reported that the reason why mental health patients are conveyed to the ED is because there is limited or inconsistent availability of alternative community services, particularly during the out-of-hours period.[19-20] Further work needs to be done to ensure that people who experience a mental health crisis get access to the most appropriate source of help 24 hours a day.[21]

Our participants expressed a lack of confidence in identifying whether a patient’s presentation is related to health anxiety (or MUS) rather than an underlying physical illness; a view shared by others [22]. Tyrer,[23] raised the point that most doctors are not trained to recognise health anxiety, only to diagnose or exclude conditions within their speciality. Therefore, it is suggested that ED staff should receive training in identifying and working with this group. This may help to increase early recognition of the fact that the patient’s symptoms may not result from a physical illness, therefore
reducing the number of unnecessary investigations which could reinforce the patient’s health seeking behaviour.[24]

Given the time pressures within the ED it is unlikely that staff would be able to undertake a definitive assessment so it would be helpful if there were pathways or mechanisms for staff to refer patient’s back to their GP for a fuller assessment and for this to then be dealt with in primary care or in to psychological services when appropriate. There is increasing interest in the role of GP co-located services within the ED but the focus of this tends to be on dealing with minor illness.[25] This role could be extended to the identification of health anxiety or a route of referral back to the patient’s own GP.

Limitations

Our study was limited to a single acute hospital site within Yorkshire and the Humber region. Furthermore, the interviews were conducted with NHS stakeholders only. In order to gain a more representative view on the types of interventions which should be developed it would be important to gain the patient perspective.

Conclusion

Interventions designed to address frequent attendance should focus on re-direction to and liaison with more appropriate services, located on the hospital site or in the community, tailored for each identified patient group. There should also be greater links between the ED and primary care or psychological services to promote continuity and appropriateness of care.

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CONTRIBUTORSHIP

All authors contributed to the design of the study (SA, LC, CC, GP and SMM). SA and LC conducted the study including recruitment, data collection and data analysis. SA prepared the manuscript with important input from all of the authors (LC, CC, GP and SMM). CC, GP and SMM provided intellectual input throughout the entire project. All authors approved the final manuscript.

COMPETING INTERESTS
There are no competing interests to report.

REFERENCES


