Abstract

Introduction: Over 5 million children attend the Emergency Department (ED) annually in England with an ever-increasing paediatric emergency caseload echoed globally. Approximately 60% of children present with illness and the majority have non-urgent illness creating burgeoning pressures on children's ED and this crisis resonates globally. To date no qualitative systematic review exists that focuses on the parental reasons for childhood attendance at the ED in this subgroup.

Aim: To identify parental reasons for attending ED for their children presenting with minor illness.

Method: A qualitative systematic review was conducted against inclusion/exclusion criteria. Five electronic databases and key journals were searched in June 2015.

Findings: 471 studies were identified and following study selection, 4 qualitative studies were included. Nine themes were identified e.g. dissatisfaction with family medical services, perceived advantages of ED and 'child suffering' with novel and insightful sub-themes of 'hereditary anxiety', 'taking it off our hands', ED as a 'magical place'.

Conclusion: This novel qualitative systematic review examined parental attendance presenting with childhood minor illness of interest to emergency care reformers and clinicians. ED attendance is complex and multifactorial but parents provide vital insight to ED reformers on parental reasons for ED attendance in this subgroup.

Keywords: Parental reasons; Minor illness; Non-urgent; Attendance at ED; ED utilisation; Qualitative studies
1. **INTRODUCTION**

The demand for urgent healthcare services is increasing, and the pressure on Emergency Department (ED) is of significant concern globally (Amiel et al., 2014). EDs are visited annually by almost 5 million children in England, United Kingdom (UK) Health and Social Care Information Centre (2016). There are diverse rates of non-urgent ED visits internationally ranging from 39.9% in Belgium among 3117 children (Benahmed et al., 2012), 40% in England (Ismail et al., 2013), 52.8% in Australia (Unwin et al., 2016), 57% in Italy (Vedovetto et al., 2014) and 58% in the United States of America (USA) (Kubicek et al., 2012) suggesting the international significance of ED paediatric attendance. The term ‘minor illness’ refers to non-urgent cases of common childhood illness which can be treated by simple medication or which need no treatment. Carey (2009) defined acute minor illness as ordinary health problems, for example non severe but prevalent respiratory and gastrointestinal infections in children which do not require admission. The usage of EDs by patients with minor illness is an important and still unresolved problem causing a burden to health services (Lega and Mengoni, 2008).

Increased usage of ED causes complex issues e.g. patient density, increased workload (Benahmed et al., 2012), increased cost, raised staff attrition (Unwin et al., 2016), and risk to quality of care in ED. Consequences of using ED for non-urgent conditions include patient dissatisfaction, demand on ED staff, longer waiting times and delays in care (Derlet and Richards, 2000; Hedges et al., 2002; Hobbs et al., 2000). Children presenting with a minor illness as self-referrals can often be appropriately and safely managed in a primary care setting (Hendry et al., 2005; Phelps et al., 2000). However, there is evidence that some parents do not attempt contact with their GP prior to emergency department attendance (Benahmed et al., 2012; Hendry et al., 2005).

These studies focused on people’s choices e.g. Jaarsma-van Leeuwen et al. (2000) and Shearer et al. (2015), however to date no systematic review has focused on parental reasons for visiting ED in this sub group.
Aim and Objective

This systematic review identifies parental reasons for visiting ED for their children presenting with minor illness via thematic synthesis of qualitative data.

2. METHODS

A qualitative systematic review was conducted against inclusion/exclusion criteria (Table 1) according to PRISMA guidance (Moher et al., 2009). No restrictions were placed on designs of studies, publication date or country of origin. ‘Parents’ are defined as anyone who has a child or children aged < 18 years without considering gender and parental age to minimise selection bias Joanna Briggs Institute (2014). Studies published in English were considered for inclusion.

Five electronic databases (Medline, Embase, CINAHL, PsycINFO, PubMed) and two journals (Emergency Medicine Journal and Pediatric Emergency Care) were searched in June 2015. The following search strategy was applied to aforementioned databases: (Parent* OR carer* OR caregiv* OR famil*) AND (Child OR Children OR infant* OR Adoles* OR P?ediatric*) AND (Minor illness OR non-urgent OR non-emergency OR non-critical OR non-essential) AND (Emergency services OR emergency department OR accident and emergency OR p?ediatric OR A&E OR ED attendance OR attendance ADJ (ED OR A&E OR PED) OR ED utilization). Study selection included title, abstract and full-text sifting and removal of duplicates. Reference lists were further checked for additional references. Quality appraisal of resulting included studies was conducted using the JBI Qualitative Assessment and Review Instrument (QARI) (Joanna Briggs Institute, 2014) by a primary (AB) and secondary reviewer (PH), consensus was reached via discussion. The results of quality assessment of included studies is presented (Table 4). Thomas and Harden’s (2008) thematic analysis framework was applied to the qualitative data: 1) the coding of the text ‘line-by-line’; 2) the development of ‘descriptive themes’; 3) the generation of ‘analytical themes’ to synthesise the data. The Figure 2 illustrates an example of how the themes were derived.
3. **FINDINGS**

### Study Selection

The searches yielded 471 studies and citations were exported to EndNote X6 reference manager software and duplicates were removed. A PRISMA flow diagram of the study selection process is presented in Figure 1. Rationale for exclusion at full text sift are presented (**Table 5**).

### Study Characteristics

The 4 included studies were published between 2003 and 2010; three of which were conducted in the USA (Gutman et al., 2003; Berry et al., 2008; Graham et al., 2010) with one study conducted in the UK (Chin et al., 2006). A range of qualitative methodologies were embraced; a prospective mixed-method study (Graham et al., 2010), (only qualitative data were extracted), qualitative ethnography (Berry et al., 2008), grounded theory (Gutman et al., 2003), generic qualitative work (Chin et al., 2006). Data were collected via semi-structured interview (Chin et al., 2006; Berry et al., 2008), qualitative telephone interview using a structured guide (Graham et al., 2010), and face-to-face interview with open/closed ended questions (Gutman et al., 2003). The sample size was 10 families (Graham et al., 2010), 31 families (Berry et al., 2008), 12 families (Chin et al., 2006), and 331 paediatric users out of 408 ED users (Gutman et al., 2003). **Table 3** shows the characteristics of included studies. Fifty-six participant quotations were extracted from all the included studies and their level of credibility identified by follow JBI degree of evidence. All these quotations were coded and the process resulted in identified 33 sub-themes and 9 main themes following thematic analysis (**Table 6**). The quality of the included studies was overall good based on the quality assessment scoring from 7/10 - 9/10 (**Table 4**). All the included studies had obtained ethical approval from an appropriate body.

### Parents’ Psychological Impact

One of the reasons for coming to an ED with childhood minor illness reflected their feelings regarding their child’s condition. Seven sub-themes emerged: worry about child...
health; worry about delayed recovery; worry about complications of illness; ran out of ideas for self-care; feeling frustrated, fearful, and anxious; hereditary anxiety; and first-time parenting.

Many parents were reported to state that their worries for their children affected their decision to visit an ED. Parents were concerned about delayed care preferring ED rapid treatment and wished to avoid anticipated complications. Parents reported feeling nervous, frustrated, fearful and anxious. In some cases, parents felt that there was nothing further that they could do to self-care for their children (Graham et al., 2010, p.252): "We were nervous, we were afraid, we really didn’t know what was causing it, and what we could really do?"

Hereditary anxiety affected parental attendance decisions. This echoes parental concern for their children presenting with the same illness as a sibling or other family member because of a family history of illness: "Our family has a history of diabetes, I mean that was one of the reasons I brought her in.” (Graham et al., 2010, p.252). Some parents are worriers by personality so their hereditary anxiety led them to use ED. Additionally, first-time parenting influence ED attendance due to lack of experience caring for a sick child. Parents reported not to take responsibility for waiting at home and instead self-referred to ED.

Dissatisfaction with Primary Healthcare Services

Six sub-themes emerged: dissatisfaction with GP services, staff attitudes, communication problems, giving unclear information to parents, mistrust, and ethnic differences. Dissatisfaction with primary healthcare services is another reason for using an ED. If patients are not satisfied with their primary healthcare provider or with treatment that they have received, it is more likely that they will not revisit these services. These issues were illustrated from one participants’ perspectives in Berry et al.’s (2008, p.362) study as: "The information people ... and like some of the doctors ... they have bad attitudes there, really bad, it’s ridiculous.”. Parents were reported to state
that staff gave unclear information to parents which was not helpful for parents. Negative staff attitudes in the community positively influenced parents’ decisions to attend ED rather than revisiting services in which the parents had experienced difficulties. Patients tended to communicate with staff who have good communication skills, who help them, who give clear and understandable information, and who show an interest in patients’ conditions. One participant in Berry et al.’s (2008, p.363) study illuminated these issues driving ED attendance by saying: “I called this morning to ask if she could be seen [by a family doctor], and [the person I spoke with] was not really clear on what I should do. She wasn’t helpful. She confused me even more.”

Mistrust of primary care services might affect the usage of an ED for minor illness. It was reported in the UK that ethnic differences might affect the relationship between the patients and family doctors. One participant in Chin et al.’s (2006, p.24) study said: It’s a black-white thing. They [black families] think that white women don’t know what is healthy for black children. White doctors don’t understand black diets.” Hence, parents did not tend to use services which display negative relationships in terms of ethnic differences.

**Advantages of ED**

The findings in this theme were the most commonly cited reasons for attendance at an ED. The theme includes nine sub-themes: quality of care, ED facilities, no appointment required, qualified doctors/staff, efficiency, waiting time, quick to get treatment, easy to get result, and parents’ preference.

Many parents explained their reason for coming to an ED because of the expected quality of care that is given in an ED. They imbued ED with magical qualities. One parent in Berry et al.’s (2008, p.363) study described an ED as: "They do a better check-up and they give them better medicine." In addition, parents see ED setting a ‘magical place’. One parent in Graham et al.’s (2010, p.253) study described an ED as: "You know, it’s a magical place. Next time I’m bringing her after one day because right after we go, it
always works out the same, [the illness] stops”. Therefore, previous experience in ED affected their belief regarding the anticipation of better treatment.

Previous experience in ED affected their belief regarding the anticipation of better treatment.

A further finding revolved around ED’s facilities and resources. Many parents perceived that an ED has more and higher quality facilities and resources, therefore, they anticipated that they would receive quality care when they visit an ED. A participant in Guttman et al.’s (2003, p.1104) study supported that in an ED they “could get the most complete care.”

Moreover, the findings of this review revealed that qualified doctors/staff in ED and efficiency of ED influence parents’ decision to visit an ED. Parents believed that an ED has more skilled staff and their GP had a lack of knowledge regarding children’s health, making it more likely that they will visit an ED. One participant in Berry et al.’s (2008, p.363) study confirmed: “[The ED] has a trained staff for children, which makes it better. You have a better interaction with children than if you go to just any clinic, because I think you guys are prepared for children.” Moreover, the review findings showed that ED services do not require an appointment and therefore patients had a wider sense of access. In addition, some parents might not make the effort to get an appointment with their GP because they might get treatment at an ED guaranteed without an appointment. One participant in Berry et al.’s (2008, p.363) study confirmed these issue: “You don’t have to have an appointment, just come in.”.

**Difficulties with Getting an Appointment**

Two sub-themes emerged from this main theme: unable to get an appointment, and unable to wait further. Some parents tried to get an appointment with their GP but, there was no available appointment. Sometimes, the child’s condition had worsened, and in this case parents could not wait for an appointment, so they visited an ED. One
participant in Berry et al.’s (2008, p.362) study said: “If I would have made an appointment, I would have had to wait until next week Tuesday, or go to urgent care.”.

In addition, the findings indicate a juxtaposition of parental perception of family doctors being sometimes too busy and unable to see patients and their own parental inability to take time off work. Berry et al.’s (2008, p.363): “I called the doctor’s office ....and I couldn’t wait until Wednesday because I work second shift, and I can’t afford to take off work, with all my children. That’s why, of course, I’m here”.

Reassurance

Two sub-themes emerged: reassurance and the importance of a precious child. This theme can be relative to the notion of parental responsibility. Some parents prefer not to take sole responsibility for the medical status of their children; they prefer to visit an ED in order to make sure that ‘everything is all right’. Also, parents expressed their need for reassurance because of children’s’ inability to fully explain their complaints. Two participants in Guttman et al.’s (2003, p.1099) study explained their need for reassurance as: “Children can’t tell you what’s wrong, and parents want to make sure everything is OK.” and “To make sure everything is OK.”

The emotional importance of children to parents was also a driver of ED attendance. Parents are worried about their children and therefore they want to get treatment as quickly as possible in order to be reassured. First-time parents in particular reported increased tendency to need reassurance. It was perceived that visiting an ED can sometimes can be the quickest way to receive treatment. Guttman et al.’s (2003, p.1099) study commented on this issue: “Quickest way to find out what’s wrong [because the] child is extremely important to you.”.

Access Issues

Access issues affect parents’ decisions to use an ED. Readiness to give care, and convenience of ED were two sub-themes emerging under access issues. The ED’s services open access policy influenced parents’ decisions towards ED attendance. Berry
et al.’s (2008, p.363) study explained that: “The hospital seems to see you a little quicker than the private doctor’s office. You don’t have to have an appointment, just come in. I wouldn’t call it emergency, I just call it ... ready-care.”. Also, convenience of ED was reported by parents as a reason for using ED. The ED was reported to be closer to patients than their GP. Also, the available means of transportation could be more suitable and lead to visiting an ED rather than a GP. Berry et al.’s (2008, p.363) study confirmed this very succinctly: “I figured it would just be easier to come here.”.

Referral Prediction

The review findings displayed that some parents are not referred by their GP because they did not try to contact their GP but because parents predicted that they would be referred by the GP. One participant in Berry et al.’s (2008, p.364) study confirmed this: “Well, we’ll have to call her and then she’ll tell me what I have to do about it, but I’d rather just come here [to the ED] and get it over with.”

Suffering from illness and pain

Two sub-themes emerged: relief from pain and not able to cope with the severity of symptoms. The findings of this review indicated that pain manifesting in minor illness was a driver for ED attendance. One parent in Guttman et al.’s (2003, p.1098) study said that: “Getting relief for what is bothering the child or relieve the pain”. In some cases, parents might not able to deal with the severity of pain by themselves. One parent in Graham et al.’s (2010, p.252) study explained: “Our child had been vomiting and diarrhea ... vicious vomiting and diarrhea ... He was screaming in pain”.

Out of Hours

This main theme comprises two sub-themes: the inability to take time off work and out of hours. The review findings emphasized that primary care services are not always open, therefore parents choose an ED out-of-hours as EDs are open 24-hours a day. This issue was supported by two participants in Guttman et al.’s (2003, p.1102) study: “Nothing else is open.” and “Nowhere to go this late.” Moreover, being unable to take
time off work was another reason for choosing an ED. This is related to availability of
parents and limited access time for a GP visit. Parents brought their children to an ED
since they would not be able to get an appointment from primary care services in the
morning before going to work. In these cases, parents do not have many options to
choose from, so they use an ED for their children because of the unavailability of other
services. One parent in Berry et al.’s (2008, p.363) study confirmed this: "... I work
second shift, and I can’t afford to take time off work, with all my children. That’s why, of
course, I’m here.”.

The nine main themes identified were grouped into two further categories; Human
determinants were parents’ psychological impact, dissatisfaction with staff, reassurance,
referral prediction, and suffering from illness/pain. Human determinants can be parents’
psychology, feelings, anxiety, level of concern, reassurance needs, health literacy, ability
to cope with severity of symptoms, dissatisfaction issues, and suffering from illness.
These human determinants affect parents’ decisions to visit an ED for children with
minor illness.

System determinants were advantages of ED, difficulties with getting an appointment,
access issues, and out of hours. System determinants were ED facilities, qualified staff in
ED, ED working hours, appointment issues, access issues, means of transportation,
distance to home, and out-of-hours primary healthcare service policy. The human factors
conflict with system determinants because in everyday family life we are subject to our
own agency and life issues impact on structural system issues. This apposition influences
parental decisions to visit an ED for children with minor illness.

4. DISCUSSION

The findings of this qualitative systematic review highlight the diversity of determinants
that lead parents to attend an ED with children presenting minor illness. Novel themes
such as ‘ethnic differences’, ‘hereditary anxiety’, ‘taking it off our hands’, ED as a
‘magical place’ have emerged.
The review findings support that ED attendance in this sub group is a multi-faceted complex issue. Parental psychological impact on ED attendance (Graham et al., 2010; Guttman et al., 2003; Berry et al., 2008) was significant in this review. In contrast, this theme was not identified by Amiel et al., (2014) study which looks at why patients with minor illness attend to ED. Anxiety about hereditary conditions emerged from this review. Psychological factors may underpin a heuristic intuitive decision to attend ED rather than a logical decision because of parents’ anxiety, fear, frustration and nervousness as some parents are worriers by personality. More research is required to identify the determinants from parental perspectives but it is vital to avoid categorising attenders as inappropriate if ED attendance rates are to reduce and instead examine the decision making processes of these attenders.

The finding that ethnic differences might affect the relationship between the patients and GPs emerged from Chin et al.’s (2006) study alone and has not been identified in previous studies and may reflect ethnocentric issues in the study’s country of origin. However, the theme of dissatisfaction with staff concurs with Amiel et al. (2014), Hendry et al. (2005), and Williams et al. (2009). Enhancing sensitivity to ethnic diversity in the community may address this. Nursing staff commonly have greatest contact with parents and can ensure that parents have a positive user experience.

The determinants regarding the advantages of an ED for attendance were commonly cited and concur with several studies (Amiel et al., 2014; Hendry et al., 2005; Phelps et al., 2000; Northington et al., 2005; Shearer et al., 2015; Howard et al., 2005; Palmer et al., 2005). Despite prior evidence e.g. Lega and Mengoni (2008) and Maguire et al. (2011) difficulties with getting a GP appointment did not appear in the review to the extent expected. This concurs with Hemingway et al.’s (2008) predictive case control study of parents in an equitable sub group of 472 parents which showed that GP contact was not a strong predictive factor for ED attendance from a parental perspective. However, out of hours care for minor illness emerged from two included studies (Guttman et al., 2003; Berry et al., 2008). Parents often work during office hours and
they might not be able to take time off work or do not want to miss time from work. The findings of the review support those of Palmer et al. (2005), and Phelps et al. (2000).

Access issues emerged with some parents perceiving ED as ‘ready care’; their decision was not centred on seeking specific treatment but ED’s readiness was manifest. Participants in A. Wood and Cliff (1986) early study mentioned that an ED provides a twenty-four hour service, and parents could guarantee receiving treatment there, as opposed to trying to contact their GP. The findings from this theme concur that ‘ready-care’ remains a contemporary issue.

Reassurance emerged from two of the included studies (Guttman et al., 2003; Graham et al., 2010). According to Stanley et al. (2007), reassurance is the most common reason for using ED services. On the contrary, reassurance was not identified as a determinant in the other two included studies (Berry et al., 2008; Chin et al., 2006). Parents anticipate referral to ED by their GP, by other primary health carers, or advised by significant others. There is anecdotal evidence that parents bypass their GP for attending ED since they predict that they will be referred. Whilst previous adverse experiences regarding GP referral affects parents’ behaviours in terms of visiting an ED directly coincided with several studies (Williams et al., 2009; Phelps et al., 2000; Stanley et al., 2007; Palmer et al., 2005).

Suffering from pain emerged from two included studies (Guttman et al., 2003; Graham et al., 2010). Children suffering from pain drive parents to visit an ED in this non urgent sub group. It is known that parents assess their child’s condition as being most appropriate for visiting an ED rather than a GP (A. Wood and Cliff, 1986; Palmer et al., 2005). This theme agreed with Hemingway et al.’s (2008) predictive data, supporting an enduring call for improved pain assessment and management services for children in the community within urgent and primary care systems.
Strengths and Limitations of the Review

One of the strengths of this review is that the findings emerged from four studies and the findings cover many of the expected facets of the phenomenon under scrutiny. By synthesising the qualitative data novel findings have emerged which are greater than the four papers examined alone. Also, there were no restrictions regarding date and origin of the studies, and the review covered all parents without considering their age or gender.

Despite these strengths only studies reported in English were admitted for inclusion so some potential studies may have been missed in relation to the phenomenon. Subsequently this review may be centric to westernised countries; a call for reviews in developing countries endures. However, the review is considered representative of the USA and UK ED systems.

5. CONCLUSION

This is the first known qualitative systematic review examining parental attendance in this area, which should be of interest to emergency care reformers, urgent care commissioners, researchers and ED clinical staff. This review further informs understanding of parental rationale for visiting ED for childhood minor illness. Parental reasons for visiting ED with children presenting with minor illness were identified. These are parents’ psychological impact, dissatisfaction with primary healthcare services, advantages of ED, difficulties with getting an GP appointment, reassurance, access issues, predict to referral to ED, suffering from illness and pain, out of hours. Further research on parental decision-making is urgently required to address the rise in ED attendances- until that point parents will continue to vote with their feet and attend ED to meet their needs.
6. LIST OF REFERENCES


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