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Original article

Reasons for patients with non-urgent conditions attending the emergency department in Kenya: A qualitative study

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ABSTRACT

Introduction: Scant literature exists on the non-urgent use of emergency departments in Sub-Saharan Africa and its effects on the provision of effective emergency care services. With the surge in the prevalence of non-communicable diseases compounded by an already prevailing significant problem of communicable diseases and injuries in this setting, there has been a rising demand for emergency care services. This has led to ED overcrowding, increased healthcare costs, extended waiting periods and overstretched essential services. The main objective of this study was to determine why patients visit the ED for non-urgent care.

Methods: A descriptive qualitative study was conducted at a tertiary university hospital ED in Nairobi, Kenya. Purposive sampling was used to select patients triaged as less urgent or non-urgent. In-depth interviews were conducted until thematic saturation was achieved. The interviews were audio recorded, transcribed verbatim and analyzed thematically.

Results: Thematic saturation was reached after interviewing twenty-four patients. The obtained data was discussed under three main themes: (1) reasons why patients visited the ED for non-urgent care, (2) patients understanding of the roles of the ED, and (3) patients' perceptions about the urgency of their medical conditions. Several factors were identified as contributing to the non-urgent use of the ED including positive experiences during past visits, a perception of availability of better services and the closure of other departments after office-hours and on weekends. It was found that non-urgent ED visits occurred despite most patients having an understanding of the role of the ED as an appropriate location for the treatment of patients with life threatening conditions.

Conclusion: This study highlights several reasons why patients with non-urgent medical conditions seek care in the ED despite being able to correctly identify its purpose within the national emergency care framework. Regular patient education regarding which conditions warrant ED attendance and alternative sites of care for non-urgent conditions could potentially help reduce ED patient numbers.

African relevance

- The use of EDs for non-emergency conditions affects Africa disproportionately because of the limited resources both in terms of equipment and healthcare workforce.
- There is a recent rapid increase in cases of non-communicable diseases in Africa that further strains the existing healthcare system.
- There is limited literature detailing the challenges and reasons for non-emergency visits to EDs in Africa.
- When understanding the perspectives of participants, healthcare professionals can implement strategies to decrease the numbers of non-emergency visits to the ED.

Introduction

Emergency departments (EDs) are an integral service for healthcare systems globally [1]. They provide immediate care for urgent medical conditions and injuries that are life-threatening and require immediate aggressive interventions [2,3]. However, there is increasing utilization of EDs for non-urgent care across the globe resulting in adverse effects including extended waiting times for actual emergency cases, treatment delays, impaired access and financial losses for service providers [4–7]. Several studies in high income countries (HICs) sought to understand why patients visit EDs for non-urgent conditions with the intention of putting in place interventions to discourage non-urgent use of EDs

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[8–10].

The provision of effective emergency care services is an even bigger challenge in low- and middle-income countries (LMICs) where a majority of the hospitals are inadequately equipped or staffed to deal with the challenges [11,12]. The situation is worsened by the recently observed rapid increases in non-communicable diseases (NCDs) in these countries which have significantly increased the burden of acute illness [13,14].

A few studies exist on the non-urgent use of EDs in sub-Saharan Africa (SSA) and its effects on the provision of effective healthcare services [15–17]. One study from South Africa found that non-urgent use of EDs concerns an interplay between insufficient access to primary care and the convenience of the ED [15]. Patients' perceptions of urgency, access to medical insurance and time-of-day when care is sought were also found to influence their behavior.

Given the limited number of studies detailing the reasons for non-urgent use of EDs in SSA countries, the primary objective of this study was to establish why adult patients with non-urgent medical conditions visit the ED in a tertiary university hospital in Kenya. The secondary objectives were to determine the patients' understanding of the role of the ED and their perceptions about the urgency of their medical conditions. The findings could form a basis for decision makers when developing strategies to decongest EDs.

Methods

Study design and setting

A descriptive qualitative study using a semi-structured interview format was conducted at the ED of the Aga Khan University Hospital, Nairobi (AKUH-N) with patients triaged by the hospital staff as less-urgent or non-urgent. The hospital's ED is one of the first points of entry for most patients coming to the hospital. The facility provides initial assessment, treatment and stabilization to an average of 180-200 patients a day with a broad spectrum of illnesses and injuries.

Study population and sampling strategy

The study population consisted of adult patients visiting the AKUH-N adult ED and triaged by the ED nurses as less-urgent or non-urgent using the Canadian Emergency Triage and Acuity Scale (CETAS) criteria. According to the CETAS criteria, these are patients to whom physician intervention could be delayed for up to 1–2 h, or even longer, without serious consequences. Patients who were triaged as urgent, emergent conditions or in need of resuscitation were excluded. The sample size was guided by the principle of data saturation, that is, more and more respondents were included in the study up to the point where adding more participants would not have resulted in any new significant information being obtained [20].

Data collection

In-depth interviews (IDIs) were conducted using an interview guide consisting mainly of open-ended questions based on the objectives of the study. Identification of participants was anonymized. The IDIs were conducted in a private room in the preferred language (English or Kiswahili) of the participants and lasted approximately 1 h. The questions were adjusted according to what was learnt from the previous interviews allowing the researcher to probe subsequent respondents further. The interviews were audio recorded and subsequently transcribed anonymously. Field notes were also taken. The main questions used in the interview guide are listed below:

- What made you seek treatment at the emergency department (ED) today?
- Have you ever been to the ED before? [Yes or No]. If no, what made you visit today? If yes, is there a particular reason that made you visit again?
- How do you usually come up with the decision on where to seek healthcare?
- In your own opinion, what do you understand by the 'emergency department'?
- What cases should be seen in the emergency department? What about non-urgent cases, where should they be seen?
- Have you ever visited other health facilities such as clinics? What is the main role of these facilities and what type of cases should be seen there?
- At the time you decided to come to the ED, did you feel there was a threat to your life? Could you tell me more about your feelings?

Data analysis

Data were analyzed using a thematic framework analysis [21]. Themes were independently generated from the data by two researchers, and once thematic consensus was reached, all the data were coded.

Ethical considerations

Approval to conduct the study was obtained from AKUH-N Ethical Review Committee (2018/REC-61 v3) and informed written consent was obtained from all study participants. It was clearly stated in the consent form that participation was voluntary and refusal to participate or withdrawal from the study had no effect on the health services received and was possible at any point. Privacy was accorded by holding all sessions in enclosed rooms and striving for minimal interruptions. The IDIs were held just after triage but before seeing the doctor and as soon as the interview was finished, patients were seen by the next available doctor.

Results

Social demographic characteristics

A total of 24 participants (12 males and 12 females) were purposefully sampled and included in the study. The average age of the respondents was 31.8 years (SD = 8.8) with a range of 25-–55 years.

Themes

Three broad themes emerged from the study: (1) Reasons why patients visited the ED for non-urgent care, (2) Patients' understanding of the purpose of the ED, and (3) Patients' perceptions about the urgency of their medical conditions.

Theme 1: reasons why patients visited the ED for non-urgent care

The study established that when patients feel unwell, they are inclined to make a decision to seek care at the ED.

'*The decision [to visit the ED]? It is out of my feeling and out of my curiosity to understand what's wrong with me…. I want to be healthy and I don't want to cough. I don't want that pain at the back. I just want to be an okay healthy person*'

(R3, 40years, male, cash)

Respondent recounted positive past experiences when they visited the ED. The service providers attended to them efficiently and this satisfaction with the services encouraged them to return.

'*I look at my experiences with the different hospitals and choose where I was attended to very well in terms of what they can do and probably the*

number of professionals that are there to attend to people… That's why am here.'

(R10, 44years, female, insurance)

'*The services are good. We have very warm people, and it is a good thing that when you are going to hospital and you are not feeling well you are welcomed by somebody who is very warm and who is very caring. I've visited other facilities and I didn't find that*'.

(R11, 50years, female, cash)

One respondent believed that the ED was better equipped than other departments and would therefore dispense quality services.

'I *believe the ED is very well equipped. It's like a one stop shop that you can go in and within few hours you are better because of the kind of medication …. So I thought it's the first point that I'll get to, to ease the pain that I'm having.*'

(R21, 39years, male, insurance)

Another respondent noted that other departments were closed on weekends and at night making it difficult to access their services. Therefore, patients had no option other than to visit the ED.

'*Yeah, (I should go to) the Family Medicine Clinic. I think that's the place I can be seen. But you see Daktari* [Doctor], *they don't open at night.*'

(R23, 43years, female, cash)

Information about the hospital was also identified as a factor influencing the use of the ED. Respondents described having received information on the hospital from the media in the form of advertisements on radio, TV, billboards, print and social media.

'*You see outside there you've just written Aga Khan University Hospital. I think there's even an advertisement you people had another day on TV …. So, you people have advertised and therefore we come.*'

(R16, 33years, female, insurance)

Theme 2: patients understanding of the role of the ED

In general, the respondents were able to define an ED and relate it to its functions. The general consensus was that the ED's ultimate function was to save critically sick patients, that is, patients with life threatening conditions who needed immediate attention.

'*Emergency. It's a place where you are taken or visit as quickly as possible, immediately you arrive when not feeling well … You don't have to wait. … You are attended to immediately.*'

(R8, 40years, female, insurance)

A recurring definition of the role of the ED, was that it is the first point of care for people involved in any form of accident or serious injury where they are stabilized before being taken to the general wards, intensive care unit or referred elsewhere for specialized treatment.

'*In my opinion, it's a section which is always available or open for any kind of situation or any kind of incidence or emergency in or outside the hospital. … For example, a car crash, a bomb blast.*'

(R2, 35years, male, cash)

The majority of the respondents felt that road, work place and fire incidents as well as terrorist attacks were the most important cases that needed to be seen in the ED.

'*I would say any type of accident; road accidents, accidents at work and at home. As long as somebody's life is in danger and needs that quick medical assistance that should be an emergency.*'

(R1, 30years, male, insurance)

While there was a general consensus on the cases that should be seen in the ED, some of the respondents believed all cases should be seen in the ED regardless of perceived severity.

'*In my opinion, I understand (the ED) is where you come when you have a pressing issue that you need to see a doctor. However, I also understand you can also come to see a doctor even if it is not urgent.*'

(R15, 45years, female, cash)

When asked about where the non-emergency cases should be seen in the hospital, a majority of the respondents reported that such cases should be seen in other departments within the hospital such as the outpatient department.

'*The non-urgent cases can be seen in an outpatient center …. A station in a hospital whereby if you are feeling unwell, any form of remedy, you can walk in and get the services from the doctor.*'

(R5, 41years, female, insurance)

When asked to describe the role of clinics, respondents reported that clinics served mainly as an alternative to government facilities which were always congested.

'*[Clinics] serve as alternatives to government hospitals … Like what I told you earlier on, the issue of the number of people. … At times when you go to government hospitals, the number of patients are so many and you may want to be attended to urgently.*'

(R7, 55years, male, cash)

Theme 3: patients' perceptions about the urgency of their medical conditions

Most of the respondents felt that their presenting condition was a threat to their lives and therefore, they came for treatment at the ED.

'*I was a bit scared because my temperature, the temperature was above normal by far. So I just thought that I needed urgent attention. That's why I came to the emergency. With the condition that I have, it is very dangerous.*'

(R20, 32years, female, cash)

Some did not want to take chances in that although their conditions were not life threatening, it could lead to complications.

'*Headaches have caused death before. Yeah, you could be having meningitis and you don't know. Yeah, everything is a threat. Yeah. I was just scared that it could turn to be something else if it was not attended urgently.*'

(R22, 34years, male, insurance)

Some respondents however expressed that their situation was not particularly urgent and they just needed regular medical attention.

'*I felt I needed to see a doctor, but I could have seen him even tomorrow. Yeah. But it's like… it''s better to take the initiative and do what you need to do.*'

(R12, 34years, female, insurance)

Discussion

This study found several reasons that led patients to visit the ED even though their medical conditions were non-urgent. These included an overestimation of the severity of their conditions, positive past

experiences during ED visits, a belief that better equipment and services were only accessible at the ED, inaccessibility of other departments during after-office hours, and an unclear messaging by hospitals on where to access what services.

The findings corroborate previous studies that have found fear for one's health as a significant factor in a patients' decision making process for where to seek medical help [22,23]. Unwin et al., noted that patients who indicated their presenting complaint was clearly an emergency despite availability of their GP demonstrated that perceived need was a significant factor in the decision making process [22]. Since the feeling of fear is inherent and varies from patient to patient, there is a need to tighten the triage process to discourage the non-urgent use of ED and, from the onset, correctly direct patients to the appropriate department depending on their symptoms.

An interesting explanation given for the non-urgent use of the ED is attributed to what may be referred to as 'success of the ED brand.' One respondent described the services received at the ED in a previous visit as being 'very fast and quick' while another described the people working at the ED as being 'very warm'. Previous studies have found that non-urgent ED patients felt that the ED was more convenient than their primary care providers [24], that the ED provided rapid physical examination [25]. These findings raise questions on whether current practices actually encourage the use of EDs for non-urgent care, the remedy of which is to ensure that services provided by other sections of the healthcare system meet the same standards.

In addition to the perception of better handling of patients at the ED, they were of the opinion that the quality of services provided at the ED is superior to those that would be received elsewhere [26]. Similarly, Legoete et al., reported that patients point to the ability to access facilities such as x-rays, blood tests and specialists as a leading factor driving the non-urgent use of ED services in South Africa [15]. These findings highlight the need to increase access to such resources throughout the healthcare system.

The problem of lack of access to alternative health facilities, especially during after-office hours, is a major driver for non-urgent ED visits [27]. Previous studies have found such visits to be higher on weekends and at night with the reasons tied to the inconvenience and the difficulty in making timely appointments with primary care providers (PCPs) during office hours. To tackle this challenge, there is need to explore strategies such as availing minimized GP services during after-office hours [27].

Finally, there is a need for advertising and other messaging by hospitals to be clearer on the separation of roles by various hospital departments. This study found patients who visited the hospitals specifically on the lack of adverts promoting the quality of services offered and who would be left confused by a seemingly conflicting message discouraging the non-urgent use of EDs at the same hospital.

It was interesting to observe that, while patients correctly defined the word 'emergency' and were aware of the roles of the ED, they still visited the ED even for non-urgent cases. This behavior is especially strengthened when one feels that they deserve to be treated anywhere within the hospital [24]. Such findings and the resulting consequences highlight the need to send a clear message to the population in general to consider the impact of their choice of the ED as their first point of contact [27].

The patients' responses on their knowledge of the roles of clinics and other PCPs highlighted a need to strengthen the primary care system in Kenya. Consistent with Mohamoud et al., who found that patients did not perceive that family doctors, who are the main providers of primary care in Kenya, could offer comprehensive services [28]. Our findings confirm a belief among patients that the ED provides better quality care. Furthermore, there is an erroneous view among some patients that clinics form a 'second tier' of the health system below government and private hospitals and only exist to take care of cases that are passed down from the 'top tier'.

Consistent with previous findings, this study established that patients overrated symptoms such as pain, headache and fever which led them to the ED instead of clinics [22,29]. Interestingly, several respondents who did not have severe medical conditions and did not perceive their conditions as life-threatening preferred to be seen at the ED as they did not want to 'take any chances'. However, there were respondents who did not feel that their medical condition was urgent and had actually ended up at the ED out of ignorance.

Conclusion

The findings from this study show that there is need to continuously educate patients on which conditions are appropriate to be assessed and treated in the ED. The education should stress the impact that inappropriate ED use could have on seriously ill patients. The final goal is to have the population of Kenya making considered and balanced decisions about the urgency of their medical conditions, which facility to attend and the timeliness of their attendance. In the meantime, however, other measures need to be put in place to deal with the challenge at hand. Proper referral mechanisms for patients presenting with non-urgent conditions to alternative sites of care should be put in place. Hospital management should take steps such as increasing the number of hours in which non-urgent departments are open and also explore the implementation of strategies such as telephone triage [30] to control the after-hours patient burden. The Kenyan Government's Ministry of Health, in coordination with public and private hospitals, should also promote and improve primary healthcare services throughout the country in order to reduce the number of non-emergency cases presenting at EDs.

Dissemination of results

The results of this study will be disseminated through publications in peer reviewed journals, presented at scientific conferences such as emergency physicians' conferences and the Kenya Association of Family Physicians.

Authors' contribution

Authors contributed as follows to the conception of design of the work; the acquisition, analysis, or interpretation of data for the work; and drafting the work or revising it critically for important intellectual content: CR contributed 40%; and BW, NN and CKM 20% each. All authors approved the version to be published and agreed to be accountable for all aspects of the work.

Declaration of competing interest

The authors declared no conflicts of interest.

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