



# A qualitative exploration of community members expectations of emergency medical services in Soweto, South Africa

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## ABSTRACT

### Introduction

In urban settings, access to the healthcare system is commonly initiated via Emergency Medical Services (EMS). Consequently, community members have expectations relating to the service they expect to receive from their EMS. This said, the public and EMS providers do not always share the same views as to what constitutes an emergency or the core role of EMS. In this study we investigated and described the expectations of a sample of community leaders in Soweto, South Africa relating to their expectations of EMS.

### Methods

A qualitative descriptive design was followed making use of one-on-one interviews with a sample of community leaders. Interviews were audio recorded (with permission) and later transcribed verbatim. Transcripts were then manually coded to identify emerging themes around participant's expectations relating to their use of EMS.

### Results

Four main themes were identified. These centered around (a) ambulance response times, (b) the quality of medical care received by ambulance crews, (b) professional conduct of ambulance crews, and (c) the need for feedback and communication.

### Conclusion

Community members have an expectation that ambulances should arrive rapidly when summoned. Those responding should be professional, caring, and able to deliver a high level of care. The community expect feedback to be provided about the incident and exactly how the EMS will be managing the case. The above expectations are seen to be reasonable and speak to a number of criteria used to measure EMS efficiency globally. Further research should be conducted to quantify the extent to which EMS services are delivering on the above expectations.

**Key Words:** Emergency Medical Services, Community, Expectations, Service Delivery.

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## INTRODUCTION

Those attempting to improve public healthcare and service delivery need to consider a number of variables. These would include things such as the extent of funding, the availability of infrastructure and human resources and the communities' expectations relating to the quality of service and levels of care that they feel they should receive.<sup>1</sup> Consequently, research focused on exploring the expectations of those who use components within the healthcare system become important for findings can assist in tailoring the delivery of services in different contexts and also guide future resource allocation.<sup>2</sup>

Although proactive primary healthcare initiatives are on the increase, most interactions between the healthcare system and the public are still initiated by the public themselves, often occurring during a health "crisis" or time of acute need. In urban settings, access to the healthcare system is commonly initiated via a request to the Emergency Medical Services (EMS). Research shows that patients are more dependent and vulnerable when they are in a perceived "crisis" situation associated with a need for immediate emergency care. This can lead to the development of "high expectations" during this time.<sup>3</sup> One such expectation is that the EMS would view and treat their call as an "emergency" and consequently respond rapidly and with a sense of urgency. This said, members of the public and EMS providers do not always share the same views as to exactly what constitutes an emergency or the core role, mandate and purpose of an EMS. The definition of a medical "emergency" is in fact frequently misinterpreted and misunderstood by the public.<sup>4</sup> As a result, a communities' expectations are often overlooked or may even go unnoticed because of this misinterpretation. This, in turn, negatively impacts how community members perceive and rate the quality of care and service they receive.

Globally, however, things are starting to change, and the public at large are becoming better informed with regards to EMS service delivery and operations through healthcare education and awareness campaigns. This then, places pressure on the EMS to start meeting expectations and to promote better interactions between themselves and the public with an aim of improved delivery of emergency care, or at least, the perceptions thereof. Despite this, in the developing world, and in Africa, there remains limited research focusing on different communities' expectations of their local EMS. This knowledge gap prompted this study which focused on gaining a better understanding of the expectations of an urban community in Soweto, South Africa regarding their use of EMS.

## RESEARCH DESIGN AND METHOD

A qualitative descriptive design was selected for this study.<sup>5</sup> The main focus of qualitative research is to elicit and describe human views and experiences by obtaining, thick, rich and meaningful information from participants. Our participants consisted of a sample of community leaders who were invited to participate in one-on-one face to face interviews exploring their expectations of EMS. A purposive convenience sampling strategy was applied that involved obtaining the contact details of potential participants through an initial engagement with the relevant ward counsellor.

The interviews were conducted in a Soweto township called "Tshiawelo" situated in Johannesburg, South Africa. As alluded to above, participants were purposefully selected from a sample of community leaders who were also all members of a Community Development Committee within the township. We felt that interviewing these specific individuals would be best given that, for this type of research design, participants should represent a structure that works closely with a community to cultivate participation, foster collaborative relationships,



and enable meaningful dialogue.<sup>6</sup> The interviews were guided by a semi-structured agenda with two self-designed, open-ended questions.

The final sample included a total of ten participants who consented to being interviewed. However, by the end of the eighth interview data saturation was seen to have occurred as no new themes were seen to be emerging.<sup>7</sup>

Each interview lasted between 10 to 15 minutes and was audio recorded (with permission). The audio recordings were used to produce verbatim transcripts. The transcripts were read word-for-word prior to analysis. During analysis, codes were identified by highlighting exact words, phrases and key concepts from the text, these were then assigned to common occurring participant responses. Following analysis of all of the transcripts the codes were categorised allowing for core themes to be generated.

### Ethical considerations

Ethical clearance for the study was obtained from the Research Ethics Committee of the Faculty of Health Sciences at the University of Johannesburg (REC 01-51-2019). Potential participants were provided with an information sheet about the study inviting them to participate. Those who decided to participate signed informed consent forms.

### RESULTS

Analysis of the data led to the emergence of our four main themes relating to their expectations of EMS. These were:

- Ambulance response times
- The quality of medical care received by ambulance crews
- Professional conduct of ambulance crews
- The need for feedback and education.

### Theme One: Response Times

Participants had similar expectations that their calls to EMS would be treated as an “emergency” and consequently EMS would respond rapidly and with a sense of urgency.

“Number one, is the ambulance who respond in time, because if they don’t respond in time, we may lose a life” –Participant 1

“I expect to get a response as soon as possible” - Participant 5

“I would expect a quick response on the phone, the hospital or clinic should be prompt in getting the ambulance to my place, quick dispatch” – Participant 7

### Theme Two: Quality Emergency Care

Expectations when it came to the provision of quality emergency care included a demonstration of competency during the treatment of the patient. A continuity of care [during transport to hospital] was also expected and identified as an important aspect.

: “... We expect to see like a nurse or someone that is qualified to be assisting the person who need help...” - Participant 1

: “... I would expect their expertise to go in line with the medication so expected to treat. They should not come and say they do not have medication....” -Participant 7

“...I expect them to at least give that person something like maybe medication putting that patient on the stretcher taking the person to the ambulance and giving that person some kind of treatment rather than them just taking that person to the hospital or clinic to wait for the doctor to give that person something...” – Participant 5

### Theme Three: Professional Conduct

One of the common themes that emerged included the views of the community leaders on the communication and conduct of the



emergency care providers. Participants expected good communication and a high level of professionalism to be shown by ambulance crews.

"...they should communicate effectively, and they should not lie to the people who need help" -Participant 1

"...must have a professional tone and mood" – Participant 8

"...they need to talk to me in a right and respectful way and they should sympathise" - Participant 5

"...what like to see is good communication and there must be good conduct." –Participant 6

"... I expect the paramedics to be professional...."–Participant 8

"...people who are competent and people who are dressed in a formal way" –Participant 2

"I want them to present themselves well, when they arrive" –Participant 6

#### Theme Four: Feedback and Education

Another theme that emerged was the community leaders' views that they expected feedback and "education" during the provision of EMS. These views included participants' expectations to be educated about their roles in emergency care situations.

"... when they have helped the person, I believe they should also tell us what we should expect...."–

"they should tell us what the law there say..... they should explain how that law works...." - Participant 1

"... services can try and bring maybe some knowledge whereby people maybe will be taught on some of the things...." --Participant 3

"what will be nice is to be told that we took the person to Baragwanath and he's atward what..." -Participant 8

#### DISCUSSION

##### Response Time

The primary role of an Emergency Medical Service (EMS) is to respond to an emergency incident within the shortest possible time.<sup>8</sup> As a consequence, response times are globally acknowledged as an important component of EMS performance. Castren and colleagues define a response time as the time the first call is received by the call centre, until the first responding vehicle arrives on the scene.<sup>9</sup> Our participants placed a high premium on the early arrival of the ambulance, and it can be argued that this was the most prevalent expectation. This may be explained by the fact that, in their responses, participants associated longer waiting times with a poorer outcome for the patient. Sonis, in their study, noted an association of patient outcome to an extended waiting time. The patient or their loved ones usually build a perception (often incorrectly) that the mortality of that patient changes significantly, if the ambulance took time to arrive on scene.<sup>10</sup> Interestingly, studies show that there may be a significant difference between the actual time waited and the perceived time waited during an emergency. Rather, the perception of how long an individual feels they have waited for the ambulance is influenced by how they define the severity of the patient or how "serious" they think the emergency is.<sup>11</sup> Local EMS are expected to respond to emergency incidents within 15 minutes, which is a national norm. This said, these times are seldom consistently achieved. A 2019 study conducted within the City of Johannesburg showed median overall times of approximately 23 minutes.<sup>8</sup>

The above emphasis on urgency and time becomes relevant (not only from an EMS perspective) but broadly as it affects expectation and perceptions of overall health care delivery.

This view is supported by Eguchi (2013) who investigated expectations and satisfaction with health care services. Eguchi showed that one of the top reasons for the public to be dissatisfied with the healthcare service was extended waiting times. Rightly or wrongly, it would appear that patients feel like their health needs are not prioritised if there is a delay in the service delivery irrespective of the reasons behind the delay.<sup>12</sup>

Taking the above into account it would appear that EMS systems would be well served to continue to strive to improve and maintain response times to all incidents but specifically to those which the community see as being true medical emergencies.

### Quality Emergency Care

Our participants (whilst expressing this in layperson's terms) shared similar views related to the quality of emergency care interventions they expected to receive from ambulance crews. It must be however be acknowledged that, as untrained members of the public, our participants may not have sufficient insights and appreciation for the clinical reasoning and decision-making that occurs, and which may inform on-scene treatment and interventions. In South Africa ambulance crews are well trained compared to many other countries in the region with many having completed formal higher education qualifications in emergency care that allow for registration with the Health Professions Council of South Africa.<sup>13</sup> However, due to systemic challenges local ambulance crews (whilst well trained) are often expected to operate in resource constrained settings. The reality of the situation being that not all ambulances are equipped with modern state-of-the-art emergency care equipment. Our participants touched on this aspect by mentioning that they expect to see some degree of reliability in the equipment used and that the ambulances should have a "certain type of quality" and should be of acceptable standard.

Needless to say, being in the back of an ambulance that is poorly equipped "run down" or dirty does not instill confidence in a healthcare system regardless of how well trained and professional the crew may be.

### Professional Conduct

Taylor makes a valid point in that perceptions of quality in health care are not restricted to the clinical aspect of care alone. Rather, "quality" is seen to include the entire patient experience. During contact with the healthcare service, patients develop additional psychological and emotional needs that may require attention. Patients when rating service delivery and quality take into account how well their psychological and emotional needs were addressed.<sup>14</sup>

During our interviews, participants highlighted the importance of good communication and conduct of emergency care providers. They indicated that they expected to see a sense of respect and a display of professionalism during interactions between the community and ambulance crews. Dansereau and colleagues mention that one of the significant predictors of overall patient satisfaction is professional conduct. Patients develop an initial perception about the provider by looking at how they conduct themselves.<sup>15</sup> This may include the healthcare professional being caring and respectful. Studies suggest the importance of attitude during the provision of information. Further, good communication skills included the ability to listen attentively without interruption and giving the other person a chance to speak.<sup>16</sup> These expected communication and conduct attributes are seen to be in line with the South African "Batho Pele" principles, specifically the Batho Pele notion of courtesy.<sup>17</sup>

The literature and views described above are supported by our findings where professionalism and communicating a caring attitude was especially valued and expected by our participants with a number indicating these



aspects had a significant impact on how they perceive their EMS.

### Feedback and Education

Our participants felt that it was important [for the community] to receive feedback from ambulance crews on the progress and condition of the patient including the anticipated patient transport pathway. There was an expectation that ambulance crews would tell them exactly where the patient might end up in the healthcare system. Such information was seen as important as it would assist the community in tracking members who are transported in the absence of a chaperone. Whilst these expectations are acknowledged, considerations of patient confidentiality and privacy means that the degree of information communicated around the incident and treatment pathway that is shared with community would differ significantly from that communicated to the patient themselves. From a patient specific perspective, literature supports the importance of ongoing communication and involvement of the patient in decisions relating to their care.<sup>18</sup>

Aside from their primary role in providing care to the ill and injured, certain participants felt that ambulance crews should also provide feedback and education as to the role of community members in providing first responder care including their activation and use of EMS. Certain participants even expected to be taught about medico-legal issues that may affect their efforts to assist patients prior to the arrival of the ambulance.

The important role that community members as first responders can play in the management of emergency care incidents is well documented and researched. In their article about the access to Out-of-Hospital Emergency Care (OHEC) in Africa, Stein mentions Tier-1 (first responder/community-based) and OHEC systems, where the first line of care is from trained community members that are readily available to assist.<sup>19</sup> During the provision of care, community responders can determine the severity of the emergency and decide if there is a need for an ambulance. This subsequently optimises healthcare resources as ambulances are less likely to be summoned for any and every healthcare need. We argue that such training and systems could be relevant to the context of our participants as they have expressed an interest and expectation for this type of healthcare education.

### CONCLUSION

Community members in Soweto, South Africa have an expectation that ambulances should arrive rapidly when summoned. Those responding should be professional, caring, and able to deliver a high level of care. The community expect feedback to be provided about the incident and exactly how the EMS will be managing the case. The above expectations are seen to be reasonable and speak to a number of criteria used to measure EMS efficiency globally. Further research should be conducted to quantify the extent to which EMS services are delivering on the above expectations.

### LIMITATIONS

The authors acknowledged that the study took place in a single setting in Johannesburg. It may well be the case that other communities in other regions may have different expectations of their EMS.

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