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# Operation Of Mobile Emergency Units: Quilombolas' Perception

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## Review Article

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**Keywords:** Emergency medical services, Ambulances, Group with ancestral African continent, Demand for health services.

**Abbreviations:** APH: Pre-Hospital Care; GM: Minister's Office; SAMU: Mobile Emergency Service; IC: Informed Consent and Informed; UFBA: Federal University of Bahia; E: Interview; UR: Registration Unit; SUS: Health System

**ABSTRACT**

**Background:** The existence of emergency mobile services is vital, especially in places where there are no fixed urgency/emergency services, such as quilombo communities.

**Objective:** To know the perception of quilombo community users on the functioning of ambulanchas (high speed boats working as ambulances).

**Method:** A descriptive study with a qualitative approach, developed in a quilombola community of the state of Bahia, Brazil, with 12 participants. Data were collected through semi-structured interviews from December 2013 to June 2014. It was used thematic analysis to process the information.

**Results:** In general, the quilombo population is unaware of the drive mechanism of ambulanchas and/or its existence and there are aspects that interfere with the operation of this service.

**Conclusion:** According to the perception of the community, the service has weaknesses and shortcomings. The application of the Emergency Care Policy by city managers is required and also the disclosure of the service, in order to promote equity.

## BACKGROUND

The APH (Pre-Hospital Care) is a service mode that makes up the National Policy for Emergencies under the Ordinances GM (Cabinet Minister) No. 1,600/2011, GM no. 2026/2011 and GM no. 2049/2011 [1,2]. Occurs outside the hospital environment and is designed to meet conditions aimed at maintaining life [3].

SAMU (Mobile Emergency Service), implemented in Brazil in 2003, is a major component of this policy. It is a mobile pre-hospital emergency service, through which the user requests assistance via telephone, through # 192 and has two components: a regulator, which is the Regulation Center and other assistance, which is the staff ambulances [4].

Among the waterway vehicles, ambulancha is equipped vessel to provide assistance in places isolated by sea or river, configuring itself as an invaluable resource, as in many communities there is no urgent/emergency services, like the former quilombo communities. Defined as secular living spaces by descendants of enslaved people, former slaves and free blacks [5], the quilombo communities had their consolidated territories in peripheral regions [6], being geographically isolated from more complex services, such as emergency care .

Among these communities, Praia Grande, locus of this study, is located approximately eight nautical miles (14.8 km) from Salvador. It is the second most populous island community with about 2,500 inhabitants [7] and the only way to access it is through the navigation. The community was selected for the study because of being in a remote location and has no fixed care services to urgencies and emergencies. The conditions of access to urgent and emergency services in maroon communities are still little explored in the literature and there is no research to ambulanchas. Researching these communities only demonstrate

the functioning of basic health units, since, in general, there is no urgency and emergency services in the quilombos, making this new study.

From the above, this study is justified by the need to demonstrate the perception of users about the operation of this service in remote communities and can serve as a basis for their qualification and consequent improvement of access by the population, which makes this relevant thematic point, in scientific and social terms. In this context, the objective is to meet the users' perception of a maroon community about the functioning of ambulanchas on the island, showing aspects that affect the quality of this service.

## DESIGN AND METHOD

Descriptive study of qualitative approach, carried out in a maroon community of Bahia state, in Maré Island, located 14,8 km of capital [8]. It was used as theoretical framework the conceptual foundations of Transcultural Theory of Madeleine Leininger, based on the understanding that the perception of individuals is directly related to the cultural context in which they live. Attended the 12 native searches, listed for convenience. Inclusion criteria were: age less than 18 years old and able to respond to questions. The number of participants was not defined in advance and the interviews until there was repetition of responses and consequent saturation of the data [9].

Data collection took place from December/2013 to June/2014, after approval of the project by the ethics committee of the UFBA (Federal University of Bahia) under the Protocol 420 096 and were considered the principles established by Resolution no. 466/2012 [10], which provides for research with human beings at all stages of the study. It was used as a semi-structured interview technique and as an instrument a script that contained questions concerning knowledge about the existence, operation and operation modes of ambulancha, as well as the perception of service and other questions was formulated in the course of the interviews.

The interviews were conducted individually, in place chosen by the participant, recorded, and took an average of 10 minutes. They were later transcribed. To maintain the anonymity of the participants, the interviews were identified by codes E1 to E12. For data processing we used the thematic analysis technique [11], being defined as UR (Registration Unit) phrase. The UR represents words, statements or themes that are mentioned by participants and as a unity of meaning it is grouped in a category where is identify similarities. Of the UR analysis emerged two analytical categories: "Knowledge of the existence and activation of ambulanchas" and "aspects that affect the quality of ambulanchas services" **(Figure 1).**

Source: Personal collection

**Figure 1:** Partial view of Praia Grande. Praia Grande, Maré Island, Salvador-Ba. August, 2014.

## RESULTS AND DISCUSSION

The study corpus consisted of 12 interviews that led 33 thematic analysis units, which were built two categories, split into eight subcategories. From the categories are presented the perceptions of participants about the issues that affect the functioning of ambulanchas and demonstrate knowledge of the community about the existence of water rescue unit.

## KNOWLEDGE OF THE POPULATION ABOUT THE EXISTENCE AND THE ACTIVATION OF THE AMBULANCHAS

In this category are 12 UR and three subcategories, namely, knowledge of the existence and form of the trigger ambulanchas; aware of the existence, but not the way to trigger the ambulanchas; and ignorance of the existence of ambulanchas.

The use of health services includes all direct or indirect contact with the user and the system is functioning center [12]. So that the resources that are available to the company are used, it is necessary that the population is aware of its existence and the forms used to obtain access. In this context, it was found that only 3 showed participants know the existence of this feature and operation modes, as noted in the following report:

**Do you know what an ambulancha is? What number you call when you need it?**

I know what it is [...] Is 192. (E8) Among the other participants (N=9) was found ignorance, both in availability and in order to trigger the ambulanchas, demonstrating that these people are not-knowing of your use mechanism, as you can see in the following lines:

**Do you know what is an ambulancha? What number you call when you need it?**

Ambulance? [...] No, I do not know what it is. (E11) A ambulancha is a...it's an ambulance, but as a boat having a call of several aid. [...] 190. I think it's...190 (E1). The number to request an ambulancha is the same up to drive ambulances basic and advanced support. The plants are triggered by the phone number 192 and from the applicant reports; the medical regulator assigns the appropriate resources for each service [13]. Because it is a population that lives in a remote location and has no fixed urgency and emergency service, you should know what tools are available, given that situations requiring emergency care can happen at any time and place, necessitating rapid intervention in order to prevent further framework and consequent death.

Was highlighted in the reports, the 190 Military Police number as the most up to trigger the ambulanchas. Although a number of aid that will allow the individual access to the correct number, it is inferred that the provision of assistance is faster as earlier the contact, since the SAMU needs trigger resources for help. In emergency situations, the time factor is crucial for decision-making by modulating the type of demand and the service to be consumed [14].

This points to the need for democratization of knowledge and access to information, so that it disclosed the existence of the service, making it known and allowing community access when needed. Information and knowledge are essential public goods and the lack of access to these determines the health inequities [15], which shows that the information necessary to meet the people must reach the community in order to ensure the fulfillment of demands health presented.

## ASPECTS THAT AFFECT THE QUALITY OF SERVICE AMBULANCHAS

This category represents 21 of UR and consists of 5 subcategories, including: lack of response to the calls of the Maroons; delay of ambulancha to reach the island; protocol to request an ambulancha; existence of hazing for the SAMU; and disbelief of the population in ambulanchas service. These subcategories reveal which aspects that affect the quality of ambulanchas service in the community under study, from the point of view of the interviewees.

Knowledge of these aspects is necessary because as pointed out in the literature [16,17] is crucial to know how users evaluate the service to rethink practices or intervene in the form of organization of services for its improvement, as the prospect of user is essential to the improvement of health policies. The lack of response to calls from the community excelled in 6 UR and is evidenced in the speech below:

**Do you usually call the ambulanchas here in island?**

[...] Usually call here, but not from... (E12). The lack of response results in the inability to use the service and therefore the resolution of the demands presented, which characterized the service as poor, bringing the results of this study with those of [18]. Failure to obtain response by the population of the island upon request ambulancha hurts the principles of SUS (National Health System), highlighting the universality and equity. The principle of universality implies the State's responsibility to ensure that everyone has access to care [19] and has a strong link with equity, which aims to reduce inequalities [18] considering that people have different epidemiological priorities, being characterized as a parameter in availability of health services. In both principles it is implied the idea of accessibility, which is related to the search process and obtain the assistance [20].

From the perspective of sanitary-politicista access model is configured as an individual right and guaranteed collective constitutionally, and requires an adjustment between the needs of users, the services and the resources used, being an essential element to satisfy the needs of those seeking the health services [21-23]. According to the statements, it can be inferred that access to emergency services and emergency from ambulanchas is hampered due to lack of response to the user. In this context, it is essential that the SAMU respond to the calls of the Maroons to the attention of policy to the emergency room, with respect to the operation of ambulanchas this community is, in fact, effective and congruent to the needs of people living geographically isolated.

The difficulty of using emergency services, either by geographical or structural issues, is not particular to the community

under study, has also been highlighted in other studies [17], which points to the need to improve and expand access to these services both in remote communities such as those located in inner cities. Besides the lack of response, she stood in the accounts of the participants to take the ambulancha to reach the island, which consisted in 3 UR:

**Why don't you call the ambulanchas?**

[...] We do not know how long it will take to get there and as I know you already have a certain boat, a certain time to take I already prefer catch the boat [in the community]. (E5) This aspect is highlighted as one of the negative factors of service and reason of dissatisfaction of users, corroborating other studies [17,18,24] on the perception of the emergency service user. In case of accident, the average time of arrival of terrestrial emergency services to the location of the incident should be 6 to 8 minutes. Because the island is geographically isolated, this time is certainly higher; however, in cases of trauma, it takes more than an hour beyond the Golden Hour Call [25], which is the first time after the occurrence of aggravation in which the precocity of the service determines the chances of patient survival.

In this perspective, the time between the completion of the call and the arrival of ambulancha to be brief, because the delay is characterized as an aggravating factor of the picture, and may also be the time to the occurrence of death, as can be seen in one of the reports, in which the deponent reveals the occurrence of death while awaiting ambulancha:

**What happened when you call the ambulancha?**

[...] My father himself, he fell ill even then...It took so much that he ended up dying, dying. (E3). In the study [18] death also excelled, being highlighted as the final result of the difficulties in achieving the desired service. Thus, it is essential for the immediate and effective assistance guarantee in order to avoid the consequences of long service or lack thereof, since the faster the greater role the possibility of survival of individuals at risk of death. Because of the delay was expressed by participants in this study that the approach adopted is shipping by own means to the mainland, where patients are driven to a fixed service to get assistance: When he called [to ambulancha] did not come.

Many cases happen here when he called the SAMU not come. Then what...The improvement of people were getting there in São Tomé [Terminal located in Salvador and distant from the community about 14 km] charter the boat gets here in Sao Tome, afford a car to take to the hospital. (E8) The geographic aspects that hinder the user access making them around to be met are indicated by Pontes et al. [18] and compacted in our study as one of the difficulties and dissatisfaction reason access to emergency services, as the Maroons need go to the terminal, instead of water help to reach them. With this finding, this research approaches the results of Dubeux et al. [17] on itinerary and obstacles to access to urgent and emergency services, which pointed out that the displacement of the users was predominantly funded by the individual. In a study developed in Rio de Janeiro, it was found that users need to seek care away from their residence, as in the locality where they live the service is not offered, resulting in pilgrimage, discomfort, displacement and expenses [18].

In this sense, this study draws attention to the need for providing quality services and which operate to be effective in meeting the needs of this and also other quilombo communities located in remote locations, to ensure access to health care for these people and equality with regard to assistance to those who live on the continent. Among the aspects that affect the quality of ambulanchas services, it was cited (1 UR) the occurrence of hazing, as evidenced in the following statement:

**Any time the SAMU have been here on the island?**

[...] There was a time that was having SAMU, but only that they were going trot there was going trot and there is no more. (E9) The realization of hazing is configured as a difficulty for the effective operation of the emergency subsystem and this aspect also emerged in a study [26] in which it was noted that in Brasilia hazing account for more than half of the calls made to the SAMU. The making of false calls to a service where speed, efficiency and quality of actions are the biggest differences is responsible for damage to the community [27], generating losses for the entire population, because the phone lines are busy, are expended resources and when ambulances and ambulanchas are displaced people who, in fact, need care are affected. The existence of hazing even explains the fact that the actuation of an ambulancha be characterized by the study population as a "protocol" which excelled in 3 RH and can be illustrated in the following lines:

**What are the problems, in your opinion, with the ambulanchas?**

[...] Is a protocol ... (E1) [...]? Takes a long, asks many questions and sometimes the person does not're not head-to answer both. I think it should be more like this...Access should be easier, they give a lot of trouble, they put much hindrance to arrive. (E12) This "protocol" in the call is related to the need of attendant detect the veracity of the call, bypassing the occurrence of misleading links. These facts demonstrate the need for awareness and change of attitude on the part of the population, since they are aware that the trot a causal factor of the existing problems. As a result of the operation mode ambulanchas service in maroon community under study, it was identified discredit the population about the functioning of the service. This was the subcategory with the highest number of UR (8) and checked disrepute may result from lack of response and the delay of help in getting to the island:

**Why don't you call the ambulancha?**

If waiting for the ambulance here dies (E2) These data allow us to think, as in other studies [16,24], that the waiting time

to receive care is key to higher user satisfaction and the delay contributed to the decline in credibility. In another study [23] has highlighted the lack of service is one of the criteria for negative evaluation of the service and have denied service generates distrust and disbelief. The image that the user makes of health services is related to accessibility, reliability and solvability of the service sought [28]. O'Dwyer and Mattos [29] glimpse at SAMU a new opportunity to mismatch of words between the needs of the population and the availability of health actions.

We agree with this statement, but we understand that despite the undeniable benefits of SAMU, there are still many challenges with regard to the excellence of this service, especially as regards the functioning of ambulanchas in communities like Grande Beach. Under the aegis of universality and equity of access they need to be investments in this service, increasing the number of ambulanchas and ensuring the functioning of existing ones, so that they are able to meet the demands undertaken by the community. Moreover, it is necessary that answers can be provided to the user when the search service and the waiting time to receive the care is diminished, causing patient satisfaction, which is considered a measure of quality of care [20], is achieved.

## FINAL CONSIDERATIONS

Identified a deficit in knowledge of ambulanchas service, either with regard to their existence or their order request. The perception of user-service highlighted aspects that affect the quality of care, have emerged the lack of response to the calls, the delay in getting to the islanders, the application process of ambulanchas - which was characterized as an agreement between the participants in this research - and the occurrence of hazing. Taken together, these factors have led the population to discredit the service, as evidenced from the reports.

The findings of this research show that there are difficulties on the part of the maroon community of Praia Grande on access ambulanchas service, which denotes lack of effectiveness concerning its proposal, injuring the principles of universality and equity of SUS. By revealing the perception of users about the functioning of ambulanchas, are perceived weaknesses of this service related to issues of access and quick service. In this context, it is necessary the implementation of Care Policy for Emergency by municipal administrators, in order to meet the demands presented by the maroon community, and ensure these people who do not have emergency services and emergency on the island, the first professional care during transport and the continuity of these on the continent.

The main limitation of this study is the lack of studies that deal with the ambulanchas operating in remote communities, allowing a direct comparison with our findings. Research on this topic is needed, what makes us suggest conducting studies exploring the accessibility to ambulanchas services for islanders and coastal communities.

It was noted the need for disclosure of the existence of ambulanchas as well as its operation modes so that people can know whom to report when in urgency and emergency situation. Moreover, it is necessary that the Maroons get answers to their calls and the time spent by ambulanchas to the island is reduced in order to improve the service and thereby enhance the credibility of users.

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## REFERENCES

1. Vieira CMS and Mussi FC. The implementation of mobile service project of urgency in Salvador/Bahia: Reality and challenges. Revista Escola de Enfermagem da USP. 2008;42:793-797.
2. Lancini AB, et al. O processo de trabalho das equipes do Serviço de Atendimento Móvel de Urgência (SAMU). 2014;18.
3. Giaretta V, et al. Perfil das ocorrências em um serviço de atendimento móvel de urgência. Revista Baiana de Enfermagem. 2012;26:478-487.
4. O'Dwyer G and Mattos RA. Integral care and attention to emergency: the mobile emergency care service in the state of Rio de Janeiro. Saúde e Sociedade. 2013;22:199-210.
5. Silva JAN. Condições sanitárias e de saúde em Caiana dos Crioulos, uma comunidade quilombola do estado da Paraíba. Saúde e Sociedade. 2007;16:111-124.
6. Silva DO, et al. A rede de causalidade da insegurança alimentar e nutricional de comunidades quilombolas com a construção da rodovia BR-163, Pará, Brasil. Revista de Nutrição. 2008;21:83-97.
7. Machado MSM and Almeida RO. Fontes e poços de água da Ilha de Maré, Salvador-BA: aspectos históricos, geográficos, socioculturais e físico–químicos. Revista Candombá – Revista Virtual [Internet]. 2008;4:35.

8. Rodrigues M. Breves considerações sobre candomblé na Ilha de Maré-Salvador: Entre fios de memória. C@lea – Cadernos de Aula do LEA. 2012;1:61-72.
9. Polit DF and Hungler BP. Fundamentos de pesquisa em enfermagem. Porto Alegre: Artes Médicas. 1995.
10. Brasil. Resolução nº 466, de 12 de dezembro de 2012. Sobre pesquisas envolvendo seres humanos. Diário Oficial da União. 2013.
11. Bardin L. Análise de conteúdo. Lisboa: Edições. 2010;70:281.
12. Travassos C and Martins M. Uma revisão sobre os conceitos de acesso e utilização de serviços de saúde. Cadernos de Saúde Pública. 2004;20:190-198.
13. Machado CV, et al. Serviço de atendimento móvel de urgência: análise da política brasileira. Revista de Saúde Pública 2011;45:519-528.
14. Abreu KP,et al. Percepções de urgência para usuários e motivos de utilização do serviço de atendimento pré-hospitalar móvel. Revista Gaúcha de Enfermagem. 2012;33:146-152.
15. Pellegrini Filho A. Pesquisa em saúde, política de saúde e equidade na América Latina. Ciência e Saúde Coletiva. 2004;9:339-350.
16. Schwartz TD, et al. Estratégia Saúde da Família: Avaliando o acesso ao SUS a partir da percepção dos usuários da Unidade de Saúde de Resistência, na região de São Pedro, no município de Vitória (ES). Ciência e Saúde Coletiva 2010;15:2145-2154.
17. Dubeux LS, et al. Acesso a hospitais regionais de urgência e emergência: Abordagem aos usuários para avaliação do itinerário e dos obstáculos aos serviços de saúde. Physis Revista de Saúde Coletiva. 2013;23:345-369.
18. Pontes APM, et al. O princípio de universalidade do acesso aos serviços de saúde: o que pensam os usuários? Escola Anna Nery Revista Enfermagem. 2009;13:500-507.
19. Fortes PAC. Bioeticistas brasileiros e os princípios da universalidade e da integralidade no SUS. Revista de Saúde Pública. 2009;43:1054-1058.
20. Donabedian A. The quality of care. How can it be assessed? JAMA [Internet]. 1988;260:266.
21. Jesus WLA and Assis MMA. Revisão sistemática sobre o conceito de acesso nos serviços de saúde: Contribuições do planejamento. Ciência e Saúde Coletiva. 2010;15:161-170.
22. Donabedian A. Aspects of medical care administration. Boston: Harvard University Press. 1973.
23. Souza ACC, Moreira TMM, Silva MRF, Almeida PC. Acesso ao serviço de emergência pelos usuários com crise hipertensiva em um hospital de Fortaleza, CE, Brasil. Revista Brasileira de Enfermagem. 2009;62:535-539.
24. Núnez-Rocha GM, et al. Tiempos de espera? El triage. Uma alternativa en el departamento de emergências. Revista de Investigación Clínica. 2004;56:314-20.
25. Takeda E. Riscos ocupacionais, acidentes do trabalho, e morbidade entre motoristas de uma central de ambulâncias do estado de São Paulo. M.Sc. Thesis, School of Nursing, University of São Paulo, São Paulo, Brazil. 2002.
26. Minayo MCS and Deslandes SF. Análise da implantação do sistema de atendimento pré-hospitalar móvel em cinco capitais brasileiras. Cadernos de Saúde Pública. 2008;24:1877-1886.
27. Soares MC and Magalhães CM. Promoção da saúde nas escolas: Estudo de contribuição do SAMU com as ações propostas pelas escolas promotoras da saúde. Sinapse Múltipla. 2012;1:81-93.
28. Oliveira LH, et al. Cidadãos peregrinos: os "usuários" do SUS e os significados de sua demanda a prontos-socorros e hospitais no contexto de um processo de reorientação do modelo assistencial. Ciência e Saúde Coletiva. 2009;14:1929-1938.
29. O´Dwyer G and Mattos RA. O SAMU, a regulação no Estado do Rio de Janeiro e a integralidade segundo gestores dos três níveis de governo. Physis Revista de Saúde Coletiva. 2012;22:141-160.