

Research Article

Fires and Psychotrauma: Experience of Psychological Care for Victims of the Petersen Market Fire in Dakar (Senegal)

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Abstract

Background: In Senegal, fires in public markets have become more and more frequent since 2013, sometimes with loss of life. These fires are generally experienced by traders as painful and traumatic. The objectives of our study were to assess the impact of the Petersen market fire on the mental health of the victims and to show the beneficial contributions of immediate and post immediate psychological care.

Methods: The study is cross-sectional and descriptive. It focused on sixteen shopkeepers, owners, tenants and employees of the shops ravaged by the fire. The study took place in the Plateau Health District on 23 March 2019 following a collective debriefing session.

Results: Among the victims, the prevalence of psychotraumatic symptoms was 50%, all categories of physical and psychological signs combined. Signs of revivification and neurovegetative activation (insomnia, anorexia, amnesia, irritability) were found in proportions of 12.5% and 87.5% respectively. All victims received a debriefing session. Some subjects continue their treatment in the form of direct individual psychotherapy and at a distance by telephone.

Conclusion: The phenomenon of fire in public markets in Senegal has become a matter of concern for the country's political and administrative leaders. However, the victims often do not receive sufficient attention from those involved, especially in the absence of human losses. Immediate psychological care is necessary as it allows for early diagnosis and has crucial effects on the future of those involved.

Keywords: Psychotrauma; Fire; Petersen; Debriefing; Follow-up

Background

Classified as accidental disasters [1], fires are events that cause psychological trauma and serious complications for some victims if they are not treated early on. The phenomenon of fires has existed since time immemorial and in all corners of the world, but since 2013, Senegal has recorded a significant series of fires in public markets, with reports of significant material damage each time [2]. Some sources count nearly thirty cases of market fires each year [3].

On Friday 15 March 2019, a fire broke out in the Petersen market, located in the heart of the Senegalese capital, where several goods and canteens were consumed by fire without, however, any loss of human life. These phenomena of market fires have become a matter of concern for the country's political and administrative leaders. However, not enough emphasis is placed on the psychotrauma clinic and on the importance of immediate and post-immediate psychological care for victims. Fires or any other traumatic event is characterized by its suddenness, violence, intensity and the impossibility for the people or structures involved to resist it [4,5]. Thus, Freud used the concept of 'trauma', which he described as a violent shock that surprises the person who was not expecting it, and which is accompanied by fear, a collapse of the senses and a disruption of beliefs [6]. In these types

of situations, even in the absence of loss of life, rapid intervention is necessary [7]. This immediate psychological care allows for an early diagnosis and has crucial effects on the future of the subjects involved. With this in mind, a psychosocial intervention team was mobilized by the Ministry of Health and Social Action (MSAS) to assist these victims.

The present study aims to evaluate the impact of the Petersen market fire on the mental health of the victims and to show the beneficial contributions of immediate and post-immediate psychological care in this type of psychological trauma linked to these events.

Methodology

The study took place at the Plateau health center in Dakar. This health facility is one of the reference centers of the Dakar-South health district (Figure 1). It is under the responsibility of a head doctor supported by a multidisciplinary team of doctors, nurses, midwives, administrative staff and community health workers. The Plateau de Dakar health center is the referral health facility for the populations of the Petersen market. Following an activity to identify the victims who lost all their property during the fire, we conducted a cross-sectional and descriptive study. The study population consisted of

16 shopkeepers, owners, tenants and employees of the shops ravaged by the fire. The data were collected during the debriefing sessions (Figure 2) on the basis of a pre-established and nationally validated form, called the “individual victim medical form”. This form explores several variables, including socio-demographic characteristics (age, sex, marital status, number of years at work), clinical characteristics (symptoms developed) and therapeutic characteristics (type of treatment and evolution). All the data obtained were entered and analyzed using the Sphinx2+ processing software.

Results

The sixteen victims were of different origins, of which 56.25% (nine) were Senegalese, 25% (four) were Guinean and 18.75% (three) were of Asian (Chinese) origin. All sixteen victims were men, married with unspecified numbers of children. Their ages ranged from 26 to 40 years with an average age of 31.5 years.

Three quarters of the victims (75%) were having their first traumatic experience. Four of them declared that they were confronted with the trauma of the last fire in 2013 at the “Sandaga” market in Dakar. No personal psychiatric history was reported by the victims. Clinically, half of the victims, eight (50%), showed symptoms of acute post-traumatic stress. Of the symptomatic victims, seven (87.5%) had insomnia due to early waking and falling asleep. Three (37.5%) victims reported eating disorders such as anorexia. Other psychological symptoms were found in the form of reliving in one person, nightmares related to the fire (12.5%), anxious hyper-vigilance with difficulties in concentrating on activities of daily life with forgetfulness (50%) and mood disorders (sadness, irritability, disgust with work) in 3 people, i.e. 37.5% of symptomatic victims.

In addition, we found several feelings shared by the victims, such as discouragement, demands and revolt in 62.5%, 75% and 87.5% respectively. The following examples of accounts collected from victims illustrate this: “I was supposed to take my child to school, but I forgot him”, “my wife told me not to take the car, but I couldn’t hear or listen to anyone”, “I couldn’t feel my feet on the pedals of the car”, “I wore someone else’s trousers to get here without realizing it”. “I lost hope when I saw the logistics of the fire brigade”, “they wanted everything to burn down” or “it’s a plot to destroy our shops”.

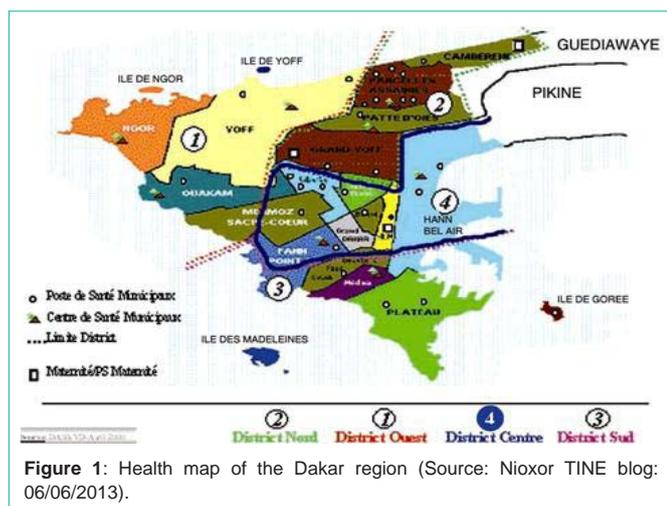


Figure 2: Collective debriefing session with the victims of the Petersen market fire in Dakar (Senegal), Dakar 23/03/2019.

The victims were given therapeutic treatment using the collective debriefing technique. During this activity, the subjects went back over their experiences of the event and explained their needs and expectations in terms of care. Five of the victims, i.e. 31.25% of all subjects, who were very affected with several symptoms of acute post-traumatic stress, benefited from individual psychotherapeutic interviews and remote telephone assistance. Two of these five victims received chemotherapy based on hydroxyzine 25mg for a short period of 15 days (1 tablet in the morning and evening), given the anxiety concerns and physical disorders expressed by the subjects. At the end of the debriefings, the participants, who were victims, thanked us for allowing them to express themselves. One spoke up and said: “I am not used to speaking in front of everyone, especially about these kinds of things, but this was useful”. All the participants welcomed the relief provided by the scheme and asked for more sessions.

Discussion

One of the limitations of this study is its cross-sectional nature. This does not allow for a correlation as would be possible in a longitudinal cohort study. Another important limitation is the relatively small size of the study population. However, this work will have the merit of highlighting the basis for reflection on a subject that is at the heart of current events. A subject that is increasingly addressed in these situations: the important part of immediate interventions in the management of traumatized psychos. It should be noted that these questions have begun to be clarified in Senegal with the setting up of a mobile psychosocial intervention and support team (EMIS) by the Health Emergency Operations Center (COUS) of the MSAS for about five years [8].

The clinical manifestations of psychic trauma are polymorphous and non-specific and vary according to the traumatic event, the proximity of the subject to the event and the number of deaths [9]. Following a disaster, psychotraumatic symptoms vary from reversible reactionary disorders to psychotic disorders with a delusional syndrome [7]. In our study, half (50%) of the victims presented symptoms of acute post-traumatic stress. These clinical manifestations illustrate the diversity of presentation possible in victims who develop post-traumatic stress disorder. There are few studies on mass psychological trauma in African countries, especially in French-speaking Africa [10]. Existing data are carried out in

developed countries, which are mostly retrospective and are based on the diagnostic criteria of the Diagnostic and Statistical Manual of Mental Disorders, 4th version (DSM IV) [11]. Despite this lack of data in Africa, the few surveys on psychotraumatic disorders show variable prevalence of 60% to 80% from one study to another [12]. Thus, our results confirm certain data that underline the high prevalence of post-traumatic disorders in people confronted with a potentially traumatic event that is not treated early on [13]. Neurovegetative activation signs such as insomnia, anorexia, amnesia and irritability were found in 87.5% of cases. Our results correlate with several data in the literature [4,10,13,14]. Our results show the importance of the psychological repercussions of fires in public markets that are not treated early on and should encourage the national health and political authorities to work towards holistic treatment of the victims. In these situations, the request for psychosocial assistance must be systematically integrated into the immediate care arrangements with or without loss of life.

We cannot close this page on the clinic without talking about resilience and victimization. In our study, half of the subjects reported that they had not developed any symptoms. These people were able to recount the event in a bearable way. However, the development of resilience in these victims does not necessarily mean an absence of suffering. Resilience is the capacity of a person to free himself from the grip of trauma, to annihilate psychological suffering and to recover a healthy psychological state. In resilience, the reality of the loss of the object is not denied by the person but put aside [15]. It lasts for a period of time and needs to be reinforced by psychosocial workers during subsequent assessments. Thus, in the case of the victims of the Petersen fire, protective factors can play a decisive role in resilience. We noted the importance of support from relatives and mutual help, as the victims talk to each other regularly on the telephone. During the group debriefing session, we noticed that some victims had feelings of discouragement, guilt and vindication, which for several authors are factors in over-victimization [5, 10, 16, and 17]. The psychotherapeutic intervention, which took place nine days after the tragedy, identified persistent psychic and psychosomatic symptoms secondary to the traumatic event. The intervention team adopted a collective debriefing. This practice in psychological trauma relies on responders who are skilled in the listening technique and who are easily deployed to the scene of the tragedy within 24 to 72 hours [11].

Debriefing consists of helping victims to metabolize the event they have experienced in order to quickly return to 'normal' daily functioning [18]. It invites victims to talk about the event, to establish contact and to limit the morbidity of the psychological trauma [19]. For our victims, the session allowed these shopkeepers to verbalize their suffering and to know that they were not the only ones to experience these signs. It also allowed an exchange in a space that allows verbalization without any danger (the health center, their health care). These group interviews also made it possible to inform about the possible evolutionary modalities in a prevention approach [20]. Some of the victims in our study population received drug therapy because of a high level of anxiety and anguish. The use of medication in these immediate and post-immediate phases has been the subject of much controversy in the medical literature. However, for the prevention of post-traumatic stress disorder, it is sometimes

important to rely, in addition to psychotherapeutic approaches, on drugs such as antidepressants or anxiolytics in the early stages after the traumatic event, whose effectiveness is attested by solid neurobiological arguments, as Ducrocq and Vaiva [21] have shown.

In these types of tragedies and mass traumas, early intervention is of great importance to avoid the permanent installation of the traumatic image in the individual's psyche [6]. A weak point is the delay in our intervention, which was nine days after the event, i.e. late in relation to the recommendations that call for immediate psychosocial assistance within 24 hours of the event [10,16,22,23].

Conclusion

Fires in public markets in Senegal have become a matter of concern for the country's authorities. However, the victims do not always receive sufficient attention from those involved. The latter seem to be mainly concerned with the loss of human life. These repeated fires in public markets on the national territory are a source of suffering for the trader victims. Immediate psychological care is therefore necessary, as it allows for early diagnosis and has significant positive effects on the future of those involved. In Senegal, since 2016, a mobile psychosocial intervention and support team has been set up by the MSAS under the coordination of the Centre for Emergency Health Operations (COUS). This team is multidisciplinary and multisector with elaborated and validated procedures whose application remains to be improved. We therefore recommend regular evaluation of interventions and simulation exercises in order to perfect emergency response procedures during disasters in Senegal.

Declaration

Ethics and confidentiality: All participants gave their informed consent before the start of the enrolment.

Authors' contributions: All the authors, who are part of the Mobile Intervention and Support Team (EMIS) in Senegal, contributed to the care activity described in the study and to the design. They approved the final document.

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