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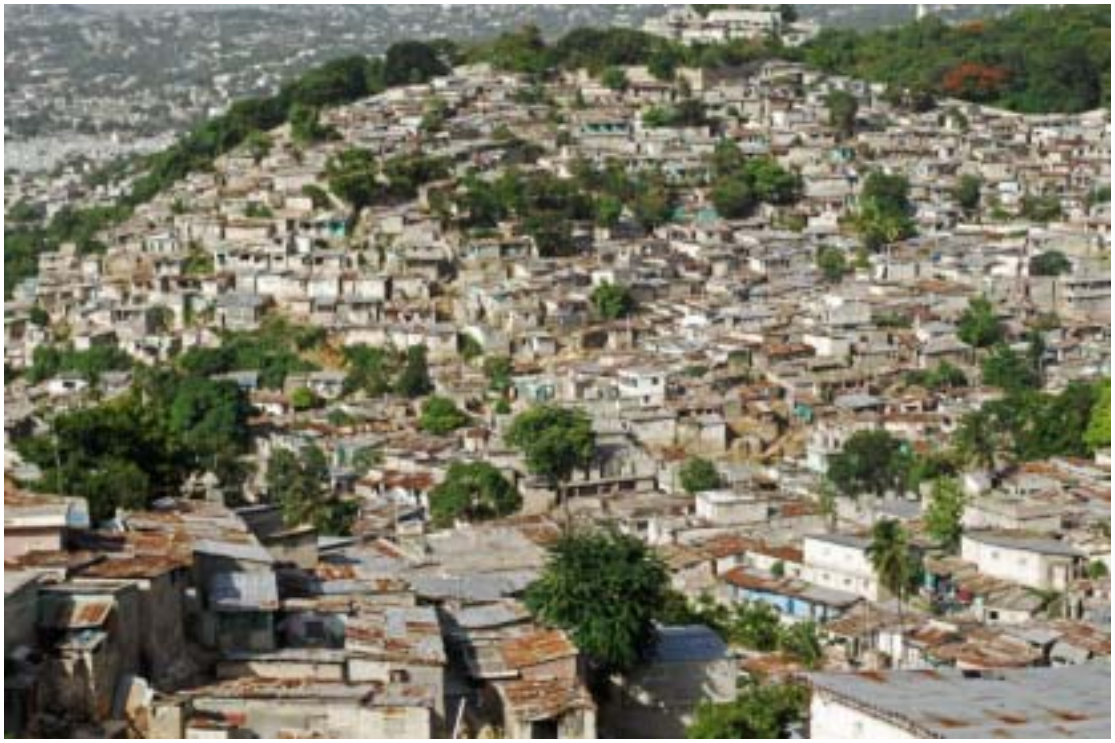
Violence, Mortality and Access to health care in Martissant, Port-au-Prince, Haiti



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MEDECINS SANS FRONTIERES

Results of an epidemiological survey
March 2008

This document was produced by Médecins Sans Frontières. It summarises the main results of the epidemiological survey carried out in Martissant - Port-au-Prince, Haiti - in 2007. The complete results of the survey are also available.

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Médecins Sans Frontières (MSF)

MSF is an international humanitarian aid organisation providing emergency medical assistance to populations in distress in more than 60 countries throughout the world.

MSF in Haiti

MSF has been present in Haiti since 1991, running several programmes offering support to state-run health facilities and responding to emergencies (cyclones, floods). MSF's activities are currently concentrated in the capital, Port-au-Prince, providing a response to emergencies mainly linked to the violence affecting the city over the last few years. MSF offers specialised health care for trauma victims – at the La Trinité hospital and in the rehabilitation centre for trauma victims (Pacot) – and for women victims of sexual violence. MSF also answers to obstetric emergencies in the Jude Anne hospital, in the Delmas district. In the poorer district of Martissant, MSF offers the population basic and emergency health care. All health care in MSF facilities is offered to patients free of charge.

Context[1]

Haiti, with its 8.5 million inhabitants, is one of the poorest countries in the Northern hemisphere. More than half its population lives below the extreme poverty threshold with less than 1$ per day per inhabitant. The violence perpetrated in the capital and throughout the country, already "initiated" some years ago, increased considerably in 2004 following the departure of President Aristide. French and American forces mandated by the United Nations arrived in the capital to maintain security. These forces were replaced in June 2004 by UN peace-keeping forces (the Minustah[2]). As from October 2004, clashes between the police and partisans of President Aristide erupted in several poorer districts of the capital. The year 2005 was marked by violence and insecurity, which affected several poorer districts in Port-au-Prince and other towns in the country. The armed groups based in the poorer districts of Port-au-Prince were accused of involvement in the rising criminality, particularly a notable number of kidnappings.

The violence and kidnappings increased until elections were held in February 2006, leading to a period of respite. The elections, held in February 2006, brought René Préval to power. The calm surrounding the electoral period gave rise to a certain optimism regarding improvements in the security situation. Yet the violence continued, with incidents flaring up on several occasions in 2006. Towards the end of the year 2006, the armed groups' activities increased, constituting a threat of destabilisation to the government. In 2006, violent fighting broke out between the UN forces and the armed groups, particularly in the Cité Soleil district, considered to be the stronghold of the Chimères, an armed militia operating on behalf of the ex-President Aristide. Throughout this period, numerous civilians fell victim to the fighting. From the end of 2006 to February 2007, the Minustah intensified its operations in Cité Soleil: several group leaders were killed or arrested. The groups' activities diminished, resulting in a drop in criminal violence that still holds today and an end to the population's isolation, at least in Cité Soleil. In other districts in Port-au-Prince, the violence continues...

Martissant, violence in the heart of the town

Martissant is a densely populated district, with more than 300,000 inhabitants, situated to the South of Port-au-Prince. The demographic explosion in the capital in the '90s led to a rapid increase in the population and a completely anarchic settlement. At the end of the 80's, certain groups defending the civilian populations in the districts gradually transformed themselves into armed groups.

These groups were supported by different parties for their own political ends. In 2004, following the departure of President Aristide, the violence between the groups intensified. A cycle of violence set in, generating acts of revenge and reprisals between the protagonists and holding the population in its relentless grip. In 2005 and 2006, the killings, the destruction and torching of houses caused numerous wounded and deaths amongst civilians, and generated population displacements. This prevailing climate of insecurity led to the

[1] The data presented in the description of the context is taken from the Haiti Country Profile 2006 and Country Report 2007, published by The Economist Intelligence Unit.

[2] The Minustah is the United Nations mission for stabilising Haiti. Please refer to the website www.minustah.org

population's isolation – particularly in the remotest parts of the district – limiting access to all basic social services. No Ministry of Health facilities exist in the area. Two health facilities – one private and one semi-private – offer primary health care with a limited case management capacity and cover uniquely the lowest part of the area (Malibu and Saint Michel health centres).

MSF in Martissant

Due to the prevailing situation of violence in the Martissant area and the absence of available health services for the population, MSF opened an emergency centre in December 2006. The objective of the "Martissant 25" centre is to stabilise and refer patients presenting an emergency medical situation (trauma with violent and non-violent origins and obstetric and surgical emergencies). In July 2007, MSF also set up mobile clinics offering primary health care to the different districts of the Martissant area.

The MSF teams wanted to explore the districts themselves and obtain more information at family level in order to better understand the impact of violence on the population's health. Thus, in August 2007, a survey was carried out amongst 1,800 families spread across the different districts in Martissant. The families were asked questions on mortality, violence and illness.

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Survey and method

An epidemiological survey on **mortality, violence and access to health care** was carried out between **31st July and 7th August 2007**.

The general objective was to **assess the impact of violence** on the **population's health** in the different districts of **Martissant[3], in Port-au-Prince.**

The survey was carried out by 20 interviewers divided into pairs and headed up by 2 supervisors. They were all recruited and trained by MSF. In total, 7 interviewers were women and 13 were men.

The specific objectives were as follows:

Mortality:

- Measuring the mortality in Martissant from **1st January 2006** up until the date of the survey (average retrospective period: 601 days).
- Measuring the proportion of mortality linked to violence.

Violence[4]:

- Measuring the level of violence within the population from **1st January 2006** up until the date of the survey (average retrospective period: 601 days).
- Describing the types of violence perpetrated on the population.
- Describing the impact of the violence on the population's health.

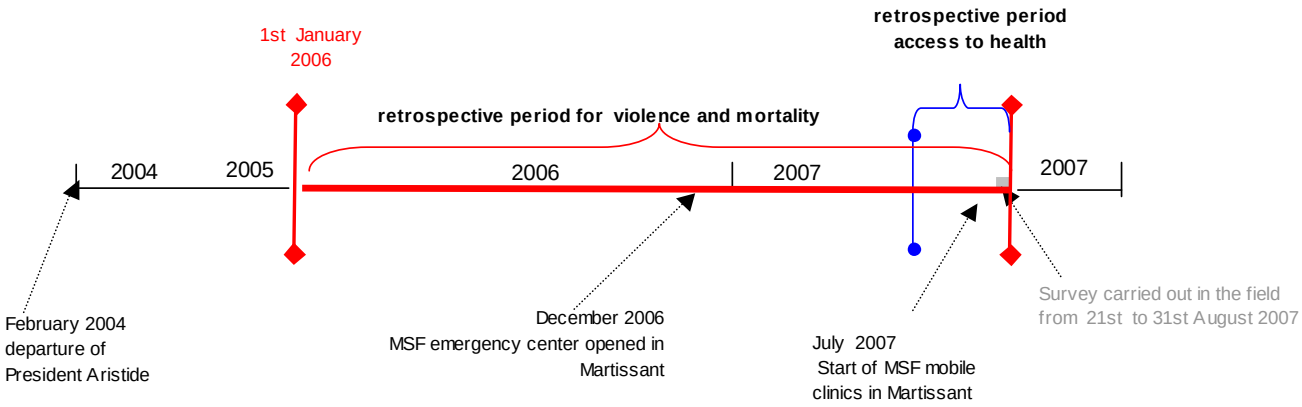
Access to health care:

- Evaluating the situation in terms of access to health care for Martissant's population by referring to the last episode of illness occurring in the families after 1st May 2007 (average retrospective period : 117 days).

[3] See annex: map presenting the demarcations for the area under survey, which represents a total of 165,000 persons.

[4] In the scope of this survey, violent acts against people were considered to be all acts of physical aggression and threats and intimidations carried out against a third party or a group. Aggressive acts targeting people's belongings were also noted.

The study covers the period between **1st January 2006** to the survey date for questions referring to **violence and mortality**. For questions on **access to health care**, only the families in which a member fell ill after **1st May 2007** were questioned.



In total, 1,800 families were questioned using the two-stage cluster sampling method. In order to ensure the proper distribution of the sample throughout the districts, 200 clusters of 9 families were selected. The Martissant area chosen for the study was divided into sections: the 200 clusters were divided between the sections in proportion to the size of the populations living in them. The exact location of the clusters in each sub-section was selected randomly on the map by the survey's coordinators.

The data was analysed using the software programme EPI INFO. The results are presented with a 95% confidence interval (CI).

Main results of the survey

1,800 families were visited between the 21st and 31st August. These families correspond to a total of 9,593 persons.

The Martissant survey was carried out in a context in which violence still forms part of daily life. This environment may have exercised some pressure on the families and limited the information offered to the interviewing teams on certain sensitive subjects linked to the violence.

72 families – less than 4% of the sample – refused to be questioned. These refusals, as well as the interviewers' observations concerning the "difficulties" certain families had responding to questions linked to violence, confirm the prevailing climate of insecurity in Martissant at the time of the survey. The data collected in the framework of the survey is likely to underestimate the violence actually perpetrated on the population.

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Interviews carried out with persons familiar with the Martissant area confirm this risk:

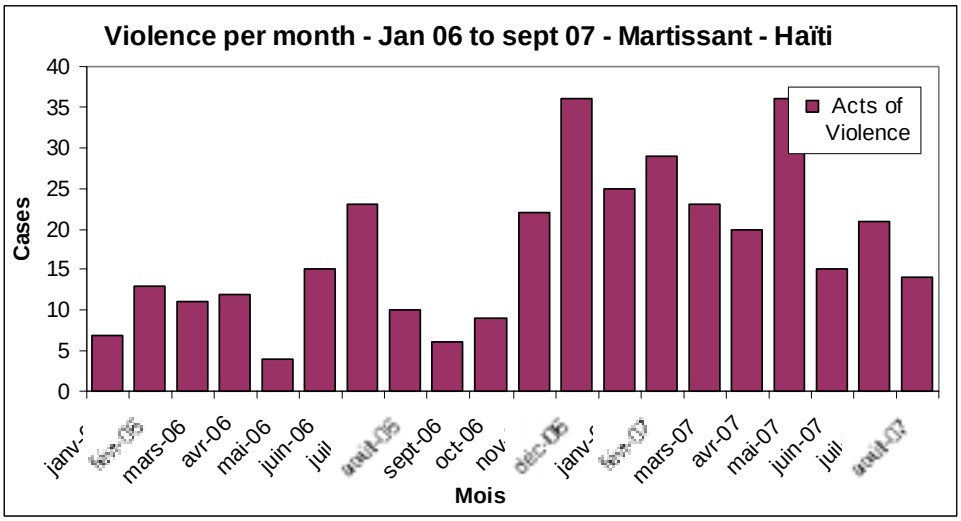
"The Martissant population lives in a state of psychosis. Bandits in the area have the population under their control. There are constraints on communication, people are prevented from saying what they think. There is also an economic side to it: taxes on traders, taxes on people in exchange for protection and gangs' benediction ". Witness account collected in September 2007.

Despite this risk of under-estimation, the data collected reveals that the violence reached high levels. Cases of violence were reported throughout the whole period covered by the survey. Whilst levels of violence vary according to the calendar month, the violence never disappeared.

Certain periods were nonetheless marked by peaks of violence. They correspond to intense fighting between armed groups and led to deaths in the civilian population.

"It was 4h30 in the morning on the 7th July 2006: my brother and I woke up to go to work. Unknown voices started calling people to wake up, saying that people from Tibwa and Decayette had invaded. They started shooting randomly. My brother took a bullet, and so did my father-in-law. I fled for my life, and the same day my house was burnt down. It was a total massacre." Man, witness account collected in Grand Ravine in August 2007.

The results also indicate a tendency for increased violence in 2007. This could reflect a "recall bias", with families remembering events that occurred in 2007 better than those of the previous year, and thus reporting them more.



Another possible interpretation is a transfer of violence from other districts towards the district of Martissant. In February 2007, most of the heads of armed groups were chased out of Cité Soleil. It is possible that a certain number of bandits found refuge in other poorer districts of Port-au-Prince, such as Martissant, and brought with them certain forms of violence.

Mortality

Out of the 1,800 families questioned, 165 cases of death were noted for the period under study. These figures correspond to a **crude mortality rate of 0.3 deaths per 10,000 people per day** - CI [0.2 - 0.3]. **For children under 5, the mortality rate corresponds to 0.2 deaths per 10,000 people per day** - CI [0.1 - 037].

✓ Violence: the first cause of mortality in Martissant

Table 4: Causes of mortality

Causes of mortality	Number of deaths (%):	CI
Violence	38 (23.0%)	[16.9-30.5]
Cardiac/blood pressure problems	32 (19.4%)	[13.7-26.6]
Respiratory diseases	16 (9.7%)	[5.8-15.7]
Accidents (burns, drowning, falls, accidents)	13 (7.9%)	[4.4-13.5]
Fever	11 (6.7%)	[3.5-12.0]
Malnutrition	7 (4.2%)	[1.8-9.0]
Diarrhoea	5 (3.0%)	[1.1-7.4]
Cancer	8 (4.8%)	[2.2-9.8]
Cerebral problems (epilepsy, mental troubles, etc.)	5 (3.0%)	[1.1-7.4]
Old age/senility	5 (3.0%)	[1.1-7.4]
Other	25 (15.1%)	[10.1-21.9]

For the under 5s, the main causes of mortality were linked to infectious diseases. For the adults, violence was the first cause of mortality, followed by chronic illnesses and infectious diseases.

In general, violence is the first cause of mortality in Martissant. It represents 23% of the deaths. It accounts for a larger part of the mortality figures than infectious diseases and

chronic illnesses. The majority of deaths by violence are linked to gunshot wounds. 97% of cases of death linked to violence concern persons over 5 years old. Only 1 case of death linked to violence was reported amongst children under 1.

Types of violence	Number of persons (%)	CI
Gunshot wound	28 (75.7%)	[58.1-87.8]
Burns*	4 (10.8%)	[3.4-26.7]
Murder	3 (8.1%)	[2.1-23.3]
Confrontation	1 (2.7%)	[0.1-16.1]
Disappearance	1 (2.7%)	[0.1-16.1]

***** The 4 cases of death by burning occurred in the same family whose house was torched in July 2007

Despite the violent situation, the mortality rates observed in Martissant for the general population and children under 5 seem to have remained under control, at least if we compare them to the reference thresholds usually used for developing countries[5].

On the other hand, if we consider the reference thresholds proposed by "Sphere" for Latin American contexts, the crude mortality rate observed in Martissant reveals an emergency situation[6]. The mortality rate for the under 5s corresponds to what we can expect in this type of context.

Violence leads to excess mortality amongst adults. Indeed, if we remove the cases of mortality linked to violence, the crude mortality rate would reach 0.23 deaths for 10,000 persons/day, being below the emergency threshold estimated by Sphere for similar contexts.[7]

"*My mother died following the deaths of three members of the family: my brother, my cousin and my uncle, who were all killed by gun shot wounds in December 2006. Her blood pressure rose so high that she died. After all these deaths in the family, my elder sister and I had to sell the house to pay for my mother's funeral. Life's not easy for us. We've lived alone since then.*" Young woman, August 2007.

For the whole period under study – from 1st January 2006 to the end of August 2007 – the epidemiological data, reported to the entire Martissant population, reveals more than 600 deaths directly linked to the violent situation[8].

Alarming homicide rates

The homicide rates can also be used as an indicator of the level of violence: it measures the degree of violence in a given context by taking into consideration all the murder cases noted for a determined period[9].

The homicide rate for the period under study reached 237/100,000/year. This rate indicates that the population was experiencing an extremely violent situation. The rate observed in

[5] Interpreting and using mortality data in humanitarian emergencies, F. Checchi and L. Roberts, Humanitarian Practice Network, N°52, September 2005.

[6] Interpreting and using mortality data in humanitarian emergencies, F. Checchi and L. Roberts, Humanitarian Practice Network, N°52, September 2005. The emergency threshold for the gross mortality rate in Latin American is fixed by Sphere at 0.3/10,000/day. For children under 5, the emergency threshold stands at 0.4/10,000/day.

[7] Ibid.

[8] These figures are based on a total population n estimation of 160,000 persons living in the area under study. The data used to calculate the size of the population in this area was extracted from the Haiti Institute of Statistics and Information's Censitaire Atlas 2003.

[9] In the scope of the survey, all the deaths linked to violence were listed as murder cases. The other cases of death by accidental trauma were not taken into account.

Martissant corresponds to the rates observed in parts of Latin American considered highly violent, such as Medellin in Columbia[10]. A survey carried out on the whole of Port-au-Prince, covering the 22 months that followed President Aristide's departure, reported homicide rates similar to those found in Martissant[11].

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The survey results show that in **2006 and 2007, death by violence concerned mainly men, who represented 9 out of 10 deaths linked to violence**. The homicide rates are significantly higher for men: they reach 433 for 100,000 per year as opposed to 49 for 100,000 per year for women. **The 15 to 39 age group is the worst affected, with violence being its prime cause of mortality.** The homicide rate calculated for this group exceeds 600 murders for 100,000 inhabitants per year.

Mortality: limits of the results

The survey does not cover the 2004-2005 period. Immediately following the departure of President Aristide, was a time of intense fighting, as the families and available data at health facilities testify. The results obtained within the scope of the survey for the 2006-2007 period can serve as an indicator of the level of violence for the 2004-2005 period.

The results collected in the scope of this survey concern only the cases of mortality that occurred in Martissant. Numerous poor districts have been affected by violence since President Aristide's departure[12]. There is no doubt that in addition to the high mortality in Martissant, many victims of fatal violence can be counted in other districts such as Cité Soleil, Bel Air, Cité de Dieu, Cité de l'Eternel...

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[10] Piquet Carneiro, Joa Geraldo (2000), "Violent crime in Latin American cities: Rio de Janeiro and Sao Paulo" , Department of Political Science, University of Sao Paulo, Mimeo.

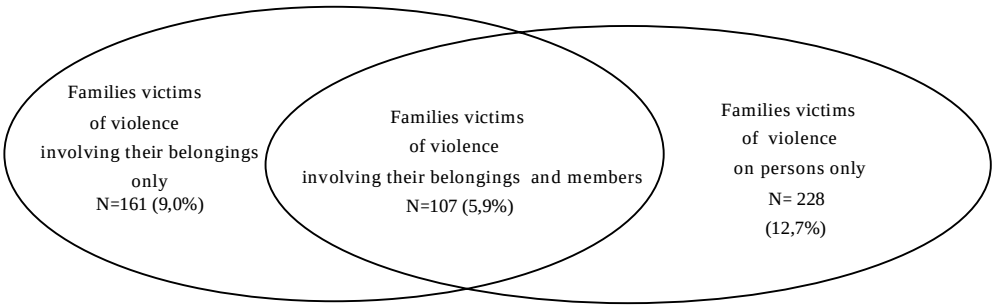
[11] "Human rights abuse and other criminal violations in Port-au-Prince, Haiti, a random survey of households", Kolbe and Hutson, Lancet, n° 368, 2006.

[12] Amongst them, the districts of Martissant, Carrefour, Bel-Air, Cité De Dieu, La Saline, etc. can be cited

Violence

✓ More than 1 family in 4 affected by the violence

The violence in Martissant is not a phenomenon limited to a targeted group, but largely affected the general population. In total, 496 families out of 1,800 – 27.6% - reported at least one form of non-fatal violence aimed at their belongings or against one of the members of their family.



In total, when considering fatal and non-fatal forms of violence, 504 families were affected, which is 28% of the families - CI [25.4 – 30.7].

Violence against belongings

268 families out of 1,800 – 14.9% CI [12.7-17.4] – reported at least one act of violence involving their home or belongings. **Amongst the families declaring violence involving their belongings, the first form of violence is the theft of belongings, followed by the destruction of belongings.**

Types of violence	Number of families (%)
Theft of belongings	137 (51.3%)
Destruction of belongings	61 (22.8%)
House targeted by shooting	41 (15.4%)
House destroyed/torched	32 (12.0%)
Other	14 (5.2%)

NB: the families could cite several forms of violence. The total of forms of violence is therefore over 100%.

Violence against persons

"Last year, I was leaving my aunt's home - she lives in the Tibwa district – when I saw men massacring someone with knives. The bandits saw me and questioned me, asking: "where do you live?" I was really scared and I said that I lived in Martissant 25. I lied so they wouldn't start beating me. I've felt traumatised ever since." Woman, Cité Soleil, witness account collected in August 2007.

335 families out of 1,800 – **18.6%** CI [16.7-20.7] – **reported at least one victim of violence among their members.** The majority of these families reported one victim of violence (N = 311); 2 families reported 2 cases of violence and one family reported 3 cases of violence.

The total number of victims of violence - still alive at the time of the survey - is 354. 44.1% - CI [38.6-49.6]- of victims of violence are women.

Types of violence	Number of persons (%)
Theft	158 (44.6%)
Intimidations/threats	120 (33.9%)
Blows	64 (18.1%)
Gunshot wounds	18 (5.1%)
Sexual violence	10 (2.8%)
Kidnappings	9 (2.5%)
Imprisonment with mistreatment	2 (0.6%)
Wounds by bladed weapons	1 (0.3%)
Family rows	0 (0%)
Other	7 (2.0%)

If we consider the total number of victims of violence reported within the families questioned (living and deceased), for the period between 1st January up to the day of the survey, this number stands at 392, being 4% of the sample.

These figures and the witness accounts reveal the omnipresence of violence in the families' daily life and how extremely difficult it is to live in a completely insecure environment. More than one family out of 3 declared they did not feel secure – not at all or not fully secure – at the moment of the survey.

Amongst other things, the interviewers reported that several families estimated that they did feel secure, saying: "We don't take any risks," "We limit our movements between the house and the church", "We never go out in the evenings"... The fear of falling victim to violence has given rise to adaptation mechanisms that attempt to limit the exposure to risk. These adaptation strategies have also been documented in other contexts[13].

"*I was threatened by a group of well-armed bandits in the Tibwa area. I was coming back from church. I'd left the main road to avoid them because a friend in the area had told me where they were operating. But I still came across them. One of them aimed at me with his gun. I dropped to my knees and asked God to save me.*" Another of them said: "*Let him go. It's not him we're looking for.*" "*I was totally traumatised.*" Man, witness account collected in Martissant in August 2007.

[13] Urban violence and public health in Latin America: a sociological explanatory framework, R. Briceno-Leon, Cad Saude publica, Rio de Janeiro, 21(6), Nov-Dec 2005.

Violence: limits of the results, under-reported and non-studied violence

Domestic and sexual violence
Due to the method used for collecting data, certain forms of violence risk being under-estimated. In particular, cases of sexual and domestic violence were rarely reported by families. We suppose that the figures under-estimate the reality of this type of violence due to the taboos surrounding them. Nonetheless, they should not obscure the terrible reality experienced by the victims and their families following such acts.

✓ Violence has an impact on victims' health in the short and long term

60.5%– CI [54.5-66.3] –of families declared a drop in the quality of their lives after a violent event experienced by one of their members. Over and above the suffering of victims, the entire family can be affected by a traumatic event.

The survey documented the **short- and long-term** impact of violence on victims' health. The results reveal the importance of **physical and mental wounds** following violence.

NB: questions relating to the impact of violence on health were posed to all victims of violence (violence against people). The impact of violence involving families' belongings was not studied.

Direct consequences of violence on victims' health.

70.8% - CI [64.6-76.4] **– of victims (250/353) declared that they had suffered direct medical consequences** following a violent event: bodily pain and psychological troubles were the most frequently reported.

Types of consequences	Number of persons (%)
Bodily pain	99 (39.6%)
Psychological troubles (stress, anxiety, etc.)	95 (38.0%)
Wounds	24 (9.6%)
Blood pressure	6 (2.4%)
Bruises/dislocations/sprains	5 (2.0%)
Fractures	1 (0.4%)
Skin problems/allergies	3 (1.2%)
Pregnancies	1 (0.4%)
Other	19 (7.6%)

NB: the victims could cite several consequences. The total is therefore over 100%.

60% of the victims consider that seeking medical aid is necessary following a violent event. **These figures confirm the necessity of offering services capable of responding to victims' needs during periods of violence.**

The survey data also emphasises the importance of an appropriate response for victims' mental health. This poses a particular challenge to the Haitian health system which does not include this service in the package of health care offered to patients.

These points seem particularly important in the Martissant area, which lacks any Ministry of Health facilities. The victims are forced to look outside the area (which can be complicated for security and cost reasons), or turn to the traditional system (which has a limited capacity for providing case management for the more serious cases), or not to look for any assistance at all.

Health response to victims of violence in Martissant

The survey results confirm the difficulties in providing health care to the victims:

- **One victim in three did not manage to receive care** even though he/she considered it necessary. The main explanatory reasons are **insecurity and lack of money.**

- Amongst the victims who considered that health care was necessary, **two out of three sought care**: the majority of victims turned to the **traditional system or a health facility outside Martissant.**

Location of health care	Number of persons (%)	CI
Martissant 25 Emergency Centre (MSF)*	7 (4.5%)	[2.0-9.5]
Mobile clinics (MSF)*	6 (3.9%)	[1.6-8.7]
Malibu health centre	4 (2.6%)	[0.8-6.9]
Saint-Michel health centre	2 (1.3%)	[0.2-5.1]
Carrefour health centre	2 (1.3%)	[0.2-5.1]
General hospital	16 (10.4%)	[6.2-16.6]
Léogane	1 (0.6%)	[0.0-4.1]
Other facility	44 (28.6%)	[21.7-36.5]
Traditional medicine	66 (42.9%)	[35.0-51.1]
Other	6(3.9%)	[1.6-8.7]

*The Martissant 25 Emergency Centre was opened in December 2006.
*Mobile clinics started running in July 2007. These facilities were therefore not functioning during the retrospective period under study.

Amongst the victims of violence who sought help, **6 victims in 10** sought assistance in the **modern system** whilst **4 victims in 10** turned to the **traditional system.**

This data confirms that the estimation of the level of violence based on official health facility statistics runs the risk of considerably under-estimating the reality of the violence in this type of context.

- **The importance of the traditional system**

The traditional system seemed to play an important role in the event of violence. This was also observed during the survey carried out by MSF in Cité Soleil[14]. People above all reported turning to the traditional system following certain forms of violence, such as blows, theft, threats and intimidation.

The Haitan context is known for the importance of the traditional sector when patients seek health care in the event of illness[15]. **The results of the survey suggest that the traditional system also occupied a large place in the response to victims of violence.**
In the context of Martissant, one hypothesis that could explain the extensive use of the traditional system was the lack of health care facilities in the area.

A second hypothesis is linked to the insecure context: moving around was complicated and risky, so victims used the system closest to their homes. In Martissant, particularly for the people living in the upper districts (further from the main road leading to town), traditional medicine was certainly the closest, simplest and sometimes the least costly option.

- **Seeking health care outside Martissant**

40% of victims sought assistance outside the Martissant area, in the different facilities in town. Whilst the reasons why the victims chose to go to these facilities are not known, they could be linked to the absence of Ministry of Health facilities in the Martissant area, which forced people to look elsewhere. Another hypothesis is that for security reasons, victims of violence preferred to be treated outside the area in which the violence occurred.

- **Case management of victims of violence in Martissant**

Only 12% of the victims were treated in a health facility in the area. The majority of them received treatment in MSF facilities.

The Martissant 25 Emergency Centre was opened in December 2006, so its services were not available during half of the period included in the scope of this study. The low number of victims declaring that they attended this centre following a violent event can thus be explained by the **centre's recent opening** at the time of the survey. Furthermore, although the centre was functional in early 2007 it was perhaps too early for much of the population to know about it.

[14] Mortality, Violence and Access to Health Care in Cité Soleil, results of an epidemiological survey, MSF, March 2008.
[15] Poor people's medicine in the central plateau in Haiti, Journal of ethnopharmacology, 17, 1986.

Another element of interpretation lies in the **geographic localisation** of MSF's emergency centre in the Martissant area. For reasons involving neutrality, the centre was opened in proximity to the main road, in an area accessible to victims coming from various areas. Nonetheless, for the victims coming from Martissant districts located further away from the national road, it may be that in insecure situations, the distance involved in reaching the centre proved to be too great. An ambulance system using the mobile telephone network for emergency cases was set up recently, allowing victims to be transported to the centre without delay. But it was still little known by the population at the time of the survey.

Recent statistics from the Martissant 25 Emergency Centre indicate that an average of 30 victims of violence are treated in the facility every month. Half of them come from Martissant, the others from neighbouring districts.

"Last week we had 3 patients with gunshot wounds. Two arrived too late and we couldn't save them. They died. The third became paraplegic. Apart from the gun shot wounds, we also see many bladed weapon wounds." Manager of the Martissant 25 Emergency Centre, September 2007.

Longer-term consequences of the violence

68.3% of victims of violence CI [6.7-73.4] - declared that at the time of the survey, they were still affected by the consequences of the violent event (235/344 – 10 missing data). The main consequences are as much at the level of victims' **mental health** – stress, trauma, sadness, insomnia and diverse troubles – as at a **physical level**.

Types of consequences	Number of persons (%)
Emotional	143 (61.1%)
Physical	50 (21.3%)
Economic	36 (15.4%)
Other	12 (5.1%)

NB: the victims could cite several consequences. The total is therefore over 100%.

This data emphasises the long term impact that violence can have on victims and their families and thus the necessity to respond to these victims' needs even when the shooting has stopped.

In addition, over and above the direct medical consequences, the violence leads to numerous upheavals in family life.

"In the Grand Ravine area, the main problem for families is rebuilding their homes. It's true that we lost a lot of people during the events, and many have disappeared. But for those that remain, the problem is that we have nowhere to sleep. Families live with several people in one bedroom. Another problem is education. There are perhaps 300 children in this area, and only 50 or 60 of them go to school. If the head of the family is dead, it means that the family loses its source of revenue.

Fortunately, for health issues there's MSF's centre every Tuesday." Man, witness account collected in Martissant in August 2007.

Another significant consequence of the violence on families is population displacement.

In total, 648 families out of 1,800, or 36.0% of the sample – CI [31.8-40.5] – declared that they had been displaced at least once temporarily since January 2006. Displacement figures are significantly higher amongst the families who are victims of violence, 50.3% - CI [43.9-56.9] –, than amongst the other 30.6% - CI [26.5-35.1]. Displacement can have a major impact on the family's equilibrium and economic circumstances. Thus, a member of the community reported that several houses abandoned temporarily by families were taken over by members of armed groups. On their return, these families were forced to pay rent to the latter in order to re-occupy their homes.

Access to health care/the families' search for health care

The data collected on access to health care covered the period from 1st May up to the day of the survey. Within the families questioned, the last illness that occurred during this period was taken into account. At the time of the survey, the mobile clinics had been functioning since July.

- ✓ **In Martissant, 15% of patients considering that health care was necessary were excluded[16] from health care in the event of illness.** The most frequent reasons for exclusion reported by the families were **financial problems and self-medication.** At the time of the survey, MSF's mobile clinics were running just one day per week in 3 districts of Martissant, and they were the only free services on offer in the area. Given the context and living conditions of Martissant's population, the financial factor would certainly dissuade families from seeking out health care. The lack of accessible health care on offer in the area meant that families were forced to look outside the district, adding even further to the financial burden directly linked to health care.

  In this context, the families regularly seemed to turn to self-medication: it is highly probably that this tendency was as much encouraged by the lack of health care in the area as by insecurity. Nonetheless, insecurity was not reported as being a direct barrier to the use of services, but it may have been under-reported due to its "ordinariness" in the context. It remains the case that self-medication could represent an mechanism used by families to adapt to the insecurity, with all the risks that it involves.

- ✓ **For the families deciding to seek health care, the choice mainly involved looking outside the Martissant area or turning to the few options existing in the area:**

  - 1 patient out of 2 left the Martissant area to seek health care;
  - A little less than a third of patients turned to health care offered outside a health facility;
  - Only a quarter of patients had access to a health facility in the Martissant area (either a private facility or an MSF one).

  The fact that practically 30% of patients were treated outside health facilities is certainly linked to the lack of health care on offer in the area. This high figure is worrying due to the medical risks associated with the offer of non-regulated health care such as traditional medicine, the purchase of medicines in the street, pharmacies and private practitioners.

  More than half the patients treated in Martissant were treated in the mobile clinics recently set up by MSF. These clinics currently only cover certain districts of the area, and only operate on certain days of the week. **The abundance of people attending these clinics reveals the families' sizeable medical needs. In total, between July and November 2007, they held more than 20,000 consultations.** But they cannot provide health care covering all the needs alone. The most urgent cases are treated as a priority. Many other patients have to return home without being seen due to the limited capacity of the health care on offer.

[16] Health care exclusion refers to all the people who considered that health care was necessary and yet took no steps to obtain it.

"When we arrive at 7 in the morning, there are already long queues of people waiting for treatment. It's really hot and no one wants to give up their place. As we give priority to babies so they don't stay under the sun for too long, chains of babies are formed, placing them at the front without anyone loosing their place. It's a really striking scene. Then we carry out a medical triage of all the people waiting, and we start with the most urgent cases. It's difficult to send someone with a complaint home, but we have no choice..." Medical personnel, MSF mobile clinic, August 2007.

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Conclusions

The epidemiological survey carried out by MSF in Martissant in August 2007 amongst 1,800 families reveals the heavy consequences of violence on the health of families in the area.

- ✓ **Violence is the first cause of mortality in Martissant.** It represents a fifth of all the cases of death and directly cost the lives of a minimum of 600 persons during the period studied.

- ✓ **The homicide rates are particularly high, comparable to those revealed in highly violent areas in Latin America.**

- ✓ **The violence affected the general population on a wide scale: more than a quarter of families were victims of aggression**, either against their members, men and women, or involving their belongings.

- ✓ Violence has had **major consequences on the victims' health**, including **direct medical consequences**, often requiring **urgent** treatment, or **more long-term** consequences, affecting families' **mental health** as much as their **physical well-being**.

- ✓ Violence affects the families' economies and jeopardises their equilibrium. Many families are obliged to **leave their homes** during the most violent periods.

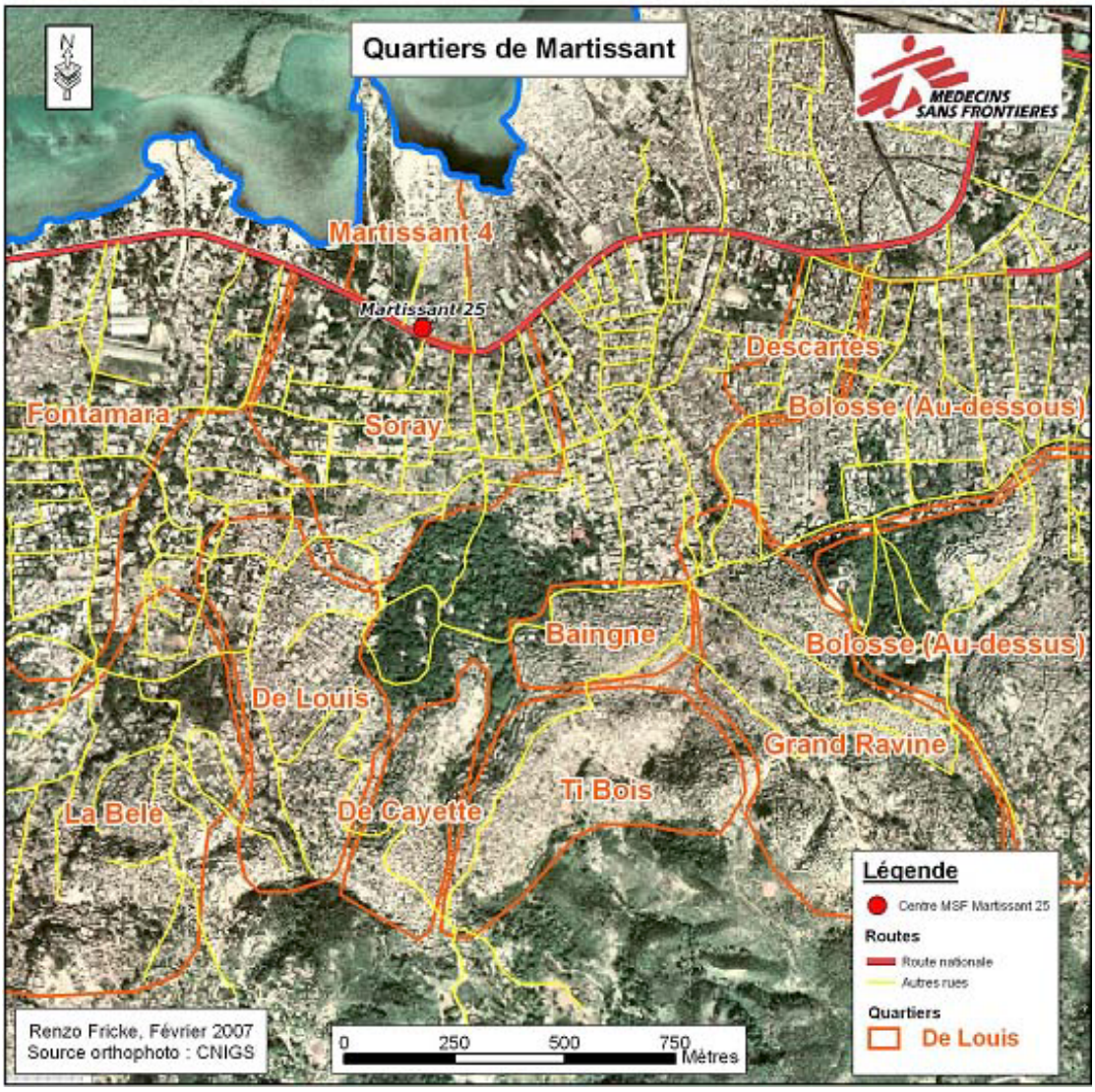
The data collected during the survey and in the framework of Médecins Sans Frontières' medical activities in the area confirm that the violent situation has not stabilised in Martissant. On the contrary, the data indicates that the violence increased during the first half of the year 2007.

This crisis situation has struck a **population already marginalised, extremely poor and vulnerable** in a context in which **access to basic social services**, such as access to health care, **quite simply does not exist.** Although Martissant is one of the poorer districts of Port-au-Prince, its inhabitants have not been accorded the presence of a single Ministry of Health facility. There are quite simply no health centres in the area.

The Martissant population has been rendered fragile by years of crisis in which the violence affects the morbidity and mortality within families. In this context, there are significant medical needs. The results of this survey and MSF's experience in the area, indicate the necessity of a two-pronged health response:

1. An emergency response in order to provide rapid case management to victims of violence.
2. A wider response to the essential health needs of the general population, left to fend for itself because it lives in a violent area.

It is imperative that state-run health services become involved in the area. At present, MSF is practically the only actor intervening in the health domain for the whole Martissant area.


Quartiers de Martissant
MEDECINS SANS FRONTIERES
Martissant 4
Martissant 25
Descartes
Bolosse (Au-dessous)
Fontamara
Soray
Baingne
Bolosse (Au-dessus)
De Louis
Grand Ravine
Ti Bois
La Bele
De Cayette
Légende
Centre MSF Martissant 25
Routes
Route nationale
Autres rues
Quartiers
De Louis
Renzo Fricke, Février 2007
Source orthophoto : CNIGS
0
250
500
750
Mètres