



# Patients struggle to access effective health care due to ongoing violence, distance, costs and health service performance in Afghanistan

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Received 22 August 2014; revised 30 September 2014; accepted 9 October 2014

**Background:** The Afghan population suffers from a long standing armed conflict. We investigated patients' experiences of their access to and use of the health services.

**Methods:** Data were collected in four clinics from different provinces. Mixed methods were applied. The questions focused on access obstacles during the current health problem and health seeking behaviour during a previous illness episode of a household member.

**Results:** To access the health facilities 71.8% (545/759) of patients experienced obstacles. The combination of long distances, high costs and the conflict deprived people of life-saving healthcare. The closest public clinics were underused due to perceptions regarding their lack of availability or quality of staff, services or medicines. For one in five people, a lack of access to health care had resulted in death among family members or close friends within the last year.

**Conclusions:** Violence continues to affect daily life and access to healthcare in Afghanistan. Moreover, healthcare provision is not adequately geared to meet medical and emergency needs. Impartial healthcare tailored to the context will be vital to increase access to basic and life-saving healthcare.

**Keywords:** Afghanistan, Armed conflict, Delivery of health care, Health service accessibility

## Introduction

After more than a decade, the US-led NATO military intervention in the country has entered its final phase. However, 2013 was one of most violent years since the 2001 US-led NATO military intervention.<sup>1</sup> According to the UN, civilian casualties increased by 13.5% (8615/7589) in 2013 when compared to 2012.<sup>1</sup> An estimated 630 000 people are internally displaced in Afghanistan, with 124 000 of them newly displaced in 2013 alone.<sup>2</sup> In addition, some 2.6 million Afghans are refugees in neighbouring countries.<sup>2</sup>

Afghanistan is a seriously impoverished country, ranking 175th out of 186 countries on the Human Development Index.<sup>3</sup> Many challenges remain. Maternal and infant mortality are persistently high. In 2013, WHO estimated a mortality ratio of 400 per 100 000

live births, and an under-five mortality ratio of 103 per 1000 live births.<sup>4</sup> Moreover, reported statistics likely underestimate the real needs.<sup>5</sup>

In 2003 the Ministry of Public Health (MoPH) and donors introduced the Basic Package of Health Services (BPHS), for which user fees were eliminated. The BPHS aims to cover cost-effective services that can have an impact on major health problems.<sup>6,7</sup> Contracting out to non-state providers was adopted as the main strategy,<sup>8</sup> and resulted in much progress.<sup>9–11</sup> However, donor support to the Afghan health system was influenced by wider political goals, such as state building and stabilization, raising concern over partiality of health facilities.<sup>12</sup> Furthermore, aid provision was too often threat-based rather than needs-based. In addition, aid providers were concentrated in some cities and in

areas where international troops were present, and unable to deliver or monitor care in insecure zones.<sup>12,13</sup>

To build a clearer picture of people's ability to access health-care, Médecins Sans Frontières (MSF) conducted research in the four hospitals where its teams worked in 2013: in Helmand, Kabul, Khost and Kunduz provinces.

## Methods

Data were collected in four MSF-supported clinics from different provinces between mid June and the end of October 2013. In Kabul, MSF supports the MoPH Ahmad Shah Baba District Hospital, a 69 bed secondary level hospital in District 12. In Lashkar Gah, the capital of Helmand province, MSF supports the Provincial MoPH Boost Hospital, a 250 bed tertiary level hospital. In Kunduz city, in the Northern Province of Kunduz, a trauma centre is fully operated and managed by MSF, providing surgical care for general trauma and conflict-related injuries. In Khost city in Khost Province, a mountainous region near Pakistan's border, a Maternity Hospital is fully operated and managed by MSF (Figure 1).

Mixed methods were applied. Quantitative data were collected with a pre-tested, structured questionnaire from the patients or from their caretakers. Convenience sampling was used. The only selection criteria for participants were whether they had someone in their household who had an illness in the past three months. Qualitative data were collected through 35 semi-structured individual interviews and 12 semi-structured focus group discussions among patients (or caretakers). Each focus group had a minimum of five and a maximum of ten people. Participants were divided into male and female for cultural reasons. Participants were attributed to a group based on rural vs urban origin.

Three male and three female Afghan interviewers who spoke the relevant local languages were recruited and trained for each location. The questions focused on access obstacles during the current health problem and health seeking during a previous illness episode of a household member.

The data retrieved from the questionnaires were entered in an Excel database (Microsoft Corp., Redmond, WA, USA). Median and IQR were calculated for numeric variables and proportions for categorical variables. Analysis were performed with Stata version 11.2 (StataCorp LP, College Station, TX, USA). Focus group discussions and individual interviews were transcribed by the Research Coordinator. The thematic analysis approach was employed for qualitative data analysis.

## Ethical approval

All interviewees gave informed oral consent to participate. Individual responses were treated in such a way as to assure confidentiality and non-traceability. Agreement to conduct the research in the MoPH hospitals in Kabul and Helmand was sought and received.

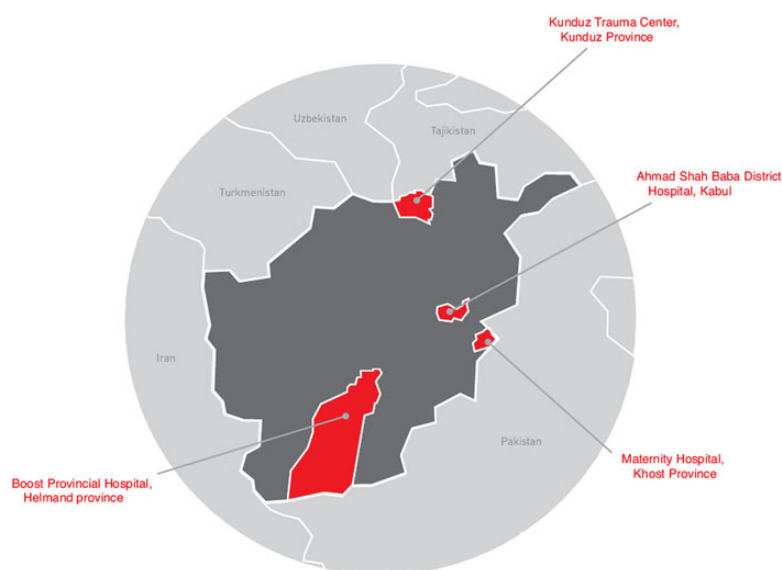
## Results

### Characteristics of the study population

Of 763 respondents, four were excluded from analysis as no data on the previous illness had been collected. Respondents were either the patients themselves (40.2%; 305/759) or their caretakers (59.8%; 454/759) (Table 1).

Overall, the majority of patients were female. Patients had a median age of 25 years (IQR 13–33). Interviewees lived with a median of 11 (IQR 8–16) household members. One in three reported a history of displacement (internally displaced or had been a refugee) since 2001.

*We are from Wardak province and came here to Kabul because of the conflict and violence... There is still a lot of fighting between the government and the opposition groups back there. If the fighting stops one day, then I will go back to Wardak, where I was born. There are a lot more*



**Figure 1.** Map of Afghanistan and provinces with Médecins Sans Frontières supported clinics, where patients or their caretakers were interviewed. This figure is available in black and white in print and in color at International Health online.

*trees and green pastures there than here in Kabul (female, 36 years, from Wardak province, living in district 12, Kabul).*

The patients of Khost Maternity Hospital were all female, and belonged to larger households. Patients interviewed in the Kunduz trauma centre were mainly male, and were younger, with a median age of 19 years (IQR 10–33). In Kunduz, patients travelled longer distances (median of 45 km; IQR 15–75) to reach the trauma centre. Across the four locations, the family members or close friends of more than one in four respondents (29.3%; 222/759) had been victims of violence within the preceding year.

### Barriers to MSF supported facilities

Two out of three people (71.8%; 545/759) experienced a barrier to reach the hospital (Table 2). Active fighting between armed groups and the impossibility of night travel due to insecurity on the roads were the main causes of delays or blockages to reach healthcare (Figure 2).

In Kabul, the majority (57.3%; 114/199) of respondents reported that they did not experience barriers to reach the MSF supported hospital. The majority of them (94.0%; 187/199) lived in the same district as the hospital. Still, one in four lived further than 15 km from that hospital. In the other provinces between 69.5% (130/187) and 93.8% (182/194) of interviewees reported

barriers to access health care. Between 58.8% (107/182) and 82.4% (122/148) of people in these three locations cited insecurity as the main barrier.

Interviewees reported how fraught with danger and difficulty their journeys were:

*In the last years violence has blocked us coming to health centres and hospitals more than 100 times I think. There is constant violence around my village. We never know how much fighting each week will bring. The fighting doesn't stop when there are injured people, so we can't get them to a doctor. So we wait, and then they die, and the fighting continues. Even if you are able to move with your wounded you still have to get through roadblocks, checkpoints, questioning and harassment before you can reach the hospital (male, 25 years, school principal, from Baghlan province).*

Though rarely cited on its own as the main problem encountered, criminality was often included in explanations of why people picked the inability to travel at night as their main barrier.

*Criminality is increasing day by day. We don't know which groups they belong to always but criminals are definitely on the rise. Too many people have been armed. ... And those who want to destabilize the situation here just give weapons*

**Table 1.** Characteristics of the study population: 759 interviewees from four locations in Afghanistan

	Helmand n=179	Khost n=194	Kunduz n=187	Kabul n=199	Total n=759
Respondent, n (%)					
Caregiver	121 (67.6)	116 (59.8)	128 (68.4)	89 (44.7)	454 (59.8)
Patient	58 (32.4)	78 (40.2)	59 (31.6)	110 (55.3)	305 (40.2)
Female patients, n (%)	93 (52.0)	194 (100.0)	53 (28.3)	123 (61.8)	463 (61.0)
Age of the patients, median (IQR)	20 (5–40)	28 (25–30)	19 (10–33)	24 (9–35)	25 (13–33)
Household size, median (IQR)	12 (9–16)	16 (12–25)	10 (7–13)	9 (7–12)	11 (8–16)
Estimated distance to clinic for current care, km, median (IQR)	25 (15–45)	25 (15–45)	45 (15–75)	5 (5–15)	15 (5–45)
Violence affected the respondent or a family member in the last year, n (%)	51 (28.5)	68 (35.1)	57 (30.5)	46 (23.2)	222 (29.3)

**Table 2.** Main barriers experienced to reach current clinic among 759 patients from four locations in Afghanistan

	Helmand n=179	Khost n=194	Kunduz n=187	Kabul n=199	Total n=759
No barrier	31 (17.3%)	12 (6.2%)	57 (30.5%)	114 (57.3%)	214 (28.2%)
Experienced barrier(s)	148 (82.7%)	182 (93.8%)	130 (69.5%)	85 (42.7%)	545 (71.8%)
Main barrier cited					
Insecurity	122 (82.4%)	107 (58.8%)	88 (67.7%)	13 (15.3%)	330 (60.6%)
Distance or lack of transport	20 (13.5%)	30 (16.5%)	36 (27.7%)	34 (40.0%)	120 (22.0%)
Cost	2 (1.4%)	39 (21.4%)	0 (0.0%)	10 (11.8%)	51 (9.4%)
Other	4 (2.7%)	6 (3.3%)	6 (4.6%)	28 (32.9%)	44 (8.1%)

to militias, to criminals, and everything gets worse (male, 30 years, farmer, from Imam Sahib district, Kunduz province).

People who live furthest away frequently face more barriers than those living in the cities. They are also more likely to be trapped between the pressures of the insurgency and the international or national military forces.

*There is nothing the community can do. We are caught between both sides. And so we pick sides. Half of us support the government, half of us support the Taliban. The middle people will not survive. You have to pick a side or you will be the first to suffer and you will not have anyone to help you. The people in the middle are in danger from both sides* (male, 48 years, cook and farmer, from Dasht-e-Archi district, Kunduz province).

Usage of the closest MoPH facilities

Accessibility and acceptability of the services offered determine the use of health structures by a community. In all four locations

the majority of those interviewed (78.9%; 599/759) had not used the nearby public system in their community during a recent episode of illness in their household (Table 3). The majority of interviewees perceived public health services as inadequate, due to long waiting times, unavailability or low quality of drugs, or lack of qualified or available staff.

The current conflict impacts both the health infrastructure and the ability and willingness of healthcare providers to work in the most insecure areas. Respondents frequently spoke of medical staff and ambulance drivers who were too afraid to travel to the most insecure zones. This is especially true for female health workers.

*The clinics are half-finished ... It means that we don't have proper healthcare in our area. A lot of the doctors also escaped the place because of the fighting and insecurity. No one wants to come to work in our area* (male, 25 years, school principal, from Baghlan province).

Respondents avoided their nearest public clinic for a variety of reasons, mostly linked to negative perceptions of both the

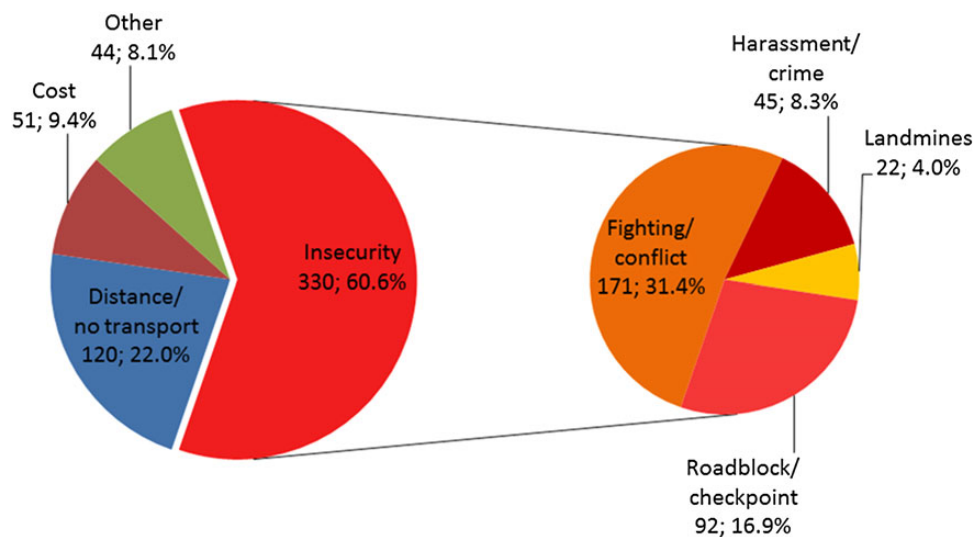


Figure 2. Type of barrier experienced on journey to Médecins Sans Frontières clinics among 759 patients from four locations in Afghanistan. This figure is available in black and white in print and in color at International Health online.

Table 3. Utilization of the closest Ministry of Public Health (MOPH) facilities, among 759 patients from four locations in Afghanistan					
	Helmand n=179	Khost n=194	Kunduz n=187	Kabul n=199	Total n=759
Did not use closest MoPH health facility during a previous illness	157 (87.7%)	178 (91.8%)	116 (62.0%)	148 (74.4%)	599 (78.9%)
Main reason cited for not using closest MoPH health facility					
Inadequate service provision	102 (65.0%)	122 (68.5%)	99 (85.3%)	86 (58.1%)	409 (68.3%)
Distance	22 (14.0%)	33 (18.5%)	4 (3.5%)	18 (12.2%)	77 (12.9%)
Other preference	19 (12.1%)	7 (3.9%)	7 (6.0%)	22 (14.9%)	55 (9.2%)
Other motivation	14 (8.9%)	16 (9.0%)	6 (5.2%)	22 (14.9%)	58 (9.7%)

quality and availability of staff, treatments or services on offer. In addition, some people preferred the private system, or chose religious or traditional care providers.

*There are public clinics in our districts, but there are no medical staff and no medicines inside ... And most people know this, so they don't go there, and they spend all their money on private, or they travel far (male, 57 years, farmer, Marjah district, Helmand province).*

Though the public system promises free care, in practice people revealed that this is not always the case, and they often had to pay for drugs and some doctors' fees. Across all four locations, more than half (56.2%; 68/121) of the patients who visited a public facility ended up paying for medication, within the facility itself, at a private pharmacy, or on the market.

*There is a pharmacy inside the hospital [public facility], but if you have to get things there, then you have to pay. And sometimes they just don't have the drugs in the hospital pharmacy, so then we have to go outside to the market and buy the drugs there (female, 41 years, Kunduz district, Kunduz province).*

In all four locations, people spoke of doctors in public clinics pushing patients to their more lucrative after-hours private practices.

*There is a problem with the government clinics in our area. They are supposed to be free, but that's not the reality. Even if you can see the doctor for free, when you need medicines or tests, the doctors push you towards their own private clinics (male, 40, mullah, from Gharmsher district, Helmand province).*

While people regularly chose private care as the perceived option of quality, many spoke of overprescribing, misdiagnosing and even malpractice from the side of the private practitioners that they visited.

*Before coming here, we'd gone to private doctors about four times ... But the private doctors couldn't help. It was too serious. And they never suggested that we come to another bigger hospital for help ... They just told us to come back again and again even though they couldn't fix my son (male, 55 years, farmer, Musa Qala district, Helmand province).*

Furthermore, healthcare is associated with the political agendas and strategies of belligerent parties, which for some patients increases their fear of using the services.

*We can't go to the government clinics. The insurgents don't want us to ... But sometimes we have to. When we do, they ask us why we went there (female, 43 years, and brother-in-law, 48 years, Sabari district, Khost province).*

Health care costs

The interviewees reported a median household spending of US\$54 (IQR 36–108) per week. Across all locations, at least half described their household economic situation as poor, very poor or extremely poor—all categories that meant they had problems to pay for healthcare.

*In January [2013], my nephew was sick. He had terrible diarrhoea. We were too poor to bring him to a doctor. He was*

**Table 4.** Impoverishment due to health care costs among 759 patients from all four locations in Afghanistan

Costs	Total n=759
Normal spending per household per week in US\$, median, (IQR)	54 (36–108)
Costs for previous illness, in US\$, median, (IQR)	
Total cost (medical, transport and other costs)	41 (16–115)
Among which medical costs (doctor fees, medication, lab, hospitalisation, laboratory)	32 (12–85)
Among which transport costs	5 (1–25)
Had to borrow money or sell goods to pay for health expenses for a recent illness	315 (41.5%)

*nine months old and he died (female, 25 years, from Khost Matun district, Khost Province).*

Across all locations, estimations of health expenditures for previous illnesses during the past three months, for someone in their household, were high when compared with weekly household expenditures. One third to half of the interviewees reported that they had to borrow or sell goods to pay for health expenses during the past three months. Medical costs, such as drugs, user fees, hospitalisation or laboratory tests, were the main health expenses incurred (Table 4).

*We live in the mountains in Samangan province. It's far away from here [Kunduz city]. It took us more than half a day to get here. We walked, travelled by donkey and then took a taxi, but the majority of the journey was on foot. My relative couldn't afford [the transport] to bring his injured son here. So I borrowed the money from people I knew and travelled with him instead. To pay back the money, I will have to sell many more nuts. And our family will have to eat less. There is no other way (male, 43 years, farmer, Khuram Wa Sarbagh district, Samangan province).*

The absence of, or a perception of the lack of, treatments and services for their conditions sometimes pushed people to seek care far from home, even in other countries. One in ten (9.8%; 74/759) had gone abroad to seek treatment for an illness of someone in their household in the preceding three months, the vast majority of them (93.2%; 69/74) heading to Pakistan. Although they estimated their weekly household expenses at US\$45 (IQR 13–74), they reported a median spending of US\$276 (IQR 147–524) during this trip, with a median of US\$224 (IQR 97–385) spent on medical expenses.

*When the fighting starts around us, the roads to Lashkar Gah are blocked. So we can't get to the hospitals here. No one is allowed to pass. The most serious patients try to get to Pakistan, but they need lots of money for that. The biggest problem is the pregnant women without money—when security conditions are bad those women who can't afford to get to Pakistan die (male, 38, Farmer, Garmsher District, Helmand Province).*

**Table 5.** Impact of barriers to care on mortality among patients and their household members or close friends, among 759 patients from 4 locations in Afghanistan

	Helmand n=179	Khost n=194	Kunduz n=187	Kabul n=199	Total n=759
Insecurity was a reason not to come to the clinic in the last year	80 (44.7%)	29 (15.0%)	85 (45.5%)	19 (9.6%)	213 (28.1%)
Death among household members or close friends due to lack of access to medical care in the last year	30 (16.8%)	49 (25.3%)	40 (21.4%)	25 (12.6%)	144 (19.0%)

Impact of violence on health outcomes

Across the four locations, one in five (19.0%; 144/759) people knew someone in their family, or a close friend, who had died within the last year as a result of lack of access to adequate healthcare (Table 5). Conflict was a major cause of why deceased family members had been unable to access adequate healthcare.

Violence not only kills directly, but also indirectly. The threat of violence, insecurity and criminality en route can result in people delaying the journey to a health facility until their medical condition has deteriorated to the point of endangering their health or even lives.

*Six of us had to travel here because the roads are dangerous at night, and we need lots of people with us to be safe. On the way we were checked by the insurgents three times and by a police commander another time. We only arrived at your hospital with our injured three hours later (male, 30 years, farmer, Dasht-e-Archi district, Kunduz province).*

For some patients, hours can mean the difference between life and death. The chances of survival for pregnant women with postpartum bleeding after a difficult delivery at home decrease dramatically if they cannot immediately access a health facility.

*A few months ago a woman in my village was pregnant. She had problems and needed to get to a hospital to deliver. There was fighting at night so we couldn't bring her here. She and her baby died that night (female, 28 years, from Bak district, Khost province).*

The distances people must travel to seek care not only delay the provision of urgently needed treatment, but also force them to undergo perilous and costly journeys. Due to insecurity, people risk further injury and even death on the journey.

*A few months ago [August 2013] my pregnant cousin came to MSF [maternity hospital] to deliver her baby, accompanied by three of our male relatives. On the way home they were all so happy because of the new baby. Their car hit a landmine in our district. Every one of them died (female, 23 years, from Sabari district, Khost province).*

Furthermore, the conflict continues to take a serious toll on people's mental health. Many reported suffering from psychosocial problems or mental health disorders.

*I had 14 children, and I lost half of them. They were killed during the conflicts. I lost four boys, three daughters, and a*

*husband. They were too young to die. So many of my people have died from the wars here... We are scared. My heart and head are full of thoughts. Sometimes my heart gets so heavy that I have to find someone to talk to so I can try to clear it out, clear out my life. I try to laugh for my family because I must stay sane for them. I laugh to forget or I would go crazy with all the deaths (female, 44 years, from Kunduz district, Kunduz province).*

Discussion

To access the health facilities where MSF works, 71.8% (545/759) of respondents experienced obstacles, with insecurity as the main barrier. The interviewees reported that their journeys to clinics were often fraught with danger and difficulty. The combination of long distances, high costs and the conflict deprived people of life-saving healthcare. To pay for health expenditures 41.5% (315/759) of the respondents had been forced to borrow money or to sell goods. For one in five people, a lack of access to health care had resulted in death among family members or close friends in the last year.

The closest public clinics were underused by four in five people interviewed, mainly due to health system barriers (lack of availability or quality of staff, services or medicines), or because the clinics were associated with politics. The increase in the number of health facilities over the last years contrasts with effective availability and usage of services.<sup>12</sup> In 2009, an International Committee of the Red Cross-commissioned survey estimated that half of the population had little or no access to basic services, including healthcare.<sup>14</sup> Additionally, interviewees reported that they regularly paid for drugs and informal doctors' fees in public health facilities. This contrasts with the country's official policy of free care.<sup>7</sup>

Violence is still affecting daily life and access to care. Further efforts are needed to reach people in need of essential care, in particular those most affected by the ongoing conflict. However, the number of aid workers killed in Afghanistan increases every year, making the country one of the most dangerous places in the world for relief work.<sup>14-16</sup>

How to improve access and health equity in a conflict-affected environment? First, health policies and programs should take into account equity-oriented indicators.<sup>17</sup> Second, health services should assure outreach interventions to reach vulnerable populations, provide referral with special attention for trauma care, and ensure uninterrupted supply of essential drugs in public clinics.<sup>17</sup> Third, it is vital that the national policy of free care is consistently

implemented.<sup>7,18</sup> Medicines and consultations must be free to avoid exclusion from care and to prevent iatrogenic poverty (caused by medical expenditure),<sup>19</sup> especially in a context where more than one third of people live below the national poverty line.<sup>20</sup> Fourth, aid provision should be impartial and more clearly untangled from military and political agendas.<sup>21</sup> Health services need to better prioritise serving patients' needs. Efforts to address the unmet humanitarian and medical needs cannot come second to state building goals. Finally, in accordance with international humanitarian law, medical personnel and facilities must be respected at all times, by all parties.<sup>22</sup>

This study has some limitations. People surveyed knew this research was being done by MSF, which could have introduced social desirability bias. In addition, security conditions meant it was not possible to run a population-based assessment. This likely resulted in selection bias as patients surveyed already had access to healthcare. It is likely that the findings underestimate the extent of barriers facing those who never made it to an MSF-supported health structure. Nevertheless, the view respondents provide from the four locations can give an indication of the access barriers to healthcare that people face in some areas of Afghanistan.

## Conclusions

Violence due to armed conflict continues to affect daily life and access to healthcare in Afghanistan. Currently, healthcare provision is not adequately geared to meet medical and emergency needs. Even if more health facilities exist today than before 2003, patients' accounts indicate that access to basic and life-saving healthcare is still not possible for too many people. People living in the most insecure and rural areas are worst off. To reach these vulnerable people, impartial healthcare, that is better tailored to their needs and the violent context will be vital.

**Authors' contributions:** NNC, BD, CVO, CB, RF and MP conceived the study. NNC, ASE and BN were involved in the data collection, and NNC, JB, CB and TD in the analysis and interpretation of these data. NNC, JB, CB and TD drafted the manuscript. All authors read and approved the final manuscript. NNC and MP are guarantors of the paper.

**Acknowledgements:** We acknowledge the contribution by Silvia Pineda, the team of interviewers and all the patients and their caretakers.

**Funding:** None.

**Competing interests:** None declared

**Ethical approval:** The clinic direction approved the study and the clinic directors of the MSF-supported Ministry of Health clinics are co-authors.

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