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Life or death. The social impact of paramedics and first responders in landmine-infested villages in northern Iraq

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ABSTRACT

Introduction: Landmines are indiscriminate weapons that mainly injure poor populations in the developing world. Pre-hospital treatment by village-based paramedics and first responders has reduced mortality, but little is known about the social impact of paramedic and first responder training in villages. The aim of this study was to understand how villagers in socially deprived, mine-infested villages experience the establishment of paramedic and first responder chains of survival.

Methods: The study used focus-group interviews conducted in four villages in northern Iraq, to explore villagers' perceptions of the impact of paramedic and first responder training. The material was analyzed using grounded theory, with the main category identified entitled 'life or death', with three subcategories: 'living on the edge', 'demanding equal rights', and 'adapting to new needs'.

Results: The paramedics were perceived by the villagers as having a large impact on the social life of the village, first as an emergency medical resource, and also as a prerequisite for the villages' continued existence. The system represented one of the few services offered by outside society to villages that lacked health care, schools, electricity, roads, and clean water. Despite an

improved economic situation in the larger society, conditions in the villages had deteriorated. Although originally intended as an emergency care system for land mine victims, the system was adapted to include the role of a general medical resource in the villages. This adaptation was perceived as useful by the villagers, and necessary for their continued trust in the system. A prerequisite for this adaptation was that the program coordinator was a villager himself, and that the program deviated from its originally fixed time period. This flexibility depended on very close cooperation between expatriate and local program managers.

Conclusions: Our findings indicate that the paramedic system made a wider impact than just the provision of emergency health care. The program earned trust through a strong local anchor, and by adapting to the needs of the population served.

Key words: first-responder, Iraq, landmine, paramedic, rural trauma, trauma systems.

Introduction

Landmines are indiscriminate weapons that have been employed in many countries around the world. It is estimated that there are 110 million live mines distributed throughout at least 70 different countries[1]. These mines kill and maim, especially poor and rural populations, and the death rate in the pre-hospital phase is estimated at 30-40%[2,3]. In low- and middle-income countries, there is a skewed distribution of resources, with most doctors and hospital facilities located in major cities[4]. Consequently, the rate of pre-hospital death from injury is highest in countries that have the least resources[5].

To address this major healthcare disparity, we established a rural pre-hospital trauma-care system in northern Iraq in 1996[6]. The program was sponsored by the Norwegian government through a small non-governmental organization (NGO), the Tromsoe Mine Victim Resource Center (www.traumacare.no), and was established in co-operation with the local health authorities of northern Iraq. Since 1999 the program has been run from Sulemaniyah, by a local NGO called Trauma Care Foundation Iraq, but it is still funded by the Norwegian government. Previously, we reported that this system improved survival after landmine injury[7]. This trauma-care system trains paramedics in landmine injury through repeated training sessions over the course of 3 years. These paramedics then train a large network of laymen first responders in their adjacent villages. A similar system of pre-hospital trauma training for lay persons has been successful in Ghana[8].

In a recent follow-up study of the northern Iraq trauma-care program, we found a consistent increase in pre-hospital injury survival over the past 8 years. We also noted that the program has adapted to changing patterns of injuries and healthcare needs in the villages served[9]. It is now clear that landmine injury survivors experience chronic pain syndromes that a local trauma-care system is expected to care for[10]. Although the northern Iraq program was initially aimed at mine- and war-related injuries only, it has changed its main focus and become a general emergency medical system for the areas it serves. In addition, many villages without paramedics and first responders are eager to receive training, as indicated by the number of village leaders approaching the project manager in northern Iraq. A 2004 survey of the area indicated that, in Kurdish villages, landmine injuries are considered collective incidents, affecting the whole village[11]. Therefore, the training of village paramedics and first responders was hypothesized to have a wider impact on the villages than was envisaged when the program commenced. Little is known about the impact of village paramedic- and first responder-training in low- and middle-income countries[12-14].

Interventions from NGOs are not without impact on the target society, and some have been reported to be harmful[15]. In addition to documenting the improvement in injury survival achieved by this program, we wanted to better understand the relationship between paramedics, laymen first

responders and the village society. This will hopefully improve future training programs, both in northern Iraq and elsewhere.

Objectives

The aim of this study was to explore the villagers' view of the paramedics and first responders, in order to understand their function in village society.

Methods

A qualitative approach was chosen to explore the social impact of paramedics, and their network of laymen first responders, on village society. We used grounded theory analytic strategy as described by Glaser[16,17], and Taylor and Bogdan[18]. This method allows a systematic study of the social meaning people attach to the world around them[19,20].

Setting

The Kurds are an ethnic group who consider themselves indigenous to the region often referred to as Kurdistan, an area that includes adjacent parts of Iran, Iraq, Syria, and Turkey. Estimated at 35 million people, the Kurds make up the largest ethnic group in the world without a nation-state of their own. In the 20th century, Turkey, Iran, Iraq, and Syria have suppressed many Kurdish uprisings[21]. In preparation for the Iran-Iraq war (1980-1988), and during the simultaneous 'Anfal' genocide campaign in 1988[21], the Iraqi army forced all inhabitants of the Kurdish villages in northern Iraq to move to 'collective towns' which were concentration-camp-like villages. These villagers previously farmed and herded sheep in the rich mountainous area close to the border to Iran. At the end of the first Gulf War in 1991 the Kurds were encouraged to revolt against what was left of Saddam Hussein's army. This failed, and the Kurds were forced into the mountains in the border area towards Turkey. Coalition forces declared a 'safe haven' in northern Iraq, which became an autonomous Kurdish-governed area. Poverty and these villagers' origin and roots forced the town inhabitants to return to their homes, unaware of the presence of live landmines within their villages. These impoverished villagers have collected firewood, herded livestock, and sold unexploded odinances in order to survive. The villagers today remain in areas lined by minefields, yet they must enter the surrounding fields continuously for agriculture and livestock herding.

In our study, every family interviewed had experienced either death or disability due to landmine injuries. Currently, the frequency of mine injuries is decreasing, although still severe, and traffic accident injuries are increasing[9]. Before the commencement of this layman training program[6], there were no emergency healthcare services in the villages. The villages we visited were all accessible by car, but were situated far from the nearest hospital or medical facility. All had a high density of landmines in their immediate vicinity, and a history of high numbers of casualties and fatalities due to landmines.

Data collection

Data for the study were collected from November to December 2005 in four Kurdish villages in the project area in northern Iraq. Two of the study authors (TW and OE) have field experience gained teaching and supervising in northern Iraqi villages since 1996 and 2000, respectively. The Kurdish author (MKM) was born and raised in a Kurdish village, and has been in the training program since 1997. During the village visits, information was gathered through focus-group interviews, where informants were asked to discuss the function and role of paramedics and first responders[22]. We included village leaders, paramedics, first responders, and ordinary men and women in the focus groups. To obtain a broad picture, we included a village with a female paramedic and one village from which the paramedic had moved. Large amounts of information were gathered during informal discussions in the evenings and at tea time.

Focus groups were considered particularly useful for the purpose of this study[18]. In addition, it was difficult to arrange

interviews with individual persons in the villages, because social norms and hospitality mores would have made this inappropriate.

Translation and data processing

All focus group conversations were conducted in Kurdish, and MKM guided the group discussions. These conversations were not translated during the focus groups, but the discussions were audiotaped and later transcribed and translated into English by a Kurdish English teacher, and proofread by MKM. Informal conversations were translated simultaneously by MKM. Extensive memos were written continuously by TW and OE. We compared the new information from the village visits with experiences and notes from previous visits

Sampling

The grounded theory system requires the researcher to constantly analyze and compare newly gathered information before going back to new informants. After each village visit, we analyzed the information gathered and adjusted discussion themes accordingly for the next village[16,18].

Interviews were conducted in four villages, and a total of 402 min of taped interviews were translated and transcribed. A total of 74 informants participated in the taped focus groups, with some participants coming and going during the conversations. Of the informants, 50 were male and 24 were female. In addition, a number of conversations occurred in smaller groups with simultaneous translation, and were directly written into memos during the trips.

Ideally, data sampling ceases when analysis reveals no new information and the material becomes saturated[18]. Due to travel constraints, we had 3 weeks of initial data collection, and planned to supplement the information if necessary during a follow-up visit in March 2006. However, the material collected in November-December 2005 proved to be sufficient for the purpose of the study, because the material became saturated during the data analysis[18].

Background and previous experience of researchers

The researchers' backgrounds differed: some were native to the region (MKM), some had travelled and trained in the villages for 10 years (TW and OE), and others were experts in the qualitative methods but had no field experience in this area (BSB). The overall experiences of the team determined the sampling strategies. We based our findings primarily on data obtained during the village visits, but previous experiences influenced the perceptions of the authors.

Data analysis

The data were analyzed using grounded theory[16-18] by the first author (TW) in cooperation with OE and MKM. All transcribed material was analyzed sentence by sentence and coded for the informant's meanings, as described by Glaser[17]. Initial open coding of the material used 91 different codes, which were then organized into categories. The material was then repeatedly re-analyzed to reassess the content and confirm the findings. We identified one main category with three subcategories.

A second trip to northern Iraq occurred in March 2006, to discuss the data findings in the study environment with the local author, MKM. During this trip, discussions and review of the interviews lead to several conclusions about the findings and their implications.

The software NVivo 2.0 (QSR International; Melbourne, VIC, Australia 2002; http://www.qsrinternational.com/ was used to organize transcripts and codes during the analysis. Quotations are referenced to the sex of the informant (M, male; F, female), the interview number, and page number in the transcript.

Ethical clearance

The study was approved by the Regional Committee for Research Ethics in Western Norway, which oversees all overseas projects (190.05-05/9372), and was conducted in accordance with the local authorities in northern Iraq. No

ethics committees were functioning in the region during the study period.

We did not intend to approach patients who had previously been managed by the trauma system; however, some of these patients participated in the focus groups. It was emphasized to informants that the village visits were not part of a survey for new training, nor did they include any compensation of any kind. The study was not aimed at a formal evaluation of the trauma system or the training program.

Results

The main category that emerged was labeled 'life or death'. This main category was explained by the three subcategories; 'living on the edge', 'demanding equal rights', and 'adapting to new needs'.

Life or death

The villagers explained that the presence of paramedics was of fundamental importance to life in the villages, because there were few other healthcare facilities. The paramedics provided the villagers with a means of obtaining medical help in case of emergency, and were considered a necessity if people were to continue living in the villages. Although the frequency of mine injuries has decreased compared with the first years of the villagers' return in 1991, the paramedics are still considered essential, because their range of care has expanded from mine- and war-related injuries to include all kinds of medical and traumatic emergencies.

The villagers were consistent in their evaluation of the impact of paramedics and first responders. It is currently a time of great social change, and employment opportunities in cities are numerous. For the first time villagers feel they are in a position to choose where they live. The deciding factors for either leaving or remaining in the villages seemed to be access to medical services and education for children.

> *The people here are more satisfied now, as they have good experienced paramedics and first responders. They know that if anything happens to them the paramedics and the first responders can manage it and provide care for them.* (M; I; 5)

> *We took part in the training course. Mr Kareem was one of us. He brought the injured to the hospital and treated him very well. I benefited from the training courses. They were very important. If an injured person was treated by one of the paramedics or by a person who took part in the training he wouldn't die; but if he was not treated he would die soon.* (M; I; 3)

> *Before we had nothing. Before we could not do anything to help the injured, only take the patient to the Qualadze hospital. It was a very long way, and many patients died.* (M, VI, 2)

> *If there were no medics here we might have just waited for death. No one could give first aid treatment. Previously, many of the injured died during transportation or we could only ask God to help them.* (F; IV, 2)

> *If we had someone like her* [the female paramedic], *I think that many of those who died would be living now.* (M; V; 1)

Many findings did not concern the impact of paramedics and first responders directly, but focused on life in the villages, and the villagers' perceptions of the possibility of influencing the direction of their own lives. Health and emergency medical treatment was a major concern for the villagers, especially the possibility of securing these services for their children.

Injuries and medical emergencies were described as events that affect the entire village community due to the close relationship between villagers, and their cultural traditions. The villagers described how the presence of local paramedics and first responders effected their perceptions of danger.

> *We are aware of any accident that happens in the villages in this area. When we visit the injured, patients they say that the paramedic gave them treatment immediately. The women here come with us because we are a social society and have a great connection with other people. We heard about the TCF* [Trauma Care Foundation Iraq] *medic's great role from patients in different villages, and the women's day-to-day anxiety reduced. Now they feel safer than before*. (M; IV; 2)

Not only were the medics now considered essential to the villagers' ability to remain in their villages, but the villagers also emphasized the late arrival of the initiative, and that many lives could have been saved if training had started earlier.

Living on the edge

The villagers consider themselves to be living under a constant threat that dominates their lives. Despite the economic improvements in the cities, little has changed in the rural areas. Minefields surround the villages; the whereabouts of some fields are known, while others are unknown. The villagers fear for their children and family members.

> *As you know most of our land is covered with mines – we're always afraid*. (M; V; 2)

> *We feel that we are strangers in our village; we feel that we are living inside the minefield 24 hours a day; we worry about our children.* (M; I; I)

All villages had a long history of landmine injuries, and had suffered severe losses when first returning home from the concentration camps.

> *When we tried to do our work, we couldn't because we behaved like strangers due to the number of mines and weapons, and we did not feel safe anywhere. Our village changed quietly.* (M; I, 1)

After the invasion of Iraq in 2003, the economic situation in the cities improved. However, the villagers reported that their living conditions deteriorated. Educated inhabitants of the villages, such as teachers and nurses, are now able to find high paying jobs in the cities, and are migrating to these areas, leaving only peasants and workers in the villages. Even so, the villagers prefer to remain in the villages if living conditions permit.

> *The war stopped, but killing and wounding continues constantly. If an animal detonates a mine in the mountains, the people of the village will immediately try to reach the place, in case it was set off by one of their children. Thus we are living in an unstable situation.* (M; I; 1)

> *Lack of jobs, safe water, electricity, no* [commercial] *benefit from agriculture, these are the reasons for migration.* (F; V; 2)

> *If there were equal services in the villages as in the cities the life in the village would be much better than in the cities.* (M; V; 5)

> *The most important things to have are health services and schools. If you don't have these two, the people can't stay. Even with bad roads and no electricity they can struggle through, but these two are most important.* (M; IIX; 4)

One of the villages we visited had lost their paramedic. This paramedic had also been a school teacher, compounding their loss. The remaining villagers expressed concern about future medical emergencies and their ability to continue living in the village.

> *You know, we feel how important and beneficial* [the paramedic that had left] *was for this area. He was like a doctor who took care of every patient, and he followed all the injured to the hospital. But now there is no one to take care of the patients, even if we have a very small complaint we must go to city.* (F; II; 2)

It seemed obvious that the paramedics' role was more than just an emergencies medical resource. They represented the only external resource in the villages and became a symbol of outside interest, despite what was seen as the authorities' inappropriately large focus on cities.

Demanding equal rights

This system of paramedics and first responders appeared to be the only external amenity available to villages that lacked fundamental quality-of-life services, such as clean water, schools, electricity, health services, and surfaced roads.

Some of the villages had empty buildings that were intended to be schools or health centers but never finished. One village had been promised electricity if the villagers erected the poles by themselves. The villagers had rented trucks to do this, but the poles were still naked. Most families have relatives in the cities, and with the development of mobile telephone systems, communication between family members has increased, allowing instant knowledge of living conditions in different areas of the country. There was a general wish to remain in the villages, but this desire was constantly weighed against the risks and perceptions of negligence of the authorities.

> *Public service and educational elements are limited here compared with life in the cities. Everything is changing in the world…. It's a period of progress and development. There are mobile phones, computers, internet and satellite* [TV], *we have information about all these new services, but still we don't have secondary schools, streets, hospitals etc. We are aware of everything, we can understand what is happening in the world, and every village should have the above-mentioned services. We live here as if we were living a thousand years ago.* (M; I, 5)

> *The request for the future is to conduct many training courses for paramedics and the general public. Medical education is necessary and useful for people who are living in a village far from town and cities. The previous training was very beneficial. The second request is that we want the Trauma Care Foundation Iraq to cooperate with the government to play a role in decreasing migration to the cities. It's a very dangerous situation.* (M; I, 5)

> *We need the government to distribute services equally among the villages and to make the villagers economically able to stay in their homes, rather than thinking of migration.* (M; V; 3)

There were also strong feelings of suspicion/skepticism about foreign relief organizations (NGOs). It seemed that NGOs had to earn credibility by proving their intentions and their ability to deliver services at the village level.

> *Many organizations came to this village and interviewed people about the things that are necessary in life, but 'till now they've done nothing for the people. They just wrote down the information on sheets, they never came back.* (M; II; 1)

> *When they* [the villagers] *came here everything was new to them. When they participated in the* [first aid] *course they saw that it was very beneficial, and that she* [paramedic] *was very active. They learned many things from her. All the people liked coming here.* (M; VI; 1)

> *Teacher: I can say that this is the only NGO we have seen work in this village. The training course was excellent and was very modern and beneficial. It was very beneficial for the pupils in the school to learn some practical medical procedures. Training of advanced first responders was great because it shortens our access to medical help. (M; I; 4)*

Adapting to new needs

The villagers were satisfied that the system of paramedics and first responders had responded to their wishes that the injured continue to receive care after the initial hospital treatment. Early on, the local organization encouraged paramedics and first responders to treat all emergencies, not

just landmine and war injuries, which was the original target group. Gradually, a system for taking care of the disabled evolved. Groups of disabled have been formed, and a system with micro-credit is being tested as a pilot study in response to findings on the relationship between chronic pain and lack of income[10]. Micro-credit is a non-interest, short-term banking system that provides items such as sheep or sewing machines to enable recipients to create an income and return the loan in the form of lambs, money or other substitutes, which are then re-distributed to new recipients.

> *The Trauma Care Foundation Iraq prepared a* [social gathering] *for the handicapped. That's the first time a good thing was done in our village. After this meeting most of the handicapped changed their behavior and character. They couldn't mix and participate in the general public before, as they considered themselves apart from society. But now, they realized that they are not the only ones, there are many handicapped persons in Kurdistan. This activity changed the personality of most of them, as it was a situation where they had freedom to behave normally.* (M; I; 6)

> *The system has another useful program for encouraging patients while in the hospital. The program was to [visit and] advise patients in the hospital. The training taught me how to respect handicapped patients.* (M; I; 7)

After some time the researchers realized that victims surviving mine injuries faced a whole series of new challenges. Many ended up staying at home with serious pain problems, and the pain seemed specifically related to lack of income[10]. For this reason the paramedics and local coordinator started social gatherings for such victims, and for testing micro-credit solutions.

In one village, the paramedic had trained first responders to respond to the specific needs of the society. This village has several mountainous areas used for agriculture and herding animals during the summer, which are hours away from the village. The paramedic distributed the first responders in accordance to the needs of the villagers.

> *Yes, we want to learn new medical advances, because during the warm season we go to the mountains in these villages where many families are living, and where people are far from the village. So we face many medical problems.* (M; V; 2)

> *Each of them covers the main area where they are in the summer. And one remains in the village.* (M; VI; 1)

The injury spectrum has changed over the years, with decreases in the number of mine injuries, and increases in traffic and blunt-force injuries. The paramedics and first responders have adapted to these changes. New injury target groups are identified by the villagers, who are best able to recognize the new threats.

> *I think everybody should have a training course - doctors, nurses, police, security, firemen etc.* (M; I; 3)

> *The most useful thing that we learned in the training is how to treat those injured in car accidents* […] *in the right way.* (M; I; 2)

These findings underline the fact that paramedics and first responders have been able to change focus when the patient panorama changed.

Discussion

This study identified a crucial role for paramedics in Kurdish villages. The paramedics and first responders seem to have a dual impact on the villages. They represent a valuable resource for emergency medical help, and are simultaneously a symbol that the external society is concerned about the living conditions of the villagers. After a long period of neglect by authorities, the villagers felt they were taken seriously by the training of some of their own to become paramedics and first responders. By fulfilling these two needs, the paramedic and first responder system literally determines the life and death of individual villagers, and also

the survival of the villages themselves, because migration to cities is seen as a way to escape the very harsh living conditions in Kurdish villages.

The fact that health services are unequally distributed is well recognized, and can be summed up by the statement, 'If access to health services were distributed according to need, the poor would come first. But they do not.'[4]. This supports the current notion that programs targeting neglected villages are perceived as important.

The high importance of the paramedic- and village first responder-system must be understood in the context of present living conditions in Kurdish villages. We found a society in dramatic change, characterized by migration of villagers to the cities. Several villages were abandoned, and in others the population was markedly reduced. Economic improvements and the better living conditions of the cities has led to the deterioration of life in the villages, because educated villagers are tempted to migrate to the cities. Despite some mine clearance and a reduced need for entering known minefields, mines and mine-related injuries are still perceived as a major threat to life in the villages. Thus, the ability to obtain medical help is considered critical, and the presence of medical services is perceived to be of paramount importance.

Initially, this program was intended to care for victims of mines and penetrating injury only. This limitation was imposed by expatriate teachers to prevent paramedics becoming general 'village doctors', thereby reserving the medical equipment for emergencies only. However, the Kurdish physician coordinating the program encouraged the paramedics to take responsibility for the complete medical needs of their villages, to the best of their ability. The program was, therefore, able to adapt to changing injury paradigms at the request of the villagers, while maintaining high quality treatment[9]. This willingness to adapt the injury scope was probably a necessary step in gaining the trust of the villagers, and the first transition from a program run by outsiders to a resource directed by the target group. This handing over of power is a prerequisite for participant involvement[23,24].

Previous work has indicated a close connection between poverty and chronic pain[10]. The Kurdish organization that took responsibility for the program was steadily approached with requests to support injury victims after their initial treatment. Despite the original intention to end the program after 3 years, the experiences gained indicated a need for developing this model of trauma care by prolonging the project period, guided by the demands of the villagers. This gradually developed into self-help groups and micro-credit trials. The very close relationship between the Kurdish organization and the villagers may have been instrumental in this adaptability.

The implementation of the program was thus very flexible concerning timeline, budget and focus. This flexibility is dependent on a good rapport between the implementing organization and the external donors or funding agency. Mutual trust of the applicant and the donor is required. A fixed protocol with rigid reporting points and outcome measures would have made these necessary program changes impossible. This adaptability to changing needs in the target society was one of the key elements in success of this program, and should be considered a critical factor for similar programs. The implication is that funding applications and protocols should be flexible concerning time and target, and also such adjustments should be made by - or in close cooperation with - the receiving society.

The villagers strongly verbalized a demand for equal rights to services such as schools, roads, clean water, health services, and electricity. The naked electricity poles and empty health centers were a constant reminder to villagers of the lack of trustworthiness of authorities. The high degree of migration to the major cities must also be considered in this light. Although most informants seemed to prefer life in the villages, the possibility of moving was always mentioned in connection with the lack of village facilities. The villagers were concerned about this migration, and considered it a development dangerous for their society.

It is important to note that the entrance of yet another organization to the village was not met with immediate acceptance. The paramedics and trainers had to earn the villagers' respect by establishing the efficiency and loyalty of their system. Several programs run by external organizations had been perceived by villagers to be most beneficial to the organizations.

Limitations

There were a number of limitations to our study. First, the authors were studying the impact of their own program, which is likely to induce a positive bias. However, many of the findings were surprising, indicating that preconceptions about the impact of the paramedics were not entirely accurate.

Second, the data were gathered using translators, with the local program manager acting as facilitator for focus group discussions. To gain access to Kurdish villages in a socially acceptable fashion is difficult, particularly now, because many foreign relief organizations have performed surveys without any positive outcome for the villagers. The Kurdish author was instrumental in this regard, because he was a villager himself and had gained the villagers trust during his visits over several years. The expatriate authors also had previous experience in the field, which was useful in building trust in the villages. According to grounded theory, the lack of preconceptions is not a prerequisite for using the analytical method[18,20]. On the contrary, we found it necessary to use our previous experience with social norms in Kurdish society to gain access. Discussions between the authors after each village visit allowed continuous revision of the aim of the focus groups. During the second visit, our purpose was to confront the European authors' interpretations of the findings with the understanding of the Kurdish author. This visit verified a shared view of the content of the conversations. Finding a high rate and risk of internal migration was as surprising to the Kurdish author as to the European authors, indicating that none of the authors had entirely accurate preconceptions.

Conclusion

The findings in this study indicate that the paramedic and first responder system has a wider impact on the lives of villagers than just being a source of emergency health care. This is partly due to the almost complete lack of services offered from the outside society, but also to the high degree of adaptability of the trauma system and its attention to the needs of the villagers. It is crucial that a program like this has a solid, trustworthy anchor in the target society itself, and that strategic decisions are made with the close cooperation of locals and expatriates.

Recommendations

As a result of this study the following recommendations are suggested:

- The training of paramedics and first responders in rural areas may have wider effects than was originally perceived, and this should be constantly considered.
- The Kurdish society in northern Iraq is in a state of constant and dramatic change, characterized by wars, oppression, and changes to the balance of power. It is very important that activities and structures in such a program are constantly adjusted to the needs of the population to be served, rather than governed by predefined goals.
- Any such adaptation must be directed by the local participants – villagers, first responders and paramedics together with the program coordinator – in partnership with the expatriates.

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