Understanding the impact of the armed conflict (2014-2018) on healthcare professional's practices and training: a qualitative study in Kirkuk, Iraq

Abstract

Since June 2014, Iraq has experienced a wave of armed conflict, which led to massive internal displacement. The situation was complicated by the fiscal crises caused by a drop in oil prices as well as the weakening of state power which increased feelings of insecurity. Healthcare professionals were impacted by this crisis including working in insecure environments, increases in the demand on healthcare services, shortage of supplies and lack of training programs.

The aim of the study was to explore the perspectives of health care professionals in Kirkuk in Iraq about the impact of the recent armed conflict (2014- 2018) on their healthcare practice and training. Exploratory qualitative research was conducted in Kirkuk province in Iraq. Sixteen semi-structured interviews and purposive sampling of doctors and nurses who worked in conflict-affected areas in Kirkuk were selected. The interviews were conducted in Arabic. Thematic analysis was used to inductively analyse the data.

Two main theme emerged. First, the professional impact of the crises, secondly the personal/ individual impacts of the crises on healthcare professionals. A set of recommendations were identified to mitigate the impacts of these factors.

Keywords

Conflict, Iraq, Kirkuk, healthcare providers, impact, qualitative method

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Introduction

Since June 2014, Iraq has experienced a wave of armed conflict caused by the takeover of significant territories of the country by what is known as Islamic State in Iraq and Levant (ISIL). This crisis was

characterized by massive and consecutive waves of internal displacement, mounting to 3.5 million internally displaced persons (1,2). The situation was exacerbated by the fragility of the state and the legal system increasing feelings of insecurity (3), not to mention the fiscal crises caused by the drop of oil prices (4).

Dewachi et al. (5) argue that war usually leaves long term effects, reshaping the lives of the entire population. Healthcare professionals, like others in Iraq, faced difficult circumstances because of this crisis (6) including working in insecure environments, an increase in the demand on healthcare services, corruption, shortage of supplies and lack of training programs (7). Burnham et al. (8), conducted a cross-sectional study interviewing 401 Iraqi doctors who resided in Jordan since 2003. The study showed that doctors fled the conflict because of the threat of direct or indirect violence, or because they were looking for a stable life. Moreover ninety percent of the sample noted a decrease in the quality of health care in Iraqi health facilities during the conflict. This was due to many reasons including a lack of skilled personnel, shortage of medication and shortage of equipment. Furthermore, violence against doctors in Iraq peaked in 2006 in the form of kidnapping, assassination, and injuries. Burnham et al. (8) also argued that immigration of doctors negatively impacted medical institutions in Iraq and it was concluded that the greatest challenge facing the health system in light of the ongoing conflicts was how to restore human capital resources.

Similar results have been found by other researchers. For example, a web-based survey by Al-Khalisi (9) which included 567 respondents who were Iraqi doctors found a lack of support from the health authority and the government. Moreover, the study showed the need to take serious measures to replace the loss of human resources by supporting junior doctors as well as the senior specialists by improving their training opportunities alongside ensuring improved security and incentives to support health staff. Smith (10) argues that even in the acute phase of conflicts, we should focus on the longer terms needs of healthcare workers and the infrastructures of the health systems as opposed to immediate short-term interventions or gains.

Retaining and developing human resources for health (HRH) during and after conflicts is a pressing need to ensure the availability of an effective and solid health system in situations of crises and post conflict redevelopment (11). In order to achieve this, some researchers have identified certain elements needed to support HRH. These elements are political willingness and availability of funds (11) as well as opportunities for further study and qualifications, coordination of work, and evidence-based actions in managing HRH (12). Fujita et al. (13), examined the situation of HRH in three post-crisis countries: Afghanistan, Cambodia and the Democratic Republic of Congo, and developed what they call the "House Model." This model identifies all the elements needed to develop a HRH system to respond to health needs in situations of crisis. The base of the house consists of the elements which fall under the responsibility of the government such as health policy, financing, and the legal framework. The pillars of the house which were built on the base are the production of healthcare professionals (for example training, education institutions, teaching staff and quality), their deployment (for example, recruitment) and retention (for example, continuous professional development, career paths and HR management). The roof is made up of a response Human Resources (HR) department. Coordination and monitoring are a cross cutting needs at all levels of this model.

Most of the available literature on healthcare professionals, however, focuses on the views of doctors especially those who reside outside of Iraq . Furthermore, there is very little qualitative research on health professionals needs during conflicts and wars. In this research we focused qualitatively on the perspectives of both nurses and doctors who were resident in Iraq during the conflict to provide a more comprehensive view of the impact of the war on healthcare professionals.

Our aim, therefore, is to explore the perspectives of health care professionals in Kirkuk in Iraq about the impact of the recent armed conflict (2014- 2018) on their healthcare practice and training, so as to inform decision makers such as the health authority in Iraq and other policy and guideline developers such as WHO to their needs.

Methods

A qualitative approach was utilised so as to understand the perspectives of unheard voices and give space for health staff to express themselves (14). This is important as qualitative research is relatively new in Iraq (15). The setting for this research was Kirkuk governorate; this area is located north of Iraq. South-eastern districts of Kirkuk were taken by ISIL in Jun 2014. In-depth interviews were conducted with 16 participants from different districts in Kirkuk impacted by the conflict. Purposive sampling (16) was used to recruit the sample to ensure representation of the cadre subgroups (doctors and nurses). The final sample consisted of 11 males, and five females, nine doctors and seven nurses. Age of participants ranged between 29 to 62 years old (please see table 1 and 2 below). All participants were working in public health facilities, 10 in primary and six in secondary facilities.

A flyer/recruitment poster was shared with health care professionals; those interested were asked to contact the primary researcher either in person or by email. A Participant Information Sheet gave comprehensive details of the study and an opportunity was given to ask questions about the study. Once informed consent was given, the face to face interview was arranged.

Sixteen semi-structured interviews were conducted with healthcare professionals in Kirkuk in Arabic. Interview questions were designed to cover different aspects of health practice and knowledge that might be affected by the conflict; for example resources, training, working environment and needs. No sensitive questions were asked regarding the participant's personal circumstance during the war or the conflict. Only questions regarding health practices, knowledge, and training, were asked. The interview questions were piloted (17) and no changes were made.

A consent form was prepared, and participants were asked to sign it to confirm their interest to be part of this research before the interview. Confidentiality was strictly maintained by using pseudonyms (18). All data were kept in a password protected computer and electronic devices. Ethical approvals from the University of Liverpool was obtained prior to the study as well as local ethical approvals from the research committee at Kirkuk Directorate of Health. A request was submitted to the DOH in Kirkuk which was followed by a meeting with the research committee to discuss the research proposal. Once the request was approved by the committee, a written facilitation letter was provided by the DOH. A Duty of Care to participants was included and any issues were signposted to a local agency. No such condition was faced during all sixteen interviews.

Thematic content analysis (TCA) followed the transcription (19) of the interview data. Arabic interviews were transcribed by the researcher into English so that both researchers could analyse the data.

Results

Two main themes emerged from the data as well as a number of sub-themes. The two main themes were: professional impacts and individual/personal impacts.

Theme 1: Professional impact of the crises

Participants expressed how the conflict impacted them professionally while they were working as health professionals in Kirkuk. In general, the research showed the negative impact of the crises on health staff and health services characterized mainly by an increase in work load and demand on health services as well as shortages of resources and the growing risks of violence against health providers. Education and training of the health workers were significantly impacted. A number of sub-themes were identified:

Workload

All the sixteen participants mentioned that the conflict substantially increased the number of patients in their health facilities. Participants described this increased use with different words such as massive, huge, unheard of, abnormal and unexpected which all went beyond the capacity of the local health system. Others said that the number of patients was increased by two to three fold with the influx of the IDPs to their areas. This load necessitated staff to take on extra duties including starting work earlier and working on off days. Staff were unable to take their annual leave because of this increased demand. Increases in particular diseases were reported including Leishmaniosis because of a lack of vector control activities which contributed to the growing demand on health services.

This increased workload affected all the units within the health facilities and meant that staff spent less time with patients and less time on consultations so as to manage the work load. All the above issues led to an increased chance of misdiagnosis and complications.

In the hospitals, staff mentioned that patients were being admitted to the hospital even when there was no bed capacity on the wards, to a point where patients were sleeping on the floor. Waiting lists for non-emergency surgery increased alarmingly. Despite this increased workload, the DOH put pressure on staff to implement all the public health programs such as checks for non-communicable diseases for every patient above 40 years old as well as checking the vaccination status for all children below five years attending the PHCC. The insistence of the DOH, it was felt, contributed to the increased workload and created some tensions between the health staff and the patients who didn't want to conduct these extra checks imposed by the DOH.

R15 "They pressured us to run all programs, and this was making problems, the client was saying why I need to do the vaccination form? Why don't I go directly to see the doctor? This was making problems".

One of the participants mentioned that the extent of the workload varied from one place to another depending on the level of education and the economic status of the clients which impacted the number of patients visiting the health facilities. For example, some participants mentioned that the implementation of the self-funding system in health facilities, which includes charging fees for each and every service provided for the clients, decreased the load on the primary health care centers (PHCCs) as opposed to the hospitals. Thus*, although most health facilities faced substantially increased workloads this was felt more by hospitals.*

Shortages of resources

Fifteen of the sixteen participants mentioned the shortage of medication as a significant impact of the crises on the health system. Lack of medications was described in different ways ranged from limited medication to complete lack of medication. The shortages meant that medication was shared between patients, patients were asked to buy their own medication from private pharmacies, placebo drugs were given in an attempt to work on the psychological side of the patient, hospitalization times increased, donations were received from individuals, staff bought medication for the patients and finally patients bought cheaper non-regulated medications which it was felt hampered the response to the treatment. Moreover, the availability of medication was not increased to take into account the greater number of patients. Participants also spoke about how in areas controlled by ISIS as well as in Kirkuk, vaccines were provided but they were not used because of uncertainty about the source and transportation conditions.

Medical staff were advised by the DOH to use alternative medications in case of shortages of the first choice medication. This approach didn't always work because some medications were difficult to replace with other drugs. Moreover, because of the shortages of anesthesia medications, the number of surgeries decreased.

R14 "the surgeons suffered from big issue. They had a very limited schedule, only two surgeries were allowed per week for them".

Shortage of staff was a controversial issue among the participants and it was stated that there were significant shortages of doctors due to them not wanting to move to areas which were in the conflict area to cover gaps. Inequitable deployment of staff without giving enough consideration to the actual needs on the ground and the safety of the staff were highlighted. Very few staff joined the health facilities in Kirkuk to help with the extra workload and it seemed that staff had no choice but to be multifunctioning during the crises to be able to manage the unusual increase of the patients. For example, cleaners were used to control crowds.

In ISIL occupied areas, staff were not paid their salaries which pushed the last few health staff to flee the area to safe zones. This issue significantly contributed to the gradual deterioration of health services in ISIL areas and increased the number of mortalities because of the shortages of health services and access issues such as the blockages of referrals to Kirkuk.

Training

Some of the participants stated that training was provided by the DOH about seasonal diseases like diarrhea in summer and flu in winter but the training was not crises-specific. Others said that at the beginning of the crises there were training sessions but as the conflict continued these stopped. Others mentioned that some training was provided by NGOs for example training on mass casualty management of chemical agents. However, the majority of the participants said that no training or education opportunities had been offered during the crises.

R5 "There were no trainings, but instructions were sent to us {by DOH} but – training….. it didn't happen".

<u>Theme 2: Individual or personal impact of the conflict on health staff</u>

Participants mentioned numerous ways in which the crises impacted them individually. The impact was divided into a number of subthemes as follows:

Physical and Mental Impacts

Participants described the physical impact as tiredness, exhaustion, fragmentation of efforts, having less time to rest, hunger because either food was not provided or they didn't have time to eat due to the workload. Additionally, restriction of movements because of security concerns affected their ability to work and study in remote areas.

A broad spectrum of psychological, mental and intellectual impacts emerged from this research which had a direct or indirect effect on the performance of the staff including psychological issues, depression, increased pressure, anger, and stress. However, the crises also meant that the staff were more attuned to the suffering of the patients.

R10 "we changed how we deal with them, we became more patient and brotherly."

Many participants expressed their passion for their profession and expressed responsibility and empathy toward the affected communities and this was what kept them going.

R3 " First my conscience pushes me, secondly they are poor they are Iraqis, they are our family, our children..."

Participants highlighted that additional benefits and privileges needed to be offered to staff during the crises believing that it will be interpreted as an act of encouragement and support and would impact on staff well-being. The staff mentioned the provision of transportation, food, annual leave and the establishment of facilities for staff like a cafeteria within the health facility. Moral incentives like appreciation and thanks alongside other financial incentives like bonuses were identified by many participants as fundamental to improving well-being. Hardly any of the participants felt that the DOH had shown their thanks and appreciation for the work that they had done in difficult situations. However, some felt that the DOH were overloaded themselves.

R6 "I excuse the DOH as they were overloaded themselves. As we got tired they were tried as well".

Knowledge and Education

Participants spoke about the impact of the crisis on their knowledge and educational study. Some highlighted that there was a lack of contact with their mentors plus a shift in the mentor's priorities as they themselves had to cope with an increase in workload.

Moreover, professors were facing access issues to get to the health facilities, and they were only able to meet their students once a week for a couple of hours. Staff mentioned that they had no time to organize or attend scientific/learning activities like lectures or conferences. This meant that they had to depend upon themselves in relation to self-learning to increase their professional knowledge, despite the reduced time available for study.

R15 "we mostly were depending on ourself and the books, we didn't get benefit from our professors."

One of the participants said that the duration of their postgraduate study was extended by an additional six months by the university who were trying to compensate for the gaps mentioned above which were an additional burden on them.

The rest of the participants had plans to continue their study but were not able because of security and financial instability as well as an inability to leave their families behind plus a lack of opportunities. The security issues hampered their movement to attend centers of postgraduate studies. However, other participants mentioned that the increase in work load and the emergence

of new diseases was a motivation to study and to search for knowledge. Some stated that new knowledge and experiences were gained during the crises as a result of the increase in patients.

R1 "we saw rare cases which is positive. We have learned as much as you see more cases you will be knowledgeable."

Risk of communicable diseases and violence

Healthcare providers during the crises were exposed to many kinds of risks that affected them directly or indirectly. Risk of communicable diseases was the frequently mentioned issue during the interviews. Staff took protective measures to decrease the risk of communicable diseases like putting on gloves and masks while approaching patients.

R3 "Mostly we were worried about diseases spread among the IDPs, we started wearing gloves and masks, and keeping the patients a bit far from us."

The majority of the participants, however, did not feel safe during the crises because of the growing risk of violence by clients inside the health facilities. Participants spoke about a lack of protection for staff while practicing their work as a critical issue during the crises. Some staff were subjected to physical or verbal violence by the patient or his/her relatives.

R14 "You know the intimidation of the doctors happens…..there should be a focus on the security side in the hospitals and protect the doctors and the health staff, because they will not be able to work, even will not be able to do the minimum of their task."

Participants spoke about clients were carrying weapons while attending the health facilities which was frightening and threatening to health professionals.

R11 "we had the issue of carrying weapons in the PHCCs, we put posters to say it is forbidden."

Several factors were identified as contributing to the increased risk of violence against healthcare providers. These factors were weakened state power because of the war, an increase in local power groups, the incitement through the media against health staff, lack of protection and guards inside the health facilities and the loss of trust in security forces.

Shortages of resources and the challenges facing the practices of health professionals in addition to the demanding health programs imposed by the DOH led to the development of misunderstandings between healthcare providers and patients. Some of the gaps were interpreted as intentional and staff were accused by patients of stealing medication and getting commission from private pharmacies and hospitals when they recommended that the patient buy their own medication or go private. As a result of that, this impacted on the morale and creativity of staff leading many to think of leaving the country. Coupled with this was the risk of air strikes on health facilities in ISIL holding area.

R13 "We were scared; sometimes if we didn't have patients, I was walking in the open space around the PHCC fair fear of the air strikes targets the building."

Discussion

The study showed that the conflict had a wide range of impacts on the practices of healthcare professionals in Iraq. Health staff highlighted physical and mental exhaustion and that their capability for providing health services was weakened by the increased work load and an apparent lack of resources. These impacts had serious consequences on the quality of healthcare services provided during the conflict similar to the results of the research by Al Hilfi, & Burnham (20) which highlighted the deterioration of the quality of care provided in Iraq as a result of the protracted conflicts. This coupled with increases in other public health risks, for example, communicable diseases, and the marked increase in demand could trigger additional health crises.

A gap was highlighted in the training of health staff that impacted negatively on the training of staff including postgraduate training. The quality of formal education provided was problematic during the conflict because of the situation itself, security issues and workload. Considering that the active phase of the crises lasted for four years while the indirect effects are still ongoing, those professionals may not have the motivation or opportunity to carry on with their learning journey depriving the health system in the country from new and additional capacities. Moreover, a lack of opportunity may mean that new recruits to healthcare professions may be reduced. This issue supports the findings of the research by Burnham et al. (8) and Al- Khalisi (9) who addressed the issue of a decrease in the number of professionals qualifying from medical educational institutes and the inability to replace doctors after retirement. Additionally, both Al- Khalisi (9) and Smith (10) stressed the need for long term support for staff training. Lack of quality training during the crises left staff in a difficult position and at risk of mismanaging community health because of a lack of training on how to detect and control health threats that may be more prevalent during conflict situations.

Increasing violence toward healthcare professionals was shown as a major hurdle in this research. Participants highlighted repeatedly that protection was needed in order for them to able to continue with their work. This was quite similar to what was identified in the research of Burnham et al (8), and Al- Khalisi (9) who identified the risk of violence and intimidation as a leading cause for doctors fleeing Iraq.

The health workforce is one of the six building blocks of an effective health system (21). The ability of any given country to reach its goals in the health sector depends widely on the skills, knowledge, distribution, and motivation of the staff delivering healthcare services (21). Accordingly, support for health staff in term of their knowledge, practices and the work environment should be maintained during conflict situations to ensure the continuous functionality of an efficient health system at the peak of the need.

The qualitative research discussed in this paper explored the impacts of the recent conflict in Iraq between 2014-2018 on healthcare providers, specifically doctors and nurses in Kirkuk. In-depth interviews identified a number of individual and professional impacts of the crises on the health staff and the quality of health services. A number of recommendations are identified. Firstly, preparedness and capacity building of staff to be able to handle conflict situations is crucial. Second, measures need to be put in place to ensure that violence towards health care staff is not tolerated and work environments are secure. Third, plans for anticipated crises, like stock and supply chain for medications and supplies, trainings and guidelines need to be apparent. Fourth, a robust monitoring and evaluation system for the quality of the health services provided in conflict zones needs to be established as well as ensuring that feedback is collected from both providers and end users. Fifth, it is imperative that continuous professional development and training

continues during conflict and sufficient time allocation for both mentors and students is needed including considering virtual connections to overcome access issues as well as organization of scientific online forums and discussions.

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Tables and Figures

Table 1: Study Demographics

Characteristics	Participants
Gender	11 Male 5 Female
Age Group (years)	29-62
Academic degree	9 MBCHB 1 Nursing school 6 Nursing Institute
Professional degree	Nine medical doctors Seven nurses
Level of the facility	Ten primary 6 secondary

Table 2: Study Participants' Demographic

Participant	Age	Gender	Academic degree	Professional degree	Level of the facility
P1	29	Female	MBCHB	Medical doctor	Secondary
P2	40	Male	Nursing Institute	Nurse	Primary
P3	44	Female	Nursing school	Nurse	Primary
P4	62	Male	Nursing Institute	Nurse	Primary
P5	31	Female	MBCHB	Medical doctor	Primary
P6	58	Male	MBCHB	Medical doctor	Primary
P7	41	Male	Nursing Institute	Nurse	Primary
P8	32	Female	MBCHB	Medical doctor	Primary
P9	52	Male	Nursing Institute	Nurse	Secondary
P10	61	Male	MBCHB	Medical doctor	Primary
P11	42	Male	Nursing Institute	Nurse	Primary
P12	39	Male	MBCHB	Medical doctor	Secondary
P13	38	Male	Nursing Institute	Nurse	Primary
P14	41	Male	MBCHB	Medical doctor	Secondary
P15	40	Female	MBCHB	Medical doctor	Secondary