

Health Needs and Care Seeking Behavior of Internally Displaced Persons Living in Jalozei Camp (Khyber Pakhtunkhwa, Pakistan)

Mohammad Imran Marwat Fellow Ph.D. Public Health, Health Services Academy, Islamabad, Health Services Academy, Islamabad, Pakistan. Email: imranmarwat_30@yahoo.com

Katrina A. Ronis Associate Professor. Health Services Academy, Islamabad, Health Services Academy, Islamabad, Pakistan.

Noor Sanauddin Assistant Professor, Department of Sociology, University of Peshawar, KP, Pakistan

Abstract

Since 2009, an estimated 3 million people were displaced in Pakistan of which 10% took refuge in "camps". To ascertain their health needs and care-seeking behavior an exploratory cross-sectional survey was undertaken from November 2017 to April 2018 in Jalozei camp by interviewing 318 household heads and 318 married females using systematic and convenient sampling techniques respectively. Study findings revealed that 91% of the IDPs received some assistance for shelter, food, water, sanitation and basic health services while 37% of respondents had difficulties in fulfilling their family food demands, 38% had poor access to water. The prevalence of communicable and non-communicable diseases in the camp was 29% and 23% respectively. Demand for basic public health needs and health services was high and required active and coordinated interventions by both the public and private sectors. The study recommends a national health framework for IDPs.

Key Words

Care Seeking Behavior, IDPs, Human Rights, Health Services, Health Needs, Pakistan

Introduction

Globally, conflict-induced displacement of populations is at its peak and greater than any other time since World War II (DeJesus, 2018; Edwards, 2016). Armed conflicts often result in disruption of health infrastructure by impeding the operational viability of health care services (Bile et. al. 2010). To adequately address the health needs of Internally Displaced Persons (IDPs) is an enormous challenge for the host countries as well as for the humanitarian agencies. During any humanitarian crisis, "rapid needs assessment" has gradually become an important component of relief activities (Ayazi et. al, 2015).

In 2005, the World Health Organization (WHO) stipulated the "Health Action Scope" during any humanitarian crisis through Assembly Resolution 58.1. The WHO emphasized rapid needs assessment, identification of critical gaps, timely interventions and strengthening the country's health system for preparedness and response (WHO, 2005). Armed conflicts often result in disruption of health infrastructure by impeding the operational viability of health care services (Bile et al., 2010). Pakistan's health system which was already underfunded and was functioning at sub-optimal level (Nishtar, 2010) was severely damaged and disrupted due to armed conflicts and posed serious threats to the basic health needs of the IDPs (Bile et. al., 2011).

The unprecedented internal displacement from the settled districts and tribal areas of Khyber Pakhtunkhwa province in the northwest of Pakistan marked the history when at one point more than 3 million people were forcibly displaced due to armed conflicts. During 2011, Pakistan was one of the top 15 countries who accounted for 72% of the world's 27.5 million IDPs and was the only country that had no legal framework for IDPs (International Crises Group, 2006).

Less than 10 percent of these displaced families took refuge in camps established by the Pakistan Government in collaboration with International Organizations. The Jalozei camp, previously used for Afghan refugees, was one of the biggest IDP camps in the country, whereby it hosted thousands of displaced families from Khyber, Bajaur and Mohmand agencies of tribal areas (Javaid, 2016). Multiple problems including lack of shelter, food and health services were faced by these IDPs (Khan, 2015).

Since Pakistan's independence in 1947, the political environment has oscillated between military and civilian rule and hence policy formulation and implementation have been affected. In 2005, the

country's first multi-sectoral health think tank "Pakistan's Health Policy Forum" was established by a local non-government organization (Nishtar, 2005). One of the aims of this health-focused think tank was to promote and ensure formulation, implementation and evaluation of national health policies via a wide array of stakeholders (Ronis, 2017).

This study was conducted with the objectives to examine the perceived health needs of IDPs living in Jalozai camp and to explore the health-seeking behavior of these vulnerable groups. The study will help in providing baseline information to the health care providers and to the local government for effective health planning and delivery of health care services to IDPs.

Methods

This study was conducted with the objectives to assess the perceived public health needs and the health-seeking behavior of IDPs living in the Jalozai camp of district Nowshera, KP Province, Pakistan. Ethical approval was obtained from the Health Services Academy and from the Department of Provincial Disaster Management Authority of Khyber Pakhtunkhwa.

Sampling technique

At the time of the study, 3,770 IDPs families were residing in the Jalozai camp (Mohsin, 2013).



Figure: The movement of conflict-induced IDPs from the settled and tribal districts of Khyber Pakhtunkhwa province (Bile et al., 2010).

The sample size was calculated by using the Sample Size Formula $(N) = pqZ^2/E^2$ (Sarantakos, 2012) where it was assumed that 50% respondents (p) would have affirmative and 50% respondents (q) would have negative answers about suffering from illness during last one month time period. The Confidence Interval (E) and Standardized

Deviation (Z) were set at 95% and 1.96 respectively. Given these conditions, the required sample size was 384 and the study respondents were selected through systematic random sampling (Collins, Onwuegbuzie, & Jiao, 2007). Although the calculated sample size was 384 in an actual total of 318 respondents (response rate 83%) were interviewed and the remaining 66 (17%) refused to participate. Along with the 318 household heads, one married female from each household was also selected through convenient sampling technique and was interviewed.

Data collection instrument

The structured questionnaire was first drafted in the English language and then translated to Pakistan's national language "Urdu" and then to the local "Pashto" language by 2 native speakers. For content validity, the questionnaire was reviewed by public health experts and was pilot tested by interviewing 38 IDPs (10% of sample size) in the Jalozai camp.

Survey Interviews

The interviews were conducted by 5 data collection teams, each comprised of one male and one female member. All team members were recruited on the basis of their previous work experience in the Jalozai camp as Social Workers. All teams received 3 days of vigorous training via classroom lectures and role-plays. For final data collection, approval was taken from the department of Provincial Disaster Management Authority (PDMA) (www.pdma.gov.pk).

In this study, a household was defined as "a group of people who eat and live under one roof or share one temporary accommodation (tent or mud house)" (Kim, Torbay, & Lawry, 2007). The interviews from household respondents were conducted from November 2017 to April 2018. Keeping in mind cultural constraints, information about all questionnaire sections (except mother and child health (MCH) section) was collected by a male team member. The relevant information about MCH including family planning and immunization was collected by interviewing at least one married female from the family of study respondents by a female team member.

Data Analysis

The structured questionnaire was analyzed through coding, indexing and then entering data into SPSS software version 20 (Statistical Package for Social Sciences) followed by data cleaning. The descriptive statistical analysis and interpretation of various variables were carried out from frequencies and percentages drawn through SPSS.

Limitations

There were a few study limitations. First, due to the frequent movement of IDPs and the non-availability of records of registered IDPs, we were unable to include all IDPs in our study sampling frame. Secondly, we were unable to assess the pre-conflict situation of study participants like their demographic profile and access to basic facilities including health services which may have influenced study findings.

Results

Demographic Profile

From the 384 sampled households, 318 household heads (83% response rate) participated in the study. The demographic profile of the study respondents is presented in Table 1. Male to female ratio of study respondents was 298 (94%) and 20 (6%) respectively. The mean age of respondents was 41 ± 11.6 years and the range was 21-69 years. The mean household members' size was 11.47 ± 3.8 and mean years of displacement were 6.92 ± 3.2 (Table-1).

Out of 318, 177 (56%) had no formal schooling and 80 (25%) attended primary school only. Regarding occupation, 115 (36%) were laborers and 84 (27%) respondents were jobless at the time of the study.

Table 1. Demographic profile of IDPs living in Jalozai camp

Characteristic	No. (%) or Mean \pm SE (Range)
Gender distribution (n=318)	Male 298 (94)
	Female 20 (6)
Mean age	41 ± 11.6 (21-69)
Years of displacement (n=318)	6.92 ± 3.2 (3-11)
Mean household size (n=318)	11.47 ± 3.8 (5-18)
Area of origin (n=318)	Bajaur Agency 154 (49)

Education profile (n=318)	Mohmand Agency	141 (44)
	Khyber Agency	23 (7)
	No formal schooling	177 (56)
	Primary Schooling	80 (25)
	Higher Secondary	25 (8)
Occupational profile (n=318)	College or university	36 (11)
	Laborer	115 (36)
	Jobless	84 (27)
	Shopkeeper	50 (16)
	Skilled Worker	33 (10)
	Government Servant	19 (6)
Marital status (n=318)	Farmer	17 (5)
	Married	297 (88)
	Widow or widower	20 (6)
Type of shelter (n=318)	Bachelor or engaged	19 (6)
	Tent house	134 (42)
	Mudhouse	147 (46)
	Brick house	37 (12)

Perceived Public Health Needs by the Study Participants

Although many gaps were identified in terms of coverage of basic public health needs by the IDPs living in Jalozai camp, over half of the IDPs had some access to shelter, ration, potable water, and basic health services. Overall, 43 % replied that they received assistance from the Pakistan Government while 42 % received assistance from the non-governmental organizations. Eighty-five percent (85 %) of the survey respondents replied that they received assistance in the form of shelter (tents only), 72 % received food ration (rice, cereals, oil and wheat flour), 73 % received basic medical care, 29 % received financial assistance (once only), 20 % were assisted in getting primary education in camp settings and 74 % replied that they received assistance in the form of health information sharing to promote and protect their health and well-being (Table-2).

Table 2. Characteristics of basic needs (Assistance & Food) of IDPs in Jalozai camp

Characteristic	No. (%) or Mean ± SE (Range)	
Assistance provided	Government	138 (43%)
	NGOs/INGOs	130 (41%)
	Family/Friends	18 (6%)
	No assistance	32 (10%)
Type of assistance provided	Shelter (Tent/s)	269 (85%)
	Food Ration	220 (72%)
	Medical Care	232 (73%)
	Information	235 (74%)
	Financial	92 (29%)
	Education	62 (20%)
	Difficulties faced fulfilling family food demands	Never
	Rarely	152 (48%)
	Sometimes	87 (27%)
	Frequently	32 (10%)
A coping mechanism to fulfill family food demands	Decreased food quantity of	142 (48%)
	By taking loan	50 (16%)
	Decreased food quality	48 (15%)
	To send children for work	18 (6%)
	Any other	13 (4%)

The study respondents faced great difficulty in obtaining potable water as 38 % replied that they had poor access to a safe water supply. The sources from where they were obtaining potable water included: well 30%, water tanks 24%, hand pumps 22%, private tube well 11%, and the remaining 13% were obtaining water from other different sources. With respect to sanitation practices, 43% of study respondents and their household members were

practicing open field defecation. The remaining 48% and 9% had latrine facilities inside their courtyard with no pit hole and with a pit hole respectively.

The study respondents identified several basic needs which required immediate attention. Out of 318 study respondents, 39% and 29% demanded provision of water & sanitation facilities and latrine facilities in their courtyard respectively. A quarter (26%) asked for improvement in the living conditions of their temporary accommodations by providing tents (Table-3).

Table 3. Characteristics of basic needs (Water and Sanitation) of IDPs in Jalozai camp

Characteristic	No. (%) or Mean \pm SE (Range)
Access to clean water	Yes 196 (62%)
	No 122 (38%)
Sources of water	Well 96 (30%)
	Water Tanks 75 (24%)
	Hand pump 71 (22%)
	Private tube well 35 (11%)
	Other sources 41 (13%)
	Latrines availability
Latrines availability	Latrines without pit hole 153 (48%)
	Latrines with pit hole 29 (9%)
	The main problem which needs to be addressed
The main problem which needs to be addressed	Latrines availability 91 (29%)
	Living conditions 82 (26%)
	Basic infrastructure 21 (7%)

Morbidity among IDPs of Jalozai Camp

The disease prevalence among study respondents of Jalozai camp and their household members was calculated to be 7% (461/6680) of which 28% (137/461) were children <5 years of age and they had one or more symptoms of diarrhea or cough while 20% (91/461) belonged to old age group.

In the Jalozai camp, the prevalence of communicable and non-communicable diseases was 29% and 23% respectively followed by 16% water-born, 12% food born, 10% psychiatric illnesses and 10% other diseases such as skin infections and injuries as shown in figure 1.

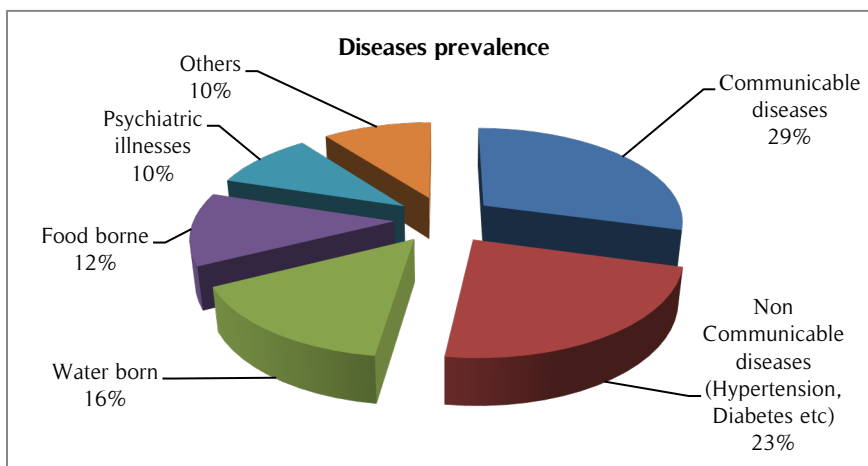


Figure 1. Common Diseases in Jalozai IDPS Camp

Health Seeking Behavior of the IDPs

IDPs' access to adequate health care services is a global and local concern; however, the latter has the overall responsibility to address these concerns (Din, 2010). In our study, 45% of the IDPs preferred to consult health facilities situated outside the Jalozai camp. The remaining 29% and 11% sought treatment in health facilities

situated inside the camp or used other local traditional methods of treatment respectively. Fifteen percent (15%) of study respondents did not receive any treatment from any provider (formal or informal) in figure 2.

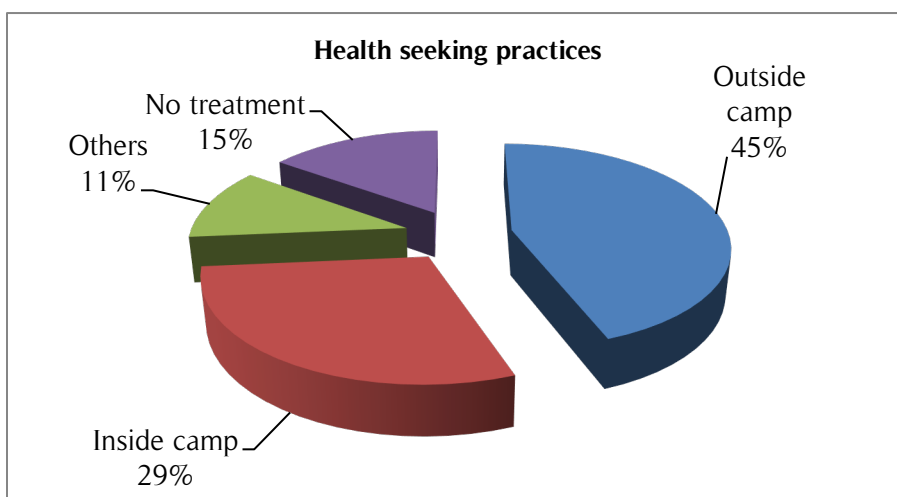


Figure 2. Health Seeking Practices of IDPS Living in Jalozai Camp

Almost a fifth (18%) of the study respondents preferred NGO health facilities over public (3%) and private clinics (8%) situated inside the Jalozai camp. While consulting health facilities outside the Jalozai camp, a third (30%) of the study respondents replied that they received treatment from public health facilities.

The study also identified other “health-seeking” practices that were adopted by the study respondents including self-treatment (3%), local traditional methods (6%) and spiritual healing methods (2%).

The main reasons which influenced the care-seeking practices of study respondents included the non-availability of appropriate services (4%), distance from health facility (4%), direct and indirect treatment cost (5%) and diseases with mild symptoms (3%) (Table-6).

Table 4. Health Seeking Practices among IDPs of Jalozai Camp

Health Seeking Practices	Frequency	Percent	
Inside Camp	Government health facility	11	3.0
	INGO/NGO	58	18.0
	Private clinics	24	8.0
	Government health facility	94	30.0
Outside Camp	INGO/NGO	4	1.0
	Private clinics	43	13.0
	Self-Treatment	11	3.0
	Local Traditional Methods	19	6.0
Other Methods	Spiritual Healing Methods	6	2.0
	Proper services not available	12	4.0
	Facility far away	12	4.0
	Costly	15	5.0
No Treatment	No serious illness	9	3.0
Total		318	100.0

Discussion

Complex emergencies including armed conflicts and disasters (both natural and man-made) have always resulted in humanitarian crises throughout the world (Bile et al., 2011). The immediate and long term effects of all disasters are particularly high on the communities who suffered from these emergencies (Aslam & Yilmaz, 2011). The minimum Sphere standards (Humanitarian Charter and Minimum Standards in Humanitarian Response) also emphasize the need to focus on food, shelter, environmental health (water & sanitation) and provision of basic

health services particularly to the most vulnerable population groups (females, children and elderly people) (Qayum et al., 2011).

A low level of education, poor living conditions and low socioeconomic status of internally displaced persons is directly linked to their poor health status (Cutler & Lleras-Muney, 2006)

Our study findings revealed that overall the demographic profile including living conditions, level of education and socioeconomic status of IDP living in Jalozai camp was very poor and posed a serious threat to their health while living in the camp. The IDPs living in Jalozai camp were exposed to extreme weather conditions, such as dust storms and rainy seasons. The shortage of proper tents and lack of blankets, sheets, and proper clothes expose IDPs to acute respiratory tract infections (Mohsin, 2013).

During complex emergencies, the provision of adequate potable water and sanitation facilities are considered to be essential components of basic health services (Sclar et al., 2016). Due to lack of access to clean potable water, the IDPs of Jalozai camp was at risk of developing water-related diseases and our findings were consistent with another study conducted in the same settings (Qayum et al., 2010). Similarly, lack of proper sanitation and latrine facilities posed a serious threat to outbreaks of diarrhea and other infectious diseases with the fecal-oral transmission which was also reported by another study conducted in similar settings (Kim et al., 2007).

In this study, 37% of the study respondents expressed that they had problems in fulfilling the food demands of their families. Similar findings were revealed in another study conducted in the same setting, where it was revealed that the IDPs of Jalozai camp received insufficient “*Kacha Ration*” (dry ration) including flour, rice, lentils and cooking oil (Mohsin, 2013). A study conducted in Darfur, Sudan reported a similar situation where the food ration which IDPs received was insufficient and they were at risk of malnutrition and increased morbidity (Kim et al., 2007)

Displaced women and children are more susceptible to diseases and with high morbidity and mortality rates than any other age group (Henry, Lagoro, & Orach, 2012). According to our research findings, the highest percentage of diseases were attributed to the communicable (29%) and non-communicable (23%) group of diseases. Children were more affected by communicable diseases including acute diarrhea and respiratory tract infections and the non-communicable diseases were more prevalent among adults and the old age group of IDPs. In camp settings, MCH (Mother-Child Health) and communicable diseases remain the main areas of focus (Cetorelli, Burnham, & Shabila, 2017).

The most commonly reported infectious diseases among disaster-affected children to include diarrhea, measles and acute respiratory tract infections (Olwedo, et. al., 2008). Similarly, in complex emergencies old age population group also faces the full impact of inadequacies regarding their health issues (Khan, 2014). Our study findings of non-communicable diseases in the old age IDPs were consistent with the study findings conducted in Syrian displaced population (Doocy, et. al., 2016).

In the Jalozai camp, half of the displaced population was composed of women (Mohsin, 2013). Almost all the IDPs living in Jalozai camp belonged to the tribal region where according to a WHO report, the health indicators were already very poor; the maternal mortality ratio of Khyber Pakhtunkhwa (including tribal areas) was 273/100,000 live births (Gani & Ali, 2013). Our study findings were consistent with the reported poor state of reproductive maternal health. There was a high rate of pregnancy, poor family planning, and higher rates of untrained birth attendant assisted deliveries. Similar findings were also reported by a research study conducted with the displaced population in Afghanistan (Hirose et al., 2011).

Pakistan adapted health cluster strategy initiated by WHO in collaboration with the government and other local and international organizations to respond to the basic health needs of IDPs and to minimize the morbidities and mortalities (World Health Organization, 2009). In early phases of displacement, the cluster response was quite noticeable but later on, raising funds became the biggest challenge due to decreasing interest of donors caused by the humanitarian crisis of Syrian refugees (Khan, 2014). In order to ensure adequate response to the basic needs of IDPs, it is pertinent to strengthen the primary health care model and to continue additional support (technical & financial) by the international community.

Conclusion

Demand for basic public health needs and health services were high among conflict-induced IDPs of tribal areas living in Jalozai camp. In terms of public health needs access to clean water and adequate sanitation facilities were extremely poor. The health needs of mothers and children were largely unaddressed due to a lack of essential health care facilities and services inside the camp. In spite of tenuous socio-economic circumstances of the study respondents, public health facilities outside the Jalozai camp were preferred over private health facilities provided

by NGOs inside the camp. The health status of Jalozaï IDPs was at risk to further deteriorate as the funding support to the public health system was gradually declined and the economic situation of camp IDPs became more tenuous.

Recommendations

- It is recommended that the government of Pakistan should draft a legal framework to recognize the rights and responsibilities of IDPs.
- New innovative and sustainable strategies are required to be planned to respond to the basic needs of the displaced populations.
- Adequate response and stewardship are required at all levels including political, bureaucratic and at the community level.
- In order to address the primary health care needs of IDPs, continued technical and financial support of development partners is very important.

Funding

None

Competing interests

Declared none

References

- Aslam, G., & Yilmaz, S. (2011). Impact of decentralization reforms in Pakistan on service delivery—An empirical study. *Public Administration and Development, 31*(3), 159-171.
- Ayazi, T., Swartz, L., Eide, A. H., Lien, L., & Hauff, E. (2015). Perceived current needs, psychological distress and functional impairment in a war-affected setting: a cross-sectional study in South Sudan. *BMJ Open, 5*(8), e007534.
- Bile, K., Hafeez, A., Kazi, G., & Southall, D. (2011). Protecting the right to health of internally displaced mothers and children: the imperative of inter-cluster coordination for translating best practices into effective participatory action.
- Bile, K., Shadoul, A., Raaijmakers, H., Altaf, S., & Shabib, K. (2010). Learning through crisis: Development and implementation of a health cluster strategy for internally displaced persons.
- Cetorelli, V., Burnham, G., & Shabila, N. (2017). Health needs and care seeking behaviours of Yazidis and other minority groups displaced by ISIS into the Kurdistan Region of Iraq. *PLoS One, 12*(8), e0181028.
- Checchi, F., Warsame, A., Treacy-Wong, V., Polonsky, J., Van Ommeren, M., & Prudhon, C. (2017). Public health information in crisis-affected populations: a review of methods and their use for advocacy and action. *The Lancet, 390*(10109), 2297-2313.
- Collins, K. M., Onwuegbuzie, A. J., & Jiao, Q. G. (2007). A mixed methods investigation of mixed methods sampling designs in social and health science research. *Journal of mixed methods research, 1*(3), 267-294.
- Cutler, D. M., & Lleras-Muney, A. (2006). Education and Health: Evaluating Theories and Evidence. National Poverty Center Working Paper Series# 06-19. *National Poverty Center, University of Michigan*.
- DeJesus, K. M. (2018). Forced migration and displacement in Africa: contexts, causes and consequences: Taylor & Francis.
- Din, N. U. (2010). *Internal displacement in Pakistan: contemporary challenges*. Human Rights Commission of Pakistan Islamabad.
- Doocy, S., Lyles, E., Akhu-Zaheya, L., Burton, A., & Burnham, G. (2016). Health service access and utilization among Syrian refugees in Jordan. *International journal for equity in health, 15*(1), 108.
- Edwards, A. (2016). Global forced displacement hits record high. *UNHCR News, 20*.
- Fisher, M. J., Marshall, A. P., & Mitchell, M. (2011). Testing differences in proportions. *Australian Critical Care, 24*(2), 133-138.
- Gani, G. N., & Ali, A. T. (2013). Prevalence and factors associated with maternal postpartum haemorrhage in Khyber agency, Pakistan. *Journal of Ayub Medical College Abbottabad, 25*(1-2), 81-85.
- Goldman, R. K. (2009). Internal Displacement, the Guiding Principles on Internal Displacement, the Principles Normative Status, and the Need for their Effective Domestic Implementation in Colombia. *ACDI, 2*, 59.
- International Crises Group (2006). Pakistan's Tribal Areas: Appeasing the Militants. *Crisis Group Asia Report, No.125*).
- Henry, O. J., Lagoro, K. D., & Orach, C. G. (2012). Prevalence of malaria and treatment seeking behaviours among pregnant women in postconflict internally displaced persons' camps in Gulu District. *Age, 14*(25), 423.
- Hirose, A., Borchert, M., Niksear, H., Alkozai, A. S., Cox, J., Gardiner, J., . . . Filippi, V. (2011). Difficulties leaving home: a cross-sectional study of delays in seeking emergency obstetric care in Herat, Afghanistan. *Social Science and Medicine, 73*(7), 1003-1013.
- Javaid, U. (2016). Pakistan Fights Militant Extremism [Operation Zarb-i-Azb] and the Challenge of Internally Displaced Persons: A Threat to Human Security. *Journal of Political Studies, 23*(2), 493.
- Kalin, W. (2008). Guiding principles on internal displacement. *Stud. Transnat'l Legal Pol'y, 38*, 1.
- Khan, M. A. (2015). *Women and the FATA Conflict: Unfulfilled Promises*.
- Khan, S. (2014). Health assistance to internally displaced persons of South Waziristan Agency in camps and host community.
- Kim, G., Torbay, R., & Lawry, L. (2007). Basic health, women's health, and mental health among internally displaced persons in Nyala Province, South Darfur, Sudan. *American Journal of Public Health, 97*(2), 353-361.
- Kim, H.-Y. (2017). Statistical notes for clinical researchers: chi-squared test and Fisher's exact test. *Restorative dentistry & endodontics, 42*(2), 152-155.
- Mohsin, Z. R. (2013). The crisis of internally displaced persons (IDPs) in the federally administered tribal areas of Pakistan and their impact on Pashtun women. *Tigah: A Journal of Peace and Development, 3*(2), 92-117.
- Nishtar, S. (2010). *Choked pipes: reforming Pakistan's mixed health system*. Oxford University Press Karachi.

- Olwedo, M. A., Mworozzi, E., Bachou, H., & Orach, C. G. (2008). Factors associated with malnutrition among children in internally displaced person's camps, northern Uganda. *African Health Sciences*, 8(4), 244-252.
- World Health Organization (WHO) (2005). Health action in relation to crises and disasters, with particular emphasis on the earthquakes and tsunamis of 26th December 2004. (WHA58.1).
- World Health Organization (WHO) (2009). Health cluster guide: A practical guide for country-level implementation of the health cluster: World Health Organization.
- Qayum, M., Adil, A. H., Haqqani, U., Rehman, W., Khan, M., & Khan, T. A. (2010). Bathing and cleaning practices in the camp of Jalozi Pakistan, for internally displaced people, based on Sphere Standards and Indicators. *JPMA: Journal of the Pakistan Medical Association*.
- Qayum, M., Adil, A. H., Haqqani, U., Rehman, W., Khan, M., & Khan, T. A. (2011). Bathing and cleaning practices in the camp of Jalozi Pakistan, for internally displaced people, based on Sphere Standards and Indicators. *JPMA-Journal of the Pakistan Medical Association*, 61(12), 1169.
- Sarantakos, S. (2012). *Social research*: Macmillan International Higher Education.
- Sclar, G. D., Penakalapati, G., Amato, H. K., Garn, J. V., Alexander, K., Freeman, M. C., . . . Clasen, T. (2016). Assessing the impact of sanitation on indicators of fecal exposure along principal transmission pathways: a systematic review. *International Journal of Hygiene and Environmental Health*, 219(8), 709-723.
- Shavers, V. L. (2007). Measurement of socioeconomic status in health disparities research. *Journal of the National Medical Association*, 99(9), 1013.