Journal of Indian Studies
Vol. 8, No. 2, July – December, 2022, pp. 253– 268

Women in Armed Conflict: Adverse Effects on Women's Health in areas adjacent to Line of Control (LOC) in the State of Azad Jammu & Kashmir (AJ&K)

Lubna Razaq
Lecture, Department of Gender Studies, University of the Punjab, Lahore, Pakistan.
Email: lubna.dgs@pu.edu.pk

Raana Malik
Chairperson, Department of Gender Studies, University of the Punjab, Lahore, Pakistan.
Email: ranna.malik@yahoo.com

ABSTRACT

The State of Jammu & Kashmir has almost 75 years long history of conflict between Pakistan and India, where women and children are mostly the victims of warfare. The present study investigated the prevalence of psychological distress, physical health including stillbirth and lack of access to medical services among women who experienced still birth in areas adjacent to combat zones of Line of Control (LOC) in the State of Azad Jammu &Kashmir. This study was conducted by using a cross-sectional survey method with 250 women interviewed. The results show that 25% of stillbirth occurred to women due to psychological distress and physical health related issues; however, 22.4% of stillbirths occurred owing to a lack of access to adequate medical services during pregnancy. Significant association was observed among the higher risk of psychological or mental distress due to cross-fire, unavailability of medical services, poor socio-economic status, social factors and still birth. Overall, more than half of the stillbirths experienced by women loving close to combat zones of LOC were due to psychological or mental factors (hypertension, anxiety, depression, stress, anemia), physical factors (injuries, disabilities, poor physical fitness), lack of access to health care facilities and poor socio-economic status of women. It is recommended that appropriate development of essential obstetric care in rural combat zones of LOC can reduce the magnitude of stillbirth and improve women physical and mental health

Key Words: **AJ&K, Armed Conflict, Cross-fire, LOC, Stillbirth, Psychological Distress, Physical Health, Kashmir Conflict.**

Introduction

A large number of armed conflicts take place across the globe (Arcel & Kastrup, 2004); from which 103 armed conflicts were estimated to take place in 69 locations around the world during the period of 1989-97(Jamwal & Shuchismita, 2012). In 2015, there were 223 violent conflicts identified, of which 43 were limited or full- scale (Kadir et al., 2018). Armed conflict or man- made disaster is destructive not only for human lives but also for human civilization. It has been

evident that armed conflict demolish that health and life of individuals, especially, women and neonates largely due to poor Scio-economic status, hazard contaminated environment, restricted mobility, damages to health care delivery and outreach programs as well as violation of medical neutrality (Arcel & Kastrup, 2004). Women are consider one of the most vulnerable and exploited group during the conflict situation. The combat activities and population displacement caused by conflicts have direct and indirect effects on women as well as neonates morbidity and mortality (Kadir et al., 2018). The direct effects of armed conflict or military attacks induce destruction in essential infrastructure and it adversely affects the women's and neonates' physical, mental and psychological development and well-being (Jamwal & Shuchismita, 2012; Kadir et al., 2018).

Women and children are considered the most vulnerable and exploited group in the history of Kashmir conflict between Pakistan and India. In Kashmir, the conflict related factors such as, destruction of property and infrastructure, forced displacement, lack of social support, low level of education and hazard contaminated environment potentially increase the risk of psychological distress among women living close to combat zones of the Line of Control (LOC) (Khan et al., 2015).

The combat zones of armed conflicts expose population to physical and mental health issues that include stress, anxiety, trauma, hypertension, and anemia. This could have long-term negative consequences for women during pregnancy including stillbirth, miscarriage and low birth weight babies in the State of Azad Jammu and Kashmir (AJK). Still birth is a public health problem not only in the conflicts regions but also in low- middle income countries (Akombi et al., 2018). Approximately, 2.5 million stillbirths occur worldwide annually out of which 98% occur in the developing countries (Aminu et al., 2014; Bhutta et al., 2013).

However, the main causes of the stillbirths in low-middle income as well as conflicts regions have been plagued by decades of the armed conflict, political instability, porous borders, humanitarian crises, and tension over natural resources and other potentially destabilizing factors which increase poor Scio-demographic factors and deleterious environment for women living close to combat zones of armed conflicts. Such a deleterious environment exposes inhabitants in these regions to challenging public health problems which affect maternal and child health resulting in poor birth outcomes as well as poor scio-demographic factors associated with neonatal, post neonatal , infant, stillbirths and child under- 5 mortality (Akombi et al., 2018). Amine et al (2014) added that women who have already experienced a stillbirth are more likely to experience this again in subsequent pregnancies than who have not.

In addition, stillbirth is an unrecognized and unaddressed burden globally (Keasley et al., 2017). Such combined burden of stillbirth and early newborn death related to intrapartum is similar to the combined number of deaths among children younger than 5 years of age that are related to diarrhea or pneumonia. However, as yet, the issue of stillbirth has not received adequate policy attention in conflict

settings as well as low-middle income countries (Bhutta et al., 2013). It has also been noted that every stillbirth has potential psycho-social consequences for mothers, including anxiety, long term depression, poor scio-demographic factors, and absence of pre-natal care as well as unavailability of health care facilities (Aminu et al., 2014).

However, the definition of stillbirth vary from country to country according to their own medical standards, that is why World Health Organization (WHO) provides the definition of stillbirth that is recommended for international comparison as well as World Health Organization (WHO) allows each country to define the gestational age at which a fetal death is considered a stillbirth for reporting purpose. Therefore, according to WHO (2009), stillbirth refers to third trimester fetal death " A fetal death late in pregnancy" i.e. ≥ 28 weeks of gestation or ≥ 1000g (Aminu et al., 2015; Avachat et al., 2015; Keasley et al., 2017; Akombi et al., 2018).

Pak-Indo Armed Conflict: Circumstances in Kashmir

The State of Jammu and Kashmir is surrounded predominantly by five countries its borders extend to Pakistan, China, Russia and India (Khan, 1997). The State of Kashmir has never been a politically stable Sate as earlier it was a source of rivalries among Russia, British and the Chines, but there is no history of their direct involvement in armed conflict. But since, the withdrawal of the British and the creation of two dominion (Pakistan and India), Jammu and Kashmir has been the bone of contention between the two (Pakistan and India) and Pakistan and India fought three wars on Kashmir in 1948, 1965 ,1971 and 1999 (Adhikari & Kamle, 2011).In addition, the total area of Jammu and Kashmir State is 84,471 from which one third 33,958 area of Jammu and Kashmir is under the administration control of Pakistan and the area which is under the occupation of India is 41342, as well as Aqsai Chin has 9171 square miles area under the occupation of China (Khan et al., 2011; Gilani & Kayani, 2014).

The State of Jammu and Kashmir was divided between Pakistan and India by the Line of Control (LOC) but the Kashmir dispute is still an ongoing armed conflict between Pakistan and India (Lassiel et al., 2015). The ongoing dispute between Pakistan and India creates serious consequences for the population of Jammu and Kashmir (Adhikari & Kamle, 2011). Due to ongoing armed conflict Kashmiri people are facing grave human rights violation that has devastating effects on the lives and dignity of men, women and children. Women and children are considered the most vulnerable and exploited group due to ongoing armed conflict between Pakistan and India (Zulfqar, 2016). The Kashmir conflict has deeply impacted the lives of people. Especially, women and children living close to 740km-Line of Control (LOC) which divides the erstwhile State of Jammu and Kashmir. The population of the State is highly vulnerable to the militarization and

violating of the LOC, which adversely affects their physical security, livelihood, scio-economic and cultural life, educational development, psychological health and well-being.

However, the LOC became a battle zones between Pakistan and India during the wars of 1948, 1965 and 1971 (Zutshi, 2015; Schofiel, 2015). It is estimates that more than 49,000 Kashmiris have been killed since early 1990. While, in the last two decades approximately 1, 55,000 Kashmiris had become homeless and destitute due to conflict between Pak-Indo military forces (Mohan, 2012). The life settlement here has been very uncomfortable and depressed to all Kashmiri population. The economic deficiency, displacement, poverty and cost of conflict are borne excessively on women and children. In fact, women and children experience extra hardship due to stress, trauma, and depression during conflict settings (Irshad & Dar, 2015).

Health Status of Women at Combat zones of Line of Control (LOC) in AJK

Today, Azad Jammu Kashmir is considered as a one of the most exploited, unfortunate and vulnerable part of the world. Not many outsiders know what is going on inside this land. The State of Azad Jammu and Kashmir (AJK) is still facing the dark aspects of deprivations in terms of housing, health, education, employment and poor infrastructure even after the independence (Hameed et al., 2016). In addition, more than a decade now, Kashmiri women have been caught in the grip of a conflict based on a fight for self-determination against Pak-Indo military forces that create a situation of tremendous fear and uncertainty in women's lives (Butalia, 2002; Yaswi & Haque, 2008). However, the Kashmiri women living close to combat zones of LOC are considered to be the most vulnerable group of the Kashmiri State. Their livelihood, health, work, culture, education, thinking as well as all other aspects of lives have altogether changed due to multifarious harsh environment on Line of Control (LOC) between Pakistan and Indian military forces. In such an environment, Kashmiri women suffer from psychological disturbance, destitution, poverty, lack of access to health care facilities and illiteracy (Malik & Bhat, 2022). In fact, in conflict situations, maternal health always does not receive the much needed attention as all efforts are usually directed only to lifesaving humanitarian assistance (Jamwal & Shuchismita, 2012; Irshad & Dar, 2015). Although, Kashmiri women, living close to combat zones of LOC in Azad Jammu and Kashmir face much more medical problems that have come about as a result of conflict between Pakistan and Indian military forces. The cross-fire between Pak-Indo military forces creates stress, trauma, depression, spontaneous abortion, still births, miscarriage and low birth weight babies; these are now common problem among women adjacent to combat zones of AJK. These health problems not only influence mother's health but also affect their neonate's health and wellbeing (Butalia, 2002; Yaswi & Haque, 2008).

In addition, in rural combat zones, more than half of the stillbirths are linked with maternal factors such as pregnancy induced hypertension, unavailability of essential obstetric care, antepartum hemorrhage and anemia (Avachat et al., 2015).

Health Indicators in Azad Jammu and Kashmir

The State of Azad Jammu and Kashmir comprises 3 divisions with 10 districts. The health care system in Azad Jammu and Kashmir is still insufficient for the present Kashmiri population (Khan et al., 2012). According to the census 2017, the State of AJ&K had a population of 4,037,363 and the urban population is 702,945 whereas the rural population is 3,329,418, the urban rural ratio is 82.57:17.43. The total numbers of doctors are 1066 including medical specialist, medical officers and health managers available to serve the whole population of AJ&K. It is estimated that almost 2790 hospital beds are obtainable for the areas averaging one bed per 1523 people as well as population per doctor is 3,968 (Bureau of Statistics, 2021). The availability of medical services are very complex issues, mostly due to distance settings of medical services and health care providers, absence of transports, cost of medicament, social-cultural barriers, poor household wealth index and the poor infrastructures further deteriorate the situation. In addition, due to mainly mountainous geography, health care provision and medical providers to the scattered rural communities of the AJ&K has been a big challenge. In the combat zones of AJ&K safe neonates and mother health is a big challenge due to delivery at homes attended by unskilled birth attendant, tying and cutting the umbilical cord with an unsterilized item and delay in seeking neonate's health care are more prevalent in rural setting (Gilani & Kayani, 2014). However, stillbirth is an unrecognized and unaddressed burden in the State of Azad Jammu and Kashmir. It is estimated that 1 in 200 pregnancies results in a stillbirth in developed or high-income countries as compared to 8.6 in 200 pregnancies results estimated in Pakistan and similar in Azad Jammu and Kashmir. In addition, women who belong to developing or low-middle countries are twenty times more likely to deliver stillbirth as compared to women living in developed or high-income countries. Similarly, Pakistan has one of the highest stillbirth rate which is estimated 30.6 stillbirths per 1000 total births as compared to other South Asian countries which is estimated 18.2 stillbirths per 1000 total births. Regarding stillbirths, the situation of AJ&K is similar to Pakistan. In addition, across the globe 13.9 stillbirths estimated per1000 total births (Asim et al., 2022).

The Bureau of Statistics (2014) highlights the number of health care providers including doctors, nurses, LHVs and DAIS/Midwives in the districts of Azad Jammu and Kashmir. The following table 1 health providers in five districts of AJ&K.

Table 1
Number of Health care Providers in 5 districts of AJ&K

Districts	Doctors	Doctors	Nurse	Nurse				
	Males	Females	Males	Females	DI	HEO	HT/LHVs	Dias/MW
Neelum	22	4	-	22	1	-	11	25
Haveli	9	2	-	7	-	-	51	14
Kotli	47	22	-	41	1	1	52	86
Bhimber	14	18	-	25	1	-	14	49
Poonch	45	27	-	51	1	-	23	60

Sources: Directorate of Health Department, Muzaffarabad

Table 1 shows that the numbers of males' doctors are more than females' doctors that is one of the biggest barriers in access to health care services especially during pregnancy due to the cultural norms; women do not feel comfortable to consult a male doctor for reproductive health related issues. The available health care providers which are highlighted in table1 were mostly available for urban population of the State of AJK (AJ&K at a Glance, 2014), while the rural population adjacent to combat zones of Line of Control (LOC) is still deprived from these facilities. Without basic health care and medical services women's adjacent to Line of Control increase their risks for both morbidity and mortality. In addition, due to unavailability of female gynecologist staff in conflict remote areas of LOC, mostly women delivered at the hands of Dais and midwives in an unhygienic and unhealthy environment which leads to stillbirths as well as maternal mortality among women. The disaggregated data on mortality, morbidity and stillbirths is still not properly available especially with reference to conflict remote areas of LOC in the State of AJ&K.

It is essential that a detailed study of the main causes of stillbirths in combat zones with a view to identify possible intervention within the available resources. Until today very few studies have been done on the health of Kashmiri women, especially in combat zones of Line of Control (LOC) focusing on reproductive health related issues.

Therefore, the present study aim to investigate the adverse effects of armed conflict on women's health in areas adjacent to Line of Control (LOC) in the State of Azad Jammu & Kashmir (AJ&K). This may also provide to answer to questions why Kashmiri women do not have access to basic medical services and peaceful environment in the combat zones of LOC due to cross-fire between Pakistan and Indian military forces as well as to access the extent of stillbirth and to study cross-fire, maternal and fatal factors influencing occurrence of stillbirth in the combat

zones of LOC in the State of AJ&K. Furthermore, one of the objectve of this study is to bring the attention of policy maker, International policies by United Nation, NGOs workers and donors in order to let the voices of Kashmiri women be heard and to improve their maternal health status and child outcome in conflict zones of Line of Control (LOC) in the State of Azad Jammu and Kashmir (AJ&K).

Materials and Methods

The present study was quantitative study in nature. This study was conducted by using a cross-sectional survey method. These surveys are conducted where researcher wants to cover a bigger population on a wider scale as well as cross sectional survey is relatively quick to conduct when information is needed about what happening currently. The cross sectional survey provides information on a given period of time on various variables on a single point in time. Kashmir has an estimated population is 4,045,367 (AJ&K at a Glance, 2018) with a rural urban ratio 88:12. However, 88% population of the State of AJ&K live in the rural areas as well as conflicts zones of Line of Control (Khan et al., 2012).It was a big population adjacent to LOC and researcher can only access them once due to armed conflict between Pakistan-Indian military forces (Chowdhury, 2020), and can ask questions on various health related issues, therefore the present study was conducted by using cross sectional survey. For this research study, a self-administrative questionnaire was formulated by researcher and used as a measuring tool to get data from Kashmiri women who living close to combat zones of line of control (LOC) in the State of AJ&K. There were 250 married women heaving at least one child were the part of this study, selected from the villages adjacent to LOC in five districts (Neelum, Haveli, Kotli, Bhimber, Poonch) of AJ&K.

Statistical Analysis

The researcher codes the responses before the data was entered into SPSS version 21, for the purpose of analysis. In the present study, both descriptive and inferential statistical techniques were used to present the data analysis. However, Multivariate logistic regression and bivariate logistic regression was the main statistical analysis for present study performed with the independent variables and dependent variable (child outcome such as stillbirth).

The results of the present study were predictably presented as crude ratios (OR) odd ratios, 95% confidence interval (CI) with upper and lower limits were using in Multivariate logistic regression and bivariate logistic regression, and adjusted odds ratios (AOR) that adjusted for all other explanatory variables. Furthermore, these explanatory variables were represented by a set of dummy variables. The sign of '***' in tables indicates the '*p*-value' which is less than 0.05 (***<0.05) identifying the statistical significance that refer to the difference

between categories for the particular explanatory variables. All the analysis was carried out by SPSS version 21.

Results and Discussion

Scio-Demographic Characteristics

Scio-demographic information was collected relating to maternal, socio-economic and family factors. These factors includes age, level of education, occupation, household wealth index, causes of stillbirth (Table 2, 3), Psychological factors and a lack of medical services (Table 4, 5). Table 2 compares the demographic characteristics of the sample based on psychological distress and lack of medical services (Table)

Table 2

Scio-Demographic Characteristics of the Participants

	n=250	
Demographic Variables	f	%
Age		
16-25	69	27.6
26-35	102	40.8
36-45	79	31.6
Education		
Illiterate	133	53.2
Primary	111	44.4
Secondary	6	2.4
Family size		
1-3	83	33.2
4-6	124	49.6
7-9	43	17.2
Family type		
Nuclear	70	28.0
Joint	180	72.0
Occupation		
Housewife	195	78.0
Self-employed	55	22.0
Household wealth Index		
Poorer	41	16.4
Poor	159	63.6
Middle	50	20.0

Table 2 indicate that 40% of the women belonging to 26-35 age group out of 250 women; 53.2% were illiterate and only 2.4% got secondary education. Similarly, 49.6% women have 4 to 6 children. 72% women adjacent to combat

zones of Line of Control (LOC) were belonging to a joint family system. 78% of women were housewives and only 22 % were self-employed. 63.6% of women living close to LOC belonged to poor household and only 20% belonged to middle class.

Table 3
Causes of Experience Stillbirth among Participants

	n=250
Causes	No. of Stillbirth (%)
Psychological factors	63 (25.2)
Social factors	49 (19.6)
Poor Scio-demographic factors	43 (17.2)
Absence of pre-natal care	39 (15.6)
Lack of medical services	56 (22.4)
Total	250

As noted in table 3, the causes of experiencing stillbirth were because of psychological factors (25.2%), social factors (19.6%), poor Scio-demographic factors (17.2%), absences of pre-natal care (15.6) and lack of medical services (22.4%) occur in combat zones of Line of Control (LOC) in the State of Azad Jammu & Kashmir (AJ&K).

Table 4
Factors caused by stillbirth among Participants a Bivariate Logistic Regression Analysis

	n=250	
Variables/Factors	Stillbirth OR (95% CI)	*P*-value
Poor Scio-demographic factors		
Yes	1.310 (1.105-1.553)	*** (0.00<0.05)
No	Reference	Reference
Social factors		
Yes	1.782 (1.498-2.120)	*** (0.00<0.05)
No	Reference	Reference
Psychological factors		
Yes	5.483 (4.59-6.547)	*** (0.00<0.05)
No	Reference	Reference
Absence of pre-natal care		
Yes	2.648 (2.207-3.177)	*** (0.00<0.05)
No	Reference	Reference
Lack of medical services		
Yes	6.174 (5.056-7.538)	*** (0.00<0.05)
No	Reference	Reference

Bivariate logistic regression analysis (Table 4) was conducted to examine the effects of factors produces stillbirth among Kashmiri women adjacent to conflict zones of Line of Control in the State of Azad Jammu & Kashmir. Stillbirth were more likely occur among women who had poor household wealth index, low level of education and unemployment (OR 1.310; 95% CI 1.105-1.553), experiencing social vulnerabilities in remote combat zones (OR 1.782; 95% CI 1.498-2.120) an experiencing psychological issues during pregnancy because of conflict pressure between Pakistan and Indian military forces (OR 5.483; 95% CI 4.592-6.547). In addition, the odds were high among women having experienced stillbirth who had absence of pre-natal acre (OR 2.648; 95% CI 2.207-3.177) and having a lack of access to appropriate medical services (OR 6.174; 95% CI 5.5056-7.538). The result of table 4 indicates that all above factors lead towards the stillbirth as well as minimum use of core services and inadequate access to ANC visits in combat zones of LOC that increased the number of risk factors, which produced the risk of stillbirth among women in rural mountainous zones of the State of AJ&K.

Table 5
Multiple logistic regression analysis

Variables/Factors	n=250 Stillbirth AOR (95% CI)	*P*-value
Poor Scio-demographic factors		
Yes	1.850 (1.550-2.29)	*** (0.00<0.05)
No	Reference	Reference
Social factors		
Yes	2.249 (5.300-7.605)	*** (0.00<0.05)
No	Reference	Reference
Psychological factors		
Yes	4.390 (2.064-3.003)	*** (0.00<0.05)
No	Reference	Reference
Absence of pre-natal care		
Yes	3.943 (5.701-8.553)	*** (0.00<0.05)
No	Reference	Reference
Lack of medical services		
Yes	4.340 (1.550-2.29)	*** (0.00<0.05)
No	Reference	Reference

Controlling Variables were, LOC, Pre-natal care, Age and Education of the sample (n=250)

Multivariate logistic regression analysis (Table 5) shows that stillbirth was more likely to occur among women adjacent to combat zones of LOC who had

poor household wealth index, low level of education as well as unemployment (AOR 1.850; 95% CI 1.550-2.29), suffering social susceptibilities (AOR 2.249; 95% CI 5.300-7.605) an experiencing psychological pressure (AOR 4.390; 95% CI 2.064-3.003). In addition, the adjusted odds ratios were high among women having experienced stillbirth who had an absence of pre-natal acre (AOR 3.943; 95% CI 5.701-8.553) and having a lack of access to appropriate medical services (AOR 4.340; 95% CI1.550-2.29). Thus, all the factors (Table 5) lead toward the stillbirth among women adjacent to rural combat zones of LOC in the State of AJ&K.

However, multivariate logistic regression analysis (Table 5) was used to perform the adverse effects of psychological distress and lack of medical services due to armed conflict between Pakistan-Indian military forces on child outcome (as stillbirth) among women adjacent to combat zones of Line of Control in the State of Azad Jammu & Kashmir. Result demonstrate (Table 5) ***p<.005 value confirm the significance of proposed model.

Discussion

At present, stillbirth is not recognized in the Global Burden of Disease; it is neither counted as missed lives in disability adjusted life year nor fully identified as an individual death by the International classification of Disease. Stillbirth is still undress and unrecognized issue even not included in the country data in approximately 90 countries worldwide. This lack of recognition and paucity of data on stillbirth has continue to make it difficult to access the exact rates of stillbirth in many developing countries as well as in conflict settings (Avachat et al., 2015;Dejong et al., 2017; Keasley et al., 2017; Akombi et al., 2018). The present study aimed primarily to describe the adverse effects of psychological distress and lack of medical services on stillbirth among women adjacent to combat zones of Line of Control (LOC) in the State of Azad Jammu & Kashmir to identify factors that create the health problems as well as caused by stillbirth among Kashmiri women. The result of present study were identify that the recognized factors associated with stillbirth in the combat zones of LOC.

In conflict remote zones of LOC in the State of AJ&K, women are still deprived from adequate health care, standard of living, timely access to health care providers that leads to low proportion of overall health care. Similarly, core services or core medical examination which is recommended for all pregnant women were frequently not performed in existing health units as well as prenatal ultrasound was also unavailable in remote combat zones of LOC. Furthermore, the result of present study shows that low utilization of basic medical services and lack of access to health care providers were associated with low socio-economic status of women living close to LOC which cause psychological distress (Malik & Bhat, 2022) that increase the prevalence of stillbirth among Kashmiri women.

In previous review of literature, women who experienced greater social inequalities (low level of education, poverty, rural residence in resources, lack of access to adequate health care services) were increased high risk of stillbirth and poor maternal health in conflict setting areas (Southall, 2011; Akresh et al., 2012; Aminu et al., 2014; Avachat et al., 2015; Keasley et al., 2017; Akombi et al., 2018). Similarly, the conflict zones of Azad Jammu & Kashmir are still facing the deprivations in terms of health, education, adequate housing, employment opportunities as well as poor infrastructure even after its independence, particularly in remote areas close to LOC. The conflict between Pakistan-Indian armed forces on Line of Control lasting health and economic consequences as well as caused by psychological distress of poor population of AJ&K. The empirically calculated results, reported in this present study were higher than the findings of previous studies review in literature (Keasley et al., 2017).

Similarly, previous studies found that women who have psychological stress can negatively effects on both birth weight and neonates wellbeing. While, in the early stages of pregnancy psychological stress leads to low birth weight, stillbirth and miscarriage among women in conflict affected regions. For instance, the destruction of infrastructure during armed conflict, incursions, and road blocks could have limited access to necessary health care services as well as prenatal care that lead to increase the risk factor of stillbirth and low birth weight babies (Esknazi et al., 2007; Khashan et al., 2008; Smits et al., 2006; Torche, 2011; Khan et al., 2015; Avachat et al., 2015). Furthermore, conflict related malnutrition increase physical exertion and psychological stress in women during pregnancy. Medical researcher have also found that women who experience stress in early stages of their pregnancy are at risk of having a low birth weight child and increase the prevalence of stillbirth (Todd & Triunfo, 2006). In conflict setting, malnutrition and physical exertion are potential stressor that may affect birth weight and prevalence of stillbirth among women. The results of present study indicate that women experiences still birth in the areas adjacent to combat zones of LOC due to factors such as psychological distress, social factors and poor socio-demographic factors, absence of prenatal, lack of medical services, uncomfortable environment, stress, depression, malnutrition and hypertension during pregnancy.
Although, there were many researches that discuss the effects of armed conflict on stillbirth also discuss how armed conflict destroyed the medical services, infrastructure and socioeconomic factors that hinder to access the adequate health care services particularly for women. But the variables adverse effects of psychological stress and lack of medical services on stillbirth among women adjacent to combat zones of Line of Control in the State of Azad Jammu & Kashmir was unique. However, availability and quality of the health care services, infrastructure, livelihood, environment obviously differs effects on remote rural population of women adjacent to combat zones of LOC and the city urban population of women that were not studies. In addition, results supported that armed conflict between Pakistan-Indian military forces creates adverse effects of

psychological distress and lack of medical services that has serious effects on maternal health increase the prevalence of stillbirth among Kashmiri women adjacent to Line of control in the State of AJ&K.

Conclusion

Exposure to an armed conflict between Pakistan- India military forces increase the adverse effects of physical and psychological distress and lack of medical services that lead to risk factors of stillbirth among women adjacent to combat zones of LOC. Furthermore, half of the stillbirth experienced by women living close to combat zones of LOC happen due to psychological distress (such as hypertension, anxiety, depression, stress, anemia, injuries, disabilities and poor physical fitness), lack of medical services and poor socio-economic status of women. It is important that the Government of Azad Jammu & Kashmir take appropriate steps to prevent the adverse health outcome among women during pregnancy and focus on women health by investing in health sector in combat zones of LOC for the development of rural population through building better infrastructure, and well equipped basic health care units. In emergency settings, the Government of AJ&K should provide mobile health care services in combat zones to provide timely and needed health care for women. In addition, health care providers should provide appropriate information to women on danger signs of pregnancy and prevent all those factors that increase the prevalence of stillbirth among Kashmiri women living close to conflict areas of LOC. In addition, appropriate development of essential obstetric care in rural combat zones of LOC can reduce the magnitude of stillbirth and improve women physical and mental health.

Recommendations

Government of AJ&K should provide mobile health care services in combat zones to provide adequate and timely health care for women in emergency settings. Health care providers should provide appropriate information to women on danger signs of pregnancy and prevent all those factors that increase the prevalence of stillbirth among Kashmiri women living close to conflict areas of LOC. Lady Health Workers (LHW) program should be introduced, and where it exists, should be strengthened.

References

Adhikari, S., & Kamle, M. (2011). The Kashmir: an unresolved dispute between India and Pakistan. *Geopolitics Quarterly, 6*(4), 58-107.

Akombi, B. J., Ghimire, P. R., Agho, K. E., & Renzaho, A. M. (2018). Stillbirth in the African Great Lakes region: A pooled analysis of demographic and

health surveys. *PloS one*, *13*(8), Article e0202603. https://dio.org/10.137/journal.phone.0202603

Aminu, M., Unkels, R., Mdegela, M., Utz, B., Adaji, S., & Van Den Broek, N. (2014). Causes of and factors associated with stillbirth in low-and middle-income countries: a systematic literature review. *BJOG: An International Journal of Obstetrics & Gynaecology*, *121*(s4), 141-153. https://doi.org/10.1111/1471-0528.12995

Arcel, L. T., & Kastrup, M. C. (2004). War, women and health. *NORA-Nordic Journal of Feminist and Gender Research*, *12*(1), 40-47. https://doi.org/10.1080/08038740410005758

Asim, M., Karim, S., Khwaja, H., Hameed, W., & Saleem, S. (2022). The unspoken grief of multiple stillbirths in rural Pakistan: an interpretative phenomenological study. *BMC women's health*, *22*(1), 1-11. https://doi.org/10.1186/s12905-022-01622-3

Avachat, S. S., Phalke, D. B., & Phalke, V. D. (2015). Risk factors associated with stillbirths in the rural area of Western Maharashtra, India. *Archives of Medicine and Health Sciences*, *3*(1), 56-59. https://doi.org/10.4103/2321-4848.154946

Bhutta, Z. A., Hafeez, A., Rizvi, A., Ali, N., Khan, A., Ahmad, F., & Jafarey, S. N. (2013). Reproductive, maternal, newborn, and child health in Pakistan: Challenges and opportunities. *The Lancet*, *381*(9884), 2207-2218. https://doi.org/10.1016/S0140- 6736(12)61999-0

Bureau of Statistics. (2014). Azad Jammu & Kashmir: At a Glance-2014. www.pndajk.gov.pk

Bureau of Statistics. (2018). Azad Jammu & Kashmir: At a Glance-2014. www.pndajk.gov.pk

Bureau of Statistics. (2021). Azad Jammu & Kashmir: At a Glance-2021. www.pndajk.gov.pk

Butalia, U. (2002). *Women voices from Kashmir*: Kali for women. Published, Printed at raj press, R/3 inderpun; New Dehli 110012. Pg. (97, 99-100, xiv-x).

Chowdhury, S. (2020). Peace and Language Studies: Kashmir Conflict: Is there any Solution?. *International Journal of English Learning & Teaching Skills*, *2*(3), 1327-1340.

Connelly, L. M. (2016). Cross-sectional survey research. *Medsurg nursing*, *25*(5), 369-370.

DeJong, J., Ghattas, H., Bashour, H., Mourtada, R., Akik, C., & Reese-Masterson, A. (2017). Reproductive, maternal, neonatal and child health in conflict: A case study on Syria using Countdown indicators. *BMJ global health*, *2*(3), 1-`13. https://dx.doi.org/10.1136/bmjgh-2017-000302

Eskenazi, B., Marks, A. R., Catalano, R., Bruckner, T., & Toniolo, P. G. (2007). Low birthweight in New York City and upstate New York following

the events of September 11th. *Human reproduction*, *22*(11), 3013-3020. https://doi.org/10.1093/humrep/dem301

Gilani, I., & Kayani, Z. A. (2014). Household practices of mothers regarding neonatal care in rural and urban settings of the capital district of Azad Jammu and Kashmir. *Rural and Remote Health*, *14*(2), 47-57.

Hameed, G., Saboor, A., Khan, A. U., Ali, I., & Wazir, M. K. (2017). Impact of community development in poverty reduction: Reflections of Azad Jammu and Kashmir community development program. *Social Indicators Research*, *130*(3), 1073-1086. https://doi.org/10.1007/s11205-016-1235-3

Irshad, I. A., & Dar, M. A. (2015). Kashmiri Women: Vulnerable Section of Society. *International Journal of Social Sciences and Management*, *2*(2), 93-96. https://doi.org/10.3126/ijssm.v2i2.12267

Jamwal, A. B., & Shuchismita. (2012). Women's Voices from Jammu and Kashmir. *Journal of Borderlands Studies*, *27*(1), 95-104. https://doi.org/10.1080/08865655.2012.687533

Kadir, A., Shenoda, S., Goldhagen, J., Pitterman, S., Suchdev, P. S., Chan, K. J., & Arnold, L. D. (2018). The effects of armed conflict on children. *Pediatrics*, *142*(6), 1-16. https://doi.org/10.1542/peds.2018.2586

Keasley, J., Blickwedel, J., & Quenby, S. (2017). Adverse effects of exposure to armed conflict on pregnancy: a systematic review. *BMJ global health*, *2*(4), 1-7. https://doi.org/10.1136/bmjgh.2017-000377

Khan, M. N., Chiumento, A., Dherani, M., Bristow, K., Sikander, S., & Rahman, A. (2015). Psychological distress and its associations with past events in pregnant women affected by armed conflict in Swat, Pakistan: a cross sectional study. *Conflict and health*, *9*(1), 1-10. https://doi.org/10.1186/s13031-015-0063-4

Khan, Q. A. (1997). *History of the Azad Jammu Kashmir regement*: Team Printer,62/7, Bank Road Rawalpindi Cantt,pp (1-3)

Khan, S. A., Zaman, T., Shams, B., Shehzad, M., Yaqoob, A., Hussain, G., & Sattar, A.(2011). "How far can I go? Social Mobility of CMWs in AJK" : A project funded by the Maternal and Newborn Health Program Research and Advocacy Fund and implemented by Children First.

Khashan, A. S., McNamee, R., Abel, K. M., Pedersen, M. G., Webb, R. T., Kenny, L. C., & Baker, P. N. (2008). Reduced infant birthweight consequent upon maternal exposure to severe life events. *Psychosomatic medicine*, *70*(6), 688-694. https://doi.org/10.1097/PSY.0b013e318177940d

Lassi, Z. S., Aftab, W., Ariff, S., Kumar, R., Hussain, I., Musavi, N. B., & Bhutta, Z. A. (2015). Impact of service provision platforms on maternal and newborn health in conflict areas and their acceptability in Pakistan: a

systematic review. *Conflict and health*, *9*(1), 1- 12. https://doi.org/10.1186/s13031-015-0054-5

Malik, R. A., & Bhat, S. A. (2022). Impact of Armed Conflict on Kashmiri Women. *Rajasthali Journal, 1*(3), 10-114.

Mohan, S. (2012). The State of Human Rights in Jammu and Kashmir, 1989-2010. *A Biannual Journal of South Asian Studies*, 5(2), 169-345.

Schofied, V. (2015). *Why Kashmir is still important*: Asian Affairs, *46(1), pp. (18-31).*

Smits, L., Krabbendam, L., De Bie, R., Essed, G., & Van Os, J. (2006). Lower birth weight of Dutch neonates who were in utero at the time of the 9/11 attacks. *Journal of Psychosomatic Research*, *61*(5), 715-717. https://doi.org/10.1016/j.jpsychores.2006.04.020

Southall, D. (2011). Armed conflict women and girls who are pregnant, infants and children; a neglected public health challenge. What can health professionals do?. *Early human development*, *87*(11), 735-742. https://doi.org/10.1016/j.earlhumdev.2011.08.020

Todd Jewell, R., & Triunfo, P. (2006). The impact of prenatal care on birthweight: the case of Uruguay. *Health economics*, *15*(11), 1245-1250. https://doi.org/10.1002/hec.1121

Torche, F. (2011). The effect of maternal stress on birth outcomes: exploiting a natural experiment. *Demography*, *48* (4), 1473-1491. https://doi.org/10.1007/s13524-011-0054-z

World Health Organization. (2009). *Women and health: today's evidence tomorrow's agenda*. World Health Organization.

Yaswi, A., & Haque, A. (2008). Prevalance of PTSD symptoms and depression and level of coping among the victims of the Kashmir conflict. *Journal of Loss and Trauma*, *13*(5), 471-480. https://doi.org/10.1080/15325020802171441

Zulfqar, Saman. "Kashmir: nature and dimensions of the conflict." *Journal of Current Affairs* 1, no. 1–2 (2016): 51-65.

Zutshi, C. (2015). An ongoing partition: histories, borders, and the politics of vivisection in Jammu and Kashmir. *Contemporary South Asia*, *23*(3), 266-275. https://doi.org/10.1080/09584935.2015.1040734