

PalArch's Journal of Archaeology
of Egypt / Egyptology

Socio-Psychological problems Faced by Female Victims of Acid Burn in Southern Punjab, Pakistan

¹Zahid Zulfiqar, ²Abou Safian, ³Muhammad Imran, ^{4*} Abdul Sattar Ghaffari, ^{5*} Tariq
Mehmood Bhuttah

¹Visiting Lecturer, Department of Sociology, Bahauddin Zakariya University Multan. Email:
ranazahidzulfiqar@gmail.com

²M.phil Scholar, Department of Sociology Bahauddin Zakariya University, Multan, Pakistan Email:
Safianjee143@gmail.com

³PhD Scholar, Department of Sociology University of Sargodha, Sargodha, Pakistan Email:
mimranjutt864@gmail.com

^{4*}(Corresponding Author) PhD Scholar Zhongtai Securities Institute for Financial Studies, School of
Mathematics, Shandong University, Jinan, China Sattarbzu@hotmail.com

^{5*}(Corresponding Author), Assistant professor (Education), Humanities and Social Sciences
Department at KhwajaFareed University of engineering and information technology, Rahimyar Khan,
Pakistan (64200).

**Zahid Zulfiqar, Abou Safian, Muhammad Imran, Abdul Sattar Ghaffari, Tariq
Mehmood Bhuttah. Socio-Psychological problems Faced by Female Victims of Acid
Burn in Southern Punjab, Pakistan, Palarch's Journal Of Archaeology Of
Egypt/Egyptology 18(2), 819-831. ISSN 1567-214x.
Keyword: Acid, Violence, Stress, Depression, Anxiety, Rejection, Victim.**

Abstract

Acid Attacks have emerged as the contemporary form of violence which is generally targeted against women with the intention of deforming her face and body, and even killing her. The Increasing number of acid attacks over the years has created an alarming situation which needs to be re-addressed. The current study analyzed the different socio-psycho hassles faced by the victims of acid burn in southern Punjab, Pakistan. The researcher selected 38 victims of acid violence from Nishtar Burn Center Multan by using the purposive sampling. It was also found that anxiety and depression were statistically positively significantly correlated with each other; marital status, family care and support, area, monthly family income and age had a significant effect on anxiety as well as depression; level of anxiety and depression are higher in single than that in married patients. Similarly, the results indicated higher level of anxiety and depression in the patients who have low family care and support than that in the patients who have higher family care and support. Furthermore, the level of anxiety and depression were

higher in the patients who belonged to urban area and who were <30 years old than that in the patients who belong to rural area and who were age >30 years old. The findings have indicated that anxiety and depression levels significantly differ among different income levels. It is suggested that the government should have to make rehabilitation centers for the acid burn victims for minimizing the depression and stress of the victims. To minimize the depression and stress of the victims the government of Pakistan should have to bear the financial expenditure as well.

Introduction

It is generally stated that gender based violence is a global issue and women of developing countries are still facing this issue. The women of Pakistan are also facing the gender discrimination and gender based violence in all spheres of life such as in social, economic, legal and political one. It is very awful that over 12.5 million females do not have National Identity Cards and are excluded from legal political right to cast a vote in Pakistan. Women are at least half population of Pakistan but due to the patriarchal influence a majority of the women are looking for their rights and facing a gender-based violence. Some of the gender based causes of violence are such as: traditional practices e.g. Badal-e-sulah; Vanni, Swara, gang rapes; honor killings; sexual harassment in public and private spaces; abduction, kidnapping; trafficking, forced marriage, forced conversion, forced prostitution; bonded labor; early/childhood marriage; maternal mortality and the most dangerous is acid burn (Annual Report 2019 of Aurat foundation, 2019).

Violence against women is universal phenomenon and appreciated throughout the history. Men do violence against women for their supremacy. The studies have identified that women faces forceful child marriage, incest, domestic violence, intimate partner violence, rape by other men, marital rape, feticide, verbal assessment, psychological harassment, sexual harassment, trafficking, prostitution, honor-killing, genetic mutilation, dowry related crimes, acid attacks etc. (Ali and Khan, 2007 ;Johnson et al., 2007; Ali &Govino; 2008;).

Women are facing diverse type of violence throughout the world; however the intensity and shape of problem may be different from one society to another. Acid violence is one of the kinds of violence faced by women. Acid violence is one of the most monstrous crimes against women, in which acid is thrown onto the face and body of women with the intention of disfiguring her. Acid violence is an intentional act of a perpetrator who pours acid on a victim (Critelli, 2010). Acid gives direct damage, defacement, pain and long lasting medicinal obstacles to the victim. Though acid violence is a crime which is committed against any woman or man but the previous studies highlighted that women were more victim of acid violence than men (Bukhari, 2010).

Acid Violence happens throughout the world and it distresses women

disproportionally. Although, it is also intolerable when acid violence happens against men, acid violence is a form of violence that has a disproportionate impact on women. It reflects and perpetuates discernment of girls in society; as such it is forbidden by global law. However, it is also a crime that acid violence is going unreported and unpunished every year (Karmakar, 2006).

It is found that 60 percent acid attacks are not reported every year due to the cultural norms and eighty percent victims are women. The rate of acid violence faced by women is quite different from society to society. The statistics showed that United Kingdom was one of the countries that had recorded acid violence. The figures showed that there were 310 corrosive substances in 2018 as compared to 456 in 2017. Majority of the acts of acid violence were done by the gangsters and the majority of the victims were women. There were more than 1200 cases of acid violence in London during 2011-2016. Bangladesh is a country that is also facing the issue of acid violence. The acid violence is exceeded every year. Most of the attacks occurred at home, public places such as schools, roads, colleges. The masses of Cambodia are also facing the issue of acid violence as masses of some states of the world are facing the issue of acid violence. It was found that there were hundred recorded cases in Colombia and majority of the victims were female. Furthermore shortage of experts for curing the victims was another issue confronted by victims of acid violence. Another study highlighted that there was no reporting or low reporting of acid violence in the remote areas of Uganda and due to the shortage of specialist doctors and costly medical treatment the victims were on risk of their survival (Acid Survivors Trust International, 2020).

It was reported by World Bank that women were facing a lot of issue in South Asia. The masculine culture motivated the male to show their masculinity by violence on women (World Bank, 2014). There are numerous causes of acid violence such as failure of marriage, rejection of proposal, revenge, jealousy, conflict, refusal of sex etc. (Doley, 2020). Kaur (2018) also highlighted the different reasons of acid violence; low-cost and easy availability of acid; patriarchal cultures and masculine ego; refusal in love and denial of indecent offers; land or cash disputes; occupational conflicts, suspicion of faithlessness; lack of rules for limits on purchase and sale of acids; family disagreements; domestic violence; association conflicts; dowry demands; sexual crimes and negative role of media.

Acid Survivors Foundation (2017) highlighted that Pakistan is a country that decreased the acid violence against women in last decade. Acid Violence fell down to 73 in 2016, 153 in 2014. Furthermore it is also identified that other than female the transgender also were targeted. The data also underlined that during the ten years half of the acid violence incidences belonged to Southern Punjab, Pakistan. It was also mentioned that the districts of southern Punjab in which acid violence was found were district Bahawalpur, Multan,

Muzaffargarh and Rahim Yar Khan. [The Punjab Commission of the Status of Women \(PCSW\) 2017](#) identified that Multan was top of the registered acid violence cases between 2014 and 2016.

Pakistan did different legislation to control and minimize the gender based discrimination and violence against women. For controlling the acid violence in Pakistan, Marvi Memon, moved an acid violence bill to control this issue. Pakistan's National Assembly passed the Acid and burn crime bill 2017 that garnered the free of cost treatment of the burn victims. Furthermore it also assures the physical and mental rehabilitation of the victim. It was an important legislation in the history of Pakistan for ensuring the women rights ([Jamal, 2018](#)).

It is usually stated that hate is the real cause of the acid violence in Pakistan due to which thousands of women and hundreds of men are its victims. It is thrown at the face and body and it melts skin, dehumanizes individuals and disfigures limbs. Acid violence leaves survivors with psychological and physical scars. Often these violence's were the barbaric continuance of less plain, but by no revenues acceptable, procedures of domestic violence perpetrated against females (Abbas, 2018). There are a number of effects (physical; psychological, economic, social etc.) of acid violence on women some are clearly discussed below.

Acids are corrosive substances that root visible necrosis (death) of human skin tissue and even corrode a metal in higher absorption. They can reason serious burning; poisoning and serious injury can result from experience to strong acids. Commonly obtainable acids include hydrofluoric acid, sulphuric acid phosphoric acid etc. Acids are used in test center and factories. The skin is the main organ of contact in an acid attack. The possessions of acid on the skin may include redness and burns. In severe cases, it could lead to tremor and death. Some other belongings include permanent hair loss and terrifying. If it is inhaled in a large number it can also lead to pulmonary illnesses. Acid eats two layers of the skin, i.e. the muscle underneath, fat and sometimes not only eats to the bone but it may even melt the bone. The deepness of injury depends on the strength of the acid and the period of contact with the skin. Burning continues until the acid is thoroughly washed off with water (Kaur, 2018).

The victim of acid also faces psychological other than physiological effects. Acid violence is stronger cause of terror and threat. Victims hurt psychological signs such as, insomnia, depression, fear about another spell and fear about fronting the outside world, annoyances, weakness and fatigue, difficulty in intent and remembering belongings, etc. They feel perpetually unhappy, ashamed, anxious, and lonely. They live with fear that they might be confronting the situation again (Singh et al., 2018). Acid assault survivor faces difficulty of appearance and mental fitness issues upon recovery. Acid attack causes reported advanced levels of depression and anxiety due to their look. Additionally, women are stated

with lower self-esteem (Patel, 2014).

Karmakar (2006) in his book identified the issues (Permanent disfigurement; permanent loss of sight and permanent impairment of function of any member or joint also constitutes an offence of grievous hurt faced by acid violence victim. Furthermore the causes of acid violence were also highlighted such as hatred, rivalry, revenge, jealousy, enmity, destructive use during riots etc. The author also highlighted the effects of the acid valence i.e. disfiguration of face or head and /whole body, contractures, restriction of the movement of joints, scar formation, permanent loss of sight, destroying of garment, sign of splashing or pouring or spilling of acid/other things on the body, extensive connection may even lead to death.

Welsh (2009) highlighted the causes and motives of acid violence and role of government and Non- government organizations regarding the rehabilitation of a victim and his/her family in some countries such as Pakistan, India, Bangladesh and Cambodia. It was found that firstly the victim and his/her family faced the financial difficulties for medical treatment. It was also found that the role of Non-government organizations was appreciating but still improvements were needed. Deb and Chowdhury (2015) highlighted how the acid violence brought change in the total life circle of the victim. It was found that the victims faced blames from the society instead of empathy in that critical situation. The victims faced the “Social Stigmatization” throughout their remaining lives. Further it was also highlighted that majority of the victims of acid violence were women and the patriarchal structure compelled the perpetrators to do so for showing their masculinity.

Mishra and Kumar (2015) overviewed the legal consideration regarding the acid violence. In this research the critical analysis was done by the researches and they suggested the improvement in the legislation to control the acid violence in India. Awasthi (2015) highlighted that socio-cultural values were the hindering in the reporting of the acid violence. It was also highlighted that the culprits selected the busy places or public roads to attack the victims and usually used the motor bikes for running away from the places of crime. The victims of acid violence and their families continuously faced the number of psychological, Physical and socio- economic issues in their lives. The study suggested that new laws should be introduced to tackle the acid violence.

Vashishtha (2013) gave the name of modern weapon of revenge to the acid violence. The researcher highlighted the complications in the investigation of the acid violence by the police. The researcher highlighted that the implementation of the law regarding the acid violence was a question mark. It was also identified that the victim of acid violence faced a lot of issues regarding the medical treatment. The treatment of acid burn was very expensive and it was very difficult to manage for a lay man on emergency basis. It was also found acid

attack occur at increased rates in areas where acid was widely used for industrial or other business purposes.

It can be argued that the above mentioned issues confronted by the victims lead them to anxiety and depression. This study investigated the acid violence faced by women. The purpose of this research was to analyses the different socio-psycho hassles faced by the victims of acid burn in Southern Punjab, Pakistan.

Material and Methods:

The researchers used the purposive sampling for conducting the research. The researcher selected the (N=38) total sample conducting the quantitative research. The victims of the acid violence were selected as participants for the study because they could better explain the reasons for acid violence. The researcher used the interview schedule for collecting data. The researcher used the national language (Urdu) as well as regional/local languages (Sariki and Punjabi) in conducting the research.

Results and Discussions:

The results and discussion of the data have key importance in the scientific research. These steps are helpful in the generalization and prediction of the data. The results and discussion of this research are given in the following lines.

RESULTS:

Table 1: Descriptive Statistics of Socio-demographic Variables of the Acid Burn Patients (n=38)

Variables	Category	Frequency (%)
Marital Status	Single	27 (71.1)
	Married	11 (28.9)
Family Care and Support	Low	20 (52.6)
	High	18 (47.4)
Area	Rural	25 (65.8)
	Urban	13 (34.2)
Family Monthly Income	<10000	16 (42.1)
	10000-20000	6 (15.8)
	20000-30000	4 (10.5)
	30000-40000	7 (18.4)
	>40000	5 (13.2)
Age	<30 Years	20(52.6)
	>30 Years	18 (47.4)

Descriptive statistics for socio-demographic variables of this study is showed in table 1. The results showed that 27(71.1%) out of 38 acid burn patients were single and 11(28.9%) patients were married.

Similarly 20(52.6%) patients had low family care and support and 18(47.4%) had high family care and support also 25(65.8%) patients belonged to rural area and 13(34.2%) patients belonged to urban area. Acid Survivors trust international (2020) also highlighted that majority of the acid attacks happened in the rural areas of Punjab.

The results depicted that 16 (42.1%) patients had less than 10000 PKR incomes, 6(15.8%) patients had income level 10000-20000 PKR, 4(10.5%) patients belonged to income level 20000-30000 PKR, 7(18.4%) patients belonged to income level 30000-40000 PKR, and 5(13.2%) patients had monthly income level above 40000. Welsh (2009) highlighted that poor economic status of the victim played a negative role in patient's treatment and rehabilitation process; 20(52.6%) patients age was <30 year and 18(47.4%) patients' age was above 30 years. It was found that the younger women faced more acid violence as compared to older one (Schuler et al. 1996). But another study highlighted that in the patriarchal structure of Pakistan violence was equally faced by all ages of women (Shaikh, 2003).

Table 2: Pearson Correlation between Anxiety and Depression (n=38)

Variable	Mean ± SD	1	2
Anxiety	10.05±3.10	1	
Depressio	10.34±3.02	.747**	1

n

(**p<0.01)

The table 2 depicted the correlation between anxiety and depression for acid burn patients. The results showed that anxiety and depression were statistically positively significantly correlated with each other. The value of correlation coefficient was $r=.747$ with $p<.001$.

Table 3: Regression Analysis: Anxiety and Depression on Marital Status, Family Care and Support, Monthly Family Income, Area, and Age

Dependent	Predictor	B	SE (β)	t	P	95% CI	
						LL	UL
	Marital Status	-.244	.749	-2.202	.035	-3.175	-.124

Anxiety	Family Care and Support	-.238	.661	-2.205	.035	-2.803	-.111
	Area	.367	.795	2.976	.006	.747	3.987
	Monthly Family Income	-.121	.248	-1.001	.324	-.752	.256
<hr/>							
	Age	-.313	.680	-	.008	-	-.532
				2.819		3.301	
	Marital Status	-.180	.941	-	.216	-	.730
				1.261		3.102	
	Family Care and Support	-.201	.830	-	.158	-	.491
				1.445		2.890	
	Are a	.208	.999	1.308	.200	-.728	3.342
Depression							
	Monthly Family Income	-.317	.311	-	.050	-	.001
				2.033		1.265	
	Age	-.167	.854	-	.250	-	.738
				1.173		2.741	

Results given in table 3 despite that marital status, family care and support, area, monthly family income, and age had significant effect on anxiety while no significant effect was found on depression. Furthermore married females had negative impact on hospital anxiety with regression coefficient -.244, the respondents who had high family care and support have also negative impact on hospital anxiety with regression coefficient -.238, urban acid burn victims showed high level of hospital anxiety with regression coefficient .367. Similarly, the respondents whose age was above 30 years have negative impact on hospital anxiety with regression coefficient -.313.

Table 4: Mean, Standard Deviation and t- values (n = 38)

Variable	Marital Status
----------	----------------

	Single (n=27)		Married (n=11)		t (289)	p	95% CI	
	M	SD	M	SD			LL	UL
Anxiety	10.96	2.78	7.82	2.79	3.160	.002	1.13	5.16
Depression	10.96	2.55	8.82	3.66	2.068	.023	.04	4.25
Family Care & Support								
	Low (n=20)		High (n=18)					
Anxiety	11.30	2.68	8.67	3.01	2.855	.004	.76	4.50
Depression	11.35	2.48	9.22	3.25	2.285	.014	.24	4.01
Area								
	Rural (199)		Urban (92)					
Anxiety	8.68	1.91	12.69	3.30	-4.766	.000	-5.72	-2.30
Depression	9.28	2.35	12.38	3.20	-3.404	.001	-6.11	-1.91
Age								
	<30 Years (20)		>30 Years (18)					
Anxiety	11.70	2.47	8.22	2.71	4.135	.000	1.77	5.18
Depression	11.50	2.40	9.06	3.19	2.688	.006	.60	4.29

The table 4 represented the results of the level of anxiety and depression for the acid burn patients who were single and married, who had low family care and support and high family care and support, who belonged to rural area and urban area and with ages <30 years and >30 years. From the results could be seen that the level of anxiety and depression was higher in single patients than married patients. Similarly, the results indicated higher level of anxiety and depression in the patients who have low family care and support than that of the patients who had higher family care and support. Furthermore, the level of anxiety and depression were higher in the patients belonged to urban area and who were <30 years old than that in patients who belonged to rural area and patients whose age was >30 years.

Table 5: Difference on the Bases of Income Status (n=38)

Variable		Sum of Squares	Df	Mean Square	F	Sig.
Anxiety	Between Groups	100.50	4	25.124	3.246	.024
	Within Groups	255.40	33	7.739		

	Total	355.90	37			
	Between Groups	123.24	4	30.809	4.722	.004
Depression	Within Groups	215.32	33	6.525		
	Total	338.55	37			

Table number 5 presented the results of ANOVA for anxiety and depression among different monthly income levels. The findings indicated that anxiety and depression levels were significantly differ among different income levels with p-values .024 and .004 respectively.

Discussion:

Table number 1 showed that majority 27(71.1%) of the respondents were single; majority 25 (65.8%) of the respondents belonged to rural areas; majority 20(52.6%) of the respondents had low family care and support and majority 20(52.6%) patients' age was <30 year. The previous literature highlighted that lower socio-economic support of the family of the patients led towards anxiety and depression (Sin et al., 2016; Alter et al., 2013). It could be argued that the hospital anxiety and depression could be minimized by family care support among patients (Feldman et al., 2012).

Table number 2 depicted the correlation between anxiety and depression for acid burn patients. The results showed that anxiety and depression were statistically positively significantly correlated with each other. The value of correlation coefficient was $r=.747$ with $p<.001$ (Ghaffari et al., 2018).

Table 3 depicted that marital status, family care and support, area, monthly family income, and age had a significant effect on anxiety while no significant effect was found on depression. Furthermore married female had negative impact on hospital anxiety with regression coefficient $-.244$, the respondents who had high family care and support had also negative impact on hospital anxiety with regression coefficient $-.238$, urban acid burn victims showed high level of hospital anxiety with regression coefficient $.367$. Similarly, the respondents whose age was above 30 years had negative impact on hospital anxiety with regression coefficient $-.313$ The previous study also proved the results (Ghaffari et al., 2019).

Table 4 represented the results of the level of anxiety and depression for the acid burn patients who were single and married, had low family care and support and high family care and support, the patients belonged to rural area and urban area and patients with age <30 years and >30 years. From the results we could see that the level of anxiety and depression are higher in single than inmarried patients. Similarly, the results indicated higher level of anxiety and depression in the patients who had low family care and support than that of the patients who had higher family care and support. Furthermore, the level of anxiety and

depression were higher in the patients belongs to urban area and patients who are <30 years old than that in the patients belonging to rural area and whose age was >30 years. The previous studies also verified the results (Frasure et al., 1993; Rogers et al., 2000).

Table number 5 presented the results of ANOVA on anxiety and depression among different monthly income levels. The findings indicated that anxiety and depression levels significantly varied among different income levels with p-values .024 and .004 respectively (Sarason et al., 1996; Zimet et al., 1988).

Conclusion:

It is concluded that the hospitalized acid burn victims face a lot of issues. The hospital anxiety and depression are statistically positively correlated with each other; marital status, family care and support, area, monthly family income and age had significant effect on anxiety as well as depression; level of anxiety and depression are higher in single patients than that in married patients. Similarly, the results indicated higher level of anxiety and depression in the patients who have low family care and support than that of the patients who have higher family care and support. Furthermore, the level of anxiety and depression was higher in the patients who belong to urban area and patients who are <30 years old than that in the patients who belong to rural area and whose age was >30 years. The anxiety and depression levels significantly differ among different income levels. It is suggested that the government should have to make rehabilitation centers for the acid burn victims for minimizing the depression and stress of the victims. To minimize the depression and stress of the victims, the government of Pakistan should have to bear the financial expenditure.

References:

- Karmakar, R. N. (2015). *Forensic medicine and toxicology: theory, oral & practical*. Academic Publishers.
- Deb,A&Chowdhury P. Roy (2015). "A Fate Worse than Death: A Critical Exploration of Acid. Attack Violence in India", Law Mantra, Vol. 2, Issue 5, <http://journal.lawmantra.co.in>
- Awasthi, Vanita and Gupta. R. K. (2015). "A Socio-Legal Study of Acid Attacks on Women in India", International Journal of Research and Analysis, Vol. 2, Issue 6.
- Welsh. J. (2009), "It Was like Burning in Hell", A thesis submitted to the faculty of the University of North Carolina, available at <https://cdr.lib.unc.edu/indexablecontent/uuid:e472922a-b4a3-47a4-82e5661dd7a966c5>.
- The Criminal Law (Amendment) Act, 2013, Ministry of Law and Justice, India.
- Vashishtha, S. (2013). Vitriolage & India-The Modern Weapon of Revenge. *International*

Mishra, S. K. Acid Attack: An Inhuman and Scandalous Crime against Women in India. Annual Report 2019 of Aurat foundation.(2019). Islamabad, Pakistan.

Johnson, H., Ollus, N., &Nevala, S. (2007). *Violence against women: An international perspective*. Springer Science & Business Media.

Acid Survivors trust international. (2020). St Hilda's East Community Centre 18 Club Row London E2 7EY The Annual Report of World Bank. (2014). [Washington, D.C., United States](#) of America

Doley, B. Acid attack on women in India. *WOMEN AND SOCIETY CONTEMPORARY ISSUES AND CHALLENGES*, 37. Retrieved on 11December,2020.

https://www.researchgate.net/profile/Tawhida_Akhter/publication/344380594_WOMEN_AND_SOCIETY_CONTEMPORARY_ISSUES_AND_CHALLENGES_RESHEMA_PARVEEN/links/5f6e4cf4a6fdcc00863c976a/WOMEN-AND-SOCIETY-CONTEMPORARY-ISSUES-AND-CHALLENGES-RESHEMA-PARVEEN.pdf#page=47

Acid Survivors Foundation. (2017). Islamabad, Pakistan

Kaur, N. (2018) Acid attacks on women in India a socio legal study with special reference to Delhi. [The Punjab Commission of the Status of Women.\(2017\).Government of Punjab, Pakistan.](#)

[Jamal](#).S. (May 08, 2018).Law to help acid attack victims passed by Pakistan law makers.[World Asia](#). <https://gulfnews.com/world/asia/pakistan/law-to-help-acid-attack-victims-passed-by-pakistan-lawmakers-1.2218372>

Abbas, H. (28, February 2018). In Pakistan, Acid Attacks Decrease But Challenges Remain. Media for transparency Islamabad, Pakistan.<http://pakrtidata.org/2018/02/28/pakistan-acid-attacks-decrease/>

Kaur, N. (2018) Acid attacks on women in India a socio legal study with special reference to Delhi.

Singh, M., Kumar, V., Rupani, R., Kumari, S., Yadav, P. K., Singh, R., &Verma, A. K. (2018). Acid attack on women: A new face of gender-based violence in India. *Indian Journal of Burns*, 26(1), 83.

Shaikh, M. A. (2003). Is domestic violence endemic in Pakistan: perspective from Pakistani wives.*Pakistan Journal of Medical Sciences*, 19(1), 23-28.

Schuler, S. R., Hashemi, S. M., Riley, A. P., &Akhter, S. (1996). Credit programs, patriarchy and men's violence against women in rural Bangladesh. *Social science & medicine*, 43(12), 1729-1742.

Patel, A. B., Patel, B., & Patel, B. V. (2016). Health care management of acid attack

survivors: a review. *Int J Med Pharm Res*, 4, 231-236.

- Alter, David A., Barry Franklin, Dennis T. Ko, Peter C. Austin, Douglas S. Lee, Paul I. Oh, Therese A. Stukel, and Jack V. Tu. "Socioeconomic status, functional recovery, and long-term mortality among patients surviving acute myocardial infarction." *PloS one* 8, no. 6 (2013): e65130.
- Sin, N. L., Kumar, A. D., Gehi, A. K., &Whooley, M. A. (2016). Direction of association between depressive symptoms and lifestyle behaviors in patients with coronary heart disease: the Heart and Soul Study. *Annals of behavioral medicine*, 50(4), 523-532.
- Feldman, D. I., Valero-Elizondo, J., Salami, J. A., Rana, J. S., Ogunmoroti, O., Osondu, C. U., ... &Nasir, K. (2017). Favorable cardiovascular risk factor profile is associated with lower healthcare expenditure and resource utilization among adults with diabetes mellitus free of established cardiovascular disease: 2012 Medical Expenditure Panel Survey (MEPS). *Atherosclerosis*, 258, 79-83.
- Frasure-Smith, N., Lespérance, F., &Talajic, M. (1993). Depression following myocardial infarction: impact on 6-month survival. *Jama*, 270(15), 1819-1825.
- Rogers, A. E., Addington-Hall, J. M., Abery, A. J., McCoy, A. S. M., Bulpitt, C., Coats, A. J. S., & Gibbs, J. S.
R. (2000). Knowledge and communication difficulties for patients with chronic heart failure: qualitative study. *Bmj*, 321(7261), 605-607.
- Sarason IG, Sarason BR, Brock DM, Pierce GR. Social support: Current status, current issues. *Stress and emotion: Anxiety, anger, and curiosity*. 1996, 16:3-27
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, 52(1), 30-41.
- Ghaffari, A. S., Bajwa, R. S., Hussain, M., Tahir, M., Bibi, S., & Khalid, A. (2019). HOSPITAL ANXIETY AND DEPRESSION OF PATIENTS WITH HEART FAILURE IN SOUTH PUNJAB PAKISTAN: A SECTIONAL SURVEY STUDY.
- Ghaffari, A. S., Zhao, W., Bibi, S., Ashraf, M., Amin, M., & Tariq, M. (2018). Statistical Analysis of Dispositional and Psychological Factors and their Association with Cardiovascular Diseases. *European Online Journal of Natural and Social Sciences*, 7(4), pp-720.