

Physical Assaults assessment concerning their pattern, severity & bone of contention, in the rural areas of Punjab-a medico-legal aspect, study.

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ABSTRACT

Background: The rural areas of Punjab have a very high prevalence of physical assault due to illiteracy, pride of cast system, related to agricultural land disputes, illegal breaches in violating the watering system of their crops, political motives of landlords in their area, and social issues related to marriages, love affairs, and illegal interference into the privacy of others.

Aim: To analyze different forms of physical assaults related to their pattern, severity, and reasons behind these physical assaults keeping in view their medico-legal aspects.

Methods: The data of physical assaults in medico-legal cases were collected from the peripheral rural areas of Faisalabad, Sargodha and Mianwali on specifically designed Performa. The cases were selected from these districts reported in Causality & Accident departments of the district and tertiary care Hospitals during one year June 2020 to May 2021. The inclusion criteria were based on non-probability with random sampling in this retrospective study. In total 200 cases were selected for this study. Association with demographic parameters like age, sex, type of weapon used, the pattern of injury.

Results: Physical Assaults had a direct association with male predominance; the age of 20 to 30 years of age, blunt weapons especially fists, kicks, and daggers, wooden sticks were used for offense as determined by the findings in this study. Various social reasons related to cast & clan system, disputes of agricultural land, family issues related to inheritance, illiteracy, pride of cast system, domestic violence, illegal breaches in violating the watering system of their crops, political motives of landlords in their area and social issues related to marriages, love affairs and illegal interference into the privacy of others, were the main bone of contentions.

Conclusions: Different variety of weapons used in the rural setting. Males as predominant participants of assault suggest a socially active status of men in the rural setup of Punjab where male dominance is evident. The feudal system of landlords main responsible for social injustice and exploitation of the low class, is determined in this study. There need reforms through social literacy, justice provision for all, reforms in medico legal reporting and social awareness of human rights.

Keywords: Physical assaults (PA), blunt trauma, domestic violence, rural areas, and bone of contention

INTRODUCTION

The rural areas of Punjab has a very high prevalence of physical assault due to illiteracy, pride of cast system, related to agricultural land disputes, illegal breaches in violating the watering system of their crops, political motives of landlords in their area and social issues related to marriages, love affairs, and illegal interference into the privacy of others¹. The use of political influences and power to alter the findings of medico-legal reports (MLC) about physical assaults, is a common practice in rural areas of Punjab. Domestic violence on women and children is not reported to law and justice institutions as considered a normal practice². The feudal landlords have a large number of working classes that look after their agricultural lands by cultivating crops on their soil. They face many human rights violations in these rural areas of Punjab. There are many forms of physical assaults in this complex society of rural areas of Punjab where the use of shouting and excessive arguments can easily turn into quarrels and fights. Different ways and weapons of physical assault are punching with fists, kicking with legs, slapping, beating, biting, hurts with daggers, use of wooden sticks, broken glasses, and attacks with broken glass, gun, or knife.

The term medico-legal has already been explained by many researchers in India and Pakistan and refers to any act of violence which results in a legal proceeding in any form either involvement by law enforcement institution or police and medical personnel is consulted to determine the type, severity, and pattern on injury or hurt^{3,4}. The medico-legal aspects are of prime importance to have a check on these physical assaults in order to maintain peace and justice in the society. The assessment of Physical assaults is done on the basis of their pattern, severity, and the reason behind these

Physical Assaults in relation to their medico-legal aspects in the rural areas of Punjab in four districts: Faisalabad, Sargodha and Mianwali during one year June 2020 to May 2021.

Faisalabad is considered as the industrial study established in British Raj named as Lyallpur before the independence of Pakistan at same time Manchester city of UK got industrial revolution and reconstruction. Later it was named Faisalabad after the creation of Pakistan after the name of KSA King Shah Faisal. Faisalabad is the second-largest city after Lahore if considering the metropolitan population in Punjab with a population of 14 million according to the 2017 census⁵. Faisalabad has a largely rural area with a lot of agricultural lands as well textile industry. This increased the sequence of events being subject to a physical attack because of your skin color, ethnic origin, gender, or religion, especially in rural areas.

Sargodha district is situated in the center of Punjab, Pakistan, and comes in the transitional state of upper Punjab entering into lower Punjab with population 3,903,588 according to 2017 census with 65-70% population living in rural and 30-35 % population in the urban area⁵. It is the main agricultural city and famous all over the world with the best citrus producing district of Pakistan⁶. The population of Sargodha grew rapidly with the arrival of Muslim refugees from East Punjab, fleeing from the religious violence that followed the partition of India and the independence of Pakistan in 1947⁷.

Mianwali district has an extensive rural area and is located in the north-west of Punjab with a population of 2.2 million according to the 2017 census. In its 2.2 million populations only 20% live in the city while the remaining 80% live in extensively extended rural areas in the form of small villages called Moza's. It has a complex demographic composition of Pashtun (Pathan) and Saraiki-speaking people possessing tribal origin of cast and clan system⁸. There are excessive tribal enmities and crime ratios related to

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grievous hurts and injuries that are common in their community along with a high rate of homicide in Punjab. It is also considered as a marshal belt of Pakistan as providing a large number of personals to Pakistan Army⁹.

MATERIALS AND METHODS

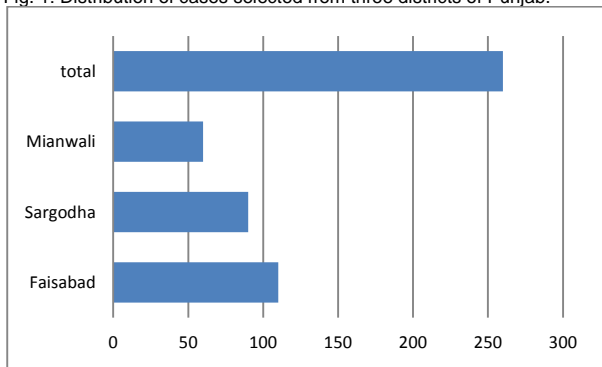
The data of physical assaults in medico-legal cases were collected from the peripheral rural areas of Faisalabad, Sargodha and Mianwali on specifically designed Performa. The cases were selected from these districts reported in causality & Accident departments of the district and tertiary care Hospitals during one year June 2020 to May 2021. The inclusion criteria were based on non-probability with random sampling in this retrospective study. In total 200 cases were selected for this study. Association with demographic parameters like age, sex, type of weapon used, the pattern of injury, and severity of PA were analyzed with statistical methods Chi-Square test, F-statics, and t-test applied where applicable. Special cases who were admitted for physical assaults in causality and accident departments of THQ, DHQ and tertiary care teaching hospitals of these cities, during one year period (June, 2020 to May, 2021), were selected to be included in this retrospective analytical study.

Data collection & statistical analysis: Data was collected for the cases on specially designed Performa which included all the variable information related to type of injury, part of the struck ,age , gender , educational status, type of weapon used, intend and reason of physical assault, probable duration between reporting and actual happening of injuries, any fowl or suspected fabricated injury and any particulars concerning domestic violence. Association with demographic parameters like age, sex, type of weapon used, the pattern of injury, and severity of PA were analyzed with statistical methods Chi-Square test/Fisher’s exact test, F-statics, and t-test applied where applicable.

RESULTS

The research has demonstrated the results of three districts of Punjab regarding physical assaults cases that higher the population and big area, ore are the cases of Physical Assaults. Hence, the cases of physical assaults from Faisalabad were the highest in this study followed by Sargodha and Mianwali (Fig. 1). Furthermore, these cities cover a large rural population living in the countryside of villages in the different tehsils of these cities in Punjab.

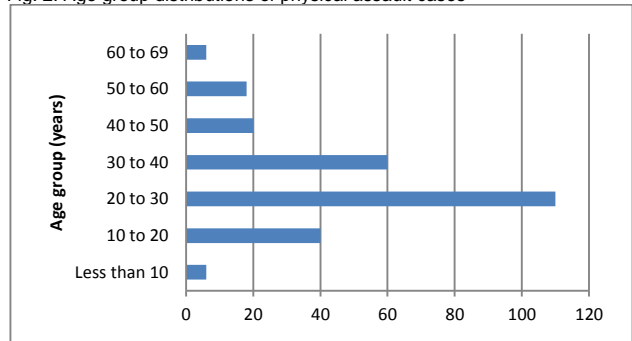
Fig. 1: Distribution of cases selected from three districts of Punjab.



Demographic results of this study have clearly shown 3:1 of males to females who suffered physical assaults in rural areas of Punjab. This predicted male predominance victims of physical assaults with 75% of cases. The highest numbers of cases were found in the age group were between 20 -30 years of age (n=110) followed by the 30-40 years age group (n=60). Furthermore, if we join these two groups together (age between 20 – 40) years they constituted 75 cases of physical assaults (Fig. 2). Hence age groups have

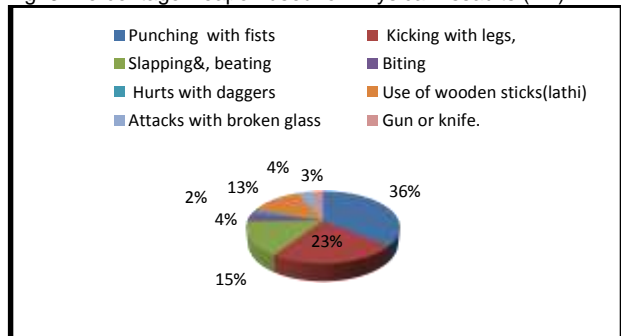
shown the highest association with frequency of assault cases as predicted by the p-value of 0.332 by statistical analysis as well (Table 1).

Fig. 2: Age group distributions of physical assault cases



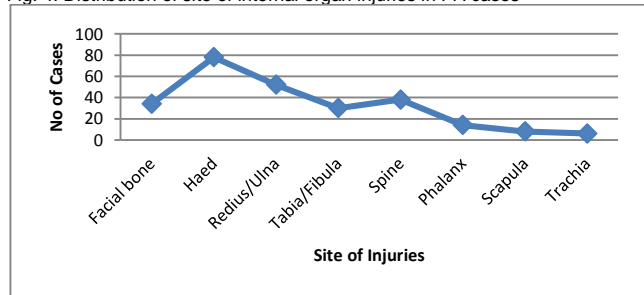
Types of weapons used by assailants were found, the punching with fists and kicking with legs was predominantly (about 60% of cases) used for physical assaults (Fig. 3). Other means of physical assaults were slapping & beating (15%), use of wooden sticks i.e., lathies (13%), biting (4%), attacks with broken glass (4%), and guns & knives (3%).

Fig. 3: Percentage weapon used for Physical Assaults (PA)



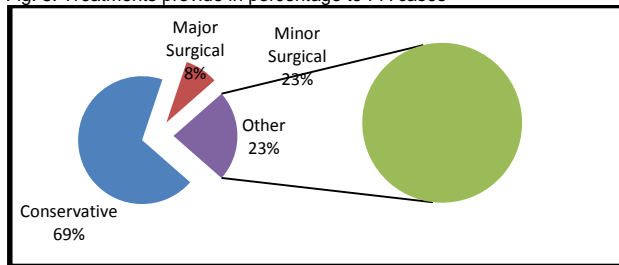
The head was the site of an attack in physical assaults in most of the cases (n=80) in this study followed by upper limb (n=52) injuries and facial bone injuries (n=34). Other parts of body inflicted with PA were spine & back (n=38), lower limbs (n=30), phalanx (n=20), scapula (n=8) and trachea (n=6).

Fig. 4: Distribution of site of internal organ injuries in PA cases



Treatments were analyzed in this study as well. The most of cases were conservatively treated (60% of cases) in this study as their treatment record was consulted in hospital admission papers. 23% of cases were treated with minor surgical procedures like fractures healing & alignments and joint dislocations while 8% of cases required major surgical procedures like neurosurgery for head & spine injuries (Fig. 5).

Fig. 5: Treatments provide in percentage to PA cases



The severity of physical assaults was an important medico-legal aspect to be studied in all physical assault cases. This factor determined the need for medico-legal reporting (MLC) to provide legal compensation to victims or punishment for assailants. This study has shown that simple hurt was found in most of the cases of victims of physical assaults 178(68%), grievous hurt 55(21%), and life-threatening 27(10%) followed after (Fig. 6).

Figure 6: Severity of Physical Assaults according Medico legal Classification

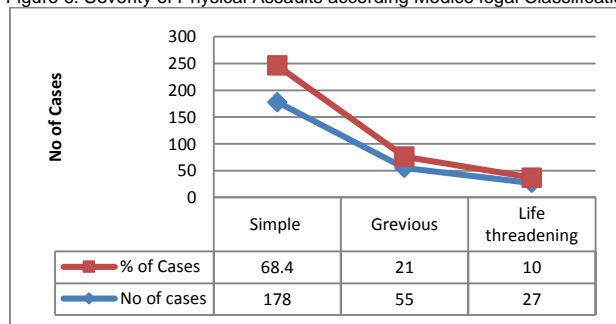


Table 1 Different categories of PA variables and their statistical association

Categories'	Age group(in years)	Severity of Injuries			Total	P-Value
		Simple	Grievous	Life threatening		
Age categories	Less than 10	4	1	1	6	0.332
	10 to 20	30	6	4	40	
	20 to 30	80	20	10	110	
	30 to 40	40	14	6	60	
	40 to 50	12	6	2	20	
	50 to 60	9	6	3	18	
	60 to 69	3	2	1	6	
		178	55	27	260	
Gender	Male	164	20	8	194	0.457
	Female	52	10	4	66	
Weapon Used	Punch/Kick	160	24	10	194	0.425
	Blunt & Heavy	34	10	6	50	
	Sharp & Heavy	8	4	4	16	

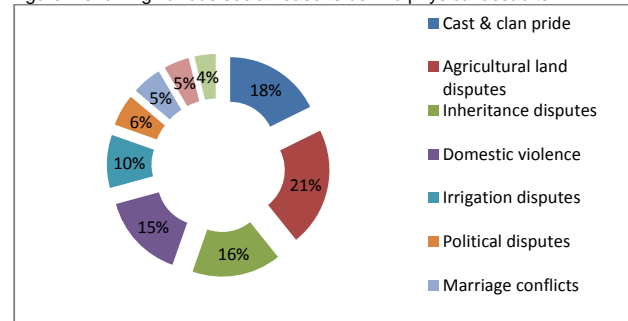
DISCUSSION

Physical Assaults in rural setup are common, especially in agriculture-related issues. The use of physical violence usually starts with aggressive mood exchange with shouting and abusing and then turns into full physical fights by the use of objects present in the surroundings^{10,11}. It was very evident in this research as well where the most common method of physical assaults was the use of fists for punching on victim's head and kicking with legs. Being a rural study, it was also found the use of blunt & heavy objects like wooden logs and sticks (lathies), earthen heavy pots, and stone. Blunt and sharp objects like sickles, shovels, garden & curb hoes, spades, and other ground digging sharp objects, were found as weapons of offense used in physical assaults in rural set up of Punjab and also by many other studies all over the world^{12,13} as well.

Physical assaults were seen in the young age group of 20 to 40 years in this study. This age group was also predicted in many other pieces of research as well^{13,14} because this age is considered

The reason behind the physical assaults which became bone of contentions between the assailants and victims was also determined in this study. Most social factors were found responsible for these physical assaults in the complex rural culture of Punjab. Various social reasons related to cast & clan system 46(16%), disputes of agricultural land 56(21%), family issues related to inheritance 42(16%), domestic violence 40(5%), illegal breaches in violating the watering system of their crops 25(10%), political motives of landlords in their area 15(6%) and social issues related to marriages 14(5%), love affairs 12(5%), and illegal interference into the privacy of others 9(4%), were the main bone of contentions (Fig. 7).

Figure 7 showing various social reasons behind physical assaults



as the main age of socially active individuals who manage the main bulk of outdoor activities. Furthermore, this age group is also involved in many antisocial activities as well like drug abuse, alcohol abuse, and crimes¹⁵. The physical assaults resulted from the violence of the same group of assailants to the victims of the same age. It was also evident in this study. Overall the males were found the main sufferer of physical violence in this study (75%) as the males were predominant in rural setup Punjab (Table 1).

In most studies, the head is the main site of injury in physical assaults^{10,11,12}. This study has also shown similar results. This fact determines the intention of the assailant to inflict the simple, grievous, or life-threatening type of injury. This medico-legal aspect is what we are needed for our expert opinion as medicolegal experts (doctors) in the form of a medico-legal certificate (MLC). The upper limb was found the second-highest site of injury as well explained the defensive nature of this injury as our hands and whole upper limb come insight to defend as a reflex action¹⁶.

Sometimes, external injuries in the case of physical violence can be minute but can result in fatal internal organ damage.

Although most of the cases in our study have shown simple injuries which were conservatively managed later some of them turned grievous and life-threatening. Therefore, a detailed description of injuries along with referrals for further technical assistance from other specialists like radiologists and sonologists must be considered, and follow-up is advised. This fact is more evident in road traffic accidents¹⁷ and also in this study, there were 8% of cases required a major surgical procedure to avoid permanent disability or death.

Agricultural disputes were a major concern in the rural district of Punjab. This study has demonstrated several reasons for physical assaults as well as in previous studies⁴. Domestic violence was found very evident factor in rural areas of Punjab and resulted in physical violence and assaults. This fact was well documented in many national¹ and international researches as well^{18,19}. Furthermore, the literacy status of rural Punjab should be improved with special attention toward social equality of humans and awareness of human rights.

CONCLUSIONS

Physical assaults were found the most common in young male age of society in rural areas of Punjab. Different variety of weapons used in the rural setting. The use of punches with fists & agricultural instruments was the most common practice to use a weapon of violence for physical assaults. Males as predominant participants of assault suggest a socially active status of men in the rural setup of Punjab where male dominance is evident. The feudal system of landlords was main responsible for social injustice and exploitation of the low class in this study. There need reforms through social literacy, justice provision for all, reforms in medico-legal reporting, and social awareness of human rights.

Conflict of interest: Nil

REFERENCES

1. Fawad Asif , M. Iqbal Zafar , Ashfaq Ahmad Maann and Munir Ahmad .domestic violence – rural-urban current age and age at marriage differential impact on women physical health in punjab, pakistan. Pak. J. Agri. Sci., Vol. 47(2), 178-182; 2010 ISSN (Print) 0552-9034, ISSN (Online) 2076-0906.
2. <https://pcsw.punjab.gov.pk/system/files/gender.pdf>
3. Siddappa SC, Datta A. A study pattern of medicolegal cases treated at a tertiary care hospital in Central Karnataka. *Ind J Forensic Comm Med.* 2015;2(4):193-7
4. Cheema TN, Qasim AP, Abaid T, Anjum H, Munir U, Abbas Q. Profile of Medicolegal Cases in the Rural Areas of District Bahawalpur. *APMC* 2019;13(1):104-7.
5. district Wise Census Results Census 2017" (PDF). *www.pbscensus.gov.pk. Archived from the original (PDF) on 29 August 2017.*
6. Mahmood, Amjad (21 December 2020). "Sarghoda's citrus claim to fame". *DAWN.COM. Retrieved 27 December 2020.*
7. https://en.wikipedia.org/wiki/Sargodha_District#cite_note-17
8. <https://en.wikipedia.org/wiki/Mianwali>
9. Manpower Reaching Military Age Annually (2020)". *Global Fire Power (GFP)*. Retrieved 19 June 2020.
10. Brink O, Vesterby A, Jensen J. Pattern of injuries due to interpersonal violence. *Injury.* 1998 Oct 1;29(9):705-9.
11. Ellis T. Psychopathy as a cause of violent crime in South Africa: a study into the etiology, prevalence and treatment of psychopathy as a cause of violence with particular reference to domestic violence in South Africa (Doctoral dissertation).
12. Karn A, Jha S, Yadav BK, Thakur D. Medico-legal study of suspected homicide cases in a Teaching Hospital in Eastern Nepal. *Health Renaissance.* 2011;9(1):15-9.
13. Subba SH, Binu VS, Menezes RG, Kumar V, Rana MS. Physical assault related injuries in Western Nepal—a hospital based retrospective study. *Journal of forensic and legal medicine.* 2010 May 1;17(4):203-8.
14. Yadav AK, Rajbanshi JN, Kushwaha SK, Nepal PR. Prevalence of Head Injury of Patients Arriving in a Tertiary Care Center. *Eastern Green Neurosurgery.* 2020 Jan 29;2(1):38-41.
15. Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. *The lancet.* 2002 Oct 5;360(9339):1083-8
16. ArchanaChaudhary ,SrijanaKunwar,SamjhanaGhimire , HariharWasti, Patterns and Severity of Injuries in Patients Following Physical Assault– A Medicolegal Aspects. *egneuro,02(02):16-20,202*
17. Chaudhary A, Wasti H. Patterns and Severity of Injuries in Patients Following Road Traffic Accidents–A Medicolegal Aspects. *Eastern Green Neurosurgery.* 2020 Jan 29;2(1):13-7
18. Bhatt RV. Domestic violence and substance abuse. *International Journal of Gynecology & Obstetrics.* 1998 Dec;63:S25-31
19. Koenig MA, Lutalo T, Zhao F, Nalugoda F, Wabwire Mangen F, Kiwanuka N, Wagman J, Serwadda D, Wawer M, Gray R. Domestic violence in rural Uganda: evidence from a community-based study. *Bulletin of the world health organization.* 2003;81:53-60