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Original Article

A Study of Injury Patterns and Socio-Demographic Profiles of Victims of Intimate Partner Violence in Sri Lanka

دراسة أنماط الإصابات والمظاهر الاجتماعية والديمغرافية لضحايا عنف الشريك الحميم في سريلانكا

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Abstract

Intimate partner violence (IPV) is a common global health problem. The injury pattern and socio-demographic profile of IPV in Sri Lanka may show variations to that seen in a western society due to socio-cultural differences. The objective of this study was to identify the injury pattern and the socio-demographic aspects of IPV in a Sri Lankan context.

All the victims of IPV presented to the Teaching Hospital Peradeniya, Peradeniya, Sri Lanka from 2006 to 2011 were included in this study. There were 226 cases of IPV of which 96% were female. The majority were married and living together. They were less than 30 years of age, unemployed, with more than 2 children, had a poor education and were in the early phase of marriage.

Seventy-two percent experienced physical violence resulting in contusions (72%) and abrasions (42%). A significant proportion (11%) did not have any visible injuries. The commonest area of injury was upper limbs (63%) with the head and face being involved in 54% of the cases. The majority (84%) were non grievous injuries inflicted by bare hands (58%) and feet (13%).

Profiling of such victims would enable social and community workers to identify this vulnerable group for early intervention and prevention of such occurrences.

Keywords: *Forensic Science, Intimate partner violence (IPV); Injury patterns; socio-demographic profile, Sri Lanka.*

المستخلص

عنف الشريك الحميم (IPV) هو مشكلة صحية عالمية شائعة. وقد لوحظ انتشار مرتفع لعنف الشريك الحميم في سريلانكا. وبسبب الاختلاف الكبير في الثقافة والمرجعية الاجتماعية فإن أنماط الإصابات والمظاهر الديموغرافية والاجتماعية لعنف الشريك الحميم في سريلانكا قد تظهر اختلافات كبيرة عم هو عليه الحال في المجتمعات الغربية.

جريت هذه الدراسة من أجل تحديد أنماط الإصابات والمظاهر الديموغرافية والاجتماعية لعنف الشريك الحميم في سياق سريلانكي. وشملت الدراسة جميع ضحايا عنف الشريك الحميم المعالجة في المستشفى التعليمي براينيا خلال الأعوام ٢٠٠٦-٢٠١١. وكان هناك ٢٢٦ حالة لعنف الشريك الحميم، ٩٦٪ منها إناث. وكانت الأغلبية (٩٢٪) متزوجة وتعيش معًا، (٢٪) متزوجة ولكنها تعيش منفصلة، و(٥٪) غير متزوجين ويعيشون معاً و (١٪) مطلقين. غالبية الضحايا (٧٢٪) تعرضوا للعنف البدني. الغالبية (٧٢ ٪) لديها كدمات و (٤٢ ٪) لديها سحجات. ونسبة كبيرة (١١٪) لم يكن لديها أي إصابات مرئية. وكانت أكثر مناطق الإصابات شيوعاً هي الأطراف العلوية (٦٣٪). بينما كانت الإصابات في الرأس والوجه لدى (٥٤٪) من الحالات. والغالبية (٨٤٪) كانت إصابات غير مؤلمة. وأغلبية الضحايا (٥٨٪) تعرضوا للاعتداء بالأيدي العارية و (١٣٪) بالأقدام.

ومن شأن تحديد ملامح هؤلاء الضحايا أن يمكّن العاملين الاجتماعيين والمجتمعيين من تحديد هذه الفئة الضعيفة للتدخل المبكر والوقاية من مثل هذه الحوادث.

الكلمات المفتاحية: علوم الأدلة الجنائية، عنف الشريك الحميم (IPV)، أنماط الإصابات، المظاهر الاجتماعية والديموغرافية، سيريلانكا.

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1. Introduction

Intimate partner violence (IPV) is referred to as any behavior within an intimate relationship that causes physical, psychological or sexual harm to those in that relationship [1]. In the year 2000, the U.S. Department of Justice defined it as physical, sexual, and/or emotional abuse by a current or former marital or non-marital partner in the context of coercive control [2]. In a report issued in 2016, the WHO revealed that physical or sexual violence is experienced by the majority of women in their lifetime by their intimate partner [3]. Intimate partner violence is a global health problem and it occurs among all religious, socioeconomic and cultural groups [1]. Devries et al. reported that South Asia has the second highest prevalence of IPV [4]. Prevalence of IPV is high in Sri Lanka and highest in the central province [5, 6].

Guruge et al. and Jayasuriya et al. further reported that the majority of victims of IPV in Sri Lanka are women [6,7]. Factors which contribute towards this assault have been identified by some authors as alcoholism and by others as male dominance [8, 9]. A study conducted in the western province of Sri Lanka revealed the types of violence experienced from controlling behavior, emotional abuse, physical violence and sexual violence [7]. Faulk reports that assault is usually not pre-meditated and there is no intention on the part of the partner to cause severe bodily harm[10].

Injuries in IPV vary from mild physical injuries to life threatening injuries [11]. Commonly affected areas are the head, face, neck, hands and legs [12-16]. In a study conducted by Saravanpavanathan in Sri Lanka, it was identified that the most common injury seen in cases of IPV was periorbitalhaematoma [12].

Physical violence ranged from slapping, tight gripping, punching, kicking, dashing the head, to homicide [7,12,17]. Assault is usually with the fist or foot [11,18]. Mason found that all victims studied were punched, while 60% were kicked and 40% assaulted by a weapon [9]. Vidanapathirana identified commonly used weapons such as clubs, sticks (broomsticks) and firewood [14].

It has been reported that most cases of sexual violence do not surface due to a reluctance to expose the problem to others [18]. Frequently, the woman concerned tolerates abuse whether physical or sexual, and others do not attempt to mediate as it is considered a personal matter [19]. Furthermore, it is well known that some men feel guilty after an episode of violent behaviour and become particularly loving subsequently, giving the wife hope of reconciliation

Although physical injuries are the most obvious, the impact of IPV is far reaching [13]. According to Campbell, depression and post-traumatic stress disorder are common among IPV victims [20].

IPV is an important health and social problem which requires urgent preventive and intervention measures [21]. Although IPV is a common problem worldwide, it is more widespread in the South Asian subcontinent than in the western world where legislation protecting women is better and more frequently enforced. [21].

The difference in culture and social background and socio demographic aspects of IPV in a traditional male dominated society like Sri Lanka may be different than what is seen in western society. The central province of Sri Lanka has multi-ethnic composition and studies regarding IPV are sparse.

Information regarding injury patterns among IPV victims would enable identification of such victims for holistic management and help prevent its occurrence. An extensive literature search revealed that no comprehensive studies have been done in the central province of Sri Lanka regarding socio-demographic profile and injuries in IPV victims. It is envisaged that exploring injury pattern and socio

demographic aspects of IPV in the central province in Sri Lanka would provide insight into the cultural and racial nature of this issue.

The teaching hospital in Peradeniya, Sri Lanka is a tertiary care unit and the only such institution in the central province which treats patients referred from the entire province. Therefore, it is justifiable to assume that the injury pattern and socio demographic profile of victims of IPV presented to this unit is representative of the entire province for the purpose of identification and management.

The objective of the study was to identify the socio-demographic profile and injury pattern of victims of intimate partner violence presented to a tertiary care unit in the central province, Sri Lanka.

2. Subjects and Methods

All cases of IPV, confirmed by the Judicial Medical Officer (JMO), presented to the Teaching Hospital in Peradeniya, Sri Lanka, from 2006 to 2011 were included in this study. Data regarding socio-demographic aspects and injury patterns were accessed from the medico-legal examination forms of these victims. Written informed consent was obtained from the relevant JMO to access data, and the anonymity of the victims was strictly maintained. Ethical approval for the project was granted by the ethical clearance committee of the Faculty of Medicine, University of Peradeniya, Sri Lanka. Data were analysed using the statistical package SPSS version 21.

3. Results

Two hundred and twenty-six victims of intimate partner violence were identified.

3.1 Socio Demographic Profile

3.1.1 Gender

Ninety-six present (96%) were female.

3.1.2 Marital status

The majority (92%) were married and living together. Two percent (2%) were married and living separately, 5% were unmarried and living together and 1% were divorced.

3.1.3 Age

The study revealed that 69% of the victims were between 21-40 years of age with a lesser incidence with increasing age. Furthermore, almost 42% of the victims who had experienced IPV were below 30 years of age (Figure-1).

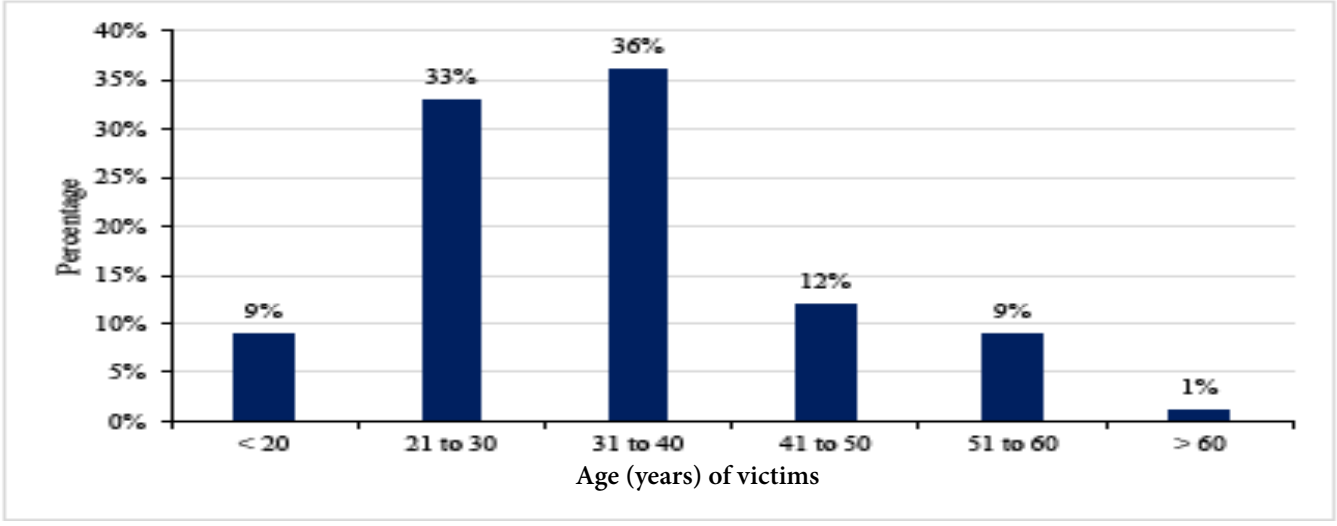

Figure 1- *Age distribution of IPV victims.*

3.1.4 Duration of marriage/ cohabitation of the victim

The duration of cohabitation (including those who are married) was 4-7 years in the majority (40%) of victims. It was 8 - 11 years in 25%, 16-19 years in 17%, less than 3 years in 10%, 12-15 years in 9%, 20-23 years in 5% and more than 24 years in 4%.

3.1.5 Number of children

A majority (56%) of IPV victims had 2 children while 26% had 1 child, 10% no children and 8% more than 2 children.

3.1.6 Level of education of the victims

A majority (58%) of those experiencing IPV were educated up to ordinary level (middle school) or less. However, it was interesting to note that 39% of the victims had passed the ordinary and advanced level examinations and 3% even had a university education.

3.1.7 Economic status of victim

Sixty-seven percent of the victims had no monthly income while 9%, 13%, 8% and 3% had an income of less than 5000, 5000-10000, 10000-20000 and more than 20,000 Rupees, respectively.

3.1.8 Ethnicity of victim

The majority of victims were Sinhalese (83%), while 10% and 7% were Muslim and Tamil, respectively.

3.2. Injury Patterns

3.2.1 Type of violence

In our cohort, more than 87% had experienced physical abuse while a significantly lesser proportion had experienced other forms of abuse (Table-1).

Table-1: *Type of violence*

Type	%
Physical only	72
Physical and Verbal	15
Verbal only	4
Sexual only	4
Psychological only	3
Multiple	2

3.2.2 Type of injury

Eleven percent (11%) of victims did not have any injuries. In our study, one individual had sustained more than one injury type on most occasions.

The most common injury identified in this study was contusions followed by abrasions, while cuts were rare. Of the 4% who had burns, 2% were due to attempted suicide following IPV (Table-2).

Table 2- *Type of injury*

Injury	%
Contusions	72
Abrasions	42
Lacerations	16
Fractures/dislocations	7
Burns	4
Cuts	3

3.2.3 Site of injury

3.2.3.1 Region involved

The most common area involved were upper limbs followed by head and face. Among the upper limb injuries, 65% were right sided.

The head and face injuries were periorbitalhaematomas (28%) and injuries to lips(5.5%). In the majority of cases, injuries were found in more than one area (Table-3).

Table 3- *Site of injury*

Site	%
Upper limbs	63
Head & face	54
Lower limbs	25
Neck	11
Chest (Anterior)	12
Chest (Posterior)	9
Abdomen (Anterior)	5
Lumbar and loin	4
Pelvis	4

3.2.3.2 Injuries according to handedness

Of those whose right hand was injured, all were right handed. Of those whose left hand was injured, the majority (80%) were left handed.

3.2.4 Severity of injury

This study revealed that the majority of victims sustained non grievous injuries. However, 4% had sustained life threatening injuries (Table-4).

Table 4- *Category of hurt (based on Penal code of Sri Lanka)*

Category	%
Non grievous (NG)	84
Grievous (G)	12
Endangering life (EL)	1
Fatal in ordinary cause of nature (FINOC)	3

3.2.5 Weapon used

The majority of victims were assaulted with bare hands, while a significant proportion were assaulted with objects such as knives, mammoties, broom sticks, wooden poles, plastic chains etc (Table-5).

In 74% of the cases, the causative agent was a single weapon.

Table 5- *Type of weapon*

Type of weapon	%
Bare hands	58
Foot	13
Objects	29

4. Discussion

The present study revealed that most victims presented to the tertiary care units with IPV were female. Similar findings were observed in previous studies in Sri lanka, India and Hong Kong [11,17,19]. Therefore, it may be interpreted that females are more vulnerable to IPV than males. This is supported by a study conducted by Jayasuriya et al. in the central province of Sri Lanka, where it was revealed that females believe their subordinate role is a norm [7]. However, this female preponderance could also be due to social and cultural barriers which prevent males from disclosing IPV [13]. A similar study conducted by Vadysinghe et al. (2018) revealed that almost all the IPV victims in the central province were females [19].

In Sri Lanka, separation or divorce is not a favorable option according to socio cultural norms. This may explain the reason for a significant proportion of those abused to remain in abusive relationships.

The vulnerable age group of 31-40 years was comparable with studies conducted by Vidanapathirana in Colombo, Sri Lanka, Paul in India and Lau et al. in Hong Kong [11,14,18].

The fact that IPV is not commonly seen in those less than 20 years of age may be due to the fact that the legal age limit for marriage in Sri Lanka is 18 years, which is also the recommendation of UNICEF [22-24]. Furthermore, studies show that the frequency of violence is more

in those who are married earlier [25-28].

This study revealed that the majority (65%) of victims of IPV were cohabiting or married for less than 11 years. It maybe speculated that immaturity in handling family matters, economic hardships in early years and stresses due to children in the first few years of family life may have precipitated IPV.

In our study cohort, 90% of families who experienced IPV had one or more children. Economic hardships which occur as a result of bringing up children may be a predisposing factor for IPV. Even though a more extensive study needs to be done to confirm this, it could be recommended that adopting family planning methods to restrict the number of children in the early years of married life would have a favorable outcome on controlling domestic violence.

Furthermore, it has been reported that children experiencing violence in the family environment are prone to health consequences, poor school performance and would be future perpetrators of family violence [29-31].

This study confirms, to a certain extent, the findings in the literature which indicate that education gives protection against IPV [31-34].

In our study, the income of the victim is a significant element in IPV. It has also been identified as a compounding factor in many other studies [35-38].

Our study revealed that more than two thirds of victims experienced IPV in early stages of co-habitation with more than half of the victims cohabiting for a period of 4 years to 11 years. Immaturity of handling family matters and economic hardships caused by commencement of family life, having children and tending to their needs and etc. may be precipitating factors.

The ethnic composition of the victims corresponds to that of the composition of the Kandy district in Sri Lanka does not indicate a higher prevalence in any particular ethnic group [39].

This study revealed that the majority of victims experienced physical violence. This compares well with the findings of Gureuge et al. who reported that during the period spanning 1980 – 2015, the predominantly reported abuse was physical [6]. This was also similar to studies done in countries such as India, Hong Kong and Saudi Arabia [11,18,40]. This may be explained by the fact that physical violence is more likely to be reported to hospital authorities than sexual, verbal and psychological violence [6]. Therefore, the findings of this study which was conducted in a hospital setting may not represent the true picture at community level [5].

Furthermore, the majority of victims in this study had contusions; while a significant number had no visible injuries. Contusions remain the most common type of injuries reported in other studies as well [12,41]. Contusions were seen in the region of the head, face and neck which was similar to the findings of Vidanapathirana where a significant number of victims had periorbital haematomas [14]. Notably, few burns were reported and among them half were resulted from suicide attempts following IPV, as indicated by the injury pattern.

In contrast to other studies where the most common site affected was head and face [12,13,15,16], this study revealed the most common area of involvement as the upper limbs followed by head and face. It maybe speculated that these injuries of the upper limbs were inflicted while defending oneself against the assailant.

The current study of IPV revealed that more than three quarters of the victims had non-grievous injuries similar to the findings of Vidanapathirana and that the majority of victims were assaulted by bare hands similar to a study

done in Hong Kong [11,14]. This study reported the use of objects such as knives, mammoties, broom sticks, wooden poles, plastic chains etc. for the purpose of assault, which was similar to studies done in Jaffna and Colombo in Sri Lanka [12,14]. Furthermore, in the majority of instances the causative agent was single rather than multiple.

5. Conclusion and Recommendations

The injury pattern of victims has been identified as physical violence caused by bare hands of non-grievous nature distributed in the upper limbs according to the handedness of victim. The vulnerable group identified by this study were young, unemployed females with more than 2 children, who had a poor education and were in the early phase of marriage.

Profiling of such victims would enable social and community workers to identify this vulnerable group not only for interventional purposes but also to prevent such occurrences.

Conflict of Interest

No potential conflict of interest reported by the authors.

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Nill.

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