

# Domestic Violence as a Major cause of Trauma in Western Province, Papua New Guinea

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## **Abstract:**

*Background Domestic violence is endemic in PNG accounting for 90% of female trauma. It is a significant cause of morbidity in the country and a drain on already scarce healthcare resources. Few studies have assessed the scale of the problem in rural areas.*

## **Aim:**

*To assess the scale of the problem in the Western Province and the views of the victims to try and identify the underlying causes.*

## **Methods:**

*Trauma presentations to the outpatient department and trauma admissions to Kiunga hospital were audited over a four week period in September 2009. Patients admitted with domestic violence-related injuries were then asked a short questionnaire.*

## **Results:**

*16 patients (15 females, 1 male) presented to Kiunga hospital with domestic violence-related injuries. 13 of these patients were admitted. In this time only one other female was admitted for acute trauma thus over 90% of female trauma admissions were due to domestic violence. The victims were not as accepting of the problem as other studies have suggested. Victims all reported that the police failed to act when they reported an incident.*

## **Conclusions:**

*Domestic violence is a major public health problem in PNG. Increasing the presence of women in law enforcement agencies and law reform to offer more support to victims is needed to improve the problem.*

## **Introduction and Background**

Papua New Guinea (PNG) is the second largest country by population in Oceania being home to over 6 million people. Statistics indicate that the nation has the lowest life expectancy and poorest health in the region (World Health Organisation). Life expectancy stands at just 60/64 (m/f) which has remained unchanged since 1980 (Connell, 1997). At first glance one could attribute this to health problems endemic in tropical countries such as malaria and TB. However, when causes of morbidity and mortality in the country are examined, the reality is an epidemic of violence exacerbated by cultural and societal beliefs (Connell, 1997).



Trauma is the leading cause of death in the 15-44 age group in PNG and the fourth most common cause of death for all ages (Watters and Laurie, 1996). Trauma is responsible for 11.5% of hospital admissions and is the third most common cause of admission after childbirth and pneumonia (Watters and Dyke, 1996). The commonest causes of injury in men are road traffic accidents, criminal assault and tribal fights, whereas in women domestic violence is by far the most common. In the capital, Port Moresby, domestic violence accounted for 90% of female casualty attendances. It is reported that wife-beating is justifiable to 65% of rural men and 46% of urban men whilst 57% of rural women and 25% of urban women thought it to be acceptable behaviour (Watters and Dyke, 1996). Not only is domestic violence endemic and accepted in PNG it frequently causes serious injury. Fractures are the commonest injury that result, occurring in 49% of victims of domestic violence in one study (Mathew et al, 1996; Clark, 1998). Of these forearm and olecranon fractures most frequently occur due to the arm being used by the victim to protect their head from a blow (Mathew *et al*, 1996).

In the 1980s research was conducted under the guise of the PNG law enforcement commission, to examine the problem of family and marital violence in response to a request from the national council of women (Amnesty International, 2006). They found that domestic violence was endemic but that rates varied in different areas of the country. They also found that the criminal law offered little protection to victims and that police thought domestic violence to be a private and justified affair between spouses. Following their report in 1992 the law enforcement commission made recommendations for reform that involved, strengthening criminal law, improving other means of legal protection, public awareness campaigns and training for the police (PNGLRC, 1992:26-27). Despite these efforts, reports suggest that domestic violence is on the increase (Amnesty International, 2006).

Domestic violence can be defined as, any incident of threatening behaviour, violence or abuse (psychological, physical, sexual, financial or emotional) between adults who are or have been intimate partners or family members, regardless of gender or sexuality (Amnesty International, 2006). In the developed world most medical visits related to domestic violence are not directly due to trauma but are somatic complaints of stress related illnesses (Bradley et al, 2002). In Papua New Guinea however, where primary care services are poorly developed, domestic violence usually presents with physical injury. Estimates of the prevalence of domestic violence-related injuries vary and most studies conducted have been in the highland areas, or in the capital, Port Moresby, areas renowned for their violence. Research by the PNG law enforcement commission estimated that marital violence occurs in over two thirds of Papua New Guinean families (Morley, 1994). As well as the obvious physical injury, domestic violence causes considerable psychological morbidity to both the victim and other family members (Bradley *et al*, 2002). This study was conducted to evaluate how much trauma is caused by domestic violence in the rural western province of Papua New Guinea and to assess its impact on healthcare resources in the area. The study also aimed to explore local views on domestic violence to try and evaluate where resources need to be targeted to combat the problem.

## Methods

### *Location of Study*

This study was conducted at Kiunga District Hospital in the rural Western Province of PNG. Kiunga Hospital has 48 beds divided into 26 acute beds, 14 maternity beds and 8 isolation beds for patients with TB and leprosy. The hospital serves the North Fly district, namely the town of Kiunga and its surrounding area.



## ***Study Design***

An audit of trauma cases presenting to Kiunga general hospital was conducted. Any patients attending the outpatient department (equivalent to the town's accident and emergency department) with a domestic violence-related injury had their details (age and sex), nature of their injuries (type, location, severity), method of injury and whether alcohol was involved recorded. Length of admission (if admitted) and treatment given (if any) were also recorded. The history behind each incident was noted to ascertain the circumstances under which the assault took place. Each patient was then asked if they would answer a short questionnaire about domestic violence to assess victim's views on the subject. The following questions were contained in the questionnaire:

1. Have you been a victim of domestic violence before?
2. Are you aware of other women (people) who have suffered domestic violence?
3. Do you think domestic violence is a big problem in PNG?
4. Do you think it is acceptable for men to beat their wives?
5. Have you done anything about this problem?

The questionnaire was designed to assess whether the victim thought it was an acceptable practice and if it had happened before. The patient's occupation, education level, and method by which the questionnaire was being delivered were recorded in order to see if prevalence differs across socio-economic groups. The questionnaires were delivered orally in English or by a nurse or relative in Tok Pisin if required.

## ***Study Population***

The study population consisted of anyone presenting with a physical injury intentionally caused by a relative, partner or other household member (spouse, partner, sibling, ex-partner, child, other wives/partners of spouse). The study population was not confined to women. Subjects were identified by the healthcare workers in the outpatient department based on the history given by the patient.

## ***Data Collection***

Data was collected during the four weeks of September 2009. Information was obtained from subjects at the time of their medical evaluation. Questionnaires were administered at the time of medical evaluation or during the patient's admission.

## **Results**

Table 1 summarises the cases seen. For each of the cases recorded the victims were asked if their assailant had been drinking alcohol or was under the influence of drugs at the time of the assault. In this study eight of the incidents had taken place when the assailant was inebriated (case numbers 1, 4, 5, 10, 11, 12, 13). In only one of the cases had the victim also been drinking (case 11). Of the 16 cases described 13 were admitted to the hospital with the other 3 being dealt with in out-patients. Each woman presenting to out-patients with a domestic violence-related injury is admitted, even if her injuries do not warrant this, in order to avoid her returning directly to her husband and potentially receiving another beating. Some women decline admission



if their injuries allow, in order to return home to look after children or return to work. The three cases in this study declined admission for these reasons. During the study period only one other woman was admitted for a traumatic physical injury which was due to a snake bite, thus, during the study period over 90% of trauma admissions were due to domestic violence. The small number of subjects in this study means that the results lack statistical power and ideally data collection would have been over a longer time period in several centres across the Western Province. However, the logistics of conducting a larger study in the area would be difficult. The results can be used as an indication of the type and frequency of domestic violence-related injuries commonly presenting to medical institutions in the Western Province. The type and frequency of injuries seen is in accordance with other studies in the literature suggesting the study provides a good indication of the amount and type of injuries caused by domestic violence in rural PNG (see graph 1).



**Table 1**

Case #	Age	Sex	Injury	Method of Injury
1	24	F	Extensive bruising around left buttock and hip and abdomen.	Kicked twice on left hip by husband. Patient was 3 months pregnant.
2	24	F	Bloodied and bruised nose (but not broken)	Punched in the nose by husband.
3	25	F	Head injury – lacerations and bruising.	Argument with sisters, dragged out onto street and thrown head first onto the road.
4	23	F	Bruises and lacerations on legs and back.	Beaten with a belt by husband whilst drunk.
5	>30	F	Extensive bruising all over body, particularly around left iliac crest.	Beaten by husband for 3 hours when he was drunk using boots and rocks.
6	18	F	Raped by stepfather.	Rape
7	41	F	Bruising over breasts and abdomen from prolonged beating. Had resulted in fat necrosis of breast.	Beating over many years.
8	34	F	Fractured left distal radius, ruptured extensor tendons of left forearm (extensor digitorum longus and extensor pollicis longus).	Hit with a bush knife by husband's second wife.
9	36	M	Fractured mid-shaft of right femur (transverse fracture with distal fragment dislocation)	Patient is disabled, unable to walk and uses a wheelchair. Injury was sustained after being beaten with a stick by his brother following an argument.
10	21	F	Fractured olecranon and significant bruising around elbow.	Hit repeatedly with a wooden plank by husband.
11	38	F	Lacerations on head and legs.	Beaten around the head and on both legs with a wooden plank by husband whilst drunk.
12	27	F	Mid-shaft fracture of right ulna.	Hit by a iron stick on right forearm and beaten round head and back by husband whilst drunk.
13	26	F	Whiplash and concussion and grazed right cheek.	Punched and kicked by husband and dragged along the floor by husband.
14	25	F	Large laceration across right hand.	Cut with knife by husband during an argument.
15	31	F	Threatened abortion – abdominal pain and PV bleeding.	Hit and punched in the stomach by husband when 5 months pregnant.
16	28	F	Mid-shaft fracture of right ulna.	Hit with a wooden plank repeatedly by husband.



**Table 2: Summary of treatment received by patients in this case series.**

Treatment Given	Number of patients
Surgical Intervention	2
Superficial Sutures	4
Reduction of Fracture and Immobilisation in Plaster	3
Immobilisation in Traction	1
Simple Analgesia	5
No treatment given	1

12 of the patients above agreed to or were able to answer the questionnaire (see table 3). The results are shown below. Of the four who were not asked the questionnaire, one patient (number 9) was unable to understand what was being asked due to his learning difficulties, one patient declined from answering and two were discharged before the questionnaire could be delivered.

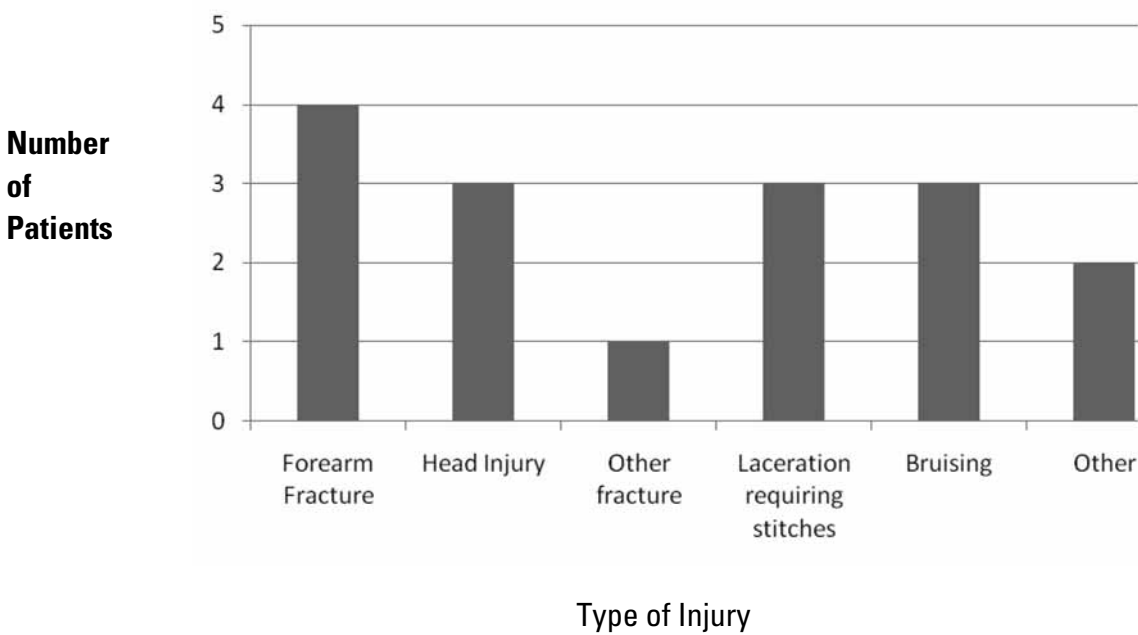
**Table 3: Summary of the results of the questionnaires completed by 12 patients. The one patient in the 'other fracture' received a femoral mid-shaft fracture. The two cases in the 'other' column were a threatened abortion in a woman 5 months pregnant and a woman who was raped.**

Question	Summary of Responses	Comments
1. Have you been a victim of domestic violence before?	10 out of the 12 women suffered domestic violence on a regular basis. For two it had been the first such incident.	All of the 10 women who had been beaten before described multiple episodes of domestic violence. These ranged from being beaten once every few months when husband got drunk to being beaten systematically everyday.
2. Are you aware of other women who have suffered domestic violence?	12 out of the 12 women who answered the questionnaire replied that they knew other women who this had happened to.	Two of the women questioned thought that this happened to some extent to all the women they knew.
3. Do you think domestic violence is a big problem in PNG?	All of the women questioned thought that domestic violence was a big problem and happened a lot in PNG.	One of the women questioned thought that domestic violence was "the biggest problem in my country".
4. Do you think it is acceptable for men to beat their wives?	12 out of 12 women questioned stated that it was definitely not acceptable for men to beat their wives.	Comments on this topic included: "Men know it is wrong as well but they still do it" "Men can be so cruel to women in this country"



<p>5. Have you done anything about this problem?</p>	<p>7 out of 12 patients questioned had tried to seek help from the police about the problem. All of these said that nothing was done by the police.</p>	<p>“The police were not helpful. My husband was just given a good behaviour book”</p> <p>“I have been to the police but they just gave me advice which didn’t help. Now that I have broken my arm I am going to try and get them to do something.”</p> <p>“I went to the police but they just told me I had to sort it out myself”</p> <p>“I went to the police and they gave my husband advice not to beat me but he didn’t listen”</p>
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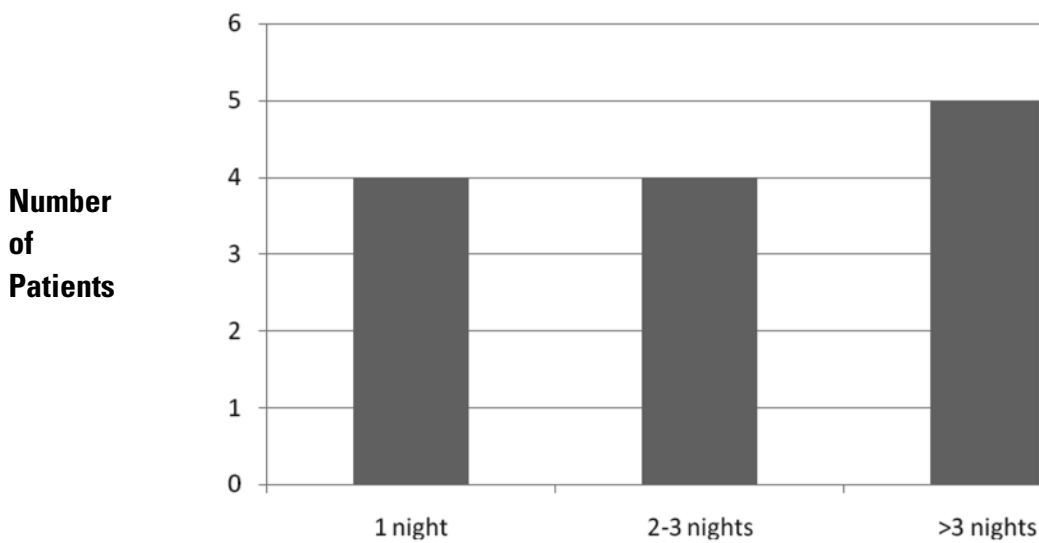
**Graph 1: Summary of injuries in the documented patient series**



*“Everything in life is speaking in spite of it’s apparent silence”*

*Hazrat Inayat Khan*



**Graph 2: Length of hospital stay of the 13 patients admitted following their injuries.**

## Discussion

The results of this study indicate that the vast majority of female trauma admitted to Kiunga Hospital results from domestic violence. The results obtained in the present study are consistent quantitatively (Watters and Dyke, 1996) and qualitatively (Mathew et al, 1996) with previous studies. The type of injuries caused by domestic violence are consistent with the work of Mathew *et al* in 1996 and Clark in 1998 with forearm fractures being the commonest single injury. These occurred in 4 patients (25% of total) in this case series. 5 of the patients identified in the study required a prolonged hospital stay due to their injuries. It is evident from these results that domestic violence-related injuries place a huge burden on already strained healthcare resources. They also indicate that domestic violence is not confined to the highlands or urban areas but is a major public health problem across the country.

In the case series described there are no identifiable risk factors for domestic violence present in all cases. In seven of the incidents reported, the assailant was under the influence of alcohol whilst just one of the victims had also been drinking when she was assaulted. Studies conducted in western countries have found an association between alcohol use in men and an increased likelihood of them inflicting injury (Kyriacou et al, 1999). Whilst alcohol clearly is a factor in the high rate of domestic violence observed in this study, having a role in over 50% of cases, it is not the only risk factor. There does not appear to be an association between women drinking and domestic violence in this case series, which is also in accordance with studies conducted in western countries (Kyriacou *et al*, 1999). Several studies conducted in developed countries have shown that women attending emergency departments with injuries due to domestic violence are more likely to be pregnant than women attending with accidental injuries. (Hillard, 1985; Mezey and Bewley, 1997). It is also reported that the pattern of injury may differ with higher incidence of abdominal injury reported in pregnant victims (Bohn, 1990; Mezey and Bewley, 1997). There were two pregnant women in this study and both were struck on the abdomen during their assault. The physical and psychological sequelae of domestic violence in this group of patients is often more severe and indeed, one of the women in this study presented with threatened abortion. One could speculate that those who are more physically vulnerable





are at increased risk of being a victim of domestic violence which would be supported by the two cases of the pregnant females and also the physically disabled male who was included in this case series. There does not appear to be any correlation between socio-economic group and domestic violence in PNG as the women in this study came from a variety of educational and economic backgrounds.

This study suggests that little has changed since the PNG law enforcement commission's report in 1992 and their subsequent reforms. Recent research by the human rights group, Amnesty International reports similar findings (Amnesty International 2006). The results demonstrate that domestic violence is exceedingly common in the Western Province, accounting for over 90% of female trauma admissions at Kiunga hospital. It does appear however, that women's opinions of domestic violence may have changed for the better over the last 20 years. The results from this study contradict the work of the PNG law enforcement commission which found that 57% of rural women thought wife beating to be acceptable (Bradley, 1988). All women questioned in this case series thought that wife-beating was categorically unacceptable. The questionnaires revealed that many women desperately want action against the problem but found that reporting incidents of domestic violence to the local police was fruitless. Seven out of the 12 women questioned said that they had been to the police about the problem but all recounted a similar tale that the police had told them this was a problem they needed to sort out for themselves.

The government of Papua New Guinea recognises that domestic violence remains an enormous problem in the country. Whilst public health campaigns are evident (see figure 3) the results of this study suggest that more work needs to be done. In the year 2000 the family and sexual violence action committee (FSVAC) was set up to "work towards reducing the occurrence of and suffering caused by physical, sexual and psychological violence, especially between family members in the home environment". During the study period a meeting was held by the FSVAC in Kiunga in order to set up a local committee to raise awareness of the problem in the area. Whilst public education campaigns have a role to play in alleviating the problem, education can only go so far. PNG is ranked 124 out of the 136 countries in the United Nations Development Programme gender-related development index (Ausaid, 2006) with women extremely poorly represented in political and governmental organisations including the police. What this study clearly demonstrates is the desperate need for more women in the local law enforcement agencies and district courts.

## Conclusion

Ausaid (the Australian government overseas aid agency) estimates that domestic violence is one of the biggest barriers to economic development in PNG (Foster *et al*, 2009). PNG's rudimentary health service is severely strained and expertise is lacking or non-existent in several specialities such as plastics and neurosurgery (Watters *et al*, 2001) thus, the country's hospitals are ill-equipped to deal with the trauma so often caused by domestic violence. Whilst some argue that the country's medical priorities for the next decade should be to increase medical expertise where it is lacking, when the vast majority of traumatic injury in women is due to domestic violence, it may be more beneficial to try and address this root cause.

The scale of the HIV epidemic in the country is only just beginning to emerge. Current estimates suggest that if current trend continue 1 million people (almost a fifth of the population) will be infected by 2015 (Cullen, 2006). The problems of domestic violence and HIV are inextricably linked. The subservient role of women in PNG society means that women are often not free to make their own choices about sexual practices and



partners, whilst the high incidence of rape is contributing to the spread of the infection. The frustratingly tragic aspect of PNG's domestic violence epidemic is that contrary to the problem of HIV, it requires no medical miracle to be cured. By increasing the role of women in society and giving them a presence in the law enforcement agencies, the lives of victims of domestic violence might be improved. Domestic violence underlies many of PNGs major health problems and needs to be tackled before any improvement will be seen in the country's grim health statistics. The government has so far been shown to be unreceptive to research which has resulted in resources being misused and few improvements seen. To alleviate the problem of domestic violence PNG society needs to readdress some of its core values with respect to the role of women. This study has demonstrated that domestic violence is a major public health problem. Tackling the problem is daunting, but if the government starts to direct resources to where they are really needed they might succeed in improving the lives of the millions who are suffering at the hands of their family members.

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*“I really don’t know why it is that all of us are so committed to the sea; - except i think it is because in addition to the fact that the sea changes and the light changes, and ships change, it is because we all came from the sea. And it is an interesting biological fact that all of us have, in our veins the exact same percentage of salt in our blood that exists in the ocean, and, therefore, we have salt in our blood, in our sweat, in our tears. We are tied to the ocean. And when we go back to the sea, whether it is to sail or to watch – we are going back from whence we came.”*

*John F. Kennedy*



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