Abstracts by IPPNW affiliate members
accepted at the 2006
8th World Conference on Injury Prevention and Safety Promotion
"Data to Action," in Durban, South Africa
Audit Of Suicides, Homicides And Self-Directed Violence At Lusaka University Teaching Hospital From 1999 To 2002

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PROBLEM
Interpersonal and self-directed violence such as homicides, suicides, gunshot injuries are not uncommon in Lusaka. Auditing such information from Medical Records, is useful in monitoring, evaluating and informing new policies even when only limited data is available. The study looks at the contribution of violence to the mortality and morbidity in Lusaka. Understanding the magnitude of the contribution made by interpersonal and self-inflicted violence makes the case-load at Lusaka University Teaching Hospital in Zambia to help monitor, evaluate and inform new policy directions even with limited data. Such data can be used to cost the amount of resources, theatre time, surgeons times, money spent on treating these cases, hospital stay, man-hours of productivity lost, Daily Adjusted Life-years, years of potential life lost amongst other issues that are important determinants in their respective spheres. Effective policy interventions need not depend on academically and methodologically sound data collection systems. Limited data, if well understood, would lead to saving lives, financial and temporal resources. Understanding the disease burden from this kind of violence can help in planning resource allocation, preventive measures and understanding the effectiveness or other current practices. Suicides, homicides and other injuries directed against self are preventable causes of violence, mortality and morbidity.

OBJECTIVES
To show the contribution of interpersonal and self-inflicted injuries to the disease burden at Lusaka's University Teaching Hospital and how such information can be used in preventing such violence.

METHOD
Retrospective study using hospital records between 1999 - 2002. The research looked at all data available due to suicides, homicides, gun-shot injuries and injuries not otherwise determined as accidental or purposefully inflicted against persons.

RESULTS
The total case load of 41,357 due to all forms of violent incidents seen at the University Teaching Hospital in Lusaka, Zambia, 12,409 or 30.00% were attributable to homicides, suicides and self-inflicted injuries. Of the 12,409 cases, suicides and self-inflicted injuries contributed 664 or 5.35%, while homicides and injuries purposefully inflicted by other persons brought in 4,144 or 33.34%. Injuries caused by firearms and missiles accounted for 573 or 4.62% while injuries undetermined as to whether accidents or purposefully determined added 7,028 or 56.64% to bring the total to 12,409. All 377 deaths were occasional thus 103 (27.32%) due to suicides and self-inflicted injuries, 97 (25.73%) from homicides and injuries purposefully inflicted by other persons and 57 (15.12%) arose from firearms and missiles. Of the 664 suicide cases and self-inflicted injuries, 103 (15.51%) died, while 97 (2.34%) of the 4,144 cases due to homicide and injuries purposefully inflicted by other persons died.

Firearms and missiles lead to 57 (9.95%) out of 557 reported cases with injury undetermined whether by accident or purposefully inflicted was 120 (1.71%) out of 7,028. Injury undetermined whether by accident or purposefully inflicted lead to 120 deaths (31.83%).

CONCLUSION
Understanding this data helps health economists, policy makers, law enforcement agencies, sociologists, community leaders to mount effective preventive strategies all aimed at reducing mortality and morbidity and saving scarce resources that may be channelled to such areas as HIV/AIDS Prevention, building schools, provision of clean water and environmental sanitation among others.
A Cross-Sectional Study Of Domestic Violence Among 385 Pregnant Women In Lusaka

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PROBLEM
Domestic violence is a widespread but understudied in Zambia. Even more rare are studies on domestic violence during pregnancy. The prevalence of domestic violence inflicted on women in Zambia is 44%, while the percentage inflicted on pregnant women is unknown. Social factors, traditional customs and lack of education are some of the factors that conspire to keep women from reporting such cases to the authorities. Because of the consequences of domestic violence on the outcome of pregnancy, this study sought to profile domestic violence during pregnancy, find out the milieu in which it occurs and prescribe some solutions to this scourge.

OBJECTIVES
1) To show the face and outcome of domestic violence in pregnant women attending antenatal clinics in Lusaka.
2) To show the usefulness of this data in current practice and the latent, unexploited potential it holds.

METHOD
A cross-sectional descriptive study of 385 pregnant women attending antenatal clinics in Lusaka. Both structured interviews and focus group discussions were employed in the data collection. The women were purposively but randomly selected; every fifth woman was enlisted into the proforma. The study was conducted over a six-month period between June 2004 and December 2004. Data were analysed using standard EPI information systems.

RESULTS
A total of 385 randomly selected pregnant women were selected from all walks of life and backgrounds. Of these women, 169 (44,0%) had experienced violence at least once in their lifetime, while 92 (23,9%) had experienced domestic violence during the current pregnancy. The age commonly exposed to domestic violence in pregnancy were those between 21-25 years old (40,2%), 338 (87,8%) were married, 229 had a poor socio-economic status and only 10,2% (37) had received a secondary education. As for local social beliefs, 139 (36,4%) believed that it was right for a husband to beat the wife in pregnancy as a show of love and loyalty. During the current pregnancy, 33 (8,6%) women experienced domestic violence at least once, 25 (25%) two or three times, 12 (3,1%) four to five times while 22 (5,7%) had experienced domestic violence over five times. This violence in pregnancy took the form of beatings 68,6% (116), verbal abuse 32,7% (55) and non-consensual sex 10,7% (18). The main perpetrator of domestic violence in pregnancy was husbands or intimate partners in 169 (98,7%) of the reported cases and the perpetrator often abused alcohol or dagga, was less educated than his spouse and suffered from an inferiority complex. Abuses included sexually transmitted infections including HIV/AIDS, physical wounds, divorce, premature labour, miscarriages and litigations among others.

CONCLUSION
Domestic violence in common among pregnant women taking the form of beatings, verbal abuse and non-consensual sex. Some women contracted sexually transmitted infections or were divorced. This information should be distributed to policymakers, women’s activist groups, law enforcement agencies and health practitioners. Already encouraging results are emerging where the Young Women Christian Association has been using such information to help abused women with shelter, legal aid and awareness raising. The Zambian Police Service has recently formed Victim Support Units where such cases can be reported. The courts of law have also been meting out stiffer and deterrent jail sentences and fines to male offenders.
Multiple Firearm Injury: Case Presentation and Review of Literature on the Burden of Firearm Injuries in Africa

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PROBLEM
The widespread and indiscriminate use of firearms has drawn increasing concern especially in the past decade. Previously considered a problem of the military, the number of civilian casualties has been on the increase worldwide, thus adding to the global burden of disease. Global data on the impact of small arms on the health of individuals is scanty, available data however suggests that over 300,000 are killed annually while millions are left with permanent physical, social and mental disabilities. These puts an enormous demand on the healthcare systems of developing countries in Africa already over-burdened by diseases like malaria, HIV/AIDS, Tuberculosis and poverty.

OBJECTIVES
To demonstrate the magnitude of the problems connected to firearm injuries and the challenges this poses to the healthcare delivery system in resource constrained countries of Africa and mitigate the case for strict arms control measures in the world.

METHOD
Detailed presentation of a patient who survived multiple gunshot wounds to the face, limbs and chest including a bullet in the wall of the left ventricle of the heart and was successfully operated at a Nairobi hospital. Details of the injuries sustained is presented pictorially and in text, demands on the healthcare system is illustrated through the various clinical needs including; pints of blood transfused, duration of stay in the Intensive Care Unit and overall hospitalization period. A critical look at the current literature on the health and global impact of firearm injuries is included.

RESULTS
The patient sustained injuries in three main areas:
1) upper limb; compound fracture distal third of the right humerus, radial nerve, median nerve and ulna nerve palsies,
2) face; complex soft tissue injuries compound maxillary and mandibular fractures and
3) chest; right chest wall laceration with right pulmonary contusion, haemothorax and bullet lodged in the left ventricle.
Thoracotomy and open heart surgery was done to retrieve the bullet, mandibular fracture reduced and rigidly fixed with plate and screws while humerus was grafted with Chron Os. A total of 6 units whole blood and 4 units fresh frozen plasma was transfused. The patient spent 20 days in the intensive care unit and a total of 41 days in hospital.

CONCLUSION
This case presentation illustrates the burden of firearm injury on a health facility and resources, including the need for qualified personnel to perform the delicate surgical procedures. While there is an immediate need to gather data and establish the magnitude of the problem, there is no doubt that the campaign to limit abuse and access to firearms is justifiable.
Factors Motivating Violent Behaviours Among Youths In Delta Region Of Southern Nigeria

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PROBLEM
The Niger Delta region of Southern Nigeria has been a hot spot for violence, perpetuated by mainly youths who advance several reasons for their actions. These violent behaviours often leave scores dead or injured not to mention the destruction to government and society’s infrastructures. Several crude oil pipelines and petroleum chemical installations have been damaged during these episodes of violence. However, studies that would illuminate the public health impacts of this violence were lacking at the time this pilot was launched.

OBJECTIVES
To study the reasons why the youths in Delta region of Nigeria opt for violent confrontations against government and multinational petrochemical companies operating in their region.

METHOD
A cross-sectional pilot survey of youths; 2 600 randomly selected youths from 13 out of 25 local government areas of the three senatorial zones of Delta State of Nigeria participated. Between November 2002 and February 2003, these youths were given self-administered questionnaires with specific questions about their employment status, educational background, age, sex and perceived situations such as feelings of being cheated by authorities and reasons for military intervention in their area. A descriptive analysis of the 2 000 returned questionnaires was made and subsequently ANOVA was utilised for statistical analysis.

RESULTS
91% felt cheated in the resource distribution; 63% felt the revenue sharing formula of the federal government is unfair; 91,95% were unemployed and 67,87% felt they were deprived of education. 960 (48%) respondents felt the quest for the control of crude oil was the reason for resorting to violence; 640 (32%) agreed it was partly the reason; 360 (16%) said it was not the reason while 60 (3%) were not sure. 1 380 (69%) preferred the crude oil to be in the total control of their region; 400 (20%) said it should not be in total control while 220 (11%) either were not sure or felt a part of it should be controlled by the region. 1 580 (79%) rejected military intervention while the rest were either partial or not sure. 860 females (43%) and 1 140 male (57%) participated.

CONCLUSION
This brief survey provides the basic data on the factors that motivate the violent behaviours of youths towards crude exploitation, poor development and low capacity-building and empowerment of future Nigerian leaders. Several factors were advanced as reasons for the chronic youth violence and the persistent glamour for regional control of natural resources such crude oil in the Delta region of Nigeria. Other countries with similar situations have applied both political and economic interventions that provided equity and reassurances. These data when well translated could initiate strategies and actions targeted at those concerns with a view to reducing morbidity and mortality from youth violence in this region.
Patterns Of Injuries Seen During Ethno-Religious Violence In Kano, Nigeria: Indices For Preventive Actions

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PROBLEM
Kano, a cosmopolitan city in northern Nigeria, has witnessed several violent conflicts which often erupt when there are ethnic and religious differences among the inhabitants. This study, the first of its kind in this part of Nigeria, is invaluable to the research community and science since it will produce an empirical evidence of a rather preventive phenomenon. The characteristic of these interpersonal and collective violent conflicts lies in the increase in injuries and fatalities seen in hospitals. Four years' review and a recent pilot survey using hospital registries reveal a trend that injuries are related to violent conflicts witnessed in Kano. Hopefully, the results will impact on policies towards peaceful resolution and thereby reduce morbidity and mortality from such violence.

OBJECTIVES
To study the epidemiologic patterns of injuries seen during violent conflicts in Kano from hospital-based data.

METHOD
Retrospectively, injury data, including a comprehensive profile of patients, were extracted from three major hospitals’ registers in Kano, Nigeria with the use of standard survey questionnaires. A two month review that included a period of violent conflicts (April and May 2004) in Kano was completed as a pilot to a more elaborate study. The questionnaires had variables such age, sex and religion of patients. Also, documented were the mechanism of injury and event and location of where the injuries were sustained. Data collected from the three hospitals will be merged and analysed using Epi info 6®, analytical software produced by Centres for Disease Control and Prevention, Atlanta, USA. The previous four years' data will be compared with the result of our pilot survey.

RESULTS
Results presented are preliminary from one of the study centres, National Orthopedic Hospital, Dala, Kano. 760 patients were seen at National Orthopaedic Hospital within the months of April and May 2004. Males were overrepresented in the total injuries in the period reviewed (419 to 241 females) as in previous years under review. 35 (males 28: females 7) were directly related to the three days’ violent conflict. Age ranged from 5 years to 55 years. The mean age was 32.5. 37,1% (n=13) of the 35 patients were from gunshot wounds which affected only males. 51,2% (n=18) were injuries caused by blunt and sharp weapons including machetes, cutlasses and sticks. 11,4% (n=4) were injuries sustained in the process of escaping from the assailants. Seven females were injured. A breakdown showed that six females were assaulted with weapons while one sustained a road traffic injury. In the previous four years, road traffic injuries were more frequently seen. However, injuries from interpersonal and collective violence tends to be highest during violent conflicts such in 2002 and 2004.

CONCLUSION
Injuries from blunt and sharp weapons were frequently seen followed by those from gunshots. Some patients sustained injuries while escaping from the scene of conflicts. Peculiarities of such injuries are the causality having correlation to ethno-religious violence, age group of patients and weaponry employed. Sharp and blunt weapons including firearms are used. The conditions that breeds misunderstanding among people of different religions and ethnicity should be managed early to prevent violent conflicts that lead to injuries in the short term. Government should put in place a cascade of peace-building strategies that will usher in a long-term solution.
PROBLEM
Injuries constitute a great burden of disease globally. Africa recorded 15% of global injury related mortality in 2000 (WHO 2002). Mortality from road traffic injuries remains within the 10 leading cause of death globally and the highest in Africa at the turn of the last century. Fatalities from violence and war contribute equally to the high mortality in Africa. Injuries form violence gained prominence after the WHO 49th assembly of 1996, by resolution 49.25 adopted violence and injuries as a preventive priority. The world health reports since it’s inception in 1995 has chronicled health situations and statistics from the various regions of the world. In this review, injury mortality in Africa is analyzed with the view to compare the magnitude of their different etiology leading to increase mortality in a region plagued with other diseases and morbidity. The world health reports are valuable tool from where the basic data for this review is based.

OBJECTIVES
To analyze and discuss the different etiology of injury related mortalities and their importance to public health.

METHOD
Estimates of deaths by cause and mortality stratum in Africa were reviewed using the statistical annexes of World health reports of 2000 to 2003. Both intentional and unintentional injuries and their specific etiology were analysed. The mean of high child\high adult and High child and very high adult mortality were calculated for each type of injury. Percentages were also calculated. Also, SSPS and ANOVA will be employed to produce the final analysis.

RESULTS
Mortality from unintentional injuries was higher than those caused by intentional injuries throughout the years under review. Among the unintentional group, Road traffic related death were highest in the years under review except for 2000 where it was surpassed by deaths caused by fire injuries. (34.8% by fire to 28.7 of RTI). Drowning was the second cause of death in Africa. Mortality from falls remained low, constituting between 3 and 4.1% of all unintentional injuries. Violence caused high mortality, 42.8% and 51.7% of all intentional injuries in 2002 and 2003 respectively. Deaths from War injuries were highest in 2001 and 2002, constituting 54% and 45.9% of all intentional injuries respectively. However, mortality from self-inflicted injuries was relatively low.

CONCLUSION
The trend is this analysis show that unintentional injuries especially, road traffic related led to high mortality in Africa followed closely by drowning. Violence and war related injuries contributed to the high mortality among the intentional injuries in this region. From these summations, public health strategies are to be focused on preventing the individual etiological link thereby reducing morbidity and mortality.
Public Health: War-Related Injury Surveillance: Towards Action

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PROBLEM
The Democratic Republic of the Congo has been in the throes of conflict for the past seven years through which has claimed over 3.5 million lives. The conflict included:
1) civil wars, internal rebellions, militia (e.g. the Mai Mai) and ethnic clashes e.g. among tribes in the Ituri Region and
2) wars of aggression carried out by foreign armies from Rwanda and Uganda.
There is no systematic actionable data that would allow a better understanding and solution to the problem.

OBJECTIVES
To determine the prevalence, pattern, distribution and characteristics of war-related injuries in Kisangani.
To generate data that would help global humanitarian efforts to prevent such war-related injuries.
To determine the causes and risk factors of these injuries.

METHOD
Retrospective study of the Medical records between 1996 and 2002 at the participating units including the University Teaching Hospital of Kisangani, Lubunga, Kabondo, Kisangani Referral Hospitals, the Military Health Pavilion, Private Clinics and Simama Rehabilitation Centre.

RESULTS
Around 9,543 cases were studied and the data included sex, age, site, circumstance, weapon used and situation of victim. 80% of civilians were women and children.

CONCLUSION
War-related injuries which reached epidemic proportions between 1997 and 2000 remain a public health concern accounting for mortality and morbidity and related diseases such as epidemics of diarrheas, bone infections, malnutrition etc. Victims were seen mostly at the Military Health Pavilion, University Teaching Hospital of Kisangani, Kisangani and Kabondo Referral. Individuals not directly involved in the war were also targeted in residential areas, public edifices, schools and military establishments. Generally more men than women and children were affected.
The following are recommended:
1) Tackle the root causes of violence through promotion of democracy and good governance, tolerance and peaceful conflict resolution.
2) Discouraging hegemonic and ideologies that lead to ethnocentrism.
3) Fighting poverty and socio-economic disparities through equitable redistribution of national wealth.
4) Promoting embargoes on the production and traffic of SALW.
5) Reinforce collaboration between civil society and the Government Agencies engaged in non proliferation, banning and abolition processes.
6) Reinforce the capacity of the health workers living in conflict zones by training them in trauma cases management by offering financial and technical assistance for research and also equipping adequately health care facilities in order to cope with injuries cases.
From Limited Firearms Injury Data To Policy Action: An Example From El Salvador

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PROBLEM
Firearm violence is very common in El Salvador due to readily available sources of Small Arms and Light Weapons (SALW). El Salvador went through a 12-year period of civil war which led to deaths and morbidity among citizens. Firearm violence threatens peace and stability, development, democracy and human rights apart from having severe public health consequences. According to the World Bank, direct and indirect costs of firearm misuse account for around 140 and 170 Million US Dollars per annum. Health workers and health institutions are witnesses to some of this violence as they take care of the injured and dead. Health workers in El Salvador studied the Public Health Dimensions of SALW Violence with a view to informing policy changes.

OBJECTIVES
To understand, from a scientific perspective, the violence phenomena, especially the consequences of small arms misuse through research and medical epidemiology, using health data/approach for better policies.
To take an active part and provide a public health view on political and health interventions, and to construct a program to control small arms violence and its effects.
To understand, from a scientific perspective, violence phenomena especially the consequences of small arms misuse through research and medical epidemiology, using health data/approach for better policies.
To promote the participation of health workers and general society in order to prevent violence through an educative, promotional, and organizational program.
Actions included Compilation of data of victims of small arms wounds from Central Archive of Rosales Hospital, Hospital Estimate of Economical Costs due to their medical attention for Health System and Salvadoran Society. Monitoring of children firearm wound cases admitted to the main children hospital in 2004. Researchers on the field were trained to identify the profile of victims of non-lethal wounds.

METHOD
Prospective data collection between 1999 - 2004 from Medical records at the country's main Hospital (Comunicando Mejor Salud, DHF de New York).

RESULTS
The number medical students involved, increased in the number of activities at the National University and the mobilization of Medical Students to develop interventions.
Gun law modifications and public politics address to control guns.
Management of admissions victims of small arms wounds (accordingly the economical costs showed in the research)
Participation in different conferences as speakers, including the introduction of the issue into other disciplines (Medical Students Congress, Health Sector, Public Security, Central American film.
Media articles using our data and activities to address the issue.
Period of time which the movement achieved a political interest.
Impact of the activities on the Ministry of Health
El Salvadoran Government banned the use of firearms in public places and established a fund to help victims of firearm violence. The Ministry of Health has now prioritised firearm injuries and allocated a specific budget to it.

CONCLUSION
Using limited data, health workers in El Salvador helped their Government to change policy, help victims by establishing a special fund for victims, raised public and media awareness among other things.

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PROBLEM
El Salvador spends 13% of its GNP (2003) in violence and its sequels. This economic impact also means social and human consequences on the families and the community. There is a cost in material resources and there is a cost in human care. Who are responsible of these wounds? Who are the victims? What are the circumstances under which the event is favored? How much does it cost the hospital care for these patients?

OBJECTIVES
CONTRIBUTE TO THE EPIDEMIOLOGICAL KNOWLEDGE ON THE IMPACT OF NON-LETAL WOUNDS BY FIREARMS (WFA).
IDENTIFY THE EPIDEMIOLOGICAL PROFILE OF 100 CASES OF WFA IN "ROSALES" PUBLIC NATIONAL HOSPITAL
ESTIMATE THE ECONOMIC IMPACT OF WFA AT THE HOSPITAL AND SOCIETY LEVEL
DISCLOSE THE RESULTS OF THE STUDY IN ORDER TO INCREASE AWARENESS AMONG HEALTH PERSONNEL

METHOD
epidemiological, observational descriptive, that includes the following issues: A statistical review of previous information on wounds caused by firearms (WFA) in El Salvador.
• The morbidity and mortality of the event according to the "Rosales" Public National Hospital files
• A descriptive study of 100 WFA admitted to the "Rosales" Public National Hospital from June 2003 to May 2004.

DATA COLLECTION AND PROCESSING
Results of the Survey form, epidemiological profile, non-lethal WFA cases were processed using Software SPSS 11.5 for Windows and direct visual review of the hospital files in order to determine severity of lesions, accomplished medical- surgical procedures and lab tests. Hospital and Medical Care Procedures and Costs were presented in tables.

RESULTS
LETHAL TOOL
80% of the polled patients assured that the arm was a commercially manufactured one and 3% mentioned a craft weapon. In 50% of the events the arm used was a pistol. There was no mention of military arms in any of the events.

The one hundred WFA hospital files that were reviewed with the two tools consumed, in total, 1,482 days/bed, with an average of 14.82 days/bed per file.
Total cost of hospital care was USD$ 308,445.46 cost per admission was USD$ 3,084.45 and cost per day amounted to USD$ 208.13. ESTIMATE OF INDIRECT COSTS BASED ON DIRECT COSTS According to Rice's theory which establishes the costs based on the pathology, injuries and traumas consumed 23% of both medical and non-medical expenses. For this study, the expenses would be USD$ 7,402,680.00 and the costs for WFA morbidity would amount to USD$ 32,185,565.2173

CONCLUSION
Violence by firearms is exerting a deep impact on the people’s health and family budget. The national hospital network cared for 30.4% of WFA homicides and "Rosales" Public National Hospital carried 26% of this group. Due to high lethality, most of the WFA individuals do not reach the hospital emergency rooms.
WFA morbidity issues addressed in this paper will allow us to draw proposals and strategies up, to prevent and care for this violence related injuries.

The WFA morbidity establishes the following victim profile: young male, in his highest productive age, living in a great urban center, member of a group of unemployed or underemployed people, in difficult economic conditions but contributing to the support of their families which usually have more than 5 members. They are young males who have reached some level of formal education (above 9th grade), aware of their social context and uncertain future, residing in a violent area, with a low social capital (Community and social organizations, recreational areas, etc.) where drugs, alcohol and firearms rule the daily life, being exposed to or participating in muggings and street fights, either related to gangs or personal conflicts.
PROBLEM
Following attack on Indian parliament by terrorists on 13 December 2001 the Indian Army planted more than one million landmines along India Pakistan border in the states of Rajasthan, Punjab, Jammu and Kashmir. Due to geographical factors, sand storms, rains, rodents and snow landmines shifted from their places and killed and injured more than 1408 civilians. No data collection was undertaken or available with any agencies.

OBJECTIVES
- The main aim of data collection of landmines victims was part of a larger strategy designed to facilitate the prioritization of violence and injury prevention, promote public awareness, mobilise intellectual, social and financial support for safety promotion, practice and policy.
- The study also wants to enhance specialised expertise in the field and encourage co-ordinated inter sectarian partnerships in the quest to advance the safety and health status of all people affected by landmines.

METHOD
Indian Institute for Peace, Disarmament & Environmental Protection (IIPDEP) started the project of data collection and documentation from December 2003 to March 2004 as per the format of UNDP and scientifically collected the data of civilians landmines and other unexploded ordinance and found more than 1408 civilians killed and injured.

RESULTS
It was revealed that half of the injuries occurred among youth people (15 - 44 years). Data collection acknowledged the devastating health, psychological and general health imputes and injury. It leads and enhance specialised expertise in the field and encourages co-ordinated inter-sectarian partnership in the quest to advance the safety and health status of all people affected by landmines.

Data collection lead to public awareness, heightened coordination in response to prevention, enhance expertise and networks of agencies and individuals collaborating to reduce violence and injuries throughout India. It stimulated further refinement in policy and practice decision in the safety promotion sector within Government, NGOs and other agencies.

On ground data collection and research helped in linkage between various academic disciplines and civil society based prevention initiative.

Data and research highlighted the following:
1) determination of anti-personnel landmines, small arms and UXOs violence,
2) risk determination of injuries in children,
3) documentation of pedestrian safety programmes,
4) experience of public spaces by road user,
5) rise and determination of traffic fatalities and
6) studies tracing contextual, content and social actors.

Data of landmine victims lead to a multi-sectoral approach that attempts to develop and consolidate the imputes and contribution to movement, NGOs INGOs and private sector to the prevention of violence and injury.

CONCLUSION
- Landmine victims' data specify the regional concern in South Asia about security, political stability, poverty, relief, post conflict peace initiative between India and Pakistan and economic development.
- Data and research indicate that it is a primarily politil phenomena, due to uneasy and unfriendly relations between India and Pakistan. Citizens were identified as a particularly high risk for becoming victims on India Pakistan border in both countreis.
- Data and research findings argue for the inclusion of violence prevention as a priority health issue.
- Data collection is the vehicle for the dissemination of injury and violence research and prevention practice and as such permits the diffusion of expertise across the diversity of countiees and their participating sectors.

Word wide many countries are affected by landmines especially in African and Asian continent. The proper data collection findings adn/or conclusion of one country could be used with some variations globally as well as regionally. The landmines violence or injuries is epidemic and has to be tackled globally, regionally and nationally. Data thus collectd will lead to action.
Impact Of Low Intensity Conflict Trauma With Small Arms In Relevance To Health And Society In Kashmir - India

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PROBLEM
The Kashmir problem has been an irritant in the process of normalisation of relations between India and Pakistan. Terrorism in Kashmir started in 1980s. People of the region have to face violence at the hands of both terrorists as well as the security forces. The situation needs to be addressed soon to prevent further suffering of the people.

OBJECTIVES
Both India and Pakistan are now nuclear powers. Their perpetual hostility and confrontation has fuelled fundamentalism, extremism and religious intolerance to the extent that its impact is felt by the international community. They are also amongst the poor regions of this planet. It is time to bury the hatchet so that our energies are channelised to peace and development. Both the countries need to join hands to fight their common enemies like illiteracy, disease, poverty, unemployment and population explosion. Some winds of change are blowing. We should encourage more people to people contacts and other confidence building measures.

METHOD
Peoples problems as learnt from personal experiences, descriptions by individuals, community interaction and media reports formed the basis of the study.

RESULTS
62,157 militancy related incidents have been reported between January 1990 to January 2005 in which more than 50,000 people have been killed and many others disabled for life. In all cases of such trauma, irrespective of physical, psychological and social symptoms, the victims first reach the medical professionals. It has its impact on the local population.

CONCLUSION
Insecurity and fear psychosis in the public, that anything may happen anywhere and at any time, such as bomb blasts, shootouts, kidnappings etc. At times innocent civilians get trapped and suffer from loss of limb and life (collateral damage). There is violation of human rights with kidnappings, murders, rapes, mass crackdowns, loss of individual dignity, tortures, imprisonments, molestations and extortions etc. Women and children are the worst sufferers. The children feel insecure, their education suffers and at times there is damage to education infrastructure. There is loss of productivity in industry, toursisms, agriculture and other sectors. Farmers, especially those in borders areas, are affected by mine-blasts, trans-borders firings etc. The crime rate increased as law and order gets less attention. Demographic dislocation of population has occurred with migration to safer places and loss of physical assets. The families are scattered and their social and cultural value system is uprooted resulting in late marriages, low birth rate, reduced fertility span and other social problems like low stress tolerance, increase in incidence of divorce and suicide rates, number of militancy related widows and drug abuse. Diseases such as hypertension and heart disease are seen more often in such internally displaced communities. There is a higher incidence of altered stress response with behavioural disorders like Migraine, Depression, aggression and sexual problems. A higher prevalence of life style diseases such as Diabetes and Immune Dysfunction with increased susceptibility to infections is recorded. At times overcrowding, lack of proper sanitation and water leads to exposure to acute and chronic infections like gastroenteritis, tuberculosis etc. Many times we see multi-system injuries which need interdisciplinary care teams, skilled nursing and rehabilitation. Still a large number of people may have residual physical or mental disabilities. Hospitals are over worked and there is need for extra staff and resources for such eventualities. The cost of caring in low conflict trauma and expenses on security in hospitals has become astronomical and is met largely from tax payers money with the result that other development works suffer. Violence will not lead anywhere. The issue has to be addressed through mutual dialogue with the involvement of people
Effective Data For Policy Change And Interventions: Mbale Hospital Small Firearms Injury Study

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PROBLEM
Uganda has had armed conflicts in the last 40 years after independence. In the last 20 years, however, most of the armed conflicts have been in the north, north east, and during certain period of time, in the south western part of the country. Small arms contribute to the misery of the populations in these areas. Many people have been killed, maimed, traumatised, disabled and psychologically tortured. This study in Mbale was set out to understand the burden of disease caused by small arms injuries in the eastern region, home for about four million Ugandans.

OBJECTIVES
To determine burden of disease due to small arms injuries in Mbale hospital in the year 2004.
To generate information for advocacy work on public health effects of small arms.

METHOD
METHODS: Medical record or chart review was done for the patients treated for small firearm injuries in Mbale hospital in a one year period (January – December, 2004). The data were collected using a questionnaire developed to address the indicators for a minimum data set for the purpose of the objectives above. The data collected were on bed occupancy, cost of treatment, deaths, circumstances of injury, anatomical site of injury, social class of injured, patient load in the surgical ward and outcome of the injury. The data were analysed using EPI INFO 2002. Ethical clearance to conduct data collection was obtained from hospital authorities.

RESULTS
There were fewer patients due to small arms compared to other injuries. The length of stay in hospital was longer for small arms injury patients compared to the rest of injuries, the outcome was either disability or death and the cost of treatment in hospital was higher for small arms injuries compared to other types of injuries. The socio-economic effects of small arms injuries to the hospital, family of the victim and victim were enormous.

CONCLUSION
Small arms injuries in Mbale hospital are fewer compared to the other types of injuries seen in surgical department but the impact and effects of the small arms injuries to the health system and patients were more than those for any other type of injuries. These types of injuries are preventable. Primary prevention through policy and small arms control is not only feasible but within reach.

KEY WORDS: small arms, burden of disease, injury, socio-economic, primary prevention and policy
(1026) Organising A Pilot Multinational Injury Surveillance Study

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PROBLEM
Progress of a public health response to violence in particular and injury in general in countries with limited resources has been impeded by the lack of a systematic approach to utilise comparable data sources of injury. This multinational study responds to the World Health Organisation's (WHO) call for multi-sectoral and collaborative efforts for the prevention of violent injury. In particular, this project responds to some of the WHO's recommendations issued in its World Report on Violence and Health. Recommendation 2 calls for an increase in the capacity for collection of data on violence and Recommendation 3 to carry out research on violence, its causes, consequences and prevention in different population groups and different cultural settings.

OBJECTIVES
The purpose of this pilot study is to systematically collect, review and evaluate the context in which specific external injuries occur in a great diversity of socio-cultural populations utilising the same data collection procedures through a emergency department surveillance system in selected hospitals in ten countries located in Africa, Latin America and the Caribbean. The ten countries are: Kenya, Zambia, Uganda, Nigeria and the Democratic Republic of Congo in Africa and Colombia, Brazil, Bolivia and El Salvador in Latin America and Puerto Rico in the Caribbean. The types of injuries to be studied are violence-related injuries and road traffic injuries. The second purpose of this study proposal is to test the implementation of a surveillance system for these types of injury following the World Health Organisation’s guidelines in countries where no such system is in place (e.g. Bolivia, Puerto Rico, Zambia, Uganda, Democratic Republic of the Congo, Nigeria and Kenya). Thirdly, the study aims to collaborate and expand the injury surveillance system in countries where such a system is already in place (i.e. Brazil, Colombia, and El Salvador).

METHOD
The study is divided in two phases. Phase I is the preliminary or formative evaluation in each country to determine the hospital environment, logistics and injury caseload that would be expected during the prospective data collection in Phase II. Phase II is the actual collection of external injury data at the designated emergency departments (ED) in each country for a twelve-month period utilising a questionnaire designed by a joint PAHO/CDC injury project in Central America.

RESULTS
The participation of injury researchers from ten countries with diverse social, cultural and economic backgrounds to implement an injury surveillance mechanism in emergency departments at designated hospitals is possible once committed researchers are identified and funding is secured. Collection of data during Phase I has been completed successfully by most study participants. The specific type of injury caseload estimates allowed for estimating the required person-time effort to successfully complete Phase II of the project (i.e. prospective collection of injury data). Phase II will be ongoing at the time of this international conference. Preliminary findings of the first three to six months of data collection will be presented at the conference in Durban, South Africa.

CONCLUSION
The conclusion we wish to arrive at is that it is possible to implement an injury surveillance system in countries with limited resources with initial support for training and guidance. The value of surveillance systems is determined by presenting reliable data on the context in which injury occurs in a given population served by the participating hospitals. The findings obtained can be used for advocacy, developing education strategies for the general population and providing convincing evidence to government officials to facilitate decision-making on government policy for the prevention and control of injury.