CHAPITRE 6 • CHAPTER 6
PRÉVENTION DU SUICIDE / SUICIDE PREVENTION
Surveillance du suicide à travers le monde

Suicide Surveillance Around the World

CHARACTERIZATION OF THE SUICIDE IN BOGOTÁ DURING THE YEAR 2000 AND EXPLORATION OF ASSOCIATED FACTORS

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PROBLEM UNDER STUDY: What factors are associated to the suicide in Bogotá city during 2000 year?

OBJECTIVES: Exploring the factors associated to the suicide in Bogotá city during 2000 year, in order to stimulate the watchfulness of relatives, educators and authorities about the mental health of population and to develop measurements of early intervention.

METHOD OR APPROACH: Observational, descriptive, transversal and retrospective study with a dwelled analytical one. In the first stage, with the available information the suicide in Bogotá was characterized, in the second stage the findings of the cohort of suicidal were made deeper to explore associations among variables and their weight in the interior of the resultant groups through multivariate techniques. 329 files were reviewed (inspecting act, protocol of necropsy, laboratory reports, clinical history and decease certificate) from the National Institute of Legal Medicine and Forensic Sciences, of suicides occurred in Bogotá between January 1st. and December 31st. 2000 that accomplished the inclusion criteria: forensic confirmation of the suicidal death. Victim resident in Bogotá at least in the last month of his/her life. Demographic, spatial, time and psychological variables were investigated.

RESULTS: The 329 confirmed cases of suicide represented a non-meaningful decrease of 6% with respect to the records of the preceding year (p=0.2). Adjusted rate of 5,47 suicides per 100,000 inhabitants, 79,6% were men. Half of the suicidal were people between 11 and 28 years old; from them, 39,8% were employed. Without couple 61,2 %. More than 70% of suicides were from people belonging to the 2 and 3 social strata. May was the month with the most events (11,6) and the Sundays (16,1%). The house was the predominant scenery (72,9%) The principal suicide methods were hanging 39,9 % and firearm (PAF) 29,2 %. To this latter, 76% of suicidal had access at home. Affectionate motivations were 31 %, economical 16%. The suicide gestures oscillated between 14,3 and 79,2 % Bivarded findings with statistically meaningful differences were: Larger proportion of suicidal women under age, using toxic, with mental illnesses and records of suicide attempt. In men in larger proportion: unemployment, use of PAF, or highly lethal methods and suicides under drunkenness. Adult people presented in a larger proportion: use of PAF and high lethal method, suicides under drunkenness, motivation, ideation and previous attempt. Under age people presented in larger proportion: hanging. Unemployed suicides had in larger proportion motivation and economic stress factor and addiction to substances. Suicides with couple had
in larger proportion economical motivations. 35.8% of the suicides occurred under drunk-
eness state, which presented in larger proportion: economical motivation, stress factor due
to a relative’s death, PAF or toxics and highly lethal methods. The suicidal with previous
planning presented pre-mortem pain in a minor percentage.

CONCLUSION: Suicides in Bogotá show stable rate for the last years; greater commitment of
men in productive age, which has influence on the high presence of economical motiva-
tion. Most of them had no couple, determinant for the affectionate suicide motivations also
frequent. The suicide is distributed homogeneously along the time, concentrated in home
sceneries, predominating in low social classes. Suicidal used the hanging, followed by the
firearm. The suicide gestures presented in high percentage must alert about their presence
as imminence of risk. Vulnerable groups are described as older men and younger women,
who do not accomplish a social role or do not have a couple and belong to low strata of the
population, over which it would be necessary a special watchfulness.

LIMITS: Although the study cannot establish cause relationships, it explores associations of fac-
tors that can help understanding the phenomena better.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The suicide not studied in deepness in the local
context, finds with this investigation contributions in the delimitation of groups with greater
vulnerability, which must be observed carefully and closely by the social net, to prevent fatal
end.

Bali Hai Cries For Help: World Health
Organization Regional Office of the Western
Pacific Health Survey Report – Vanuatu Suicide
And Related Issues Baseline Survey

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Problem Under Study: Vanuatu is a ‘Least Developing’ Pacific Island Country with 186,678
Melanesians living in “The Last Paradise.” Ni-Vanuatu life represents one of Earth’s oldest,
most diversified cultures with more languages than any other nation. Pristine blue lagoons,
crystal clear blue holes, clean beaches, untouched rainforests, awe-inspiring volcanoes and
coral reefs of exciting colours lure tourists from all over the world to this small, quiet island
country. Known as ‘New Hebrides’ before its independence in 1980, Vanuatu consists of 80
islands over 1100 kilometres in the South Pacific. Although less recognized, Vanuatu is sim-
ilarly unstable politically as neighbouring Solomon Islands and Fiji Islands. Vanuatu has
rudimentary (at best) health and police services and records, no mental health system, coro-
ner, mortuary or post mortems. Use and fear of Vanuatu Black Magic, psychological and nat-
ural “leaf” bio-terrorism, as punishment of ‘evil doers’ constitutes a major part of everyday
life, albeit a federal offence. With no free education in where people living on a dollar a day,
Vanuatu people perceive disease, accidents and suicide as sources of shame, resultant of
Black Magic. Based on other Melanesians countries having highest suicide rates, suicide
predisposing factors in both developed and developing countries, Vanuatu mental health
therapist client data and a 1997 Vanuatu WHO Report urgently recommending Vanuatu mental health care, the research hypothesis was that Vanuatu suicidal is high. Before this project, there were no published studies on Vanuatu suicide.

OBJECTIVES: The mission purpose was to provide estimated Ni-Vanuatu suicide rate, causality and recommendations to the Vanuatu government in a unique, sustainable report to expedite action for mental health care. The mission aimed, therefore to incorporate strategies in the written and video documentation to provide not only quantitative and qualitative data, but to prompt action.

METHOD OR APPROACH: Village Community Participatory Research meetings were followed by ‘Snowball Technique’ outreach campaigns into homes. Data collection included completed and attempted suicides, factors influencing suicide among urban and rural adults and youth, and roles of local environment, cultural and attitudes. Research included kava consumption, Black Magic and other stressors unique to Ni-Vanuatu. Some suicide survivors and attempted suicide victims were permissibly video recorded. Sustainable ‘Circles of Compassion’ were initiated to cater to participant needs. The mission occurred May through September 7, 2001. Based in Port Vila, Efate’ Island, the consultant traveled in remote areas for ten days to gather data from various sample areas of three Vanuatu provinces including five unique islands. Bali Hai is the name James Michener gave to Vanuatu’s Ambae Island in Tales of the South Pacific that later became Broadway musical, South Pacific. West Ambae Island was included in the survey.

CONCLUSION: “Bali” is crying for help. Vanuatu’ suicide rate is 70/100,000. That Vanuatu people “live blissfully” as perceived by tourists and dreamers, or are “accustomed” to the human condition of suffering as local expatriates profess, are both myths. Oppression and lack of basic survival needs cause suicide in Vanuatu. Death from kava demands urgent investigation.

LIMITS: Discussing Black Magic and its causes including perceived suicide are taboo. One village, renown for suicides, denied researchers entrance reportedly because of traditional secrets related to suicide. Poor infrastructure and low project funding, a fraction usually allocated for surveys of similar magnitude, limited data collection.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The Vanuatu project report presents data collection techniques important for developing and developed countries. The project data lends itself to important correlation with developed country suicide data, particularly but not limited to impoverished areas. Data collected on Black Magic, a form of bio-terrorism, and its effects on Vanuatu suicide warrant further investigation and dialogue at international and local levels. With diminishing resources for Third World and non-government organizations, the practicality of the mission report as learning and action tool warrants attention. Rather than a ‘read once and file’ technical paper for a few, the report is in the form of a handbook for all. It provides data informally and formally, advocates for people’s human rights in their own words and contains basic suicide intervention steps and ready-to-use or adapt examples of informational-educational-communication materials. The report recommendation chapter provides the report warrants distribution, dialogue and evaluation as a prototype.
SUICIDE & ITS PREVENTION IN INDIA

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PROBLEM UNDER STUDY: Over 100,000 Indians commit suicide every year. India alone contributes to about 10% of suicides in the world. The suicide rate in India has increased to 11.2 in 1999. Despite the enormity of the problem, there is paucity of information about the risk factors and effective preventive measures.

OBJECTIVES: The first objective was to identify the specific risk factors for suicide in India and the second objective was to develop appropriate suicide prevention strategies.

METHOD OR APPROACH: A population based case control study employing the "psychological autopsy" technique was conducted. In total 100 completed suicides and 100 neighbourhood controls were studied. Suicide being a multi-dimensional problem, prevention could be incorporated in other health and social programmes. So the nested programmes were initiated. Relevant viable and successful programmes were identified and the component of suicide prevention was included.

RESULTS: Alcoholism (34%) was the commonest diagnoses in cases (OR–8.25 (CI 2.93–32)). The onset of alcoholism was early and most subjects were moderately or severely (88%) dependant and for a considerable period of time in the previous five years. A major recommendation to prevent suicide is to reduce the accessibility of the means to commit suicide. T.T. Ranganathan Clinical Research Foundation is a premier institution in India working in alcoholism and substance abuse in India. A joint programme was conducted in rural Tamil Nadu where the teachers were trained to be the primary resource group to identify addiction and suicidal behaviour. The primary resource group in turn trained the other teachers in the schools and the village health workers in the Taluk. Referrals to physicians and mental health professionals showed a substantial increase. In India, Poisoning (37.2%) by pesticides is the commonest method used in suicide followed by hanging (25.2%) and self-immolation (11.1%). These methods are difficult to limit access and pose a challenge to preventive action. Hence a fertilizer company was approached to study the association between the use of bio-fertiliser and suicide rate.

CONCLUSION: To formulate an effective suicide prevention strategy, it is necessary to identify specific risk factors and then develop locally relevant, culturally appropriate, cost effective suicide prevention strategies.

LIMITS: The study shares the limitations of all retrospective studies on suicide. The community interventions have been done at a local level and hence a larger study is needed to replicate the findings.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The project is a forerunner to developing suicide prevention strategies that are appropriate to the developing countries.
MORTALITY AND MAIN DEATH CAUSES OF INJURY IN CHINA

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According to the National Health Statistics, injury and poisoning has become the fifth death cause after malignant tumour, heart disease, cerebral blood vessel diseases and respiratory system diseases. Injury deaths account for 10.8% of the total deaths and the years of potential life lost (YPLL) of injury take up 24% of the total deaths.

DEATH RATE AND CAUSES: The average death rate of injury is 65.82/100 000 (National Disease Surveillance, 1991-1997), there are about 700 000 injury deaths each year. The main death causes in order of the importance are suicide, traffic accident, drowning, falling, poisoning, homicide, burn and scald and iatrogenic injury. The deaths caused by suicide, traffic accident and drowning take up 55.4% of the total injury deaths, and their death rates are 16.86/100 000, 13.02/100 000 and 6.61/100 000 respectively.

PLACE DISTRIBUTION: The injury death rate of urban is 39.75/100 000 and that of rural area is 73.22/100 000, the latter is significantly higher than the former. The main three death causes of urban are traffic accident, suicide, accidental falling while that of rural area are suicide, traffic accident and drowning respectively. Among all of the injury deaths, the death rates caused by suicide, drowning, burn and scald of rural area are significantly higher than that of urban area, the RRs are 3.76, 4.27 and 4.14 respectively.

GENDER DISTRIBUTION: The injury death rate of male is 80.23/100 000 and that of the female is 50.73/100 000, the former is significantly higher than the latter. Traffic accident is the first important cause of male, the death rate is 18.79/100 000, it is 2.68 times of that of female and suicide is the first important cause of female, the death rate is 18.47/100 000, it is 1.2 times of that of male among all of the injury causes.

AGE DISTRIBUTION: Drowning is the first death cause of less than 15 years of age, the death rates of the male and female are 24.30/100 000 and 15.0/100 000 respectively. Suicide is the first cause of >=15 years of old, in the age group of 15-34 years, the death rate of female is significantly higher than that of male and it is adversely in the age group of >= 60 years. Accidental falling is the major cause of >= 60 years of old, the death rate is around 20.0/100 000 of both male and female.

CONCLUSION: Considering injury has become one of the important public health problems, and its epidemiological characteristics, the study and control of injury has become a very important part in the strategy of disease control and health promotion in China.
ATTEMPTED SUICIDES IN BANGALORE, INDIA: 
AN EPIDEMIOLOGICAL PERSPECTIVE

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PROBLEM UNDER STUDY: Suicides have been increasing at the rate of 5-10% every year in India as per official reports. Nearly, 1,10,000 individuals completed suicides during 1999 and number of persons with attempted suicides is not known clearly. Majority of suicides occur among men and in younger age groups. Due to complex interaction of social, economic, mental and society developmental factors, the causes are not clearly known in India. Due to complexity of issues and lack of epidemiological data at regional and local levels, strategic planning of interventions at individual, family and community levels has not been occurring.

OBJECTIVES: The present study was undertaken to identify epidemiological correlates of attempted suicides in Bangalore. The specific objectives were to identify incidence, socio-demographic correlates, pattern and causes of suicide in the city of Bangalore, India.

METHOD OR APPROACH: The study adopted a combination of quantitative and qualitative methods. Information was collected from 86 police station limits for the period 1989-1999 to examine decadal trend of suicides. Trained research officers collected information from 1,550 attempted suicides (direct interviews in a semi-structured format with family members) from 12 major hospitals in the city of Bangalore. The focus of information gathering was on identification details, socio-demographic factors, place and time of occurrence, past history of suicides, history of alcohol, history of mental illness, method and causes of suicides. ICD-10 and ICECI methods were adopted for classification purposes.

RESULTS: The incidence of suicide increased from 10/100,000 to 35/100,000 during the period 1989-1999 in Bangalore city. Nearly 2,000 persons complete suicide every year. The incidence of attempted suicides was estimated to 250/1,00,000 per year. Highest number of suicides occurred in the age group of 20-24 years (27%) and 15-19 years (20%), with an overall male to female ratio of 1.2 :1. The mean age of attempted suicides among men and women was 28 and 25 years, respectively. Suicides were more among poor sections of community and in nuclear families. History of chronic alcoholism was present in 15% of suicides. Nearly 16% had a previous suicide attempt and an obvious mental illness was present in 9% of suicides. Investigation of causes indicated that family conflicts (37%) was the major cause of attempted suicides. Financial problems (6%) and marriage related problems (4%) were the other major causes for attempted suicides. The causes varied with age and sex, and were cumulative, progressive, repetitive and drawn over a period of time, except a small proportion of impulsive suicides. Poisoning with organophosphorus compounds (54%) and drugs (25%) was the commonest method. Self-inflicted burns (18%) were more common among women. Majority of the individuals had obtained lethal products on their own prior to the act. Nearly 50% had received first aid care, though it was not clear about the quality of care. Home was the commonest place of occurrence for nearly 80% of suicides.

CONCLUSION: Suicides are a major unrecognized public health problem in India and other developing countries, placing significant burden on rapidly transforming societies. Since
the problem and pattern are different in developing countries, the preventive strategies must focus on number of social, economic and health related issues. Strengthening support mechanisms for high-risk individuals and families should be a major strategy in India towards reduction of the problem.

LIMITS: Lack of total information and non-reporting of total attempted suicides by hospitals is a major limiting factor for para-suicidal.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The present study is the first large-scale epidemiological study on attempted suicides from India. The findings have lead to beginning of large-scale inter-sectoral activities towards prevention of suicides.

SUICIDE BY SELF-IMMOLATION IN DURBAN, SOUTH AFRICA

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PROBLEM UNDER STUDY: Self-immolation (or self-incineration) is a relatively uncommon method of suicide. The intention may be self-mutilation or suicide. Self-inflicted burns have been studied in various settings such as burn units, psychiatric and general hospitals, and by the use of mortality data from forensic pathology services. Burn unit data as well as psychiatric and general hospital data may not be fully representative. Mortality status may be unknown in cases of referrals especially when there are long admission periods, and it also excludes those cases that go straight to the mortuary and not via the hospital. Also, comparisons between different studies using burn unit data may be difficult due to variations in inclusion criteria.

OBJECTIVES: To determine the incidence of deaths due to self-immolation in Durban and to establish a profile of the patients and circumstances under which this condition occurs.

METHOD OR APPROACH: This is a 5-year retrospective study (1996-2000) of fatal cases of self-immolation seen at Gale Street mortuary in Durban South Africa. Gale Street mortuary is the largest of the three mortuaries serving the Durban metropolitan area that has a population in excess of 2.5 million. Data was obtained from the archives of the Department of Forensic Medicine of the University of Natal and the Medical Research Council’s National Injury Mortality Surveillance System (NIMSS). Additional information was also obtained from police dockets and hospital records.

RESULTS: During the study period, there was a total of 12 339 non-natural deaths of which 696 (5.65%) were suicides. Self-immolation cases accounted for 69 (0.56%) of non-natural deaths and 69 (9.9%) of all suicides during the five-year period. Subjects had a mean age of 31.2 years, were predominantly female (76.8%) and Black (81.2%). The mean burn surface area was 63.3% and the mean injury severity score was 36.9. Use of an accelerant was documented in 53 (76.8%) of cases and paraffin was the most preferred accelerant, being utilised in 44 of the 53 cases (83.0%). Unlike other reported series, all our cases occurred indoors.
CONCLUSION: Self-immolation comprised 9.9% of all completed suicides in our study. In comparison with other international studies, which report figures of between 0.91% and 2.2%, our results are excessive. The reasons for this discrepancy are not clearly understood.

LIMITS: Studying self-immolation in the South African context has limitations and hence a comprehensive profile of the self-immolation patient cannot be established. Firstly, documentation and details of the incident is inadequately reported by the police. Paucity of information concerning the medical history of the deceased makes evaluation of the contribution of chronic diseases and psychiatric illnesses difficult. Admission to a medico-legal mortuary is reliant on accurate death certification, and this may result in underreporting of cases.

CONTRIBUTION OF THE PROJECT TO THE FIELD: This paper brings a unique South African perspective to the self-immolation literature that is well documented in the East and in developed countries. The relative high proportion of suicides due to self-immolation is of concern and warrants further investigation especially with regard to the impact of HIV/AIDS and psychiatric illness.

SELF-INFLICTED INJURIES TREATED IN HOSPITAL EMERGENCY DEPARTMENTS, US, 2000

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PROBLEM UNDER STUDY: Suicide is a leading cause of mortality in the USA, yet relatively few population-based surveillance systems exist which capture information about suicide and other non-fatal self-inflicted injuries. Surveillance data are necessary to estimate the magnitude of the problem, identify at-risk populations, monitor trends, facilitate research, and evaluate prevention and intervention policies and programs. Emergency departments are felt to be a particularly useful source for injury-related data.

OBJECTIVES: To provide national, annualized, weighted estimates of self-inflicted injuries treated in US hospital emergency departments and descriptive information by the sex, age, race, injury cause, outcome, and whether the injury was likely suicide-related or not.

METHOD OR APPROACH: Data are from the National Electronic Injury Surveillance System All Injury Program (NEISS-AIP) operated by the US Consumer Product Safety Commission. This system was expanded during 2000 to collect data on all types and external causes of nonfatal injuries and poisonings treated in US hospital emergency departments (EDs). Nonfatal injuries and poisonings were defined as bodily harm resulting from acute exposure to an external force or substance (i.e., mechanical, thermal, electrical, chemical, or radiant) and near drowning, including unintentional and violence-related causes. All injuries were classified for intent of injury (i.e., unintentional, assault, self-harm, and legal intervention). Our analysis is limited to those injuries classified as self-harm that were treated in the ED during July through December 2000. Data regarding sex, age, race, and outcome (treat-
ed/released, hospitalized, transferred, died) were collected. Narrative information about each incident was also abstracted from the ED record.

Based on the information from the narratives, self-inflicted injuries were categorized as one of the following:

1. Probable suicide/suicide attempt;
2. Possible suicide/suicide attempt; or
3. Unclear/unknown. Data were weighted to provide national, annualized estimates.

RESULTS: A total of 2025 patients with self-inflicted injuries were treated in hospital EDs during the study period, representing an annualized weighted estimate of 266,918 injuries. Of these patients, 56.9% were females. The majority of patients (62.0%) were white non-Hispanic, followed by 8.5% black and 6.8% Hispanic. Approximately one-fifth (20.3%) of persons with self-inflicted injuries were of unknown race/ethnicity. The highest proportion of injuries occurred among those aged 25-44 years (44.9%), followed by those aged 15-24 years (35.9%). The majority of the injuries that resulted were poisonings (63.8%), followed by lacerations/piercing (24.5%). Most of the patients were treated and released (48.6%); 31.9% were hospitalized and 15.7% were transferred. Less than one percent were reported as dead on arrival to the ED or died in the ED. Based on review of the narrative information, close to 60% (59.6%) of these injuries were probable suicide/suicide attempts, with the remainder classified as possible suicide/suicide attempts (11.1%) or unclear/unknown (29.3%).

CONCLUSION: More than 266,000 hospital ED visits are due to self-inflicted injuries, with the majority of these occurring among females, white non-Hispanics, and those aged 15-44 years. Close to one-half of these injuries are treated and released and close to 60% were deemed probable suicide/suicide attempts.

LIMITS: These findings are based on data collected for a 6-month period, and may not reflect seasonal differences in the number of self-inflicted injuries. Data for the NEISS-AIP system are based solely on information contained in the ED records and are not linked or supplemented with other sources of data. Similarly, information contained in the narrative — which was used to categorize the self-inflicted injuries as probable suicide/suicide attempt, possible suicide/suicide attempt, or unclear — is also limited to the data found in the ED records. Finally, the outcomes described here are specific to the ED visit and do not necessarily represent more distal outcomes.

CONTRIBUTION OF THE PROJECT TO THE FIELD: This analysis provides a national estimate of self-inflicted injuries treated in US hospital EDs and associated descriptive information. These data increase our understanding of the magnitude and the characteristics of self-inflicted injuries. This important information provides the basis for the development of prevention strategies.
ASSESSMENT OF INTENTIONAL SELF-HARM INJURIES SIOUX LOOKOUT ZONE

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PROBLEM UNDER STUDY: The Sioux Lookout Zone hospital in North-western Ontario provides services to approximately 16,000 people, primarily First Nations, living both in the town of Sioux Lookout and in 32 remote-access communities. CHIRPP data is collected through the emergency department and participation of 5 northern communities. A major area of concern is an apparent increase in the number of intentional self-harm injuries within the Sioux Lookout Zone. Based on preliminary observations it was determined that examining the existing data and identifying patterns of intentional self-harm injuries over a specified period of time would provide information that could directly impact service delivery and program planning aimed at preventing intentional self-harm injuries within the Sioux Lookout population.

OBJECTIVES:

1. To determine the percentage of hospital admissions resulting from intentional self-harm injuries;
2. To describe, compare and contrast the pattern of intentional self-harm injuries over a specified period of time.

METHOD OR APPROACH: The time-frame selected for a retrospective descriptive analyses was 1992-1997. At each visit to the emergency department (or participating nursing station) for intentional self-harm injuries, a form was completed by the nurse and forwarded to the CHIRPP Coordinator. The data was compiled annually and analyzed using an epi-info program. Variables examined included age, gender, type and cause of injury and disposition of patient.

RESULTS: Between 1992 and 1993 there was a significant increase in reported Intentional self-harm injuries with the rate peaking in 1994. 53% of admissions were intentional self-harm injuries. Clients ranged in age from 9.8–57 years and were more likely to be female. The major method of intentional self-harm injuries was poisoning which accounted for 72%. However, from 1993–1994, there was also a slight increase in the percentage of attempted asphyxia.

CONCLUSION: Further evaluation and research needs to be conducted to determine the causative factors for the consistent increase and its impact on service delivery and program development.

LIMITS: Sioux Lookout Zone Hospital is a Federal hospital that services predominantly First Nations clientele; data is not generalizable to the entire population of the community. Data does not capture injuries from non-participating nursing stations if the client is either treated in the community or sent directly to another hospital.

CONTRIBUTION OF THE PROJECT TO THE FIELD: Identifies intentional self-harm injury as a high risk behaviour and verifies need for further evaluation and research into causative factors and
management. Establishes need for prevention programs and service delivery aimed at identifying and reducing intentional self-harm injuries.

**FIREARM SUICIDES: A TWO STATE COMPARISON**

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**PROBLEM UNDER STUDY:** The benefits of state-based, national reporting systems following common data definitions to track the incidence of health conditions in the U.S. are well established in several public health areas (e.g., infectious diseases and motor vehicle safety). Violence in our country is another major cause of morbidity and mortality, yet there is no state-based reporting system using common data definitions to characterize violence-related events. A National Violent Death Reporting System (NVDRS) using common data definitions is being piloted in nine states. The current study uses firearm surveillance data collected in two states using the Uniform Data Elements developed for the NVDRS.

**OBJECTIVES:** To compare the characteristics of firearm suicide fatalities in Utah and Wisconsin with regard to demographics, contributing circumstances, firearm type and location.

**METHOD OR APPROACH:** One year of statewide firearm fatality data was collected for each state. Data sources included vital records, medical examiners/coroners, police incident reports, and Uniform Crime Reports. The data included characteristics of the victims, environment and firearms.

**RESULTS:** There were 169 firearm suicides in Utah for a rate of 7.6/100,000 and 270 firearm suicides in Wisconsin for a rate of 5.1/100,000, compared to the national average of 6.4/100,000. The average age of decedents was 43.9 years in Utah and 45.3 years in Wisconsin. Males comprised 85% of the Utah decedents compared to 92% in Wisconsin. Over 90% of the decedents in both samples were White. One-third of the decedents in Utah and one-fourth of the decedents in Wisconsin had completed more than a high school education and approximately one-third of decedents in both samples were married. Firearm type varied by state: 64% of the decedents in Utah used a handgun compared to 46% in Wisconsin. In rural communities in both states, long guns made up at least half the gun types used in suicides. For rural Utah, either a shotgun or rifle was used in 50% of the suicides compared to 61% in rural Wisconsin. In addition, firearm suicide rate was higher in rural Wisconsin (5.8/100,000) compared to the rate in the urban areas (4.6/100,000). The opposite pattern occurred in Utah with a higher rate (9.2/100,000) in urban areas compared to the rural areas (7.0/100,000). In both states, 68% of firearm suicides occurred in the residence of the decedent. In Utah, 12% occurred in a natural area such as in the mountains, whereas in Wisconsin, the next highest proportion of suicides occurred on a roadway/sidewalk or parking lot (9%). Over a third of decedents tested positive for alcohol or any illicit drug in both states (45% in Utah and 37% in Wisconsin). A slightly high-
er proportion in Utah tested positive for alcohol compared to Wisconsin (34% versus 31%), but the proportion of decedents reported to experience alcohol dependence or abuse in Wisconsin was twice that of Utah (23% versus 9.5%). Mental illness was found to be an important contributor to suicide in both samples. Over half of all victims had either been in treatment or reported a history of depression or other mental disorder. In addition, over a third of victims in both samples left a note or stated intent to commit suicide.

CONCLUSION: While both states shared similar demographics, firearm type, location and contributing factors in firearm suicides, several differences were noted. For example, long guns were used more often in suicides in rural Wisconsin, and alcohol dependence was reported more often among Wisconsin decedents. Our data suggest that prevention and policy initiatives could be implemented and evaluated in more than one state. In addition, these initiatives may need to differ between states to reflect unique characteristics of suicide events in each state.

LIMITS: We studied only one year of data so cannot report long term patterns or trends. In addition, coders in each state may have interpreted the NVDRS Uniform Data Elements differently.

CONTRIBUTION OF THE PROJECT TO THE FIELD: This study demonstrates the utility of information collected by pilot states in the NVDRS as a means to compare and contrast firearm deaths on a national level as well as to evaluate policy and prevention programs.

SUICIDE IN THE EUROPEAN UNION

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PROBLEM UNDER STUDY: Suicide is one of the three leading causes of death among young people with approximately 700,000 suicide attempts per year. European countries have been urged by the WHO to reduce existing rates by at least one third by the year 2020 (base year 1998). Due to increasing concern over intentional injuries throughout Europe, the EUROSAVE (European Review of Suicide and Violence Epidemiology) project was initiated as part of the EU Injury Prevention Programme. The aim of the project was to pool expertise in epidemiology and injury research from across the EU in order to strengthen and support the community epidemiological network for monitoring suicide.

OBJECTIVES: To describe the contemporary epidemiology of suicide in the European Union over the time period 1984-1998.

METHOD OR APPROACH: EU suicide mortality data were obtained from the WHO and EUROSTAT using cause of death codes E950-E959 and X60-X84 of the Ninth and Tenth editions of the International Classification of Diseases (ICD9 and ICD10), respectively. To assess the incidence of suicide mortality in 15 European countries, age-standardised mortality rates were calculated for the years 1984 to 1998 or the latest year for which data were available, using the world standard population. Linear regression was used to determine which EU countries exhibited significant upward or downward trends over the study period.
RESULTS: Finland had the highest suicide rate for the latest available year (1997; 21.6 per 100000) while Greece had the lowest rate (2.8 per 100000). Significant downward trends occurred in Austria, Denmark, France, Germany, Greece, Netherlands, Portugal, Sweden and the UK while significantly increasing ones were observed in Ireland and Spain (89% and 17.2% respectively). No significant trend was observed for suicide rates in Belgium, Finland, Italy and Luxembourg. The greatest decrease in rates over the study period occurred in Portugal. Sex-specific rates showed Finland and Greece again demonstrated the highest and lowest rates respectively, for both sexes. Significant downward linear trends in male mortality were observed for Austria, Denmark, France, Germany, Netherlands, Portugal and Sweden. Significant upward linear trends in male mortality were observed in Ireland and Spain while no significant trends were observed for Belgium, Finland, Greece, Italy, Luxembourg and UK. Most countries exhibited a significant downward linear trend in female mortality apart from Finland, Ireland, Luxembourg and Spain, which all exhibited non-significant linear trends in female mortality rates. Irish rates increased by 128% for males in contrast with almost no change in female rates (-1% over study period).

CONCLUSION: Suicide mortality rates varied markedly between countries, for reasons that are unclear. Although most countries reported a decline in the standardised suicide rate, further declines are necessary if the WHO target is to be met.

LIMITS: International comparisons of suicide rates are problematic since evidence exists of under-reporting as well as fatalities being misclassified under “undetermined deaths”. A reason perhaps could be that suicide may be less socially stigmatized in some countries (especially in Southern Europe) than in others.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The findings will be used to make explicit recommendations in two areas: information quality and the targeting of preventive interventions. Our priority will be to highlight deficiencies in routine data and to propose remedial action.

SUICIDE AT WORK: TRULY WORK-RELATED OR MISCLASSIFICATION OF EXPOSURE?

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PROBLEM UNDER STUDY: From 1993-2000 more than 290,000 people took their lives in the USA. The proportion of those who were directly related to a motivation connected with work or a work related activity or a work environment is completely unknown. From 1992-2000 more than 55,000 workers died from work related injuries in the USA. For most work-related fatal injuries, the nature of the exposure such as task, activity or duty combined with a specific location is known and recorded. The work exposure associated with self-inflicted injury however are not known and have not been well studied.

OBJECTIVES: California County Coroners report self-inflicted fatal injuries as “work-related” on the basis only of place where the injury was inflicted. Hence the goal of this project is to identify possible factors that may lend themselves to potential intervention measures with
possible focus on employer intervention. Then aim of the study is to determine the work-
exposure basis or motivation for suicides that are coroner designated "at work" on the stan-
dard death certificate.

**METHOD OR APPROACH:** The case control study design was used to identify and describe the
nature of work-related factors associated with suicides, which have been classified as injury
at work and to determine the degree to which these factors differentiate such cases from
those not categorized as injury at work. All suicide cases were identified from a seven-year
period of January 1, 1994 through December 31, 2000. A case was defined as a suicide death,
which the death certificate stipulates as being an injury at work event. A control is a suicide
not designated as injury at work. Coroners investigative reports were used to identify work
related factors in both cases of controls.

**RESULTS:** With endorsement by the California Coroners Association, all county coroners
were approached and all agreed to participate by allowing access to the case and control
records as previously defined. As recorded on the coroners record, almost three quarters of
all "injury at work cases" signed out by the coroner are based only on the work location of
the suicide. No other evidence of motivation or related exposures were identified following
a careful review of the coroner record. Twenty percent of cases designated were found to be
based on work location plus other evidence in the record including statements of recent
loss of job mobility, inability to find a new job, failing business, demotion and interperson-
 al work problems. Six percent had no evidence whatsoever either by location or by motiva-
tion for designation of suicide at work. Among the controls, four percent occurred at a work
location and an additional twenty-four percent showed evidence of motivation based on a
work related situation. Almost seventy percent of controls had no evidence of work-relat-
ed activity as would be expected among true non work-related suicides.

**CONCLUSION:** The evidence shows extensive misclassification and furthermore demonstrates
our ability to identify from existing records suicidal evidence that may have been precipitated
by work related difficulties.

**LIMITS:** The data available for this study was coroners’ records from 57 county coroners in
California. The degree of detail on each suicide case varied somewhat and it is possible that
certain crucial information may have been missed. That is not recorded in the record. Hence,
some amount of information bias might be pertinent.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:** Suicide remains a public health issue of great mag-
nitude involving many different groups worldwide. There is little demonstrated program suc-
cess in prevention and epidemiological; there is little information still on the motivational
factors that may be amenable to intervention. Factors associated with true work-related
exposure may benefit from knowledge of the nature of the exposures involved, and hence
where interventions may be feasible.
THE REALITY OF SUICIDES IN SANTIAGO OF CALI

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We analyse the violent deaths with possible suicide occurred in Cali since January of 1995 to June of 2001; the information was recollected of bookmark of the section of Tanatology, the certificate of crime’s incident by the authority and autopsy protocols; we use the software EPI-INF 6.04 for the statistics analysis. We use the variables age, gender, school level, occupation, date and hour of the incident, place of the event, death’s cause, level of alcohol in blood and drugs in urine. We compare the annual suicide rate in Colombia versus the rate occurred in Cali. We apply proportion and cross to the different variables and we look for relation between it.

OBJECTIVES: We attempt to determine if the tendency for suicides in Cali like the other violent forms of death is going in assent with the time.

RESULTS: No tendency assent for suicides in Cali. Relation suicides with age, gender and hour incident. We want expound strategic for prevention of this problem.

SOCIO-LEGAL PROBLEM OF SUICIDE AND ITS PREVENTION: ANALYSIS OF SUICIDES IN INDIA

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PROBLEM UNDER STUDY: This study analyses the sociological aspects of suicides in India on the basis of reported suicide cases as published in Crime in India by Government of India. The study attempts to test the determinants of suicide either to support or negate various sociological explanations of suicide developed by many sociologists such as Morescli (1882), Dublin (1933), Simpson (1950), Poterfield (1952), Henry & Short (1954), Durkein (1951), Merton (1957) etc. The study also focuses on the dilemma of the Indian judiciary and the legislature on the issue of punishing attempt to commit suicide and social demand of right to die or permission of euthanasia within our legal framework.

OBJECTIVES: The thrust area of the study is:

1. To reveal major sociological factors responsible behind most of the suicide cases from the data published regularly by the Bureau of Police Research, Ministry of Home Affairs, Govt. of India; and
2. To study the legal provisions both Fundamental Rights under Article 21 of Indian Constitutions and the various substantive and procedural aspects of Criminal Law in India to prevent and control suicides in India.
METHOD OR APPROACH: The Method of this study is primarily analytical on the available government data, reported suicide incidences in the press and decisions of the Supreme Court of India. Five sociological variables—age, sex, region, family and economic conditions are posited as accounting for variation in the suicide rate. The focusing point of issue is whether more legal control or decriminalisation should be the strategy for prevention of suicide.

RESULTS: This study reveals the following:

1. As the age increases the suicide rate decreases;
2. More men than women commit suicide;
3. Suicide rate varies region wise and highly urbanised centres do not exhibit the highest suicide rate;
4. There is no direct cause and effect relationship between literacy and suicide;
5. The poverty and unemployment induce more men to commit suicide than those on whom fortune once smiled but ended in bankruptcy;
6. The most significant cause of suicide is family distress and much more severe problem than the problems of poverty and unemployment in the country. In the family front the daughters in law and wives are more affected than sons-in-law and husbands.

CONCLUSION: As the major problem regarding suicides in India is related with family distress so, firstly, importance be given on proper matching of personality of brides and bridegrooms as preventive measure and secondly to develop family therapy or divorce therapy to solve the problem of family disharmony resulting committing suicide by any of the family members.

LIMITS: The statistics on suicide cases are mainly covered by those cases where persons succeeded in putting end to their lives and registered with the police. Besides the reported suicide cases, there is a large number of dark figure of attempt to commit suicide cases in India (unsuccessful attempt). Moreover there are suicide cases in addition to the official suicides that are never recorded. Moreover a high proportion of suicide cases that actually are reported often rejected by police in India as “unfounded”.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The study reopens some established sociological theories on causation of suicides and raised a strong debate whether there is need of decriminalisation of suicide and to bring an legal control under civil law or propriety of recognition of right to die in all societies and all places in this world.

LES BRÛLURES SUICIDAIRE EN TUNISIE

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Les brûlures suicidaires ou immolation par le feu qualifiées de scandaleuses par certains, de mystérieuses par d’autres, restent rares mais non exceptionnelles. Notre travail tente

Tous les états psychiatriques peuvent entrainer un tel geste mais il s’agit souvent d’un acte impulsif. La majorité des suicidaires proviennent des banlieues à bas niveau socio-économique suivi de la région Nord-ouest (milieu rural). Les conflits familiaux et conjugaux viennent en tête des facteurs déclenchant.

En conclusion, si certains jeunes hommes et jeunes femmes tunisiens ont choisi le feu pour se faire entendre, renouant ainsi avec la tradition carthaginoise, la violence de cet acte nous interpelle tous à plus d’un niveau.

OVERVIEW OF SUICIDE TRENDS IN LOW INCOME COUNTRIES:
THE CASE OF SRI LANKA

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PROBLEM UNDER STUDY: Suicides in low-income countries (Lics) have not been as well addressed as in the high-income countries (Hics). Especially for the least developed continent and in particular South East Asia. However, the data that does exist indicates that in many Lics including Sri-Lanka, suicide as well as suicide attempts are a major health burden for society. However, this is not well known to the international community and its importance in low income countries (Lic’s), is often not as fully appreciated as it should be.

OBJECTIVES: To review the recent suicide trends in Sri-Lanka in order to base proposals for preventative intervention, exploration of the existing problem is being attempted. Thus, concluding with the recommendation regarding the development of an overall policy, to minimise this subjects harm to society.

METHOD OR APPROACH: According to categories E950-E959 of the ICD-10 in Sri-Lanka, the annual number of suicides over the period of 1990-1998, were obtained from the ministry of Health and Registrar General’s office. This study examined the trends, rates, methods and motives for suicide.

RESULTS: Based on data that at best, are conservative estimates, Sri-Lanka is a country with a serious growing suicide problem. This is one of the highest rates in the world as can be seen from over the last 50-year trend (1950-2000). Sri-Lanka’s national annual suicide rate has been estimated to be about 30.4 deaths per 100000 people; this is about 3 times greater than
the global average. The countermeasures have thus far, proved ineffective. A marked increase in a nation's suicide rate has been associated with disruptive and destabilizing social changes due to political and economical factors. In Sri-Lanka the suicide rate is likely to remain high or could even increase in the future, as so far the problem is not reviewing the appropriate medical and political attention.

**LIMITS:** Mortality statistics may incorrectly attribute some suicides to other forms of death, as many victims’ families are desperate to avoid suicide as an autopsy verdict. Furthermore, heavy popular stigmatization of suicide promotes avoidance of the issue, denial and even deception on the part of family and friends. Due to social and cultural constraints, realistic statistics are difficult to obtain.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:** Information on the precise global health burden of suicide is not readily available in the low-income countries (Lics), due to the lack of research conducted and data collected. However, suicides in Lics’s have pandemic effects and are costly in terms of lives and resources, and promise to remain a significant public health problem. Therefore, it is suggested that reducing the number of suicides in the developing world should become an international public health priority.

**UNDERSTANDING SUICIDE IN COLORADO**

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**PROBLEM UNDER STUDY:** Colorado is a leader in incidence of suicide in the USA, yet very little is known about risk factors in specific populations or what is being done to effectively prevent this tragedy.

**OBJECTIVES:** The Colorado Trust is conducting a needs assessment to understand the issues surrounding suicide in Colorado, including the relationship of access to mental health services and suicide; populations at risk and differences in health seeking behaviours; underlying factors for suicide by various subgroups, particularly those of special populations; the current status of suicide prevention in communities and schools; and what effective programs currently exist in Colorado and elsewhere in the USA.

**METHOD OR APPROACH:** Analysis of health department data for the past ten years, including vital statistics data for each county in Colorado; mapping of data illustrating risk of suicide and suicide attempts by county, as well as availability of mental health services; meta-analysis of all evidence-based suicide prevention programs in the USA; inventory of suicide resources by county in Colorado; survey of all school districts, hospitals, health departments and community health centres in Colorado; and in-depth interviews with regional mental health centres.

**RESULTS:** Ten-year data trends by county indicate predictors of completed suicide are unemployment, male gender and living alone. Mental health variables were not significant. Predictors for suicide attempts are depression/mental health problems and female gender. Rates for suicide attempts by Hispanic adolescents are 150% higher than Blacks or Non-
Hispanic Whites. Surveys were mailed in August 2001 with an initial response rate of 52% from schools and 50% from health care provider organizations. Preliminary results indicate the risk of suicide is perceived as moderate to substantial by >80% of health care organizations and >50% of school districts. All groups reported services available as less than adequate. Reasons for a lack of resources and barriers to available resources are forthcoming. Risk and protective factors, as well as data on the economic burden of suicide attempts and completions in Colorado will be presented along with numerous options for combating the problem, including identification of at-risk individuals, improving services, and suggested policy changes.

**CONCLUSION:** The profiles of a suicide completer and an attempter in Colorado are quite different. Unemployment is the highest predictor of completed suicide. Graphed 10 year unemployment trends show suicide declining when unemployment declines. As recent data indicate unemployment throughout the USA is increasing this will likely have implications for suicide trends. Stigma remains high regarding suicide, particularly in ethnic minority communities. Suicide is defined and experienced from unique perspectives depending on culture. The needs assessment highlights what can be done immediately to better prepare Colorado counties to combat this problem.

**LIMITS:** Time limitations–The Colorado Trust’s study is being conducted over an 8 month period; surveys were conducted during summer when response is normally low; surveys did not include families of suicide survivors nor completers; regression analysis was conducted for 10 years of data therefore providing only a glimpse into the trends.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:** Suicide is a problem of national significance. This is the first comprehensive needs assessment of the problem in Colorado. Stigma remains high and suicide is often considered an unrecognized problem. Those attempting suicide are often overlooked as a cohort needing a range of mental health services. The comprehensiveness of the information presented here is unique and will have far-reaching implications for delivery of mental health services, training of primary care providers and communities in general.

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**THE CAUSES AND CURE OF SUICIDE IN INDIAN SOCIETY**

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**PROBLEM UNDER STUDY:** The social causes of suicide in a developing society like India, the legal support to check the problem and the cure of this malady.

**OBJECTIVES:**

1. To identify the causes of suicide;
2. The legal provisions in the Indian penal code;
3. The weaknesses of law and social support.

**RESULTS:** The incidence of suicide is increasing with every year passed both in the rural and urban settings and also in all economic classes irrespective of any gender difference. Suicide tendencies are more common in the age group of 15-25 years. The increasing demand of
freedom by the Indian youth and its contradiction with the existing value system is the pre-
dominant cause of this problem.

**CONCLUSION:** Indian law declares attempt to commit suicide as an offence. Since only a very
meagre proportion of such cases is reported, the problem largely remains unexplored soci-
ologically.

**LIMITS:**
1. Lesser cases reported to the police;
2. Suicide attempt considered a social stigma in Indian society;
3. Financial and time resource constraints.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:**
- Making criminal law more socially relevant;
- Satisfactory and harmonic living in society;
- Making productive use of youth.

**DIFFERENT METHODS OF SUICIDE IN WEST BENGAL AND SOME SAVIOR SOLUTIONS**

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**PROBLEM UNDER STUDY:** One of the major problem in West Bengal regarding "Safety Promotion" suicide which not only deter our mission, also reduce human capital significantly. If the prime earner of a family accepts this type of absolute, self-violence then the whole family is automatically in its final stage of existence. There are so many social, political and economic causes behind it. But what are the methods of suicide?

**OBJECTIVES:** With different sorts of problems in a developing state we can hardly wipe out the problems behind suicide, particularly in a short run operation. But if we can identify the methods of suicide in a scientific way and accordingly take corrective measures then we can easily prevent suicide that not only saves distress families also the loss of human capital.

**METHOD OR APPROACH:** As govt. data are hardly available for typical bureaucratic control, we have collected information from private sources and from funeral stations, burial grounds in urban area. And in rural areas these are from family/neighbour’s statement. Last year we have collected data for 129 suicidal death in rural areas and 92 in urban areas.

**RESULTS:** In rural and far-urban areas categorically, we have found the following methods of suicide and with in bracket, we have mentioned the percentage of suicide through that method; 42 persons–by taking insecticides/pesticides (32.55%), 32 persons–by hanging from the ceiling/Joist/tree-branch (24.80%), 24 persons–by diving under a running train (18.60%), 18 persons–by setting fire oneself (13.95%) and 13 persons–by drowning in pond/tank/river (10.07%). In urban areas with the literacy development the methods of suicide has been changed significantly. Here, 24 persons committed suicide by diving under running train (25.26%), 19 persons by setting fire themselves (20%), 16 persons diving
from top of multi-storied buildings (16.84%), 14 by hanging from ceiling fan/elsewhere (14.73%), 8 by drowning in the river/pond/reservoir (8.42%), 7 by taking acids/phenyl (7.36%), 4 persons by cutting wrist vein (4.21%) and 3 by shooting from revolver/gun (3.15%). The urban peoples take more sophisticated methods than their rural, semi-urban counterparts mainly due to availability of methods and social behaviour. The aged males are generally attempting their suicide at the last week of the months. The urban females go for suicide at Thursday or Saturday nights while the rural females attempt to finish their lives at Monday or Wednesday noon or afternoon. Only two males from urban slums area have been found under self-death in railway track after in taking huge country liquor. After the result out session of the Secondary (class XI level) and Senior Secondary (+2 level) and just before the result out day most of the students commit suicide. Just for the fear of social disgrace and family hangering and ceased spurious huge tension.

CONCLUSION: If we proceed, here, with the following easily accessible anti suicidal measures; creating hindrances to easily accessibility of poison with well administered distribution systems, by appointing toxicologist in hospitals for timely diagnosis, using position free joist, low sustainable ceiling hooks, identifying black spots of suicide on the railway track, mass swimming training programme in rural areas, by enhancing vigil on suspected areas etc. Then we can have really impressive positive effects on the society.

LIMITS: Like star gazing of the astronomers, it would also need stupendous tenacity and vicarious jeal with long run motivation to have the wanted result.

CONTRIBUTION OF THE PROJECT TO THE FIELD: With this sort of scientific evaluation of suicidal methods and their anti-measure way outs this paper can become into a new era of philanthropist hope for the victims particularly in the developing countries.

SUICIDAL BEHAVIOUR AND ADMISSIONS TO THE PSYCHIATRIC WARD AT A UNIVERSITY HOSPITAL 1996-2000

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PROBLEM UNDER STUDY: Attempted suicide, Para-suicidal and suicidal ideation.

OBJECTIVES: To examine socio-demographic variables and trends in suicidal behaviour during the period 1996-2000 in persons admitted to the psychiatric ward University Hospital of the West Indies, Jamaica.

METHOD OR APPROACH: The Admission records of persons admitted to Ward 21 for suicidal behaviour were examined over the period 1996 to 2000. The trends in respect of suicide methods used, socio-demographic factors, age, sex, location (urban/rural), month/quarter of occurrence, and possible precipitating factors over the period 1996 to 2000, for suicide and suicidal behaviour, were identified. The package used for statistical analysis was SPSS, at the Department of Administrative Computing.
RESULTS: Over the years, the number of suicide attempts has been increasing, with females (75%) continuing to vastly outnumber males (25%) in suicide attempts. There is some significance (.001) between location and method of attempts. The preferred method was pill overdose, with 62% of cases using this method. There was also some significance (.002) between the type of attempt and the method used, with the serious attempts trying all methods and the para-suicidal but concentrating on pill overdose (65%). The number of persons admitted with suicidal behaviour has increased markedly over the last decade, and 25-30% of all admissions are suicide-related. A “one-group” of persons who have had repeated suicide-related admissions was identified. These are preliminary observations only, and much research work remains to be done.

CONCLUSION: The single most important finding indicates that we need to be involved at the most fundamental level to address and obviously increasing trend. More than anything else, it is affecting people who should be in the forefront of nation building and productivity—the 15-40 age group.

LIMITS: Accuracy of records; Diagnostic acumen of doctors; differentiating attempted from para-suicidal.

CONTRIBUTION OF THE PROJECT TO THE FIELD: Indicating the different demographic profile of young to 40’s persons at risk in this region, as opposed to the bimodal distribution seen in Europe and North America.

SUICIDE EPIDEMIOLOGY IN CHINA

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PROBLEM UNDER STUDY: The distribution of suicide; how to control the high suicide mortality in China.

OBJECTIVES:
1. To describe the suicide distribution in China;
2. To analyze the factors influence the distribution of suicide;
3. To discuss the strategy and effective prevention and control of suicide in China.

RESULTS: The suicide mortality in rural area is higher than in the urban area and the females have the higher suicide mortality than man in China. According to the data from disease surveillance system from year 1990 to 1995 in China, the female adjusted suicide mortality was 26.92/106 while the male mortality is 15.44/106. Autumn has the highest suicide mortality in a year in China. The main factors that influence the suicide mortality are psychological, environmental, biological and social factors.

To control and prevent suicide in China, we should improve the knowledge of suicide of the public, reinforce the ability of government to develop preventive strategy, develop the special research on women suicide and community-based psychology health service.

CONCLUSION: To control the suicide mortality in Chinese young women and rural area is the most important thing to do to prevent suicide in china.
LIMITS: The study was based on the existing data and maybe has bias.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The study reviewed the situation of suicide in China and will give the further researches some references.

THE EPIDEMIOLOGICAL CHARACTERISTICS OF SUICIDE IN CHINA

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According to the data of national disease surveillance (1990 1997), the main injury death causes defined according to ICD-9 are suicide, traffic accident, drowning, falling, poisoning, homicide, fire disaster and iatrogenic injury. The average death rates (1/100 000, the same below) are 16.86, 13.55, 8.77, 4.73, 4.13, 2.53, 1.46, and 0.14 respectively. Suicide death rate is the highest among the eight death causes. It accounts for 25.8% of the total injury deaths and that means each year there are more than 200 000 suicide deaths in the country.

Place Distribution: In order of the average injury death rates, in urban area, the preceding three death causes are traffic accident (12.28), suicide (6.56), and falling (5.43); while in rural area, are suicide (22.89), traffic accident (13.96) and drowning (10.35) respectively. Suicide death rate in rural area is 2.8 4.5 times higher than that of the urban area during the surveillance years.

Gender Distribution: Both male and female, the preceding three death causes are traffic accidents, suicide and drowning, but the average death rates are quite different. For male, the death rates are 19.95, 17.79 and 11.33 respectively; for female, the death rates are 7.23, 21.65 and 6.30 respectively. Female suicide death rate is significantly higher than that of male (OR=1.22).

Age Distribution: The highest suicide death rate is in the age group of 60 years, 65.8 of male and 52.3 of female. In the age group of 35 59 years, the suicide death rate of male and female are 20.09 and 21.1 respectively. In the age group of 15 34 years, the death rates are 15.4 and 26.93 respectively. In the age group of <15 years of old, both male and female the suicide death rate are lower than 1.0.

Risk Factors: According to the results of related reports in the recent years, the risk factors of suicide behaviour are characterized as the following:

1. Depression and the other psychiatric patients account for 41% 64% of the total
2. Among the suicide attempters, depression and other psychiatric patients account for 29% 42%, family conflict take up 52% and the other factors account for 19%;
3. Of the suicides and suicide attempters that suffered from psychiatric diseases, 33% 35% once visited doctors for mental care;
4. Most of the suicide attempters, the time for thinking over of suicide action usually is short, 50% = 2 hours, and 28% 10 minutes.
CONCLUSION: Considering the epidemiological characteristics of suicide, the study and control of suicide has become a very important part in the strategy of disease control and health promotion.

LIMITS: The risk factors of suicide behaviour should be further studied systematically, so that to provide the scientific foundation for suicide intervention.

CONTRIBUTION OF THE PROJECT TO THE FIELD: Describing the epidemiological characteristics of suicide in China, it is necessary for both further study and intervention strategy.

COMPARISON OF ADOLESCENT SUICIDE MORTALITY RATES BY URBAN CITY

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PROBLEM UNDER STUDY: Suicide is a major public health threat to adolescents throughout the world. Suicide rates have been reported to be disproportionate by age, ethnicity, gender, and urban city. Suicide by urban city has not drawn the attention as other factors to date in the USA. A review of adolescent suicide mortality rates from selected states of adolescents living in non-metropolitan counties was compared to metropolitan counties.

METHOD OR APPROACH: Historical correlation studies of states with the highest adolescent suicide mortality rates for the selected time period were examined. County-level data were obtained and assigned a code according to the Rural-Urban Continuum Codes for metro and non-metro Counties, 1993 (Butler & Beale Codes-USDA). The USDA Code categorizes each county based on population size and proximity to a metropolitan area. County-level adolescent suicide rates were obtained from the Centre for Disease Control’s WONDER Compressed Mortality Population Data over a ten-year period (1989-1998). Scatter diagrams were developed for each state to examine adolescent suicide death rates by county using the USDA Code county classification.

RESULTS: Review of the scatter diagrams demonstrates a positive trend in association for adolescent suicide rates for counties with the lowest population and those located the farthest from metropolitan areas. Pearson product-moment correlation coefficients for the data are pending to confirm correlation.

CONCLUSION: Population density and access to metropolitan areas is associated with an increase the incidence of adolescent suicide for those living in no metropolitan counties. It is not evident the unique experience that may contribute to the increased incidence of suicide in non-metropolitan counties. Limitations may include restricted access to services, increased availability to lethal methods, social isolation, and enhanced acceptance of suicide. Additional research will be needed to identify the social, economic, and cultural factors of sparsely populated and isolated counties in the USA. Prevention providers and policy makers responding to the needs of non-metro adolescents need to be aware of potential approaches needed. Additional research is needed to further elucidate the factors that may contribute to urban city as a risk of adolescent suicide.
LIMITS: In order to obtain a reliable sample of a rare health event, an extended period of time was needed. Under reporting of actual suicide events can occur to protect survivors from the stigma and may not be recognized as a suicide. Capturing accurate data for suicide can be problematic, especially in non-metropolitan areas served by locally elected officials. Data collection also does not include the myriad of behaviours (ideation, attempts, injury, and hospitalization) associated with suicide.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The differential in suicide rates by urban city has been well documented and recognized in many countries. Geography and the political, social, and economic limitations may have profound effects on developing preventive measures for adolescent suicide. This study illustrates the need for further investigation of the effects of urban city on suicide in the U.S.

SUICIDE AND SELF-INFlicted INJURIES IN ONTARIO

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PROBLEM UNDER STUDY: Investigate the increase in suicides and self-inflicted injuries in Ontario and evolution within risk groups.

OBJECTIVES: The objective of this study is to provide timely and accurate statistics to quantify and monitor the problem of suicide in Ontario. In addition, Ontario data are presented in order to facilitate comparisons with other Canadian provinces and increase the awareness of suicide and self-inflicted injuries as a public health problem in Canada.

METHOD OR APPROACH: Data for this study were extracted from the Ontario Trauma Registry, as a preferred data source over the National Trauma Registry. Ontario data were presented not only because they mirror the Canadian perspective but also because the Ontario Trauma Registry contains more detailed and robust data on suicides and self-inflicted injuries. The Ontario Trauma Registry contains three subsets: the Minimal Data Set, which includes all acute care hospital injury admissions in Ontario, the Comprehensive Data Set, which contains hospital admissions due to major trauma and the Death Data Set, which includes all deaths in the province due to injury.

RESULTS: The number of hospitalizations related to suicide and self-inflicted injuries in Ontario have risen by more than 5% in the last 5 years. This is in sharp contrast with all injury hospitalizations in the province, which have decreased by close to 15%. The picture in Canada is very similar, as suicide numbers increased by close to 5%, while overall injury admissions decreased by almost 12%. Suicide is the third leading cause of injury death in Ontarians, behind unintentional falls and motor vehicle collisions (MVC). However, whereas the numbers related to falls and MVCs continue to decline, the number of deaths related to suicide continues to climb. The age group 35-44 had the highest number of suicide-related deaths in Ontario. Suicide was the second leading cause of injury death among Ontario youth aged 10-19.
CONCLUSION: Suicides and self-inflicted injuries resulting in hospitalizations in Ontario continue to rise, despite a drop in overall injury hospitalizations. Young males between 10 to 19 or 35 to 44 form the highest risk groups for suicides and self-inflicted injuries.

LIMITS: This study does not examine attempted suicides or non-hospitalizations. It is estimated that suicide attempts outnumber suicides by as much as 100 to 1.

CONTRIBUTION OF THE PROJECT TO THE FIELD: This study highlights an alarming trend in suicide-related hospitalizations and deaths. Although overall injury numbers have decreased in the past five years, this trend is reversed for suicides. The study points to the need for more focused prevention strategies, especially for males aged between 10-19 or 35-44.

PRIOR VISIT TO EMERGENCY DEPARTMENT BY SUICIDE COMPLETERS

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PROBLEM UNDER STUDY: Suicide is a serious problem in the US. It is the ninth leading cause of death in the US accounting for 31,000 deaths a year.

OBJECTIVES: To identify possible intervention points for suicide, we compared emergency department (ED) visits 30 days prior to death for suicide and motor vehicle crashes (MVC) fatalities.

METHOD OR APPROACH: Utah death certificate records for February 1996 thru January 1998 were probabilistically linked to statewide ED records for January 1996 thru December 1997. Decedents were linked to ED visits within 30 days of their deaths.

RESULTS: There were 594 suicide and 632 MVC fatalities. We found 54 (9%) of the suicide compared to 120 (19%) MVC fatalities visited an ED and were discharged home within 30 days prior to their deaths. Controlling for age and gender, showed MVC fatalities were over 2 times more likely to have an ED visit than suicides (95% CI; 1.6, 3.1). The suicide and MVC fatalities experienced a similar rate of repeat ED visits (p=0.209). The average number of days between the death and last ED visit was 4.5 days for suicide and 1 day for MVC fatalities (p<0.001). The reason for the prior ED visit differed between suicide and MVC fatalities (p<0.001); the leading reasons for suicides were self-inflicted injuries, mental illness and falls compared to MVC and cardiac disease for MVC fatalities. Alcohol/drug abuse was noted in < 6% of the ED records.

CONCLUSION: Approximately 10% of suicide completers presented to an ED 30 days prior to their suicide. This percentage was significantly less than that for MVC fatalities, which may indicate that only a small segment of the suicide population would be imparced by an ED-based suicide intervention program.

LIMITS: We relied on databases that were largely collected for administrative purposes not research or prevention. As a result, they contain minimal detail about diagnoses or other injury information.
CONTRIBUTION OF THE PROJECT TO THE FIELD: This study adds to the growing body of knowledge regarding suicide prevention and prior ED use. Probabilistic linkage is a relatively new method being used in injury research.

EPIDEMIOLOGY OF SUICIDE, COLOMBIA, SOUTH-AMERICA, 2000

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PROBLEM UNDER STUDY: The complexity of suicidal behaviour has motivated a wide number of explanations from different perspectives, from Durkheim's and Freud’s to theories and models based in social learning, which have enabled us to approach its study and understand the enormous diversity that suicidal behaviour presents. Since the late 1990’s Colombia presents a stable suicidal rate of 5 per 100,000 inhabitants. Nevertheless, differences can be appreciated in the local level happening to occupy in 1995 the twenty seventh place and sixth for the group of 15 to 24 years, level of the general mortality of the country, and on the other hand the fourth place between all the violent deaths in Colombia.

OBJECTIVES: The objective of the present study is to identify the main characteristics epidemiologists of the suicides in Colombia, whose legal medical autopsy was made in the National Institute of Legal Medicine and Forenses Sciences in year 2000, with the purpose of contributing information that reinforces the judicial investigation of these cases and therefore the detection of factors associate that can be watched for the design and implementation of prevention strategies and promotion of the health of the community.

METHOD OR APPROACH: It was used like source of data, the magnetic file processed by the CRNV made up of originating data of the respective protocols of autopsy with his annexes, of acts of inspection to the corpse and hospitable epicrisis.

RESULTS: In Colombia during the decade of 90’s, appeared two epidemic periods of suicide, in which the rate of significant way was increased, between 1991 and 1994 happening from 1,7 to 4 and from 1997 to 1998 of 4,2 to 5 cases through each 100,000 inhabitants. During year 2000, INML and CF, it made 2.070 autopsies by suicide. 79% were men and by each woman 4 men committed suicide.

Traditionally in Colombia, the affected groups but have been those of adolescents and adult mayors (65 years old). Nevertheless in the 2000, the greater rate appeared in the group of 18 to 24 years of age (10,3 by each 100,000 hab/year), group made up of people in age to work and head of home, which brings a series of socioeconómicas implications for the familiar group and the society. The weapon or mechanism used with more frequency to obtain the death, was the poisoning (31%), the firearm (30%) and the suspension or hanging (27,3%). The monthly average of cases was of 174, corresponding approximately to 6 cases to the day or a suicide every four hours; the months with greater number of cases were May (192), January (191) and October (182). The greater number of autopsies by suicide was made in
the cities of Bogotá (337), Cali (153) and Medellín (122). The departments with greater rate were Amazon, Risaralda and Huila. The 1000 local units, with greater rate of autopsy by suicide were La Mesa (Cundinamarca) with 41,2/100,000 hab, Garagoa (Boyacá) 29,4/100,000 hab and Chocontá (Cundinamarca) 27,8/100,000 hab.

DISCUSSION: Mental divulgation of health politics and its mandatory enforcement, along with community involvement will enable the establishment of preventive and promotion- al actions.

Key words: theoretical models, epidemiología, prevention.

HOMICIDE-SUICIDE IN BOGOTÁ-COLOMBIA, SOUTH AMERICA, 2000: A REAL FACT AN UNKNOWN EVENT OF SUICIDE

JORGE GONZALEZ, IVAN JIMENEZ, ANDREA RODRIGUEZ
National Institute of Legal Medicine
Bogotá, Colombia

PROBLEM UNDER STUDY: The complexity of suicidal behaviour has motivated a wide number of explanations from different perspectives, from Durkheim’s and Freud’s to theories and models based in social learning, which have enabled us to approach its study and understand the enormous diversity that suicidal behaviour presents. Since the late 1990’s Colombia presents a stable suicidal rate of 5 per 100,000 inhabitants. Nevertheless, differences can be appreciated in the local level happening to occupy in 1995 the twenty seventh place and sixth for the group of 15 to 24 years, level of the general mortality of the country, and on the other hand the fourth place between all the violent deaths in Colombia.

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**DISCUSSION:** Mental divulgation of health politics and its mandatory enforcement, along with community involvement will enable the establishment of preventive and promotional actions.

*Key words:* theoretical models, epidemiología, prevention.

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**NONFATAL, HOSPITAL-TREATED, SELF-INFLICTED POISONING: STATE-BASED SURVEILLANCE USING HOSPITAL DISCHARGE DATA**

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**PROBLEM UNDER STUDY:** Nonfatal, self-inflicted poisoning was identified as a leading cause of nonfatal injury in Minnesota during 1997. Additional information about this injury problem was needed.

**OBJECTIVES:**

1. To provide a descriptive epidemiology of nonfatal, self-inflicted poisoning in the state of Minnesota, USA; and
2. To describe the problem of nonfatal, self-inflicted injury in relationship to other causes of nonfatal injury.

**METHOD OR APPROACH:** Minnesota’s hospitals voluntarily submit hospital discharge data to a central database, using the HCFA 1450 (UB-92) standard reporting form. Utilizing the nonfatal hospital discharge data for both in- and out- patient treatment in 1999, the authors examined all incident, ICD-9 E-coded, injury treatments in Minnesota provided to Minnesota residents, and specifically looked at the descriptive epidemiology of self-inflicted injury.

**RESULTS:** There were 2098 in-patient and 1031 out-patient treatments identified, representing 75% and 56% of the nonfatal, hospital-treated injury, respectively. The age-adjusted rate for in-patient treatment was 4.4 per million population. Women experienced the highest rates of in-patient treatment, while men experience higher rates of outpatient treatment. Self-inflicted poisoning is the leading cause of nonfatal, hospitalized (in-patient) injury for women 10 to 44 years of age. Rates were highest in the 15-19 and 20-24 year old age groups.
of both genders. Over all age groups and genders, self-inflicted poisoning is the third leading cause of nonfatal hospitalized injury. Rates for both in-patient and outpatient treatment were higher for the Twin City metro area of Minneapolis/St. Paul than for the rest of the state.

**CONCLUSION:** Nonfatal hospital-treated injury represents an important component in the spectrum of both hospital-treated injury and self-inflicted/suicidal injury. While men have been documented as having the highest rates of completed suicide, women have the highest rates of self-inflicted poisoning. This helps to demonstrate the complex epidemiology and aetiology of self-inflicted/suicidal injury. Additional samples of self-inflicted poisoning should be obtained to examine additional risk factors such as race/ethnicity.

**LIMITS:** Only E-coded cases were examined. E-coded data is submitted voluntarily by hospitals, with approximately 90% compliance. Some hospitals do not participate in reporting hospital discharge data. Milder cases may not go to hospitals for treatment, and so would be missed. Some cases may be treated in border hospitals in adjoining states. Race/ethnicity data was not available.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:** Public health surveillance of nonfatal injury using hospital discharge data reveals the public health importance of self-inflicted poisoning. This helps to demonstrate the value of surveillance of nonfatal injury.

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**EMERGENCY MEDICAL SYSTEM RESPONSES TO SUICIDE-RELATED CALLS IN MAINE**

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**PROBLEM UNDER STUDY:** Suicidal acts are morbid, potentially lethal events, risk factors for subsequent completed suicide, and often indicators of other existing health problems, such as substance abuse and depression. For 1996, the cost of health care and lost wages for suicide attempts in Maine was estimated at $115,219,897. In 1999, 1079 people were hospitalized in Maine for self-injurious behaviour. While Maine has no injury-related surveillance systems, the state has explored the use of Emergency Medical Service (EMS) response data as part of comprehensive surveillance for suicidal behaviour.

**OBJECTIVES:** This analysis was undertaken to estimate incidence of EMS responses to suicidal behaviour in Maine and to summarize the distribution of these responses by patient and event characteristics. Information on precipitating events and circumstances associated with suicide attempts is not available from hospital discharge databases. These precipitating events are of particular importance since they could point to programmatic directions.

**METHOD OR APPROACH:** Maine EMS responders fill out a standard, one page Run Report Form (RRF) for each call for emergency assistance. The RRF contains a check box titled 'Concern Suicide', which is to be selected for patients who have, relevant to this call/run, expressed or displayed any suicidal tendencies or attempts. The RRF has defined fields for gender, age, date of birth, incident date, incident location, incident site, patient town, insurance payer, and
EMS service number. EMS responders may provide additional information in a free text field, from which MYSPP extracts data on method of attempt or threat and circumstances surrounding the event.

RESULTS: Age-adjusted EMS response rates were higher in females than males. Female rates of suicide-related EMS calls were highest in the 15-19 year age group, but were generally high among females 20-44. In contrast, suicide completion rates, derived from Maine Medical Examiner reports, were essentially uniform across all female age groups. Male rates of EMS calls were highest among 20-24 year olds and high in the 15-19 and 25-34 age groups, whereas completion rates were highest in persons 65 years of age and older. Among the 1171 responses, 811 (69.6%) were made to the residence of the attempter. EMS calls were most frequent in the summer (27.6%) and least frequent in the winter and spring (23.4% and 23.1%, respectively.) Method was documented in 1036 (88.5%) of cases. ‘None’ or ‘suicidal ideation only’ were the most commonly documented methods. Attempts with firearms were least common. The percentage of fatal attempts was 3.9% (1.0% for females, 7.3% for males). Percentage of fatal attempts was highest among males age 65+ (17.5%). Of the 41 attempts involving a firearm, 22 (53.7%) were lethal at the time of EMS arrival. Compared to drug overdoses, attempts with firearms were 80 times more lethal (0.67% vs. 53.7%).

LIMITS: Ideally, suicide prevention programs would use prevalence information for planning. Unfortunately, prevalence cannot be derived from our EMS data. First, no systematic mechanism exists to ensure that only one RRF is filed for each event. Second, there is no mechanism for systematically identifying repeat attempters. Third, the dataset contains only those events for which there is a completed RRF. A second limitation is the completeness and quality of risk factor data. Insurance status is frequently missing. Other critical variables have no designated field on the RRF and must be extracted from text. Finally, this analysis includes data for only 12 months. While this limits sample size and precludes description of temporal trends, analysis at this early stage of development creates opportunities for improving the data collection system and preparing for its utilization in surveillance. The most commonly reported circumstances were drug/substance abuse at the time of the incident, psychiatric illness, domestic discord or violence and medical illness/pain.

CONCLUSION: Suicidal ideation, threats and acts occur on ‘a continuum of severity’ and the prevention of less serious events may preclude more life-threatening health problems. Relative to Emergency Department, Hospital Discharge and Vital Records data, EMS runs provide information from an earlier point along this continuum. Hence, these data have greater utility for early prevention efforts. Moreover, EMS data provides event detail unavailable in other health information systems.

CONTRIBUTION OF THE PROJECT TO THE FIELD: Resources for surveillance are limited. This study presents a possible surveillance tool that required no additional expenditures and was the result of multiple agency cooperation. An existing data system was modified and utilized to provide key data and direction for the youth suicide prevention program.
ERRORS ON SUICIDE DEATH CERTIFICATES IN MONTANA

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PROBLEM UNDER STUDY: Certifications errors on deaths certificates are known to exist. It is presumed that errors occur with greater frequency in rural areas served by corners rather than medical examiners. The extent that these errors confound the study of suicide is, largely, unknown.

OBJECTIVES:
1. To define the rate of agreement between death certificates and other sources of data including coroner’s reports, autopsy proceedings and medical records;
2. To determine what fields on the death certificate are most prone to error; and
3. To compare the rate of certification errors between physicians and coroners.

METHOD OR APPROACH: A study of all intentional and unintentional injury deaths occurring in Montana in 1998 was recently completed. This study includes the acquisition of records for each decedent from all available sources including: death certificates, autopsy proceedings, coroner’s reports, law enforcement records, toxicology reports, pre-hospital and hospital medical records. Those deaths that were attributed to suicide on the death certificate or were unequivocal were included in this study (N=158). As each case was reviewed in its entirety the information on the death certificate was verified and discrepancies were noted. Both errors of omission and commission were examined to determine if the errors were attributable to completeness, accuracy or specificity.

RESULTS: Of the 158 death certificates, 117 (74%) were found to contain one or more errors. The error that occurred with the greatest frequency (26%) was an incomplete description of the immediate cause of death and sequential conditions. A lack of specificity in how the injury occurred was evident in 18% of the suicide death certificates. Failure to note the completion of an autopsy occurred in 6% of the cases, a non-specific description concerning the location on injury was noted in 5%, and discrepancies between race and ancestry information were noted in 5% of the cases. Of 158 cases, only four were certified by physicians making comparative analysis of error rates between the physician and coroner group statistically impossible.

CONCLUSION: Error rates by specific data field on the death certificate ranged from 0-26%. Information needed to identify and correct the errors were found in coroner, autopsy, law enforcement and medical records. Because of the preponderance of county corners certifying suicide deaths in Montana, efforts to decrease errors in reporting should target improved performance by these personnel.

LIMITS: Small sample size. Insufficient number of physician certified deaths for comparative analysis.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The identification of field-by-field error rates and types allows for targeted training of county coroner and other certifying personnel.
INTENTIONAL INJURY IN YOUNG PEOPLE IN RURAL SOUTH INDIA

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PROBLEM UNDER STUDY: The burden of intentional injury as a cause of death in a rural area in South India.

OBJECTIVES: Injuries are among the leading causes of death and disability in the world. Considerable literature now exists on the burden of injury, intentional and unintentional, from the industrialized nations. Such information on the burden of injury among low and middle-income countries is limited and this data is therefore presented.

METHOD OR APPROACH: The Community Health Department of Christian Medical College at Vellore in India has information collected on all births, deaths and causes of death, collected prospectively on a rural population of approximately 100,000 people. The information is gathered by a network of Health Workers, Public Health Nurses and supervised and checked by a team of public health doctors of the Department. The information available was analysed for the years 1995-1999, with special reference to intentional injury, among young people, aged 10-14 years and 15-19 years.

RESULTS: The author presents 3 tables:

1. Age-specific deaths among adolescents: (death-rates/10,000); 1995-1999;
2. Suicides and suicide rates (per 10,000) 1995-1999;

The population of the block in those years varied between 106,000-108,000. The crude death rates/1000 population were 8, 8.8, 7.6, 8.1 and 8.2 for the five years under study. The population in the 10-14 year and 15-19 year age group is approximately 5000 in each of the 4 subdivisions.

CONCLUSION: The death rate due to accidents is higher among males in the 10-14 year age group and is now attributed to the social expectations and higher risk taking behaviour in males at that age. Suicide rates among the 15-19 year olds are higher among girls and range between 40 per 100000 in 1996 to 191 per 100,000 in 1997. These high rates necessitate recognition of suicides as a major cause of death in this age group. Once the recognition is obtained prevention strategies would be essential and justified. This is particularly important in areas of the world where distributive justice of resources is a necessity.
Prévention du suicide chez les jeunes

Youth Suicide Prevention

L’ÉVALUATION DU PROGRAMME AGIR ENSEMBLE POUR PRÉVENIR LE SUICIDE CHEZ LES JEUNES; DES RÉSULTATS PROMETTEURS

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PROBLÉMATIQUE : Le suicide chez les jeunes est un problème majeur de santé publique. Première cause de décès chez les jeunes Québécois et Québécoises, le suicide est en hausse depuis les années 1970. Il existe plusieurs stratégies afin de prévenir le suicide chez les jeunes. Parmi celles-ci, les programmes de prévention en milieu scolaire ont fait l’objet de nombreuses études peu concluantes. À partir de nombreux constats sur les défis des programmes de prévention, un groupe d’experts a participé à la conception et à la réalisation d’un programme novateur. Le programme Agir ensemble pour prévenir le suicide chez les jeunes propose une approche globale visant la prévention du suicide chez les jeunes et implique la mise en place d’une séquence précise d’activités : formation d’intervenants, création d’un filet de sécurité, sensibilisation des élèves, des parents et du personnel scolaire sur la prévention du suicide. Plusieurs outils accompagnent ce programme : une vidéocassette Le secret, un cahier d’accompagnement pour la vidéocassette, un cahier de formation, etc.

Le but de l’évaluation du projet est de fournir des renseignements sur l’implantation du programme (analyse de l’implantation), les outils utilisés (analyse de l’intervention) et les effets obtenus au niveau de la connaissance des indices des comportements suicidaires, des ressources d’aide, des actions préventives à poser et du secret (analyse des effets).


Les sujets sont des élèves (n1), des parents (n), le personnel scolaire (nE), des intervenants (nB) et douze autres informateurs pour l’analyse de l’implantation et de l’intervention. Au niveau de l’analyse de l’implantation, la recherche montre certaines difficultés rencontrées et met en lumière l’importance pour les animateurs d’être à l’aise avec la problématique. L’analyse de l’intervention a permis de bonifier le cahier d’accompagnement de la vidéocassette. Toute la clientèle rejointe par le programme est hautement satisfaite et aucune différence n’est observée selon le sexe ou le milieu. Des effets significatifs sont observés chez les jeunes pour la connaissance d’indices des comportements suicidaires, la connaissance des ressources d’aide et des actions préventives à poser et sur la nécessité de dévoiler une confidence suicidaire. Peu d’effets sont observés chez les adultes. L’ensemble des données recueillies indique que la logique du programme et les outils proposés, particulièrement la vidéocassette, sont des éléments propices à la prévention du suicide chez les jeunes.
Cette recherche contribue à l’avancement des connaissances au niveau des possibilités d’action préventive auprès des jeunes en milieu scolaire.

**YOUTH SUICIDE: WHO WILL IDEATE, WHO WILL ACT?**

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**Problem Under Study:** Youth suicide is a major problem in the USA. Unlike most injury risks, suicide risk has been rising. The US Maternal and Child Health (MCH) Bureau and the states recently included youth suicide reduction among the 18 core performance measures for the MCH block grant. Several studies find that health-risk behaviours correlate with suicide ideation and acts. None, however, examine the relationship between multi-problem youth and suicide.

**Objectives:** To test whether multi-problem youth are at elevated risk of suicide ideation and moving from ideation to action.

**Method or Approach:** Analysed data from the 1999 Youth Risk Behaviour Survey (YRBS). The 1999 YRBS administered questionnaires at school to a nationally representative sample of 15,349 U.S. youth in grades 9-12 (ages 14-18).

Three suicide variables were collected:
1. Ideation: seriously considered suicide, past year;
2. Suicide act: attempt, past year; and
3. Serious act: attempt resulting in medically treated injury, overdose, or poisoning, past year.

Using accepted definitions, we analyzed if youth aged 14 and over engaged in smoking, drinking, drugging, violence, or high-risk sex. Definitions were:
1. Smoking: 3 or more days, past month;
2. Binge drinking: 5 drinks in one session, past month;
3. Drugging: any illicit, past month; or heroin, methamphetamine or injected illicit, lifetime;
4. Violence: in 2 or more fights, past year; or carried a gun, past month; and
5. High-risk sex: no protection or no condom last intercourse; been pregnant or gotten someone pregnant; 4 or more partners, lifetime, or 3 or more, past 3 months; or first sex before age 14.

We counted problem behaviours reported by each youth. Tables and logistic regressions examined the relationships between the suicide variables and the problem behaviours. The regressions controlled for age by sex, race, and region of residence. We accounted for sample design when determining significance.
RESULTS: Youth with at least two problem behaviours committed 87% of all serious suicide acts. Such youth comprise 41% of the population. A strikingly strong dose-response relationship emerges from tabulating how suicide risk relates to the problem behaviours. An alarming 26% of those with all 5-problem behaviours attempted suicide in the past year. Logistic regression showed that the odds of a serious suicide act rose from 1.0 with no problem behaviours to 3.6 with one, 8.7 with two, 13.5 with three, 23.3 with four; and 66.3 with 5. Similarly, the odds of moving from ideation to a serious act rose from 1.0 with no problem behaviours, 2.4 with one, 4.5 with two, 5.3 with three, 7.0 with four, and 19.2 with five. Youth suicide risk relates much more strongly to the number of problem behaviours than their nature; a separate regression showed that no individual behaviour alone raised suicide risk by more than 2.4 to 1.0, with binge drinking not even affecting risk.

CONCLUSION: Youth suicide is embedded in a broader array of youth problems. Multi-problem youth dominate the population needing suicide prevention services. Thus, youth who commit suicide acts should be screened and treated for other problem behaviours. Both research and treatment on problem behaviours tends to be compartmentalized. A more holistic approach might reduce youth suicide dramatically. Suicide interventions that address the root cause of multi-problem behaviour seem more likely to succeed than ones that focus explicitly on depressive symptoms.

LIMITS: The YRBS omits school dropouts, a group likely to practice many health risk behaviours. Comparison with data from the 1999 National Household Survey on Drug Abuse, which reaches all youth, suggests that the YRBS represents the percentage distribution of drinking, drugging, and smoking among American youth accurately. This research examines only a subset of problem behaviours. Suicidal youth may have other problems too.

CONTRIBUTION OF THE PROJECT TO THE FIELD: This research is the first to link youth suicide acts to multi-problem behaviour. The linkage is so strong that it suggests practical ways to narrow the cohort of youth targeted for preventive services. It also is a clarion call for mandatory screening for other high-risk health behaviours in youth suicide treatment protocols.

INTERROGATING INTENT: INTERCONNECTIONS OF DESIRED OUTCOME, METHOD AND GENDER

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PROBLEM UNDER STUDY: In spite of a few empirical investigations of young people’s rationales for the use of particular methods of suicide, the current suicide literature is characterized by gendered assumptions about the interactions between intent and method. Based on differences in the epidemiology of fatal and non-fatal suicidal behaviours, it is frequently suggested that young men deliberately intend to die as a result of their suicidal actions, and the descriptions of methods most often used by young men as ‘violent’ or ‘hard’ reflect such accordingly. Alternately, it is suggested that young women undertake deliberately non-fatal suicidal behaviour, and reflecting their lack of appropriate intent, the methods used by young women are frequently described as ‘soft.’
OBJECTIVES:

1. To present discursive analyses of young people’s discussions of their intentions at the time of their suicidal behaviours;
2. To examine the ways in which young people describe the interconnections between their intentions, and choice of method.

METHOD OR APPROACH: This analysis is based on data from the transcripts of in-depth interviews with 30 young people who received treatment following a suicide attempt at emergency departments. Following the example of other discursive analysts, particular pieces of transcript have been selected for presentation and analysis because they illustrate broad thematic patterns observed across many interview transcripts.

RESULTS: The majority of participants identified themselves as ‘serious’ suicide attempters, constituted by discourses of planned action, fatal intent and a rejection of attempts to construct their behaviour as impulsive or attention seeking. The experiences of the current participants suggest that investigations of suicidal intent among young people are likely to be problematic. For example, young people suggest that they are likely to minimise or downplay their fatal intentions, in order to avoid negative judgements of their behaviour and mental health. Young people were not likely to discuss their traumatic experiences with significant others, thereby reducing avenues to help-seeking. The experiences of the participants suggest that choice of method of suicide is less influenced by gender, than by a particular method’s ability to facilitate a desirable death experience. For the majority of participants, deliberate overdose usually involving Paracetamol was the preferred method of choice. The predominance of deliberate self-poisoning as young people’s most preferred method of suicide was justified by participants as this being the method which was most likely to facilitate a desired death experience: a death which was quick, clean and painless. The use of deliberate self-poisoning was also supported by discourses of ease: of access, of use and of transition to a desired death state.

CONCLUSION: In conclusion, these findings suggest the need for the re-conceptualisation of young people’s intentions for their suicidal behaviour. The diversity of the young people’s experiences suggest that historical constructions of intent, traditionally mediated by assumptions interweaving method and gender, are no longer useful in explaining the complexity of intentions informing young people’s suicidal behaviours.

SUICIDE CHEZ LES JEUNES QUÉBÉCOIS AYANT REÇU DES SERVICES, DES CENTRES JEUNESSE

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Le suicide est une problématique grave et prioritaire: c’est la première cause de décès chez les jeunes âgés de 15 à 19 ans au Québec. Une proportion de 31,5% des décès chez les jeunes québécois de 15-19 ans s’applique suite à un suicide (Direction de la santé publique, 1996).
Plus spécifiquement, la médiatisation importante de la problématique du suicide dans la population des adolescents recevant des services des Centres jeunesse a entraîné une mobilisation des différents partenaires concernés dont le Collège des médecins, l’Association des centres jeunesse et le Protecteur du Citoyen qui a mis sur pied un comité devant se pencher sur la question. Le comité formé à cet effet rapporte des résultats préliminaires, à savoir que près du tiers des adolescents qui se sont suicidés au Québec avaient déjà reçu ou recevaient des services des centres jeunesse (57/177).

Ainsi, l’objectif principal de cette étude porte sur la recherche des facteurs de risque de suicide associés à la population d’adolescents recevant des services des centres jeunesse. A partir de données d’archives provenant de différentes sources (dossiers des centres jeunesse, du Bureau du coroner, des fichiers de la Régie de l’Assurance Maladie du Québec et du Ministère de la Santé et des Services Sociaux) les indices de psychopathologie, les événements de vie et le type d’interventions reçues par 53 adolescents décédés par suicide au cours des années 1995 et 1996, sont comparés à ceux d’un groupe témoin constitué de 159 jeunes des centres jeunesse du même âge, du même genre et de la même provenance géographique, n’étant pas décédés par suicide.

Les résultats suggèrent que parmi le groupe des jeunes décédés par suicide, un plus grand nombre d’indices de psychopathologie et d’événements de vie sont retrouvés, par rapport au groupe témoin des jeunes des centres jeunesse non décédés. La limite principale de l’étude est liée à l’utilisation de données d’archives. Toutefois, le fait d’avoir utilisé un groupe témoin permet d’atténuer cette limitation. De plus, plusieurs sources complémentaires furent utilisées afin d’améliorer la qualité de la cueillette de données. Ces résultats vont permettre de mieux caractériser la population fréquentant les jeunes, usagers des centres jeunesse, et favoriser des services de référence et d’évaluation médicale, psychiatrique et psychosociale plus ciblés et en concertation avec les différents partenaires impliqués dans la prévention du suicide et dans le traitement des causes sous-jacentes au suicide et aux comportements suicidaires.

Cette étude constitue une contribution majeure puisqu’il s’agit de la première tentative destinée à cerner ce problème de santé publique au Québec.

PREVENTING TEEN SUICIDE IN COLORADO

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PROBLEM UNDER STUDY: Colorado consistently ranks in the top ten nationwide in suicide, with a suicide rate approximately 40% higher than the national average. Suicide is the second leading cause of death for youth in Colorado in every category between ages 10-19. The overwhelming majority of completed suicides by youth were done so with a firearm. Of the close to 400 suicide-prevention programs reviewed, only 19 specifically addressed the issue of handguns. None of the programs reviewed had rigorous evaluations.

OBJECTIVES: The objective of Colorado Link–Youth Suicide Prevention Collaboration is to provide culturally diverse and appropriate means to prevent teen suicide in two of Denver’s
largest public high schools and at one homeless youth shelter. The collaboration is comprised of 6 culturally diverse organizations with experience working with youth, schools and mental health issues, each of whom contributes toward the strategy of education, screening and treatment for at-risk youth. Gun-violence prevention strategies are incorporated into the education component of the project.

**METHOD OR APPROACH:** The initial component of this project is educational; students, staff and parents are given educational information on suicide myths, prevalence of suicide, and strategies for assisting suicidal youth. A one-time, retrospective post-test instrument measures this component. Following the educational component for students, youth are invited to participate in a depression screening. They are screened using the Columbia Teen Screen. Those who demonstrate need are selected for treatment. Treatment begins with a thorough assessment, facilitated by DISC-IV. As these two instruments have not been tested for validity or reliability as pre-post measures, the Beck Depression Inventory, an instrument with well-documented reliability and validity, is also being used for assessment. Pro-bono and paid licensed mental health professionals provide treatment. Pre-post scores on the screening tools as well as through qualitative assessment and chart review measure changes in students. Due to the uniqueness of the population, the youth at the homeless shelter are not given the Teen Screen, but are using the DISC-IV and the Beck Depression Inventory.

**RESULTS:** Numerous unforeseen challenges have forced the evaluation of this project behind schedule. The initial goal of screening 50% of the 9th and 10th grade students of the two high schools put the anticipated sample size at between 1,500–2,000 youth. Recently enacted Colorado law requires parents provide active consent prior to screening. Of the approximately 2,600 forms sent to parents, only 68 were returned. In spring 2001, 54 of those students were screened and 13 enrolled in treatment. Results from these screenings and treatment, as well as all subsequent subjects, will be available by spring 2002. Thus far, it is believed two suicides in one high school were prevented; by spring 2002 it is expected this number will increase. By spring 2002, the results from the screenings and treatment at the homeless shelter will be available.

**CONCLUSION:** While the quantitative and qualitative data are not yet available, they will be by spring 2002. The presentation will highlight the challenges that are faced in evaluating this type of program: increasing barriers to conducting research in a school setting; issues regarding active parental consent; challenges faced when collaborating with numerous organizations with competing agendas; and trying to select appropriate screening and assessment tools that both meet acceptable evaluation protocol standards while also allowing maximum time for service delivery and minimizing data collection time. Challenges will be discussed in detail along with the solutions created.

**LIMITS:** The greatest limitation at this time is the difficulty in getting active parental consent, necessary prior to screening any youth. This requirement has forced a reduction of the expected sample size. The lack of a comparison group further compromises the ultimate conclusion.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:** This project is particularly unique because it combines education, screening and mental health treatment—including case management—in one program. In addition, the inclusion of the homeless youth provides an opportunity to understand risk factors in this population. The added component of gun education into
the curriculum is also unique. The results of this project are expected to further guide the direction of mental health services to high schools aged youth in a large urban area such as Denver.

TRAVELLERS – A SCHOOL-BASED SUPPORT GROUP HELPING YOUNG PEOPLE MANAGE CHANGE, LOSS AND TRANSITION

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PROBLEM UNDER STUDY: Adolescence is a time of change, loss and transition. Whilst these can be growth experiences, they can also be stressful and lead to emotional distress. Where young people are not sufficiently supported and coping skills are not fully developed, mental health problems, in particular anxiety and depression, may develop. Accompanying these can be suicidal ideation and attempts. Research evidence shows that depression in young people is on the increase and that suicide statistics among young people are high. There is thus a need to give increasing consideration to ways in which young people’s mental health can be promoted. Schools are in a unique position to identify young people experiencing distress, to offer support and to promote mental health. Group programs that provide psycho-education and offer support have been found to be effective with young people dealing with change.

METHOD OR APPROACH: “Travellers” is a pilot study exploring the potential of a school-based support group in developing young people’s coping skills and resources to manage change, loss and transition. The concept “travellers” expresses the idea that life is a journey that will involve change, loss and transition. Groups are offered to up to 10 young people in two schools over 8 sessions (with one follow-up session a month later). Sessions are interactive and cover topics such as self-esteem, identification and sharing of feelings and thoughts, active strategies, social support and meaning making. Sessions draw from narrative and cognitive behavioural approaches. This paper will discuss the programme’s rationale, format and structure, as well as findings of the pilot phase.

RESULTS: Travellers has been piloted in two schools, one urban and one rural, with considerable success. Statistically significant decreases in participant’s levels of distress were found (p=0.05). A number of participants also reported being able to access additional support and counselling as a result of travellers: “I go to the counsellor now and I talk to my form teacher and she listens and my mum does too. I didn’t tell anyone before.” “I would go to friends and family. I wouldn’t have done that before. I kept my troubles to myself.” Comments from school staff/counsellors/parents included: “I probably would have picked up some of the travellers participants eventually, but attending the group meant some students self-referred for counselling and one very distressed student was referred by the facilitators which enabled her to receive the help she needed much earlier.” “I was really concerned about how my son was settling. It was such a huge change, moving countries and a new school. Travellers have really helped him settle and feel more positive about himself and his life here.”
CONCLUSION: Many earlier intervention programmes aimed at improving young people's mental health have been developed internationally and in New Zealand. However few have been rigorously evaluated. The next phase of this program will involve randomization of students to either the programme or a comparison group. Outcomes will be measured using the Weinberger Distress Scale and the Adolescent Coping Scale (Short Form).

SUICIDE INTERVENTION TRAINING FOR SCHOOL PERSONNEL: A FOLLOW-UP STUDY

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PROBLEM UNDER STUDY: In British Columbia (BC), Canada, various non-academic professional development programs developed to address social and emotional issues are offered to school personnel on a regular basis. Safe schools, anti-bullying, substance abuse, and suicide prevention are just some of the topics offered at most school district sponsored Professional Development Days (BCTF, 1998). Little is known about the application of these programs when school personnel return to their respective classrooms: there is a paucity of follow-up research (Ottoson, 1995; 1997). This research addresses the problem of how learning is applied following the suicide-intervention professional development program, ASK ASSESS ACT.

OBJECTIVES: The objective of this research was to investigate, from the participants’ perspective, two questions:

1. What learning did they apply following the ASK ASSESS ACT program in the context of their school setting? and
2. What were the factors that facilitated or hindered this application of learning in the context of their school setting?

METHOD OR APPROACH: This qualitative research was conducted in both an urban and a rural school district in BC. School personnel from two 1998 training sessions were approached to participate in the research. Twenty-one schoolteachers, counsellors and youth care workers agreed to an interview that took place in their respective school districts between November 2000 and June 2001. The personal interviews consisted of 32 semi-structured questions that adapted four factors from Cervero’s (1984, 1985) framework and used to explore application of learning. The interviews were audiotaped, transcribed, input into the qualitative software program ATLAS and then analysed.

RESULTS: The majority of participants had an opportunity to use the suicide-risk assessment model they had learned during the training and some used it almost immediately upon returning to their workplace. Overall, most of the participants mentioned their increased feeling of confidence in dealing with a potentially suicidal student and were grateful for the suicide intervention tools from the program. Responses about their perceived support, from their administrator or district, in suicide intervention ranged from no support to extremely supportive. These responses were demonstrated with examples ranging from the school
district offered continued professional development and the administrator supported decisions, to no additional training offered and poor response from administrators and school districts. Most of the participants felt it was their responsibility to intervene with a potentially suicidal student and they did not falter in this belief. When questioned about their learning style, responses ranged from a visual learner, a “hands on” person, to listening and reading. All participants reported the program was relevant to their professional development.

CONCLUSION: The key component of the ASK ASSESS ACT Suicide Intervention Training Program is the risk assessment. It appears that the participants in this study learned this concept during the program and applied it following the program. The factors that seem to influence the application of learning are the participants’ increased confidence due to the suicide risk-assessment tool, sense of responsibility or duty, and relevance to their work. The administrator or school support factor seems to have little relevance on application of learning. It also became evident that most participants wanted and needed a refresher course. The program also appeared to meet the learning styles and professional development needs of school personnel.

LIMITS: These findings are limited to the program participants of the ASK ASSESS ACT Suicide Intervention Program and may not be applicable to other similar programs.

CONTRIBUTION OF THE PROJECT TO THE FIELD: This study is significant in that it contributes to the knowledge about application of learning and professional development in suicide intervention training. It further demonstrates that this one-day professional development program can train school personnel to recognize suicide-warning signs, assess the risk and seek help, when necessary, for potentially suicidal students. Hopefully the knowledge gained from this research will influence programs, policy and practice in school systems.

ASSOCIATION BETWEEN SUICIDAL IDEATION/ATTEMPTS, RISK-TAKING BEHAVIOURS, AND PSYCHOLOGICAL MALADJUSTMENT IN HOMELESS ADOLESCENT MALES

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PROBLEM UNDER STUDY: Homeless youth are at risk for suicide, substance abuse, injury due to sexual/physical assault, mental and physical illness, and criminal activity. Studies involving homeless youth report rates of prior suicide attempts ranging from 25-53%, compared to rates of 3-13% among youth in the general population. Engagement in substance use, criminal acts, delinquency, and exposure to violence and victimization is widespread among homeless youth, with suicidal history being positively associated with substance abuse. Studies employing DSM-III criteria indicate that between 43-50% of homeless youth met criteria for substance abuse disorders. Little is known about the association between homeless adolescents’ suicide, risk-taking behaviours, psychological maladjustment and coping style as related to the field of injury prevention.
OBJECTIVES: This study is a preliminary step in better understanding the prevalence of suicide, risk-taking behaviours, and mental health problems among homeless youth. Better understanding of the relationship between these constructs and homeless youths' coping style(s) could lead to the development of improved suicide prevention efforts for these high-risk youth.

METHOD OR APPROACH: Data was collected over a 12-month period, through a semi-structured interview and standardized measures, from two groups of male adolescents (16-19 years). The case-group consisted of homeless youth accessing an emergency shelter in Ottawa, ON. The comparison group consisted of non-homeless youth accessing local drop-in centres (n=70).

RESULTS: Group responses were compared using t-tests and chi-square procedures. Homeless youth reported a higher incidence of suicidal ideation (43%) compared to non-homeless youth (33%); 21% of homeless youth reported 1-3 prior suicide attempts relative to 4% of non-homeless youth. Significantly more homeless (39%) than non-homeless youth (28%) presented with depressive symptoms in the clinical range; 18% and 26% of homeless youth reported internalizing and externalizing behaviour problem scores in the clinical range, respectively. Relative to non-homeless youth, homeless youth reported a higher prevalence of legal problems and substance use; 25% reported using alcohol a few times per week, while 34% reported daily drug use. Regression analyses indicated that disengagement coping was a significant predictor of suicidal ideation, number of prior suicide attempts, and depressive symptomatology in homeless youth; disengagement coping and low self-worth were both predictors of internalizing and externalizing behaviour problems.

CONCLUSION: Results of this study confirmed that homeless youth are a vulnerable group of young people who are at high risk for poor psychosocial outcomes, such as suicide, substance abuse, depression, behaviour problems, cigarette use, legal problems, academic difficulties, and family dysfunction. The prevalence of these problems indicates that clinical, outreach, and research interventions must address coping style, as well as targeting specific problems such as suicide, substance abuse, violence, and involvement in criminal activity. This study's findings suggest that homeless youth would benefit from youth-specific services and intervention-programs that are designed to decrease the incidence of risk-taking behaviours, reduce the prevalence of psychosocial difficulties, and foster adaptive coping patterns.

LIMITS: As data were cross-sectional in nature, causal relationships between suicide, risk-taking behaviours, mental health issues, and coping style in homeless youth cannot be inferred. Given the transient nature of youth, this study was unable to follow the youth longitudinally, and thus not able to discern if there were changes in youths' suicide throughout the duration of their homeless period. As the sample consisted of male shelter youth only, findings may not be representative of those homeless youth who choose not to access youth service agencies or shelters, nor be generalizable to homeless female youth. Given that all the measures used in the study were based on self-reports by youth, they were not subjected to cross-validation.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The dissemination of the results of this study to shelter staff, outreach workers, and youth-services agencies should provide valuable information regarding the need for services that are youth-friendly in nature. Knowledge of one's coping style allows one to make inferences about the selection and effectiveness of one's
coping strategies. Consequently, this study’s findings reflect the merit of considering psychological processes or cognitive structures such as coping style, when developing intervention programs to reduce the risk of suicide and risk-taking behaviours in homeless youth.

**PREDICTORS OF SUICIDAL BEHAVIOURS AMONG DEPRESSED TEENAGE STUDENTS IN NEW MEXICO**

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**PROBLEM UNDER STUDY:** Suicide attempts among adolescents and teenagers.

**OBJECTIVES:** To evaluate risk and protective factors of suicide attempts among students who report depression in grades 5-12.

**METHOD OR APPROACH:** Data were collected using the survey instrument: Search Institute Profiles of Student Life, a self-administered survey administered to all New Mexico students in grades 5-12 in 1999. Students who reported experiencing depression in the preceding month and who had a history of one or more suicide attempts were compared to students who experienced depression but had no history of suicide attempts. Predictive factors were grouped into subcategories: Demographics; values; family/home environment; school; violence experienced against self; violence toward others; risk behaviours—alcohol; risk behaviours—drugs; risk behaviours—sexual activity. Data elements were examined individually and within subcategories.

**RESULTS:** 10,814 students in New Mexico completed the survey. Of these, 3,562 (32.9%) students reported experiencing depression some, most, or all of the preceding month. Students reporting depression were nearly five times (OR=4.7 (95% CI=4.2, 5.2)) as likely as other students to report a history of one or more suicide attempts. Among students reporting depression, 35.7% had a history of one or more suicide attempts: 19.4% one attempt; 6.9% two; and 9.3% three or more attempts. Students were grouped as follows: no history of suicide attempts; history of one or more suicide attempts. Factors related to a history of suicide attempt were found within all subcategories except school. Violence (toward self, and toward others) and risk behaviours (alcohol, drugs, and sexual activity) were the strongest predictors of a history of suicide attempts. Of the individual variables, those associated with odds ratios (ORs) of 2.5 or greater were, in order of effect size: feeling that life has no purpose (OR=4.6 (95% CI=3.8, 5.5)), amphetamine use in the previous year (OR=3.1 (2.5, 3.8)), coercively using a weapon against another (OR=2.9 (2.2, 3.8)), use of inhalants in the preceding year (OR=2.8 (2.4, 3.4)), sustaining a violence-related injury in the preceding two years (OR=2.6 (2.3, 3.0)). Protective factors with the same effect size included receiving help and support from parents (OR=.34 (.27,.43)) and feeling important and useful in the family (OR=.38 (.31,.45)). For the purposes of designing secondary prevention interventions, two other values were examined:

1. Prevalence of each risk/protective factor; and
2. Prevalence of suicide attempts among students reporting the risk factor (or lack of protective factor).
A subset of risk factors that were reported by 50% or more students, and were also associated with an odds ratio of 2.0 or greater, included: having one or more friends who use drugs (76.5% of students; OR=2.0), a value system supporting drinking alcohol as a teenager (64.1%; OR=2.1), feeling that life has no purpose (63.6%; OR=4.6); having been injured by violence in the preceding two years (54.7%; OR=2.6); and, having a history of sexual activity (54.4%; OR=2.1). Risk factors associated with a 50% or greater prevalence of suicide attempts among students reporting the risk factor included: coercive weapon use (among students reporting this behaviour, 59.7% had a history of suicide attempts), use of amphetamines (59.3%), inhalants (55.7%), or cocaine (54.4%) in the previous year (59.3%), not receiving help/support from parents (57.1%), a lack of clear family rules concerning behaviour (51.5%), having seriously injured another person in the previous year (51.2%), and not feeling important and useful in the family (51.0%). Each of these factors was also associated with an odds ratio of 2.0 or greater. Among risk factors associated with a 50% or greater rate of suicide attempts, the most prevalent were having seriously injured another person (32.2%) and amphetamine use (22.5%). Prevalent protective factors include receiving help and support from parents (87.6%), having clear family rules concerning behaviour (82.3%), and feeling important and useful in the family (73.7%).

CONCLUSION: These data indicate several areas of potential intervention to prevent suicide behaviours among students who report depression. Initial efforts should focus on risk and protective factors that are highly prevalent and/or associated with high rates of suicide attempts. High-risk students should be targeted for counselling and other preventive interventions.

LIMITS: The data were not collected specifically to address the relationships evaluated; data concerning the timing of suicide attempts were not available; individuals who completed a suicide attempt were not in the dataset.

CONTRIBUTION OF THE PROJECT TO THE FIELD: These results can be used to identify individuals at risk of attempting suicide, and also indicate areas of potential intervention among depressed students.

PSYCHO-SOCIAL DETERMINANTS FOR SUICIDE AMONG SCHOOLCHILDREN IN INDIA

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PROBLEM UNDER STUDY: The alarming increase in the number of high-achiever school children who attempt/complete suicide in India.

OBJECTIVES:

1. To determine the psycho-social causes that predispose the above population to attempt suicide;

2. To formulate strategies which would prevent such occurrences.
METHOD OR APPROACH: Data from Hospital records of 17,000 bedded University hospitals, which registers patients covering a drainage area of 600,000 population. House visit by social worker using a preformatted customized questionnaire. Analysis at the Clinical Epidemiology Department of the above Institution.

RESULTS: The study is underway and results are presently unavailable.

CONTRIBUTION OF THE PROJECT TO THE FIELD: It is envisaged that the results would be beneficial to the public as well as school authorities to review determinants that contribute towards suicide among school children and to devise strategies to minimise such occurrences.

LA PRÉVENTION DU SUICIDE CHEZ LES JEUNES DE LA RUE

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PROBLÉMATIQUE : Les taux de suicide, de tentatives de suicide et d'idéations suicidaires sont très élevés au Québec notamment chez les adolescent(e)s et les jeunes adultes. Les jeunes de la rue représentent une population particulièrement à risque. Les auteurs qui se sont intéressés à la question du suicide y ont associé divers facteurs. Parmi ces facteurs, nous avons retenu le soi. Celui-ci s’avère d’une grande importance à l’adolescence, il est considéré vital pour comprendre le comportement et, par définition, le suicide signifie la mort de soi-même. Pourtant, aucune recherche, à notre connaissance, ne s’est penchée sur le parcours du soi des jeunes qui ont accompli une tentative de suicide.

OBJECTIFS : L’objectif général de la recherche était de générer une théorie substantive (locale) des trajectoires du concept de soi de jeunes qui avaient tenté de se suicider, en partant de leur vécu avant, pendant et après la tentative. Les objectifs spécifiques étaient d’identifier les caractéristiques du concept de soi du jeune à divers moments le long de la trajectoire, de décrire les changements qui survenaient au niveau du soi ou de ses dimensions (s’il y avait lieu) et de déterminer les conditions qui semblaient avoir un impact sur son concept de soi.

MÉTHODE OU APPROCHE : Au total, 11 jeunes « de la rue », âgés entre 17 et 25 ans et qui avaient tenté de s’enlever de la vie au cours des deux années précédentes, ont participé à cette recherche constructiviste. Les données ont été recueillies par des entrevues individuelles (entrevues semi-structurées suivies d’entretiens non directs) et des documents personnels. L’analyse des données s’est effectuée à l’aide de la “grounded theory” (théorie ancrée ou enracinée), une méthode d’analyse comparative qui vise la découverte de perspectives théoriques à partir du monde concret.

RÉSULTATS : L’étude démontre que, d’avant à après la tentative de suicide, le soi peut rester semblable, empirer ou s’améliorer. Huit facteurs d’influence, qui se trouvent dans l’interaction jeune/environnement et que nous avons réunis sous le vocable « soi interactif », ont émergé :

1. La gestion des émotions;
2. La perception du soi;
3 La relation au corps;
4 La vision et la résolution des problèmes;
5 Les relations interpersonnelles;
6 Le rapport à la société et la perception de celle-ci;
7 La relation aux objets;
8 La dimension spirituelle.

Lorsque ces conditions sont “positives”, elles agissent comme facteurs de protection du comportement suicidaire; elles peuvent mener au goût de vivre. Nous avons appelé cet ensemble le cercle “vertueux”. Quand ces conditions sont “négatives”, au contraire, elles agissent comme facteurs de risque; elles peuvent mener à la tentative de suicide. Nous avons nommé cet assemblage le cercle “vicieux”. La grande majorité des conditions recèlent un pouvoir de changement. Plusieurs trajectoires sont possibles.

CONCLUSION : Nos observations appuient le fait que le suicide soit un phénomène complexe déterminé par l’interaction de plusieurs conditions. Les relations dynamiques entre les éléments variés représentent autant d’angles qui permettent d’aborder le phénomène du suicide.

LIMITES : Les principales limites de la recherche sont les suivantes: seul le point de vue des jeunes a été considéré; la collecte des données a eu lieu après la tentative; le nombre de participants était peu élevé (11) ainsi que le nombre d’entrevues auprès de chacun d’eux et le nombre de documents étudiés (total : 25 entrevues et 5 documents); la durée de l’étude a été courte (1 1/2 an); la recherche s’est attardée à une spécificité géographique (Montréal); une généralisation des résultats n’a pas été recherchée, seule la transférabilité devient possible.


DEVELOPING A COMPREHENSIVE COMMUNITY WIDE PLAN TO ADDRESS YOUTH SUICIDE

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PROBLEM UNDER STUDY: With the greater attention being paid to the need for communities to comprehensively address suicide, a model is needed to guide the development of community plans that integrate universal needs with particular needs and services. One size does not fit all, but mechanisms to create an appropriate, acceptable plan have been lacking.
OBJECTIVES:

1. Participants will learn how to use a guided strategy to develop a community-specific plan to address youth suicide;
2. Participants will learn how to facilitate stakeholder buy-in for a comprehensive plan to address youth suicide.

METHOD OR APPROACH: A template was developed by experts in emergency medicine, adolescent medicine, child psychiatry, injury prevention, and social work that addresses the continuum of services needed to meet 100% of the needs related to youth suicide. All needed prevention, intervention, crisis intervention, and postvention (closure & healing) services were identified based on current research. This template was overlaid on the services available in a mid-sized Ohio county in order to identify gaps. This information, as well as an overview of the issue and local, state, and national data were provided to community stakeholders who had responded to a request that they participate in an all-day planning session called to develop a community-wide plan. Small groups were led by trained facilitators to identify and prioritize unmet needs and to develop specific strategies to meet these needs.

RESULTS: A full-day meeting with representatives from more than 40 organizations, as well as community representatives and parents, resulted in a comprehensive community plan to address youth suicide in the county. The full spectrum of needed services was identified, and specific strategies to meet the unmet needs developed. The plan, issued as a report to the community, will be used to guide program development, public policy, educational strategies, emergency response, and public awareness. The report will also serve as support for securing the resources needed to implement the planned strategies.

CONCLUSION: A framework for identifying available services versus needed services is a useful tool in developing a comprehensive plan for addressing youth suicide. Ensuring participation of all facets of the community in the development of such a plan enhances the likelihood that the plan will be accepted as a guideline for program development. Both of these make full use of the public health model of problem identification and planning.

LIMITS:

1. Neither the template nor the model have been fully tested/evaluated;
2. There is uncertainty regarding the generalizability of the model to non-Western cultures

CONTRIBUTION OF THE PROJECT TO THE FIELD: The project provides initial guidelines for others to use in addressing youth suicide in their communities with the flexibility to meet the specifics of that community.
Prévention du suicide dans le corps policier

Suicide Prevention in the Police Force

LA PRÉVENTION DU SUICIDE AUPRÈS DES POLICIERS ET POLICIÈRES DU SERVICE DE POLICE DE LA COMMUNAUTÉ URBaine DE MONTRÉAL (SPCum) : UNE APPROCHE MULTIVOLETS NOVATRICE EN PRÉVENTION DU SUICIDE

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PROBLÉMATIQUE : Au Canada comme ailleurs le métier policier est considéré comme exigeant. Dans cette profession, en particulier, il a été démontré que l’on ne peut prendre à la légère les pertes de vie dues au suicide. À cet égard, Charbonneau (1995) dans une étude effectuée auprès des corps policiers québécois a démontré que sur une période de six ans de 1986-1992, il y a eu plus de policiers actifs qui se sont suicidés (n=19), que de policiers décédés en devoir (n=12). Le Service de police de la Communauté urbaine de Montréal de concert avec la Fraternité des policiers et policières de Montréal a relevé le défi de mettre sur pied le premier programme canadien de prévention du suicide destiné à une population policière. Désigné sous l’acronyme P.A.R.I.S. pour prévention par l’action du risque et de l’intention suicidaire, ce programme est en vigueur depuis 1997 au Service de police de la Communauté urbaine de Montréal (SPCum).

OBJECTIFS : Le programme P.A.R.I.S. vise à sensibiliser les 4,157 policiers et policières qui constituent l’effectif policier du SPCum afin que ceux-ci se sentent concernés par la problématique du suicide et soient mieux outillés pour déceler et intervenir auprès d’un collègue de travail en difficulté.

MÉTHODE OU APPROCHE : L’approche privilégiée dans le cadre du programme P.A.R.I.S. est une approche multivolets qui regroupe des stratégies de prévention complémentaires. Le programme comporte à ce titre quatre volets :

1. Campagne de promotion du programme : Ce volet comprend la médiatisation et la promotion du programme de prévention au sein du Service de police par la parution d’articles dans les journaux internes, la production d’affiches promotionnelles et de dépliants d’information. Le but visé est d’officialiser les activités de prévention du programme en leur donnant une visibilité étendue.

2. Tournée des unités : Dans le cadre de ce volet, la démarche consiste à visiter chaque équipe de travail dans leur milieu pour une rencontre d’une heure trente minutes. Ces rencontres prennent la forme d’atelier de discussion et d’échange entre un psychologue et le personnel policier et visent à favoriser une ouverture
envers la prévention du suicide et à développer un sentiment de compétence d’équipe pour intervenir auprès d’un collègue en difficulté.

3. Formation des gestionnaires et des représentants syndicaux : La démarche consiste à former tous les gestionnaires d’équipe, ainsi que les délégués syndicaux à l’intervention préventive auprès du policier ou de la policière en difficulté. En formant les intervenants hiérarchiques et les intervenants syndicaux, l’objectif est d’assurer une complémentarité des rôles des différents intervenants dans le milieu de travail qui entourent le policier ou la policière qui présente un risque de suicide.

4. Policier-ressource : Le volet Policier-ressource regroupe des policiers bénévoles formés à offrir une aide ponctuelle d’écoute et de référence aux policiers et policières qui éprouvent des difficultés. L’objectif est d’offrir un soutien téléphonique aux personnes qui ont besoin d’aide avant qu’elles ne deviennent en crise. Les policiers ressources sont regroupés à l’intérieur de quatre modules s’adressant à des problématiques spécifiques telles que :
   a. Les événements majeurs survenus dans le cadre du travail ;
   b. Les problématiques associées à l’alcool et autres dépendances ;
   c. Les difficultés liées à la vie de couple et familiale ; et
   d. La difficulté à être policier et policière gai.

RÉSULTATS : Les conséquences de la mise en place des différents volets du programme de prévention P.A.R.I.S. sont jusqu’à maintenant très prometteuses. Depuis l’implantation du programme de prévention le nombre de suicide chez les policiers et policières du Service de police de la Communauté urbaine de Montréal a considérablement diminué.

CONCLUSION : L’expérience de la mise en place du programme P.A.R.I.S. est une première pour un grand corps policier et ouvre la porte à d’autres initiatives de prévention en démontrant la faisabilité d’implanter un programme préventif du suicide dans une organisation policière.

LIMITES : Les stratégies de prévention et les méthodes d’intervention proposées dans le cadre du programme P.A.R.I.S. ont été spécifiquement élaborées pour une population policière. Il n’est pas acquis que ces stratégies seraient transférables à d’autres milieux organisationnels sans en adapter le contenu et les objectifs.

CONTRIBUTION DU PROJET AU DOMAINE : Le programme P.A.R.I.S. apporte une contribution importante aux efforts d’intervention en vue de prévenir le suicide.
RÉSULTAT DE L’ÉVALUATION DU PROGRAMME
DE PRÉVENTION DU SUICIDE EN MILIEU POLICIER
«ENSEMBLE POUR LA VIE»

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PROBLÉMATIQUE : Le programme de prévention du suicide dans les corps policiers de la Communauté urbaine de Montréal (SPCUM) avait comme objectif de prévenir le suicide des policiers par le biais d’une série d’activités visant la sensibilisation de l’ensemble des membres du service de police, une formation des employés au dépistage des personnes à risque de suicide, le développement des ressources spécifiques pour les problèmes vécus par les policiers, particulièrement un service d’aide téléphonique « Policiers-ressource » et un programme de sensibilisation générale sur l’aide disponible aux policiers quant au suicide.

OBJECTIFS : L’objectif de l’évaluation était de s’assurer de l’implantation du programme et de ses différents volets tel que prévu et d’identifier les facteurs qui ont facilité ou causé des difficultés d’implantation. Dans un deuxième temps, l’évaluation visait à connaître les effets à court et à moyen termes de chacune des composantes du programme.

MÉTHODE OU APPROCHE : Chacun des volets du programme a fait l’objet d’une cueillette d’informations au niveau de tout le personnel du Service de police, y compris les administrateurs et cadres, les superviseurs, les représentants syndicaux, les coordonnateurs et les formateurs qui ont participé à l’implantation du programme. Les personnes qui ont reçu une formation spécifique ont rempli des questionnaires avant et après la formation afin d’évaluer les apprentissages et leurs perceptions des activités. Les données sur la participation et les activités étaient anonymes. Les superviseurs ayant suivi une formation deux ans plus tôt, en plus d’avoir répondu aux questionnaires avant et après leur formation, ont également participé à une entrevue afin de savoir s’ils ont utilisé les informations de la formation dans leurs interventions subéquentes avec des personnes potentiellement suicidaires. Les données qualitatives et quantitatives ont fait l’objet d’analyses.

CONCLUSION : Les conclusions dépendent évidemment des résultats. Cependant, les résultats préliminaires indiquent qu’il s’agit d’un programme très prometteur qui a eu énormément d’importance dans les corps policiers pour l’ensemble des membres.

LIMITES : La limite principale est le fait qu’il soit nécessaire de faire un suivi plus à long terme avant de pouvoir déterminer si, malgré les multiples effets à court terme, le programme a réussi à prévenir le suicide dans les corps policiers de Montréal. Le problème qui se pose également, comme dans toute recherche sur le suicide dans un milieu spécifique, est l’impossibilité de contrôler les autres variables pouvant influencer les taux de suicide.

CONTRIBUTION DU PROJET AU DOMAINE : Il est très rare d’avoir des projets de prévention du suicide dans les milieux traditionnellement fermés tel celui des corps policiers. Il s’agit d’un projet novateur ayant duré longtemps et touché à l’ensemble du personnel de la Police de Montréal. L’évaluation détaillée de ces différents volets contribue non seulement à notre
compréhension de l’implantation des effets de ce programme mais peut servir comme modèle sur la façon dont on peut évaluer les programmes de prévention dans les milieux spécifiques.

ÉVALUATION D’UN PROGRAMME DE PRÉVENTION DU SUICIDE EN MILIEU POLICIER

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OBJECTIFS :
1. Expliquer le plan d’évaluation du programme de prévention du suicide « Ensemble pour la vie »;
2. Énoncer les questions d’évaluation et les méthodes d’évaluation du programme;
3. Décrire les activités réalisées dans le cadre de l’évaluation du programme; et
4. Exposer les difficultés rencontrées lors de l’évaluation et effectuer des recommandations.

1. La campagne de sensibilisation au suicide (Tournée des unités);
2. La formation de dépistage et d’intervention auprès de l’employé en difficulté diffusée aux gestionnaires;
3. Le service d’écoute téléphonique « Policier-ressource »; et
4. La campagne de promotion du programme « Ensemble pour la vie ».

RÉSULTATS : Le plan d’évaluation du programme « Ensemble pour la vie » a été construit à partir des questions et des intérêts des initiateurs du programme. Les activités d’évaluation prévues dans le plan couvrent l’ensemble des activités du programme de prévention du suicide et les populations ciblées par ces activités. L’évaluation a nécessité l’utilisation de plusieurs techniques de cueillette de données (qualitatives et quantitatives) afin de répondre aux
CONCLUSION : L’évaluation du programme de prévention du suicide « Ensemble pour la vie » a permis d’identifier que le programme a été implanté comme prévu. Aussi, les résultats (qui font l’objet d’une présentation complémentaire par Brian Mishara) de l’évaluation ont permis de connaître les effets à court terme et ont fourni quelques informations sur les effets à moyen terme.

LIMITES : Nous ne pouvons obtenir des informations sur les problèmes vécus par les policiers et policières qui n’ont pas utilisé les services offerts dans le cadre du programme. Aussi, il serait important d’évaluer les effets à long terme du programme.

CONTRIBUTION DU PROJET AU DOMAINE : Il s’agit d’un des rares programmes de prévention du suicide dans un milieu de travail qui a été évalué en profondeur.

LE VIDÉO : OUTIL PÉDAGOGIQUE DE MODELING EN PRÉVENTION DU SUICIDE

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Présentation d’un vidéo d’une durée de 24 minutes produit par la Section formation du Service de police de la Communauté urbaine de Montréal pour le programme de prévention du suicide du SPCUM.

Intitulé « L’intervention préventive dans la gestion d’un employé en difficulté », ce vidéo constitue un outil pédagogique de « modeling » dans le cadre d’une formation diffusée à tous les superviseurs du SPCUM. Le vidéo illustre l’intervention d’un superviseur auprès d’un agent qui traverse une période difficile et présente un risque suicidaire.

Le déroulement de cette intervention met en lumière les attitudes et habiletés du gestionnaire pour chacun des aspects suivants :

a. L’identification des intentions suicidaires;

b. La référence à une ressource professionnelle;

c. Le retrait de l’arme du policier;

d. L’établissement d’un réseau de support.
Prévention du suicide dans le métro
Suicide Prevention in the Subway

LE SUICIDE DANS LES TRANSPORTS URBAINS :
LA PRÉVENTION DANS LE DOMAINE DE LA RATP

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PROBLÉMATIQUE : Au vu du nombre d’accidents voyageurs (tentatives de suicides ou suicides) sur les réseaux ferrés de la RATP, qui n’ont jusqu’alors jamais été analysés, la RATP a décidé de travailler sur le thème de la prévention du suicide des voyageurs, en partenariat avec une association reconnue sur la place publique, l’Union Nationale pour la Prévention du Suicide. De plus, il est à préciser que le gouvernement a lancé un plan d’actions nationales de prévention du suicide par les armes, les médicaments et les moyens létaux. Ce projet entre donc naturellement dans ces priorités.

OBJECTIFS : Le groupe de travail d’une dizaine de personnalités a été constitué pour analyser, dans un premier temps, la situation à la RATP dans l’objectif :
1. D’identifier les circonstances des suicides (lieux, heures, stations…) ;
2. De proposer des actions de prévention des suicides à l’adresse des voyageurs, du personnel ;
3. De proposer des actions correctives pour diminuer le risque létal.

MÉTHODE OU APPROCHE : Pour atteindre ces objectifs, le groupe de travail s’est fixé trois axes de travail, à savoir :
1. L’analyse exhaustive des dossiers d’accidents de voyageurs ;
2. La recherche documentaire portant sur la prévention du suicide (recherche, expérience vécue) ;
3. L’évaluation des conséquences économiques.

RÉSULTATS : Tous les dossiers d’accidents, sur les dix dernières années, conservés par le département juridique de la RATP ont fait l’objet d’une analyse exhaustive.

1. Cette analyse a porté sur environ 1500 dossiers dont les principaux enseignements à tirer sont les suivants :
   • Les suicides et les tentatives sont dispersés sur un grand nombre de stations : 275 dont quatre seulement dépassent la dizaine de cas en 5 ans ;
   • L’issue n’est fatale que dans un cas sur quatre (19% pour le métro, et 42% pour le réseau express régional) ;
   • La fluctuation saisonnière n’est pas marquée ;
   • La variation de fréquence en cours de semaine n’est pas très marquée ;
   • Dans la journée, la fréquence est un peu plus grande en fin d’après-midi, à l’heure de forte affluence ;
• Les suicidants sont dans la proportion de 2 femmes pour 3 hommes, mais la proportion des décès est la même pour les deux catégories ;
• Les hommes sont en général plus âgés que les femmes ;
• La tranche d’âge des suicidants les plus nombreux se situe entre 30 et 44 ans ;
• Se jeter sur la voie à l’entrée du quai est le geste le plus fréquent et le plus meurtrier ;
• La durée d’interruption du service varie de moins de 15 minutes à plus de 2 heures, selon les cas ; elle est de 45 minutes à 2 heures en cas de décès ;
Les données recueillies actuellement sont insuffisantes pour faire des études d’accidentologie et d’épidémiologie. Une des recommandations du groupe de travail sera à l’avenir de collecter des données plus complètes et plus structurées.

2. Concernant la recherche documentaire, le constat est que, à part quelques documents relatifs aux métros de Montréal et de Vienne, il semble exister peu d’études spécifiques sur le suicide et les tentatives de suicide dans les métros. Un projet d’étude a toutefois été mené en Angleterre sur les réseaux ferroviaires de la région est ; la recherche se poursuit.

3. Concernant l’évaluation des conséquences économiques, le coût pour la collectivité calculé à partir du temps perdu par le voyageur, du fait des tentatives de suicide et des suicides est important. En effet, les évaluations faites sur une dizaine de cas évoluent entre 50 000 et 125 000 Euros. Pour l’ensemble des suicides et des tentatives d’une année, le coût pour la collectivité serait de l’ordre d’une dizaine de millions d’Euros.

CONCLUSION : A partir de la première phase d’analyse, la RATP et l’UNPS poursuivront par la recherche des réponses adaptées à la problématique du suicide dans le métro et sur le réseau express régional. Les pistes à étudier sont les suivantes : – l’information et la prévention par une communication adaptée auprès des voyageurs – la formation du personnel de la RATP au contact du public – l’aménagement de l’avant des trains et des stations pour réduire le risque létal – la mise en place d’une organisation permettant de prendre en charge les suicidants ayant échappé à la mort, et de collecter des données épidémiologiques et accidentologiques plus complètes et plus précises – le renforcement des services existants, la mise en place, avec le concours des associations de bénévoles, de structures d’accueil et d’écoute téléphonique pour les personnes en situation de mal être, avant qu’elles ne soient suicidantes.

CONTRIBUTION DU PROJET AU DOMAINE : Le projet entre totalement dans le domaine de la prévention du suicide.

PRÉVENTION DU SUICIDE,
UNE STRATÉGIE INTÉGRÉE

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Chaque année, des personnes tentent de se suicider dans le métro. Pour la STCUM, chaque tentative de suicide est un drame : pour les personnes qui attencent à leur vie et pour leurs
proches; pour la clientèle témoin de gestes aussi violents; pour nos employés dont un grand nombre doivent surmonter les traumatismes qui en découlent.

Afin de réduire l’ampleur du phénomène, la STCUM se dotait d’un comité sur la prévention du suicide en 1999 afin de mettre en place un plan d’action :

1. Sensibiliser les employés à la prévention : Le comité, en collaboration avec Suicide-action Montréal, a consacré ses premiers efforts à sensibiliser l’ensemble des employés de la STCUM à la prévention du suicide dans le métro–c’est à dire à signaler, par le biais des téléphones d’urgence sur les quais de métro, les personnes à risque.
   a) Démystifier la question du suicide (premier trimestre 2000) : Les entrevues réalisées auprès des employés du métro révélaient une surestimation du nombre de tentatives, des idées préconçues face à certaines stations supposées plus à risque, aux heures, etc. La communication s’attardait donc à brosser le portrait des tentatives de suicide dans le métro afin de changer les perceptions des employés.
   b) Sensibiliser à la prévention (automne 2000) : Cette étape, située au cœur des efforts de communication, visait à sensibiliser les employés à l’importance de la prévention du suicide et à défacer les préjugés face à la prévention–par exemple, on ne fait que déplacer le problème, etc. D’autre part, il fallait informer les employés des caractéristiques d’une personne suicidaire et leur indiquer la démarche à suivre lorsque l’employé a repéré une telle personne.
   c) Faire connaître les résultats (premier trimestre 2001) : Destinée à l’ensemble de la STCUM, la publication des résultats avait pour but de souligner l’effet réel des actes de prévention, suivre le nombre de tentatives de suicide et de reconnaître les gestes des employés dans ce dossier.
   d) Intégrer la prévention dans les opérations quotidiennes (en continu) : Les agents de surveillance ont développé un projet pilote de surveillance par caméra afin de compléter par surveillance électronique la surveillance des employés.

2. Sensibiliser la clientèle à la prévention du suicide : C’est vers la clientèle que le comité va se tourner pour faire appel à sa vigilance.
   a) Faire connaître le programme Assistance (en continu depuis juin 2001) : Déjà un premier geste a été posé en rappelant aux clients les règles d’utilisation du téléphone rouge dans la niche Assistance–appellation regroupant tous les équipements de sécurité sur les quais ou dans les voitures de métro. C’est par ce moyen de communication que se font les signalements.
   b) Faire appel à la vigilance des clients: En 2002, la STCUM prévoit faire appel aux clients pour signaler les personnes suicidaires. La campagne d’affichage est en préparation.
   c) Les résultats: En 2000, 354 employés ont signalé une personne qui semblait en détresse dans l’une ou l’autre des stations. Parmi ces signalements, 179 ont mené à une intervention de la part des agents de surveillance de la STCUM. Il n’y avait jamais eu dans les statistiques colligées par la STCUM de suivi fait sur le nombre d’actes de prévention réalisés par les employés.

Cependant, la revue au cas par cas démontre qu’en 1999, il y a en a eu 104. Il y a donc eu une hausse lorsqu’on compare au 179 de l’année 2000. Pour la même période, les tentatives de
PRÉVENTION DU SUICIDE

CONCLUSION : Au moment du congrès, les premiers efforts pour sensibiliser les clients à la prévention du suicide auront porté fruit. Cependant, il restera encore du travail à faire au niveau de la prise en charge des personnes en crise par les organismes appropriés. En effet, les statistiques obtenues en 1996 dénotaient une présence importante de personnes ayant des antécédents psychiatriques. Comment s’assurer d’avoir des bonnes données à ce sujet et que faire pour réduire la présence de ces personnes dans nos statistiques de suicide? La discussion est ouverte et les possibilités de collaboration sont les bienvenues.

SUICIDE PREVENTION IN TRANSIT SYSTEMS

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PROBLEM UNDER STUDY: Suicide by train presents substantial problems for the operators of transit systems worldwide. In addition to the loss of life, major delays in transit service result and overcrowding on platforms presents safety risks to patrons trapped by the delay.

OBJECTIVES: Provide a review of best practices for suicide prevention among transit properties.

METHOD OR APPROACH: The Toronto Transit Commission has pursued an active strategy for suicide prevention since the early 1970’s. During this time the annual rate of completed and attempted suicides has steadily declined. This paper will characterize the patterns of rail suicide in Toronto and outline the elements of our prevention strategy. We have used a three-prong approach.

RESULTS: Few patterns of time or station location are stable predictors of suicide attempt rates. One important fact that is stable in all transit companies is that approximately half of train suicide attempts are non-fatal. The first strategic element is to control the flow of information on suicide incidents to the degree possible. This has involved agreements with local media, police and the coroner. We have also developed strong relationships with local community and medical groups who are active in suicide prevention. The second element has been the development of well-defined procedures and training for staff. Special constables have extensive training in mental health intervention and staff in many types of positions intervenes with patrons who appear to be in distress. Finally, we have instituted engineering approaches to reduce risk. These include emergency power cut switches available to the public on all platforms. New designs provide for a safe refuge area in each station. The TTC has recently conducted a worldwide survey of transit properties to establish other means of suicide prevention. The results of this survey, which has not yet been compiled, will also be presented.

CONCLUSION: Transit operators can reduce the incidence of train suicide by adopting well-established elements of a deliberate strategy.
LIMITS: The prevalence of train suicide varies very significantly between cities. The type of technology also appears to be an important factor. Above grade trains attract fewer victims than subways.

CONTRIBUTION OF THE PROJECT TO THE FIELD: Provides a framework for a suicide prevention strategy that can be applied in other transit properties.

Stratégies nationales et régionales
National and Regional Strategies

THE EFFECTIVENESS OF TELEPHONE INTERVENTIONS IN SUICIDE PREVENTION CENTRES: CHALLENGES FOR VOLUNTARY ORGANIZATIONS, RESEARCHERS AND PUBLIC POLICY

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PROBLEM UNDER STUDY: Each day suicidal callers throughout the world contact community-based suicide prevention and intervention centres for help. Despite the proliferation of the centres and their general community acceptance, there has been little systematic research on the nature of telephone interventions by volunteers and their effectiveness.

OBJECTIVES: This communication presents a critical review of research on the effectiveness of telephone interventions by suicide prevention centres and similar voluntary organizations as well as the results of an empirical investigation of the short-term effects of 617 calls by suicidal individuals to two suicide prevention centres in Quebec, Canada.

METHOD OR APPROACH: The empirical investigation involved unobtrusively listening to calls by suicidal persons and categorizing the 66,953 responses by the 110 volunteer helpers according to a reliable 20-category checklist.

RESULTS: On the basis of our critical examination of research on the effectiveness of telephone interventions, we highlight methodological issues in relating changes in population suicide rates to activities by telephone-based suicide prevention organizations. Our review suggests that there are instances where the presence of telephone intervention organisations may have had an effect on suicide rates among the sub-group of the population that has characteristics similar to callers to the centre. In our empirical investigation we developed a reliable classification of all responses by the volunteers and identified a “directive” and a “non-directive” style. Outcome measures showed observer evaluations of decreased depressive mood from the beginning to the end in 14% of calls, decrease suicidal urgency in 27% of calls and reaching a contract in 68%, of which 54% of contracts were upheld according to follow-up. A greater proportion of non-directive responses was related to significantly
more decreases in depression. Deduction in urgency and reaching a contract were related to greater use of non-directive responses categories only with non-chronic callers.

**CONCLUSION:** Increases in the number of callers to telephone suicide prevention organisations is often used to justify the helpfulness of their activities. It is essential to investigate further the empirical basis for claims that telephone interventions prevent suicide attempts and/or deaths by suicide. We suggest that all telephone interventions should not be considered as equivalent. It is important to identify the types of activity which occurs in telephone interventions in order to determine which intervention method may be better linked to beneficial outcomes. This constitutes an essential first step in evaluating effectiveness.

**LIMITS:** Lack of follow-up and individual interviews with callers limits firm conclusion concerning lasting effects.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:** Several ongoing projects are described which attempt to assess the long-term effects of activities by voluntary telephone-based suicide prevention centres in suicide prevention.

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**ÉVALUATION DE L’IMPLANTATION DE LA STRATÉGIE QUÉBÉCOISE D’ACTION FACE AU SUICIDE**

**NELSON POTVIN**

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La Stratégie québécoise d’action face au suicide prend appui sur une série de mesures précises qui visent à engager le Ministère dans des actions concrètes et concertées avec ses partenaires. De plus, en proposant cette stratégie, le Ministère était également animé par la volonté d’assurer l’évaluation de ses actions, en somme de rectifier son tir, là où il y a lieu. Après quelques années d’implantation de la Stratégie d’action, soit depuis son lancement au mois de février 1998, le temps était venu en avril 2000 d’engager un processus de planification menant à son évaluation, en collaboration avec les partenaires du Ministère.

Le but principal est de déterminer les adaptations requises à la Stratégie d’action, afin de procéder à son amélioration, tant par rapport à ses moyens d’action qu’à leur implantation, et ce en tenant compte de l’expérience acquise lors de sa mise en place dans toutes les régions du Québec. Il a fallu d’abord procéder à l’élaboration d’un cadre d’évaluation pour la Stratégie québécoise d’action face au suicide. C’est dans le cadre d’une tournée de toutes les régions que nous pourrions faire le point sur l’implantation de la Stratégie québécoise d’action face au suicide. Le ministère a aussi financé 17 projets d’intervention et d’évaluation auprès des clientèles les plus à risque de suicide et de tentative de suicide. Nous effectuerons une analyse globale (méta-évaluation) des résultats de ces projets.
Le suicide est un problème majeur au Québec. Le gouvernement du Québec a lancé la Stratégie nationale d’action face au suicide en février 1998. La Conférence mondiale sur la prévention et le contrôle des traumatismes nous fournit l’occasion de faire le point sur la mise en oeuvre de la Stratégie, de discuter de l’atteinte des objectifs poursuivis et de dégager des perspectives pour l’avenir.

**SUICIDE PREVENTION EFFORTS IN STATES**

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**PROBLEM UNDER STUDY:** Suicide the third leading cause of death among adolescents in the USA. Many states are now developing and implementing plans to prevent suicide among youths. To date, we do not have a comprehensive view of the number of states actively working in this area or on the elements of state suicide prevention activities.

**OBJECTIVES:**
1. Identify elements of model youth suicide prevention programs;
2. Describe the nature of the state activities to prevent suicide;
3. Describe the role that MCH agencies and other public health professionals can play in addressing suicide as a public health problem.

**METHOD OR APPROACH:** Several sources of information are used to assess state efforts to prevent youth suicide. A survey of state health departments provides information on state activities and support for suicide prevention efforts. Suicide prevention plans states are reviewed for program and evaluation content. Information from all sources is summarized and presented to provide a more comprehensive picture of state efforts and plans to prevent youth suicide.

**RESULTS:** State health departments have made significant progress in defining youth suicide as a public health priority and have started to devote personnel and fiscal resources to addressing the problem. Almost three-fourths of states report that they have some sort of suicide prevention activity in their health department. States health department staff indicated that they need assistance in identifying funding and evaluating their programs.

**CONCLUSION:** State health departments are actively engaging in efforts to prevent youth suicide. Many have drafted plans to prevent suicide based on the best available science. Many plans have program evaluation components built-in but lack adequate resources to conduct evaluation research (e.g. controlled trials).
LIMITS: Not all information on suicide prevention activities in states is readily available. Thus, this description of state efforts probably under represents the extent of the effort.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The description of state efforts provides information regarding the range and types of efforts to prevent suicide that can be developed by states.

THE NORWEGIAN PLAN FOR SUICIDE PREVENTION – WHAT HAS BEEN ACHIEVED?

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PROBLEM UNDER STUDY: Norway experienced a threefold increase in suicide rates in the young during the 1970s and 1980s.

OBJECTIVES: To reduce this increase in rates of suicidal behaviour.

METHOD OR APPROACH: A national plan for suicide prevention including both educational, clinical and research aspects was established in 1994. When this plan ended in 1999, a three-year follow-up project was started to continue the tasks of the national plan. To accomplish the main goal, the national plan listed some specific subsidiary objectives. In the follow-up project four specific target groups were emphasized, namely children and youth, elderly, gay and lesbians and suicide survivors.

RESULTS: Several important developments have been achieved, for instance, establishment of one national and three regional suicide research and prevention centres, establishment of regional networks, a considerable increase in research projects, establishments of a national organization for suicide survivors, establishing of a suicidological journal (3 issues annually) and an internet site (including pages in English), and systematic implementation of a first-aid suicide intervention workshop (VIVAT) in close collaboration with Canadian Living Works, in addition to other educational programs. A reduction in suicide rates of almost 30% during the 1990s has been observed.

CONCLUSION: In suicide prevention a close collaboration between national authorities and professionals has proved to be essential. Also, to have an interdisciplinary perspective on suicide prevention is important.

LIMITS: It remains to be documented whether the program has had lasting effects. Moreover, a number of different risk groups have not yet been effectively approached.

CONTRIBUTION OF THE PROJECT TO THE FIELD: Compared to the Finnish national plan for suicide prevention which made a great contribution as research is concerned, the Norwegian plan is more action oriented, where development of chain of care projects have been particularly emphasized.
MONTANA STRATEGIC SUICIDE PREVENTION PLAN:  
THE IMBALANCE OF PREVENTION STRATEGIES AND  
RELATIVE RISK BY AGE GROUP  

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OBJECTIVES: To compare the strategies and approaches of the recently completed Montana Strategic Suicide Prevention Plan against the relative risk of injury by age group and other developmental considerations.  

METHOD OR APPROACH: The suicide trajectory model (STM) has been previously identified by Stillion and McDowell (1996) as a method for describing suicide risk characteristics of various developmental age groups. The STM provides biological, psychosocial, cognitive and environmental vectors as well as warning signs, triggering events and suicidal behaviour for each age group. The authors compared the STM age group characteristics with the 26 long-term strategies included in the recently published Montana Strategic Suicide Prevention Plan to identify the group targeted by each strategy. The number of strategies for each group was compared to ten-year suicide mortality data stratified by the same developmental age groupings to determine the balance between strategies and relative risk.  

RESULTS: Children (age 5-14) and adolescents (age 15-24) had the greatest number of targeted interventions at 13 and 12 respectively. Young adults (age 25-34), middle adults (age 35-64) and elderly (>= 65) were the target at far fewer interventions at 4, 6, and 5 respectively. When compared with mortality data, stratified by the same age groupings, an imbalance of between risk and prevention emphasis appears. When subjected to a Pearson’s r an inverse linear relationship between relative risk and the number of strategies targeted at that age group appears (one-tailed, r=-.914, p =.015). This relationship accounts for 84% of the variance in the number of strategies targeting each age group.  

CONCLUSION: Suicide among children and adolescents is an emotional issue. This resulted in disproportionate emphasis being placed on these age groups in terms of long-term prevention strategies and resources. As other suicide prevention plans are developed in the future, consideration should be given to the groups at highest risk and a balance between risk and resource allocation be attempted.  

LIMITS: The STM is a theoretical framework that has not been validated or operationalized. The categorization of intervention strategies into one of the developmental stratifications of the STM was achieved by panel consensus and therefore is a risk for the biases that are common to panel determinations.  

CONTRIBUTION OF THE PROJECT TO THE FIELD: This application of the STM, which is based on developmental theory, may help to create a more equitable balance between resources and relative risk for suicide during the development of future suicide prevention plans.
LA PRISE EN CHARGE DES PERSONNES INCARCÉRÉES SUICIDAIRES OU SOUFFRANT DE TROUBLES MENTAUX GRAVES

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PROBLÉMATIQUE : Au Québec, les taux de suicide sont très élevés chez les hommes et, dans le cas qui nous occupe ici, chez les hommes incarcérés. De multiples recherches internationales indiquent, indépendamment même de la situation québécoise, que les taux de suicide en milieu carcéral sont au moins quatre fois, sinon même onze fois, plus élevés qu’en milieu naturel. De plus, cette problématique est très souvent associée à des problèmes de santé mentale. Certains programmes de dépistage et de prise en charge sont instaurés mais peu ont été évalués.

OBJECTIFS :
1. Évaluation systématique de la clientèle cible au plan de la santé mentale et du risque suicidaire.
2. Documentation du cheminement des individus dépistés actuellement.
3. Implantation éventuelle d’une nouvelle méthode de dépistage.

MÉTHODE OU APPROCHE : Évaluation d’un échantillon aléatoire de 243 hommes détenus dans deux prisons québécoises.


RÉSULTATS : Des taux élevés au niveau des antécédents suicidaires, de la gravité de ces antécédents, du risque et de l’urgence suicidaire, et des troubles mentaux ont été observés chez les 243 détenus. De ce nombre 43 détenus (17,7%) présentaient une urgence suicidaire élevée ou un trouble mental grave. L’analyse des dossiers institutionnels de ces individus en difficulté a révélé que seulement 35% d’entre eux avaient été dépistés formellement mais que 75% avaient au moins été identifiés de façon informelle. Les dossiers étaient peu annotés et ne rendaient peut-être pas justice au travail clinique qui n’est pas toujours consigné. Néanmoins, ce manque d’informations pouvait laisser entrevoir un problème au niveau du suivi des individus. Par-delà ces observations, de grandes différences étaient observées entre les détenus des deux villes. Or, les services psychiatriques et de déjudiciarisation offerts dans les communautés respectives pourraient expliquer ces différences au niveau des prisons. Cela tendrait à démontrer que la prise en charge communautaire des délinquants suicidaires ou souffrant de troubles mentaux peut avoir une influence sur la qualité de vie de ces derniers mais aussi, indirectement, sur celle des personnes vivant ou travaillant en milieu carcéral.
CONCLUSION : Les résultats de cette étude permettent de préciser l’ampleur des deux problématiques ciblées, alors qu’elles ne sont pas toujours bien dépistées par les intervenants des prisons. Ne serait-ce qu’au niveau du dépistage, des améliorations pourraient être réalisées assez facilement en systématisant le processus lors de l’admission des personnes incarcérées. Reste la difficile question du suivi des clients en difficulté. Chez les personnes suicidaires, on peut penser qu’un encadrement minimal nécessiterait plus de personnel clinique (pas nécessairement médical) mais pas dans des proportions très importantes. En effet, une certaine expertise clinique est nécessaire lors de l’évaluation et de l’intervention de crise avec les personnes suicidaires mais les mesures subséquentes peuvent souvent être appliquées par d’autres intervenants. Pour les sujets souffrant de troubles mentaux graves, une certaine déjudiciarisation soulagerait cependant les établissements carcéraux. N’en resterait pas moins la nécessité d’améliorer les services psychiatriques en prison, lesquels ne peuvent être réduits à la prescription de médicaments. Une telle amélioration des services médicaux serait également nécessaire pour atténuer la problématique suicidaire, si tant est que cela puisse s’avérer utile avec ce type de problématique.

LIMITES : Recherche qui a été menée uniquement dans deux localités accueillant des établissements carcéraux et uniquement auprès des hommes.

CONTRIBUTION DU PROJET AU DOMAINE : Cette recherche confirme l’importance de la problématique suicidaire et de santé mentale chez les personnes incarcérées. Cependant, elle révèle le problème dans une perspective plus large où d’autres instances que la prison sont interpellées.
different assessment screening protocols, evaluated for their responsiveness to cultural mores during the second year of this research.

**OBJECTIVES:** This presentation explores the influence of culture—as it is revealed through quantitative and qualitative analyses—on the perceptions and responses of American Indian detainees to standard suicide risk assessment questions and booking procedures. The overall objective of this presentation is to demonstrate how cultural considerations should guide professionals as they devise and interpret risk assessment instruments and interviewing strategies.

**METHOD OR APPROACH:** In year one, 700 inmates, nearly half of whom were American Indians, completed both the jail’s standard suicide screening instrument and a survey instrument designed to measure the validity of the standardized screening form and to gather initial data related to culture and life experience. Focus groups were initiated to explore inmates’ understanding and perceptions of the risk assessment questions. In year two, over 800 inmates were assessed using the formal screening form but according to four new protocols based on environmental and personnel manipulations. Further, subjects were asked to complete a “satisfaction survey” at the end of their booking process. Focus groups were initiated to explore inmates’ experiences of the varying screening protocols.

**RESULTS:** Significant differences in screening and survey measures were found between American Indian and non-Indian groups on very few, but nonetheless important, items. Situationally, American Indian inmates are more likely to be incarcerated on alcohol-related charges, experience more un-or under-employment, have more prior arrests and have served jail time than their non-Indian counterparts. Divergences along cultural lines were noted in the areas of strategies used for coping with stress, exposure to traumatic events, utilization of social services outside of jail, as well as in other reported life experiences. Of most interest to this presentation are the comments of both the American Indian and non-Indian groups that situate jail protocols within a cultural context and suggest that mainstream methods of risk assessment necessarily lead to inaccurate results, in part because the institutional context subjugates the cultural voice.

**CONCLUSION:** Modifications in risk assessment strategies which fully consider not only the cultural mores of the interviewee but also the cultural context of the assessment milieu must be developed, tested, refined and disseminated to detention centres throughout the USA and beyond.

**LIMITS:** The findings of this study are limited to the culture and experience of certain American Indian inmates, most of whom were members or descendants of members of the Northern Plains tribes. Because this is the first jail-based study of suicide risk assessment among this population, replicated studies in other detention centres must be initiated to explore similar cultural nuances vis-à-vis suicide risk assessment tools and protocols.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:** This endeavour offers many contributions to the study of jail suicide. On a broad scale, it suggests that jails are keepers not only of people, but also of valuable data with which the study of person, culture, and behaviour can progress. This research also suggests that the one-size-fits-all approach of jail screening is faulty in that jail populations are heterogeneous, reflecting particular cultural traditions, values, and mores.
Motor vehicle exhaust gassing suicides in Australia: update with lower emission levels

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Problem under study: In recent years exhaust gas has been the second major means of suicide in Australia. It is a common method in several other western countries. When catalytic converters coinciding with 9.4 gm/km CO emission were made mandatory in Australia in 1986 suicides by this method were expected to reduce. However rates, frequencies and the percentage of suicides continued to rise and by 1999 had not reduced. Consequently, countermeasures have been developed and promoted. In response to environmental concerns, lower CO emission levels (2.1 gm/km) became mandatory for vehicles manufactured after 1997.

Objectives: To determine if suicides by exhaust gas have been occurring in vehicles manufactured after 1997, the characteristics of vehicles used and if such suicides differ in manner, reasons, level of toxicity and socio-economically from those undertaken in previous years.

Method or approach: Electronic records of exhaust gassing suicide cases for the period 1998-2000 were provided by the State Coroner’s Office. The variables provided included age, sex, employment status, year of death and circumstances of the suicide. Circumstances of all cases were initially reviewed to identify vehicle details such as the make, model, year of manufacture or, failing the latter, registration number. The available vehicle details were supplemented by the Victorian Police Records Services Branch. For every third case the location and type, if any, of hose or pipe used were extracted from the police circumstances. Data was entered in Excel and analysed in SPSS for frequencies, cross tabs, t-tests and tests of significance. The distribution of year of manufacture was compared with that for the vehicle fleet. Comparisons were made with the study covering the period 1994-96 by the same researcher. Toxicology reports and the Coroner’s findings are yet to be provided. Carboxyhaemoglobin levels and other drugs detected and reasons for the suicide will be extracted when this information is available.

Results: Preliminary results indicate: There were 398 suicides by motor vehicle exhaust gas recorded by the Victorian State Coroner’s Office over the years 1998 to 2000, representing 20% of all suicides. Of these 84% were male and most (54%) were concentrated in the 25 to 44 year age group. Exhaust gassing suicides were therefore more likely to be male, and older, than suicides overall. Of the 195 cases where vehicle details could be ascertained, suicide vehicle manufacturers were largely in proportion to their representation in the Australian fleet albeit with one major manufacturer slightly over-represented and another under-represented. Almost 60% percent of the vehicles used were manufactured prior to 1986 (v 34% of the vehicle fleet), 35% were manufactured between 1986 and 1997 (v 51% of the vehicle fleet) and 6.3% were manufactured after 1997 (v 15% of the vehicle fleet). Employment status, location and methods of delivering emissions to the cabin were similar to the 1996 study.

Conclusion: Early indications are that older vehicles are over-represented. Exhaust gassing suicides are typically undertaken by middle-aged males inside their vehicle in their garage or at remote locations. Results so far indicate similarity with the 1996 study.
LIMITS: Data is from Victoria only. Police may not have provided all relevant details to the Coroner’s files in describing circumstances e.g. registration number. A large proportion of new vehicles are part of commercial or government fleets and are therefore not so available for private purposes.

CONTRIBUTION OF THE PROJECT TO THE FIELD: An indication of the effectiveness of lower emission levels in reducing suicides by this method and greater understanding of exhaust gassing suicides in Victoria in recent years.

ÉVALUATION DE QUATRE PROJETS PILOTES D’INTERVENTION AUPRÈS D’HOMMES SUICIDAIRES À HAUT RISQUE PAR L’INTERMÉDIAIRE DE LEURS PROCHES

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PROBLÉMATIQUE : Les hommes qui souffrent de dépression et/ou d’abus de substance constituent un groupe à haut risque de suicide. Ils sont difficiles à rejoindre pour les centres de prévention du suicide (CPS) car ils utilisent peu ce type de ressources téléphoniques. Par contre, les CPS reçoivent régulièrement des appels de proches (conjointe, parents, enfants ou amis) d’hommes suicidaires à haut risque de sorte que c’est souvent par leur intermédiaire qu’ils interviennent auprès des clientèles masculines. Aucune recherche évaluative ne s’est encore penchée sur l’efficacité d’une telle pratique pour prévenir le suicide.

OBJECTIFS : Cette étude a pour but d’évaluer l’implantation et l’efficacité de quatre projets pilotes d’intervention auprès d’hommes suicidaires à haut risque par l’intermédiaire de leurs proches. Les quatre projets sont les suivants :

1. Rencontre d’information : le proche assiste à une rencontre de groupe de 2 heures et demie avec d’autres proches;
2. Rencontre info-plus : le proche assiste à une rencontre d’information et reçoit une relance téléphonique par un intervenant bénévole une semaine plus tard;
3. Parrainage téléphonique : le proche reçoit des appels téléphoniques d’un intervenant bénévole à la fréquence de son choix et pendant une durée maximale de quatre semaines;

MÉTHODE : Les participants sont 110 proches (conjointe, parents, enfants ou amis) d’hommes suicidaires âgés de 18 à 60 ans et souffrant d’une dépression majeure et/ou d’un trouble d’abus de substances. Ils sont recrutés au cours de leur appel téléphonique à Suicide-action Montréal, un centre de prévention du suicide. Les participants répondent à un questionnaire avant de recevoir l’intervention (pré-test) et quatre semaines plus tard (post-test).

RÉSULTATS : L’évaluation révèle des difficultés d’implantation pour le projet Accès-direct et un niveau de satisfaction élevé de la part des participants pour les quatre projets pilotes. Les
résultats indiquent aussi que le parrainage téléphonique, la rencontre d’information et la rencontre d’info-plus sont associés à des changements positifs chez les proches et chez les hommes suicidaires deux mois après le début de l’intervention. Les changements diffèrent d’un projet pilote à l’autre ce qui suggère qu’ils ne soient pas seulement attribuables au passage du temps et que certains projets sont plus efficaces que d’autres.

CONCLUSION : Cette étude suggère que l’intervention auprès des hommes suicidaires à haut risque par l’intermédiaire de leurs proches entraîne des changements positifs chez les participants. Ce type d’intervention semble donc être une alternative intéressante pour les centres de prévention du suicide qui souhaitent rejoindre les clientèles masculines à haut risque de suicide. Des études supplémentaires avec de plus grands échantillons, une répartition aléatoire des participants et des groupes témoins sont pourtant nécessaires avant de conclure.

LIMITES : L’absence de groupes témoins fait en sorte qu’il est impossible de statuer sur l’importance des effets des projets pilotes en tenant compte du passage du temps. Par ailleurs, le fait que la répartition des participants aux différents projets ne se soit pas faite de façon complètement aléatoire, introduit un biais de sélection qui peut nuire à la validité des résultats. Finalement, le nombre relativement restreint de participants dans chacun des projets nuit à la généralisation des conclusions de l’étude. Des études supplémentaires sont nécessaires pour combler ces lacunes.


AN INTEGRATED COMMUNITY MODEL FOR SUICIDE PREVENTION: LESSONS FROM CARDIAC CARE
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PROBLEM UNDER STUDY: Suicide is a complex issue influenced by biological, biochemical, and psychosocial factors. Many suicide prevention programs are singularly focused and, as such, have had limited impact on the rate, incidence or prevalence of suicide. When a comprehensive community model of prevention is applied to cardiac disease, which also has biological, biochemical and psychosocial contributors rates of cardiac death have been reduced but only when all components of the integrated system are included. By examining the components of the comprehensive cardiac care prevention model and drawing parallels for suicide prevention a proposed integrated community model emerges.
OBJECTIVES:

1. To review the developmental history and components of a comprehensive community cardiac care model;
2. To explore potential parallels for a suggested comprehensive community suicide care model; and
3. To provide a referent when presenting suicide prevention and control to medically trained personnel.

METHOD OR APPROACH: A comprehensive literature review of cardiac prevention activities was conducted. Seattle and King County, Washington, USA, which is widely heralded as having a premier cardiac prevention system was the primary focus of that literature search. The attributes, components, evolution and results of that system were identified. The authors searched for parallel components within the field of suicide prevention and propose the integration of various approaches to create a comprehensive community suicide prevention program.

RESULTS: Integrated community-wide systems of cardiac care have been evolving since the mid-1960's. Similar systems of care could prove valuable in suicide prevention. There are multiple factors contributing to successful outcomes in cardiac care, including: promoting community cardiac wellness, prompt recognition of a cardiac event, early notification of emergency medical personnel, immediate temporizing citizen action, tiered response systems capable of immediate definitive care, efficient transport to quality acute care facilities, and strong rehabilitation, follow-up and repatriation elements. These components have been labelled the “chain of survival” recognizing that weak or missing links result in sub-optimal outcomes. Additional vectors contributing to improved cardiac outcomes over the past three decades include sustained research funding and a uniform research reporting criteria. The development of a parallel multi-faceted, integrated model that builds upon the components of the cardiac care model may provide a new paradigm for community suicide prevention and control. It may also serve to frame the complexities of suicide prevention and control in a context that is more easily understood by medical personnel.

CONCLUSION: By examining a successful integrated community cardiac prevention model, evidence can be found to generate support for the development of a comprehensive community suicide prevention model. This hypothesis is further supported by general systems theory.

LIMITS: The proposed conceptual framework for suicide prevention is based on a cardiac prevention model that only a few communities worldwide have been able to achieve and sustain.

CONTRIBUTION OF THE PROJECT TO THE FIELD: This examination provides a general theoretical basis for the development of a comprehensive community suicide prevention model that may influence the incidence, prevalence and rate of suicide over time. It also provides a basis for applied research concerning the effectiveness of such an approach.
SOURCES OF DATA AND THE INFLUENCING FACTORS IN CANADIAN INUIT SUICIDES: WHAT ARE THE BEST PRACTICES AND STRATEGIES IN RESPONSE TO THIS CRISIS?

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PROBLEM UNDER STUDY: As an advocacy organization with a national objective, an understanding of the suicide statistical collection within all Inuit regions is necessary. To appropriately act on this information, ITC needs to be abreast of the general perspective of the Inuit communities, professionals and other organizations in their understanding of influencing factors and recommended best practices and strategies.

OBJECTIVES:
1. To identify the scope of the suicide issue amongst Inuit in every region;
2. To identify the influencing factors that have contribute to this reality;
3. To identify approaches and best practices.

METHOD OR APPROACH: Telephone interviews with researchers, community members, professionals and literature reviews. Approximately 6 people were interviewed within each Canadian Inuit region.

RESULTS: Suicide statistics are not uniformly gathered in each region. There are gaps and contradictions in the information available. Uniform and centralized form of gathering is necessary for ITC and others to monitor this issue. Influencing factors were identified. Community designed and controlled initiatives are consistently recommended by all levels of government and community. The degree to which this is reflected is not consistent in the regions. There are successful and innovative community strategies in operation. There are underdeveloped initiatives, given consistent and sufficient resources, they would be more effective. Across the regions, there is difficulty maintaining full staff in the human service field.

CONCLUSION: Community design and management of mental wellness programming is most effectively initiated and managed using a community development approach. The development of mental wellness indicators would be most successful if it is made a part of this same process.

LIMITS: Due to time constraints, the review was limited in numbers of those interviewed.

CONTRIBUTION OF THE PROJECT TO THE FIELD: The compilation of this information is useful for comparison purposes. The number of articles and interviews that mention cultural relevancy of mental wellness programming is significant. Also, the similar themes running through articles are notable in the efforts to encourage community control and involvement of mental wellness endeavours. These discussion papers clarify that the data and literature supports community based initiatives.
TAPIRIILIRNIQ: NUNAVIK Responds to the High Numbers of Inuit Suicides

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Problem Under Study: The suicide numbers are alarmingly high in the Inuit regions of Canada. In Nunavik, suicide rates have increased by a factor of 11.5 times in the past 30 years. Suicide is striking increasingly younger age groups.

Objectives: Measures are required to slow down and reverse the current trend. With their central office in Kuujjuak, in the northern area of the province of Quebec, a committee of elders, youth and community leaders developed an action plan by travelling to each community to facilitate action towards the improvement of the quality of life community designed and initiated actions.

Method or Approach: Participatory Action Research and Nominal Group Procedure are two terms that describe the method that Tapiiriilirniq members utilize. This process is facilitated by researchers trained in posing questions to community that encourages independence and honours the wisdom of the people involved. In the setting of a community meeting the questions about community empowerment towards the prevention of suicide and development of mental wellness are posed.

Results: The community appreciates facilitated discussion on the issues surrounding suicide. In particular, the impact of suicide on the community. Communities consistently identify the need to rebuild the relationship between youth and elders. Also, communities allow-up and continued meetings in this process need to continue.

Conclusion: The process has created new energy and interest in pro-activity. The project needs to be ongoing and follow-up needs to be done to verify success and keep this process alive. The process facilitates a deepening of understanding amongst community members.

Limits: Since most travel in the north is by air it is very expensive, the limits are mostly financial. Nunavik Health Board is the only source providing funding for this initiative. We are in the process of developing a proposal for the Aboriginal Healing Foundation.

Contribution of the Project to the Field: Although we are still in the early stages of this project, it is clear that the process of Tapiiriilirniq has already been successful in involving the community in wellness program development.
EFFONDREMENT DES INSTANCES IDÉALES DANS LE SUICIDE
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C’est surtout grâce à nos réflexions sur les difficultés cliniques des femmes suicidaires que nous avons entrepris ce travail sur la problématique du narcissisme dans le suicide. La relecture des textes fondamentaux de Freud montre que ce concept a provoqué quelques hésitations dans sa construction. L’interprétation de A. Green nous révèle la double face du narcissisme en opposant un narcissisme symbolique porteur de vie et un narcissisme mortifère. Toutes les patientes participant à notre étude tentent de combler les failles de leur structure en retournant sur leur moi l’investissement de l’objet perdu suite à l’échec sentimental. La théorie du stade du miroir de Lacan nous a amené à préciser le statut de ces instances idéales.

Suite à la passation du test du dessin des deux personnages de sexe opposé et d’un questionnaire adapté, nous avons dégagé suffisamment de caractéristiques pour explorer l’ampleur de la faille narcissique lorsque la relation idéalement privilégiée se trouve rompue. Relevant de la dimension incestueuse, le Moi idéal subit une déflexion préfigurant pour le sujet une réflexion sur sa propre mort. La blessure porte sur la désidéalisation du Moi idéal dans sa figuration au double en tant que projection narcissique. Nous soulignerons la défaillance de l’Idéal du Moi, instance symbolique mais précaire qui confère un rôle essentiel à l’objet investi puisque celui-ci à un effet désorganisant pour les sujets. Cette fragilité narcissique s’explique par l’incapacité de se sentir dépossédé de l’idéal et par décharge agressive provoquée par cet objet qui menace.

Ce travail permet de mieux comprendre la problématique suicidante et l’accompagnement psychologique à mettre en place.

Stratégies de prévention du suicide
Suicide Prevention Strategies

LE SUICIDE CHEZ LES HOMMES DE 18 À 55 ANS :
ÉVÉNEMENTS DE VIE DÉCLENCHEURS ET ABUS ET
NÉGLIGENCE AU COURS DE L’ENFANCE
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PROBLÉMATIQUE : Plusieurs recherches rapportent que les hommes décédés par suicide ont vécu des événements majeurs avant leur suicide. Par contre, nous en connaissons peu sur la nature de ces événements dû au fait que seulement des listes d’événements ont été utilisées.
Par ailleurs, il n'y a pas d'étude systématique sur les expériences d'abus et de négligence au cours de l'enfance.

**OBJECTIFS** : Identifier la nature du dernier événement majeur avant le suicide et décrire la vulnérabilité familiale dans la relation parent-enfant.


**RÉSULTATS** : La grande majorité des personnes décédées par suicide ont vécu un événement majeur au cours des dernières semaines avant leur décès. Les séparations amoureuses sont très fréquentes mais c'est souvent un événement qui implique un membre de la famille appartenant à une autre génération qui est critique, soit un parent ou un enfant du décédé. Les problèmes financiers et les pressions pour rembourser sont aussi un élément important. Environ les trois quarts des dossiers révèlent de nombreuses expériences d'abus psychologique, de rejet, d'indifférence parentale et de contrôle excessif. Dans les cas où il y a relative absence de ce type d'expérience, on retrouve une incapacité des parents à exercer un contrôle.

**CONCLUSION** : Les programmes de prévention et de traitement devraient attacher davantage d'importance à la réconciliation entre les générations. Dans les cas de séparation maritale, la souffrance est souvent liée à l'éloignement des enfants ou à la difficulté à assurer un bon lien avec eux. L'intervention devrait cibler les personnes avec trouble d'alcoolisme, tendances dépressives qui viennent de subir une perte majeure.

**LIMITES** : L'entourage de personnes décédées par suicide qui sont isolées est difficile à atteindre. Les quelques familles ayant des problèmes psychiatriques ne peuvent compléter les entrevues.

**CONTRIBUTION DU PROJET AU DOMAINE** : Cette étude donne un tableau beaucoup plus précis que celui de la dernière année, de la vie des personnes qui s'enlèvent la vie et des problèmes avec leur entourage. Elle montre aussi l'importance de la vulnérabilité durant l'enfance.

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**PROGRAMME DE DIMINUTION DE L'ACCÈS AUX ARMES À FEU**

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**PROBLÉMATIQUE** : Le suicide constitue l’une des principales causes de décès par traumatismes au Québec. Après avoir connu une diminution au début des années 90, le taux de suicide québécois ne cesse d’augmenter et a atteint un record avec 21/100,000 en 1999. Ce taux est encore plus élevé en milieu rural et il a atteint 35/100,000 dans la région du Bas-Saint-Laurent. Face à cette situation, une stratégie d’action a été mise en place, qui touche à la
fois la disponibilité et la continuité des services de crise, la disponibilité de services d’intervention, la formation des intervenants, la mise en place d’intervention en prévention ainsi que des actions de réduction de l’accès des armes à feu. Les armes à feu constituent le second moyen pour s’enlever la vie après la strangulation et est utilisé par environ 20% à 30% des suicidés selon les régions. Ce moyen est presque exclusivement utilisé par les hommes qui affichent d’ailleurs un taux de suicide quatre fois plus élevé que les femmes. Un sondage québécois révèle qu’un foyer sur cinq disposerait d’une arme à feu et que le tiers de celles-ci ne seraient pas rangées de façon sécuritaire. Pourtant, de nombreux consensus d’experts rappellent l’importance d’agir également sur l’accessibilité des moyens utilisés pour s’enlever la vie dans le but de réduire les gestes suicidaires.

OBJECTIFS :
1. Réduire l’accès aux armes à feu auprès des personnes à risque;
2. Sensibiliser la population au rangement sécuritaire des armes à feu à domicile.

MÉTHODE OU APPROCHE : La stratégie d’action face au suicide dans le Bas-Saint-Laurent prévoyait la mise sur pied d’une série de mesures énergiques visant à réduire l’accès aux armes à feu et ce, particulièrement chez les personnes suicidaires. Cette série de mesures impliquait un éventail élargi de collaborateurs : établissements du réseau de la santé et des services sociaux (CLSC, centres hospitaliers, Centre jeunesse), les organismes communautaires impliqués en prévention du suicide, les médecins généralistes en cabinet privé, les psychiatres, les corps policiers de la région, les médias écrits et électroniques de la région. Tous les participants à ces mesures retrouvaient des intérêts diversifiés dans la réalisation de ce projet. Une approche multi-sectorielle a été mise de l’avant afin d’implanter ces actions.

Trois catégories d’actions ont été menées dans le cadre de ce programme :
1. Sensibilisation des professionnels et intervenants du réseau de santé ainsi que des policiers sur les conduites à tenir dans le cas de menaces impliquant des armes;
2. Des interventions auprès des personnes à risque et proches d’un suicidé;

Ces trois catégories d’actions ont été intégrées aux autres dimensions de la stratégie régionale afin d’assurer une continuité des interventions.

RÉSULTATS : Une description du déroulement de ce programme a permis de constater un intérêt marqué des professionnels de la santé à s’informer sur les aspects touchant les armes à feu. Cet intérêt déborde la problématique du suicide et touche également les conduites violentes et les accidents liés aux armes à feu. Une évaluation du fonctionnement du programme a permis de constater un fonctionnement adéquat des activités et une participation importante du public visé. Une évaluation visant à estimer les effets de ces actions est actuellement en cours.

CONCLUSION : La littérature scientifique et plusieurs consensus d’experts militent dans la réduction de l’accès aux moyens pour s’enlever la vie. Cette campagne nationale est inédite au Canada et devrait, simultanément à d’autres actions, contribuer à diminuer des gestes suicidaires. La collaboration spontanée des multiples milieux d’intervention montre l’importance de cette problématique au sein de la collectivité québécoise.
HOUSEHOLD FIREARM OWNERSHIP LEVELS AND SUICIDE RATES

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PROBLEM UNDER STUDY: In the USA, more people kill themselves with firearms than with all other methods combined. A central question regarding the relationship between firearms and suicide is whether the ready availability of firearms increases the suicide rate, rather than merely increasing the proportion of suicides from guns.

OBJECTIVES: To explore the relationship between rates of firearm ownership and rates of suicide, firearm suicide and non-firearm suicide across the 9 U.S. census regions and the 50 U.S. states, by age groups and by gender.

METHOD OR APPROACH: We used pooled cross-sectional time series data for the nine regions and 50 USA over a ten-year period (1988-1997) to examine the association between levels of household firearm ownership and rates of suicide, firearm suicide and non-firearm suicide for seven age groupings and for both males and females. States and year-specific population figures and data for the number of suicides, firearm suicides and non-firearm suicides come from the National Centre for Health Statistics Mortality Files (NCHS). At the regional level, we use published survey-based estimates from the General Social Surveys (GSS) to measure the percentage of households with guns and the percentage with handguns. At the state level, published data on reported household gun ownership are available for only a non-random sample of 21 states and then usually only for a single year in the 1990s. To analyze all fifty states, we use a proxy for household firearm ownership: the fraction of all suicides in a given state-year that involve a firearm, referred to in the text as FS/S.

RESULTS: In both regional and state-level analyses, for the U.S. population as a whole, for both males and females and for virtually every age group, a robust association exists between levels of household firearm ownership and suicide rates. These results are accounted for by substantially elevated firearm suicide rates in regions with high levels of firearm ownership. There was a small, but never offsetting, decrease in the rate of non-firearm suicides in regions with higher firearm ownership, principally evident in older age groups.

CONCLUSION: In the U.S., where firearm ownership levels are higher a disproportionately large number of people die from suicide.

LIMITS: Our study has limitations inherent in using group level rather than individual level data (the ecologic fallacy). People who commit suicide may not share the characteristics of...
the populations from which they are drawn. However, since a firearm must be have been the instrument of death for individuals who committed suicide with a firearm, we know that individuals who actually committed suicide with a gun had access to that gun. Another limitation is that we include only two potential confounders (poverty and urbanization), and then only in the state-level analysis. Suicide rates may be affected by many other factors, such as parenting, alcohol use, drug use, family violence, social fragmentation, etc. It is not clear, however, whether trying to account for these or other area-wide characteristics would increase or reduce the magnitude or significance of the association between rates of household firearm ownership and suicide—and at the potential cost of introducing several collinear measures.

CONTRIBUTION OF THE PROJECT TO THE FIELD: Our study extends previous work by using recent data, looking at the U.S. as a whole across both regions and states, and disaggregating victims by age. In addition, we use the two best measures of levels of household firearm ownership currently available—direct survey-based measures for regional analyses and a rigorously validated proxy of household gun ownership for both regional analyses and for analyses across all 50 states. Our study provides evidence that firearm prevalence is related to the rate of firearm suicide and overall suicide, across U.S. regions and states, for every age group, and for both men and women. Although our study is unable to determine causation, our results are consistent with the notion that instrumentality as well as intent affects the rate of suicide. In the USA, in areas with more firearms, people of all ages are more likely to take their own lives, especially with guns.

PSYCHIATRISTS’ KNOWLEDGE, ATTITUDES, AND PRACTICES CONCERNING FIREARM-RELATED SUICIDE RISK ASSESSMENT

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PROBLEM UNDER STUDY: Suicide is the leading injury-related cause of death in Massachusetts, with an average of 409 suicides annually. In 29% of the cases in Massachusetts, the method chosen is a firearm. Having access to a firearm, particularly, in the home, is a risk factor for suicide. Up to two-thirds of patients who commit suicide will see a physician in the month before their death. Several studies have shown that many primary care physicians do not routinely evaluate access to firearms. Even less is known about the clinical practices of psychiatrists regarding routine screening and risk assessment for firearm access as part of a clinical suicide evaluation. Despite policy statements by medical organizations recommending firearm injury prevention counseling, there have been few studies on the attitudes and practices of physicians in regard to firearm safety counseling. Nor have there been similar studies of mental health professionals.

OBJECTIVES: The aim of this study is to assess current knowledge, attitudes and practices among psychiatrists regarding counseling on firearm access and storage with all patients, and
particularly with suicidal patients. The need for training and educational materials targeted to such providers will also be assessed.

**METHOD OR APPROACH:** A cross sectional, random sample of psychiatrists engaged primarily in clinical practice in Massachusetts was mailed a self-administered, 40-item, multiple-choice survey instrument with a stamped and self-addressed return envelope. The survey was designed to take 8-10 minutes to complete. An endorsement letter from the Massachusetts Psychiatric Society accompanied each survey. A reminder postcard and a second mailing occurred at two-week intervals. Psychiatrists were surveyed about the factors and barriers that influence whether they ask patients about firearms and whether they know how to intervene. Data was analyzed by logistic regression to determine the significant predictors of whether psychiatrists will discuss firearm access with their patients.

**RESULTS:** Several factors were identified that may be significant predictors of psychiatrists' screening for firearm access: perceived effectiveness in limiting patient access; comfort with discussing the topic; having treated a patient who committed suicide with a firearm; previous training on firearm risk assessment; and ownership of a firearm. A number of respondents indicated through unsolicited responses that the survey in and of itself was an eye opener and a vehicle of education.

**CONCLUSION:** More training is indicated to increase the proportion of psychiatrists who discuss firearm access with suicidal patients and their families. Other incentives may be necessary to change training and practices among clinicians who see suicidal patients.

**LIMITS:** Generalizability of this study is limited by the unique characteristics of Massachusetts and its firearm policies as well as a 35% response rate. Hence, we view this as a pilot survey. Additional studies would need to be completed to determine similar practices among other types of mental health clinicians—psychologists, psychiatric nurses clinicians, psychiatric social workers, mental health crisis intervention workers.

**CONTRIBUTION OF THE PROJECT TO THE FIELD:** This is the first study in the USA to assess the practices of those in the mental health field as regards counselling on firearm access and storage.
OBJECTIVES: The goal of this study was the psychological analysis of suicide situation in Russia and to propose the effective methods of prevention.

METHOD OR APPROACH: 72 patients (48 females, 24 males, aged 14-61) with suicidal attempts were studied.

RESULTS: One of the significant features of the observed suicidal patients was their negative approach to the treatment in the psychiatric facilities (hospitals, out-of-patients clinics) and to the contact with psychiatrists at all since the fear of stigmatization as mentally ill person. This peculiarity reflects the preservation of the influence of the model of previous Soviet psychiatry. In USSR people with mental illness suffered from many social limitations concerning the prohibitions in the field of study, choice of profession, employment, car driving etc. It was shown that in most observed cases biomedical (psychopharmacological) treatment was not in the best interest of the patients. The content of clinically significant disorders in 26 patients was expressed in medically (somatically) unexplained chronic weakness and fatigue reflected the situation that mental illness carries a tremendous stigma in their local communities. Patients were very reluctant to report psychopathological or psychological symptoms, which were transformed into somatoform symptoms. The patients perceived the cause of their problem as social, work problems, financial stress, sanitation-living conditions, isolation, stress-loss-shock, hopelessness and helplessness. Establishing the mutual psychological contact with patients was most serious task. The standard psychoanalytic approach (neutral, mirror reflecting approach of the analyst) had no positive effect or had even negative consequences. Special emphasis was made on the development of transference-counter transference positive dynamic.

As a result the impact of new factors as sexual abuse as child or/and as adult, family conflicts, drug abuse, spiritual deficit, a sense of life meaningless, supernatural cause (sorcery, possession by the evil spirits, cashing the evil eye) was revealed. Two patients who perceived the cause of their suffering as supernatural had sought prior help from folk-healers or paramedics. It seemed to them that psychiatrists did not understand the real source of their conditions. New situation is characterized by a tendency to the increase of number of patients who bring religious and Spiritual problems into psychiatric treatment. The patients did not trust the priest too, because their problems were not related to the conventional religious beliefs. However, mental health professionals in Russia as yet are not provided relevant training to enable them to treat the culture-bound, religious and spiritual problems effectively. It will be productive in that context to include a new diagnostic category of psycho-religious dimension what could increase the sensitivity of psychiatrists/psychologists to a religious/spiritual issues.

CONCLUSION: Psychotherapeutic approaches were invented as a tool for the correction of the suicidal tendencies. The main goal of the treatment was the breaching of a serious source of resistance-maintenance of the patients' internal world as a closed system. This resistance might be seen as a wall separating the polcut from the therapeutic impact. Prevention of suicidal behaviour was based on the establishment of empathic feelings, which was not effective in parents who were reared in religious family earlier.

LIMITS: The necessity of organization of special service for suicidal prevention, psychiatrists and social workers is difficult since the traditional psychiatric approach proved to be insufficiently effective.
SUICIDES ET ARMES À FEU :
CAMPAGNE NATIONALE DE SENSIBILISATION

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PROBLÉMATIQUE : Le Québec affiche l’un des taux de suicide parmi les plus élevés des pays industrialisés. Face à cette situation, une stratégie ministérielle d’action a été adoptée en 1998 afin de contrer l’augmentation du nombre de suicidés. Cette Stratégie québécoise comporte de multiples actions dont un des objectifs vise la réduction de l’accès aux moyens pour s’enlever la vie et qui touche, entre autres, les armes à feu.

D’autres organismes tels Santé Canada, le Bureau du coroner du Québec soulignent l’importance de réduire l’accès aux armes à feu. Les armes sont impliquées dans 20 à 25% des suicides au Québec et ce sont principalement des hommes qui utilisent ce moyen. L’arme à feu constitue le second moyen utilisé pour s’enlever la vie après la strangulation. On estime qu’environ 20% de foyers québécois posséderaient des armes et que le tiers de celles-ci ne seraient pas rangées de façon sécuritaire.

OBJECTIFS : Sensibiliser la population québécoise des risques que représentent les armes à feu à domicile.

MÉTHODE OU APPROCHE : Une approche multisectorielle a été mise de l’avant afin de mener cette campagne. Des actions de sensibilisation ont été menées auprès des médecins, intervenants du secteur de la santé et des services sociaux du Québec, des organismes en prévention du suicide ainsi que des corps policiers. Cette sensibilisation a été menée conjointement par des intervenants de la santé publique, des policiers et d’associations médicales. Suite à cette étape, trois capsules télévisées ont été diffusées pendant six mois sur les ondes d’un réseau de télévision nationale en collaboration avec une compagnie pharmaceutique et ce, pendant les heures d’écoute optimales. Une première capsule d’information a été élaborée présentant la possibilité de l’entreposage temporaire des armes. Cette capsule d’information s’adressait aux patients, à sa famille et au médecin. Une deuxième capsule d’information a été faite concernant le désistement permanent des armes à feu, afin de réduire le nombre de foyers ayant une arme à feu non utilisée depuis des années mais conservée inutilement. Une troisième capsule d’information a été préparée concernant l’entreposage sécuritaire des armes à feu. Cette campagne déborde les gestes suicidaires et touche également les accidents et homicides commis avec des armes à feu.

RÉSULTATS : Une estimation des effets de cette campagne est actuellement menée afin d’en déterminer la portée. Cette estimation touche à la fois la fréquence de diffusion des messages, les caractéristiques du public joint, une estimation du nombre d’armes désistées pendant la campagne et, ultérieurement, une variation des traumatismes par armes à feu.

CONCLUSION : La littérature scientifique et plusieurs consensus d’experts militent dans la réduction de l’accès aux moyens pour s’enlever la vie. Cette campagne nationale est inédite au Canada et devrait, simultanément à d’autres actions, contribuer à diminuer des gestes suicidaires. La collaboration spontanée des multiples milieux d’intervention montre l’importance de cette problématique au sein de la collectivité québécoise.
LIMITES : Des difficultés méthodologiques rendent difficile la mesure précise des effets d'une telle campagne médiatique.

CONTRIBUTION DU PROJET AU DOMAINE : Ce type de campagne de sensibilisation est, à notre avis, inédite au Canada et devrait contribuer à augmenter nos moyens afin de réduire les traumatismes par armes à feu.