Center for Research and Intervention on Suicide and Euthanasia

Education in Mental Health Facilities near Tracks to Reduce the Incidence of Railway Suicide

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This document describes a proposal for the implementation of an educational programme for mental health facilities near tracts to prevent railway suicides in Canada. A separate document available on this web site describes the proposed evaluation of the implementation and the effects of this project. The consistent finding that most railway and metro suicide victims are in treatment for psychiatric disorders, and that they often reside in a psychiatric facility and commit suicide in the station or on the tracks in the vicinity of a psychiatric institution provides important information to identify both high risk populations and high risk locations on metro and railway lines. We proposed an alternative to the "signage and poster" pilot programinvolving the provision ofproper training in the identification of persons at risk of suicide and the development of protocols and interventions to prevent their suicides in mental health facilities near tracks.The present document describes the content, implementation and costs of a pilot project for an "education in mental health facilities near tracks" suicide prevention strategy in Canada.

Background

It is clear that cost-effectiveness is a concern therefore it is best to focus technical modifications on stations, grade crossings and tracks areas of greatest risk, which are generally close to psychiatric institutions. Similarly, it may be useful to develop specific training programmes for staff of psychiatric facilities near tracks on the identification of suicide risk. Mishara (1999) found that most metro suicide victims threatened to commit suicide beforehand and they were often not taken seriously by psychiatric personnel. This would imply that it is important that staff in psychiatric institutions be well educated in the assessment of the suicide potential of their patients. Although it has been suggested that potential victims could be informed of the devastating effects of suicide on train drivers (Kerkhof, 2003), one would have to provide some empirical evidence of the dissuasive effect of such a programme before recommending its implementation.

At the present time there have been no published studies that report on the effectiveness of railway and metro suicide prevention programs that target specific high risk populations. We need better information to permit more precise identification of those at greatest risk of committing suicide in the railways and metros. To date, we know that persons who receive inpatient treatment for psychiatric problems are at greatest risk, but we know little about which psychiatric patients are most at risk and how their suicides may be best predicted. However, we do have some indications of at least one high risk group: Survivors of railway and metro suicide attempts are at particular risk of repetition and eventual completed suicides. Thus, persons intercepted in the process of an attempted may be targeted for specific interventions in order to prevent future attempts. Railway and metro personnel may profit from developing better collaborations with psychiatric emergency services and institutions.

However, it is most important to conduct research to learn more about the specific motivations of people who choose to attempt and commit railway and metro suicides and to evaluate the effectiveness of prevention programmes.

Collaborators and willingness to participate

We have identified 139 mental health facilities near the tracks which we would be using for the pilot intervention (see Table 7). We have conducted preliminary investigations of their willingness to accept suicide prevention training for their staff, and it is our general impression that there would be acceptance of this intervention, particularly if the training is provided free of charge to them.

Table 7- Mental health organisations close to tracks in the experimental areas

We identified 139 mental health facilities near tracks which we would use for the pilot intervention. Because this information is confidential, we do not include any specifics in this document. For additional information regarding at-risk areas of tracks, suicides and, mental healthfacilities, as identified by our study, please contact: railway_suicides@uqam.ca . We can discuss your needs and provide you with adequate information

Intervention characteristics

This intervention contains several key components that would be developed in detail in collaboration with our partners program.

Creation of a training programme for mental health professionals

Literature review

A literature review of suicide prevention training programs for mental health professionals has been carried out to identify best practices in program design and delivery strategies. There was no publication regarding training to identify and intervene with suicidal people with specific emphasis on a particular suicide method. Overall, 26

publications from 1999 to 2010 were identified, including 20 articles describing a training program and 6 training literature reviews.

Targeted professionals:

Most training program is designed to address hospital staff such as emergency department, psychiatry unit, and new staff in general hospital, residents (13, 65%). In some cases, all health or mental health providers are targeted (3, 15%). Finally, 2 trainings are dedicated to multidisciplinary staff excluding psychiatric institutions, one to providers working with older patients and the last one, to mental health providers working with homeless people.

Training format and content:

Our review of existing training programs for mental health facilities indicates that the length of the training can vary between one and 36 hours. The most extensive training program includes 5 trainings session of between 5 and 6 hours each. The structure of the training varies greatly according to duration and the most common teaching strategies are a lecture, role play with feedback, cases vignettes, and discussions in small groups about the presentation or the vignette and video on the topic.

Its content is usually based upon general knowledge about suicide (epidemiology, comprehension model…), myths and facts about suicide and suicidal behaviour, protective factors and risk factors. Then, identification and assessment of suicidal risk is presented, followed by suggestions of ways to deal with the suicidal crisis.

Several components of training can be evaluated, such as satisfaction with training, increases in knowledge, changes in attitudes and improvements in the ability to assess suicidal risk and intervention with suicidal individuals. A pre and post-test model is generally used, with a follow up to determine if the learning is maintained over time some time from one month to a year after the training. There are several methods which have been used to evaluate the effectiveness of training programs. These include questionnaires, reactions to vignette cases to evaluate competencies and role plays with an actor playing a suicidal client. The evaluation of the impact of such training on suicide attempts and completed suicides are rarely considered.

Program content and structure based on best practices

Details of the content and format of a potential training programme are included in Appendix III. Since a number of training programmes already exist in each province, we would coordinate development of our training programme with local organizations.

We aim at developing a training programme that would respond to the best

practices identified in the literature and that would also take into account the large variety of professionals to be trained and the different contexts of training and practice (mental health facilities, community organisations), the specificities of the area in which trainees work (regarding the problem of railway suicides in their area), time and organisational constraints and the need for an evaluation of implementation and effects.

This training would not constitute and cannot be a substituted for a lengthier and complete basic training in suicide prevention. It would be formatted to give further information on railway suicide to professionals who have already received some basic suicide prevention training.

Development of collaborations with local partners

The regions which we have identified for the pilot testing all have heath care networks, such as the CSSS in Québec and the LIHN in Ontario. These organisations have shown an interest in being involved in the recruitment of local facilities to be trained and have expressed a willingness to help in the promotion of the programme throughout their territories. We have confirmed interest and availability of Suicide Prevention Centres in Quebec, the network of Distress Centres Ontario, British Columbia Distress Centres and Professor Paul Links and his colleagues in Ontario to provide the training in their areas, if this project is implemented.

Time line

Development and implementation of the training program

Timeline	Delivery of program	Building of program
Month 1-3	Communication and negotiation with helplines, professionals and suicide prevention centers who will be local partners in the delivery of the training programme	Development of the training material and validation of content and pedagogy with expert partners Inclusion of local characteristics of the problem of railway suicides
Month 1-3	Communication and negotiation with local mental health and social networks who will be local partners in recruiting participating services	
Month 3		Printing and delivery of training kits to partners
Month 4	Training of trainers	
Month 4-5	Recruitment and scheduling of trainings in selected mental health services (phase 1)	
Months 5-8	Delivery of trainings	
Month 9		Analysis of first phase of training and programme adjustments Inclusion of a refresher session for those who already have been trained
Month 12 - 13	Recruitment and scheduling of trainings in selected mental health services (Phase 2)	Production and delivery of new training material Further training to trainers
Months 14-17	Delivery of training	
Month 18		Analysis of first phase of training and programme adjustments
Months 24 - 25	Recruitment and scheduling of trainings in selected mental health services (Phase 3)	Production and delivery of new training material Further training to trainers
Months 26-30	Delivery of training	
Month 36		Analysis of first phase of training and programme adjustments
Months 37-38	Recruitment and scheduling of trainings in selected mental health services (Phase 4)	Production and delivery of new training material Further training to trainers
Months 38-41	Delivery of training	
Months 42-48		Production of a final training package to be used after the end of the pilot testing project

Costs

We calculated costs based upon 139 organisations to be trained. There may be local variations (new organisations emerging during the project) and we also may be able to train two or more organisations in one session. Thus we based the cost analysis on 120 training sessions per round (per year), including 520 sessions over 4 years

Training preparation		totals
- Development of the programme	15 days (research professional, 47$/h x 105h) 2 days graphic designer	4 935$
- Designing training and promotion material	Each trainer's kit : 10$ printing + 3$ delivery (3 kits per track area per training bloc : 96 kits)	300$
- Printing copies of training guides for trainers		1 250$
Trainers		
- Recruitment	10 days (research assistant, 23$/h x 70h)	1 610$
- Training (training sessions will be delivered to groups of 7 to 10 trainers at a time)	Research professional 1 day per training session (8 tracks x 4 training blocs)	10 530$
Training delivery		
- Needs analysis and recruitment	7 hours per training session (25$/h) 520 training sessions overall	91 000$
- Registration	Printing trainee's kit : 5$ each (10 trainees per class)	26 000$
- Printing of training material and pamphlets and posters	Printing service kit : 10$ each (520 kits)	5 200$
Trainer's salary and travel costs	3 hours sessions of training (30$/h : 90$) Travel expenses	46 800$ 12 000$
Total		198 025$

Potential negative effects of the intervention

We cannot identify any potential negative effects, but we will remain attentive throughout the project.

Evaluation of this project

A separate document available on this web site describes the proposed evaluation of the implementation and the effects of this project.