Monitoring Suicidal Behaviour in Europe

MONSUE

Proposal for an

Action Plan

for the Prevention of Suicide and Suicidal Behaviour in Europe

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in the context of the project
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Preamble

This action plan was developed by the participants of the EC project "Monitoring Suicidal Behaviour in Europe" MONSUE.

The guidelines for political actions for suicide prevention in Europe were agreed upon in the MONSUE general meeting at Wuerzburg on 29th and 30th October 2010.

The consortium points out the importance of an integrative prevention strategy including measures on the primary, secondary and tertiary level.

Table of Contents

1. Aim of the MONSUE action plan

Suicidal behaviour is a major public and mental health problem in the majority of European countries. Every year, there are more than 58,000 suicides within the European Union. Continuous monitoring of suicide and attempted suicide is the basis for a successful implementation of suicide prevention programmes and their evaluation. The aim of the MONSUE project was a systematic assessment of the frequency, characteristics and repetition of suicidal behaviour, mainly of suicide attempts, in several European countries with a commonly developed monitoring form. On the basis of the synergistically collected and integrated data it was possible to formulate proposals for the implementation of prevention strategies to reduce the frequency of suicidal behaviour.

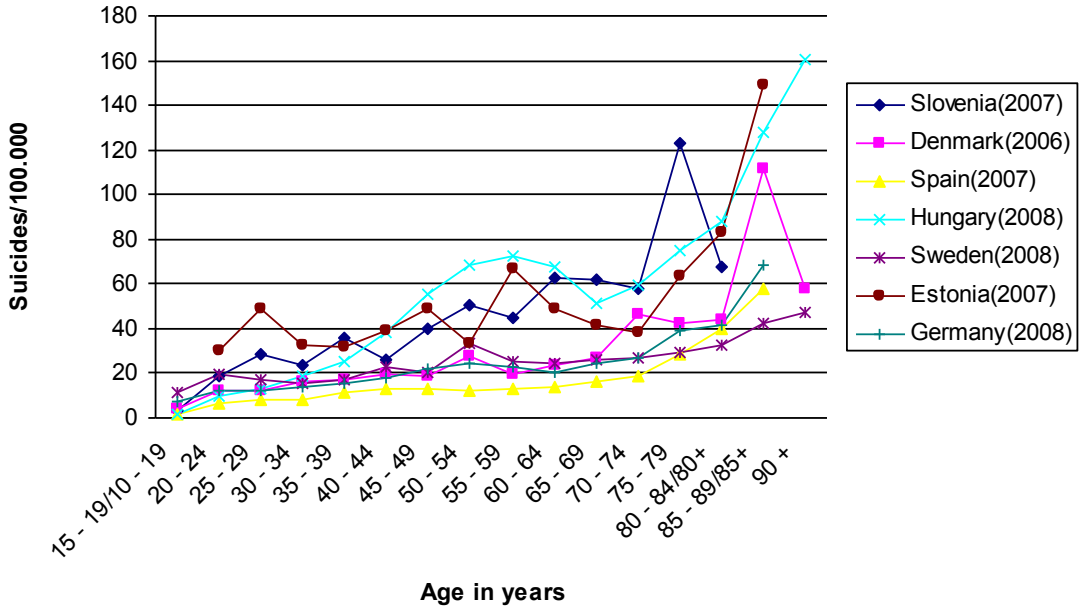
The MONSUE project is based on the experiences of the WHO/EURO Multicentre Study on Suicidal Behaviour. Since completed suicide is systematically assessed in nearly all European countries, it is all the more astonishing that no systematic cross-national assessment of suicide attempts is being conducted. A first approach towards a systematic assessment of suicide attempts was started in 1989 in the context of the WHO Network for Suicide Prevention. Due to funding by EC from June 2007 to June 2010, it was possible to improve and validate previously collected data by initiating the MONSUE project. Actively participating countries, covering all parts of Europe, were Belgium (Brussels), Denmark (Odense), Estonia (Tallinn), Germany (Leipzig, Wuerzburg), Hungary (Pecs), Italy (Campobasso), Slovenia (Maribor), Spain (Oviedo) and Sweden (Stockholm). Berne in Switzerland participated as associated centre without EC funding and assessed data on episodes of suicide attempts with the MONSUE monitoring form.

The aim of the MONSUE action plan is to present an overview of the existing suicide prevention strategies and risk factors of suicidal behaviour, to compare and validate this state of knowledge with the data collected within the MONSUE project and to deduce recommendations for suicide prevention strategies and the implementation of political actions.

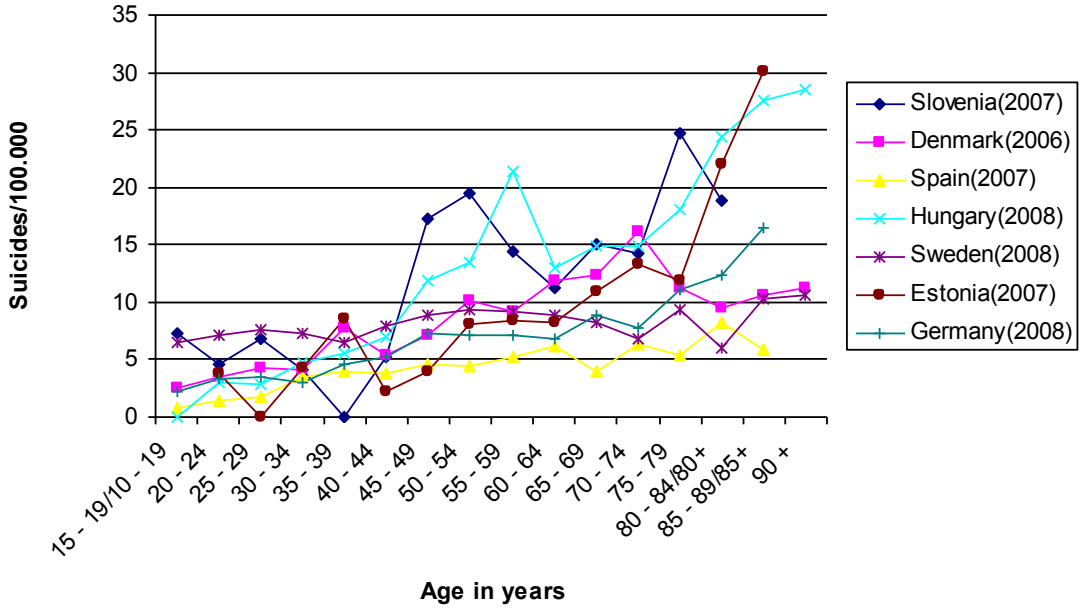
2. Suicide and suicide attempt rates in the MONSUE countries

Within the framework of the MONSUE project, suicide and suicide attempt rates were broken down by sex and five-year age groups. The distribution of suicide and suicide attempt frequencies according to sex and age found in previous epidemiological studies is confirmed by the MONSUE findings.

Suicide rates in males

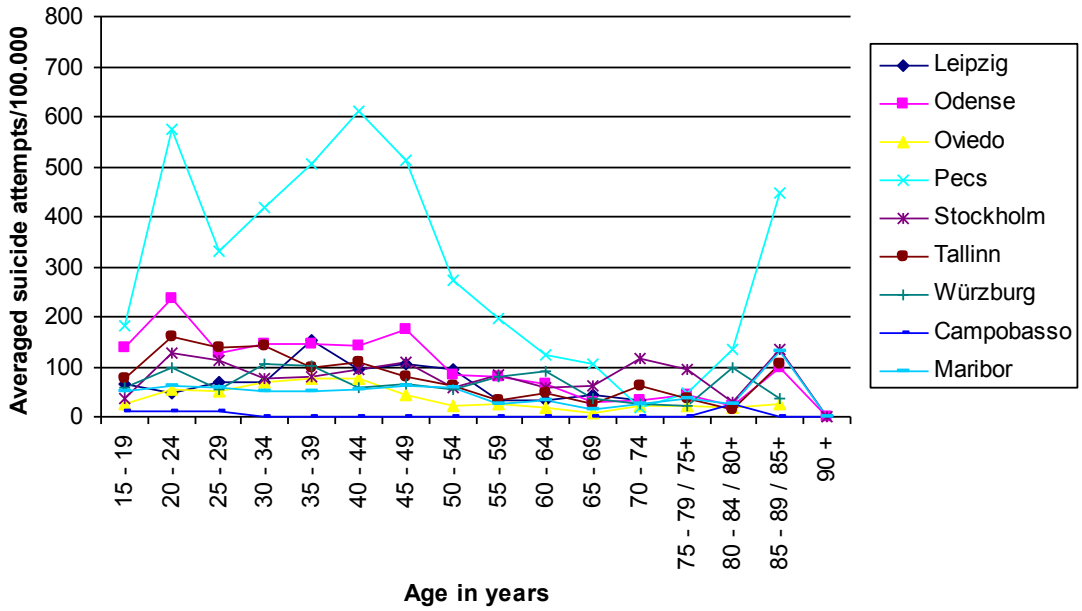


Suicide rates in females

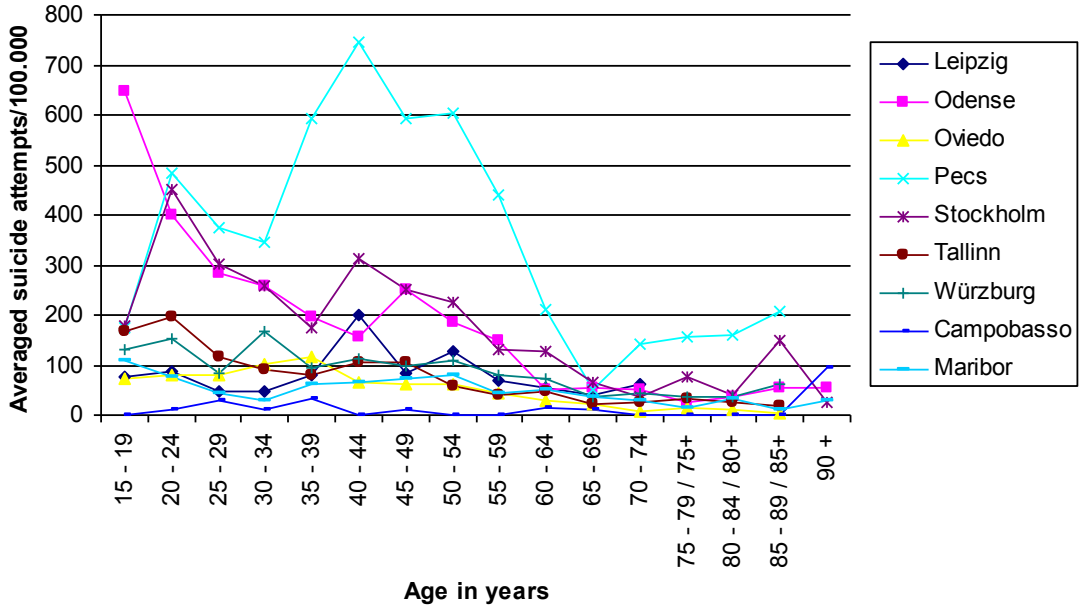


As shown in the figures above, suicide rates of males as well as females generally increase with age, and men's suicide rates are about three times higher than women's. A reverse distribution appears for suicide attempt rates.

Suicide attempt rates in males



Suicide attempt rates in females



With respect to suicide attempt rates, those of females are higher than those of males. In addition, suicide attempts are more often observed in younger females than in older age groups. One notable exception is Hungary where a high rate of suicide attempts could be observed for males. In general, suicide attempt rates are about ten times higher than suicide rates.

3. Summary of prevention strategies in the MONSUE countries

Strategies for suicide prevention can be divided into a public health approach and a health care approach. The public health approach intends to control the access to means of suicide, to implement a media policy, to increase knowledge through public education and to change disapproving attitudes in society to mental illness and suicide. Its purpose is to establish effective support networks as well as good environmental conditions. The health care approach aims at improving health care services, diagnostic procedures, treatment, follow-up and rehabilitation especially for individuals of risk groups, as well as increasing awareness among health care staff and changing their condemnatory attitudes and taboos concerning suicide.

In general, there are countries with comprehensive national programmes (multifaceted programmes integrating various components supported by the government) for the reduction of suicide rates, for example Sweden and Finland, countries with coordinated national programmes (non-governmental initiatives targeting various factors of suicide prevention), for example Estonia and Germany, as well as countries without any national programmes (isolated suicide prevention initiatives), for example Italy, Slovenia and Hungary. A comparison of changes in suicide and suicide attempt rates in a subsample of countries with a comprehensive national suicide prevention strategy, a coordinated national programme for suicide prevention or no national suicide prevention programme was conducted using MONSUE data as well as data collected within the scope of the WHO/EURO network for suicide prevention.

Comprehensive strategy: Sweden (Start in 1995)		**Suicide rate 1995**	**Suicide rate 2007**	**% change**	**Suicide attempt rate 1995**	**Suicide attempt rate 2007**	**% change**
	Males	26.57	21.10	-20%	212.68	152.63	-28%
	Females	11.23	4.85	-57%	322.96	418.04	+29%
National programme: Germany (Start in 2002)		**Suicide rate 2002**	**Suicide rate 2008**	**% change**	**Suicide attempt rate 2002**	**Suicide attempt rate 2008**	**% change**
	Males	23.81	20.39	-14%	115.93	70.96	-39%
	Females	8.43	6.61	-22%	184.61	106.41	-43%
No coordinated programme: Hungary		**Suicide rate 1997**	**Suicide rate 2008**	**% change**	**Suicide attempt rate 1997**	**Suicide attempt rate 2008**	**% change**
	Males	49.00	40.10	-18%	276.98	328.04	+18%
	Females	15.50	10.74	-31%	424.20	363.58	-14%

Regarding suicide rates, corrected for differences in the duration of assessment, a coordinated national suicide prevention programme seems to be similarly effective as a comprehensive national suicide prevention programme. The lack of a major difference is probably due to the fact that specific prevention activities are basically comparable. Merely the political support and embedment is diverse, since comprehensive programmes are approved and funded by the government, whereas coordinated programmes are non-governmental initiatives. It is obvious that in a country like Hungary which offers less connected interventions for preventing suicidal behaviour suicide rates also decrease, but stay at double the size as in the two other countries. Obviously there is a need for a comprehensive or coordinated national programme in countries like Hungary. The comparison over time clearly shows that the decrease in men's suicide rates is smaller than the decrease in women's´ suicide rates. Hence, suicide prevention strategies should be more adapted to men's needs.

Besides monitoring suicidal behaviour, the implementation of strategies for suicide prevention was observed for each country in the framework of the MONSUE project. In general, prevention strategies can be implemented on three different levels. Primary prevention strategies address the general population, whereas secondary prevention strategies address risk groups for suicidal behaviour. Tertiary prevention in the field of suicidal behaviour aims at reducing the risk of relapse. The

following table provides a structured overview of the prevention strategies in the different countries according to these three levels of prevention.

Country	Level	Strategy	Effectiveness
Belgium	Primary Prevention	• Regional initiatives: crisis hotlines • Public awareness campaigns to increase sensibility towards suicidal behaviour • Internet forum for suicide prevention • Campaigns for students	• Up to now no systematic evaluation of isolated measures
	Secondary Prevention	• Interventions in crisis institutions • Training for professionals	
	Tertiary Prevention	• Aftercare of suicide attempters • Education of parents after a suicide attempt of their child	
Denmark	Primary Prevention	• Youth education (Saving Young Lives in Europe SAYLE): enhancement of personal well-being and training for the development of resources	• Up to now no systematic evaluation of isolated measures
	Secondary Prevention	• Prevention of suicidal behaviour among elderly people, particularly elderly men (handbook for the personnel of the health care field: better tools in order to identify signs of poor personal welfare and suicidal behaviour among elderly people) • Prevention strategies targeting young people, particularly girls with eating disorders: psycho-educative programmes • Prevention strategies targeting mentally disordered, particularly those just discharged from a psychiatric department	
	Tertiary Prevention	• Collection of information on suicidal behaviour	

Estonia	Primary Prevention	• Public-relations activities to integrate suicide behaviour awareness into Estonian society. Topics on suicide behavior already have high profile in the media (TV, radio, press) • Raising awareness of Estonian policy- and decision-makers by providing sufficient information about the magnitude of suicidal behavior as an important public health and economic burden • Restriction of access to lethal means (regulations on medications, restriction of availability of alcohol etc.) • Providing guidelines to media about “safe” reporting of suicidal behaviours with indicating the possible aid and avoiding “copycat” suicidal behaviour. • Epidemiological and clinical research – (surveys of the distribution and dynamics of suicide and suicidal behaviours among specific groups, risk and protective factors, availability, quality and capacity of public health services, with respect to assessment and treatment of suicidal patients)	• Judging the effectiveness of suicide prevention by level and dynamics of suicide rates and trends, the suicide rate in Estonia has decreased steadily since 1995. It is now the lowest (20 per 100,000 inhabitants) among the Baltic States and Russia, the neighbouring post-soviet countries. The work of the Estonian-Swedish Mental Health and Suicidology Institute (ERSI) has gradually shifted towards earlier stages of the suicidal process, and towards the promotion of positive mental health.
	Secondary Prevention	• Education / basic course in suicidology and related topics for health sector (physicians, nurses), hotlines workers, psychologists, social workers, schoolteachers,police officers and other gatekeepers • Consultations related to special suicidological cases for medical staff and other specialists if needed • Strengthening protective factors and promoting positive mental health through e-learning courses for specific settings and risk groups (schools, workplaces, elderly care facilities) • Community programmes for migrants, unemployed and other risk groups	
	Tertiary Prevention	• Follow-up of suicide attempters and proper aftercare by professionals • Compulsory psychiatric observation after suicide attempter is admitted to emergency care department or in any other hospital • Collaboration with family members • Monitoring of suicide attempters	

Germany	Primary Prevention	• In 60 cities in Germany the four-level approach of the European Alliance Against Depression (EAAD) is implemented • Public awareness campaigns (Press conferences in connection with the World Suicide Prevention Day, presentations for the public, flyers and posters) • Restriction of access to lethal means (e.g. car exhausts fumes, medications, prohibition of selling alcohol in petrol stations after 10 p.m., registering and safeguarding of hot spots) • Media recommendations for reporting about suicide (flyer, press conferences)	• Reduction of suicide and suicide attempt rates in regions, which have implemented the EAAD multilevel concept (Interventions for the public, GPs, risk groups and multipliers), but also in Germany in total over the last 30 years • Up to now no systematic evaluation of isolated measures, but synergistic effects on the four levels of intervention
	Secondary Prevention	• In 60 cities in Germany the EAAD four-level approach is implemented • Flyers, posters and presentations for risk groups (relatives/survivors, substance-related disorders, elderly, young people, prisoners) • Training for multipliers and gatekeepers (e.g. teachers, priests, prison guards) • Crisis hotlines	
	Tertiary Prevention	• Training for professionals (e.g. nurses, general practitioners) regarding treatment of suicide attempters • Green card models (aftercare of suicide attempters)	
Hungary	Primary Prevention	• Nationwide S.O.S LIFE Hotline Service providing help between 7 p.m. and 7 a.m. daily for people in difficulties	• Up to now no systematic evaluation of isolated measures
	Secondary Prevention	• Training of help-line personnel in crisis resolution • Training of GPs in consultations with psychiatrists in identifying and treating depressive patients initiated by the American Foundation for Suicide Prevention (AFSP)	
	Tertiary Prevention		

Italy	Primary Prevention	• Public awareness campaigns (Conference in connection with the suicide prevention day) • Mental health awareness campaign within the project “Saving and Empowering Young Lives in Europe” (SEYLE)	• No systematic evaluation available • Evaluation currently on-going. Results will be available in 2011.
	Secondary Prevention	• Gatekeeper training for teachers in high schools about how to recognize and refer adolescents at risk for suicide, in the context of the SEYLE project • Professional screening for high schools at risk, within the SEYLE project • Suicide prevention program for prisoners conducted in different Italian regions	• Evaluation currently on-going. Results will be available in 2011. • Evaluation currently on-going. Results will be available in 2011. • No systematic evaluation available
	Tertiary Prevention	• Training for mental health professionals about suicide prevention in persons with a suicide attempt • CME course for physicians about suicide prevention in persons with a suicide attempt	• Evaluation is scheduled for 2011 and results expected by the end of 2011. Treatment given before and after the training will be evaluated. • No systematic evaluation available

Slovenia	Primary Prevention	• (Professional and General) Public awareness campaigns; symposia in connection with the World Suicide Prevention Day, with expert discussions, workshops and presentations, good media coverage of these events • Informative websites on mental health	• Raising awareness, battling suicide-related stigma among the expert AND general public (but no systematic evaluation so far) • Up to now no systematic evaluation of isolated measures • Resulted in improved recognition of depression by the GPs (research evidence)
	Secondary Prevention	• Flyers for risk groups (i.e. mental health patients), available at various (mental health and other) treatment centres • Crisis hotlines • Training for professionals (e.g. nurses, general practitioners) in recognizing the symptoms of mental disorder, specifically depression, among their patients	
	Tertiary Prevention		
Spain	Primary Prevention	• Public awareness campaigns: 1. Public conferences in connection with the World Suicide Prevention Day. 2. Press presentations 3. Interviews in radio programs. • Media recommendations for reporting about suicide. • Restriction of access to lethal means (e.g. medications, weapons, railings on bridges, car exhausts fume...).	• Up to now no systematic evaluation.
	Secondary Prevention	• Intervention program for adolescents (Oviedo): 1. Awareness intervention for pupils at schools (including poster and booklets). 2. Training for gatekeepers (teachers). 3. Screening for pupils at schools. Professional interview for pupils at risk (including referral to the mental health system if needed). • Crisis hotlines	
	Tertiary Prevention	• Case management intervention program for suicide attempters (Oviedo), start in 2011: 1. Follow-up interviews 2. Psychoeducation groups	

Sweden	Primary Prevention	• National Program for suicide prevention (first1995-2007; second started in 2008) with the following objectives: -To reduce availability of means to commit suicide; -To promote better life opportunities in order to support the groups that are most at need; -To support voluntary organizations	• A continuous evaluation of the National Program for suicide prevention is performed with process oriented and epidemiological measures. Suicide rates decline markedly and continuously in Sweden, both for males and females in all age groups, with the exception of the 15-24 age group in which suicide rates are stable.
		• Public awareness campaigns in connection with the Suicide Prevention Day with press-releases and wide media coverage	• No systematic evaluation is performed.
		• School based intervention on adolescents which comprised projection of a film and discussion	• A decrease in suicidal ideation has been measured one year after the intervention.
		• Adaptation and implementation in Sweden of the program Mental Health First Aid to the general population	• The program will be pilot-tested on 2000 persons from the general population in the first half of 2011. Results are expected to be available in early 2012.
		• Training of school staff in suicide prevention	• A decrease in suicidal ideation in students has been observed after the intervention.

	Secondary Prevention	• Objectives within the National program for suicide prevention: - To minimize alcohol consumption in target and high-risk groups; - To educate gatekeepers about effective management of persons with suicide risk; • To disseminate knowledge about evidence-based methods for reducing suicide	
	Tertiary Prevention	• Objectives within the National program for suicide prevention regarding of treatment with individuals with a suicide attempt: • To support medical, psychological and psychosocial services in preventing suicide; • To systematically analyse within the framework of the National Board for Health and Welfare all suicides which occur in the health care system during care and 28 days after discharge from the hospital; • To raise the competence of health-care personnel; • To build up rehabilitation services for suicide attempters • Zero vision on suicide program implemented by the Stockholm County Council which aims at training all health care staff in hospitals. • Training of mental health professionals through a train-the-trainer programme	• Evaluation is ongoing and results will be available in early 2011 • Improvement of trained staff in terms of knowledge about suicide, attitudes towards suicidal patients, self-confidence in their work.

4. Prevention strategies and their validation by MONSUE data

Within the MONSUE project a total of 4683 episodes of suicides attempts were registered in ten centres out of nine countries.

The following section reports on characteristics of suicide attempts and their contextual factors as well as related sociodemographic variables of suicide attempters assessed with the official MONSUE monitoring form. Based on these data, recommendations for political actions for the prevention of suicidal behaviour are deduced.

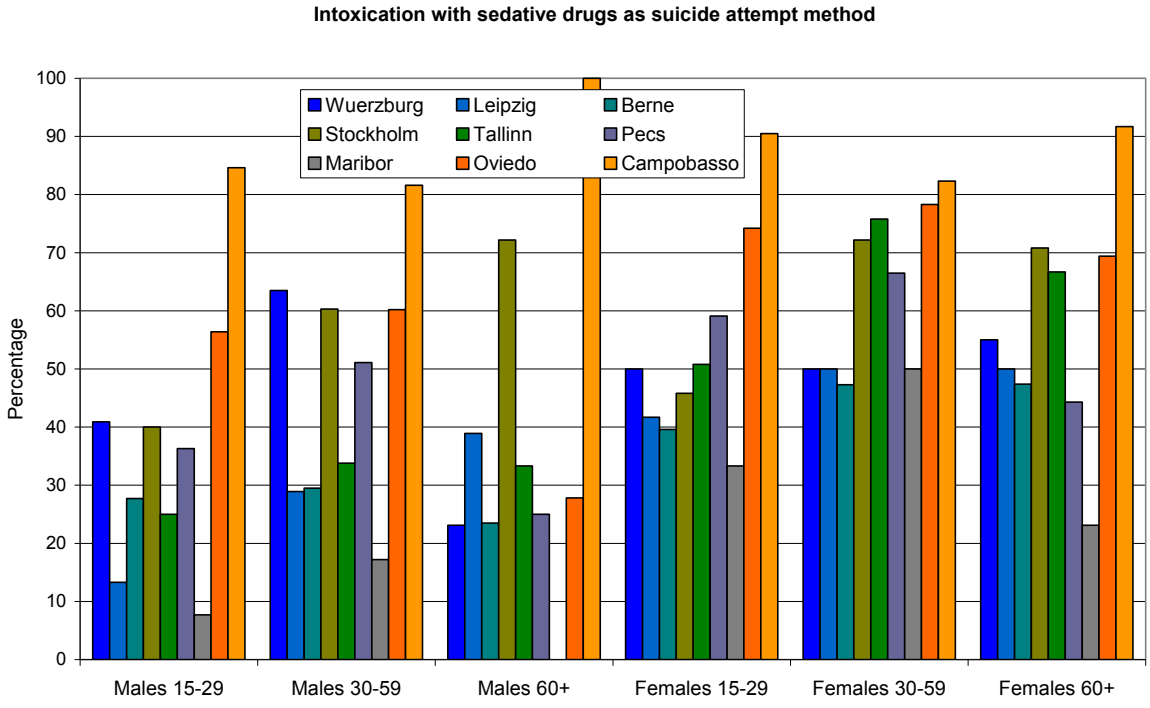
4.1 Primary prevention: prevention strategies for the general population

Prevention strategies on the primary level address the general population. They include the restriction of access to lethal means, awareness campaigns and media recommendations for reporting on suicidal behaviour. Methods of suicidal behaviour were systematically assessed with the MONSUE monitoring form and the obtained data constitute the basis for the development of prevention strategies for restricting the access to these means.

4.1.1 Prevention of intoxication with pharmaceutical drugs in suicidal intention

Concerning the choice of method, most suicide attempters in the MONSUE study take soft poisons (different kinds of medication). Hard poisons (e.g. pesticides) or other methods were less often observed (cf. MONSUE final report). The majority of persons that intoxicate themselves with pharmaceuticals take medication prescribed for them and do not use drugs prescribed for somebody else, which again outlines the importance of prescription regulations (cf. MONSUE final report). According to the literature, restricting the access to barbiturates led to a decrease in annual suicide rates of at least 23% (Mann, Apter, Bertolote et al., 2005). The MONSUE results reveal that especially younger people use medication prescribed for another person. As a consequence, general practitioners and pharmacists should advise parents to safely store their medication.

With regard to country-specific results, particularly Italian males and females of all age groups strongly prefer the method of soft poisoning (more than 80%). By contrast, in Slovenia this method is used less often for all sex and age groups. On average, more women intoxicate themselves with sedative drugs than men.



The restriction of access to drugs and medication therefore is an important primary prevention strategy (Leenaars, Lester, Baquedano et al., 2009). Governments and agencies need to be aware of these issues in order to promote international cooperation and establish educational campaigns and international agreements among pharmaceutical companies, national health services as well as medical associations.

Action: How to prevent intoxication with pharmaceutical drugs in suicidal intention

- Restriction of maximum package sizes of prescribed drugs and intervals of repetitive prescription, obligations to the prescription of OTC drugs (e.g. Paracetamol) in case of the purchase of a higher amount of medication and obligations regarding the type of packages of medication (blistering of medication)
- Training of pharmacists
- Strict monitoring of prescriptions by doctors and pharmacists
- Education of parents how to safely store their pharmaceuticals

4.1.2 Prevention of intoxication with alcohol in suicidal intention

The MONSUE results show that, compared with the other participating centres, alcohol as suicide attempt method is most often used in Spain, but also Germany (cf. MONSUE final report). It is a relevant co-factor for attempting suicide, and the restriction of alcohol consumption may be effective in reducing suicide (attempt) rates. Both aggregate-level and individual-level studies have shown that the reduction of overall national or regional alcohol consumption led to a decrease in national and regional suicide rates (Wasserman and Hadlaczky, 2009). As a consequence, restricting prescriptions of sedative drugs and the availability of alcohol is an indicated primary prevention strategy, particularly for Spain and Germany.

Action: How to prevent intoxication with alcohol in suicidal intention

- Governmental regulation of sales (i.e. of the number of outlets and alcohol sales at retail level) and implementation of licenses for private operators
- Regulation of alcohol prices and taxes
- Bans on drinking in streets and public places; bans on selling alcohol to young people in the evening hours
- Restrictions on alcohol marketing
- Education about alcohol-related harm via mass-media campaigns, the internet, family initiatives and school programmes

4.1.3 Prevention of hard poisoning in suicidal intention

In line with the MONSUE results, hard poisons (pesticides) are not frequently used as method of suicide attempt (cf. MONSUE final report). Highest percentages are found in elder female suicide attempters in Slovenia, followed by Germany. With regard to controlling the access to hard poisons, the detoxification of domestic gas has been shown to be effective in reducing annual suicide rates by 19% (Mann, Apter, Bertolote et al., 2005). As a consequence, access to pesticides needs to be paid special attention as primary prevention strategy in Slovenia and Germany.

Action: How to prevent intoxication with hard poisons in suicidal intention

- Restriction of the access to pesticides for people other than farmers (especially in Slovenia and Germany)
- Safety measures for toxic gases (detoxification) and car exhausts (automatic stop switches after a certain period of running of the engine without driving)

4.1.4 Prevention of shooting in suicidal intention

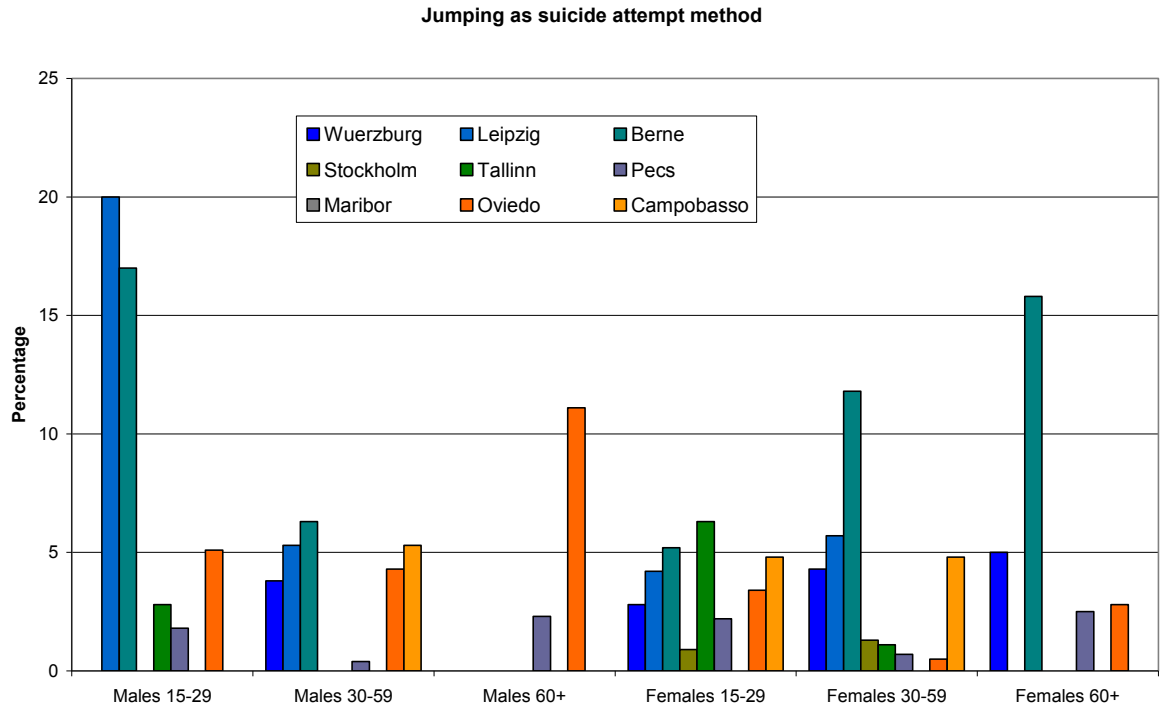
Controlling gun availability is a further important aspect in suicide prevention (Leenaars, 2009). Studies revealed that the rate of suicide by firearms increases with the availability of guns, especially among young people. The importance of this suicide prevention strategy is underlined by the fact that shooting is a method with high case fatalities. Restricting the access to guns led to a decline in annual suicide rates of at least 1.5% (Mann, Apter, Bertolote, et al., 2005). The need for intervention is stressed by the MONSUE results, since these reveal that young and elder men using hard methods for their suicide attempt have a high risk for repetition (cf. MONSUE final report).

Action: How to prevent shooting in suicidal intention

- Reduction of access to guns among groups at risk of suicide
- Gun control legislation and, especially, the enforcement of this legislation

4.1.5 Prevention of jumping in suicidal intention

Another important primary prevention strategy addressing the general population is the identification of “hot spots” for jumping in suicidal intention and the subsequent restriction of access to these locations. A suicide “hot spot” is a location where more than 0,5 suicides per year take place over a time period of 10 years. Shorter time units should be defined for newer locations. Continuous random monitoring of suicides in new locations (e.g. bridges, buildings and towers) is a necessary precondition for an early intervention.



As regards jumping as suicide attempt method, young males from Leipzig (Germany) and the associated centre in Berne (Switzerland) show a higher percentage than those of the other centres (cf. MONSUE final report). This leads to the conclusion that there probably are certain hot spots for jumping in Leipzig and Berne. In Leipzig the so-called Battle of the Nations Monument could be identified as hot spot. Restrictions of access to this monument have recently been implemented (barriers and net constructions). A systematic evaluation of the influence of this prevention strategy on the number of suicides and suicide attempts still needs to be conducted in those regions of Germany, Switzerland and other countries where hot

spots have been identified. Since the largest proportion of the individuals in the MONSUE sample attempted suicide in their homes (cf. MONSUE final report), the restriction of access to hot spots is particularly relevant for completed suicides. Hot spots are mainly related to the use of hard methods (jumping) and, thus, to high case fatalities. There is increasing evidence that suicide by jumping can be prevented by protecting bridges and high buildings through the installation of appropriate safety barriers, and that this measure decreases suicides by jumping in the surrounding area (Beautrais and Gibb, 2009; Wohner et al., 2005; Lindqvist et al., 2004).

Action: How to prevent jumping in suicidal intention

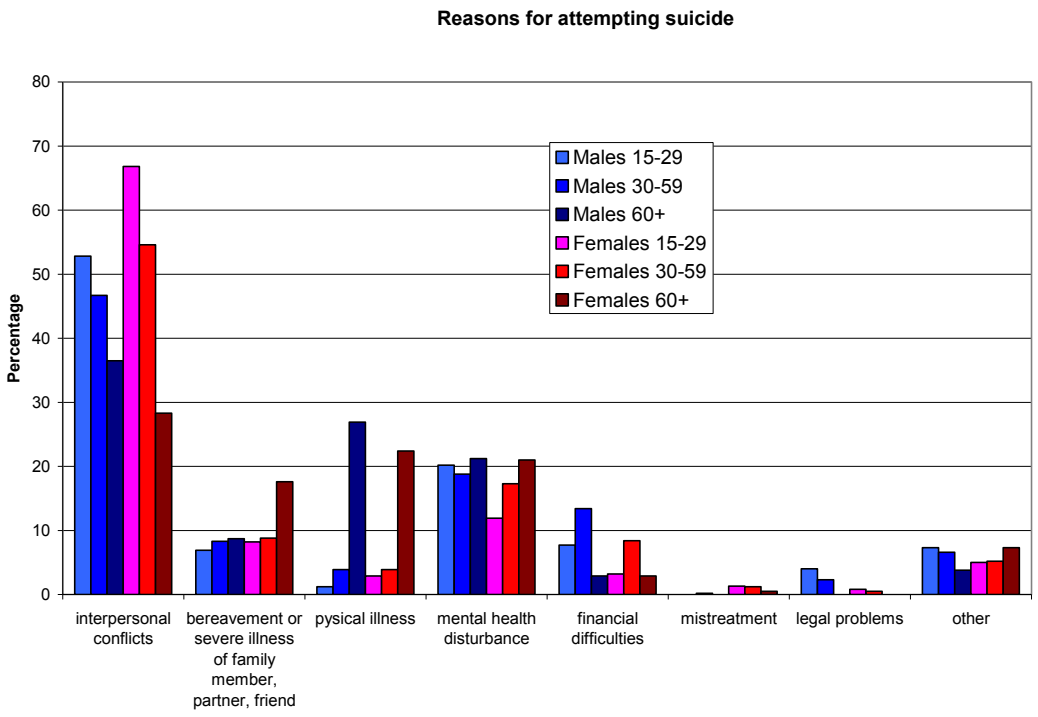
- Implementation of norms for kind and heights of barriers and fences on bridges, roofs of tall buildings and railings with the aim of building maximally "safe" bridges and houses with regard to potential suicidal acts

4.2 Secondary prevention: prevention strategies for groups at high risk

Secondary prevention strategies address risk groups for suicidal behaviour. Risk groups were identified on the basis of either a higher frequency of suicidal behaviour in relation to the general population or by analysis of the risk for repetition. The following risk groups could be detected by MONSUE and previous studies: People in interpersonal conflict situations, people with psychiatric disorders (especially affective disorders, adjustment disorders, substance-related disorders), persons with migration background (especially young females), unemployed (especially young males), elderly with physical illness, elder females living alone, soldiers as well as prisoners (cf. MONSUE final report, De Leo, Krysinska, Bertolote, Fleischmann, and Wasserman, 2009; Mäkinen and Wasserman, 2009; Mehlum, 2009; Sharma and Bhugra, 2009; Ochoa, Muelas, and Suarez, 2005).

4.2.1 Prevention targeting the reasons for attempting suicide

Concerning the results of the MONSUE monitoring form, interpersonal conflicts constitute the main reason for attempting suicide.



In particular young males and females often mentioned interpersonal conflicts as the major reason for attempting suicide. Therefore, the implementation of hotlines for interpersonal conflicts as well as training to cope with social crises (social skills training) are secondary prevention strategies according to these results. Telephone hotlines have been proven to have a high potential to serve vulnerable individuals in crisis (Gould and Kalafat, 2009). Studies also highlight the need for improved training of crisis counsellors.

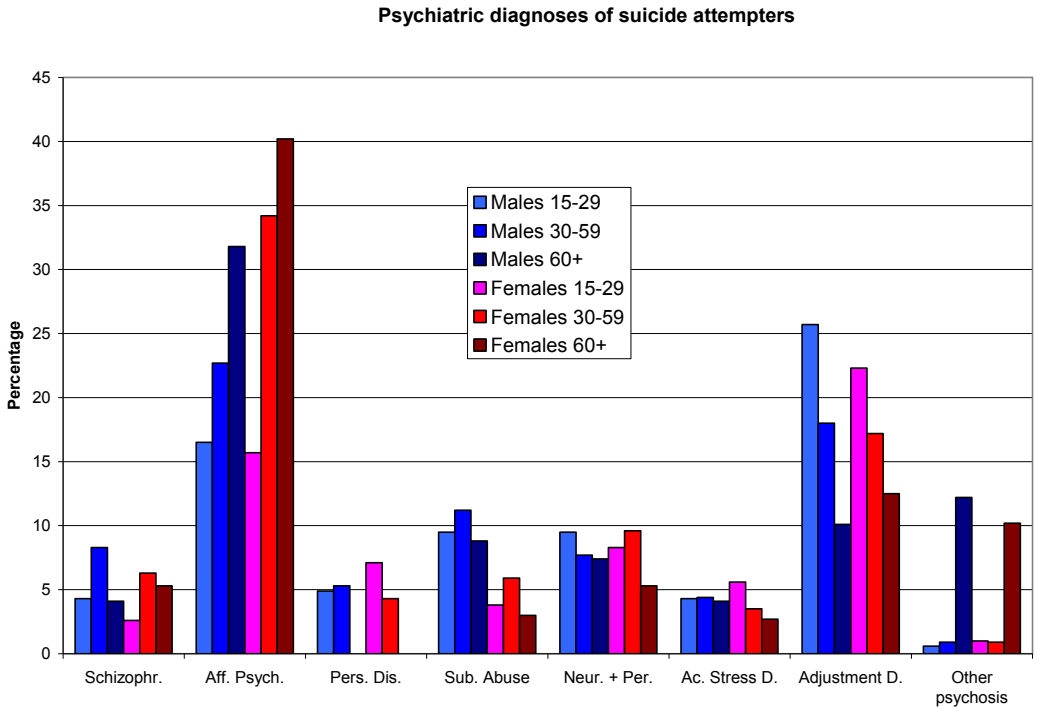
Moreover, the MONSUE results display that in elder persons physical illness is a major reason for suicidal behaviour. Support for coping with physical illness thus seems to be an important secondary prevention strategy for this age group. Suicidal behaviour among the elderly still attracts very little attention from the media as well as public health planners (De Leo, Krysinska, Bertolote, Fleischmann and Wasserman, 2009), despite of the fact that suicide rates significantly increase with age. This may be due to the existence of an ageism culture which considers depression as a normal feature of the old age and, consequently, suicide of elderly as unpreventable (Draper, 2006). Suicide prevention in this area has to affect the conditions of life in nursing homes as well as the quality of pain treatment.

Action: Prevention strategies targeting the reasons for suicidal behaviour

- Implementation of stress management trainings in schools
- Implementation of crisis hotlines, especially for young people
- Education of first-line help providers in suicidal de-escalation techniques
- Training of general practitioners concerning recognition and management of suicide risk in individuals with a psychiatric diagnosis, but also in people with severe physical illness, especially chronic pain or chronic disease

4.2.2 Prevention targeting the psychiatric diagnoses of suicide attempters

Suicide is the most severe outcome of mental ill-health and no other known risk factor has such high prevention potential regarding suicide as psychiatric disorders (Mehlum, 2009). On the basis of the MONSUE results, it becomes evident that the frequency of affective disorders among suicide attempters is quite high and increases with age. Especially in elder females, but also males of most centres the percentage of affective disorders is very high (cf. MONSUE final report). Additionally, adjustment disorders seem to be an important risk factor, mainly in young males and females.



Substance-related disorders also appear to be associated with suicidal acts (cf. MONSUE final report). Substance-related comorbidity particularly plays a role in males. Independent of sex and age, substance abuse is a potentially high risk factor for the repetition of suicidal behaviour (cf. MONSUE final report).

In summary, the MONSUE data analysis confirms the results of previous studies which show that psychiatric illness is frequent in suicide attempters. Most vulnerable are people suffering from affective disorders, adjustment disorders as well as substance abuse (cf. MONSUE final report). According to the scientific literature,

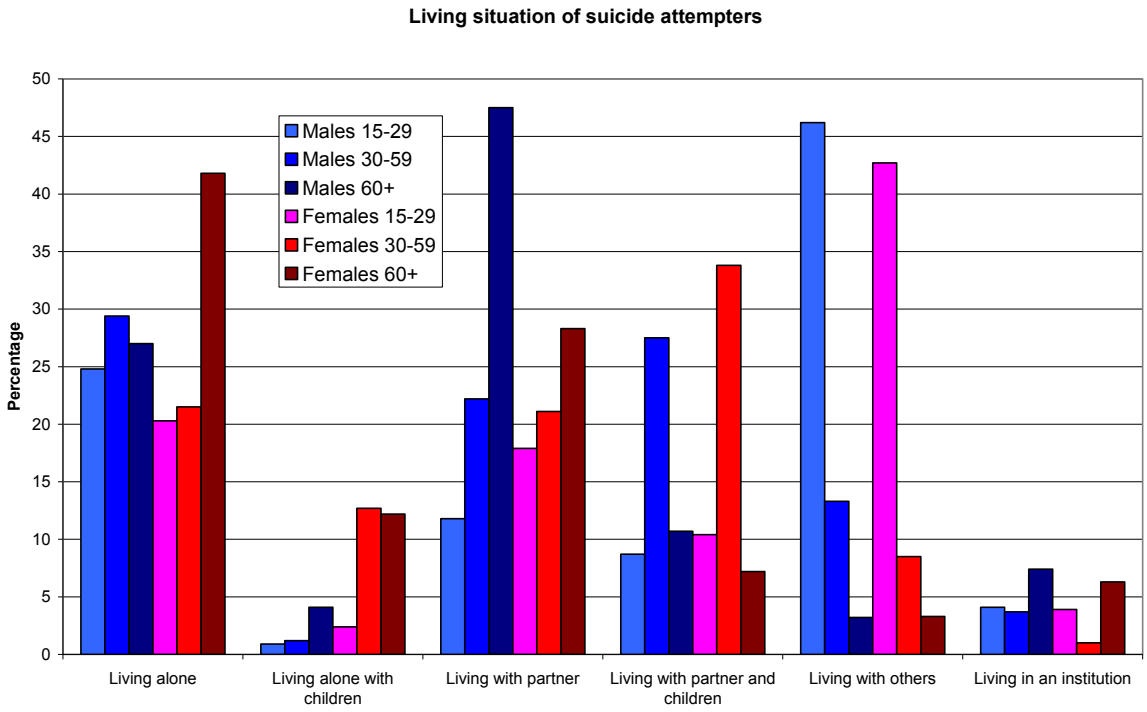
the education of primary care physicians was shown to be effective in reducing annual suicide rates by at least 22% (Mann, Apter, Bertolote et al., 2005). Optimizing treatment strategies for these psychiatric disorders therefore appears as a highly important secondary prevention strategy.

Action: Prevention strategies targeting patients with psychiatric disorders

- Improvement of the early recognition and sufficient treatment of patients with psychiatric disorders, especially depression
- Training of the staff of general and psychiatric hospitals in recognition of depression and suicidality
- Implementation of norms for building new psychiatric hospitals as well as general hospitals and nursing homes, regarding the distance from identified suicide hot spots, safety measures for windows, bath rooms, hooks, access to electricity, ropes, etc. Additionally, implementation of regulations for security measures in existing psychiatric and general hospitals as well as homes for the elderly

4.2.3 Prevention targeting the living situation of suicide attempters

The analysis of the usual household composition one year before the suicide attempt shows that elder females living alone constitute a special risk group for attempting suicide (cf. MONSUE final report) and should thus receive special attention as regards suicide prevention.



Action: Prevention strategies targeting persons with risk-elevating living situations

- Improvement of depression care and the responsiveness of services to the needs of elder females living alone
- Implementation of measures for socially disadvantaged people to prevent loneliness, to improve autonomy and the facilitated access to social activities

4.2.4 Prevention targeting unemployed persons

Another important risk group detected in the majority of the MONSUE centres is that of the unemployed (cf. MONSUE final report): 20 to 30% of the young males in the sample of suicide attempters are jobless. This percentage differs from the unemployment rate of young males in the general population. Suicide prevention issues in this regard concern unemployment policies, the reduction of work-related access to means of suicide and the implementation of the workplace as a place for suicide prevention (Mäkinen and Wasserman, 2009). Awareness campaigns and trainings for employees in job centres as well as psychosocial coaching for persons

who lose their jobs are further possible secondary prevention strategies. Since unemployment is frequently associated with a low economic status and, in some cases, with homelessness (Brux, 2007), socially disadvantaged people also constitute a group at risk for suicidal behaviour.

Action: Prevention strategies targeting unemployed persons

- Implementation of mental health promoting measures at work place, especially for people threatened by unemployment. This means the provision of information material regarding depression, addiction and other psychiatric problems as well as the availability of professional help and recommendations to employment centres, employers' associations and trade unions to facilitate the distribution of such material. In addition, low-threshold psychiatric emergency services should be installed
- Information on how to cope with unemployment distributed by the job centres (e.g. leaflets); training of personnel managers how to cope with co-workers to be dismissed; education of co-workers in job centres which deal with unemployed people
- Provision of information material regarding depression, addiction and other psychiatric problems and the availability of professional help via specific aid organizations working with homeless people.
- Reintegration of mentally ill persons into work life and social life
- Exemption of the poor from co-payment for treatment

4.2.5 Prevention targeting persons with migration background

Another risk group, highly relevant for political actions, are immigrants or persons with migration background (Sharma and Bhugra, 2009). Given the impact of socio-cultural aspects in the development and clinical manifestations of mental health problems, it is necessary to know the demands of the immigrant population and to adjust current facilities to its needs (Ochoa, Muelas and Suarez, 2005). Looking at the difference in the suicide attempt rates of persons with migration background and persons without migration background in the MONSUE sample, it becomes obvious that in particular being a young female with migration background heightens the probability of attempting suicide (cf. MONSUE final report). According to these results, people with migration background, especially young females, constitute a group at risk for suicidal behaviour. Specific secondary prevention strategies for this particular group should therefore be considered. Preventative strategies for persons with migration background must be adapted to the type of migration, the reason for migration and to culture-specific as well as social aspects.

Action: Prevention strategies targeting persons with migration background

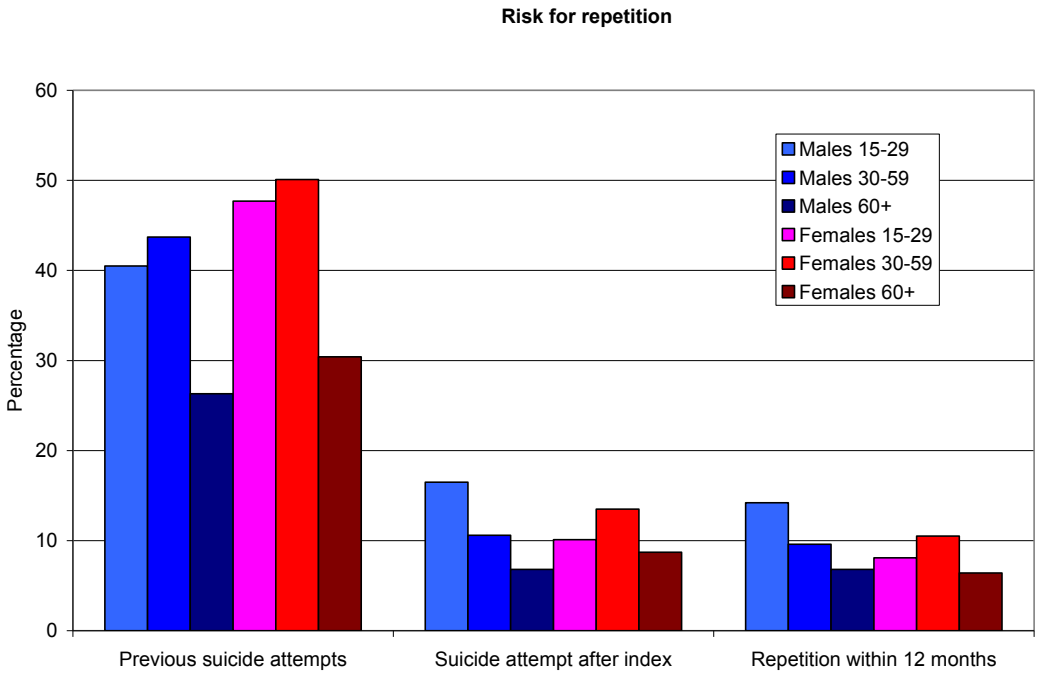
- Provision of native language information material to persons with migration background regarding depression, addiction and other psychiatric problems
- Availability of professional help and improvement of the availability of psychiatric/psychotherapeutic care in patients´ native language, mainly for young females with migration background

4.3 Tertiary prevention: prevention of repetition of suicide attempts

Tertiary prevention in the field of suicidal behaviour aims at reducing the risk of relapse. In particular, this means providing information and education to general practitioners and psychiatrists/psychotherapists regarding the necessity of intensive aftercare for suicide attempters.

4.3.1 Reducing the risk for repetition

The MONSUE results show that the risk for repeating a suicide attempt is generally high.



Between 30 to 50% of the suicide attempters in the MONSUE study had a history of at least one previous suicide attempt. According to the MONSUE results, a critical time period for tertiary prevention is the first 12 months after the suicide attempt, since in this period the probability of repetition is high. According to these results, the improvement of the aftercare for suicide attempters as well as an implementation of tertiary prevention strategies at the earliest point in time is indicated. Since the percentage of repeaters is about 50% among young and middle-aged persons, special programmes for these groups are necessary, in particular the follow-up of suicide attempters and proper psychiatric care after a suicide attempt.

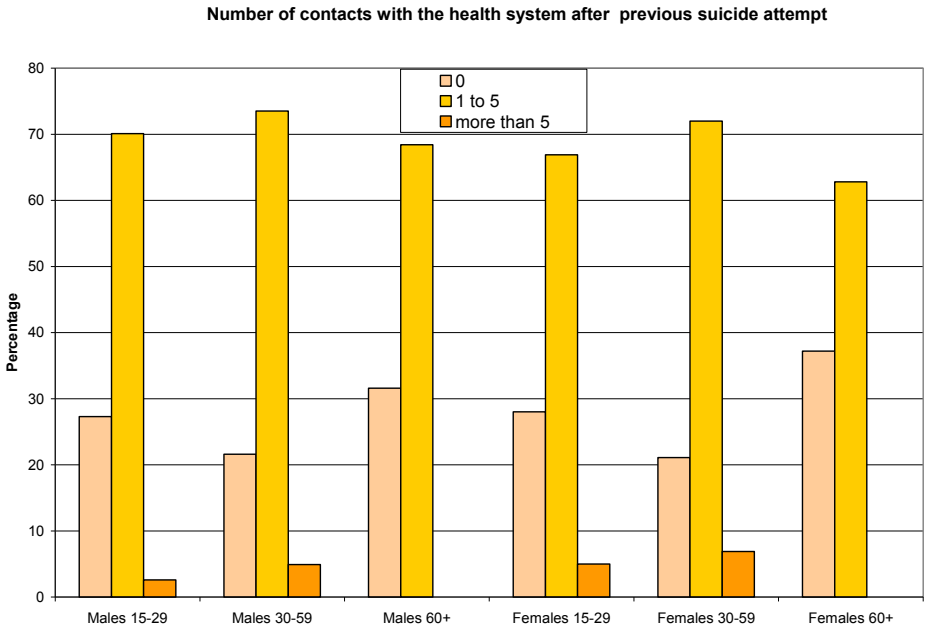
In addition, the following risk groups could be identified by means of repeater analyses (cf. MONSUE final report) in the MONSUE study: people with psychiatric disorders (especially affective disorders, substance-related disorders) and persons with migration background (especially young persons). Thus, special programmes for these groups at high risk for repetition need to be developed and implemented.

Action: Prevention strategies to reduce the risk for repetition of a suicide attempt

- Proper and continuous follow up of suicide attempters
- Monitoring of prevalence, service use, self-perceived health and social status of suicide attempters
- Implementation of support groups in the local communities
- Special aftercare programmes for young and middle-aged persons, patients with psychiatric disorders and persons with migration background

4.3.2 Improving the aftercare of suicide attempters

The MONSUE results suggest that most of the suicide attempt repeaters suffer from a lack of adequate treatment, i.e. continuous and highly frequent treatment, after their suicide attempt. In the study sample less than 5% of the suicide attempters obtain longer-lasting aftercare which is a necessary precondition for reducing the risk of repetition. Concerning tertiary prevention, increasing antidepressant prescriptions led to a decline in annual suicide rates of 3.2% (Mann, Apter, Bertolote et al., 2005). Furthermore, lithium treatment, due to its anti-suicidal effect, is an empirically validated strategy to reduce the risk for repeating a suicide attempt in patients with affective disorders (Guzzetta et al., 2007). Consequently, the provision of better aftercare for suicide attempters is proposed.



Action: Prevention strategies targeting the aftercare of suicide attempters

- Evaluation and psychiatric care after the first suicide attempt, not just the treatment of medical consequences in emergency care settings
- Improvement of the density of care and continuity of treatment after a suicide attempt, especially in the first 12 months
- Involvement of families in taking care of the suicidal patient, better collaboration with family members
- Green card models (a document that facilitates immediate access to the respective treatment institution)
- The optimization of treatment must include adequate pharmacological treatment

5. Future perspectives and open questions

Suicide and suicide attempts are complex phenomena that arise in very individualistic ways. Therefore, the complexity of causes requires a multifaceted approach to prevention.

MONSUE has laid a fundament for a systematic assessment of suicide attempts and prevention strategies in Europe.

Whereas suicides are and will be continuously monitored by means of common databases (WHO, EUROSTAT), suicide attempts and the efficacy of prevention strategies will not be systematically assessed in the future after the termination of MONSUE. This seriously handicaps the coordination and interconnection of prevention strategies.

The continuation of the MONSUE effort therefore appears to be absolutely necessary for the improvement of suicide prevention. Thus, it is recommended to establish a European umbrella institution or office that is steadily concerned with this important issue. There are different ways of implementing such an entity: 1. a call for tenders in the framework of a network; 2. an EC-wide centre that is connected with country-specific institutions; or 3. the integration of this task into an already existing division of EC.

The continuation of data collection on suicide attempts and prevention strategies will be the essential prerequisite of the continuous improvement of prevention of suicide attempts and suicides. With Europe becoming a house united this is not a national, but a European challenge.

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