



# PREVENTION OF DEPRESSION AND SUICIDE



## CONSENSUS PAPER

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More information and the electronic version of the paper are available at:

<http://www.ec-mental-health-process.net>

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu.int>).

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## Prevention of depression and suicide

### Consensus paper

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Depression is a common mental disorder in Europe, causing unnecessary human suffering and enormous costs for society. Depression can lead to suicidal behaviour, especially if other predisposing factors exist. In 2006 at least 59 000 persons in EU27 completed a suicide. It is important to raise awareness on that depression is a treatable disorder and suicide is a preventable act. Promotion of good mental health, preventive measures, early recognition and adequate treatment of people with mental disorders are the key measures in avoiding depression and its complications such as suicide. Multisectoral comprehensive suicide prevention programmes, aiming at restrictions in access to suicide means, prevention of depression, improved recognition and treatment of mental disorders, and support for people at risk for suicide, achieve best results.

#### 1. POLICY CONTEXT

In the renewed EU Sustainable Development Strategy adopted by the June 2006 European Council, improving mental health and tackling suicide risks was identified as one of the operational objectives of the strategy in the field of public health. Addressing mental health and suicide has therefore become a focus of EU policy making.

Depression is one of the major risk factors for suicide and was the subject of Council conclusions in 2001. The Commission's Green Paper "Improving the mental health of the population" (2005) highlighted the prevention of depression and suicide as priorities for action. In line with the commitment in the Sustainable Development Strategy, the Commission's White Paper "Together for Health. A Strategic Approach for the EU 2008-2013" announced the development and delivery of actions on mental health involving the Commission and Member States.

Furthermore, the Commission's White Paper stressed as one of the values related to improving health the need to reduce inequities in health. Inequities are significant in the field of suicide. Some Member States have low rates of suicide, while others have rates which are among the highest in the world. Additionally, risk of suicide is associated with social exclusion and other major health inequities that the EU is committed to tackling.

The Commission's White Paper aims to develop actions on environmental and socioeconomic factors affecting physical and mental health. The broad approach needed for prevention and action on depression and suicide is entirely consistent with this aim.

Although action in the field of prevention of depression and suicide is primarily a responsibility of Member States themselves, who are also in charge of the organisation and delivery of health services and medical care, there are specific competencies and powers of the EU institutions as a whole that can influence the major determinants of depression and suicide.

## 2. FACTS AND TRENDS

### 2.1 Depression

#### ***Depression affects one in six women in Europe***

Depression is common in Europe, and affects women almost twice as often as men. Data from western and southern Member States indicate that lifetime prevalence of major depression is 13% overall, 9% of adult European men and 17% of adult European women<sup>1</sup>. Depression is more frequent in younger age groups<sup>1</sup>. Being single or having a chronic illness increases the risk of having depression<sup>2</sup>. Depression is highly co-morbid with other mental disorders like alcohol use<sup>3</sup> and anxiety disorders<sup>4</sup>. European data indicate that mood disorders markedly reduce quality of life<sup>5</sup>. The impact on quality of life of a depressed person is estimated to be equivalent to that of a severe physical illness, e.g. severe stroke<sup>6</sup>. Global data indicate that depression caused a worse decrement in self-reported health score than angina pectoris, arthritis, asthma or diabetes<sup>7</sup>.

#### ***Depression affects Europeans during peak earning years***

Depression makes a major contribution to the burden of disease in developed countries because of early onset, unlike many physical disorders that occur later in life. Many countries of Western Europe are experiencing an increasing numbers of sickness spells and early retirements due to mental disorders, especially depression<sup>8</sup>. People with major depression in Europe report more than seven times more work days lost than people without any mental disorder, and they lose more work days than e.g. people with heart diseases or diabetes<sup>5</sup>. Individuals with major depression report, on average, about 25% of work loss days, while sufferers of heart diseases or diabetes report 18% and 12%, respectively<sup>5</sup>. Two thirds of the individuals with depression report severe interference with normal function, a considerably higher proportion than individuals with physical chronic conditions<sup>9</sup>.

#### ***Costs for depression have doubled in ten years***

In 2004, economical costs of depression were estimated to be € 250 per inhabitant, or € 118 bn in EU25 and EFTA<sup>10</sup>. Direct costs, i.e. health care costs, account for only a minor part of the total economic burden<sup>9,10,11</sup>. A majority of costs, about 65 %<sup>10</sup>, arise indirectly from loss of productivity, i.e. sickness absence and early retirement but also from mortality due to suicide. Data from Sweden indicate that the costs for depression may have doubled from 1997 to 2005, mainly due to increase in indirect costs<sup>11</sup>.

#### ***Access to prevention and treatment of depression is a challenge for Europe***

Depression can be prevented. Psychological interventions for people at risk of depression may reduce the risk of development of a depression by a third<sup>12</sup>, but few Member States have implemented prevention programmes<sup>13</sup>.

Depression is a treatable disorder. Yet under-treatment is very common<sup>14</sup>. Data from western and southern Europe indicate that only a third of Europeans with mood disorders have been in contact with formal health services in the previous year<sup>15</sup>. Of those who have been in contact with the health services, only about a half receives adequate treatment<sup>15</sup>.

One reason for under-treatment lies in the stigmatisation of mental disorders, which creates a hurdle of access to health care<sup>16</sup>. Accessibility of health services, which may differ between Member States, can influence care seeking. Barriers for access to health care exist especially for disadvantaged groups with the highest rates of mental disorders and suicides<sup>17</sup>. Recognition of depression is not difficult<sup>18</sup> but under-recognition exists among healthcare professionals<sup>14</sup>. Therefore, educational activities for health care professionals are necessary.

## 2.2. Suicide

### ***Several Member States are among the leading suicide countries***

Suicide is a major cause of premature deaths in Europe. 12 of 1000 EU citizens die prematurely due to suicide. In 2006, about 59 000 Europeans in the 27 EU Member States (EU27) completed a suicide, including 45 000 men and 14 000 women (Eurostat). In comparison traffic accidents caused 50 000 deaths (Eurostat). Seven Member States are among the top 15 male suicide mortality countries globally, and five Member States are among the top 15 female suicide mortality countries (WHO, most recent year available as of 2007)<sup>19</sup>.

On EU-level, no decisive success in prevention of suicides can be seen. There is no distinction between the decrease in suicide mortality and the general decrease in all-cause mortality (Eurostat statistics available since 1994). Variations, which are partly due to differences in documenting and reporting suicides, can be seen between countries (Figure 1).

### ***Suicide is a consequence of mental disorder***

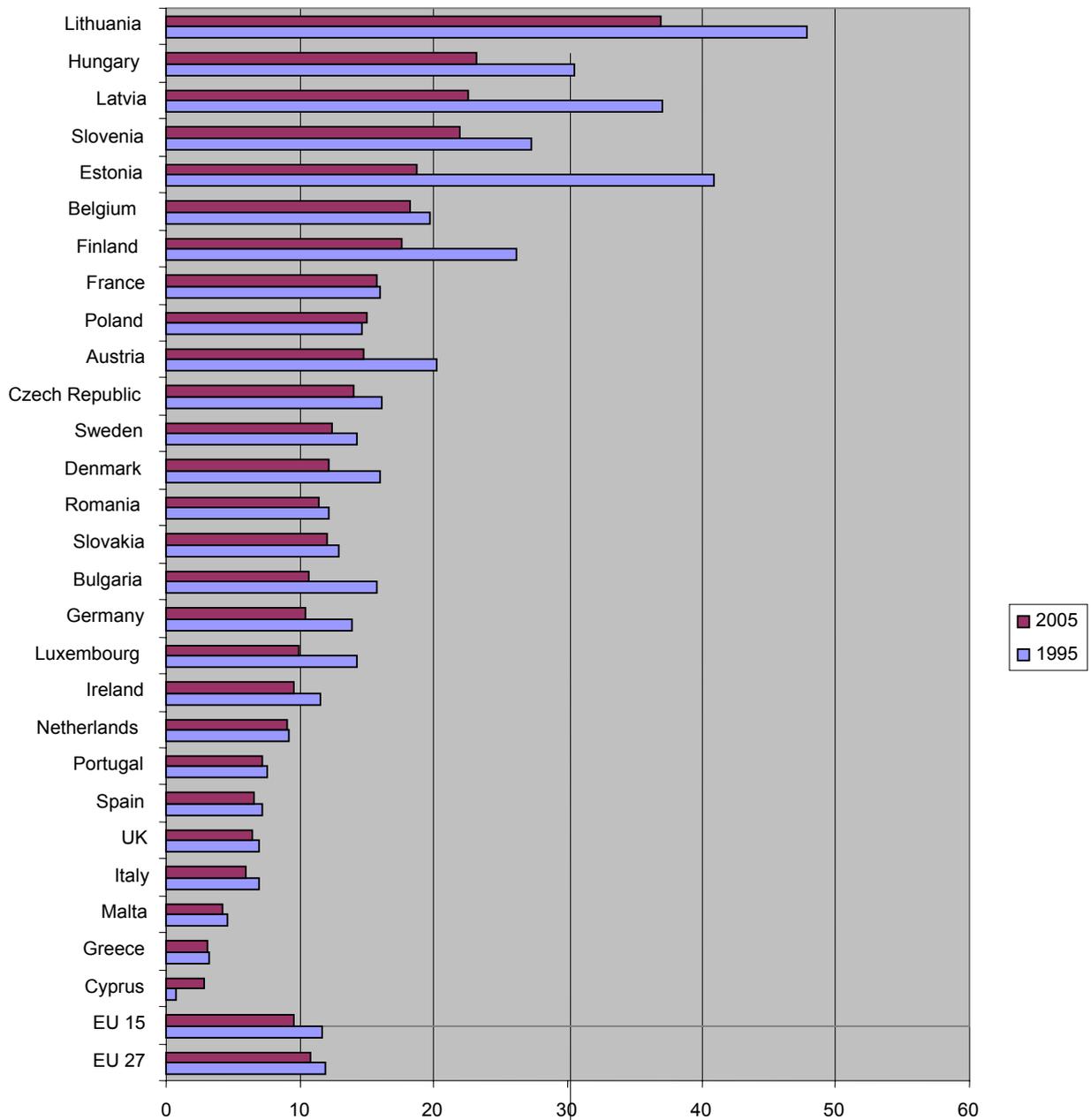
Risk groups for suicide are above all people with mental disorders, including substance use disorders. 90 % of suicides are associated with mental disorders, mostly with mood disorders like depression (60 % of suicides)<sup>20</sup> but also with alcohol use disorders. Risk groups also include those persons with severe somatic illness, the socially disadvantaged, those with recent loss, especially suicide<sup>21</sup>, and some migrant groups, like Finns in Sweden<sup>22</sup> or Surinamese in the Netherlands<sup>23</sup>. Some professions have higher risk, like doctors: they have the knowledge of lethal means and also easier access to drugs.

Non-fatal self-harm greatly increases the risk for suicide<sup>24 25 26</sup>. The incidence of non-fatal self-harm is estimated to be 10–40 times more common than that of actual suicide (1:9 for males, 1:42 for females)<sup>27</sup>. Yet non-fatal self-harm seems not to be identified by healthcare professionals: A study on adolescents in seven EU/EFTA countries showed that 83 % of self-harm episodes took place at home and that only 12 % of recent episodes led to hospital presentation<sup>28</sup>. Non-fatal self-harm is highly co-morbid with mood, anxiety and substance-use disorders<sup>29</sup>.

### ***Choice of suicide mean is linked to availability***

Choice of suicide mean varies according to the country<sup>30</sup> and even inside one country<sup>31</sup>, and by age<sup>32</sup> and gender<sup>30</sup>. Suicide means used also vary over time<sup>33</sup>. Hanging was found to be the most prevalent suicide method in 13 EU and 1 EEA country among both males (54 %) and females (36 %). Other often used suicide methods in the EU are firearms, self-poisoning with legal and illegal drugs, drowning, jumping from a high location or in front of traffic<sup>32</sup>, with variations among the genders<sup>30</sup> and partly depending on availability.

**Death due to suicide and intentional self-harm per 100 000 whole population (standardised death rate) in 1995 and 2005 in the EU**



Years when data from 1995 not available: EU27 2000, Bulgaria 1997, Cyprus 2004, France 2001, Latvia 1996, Romania 1999 and Slovakia 1999.  
 Years when data from 2005 not available: Italy 2003, Denmark 2001, and Belgium 1998.  
 Data source: Eurostat.

**Figure 1.**

## 2.3. Determinants of depression and suicide

### ***Longitudinal studies show roots of depression in childhood negative events***

Negative life events in childhood and adolescence can lead to severe long-lasting mental and social problems in adulthood<sup>34 35 36</sup>. Poor parenting, i.e. low level of care and high level of control, increases the risk for depression in adulthood two- to threefold<sup>37</sup>. Childhood sexual and physical abuse is linked with an approximately twofold risk of adult depression<sup>38</sup>; the more severe abuse, the higher is the risk for major depression and suicide.

### ***Suicides have strong links to inequity***

Suicides are linked with social exclusion, on the individual level with low socio-economic status and poor educational level and unemployment<sup>39,40</sup>, and on the community level with socio-economic deprivation<sup>41,42,43</sup>. Data from Scotland indicates that there are over six times as many suicide deaths in the most deprived fifth of areas compared with the least deprived fifth<sup>44</sup>. Yet depression and suicide may hit persons regardless of the socio-economic status, and social exclusion may be one consequence of depression.

### ***Alcohol consumption patterns are linked to depression and suicide mortality***

Alcohol abuse and depression are frequently comorbid. Alcohol abuse can lead to a more serious course of the depression, including earlier onset of the disorder, more episodes of depression and more suicidal attempts<sup>45</sup>.

A rise in per capita alcohol consumption has been linked to a post-war rise in suicide mortality in many European countries (Denmark, France, Hungary, Norway, Sweden), but not in south Europe<sup>46 47</sup>. The link seems to be more pronounced in countries where strong spirits dominate the consumption<sup>48 49 50</sup>, and only in some population groups, such as lower educational group<sup>51</sup>. A study of all suicides in Finland during one year evidenced that almost half of the suicides are associated with alcohol dependence or abuse<sup>52</sup>.

There is a direct relationship between alcohol consumption and alcohol use disorders with suicide and attempted suicide, which is stronger for episodic heavy drinking than for overall consumption<sup>53 54</sup>. Acute alcohol use decreases inhibition and increases impulsivity and the likelihood of unplanned suicidal behaviour, even in the absence of depression, especially in young people<sup>55</sup>.

## 3. FRAMEWORK FOR ACTION

### 3.1. National programmes

#### ***National mental health policies: Reaching across policy sectors is a key issue***

Mental health is a health policy priority in Member States. Health policy action lines chosen by Member States include mainstreaming of mental health policy into health policy (e.g. the public health programme of Sweden), overarching mental health policies, or programmes focusing on mental health promotion, prevention of depression or suicide prevention. Adopted programmes acknowledge that causes of depression and suicide are multiple, and mostly not amendable by the healthcare sector alone. Many national policies emphasise effective intersectorial partnership to promote good mental health and well-being and to prevent depression and suicide, and acknowledge that empowerment of citizens and social inclusion support mental health. A comprehensive approach to depression and suicide prevention develops and implements comprehensive actions across sectors at all levels (individual, family, community, region, nation and the EU).

**Box 1. The Scottish Mental Well-being Policy: a comprehensive policy across sectors**

In Scotland, the four key aims of the National Programme for Improving Mental Health and Wellbeing (2001) are promotion of mental well-being, eliminating stigma, preventing suicide, and supporting recovery. Commitment to the aims has been repeated in two action plans (2003-2006 and 2006-2008) for the National Programme. The programme works across policy fields and sectors. Successful actions have included a widespread dissemination of mental health first aid courses aimed at promoting mental health and improving mental health literacy of the general population.

**Box 2. The Andalusian Mental Health Plan: intersectorial approach**

The second Andalusian Comprehensive Mental Health Plan (2008-2012) plan stresses the intersectorial approach to attend mental health needs of groups at risk of social exclusion.

***Reduction of risk factors and stress prevents depression***

Depression prevention programmes are effective<sup>12,13</sup> and probably highly cost-effective, because new cases of depression cause a major part of the costs due to disability to work<sup>56</sup>. Yet preventive public health programmes to reduce incidence of depression are not widely used<sup>57</sup>.

**Box 3. The Dutch public health policy: prevention of depression is a priority**

The prevention of depression is one of five priority areas in the national public health policy for 2007-2010, along with tackling overweight, smoking, alcohol abuse and diabetes. To implement the national objective of preventing depression, the "Depression Prevention Partnership" programme has been initiated by the Trimbos Institute and the Dutch Mental Healthcare Association. Access to evidence-based interventions aiming to prevent depression is a specific priority within the programme. Developing e-health solutions such as depression prevention courses via the Internet are among the ongoing measures to improve access to mental health prevention.

More information available from e.g. <http://www.icom.trimbos.nl>.

***Effective suicide prevention is multisectorial***

Finland was the first country to implement a successful comprehensive and multisectorial community-based national suicide prevention programme in 1986-1996. Following publication of the 1996 United Nations guidelines<sup>58</sup>, national suicide prevention programmes have been developed in several countries (e.g. Denmark, England, Ireland, Sweden and Scotland), or are in the process of being approved (e.g. Germany). Some countries have adopted a comprehensive population approach across sectors, while others have adopted more restricted programmes approaching mainly high risk groups.

#### **Box 4. Some key issues of national suicide prevention programmes**

*The Finnish national suicide programme (1986-1996) was based on psychological autopsies of all suicides completed in Finland in 1987, and recommendations derived from them. The decentralised project was implemented across sectors (including e.g. the church and police), in more than 1000 local projects, each derived from the needs and interests of local stakeholders. From the beginning of the implementation phase of the project in 1990, the national suicide rate decreased from 30 per 100 000 to 18 in 2005, mainly due to decrease in male suicides. According to an international evaluation (1998), the project had been a success.*

*The National Suicide Prevention Strategy for England was launched in 2002. It uses multisectorial approach targeting reduction of suicide in high-risk groups, promotion of mental well-being, reduction of access to lethal means of suicide, improved reporting of suicidal behaviour in the media, monitoring of progress and promotion of research on suicides and its prevention. The aim is to reduce suicides by 20% by 2010. Already during the first three years of the strategy a 7.4% reduction in the suicide rate has been reported.*

*National suicide prevention programme in Denmark focuses on high risk groups and has two key messages: To 1) provide relevant treatment after suicide attempt and to 2) increase awareness and follow-up of discharged mentally ill (during discharge and the first weeks after discharge, when the suicide risk is increased)(Personal communication, Professor M Nordentoft).*

*The Swedish National suicide prevention programme was first developed in 1995 by two public authorities and a National Expert Unit (NASP). The new National Suicide Prevention Programme, developed in 2007/8, proposes public health and health care strategies aiming to strengthen each other. It is expected to be ratified by the Swedish Parliament in June 2008, to provide legal status and legal requirements for action. but also sends a very important psychological signal to the whole nation that the topic is important and lifts the stigma and taboo surrounding suicide<sup>59</sup>.*

*The Flemish suicide prevention programme was approved in 2007. It aims at 8% reduction of suicides in 2010 compared to 2000. It is based on five strategies: 1) promoting mental health for the individual and society, 2) promoting accessible e-healthcare, 3) capacity building of professionals and promoting networking, 4) promoting suicide prevention through e.g. adequate media reporting and reduction of availability of means for suicide and 5) putting emphasis on specific target groups, such as young people, relatives and people with psychiatric disorders (Personal communication, Professor C van Heeringen).*

A review of national suicide prevention programmes in Europe<sup>60</sup> identified the following common characteristics in all programmes: improved recognition and treatment of depression, restriction of suicide means, restrictive media coverage of suicides, drug and alcohol measures, improved access to mental health care, and health care staff capacity building.

### **3.2. Actions on mental health determinants**

#### ***Supporting a healthy lifestyle supports mental health***

Healthy life style can assist in improving or maintaining good mental health. Two significant predictors are alcohol use and physical activity. Both evidence a socio-economic gradient. A healthy lifestyle is often associated with better income and education.

Excessive alcohol use is strongly linked to depression and suicide, and limiting availability of alcohol promotes a healthier lifestyle. There is very strong evidence for the effectiveness of policies that regulate the alcohol market by taxation and restricting access in reducing the harm done by alcohol. There is also extensive evidence for the impact of brief advice ("mini-intervention"), particularly in primary care settings, in reducing harmful alcohol consumption. Promotion of a healthy lifestyle and avoidance of harmful drinking are cornerstones in promotion of good mental health and prevention of suicides<sup>61</sup>.

#### **Box 5. Baltic countries: Restriction in access to alcohol reduced suicides**

Restrictions in access to alcohol have been linked with a decrease in suicides in Baltic countries during the Soviet Anti-Alcohol Campaign, which included rise in price, reduction of alcohol outlet spots and production of alcohol, banning of usage in public places, and more strict penalties on illegal production and sales of alcohol<sup>62 63</sup>.

Cross-sectional population studies have repeatedly found a strong link between regular physical activity and a sense of well-being and lower levels of stress and anxiety<sup>64 65 66 67</sup>. Data indicating a direct effect of exercise on mood are scarce, but limited evidence indicates that regular participation in exercise results in fewer depressive symptoms<sup>68</sup>.

#### ***Fighting inequity is fighting suicide***

Mental health can be compromised by living in deprived neighbourhoods with high unemployment, poor quality housing, limited access to services and a poor quality environment. Good urban planning creates a safe and inviting environment, which is especially important for children to enable safe enlargement of the zones for their socio-emotional developmental activities. Improved housing conditions can promote mental health and increase social and community participation<sup>69</sup>. Urban shape and regeneration, zoning strategies, reduced noise levels, community initiatives to reduce social isolation and public amenities (such as community centres) can promote urban health, community cohesiveness and create social capital, and help to reduce stress, social dislocation and violence.

Targeting socio-economical disadvantage and inequality may assist in reducing depression and even suicides, especially in young men<sup>70,71</sup>. Data from UK link suicides in young males to increases in divorce, declines in marriage and increases in income inequality<sup>71</sup>. Policy measures in education, employment and social sectors, to ensure sufficient income in all life stages, support suicide prevention. This is particularly important, as socioeconomic deprivation often has long-reaching consequences over generations. Socioeconomic deprivation and its consequences to youth are further discussed in the consensus paper "Healthy Children and Young People: Laying the Foundation for Lifelong Wellbeing"<sup>72</sup>.

### **3.3. Restricting access to means of suicide**

#### ***Strong evidence for effectiveness of means restriction***

Strong evidence from several countries indicates that restriction of access to common and highly lethal suicide means is successful in reducing suicides. Restriction of one suicide mean seems not to lead to a switch to another, as suicidal persons tend to have a preference for a specific method<sup>73</sup>.

Restrictive actions must consider national peculiarities in suicide mean patterns. Common European measures are increasingly important because free movement of goods enables also means of suicide to move more freely from one country to another.

#### **Box 6. Legislation in Austria decreased firearm suicide**

In Austria, firearm legislation reform in 1997 restricted availability of firearms. Prior to the legislation the average firearm suicide rate was 4 per 100 000 (1985-1997), after it has decreased on average 5 % each year (period 1998-2005) to 3 per 100 000. The proportion of firearm suicides of all suicides decreased from average 19 % (1997) to 17 % (2005)<sup>74</sup>.

#### ***Bad planning can turn railways and bridges into suicide hot spots***

Environmental planning can prevent suicides effectively<sup>75</sup>. Prevention of suicide can be taken into account already in the planning process or after an environment has been identified as a hot-spot

for suicide attempts. Needs of high risk groups should be paid attention: e.g. in planning and building safe mental hospitals and prisons.

#### **Box 7. European cases of environmental actions to restrict access to suicide means**

German research identified 14 suicide hot-spots on German railways, 80 % in the neighbourhood of psychiatric hospitals. The study derived recommendations for the building/location of new psychiatric hospitals<sup>76</sup>.

In the UK installation of barriers on a suspension bridge famous for suicide in Bristol reduced deaths from suicide by jumping from this bridge and did not increase suicides by jumping from another site (in Bristol)<sup>77</sup>.

In Sweden emphasis has been put on safer residential care environments and for example by placing the shower hose in a safe position in hospitals and removing sharp and piercing instruments (personal communication, Professor D Wasserman).

In the UK, the National Institute for Mental health has published suggestions for practical measures to act on environmental factors that could contribute to self-harm in in-patient care: <http://www.kc.csip.org.uk/upload/SuicidePreventionToolkitweb.pdf>.

#### **Control of medication, drugs and chemicals saves lives**

Several commonly used and available medicines can have serious health consequences, even causing death when used in extensive amounts or together with alcohol, other drugs or substances. Some of these drugs require a prescription, but some of them are available over the counter. Control policies have been shown to reduce drug-related suicides.

#### **Box 8. UK restrictions in availability of paracetamol**

A commonly used analgesic, paracetamol, is lethal even in fairly small doses. In UK, where paracetamol has been the most common drug taken in overdose, legislation in 1998 reduced maximum packet size sold by outlets other than registered pharmacies. Paracetamol-associated mortality rates, hospital admissions and the severity of paracetamol overdose appear to have been decreasing since 1998<sup>78</sup>.

In addition to legal drugs, restriction on other legal chemicals commonly available and used as suicide means has successfully reduced suicides. These include restricting carbon monoxide content in household gas in Denmark<sup>79</sup> and detoxification of domestic gas in the UK<sup>80</sup>.

### **3.4. Mental health literacy**

The important message for the population and health care professionals is that depression can be treated and suicide can be prevented<sup>81</sup>.

#### **Stigma busters report and reduce stigma in media**

People with depression and other mental disorders are subject to stigma and discrimination. It is crucial to overcome the stigma of mental disorders to promote social inclusion and cohesion, and to improve public mental health. Public information campaigns aim at increasing health literacy, knowledge and awareness of the common signs and symptoms of depression and suicidality, and may target the public or specific risk groups. Campaigns aim at de-stigmatising depression and promoting early help-seeking. Stories about celebrities who have been depressed (and especially about those who have subsequently recovered) decrease stigma and give people hope.

### **Box 9. Greek media anti-stigma programme**

In Greece the national anti-stigma programme informs and co-operates with the media and co-ordinates a network of volunteer “stigma busters”. A study indicates that in Greece stigmatisation in the press has been reduced<sup>82</sup>.

### **Box 10. The Andalusia Framework Agreement to promote social inclusion**

In 2004 a Framework Agreement for the Social Awareness for People with Serious Mental Health Disorders was signed by the Health, Equality and Social Welfare, and Education Departments of the Regional Government, the Andalusian Radio and Television (RTVA), and NGOs, with the aim to promote the knowledge and social acceptance of people with mental disorders.

Several activities were developed in the framework, focusing on how mental illness is covered in the media. In the health sector, the Andalusian Health Service created a Permanent Group of Mental Health Communication for awareness activities targeting health professionals. The Andalusian Government launched the communication campaign called “1 out of 4” in collaboration with RTVA. A Mental Illness Observatory has been created aimed at denouncing information that contributes to stigma appeared in the media. Also resources for journalists have been created.

More information available from: [www.1decada4.com](http://www.1decada4.com); [www.saludmentalandalucia.es](http://www.saludmentalandalucia.es)

### ***Responsible media coverage of suicides reduces mortality***

Glamorising or sensationalising suicide, explicitly describing suicide methods and reporting celebrity suicides in a glamorous way can provoke copycat suicides<sup>83</sup>. On the other hand, responsible reporting on suicides reduces copycat suicide<sup>84,85</sup>, especially among adolescents<sup>86</sup>. Therefore, media guidelines on the reporting of suicides have been developed by the WHO, other international organisations and several countries<sup>87</sup>.

### **Box 11. Austrian media guidelines**

In Austria, media guidelines on reporting suicide have been offered since 1987 with a subsequent reduction of suicides<sup>84</sup>. These media guidelines as in 2005 stated that probability of an imitation effect will increase when an article on suicide act contains sensational headlines and is romanticised, contains details of the person who completed suicide, of the suicide method and site, and/or simplifications for reasons leading to suicide. According to the guidelines probability of imitation is lower when alternatives for suicide were stated clearly, contact points for suicidal persons given and warning signs listed.<sup>85</sup>

### ***The Web offers possibilities for prevention benefits and for harm***

The Internet may constitute a cost-effective means of reaching suffering people and combating depression by self-help interventions based on forms of psychotherapy that have proven their effectiveness in the clinical setting such as cognitive behavioural therapy, brief problem solving therapy and interpersonal therapy. It is recommended that these interventions are offered as a first step in a stepped care approach such that patients can be directed to more intensive therapies when so required. The benefits of the internet are that it reaches a wide clientele at low costs, is accessible 24/7 anywhere with appropriate technology, and does not require a face-to-face contact, and can even be used anonymous -- which may encourage health service uptake by those who fear stigma or have difficulties travelling to and from health services. However, web content and especially suicide websites have to be monitored to prevent suicide clusters: Internet provides sites containing harmful suicide information encouraging and informing how to complete suicide. These sites are easy to find by using common search machines and key words<sup>88</sup>.

#### **Box 12. Dutch e-mental health projects**

The Trimbos Institute in the Netherlands runs several successful, evaluated e-mental health interventions, including currently three interventions for depressive disorder. The interventions are offered over the internet. They are self-help versions of cognitive behavioural therapy, structured into a series of sessions. They may encompass psycho-education, self-tests with automated and tailored feedback, sessions for cognitive restructuring, behavioural activation, in vivo exposure, home work assignments with feedback, applied relaxation training, evaluation, and relapse prevention. The interventions have a built-in opportunity to contact a life therapist via email, but this is an option that can be switched on or off by the mental health service offering the intervention.

More information available from: <http://www.icom.trimbos.nl>

#### **Box 13. Web self-help in Germany**

A web based self-help group for depressive and suicidal people was established in Germany in 2001. It offers a platform accessible 24 hours. There were around 3000 registered users with 85 000 postings in 2006<sup>89</sup>.

Mental health can be promoted also through common social networking sites, which have gained popularity especially among the young. Information offered via easily accessible sites can also assist in getting the first step towards help.

#### **Box 14. Using a virtual social network for suicide prevention in Ireland**

In Ireland, a mental health awareness profile has been set up among a social network to provide information on mental health, mental disorders and support sources.

More information available from: [www.bebo.com/yourmentalhealth](http://www.bebo.com/yourmentalhealth).

### **3.5. Promotion and prevention in health care**

#### ***Health care can strengthen good mental health and well-being***

Existing health services is an efficient delivery channel for mental health promotion. Member States have implemented effective programmes to widen the scope of health services to include promotion of good mental health and well-being. The evidence of cost-effectiveness is strongest for early childhood development programmes.

#### **Box 15. The European Early Promotion Project**

The European Early Promotion Project (EPPP) developed and evaluated early interaction between mother and child to promote child health and prevent psychosocial problems in Finland, Great Britain, Greece, Cyprus and the former Federal Republic of Yugoslavia. The child health clinic staff training programme improved staff capacity, family satisfaction and mother-child interaction at two years. In Finland, the project developed into the nationwide programme VAVU for child health clinic staff to support early interaction<sup>90</sup>.

#### **Box 16. Support to children in vulnerable families in Finland**

In Finland the "Effective Family" programme aims at a provision of support by the health care for parenting and children in families with parental mental illness, substance abuse or severe somatic disease. The aim is to prevent children's mental disorders. The programme is implemented in services for adults and results of the project have been positive.

More information available from: <http://info.stakes.fi/toimivaperhe/EN/index.htm>

### ***Early recognition of risk and psychological interventions may prevent depression***

Health care staff skills in recognition of people at risk of depression and suicide ideation are often limited. Training of healthcare personnel both in ambulatory and hospital settings to better recognise signs of depression is essential. There is emerging data on effectiveness of targeted and indicated prevention by psychological interventions<sup>91</sup>. Programmes aimed at education of primary care physicians (e.g. in Hungary, Slovenia and Sweden) have improved detection of depression and increased prescription rates of antidepressants<sup>91 92</sup>, and even led to a decrease in depressive suicides.

#### **Box 17. Education of GPs have resulted in better treatment of depression and decrease in suicides**

In the Gotland region, Sweden, depressive suicides accounted for 42 % of all suicides during the 2.5 years before the GP education of prevention and treatment of depression programme and was reduced to 12 % of all suicides during 2.5 years after the programme and to 16 % during 9.5 years after the programme<sup>92</sup>.

In Hungary, in a region with a high suicide rate, a reduction in suicides from 60 per 100 000 persons prior to the intervention to 50 per 100 000 persons in a 5-year intervention period was gained by educating GPs and their nurses in depression management<sup>93</sup>.

#### **Box 18. UK: Prevention of postnatal depression**

Postnatal depression is common, it is estimated that 10-15 % of women suffer from it<sup>94</sup>. In England a postnatal depression prevention intervention was carried out in primary care. It involved training of Health Visitors (nurses) in clinical assessment for postnatal depression who offered the option for psychological intervention sessions to low risk women with a previous delivery. A 32% reduction in the numbers of new episodes of depression in mothers is reported (Brugha et al., submitted for publication).

### ***Prevention of suicides: Dare to ask about suicidal thoughts***

Recognition of suicidal persons is often hampered by a reluctance to ask patients about their suicidal thoughts. Recognition of suicidal ideation can be improved by training of health care staff and other gatekeepers, such as clergy, teachers, military personnel, or caregivers, i.e. persons who have the possibility to meet persons at risk of suicide. Training of gatekeepers to identify depression and suicide risk as early as possible aims at providing them with tools for support and referral to health care. Healthcare personnel training positively influences staff attitudes and professional identity and skills in treating suicidal persons<sup>95,96</sup>.

Many successful suicide prevention programmes have used a multi-level approach, aiming at reducing stigma, improving mental health literacy, and educating gatekeepers. Such a large scale multilayered suicide prevention programme has been able to prevent one of three suicides<sup>97</sup>.

#### **Box 19. Germany: Nuremberg four-level approach programme to prevent suicide**

The Nuremberg 2-year pilot study is an example of a successful multilevel approach to suicide prevention: Training of general practitioners to recognise depression, public information on depression, support to self-help groups and high-risk persons, co-operation with multipliers, that is priests, teachers, police and the media. The Nuremberg study resulted in a significant reduction of attempted suicides (non-fatal self-harm), compared to both a baseline year and a control region.

The European Alliance Against Depression (EAAD), of which the Nuremberg study was based on, has a four-level approach, targeting the early detection of depression and optimising the care of depressed people. Today, the EAAD project model is being processed in 17 EU countries<sup>98</sup>.

More information available from: <http://www.eaad.net>

### ***Good community mental health services prevent suicides***

Community-based, well-developed and multi-faceted mental health services have been linked with lower suicide rates than hospital-based traditional services<sup>99</sup>. Adequate treatment of major mental disorders, as well as high quality care of severe or chronic physical illnesses, decreases the risk of suicide and is an effective way to prevent suicide in healthcare.

### ***Suicide attempt survivors are a high risk group***

People who survive intentional self-harm/suicide attempt have a considerable and long-lasting risk of further suicidal behaviour<sup>100</sup> and of dying by suicide<sup>101 102 103 104</sup>. Adequate treatment and support in addition to programmes facilitating easy and quick access to treatment facilities for persons in aftercare may prevent further suicide attempts.

#### **Box 20. Brief psychotherapy after deliberate self-poisoning reduced self harm in England**

In England, brief psychological intervention was shown to be successful after a deliberate self-poisoning among a selected group. Interpersonal psychotherapy was given four times at the patient's home. Compared to the control group, with only a referral to general practitioner after the poisoning, the intervention group showed significantly greater reduction in suicidal ideation and repeated self-harm in follow up (proportion repeating 9% vs. 28 % in the control group)<sup>105</sup>.

### ***Suicides are transmittable***

Bereavement after a suicide is unique and associated with prolonged grief and loneliness<sup>106</sup>, guilt, shame<sup>107</sup>, stigma, isolation, anger and search for motives for the suicide<sup>108</sup>. Consequently, the bereaved have an increased risk for suicide and non-fatal self-harm<sup>109,110,111</sup>. Suicide postvention is support given to family members or others bereaved by suicide. The burden caused by suicide is huge and long-standing, and the bereaved are too often left without any support from health care. However, according to follow-up studies the experiences of providing support are encouraging<sup>112</sup>.

## **3.6. Children and families**

### ***Early formative relationships lay the ground for good mental health***

The infant's early formative relationships with caregivers, i.e., attachment relationships, are associated with his or her social functioning and adaptation in childhood and later in life. A multitude of research has linked early attachment problems with psychological symptoms and disorders in childhood<sup>113</sup> and adolescence<sup>114</sup>. Promoting a nurturing early interaction between caregivers and the child promotes life-long good mental health and well-being.

### ***Fighting abuse and harsh parenting is prevention of depression and suicide***

Positive proactive parenting supports the child's self-esteem, social competence and resilience. Corporal punishment, harsh parenting and child abuse, both physical and mental is associated with adverse psychological outcome<sup>115</sup>. There is plenty of good evidence for the effectiveness of parenting support programs. The mental health and wellbeing of children in disadvantaged families and families with mental disorders can be promoted by selective interventions.

## **3.7. School and work place**

### ***School interventions reduce risk of mental disorders***

Schools play a major role in promoting good mental health, socio-emotional competence and emotional development. Evidence indicates that a whole school approach reduces the risk for mental disorders and is an important component in mental health promotion across the lifespan. Mental health interventions at schools are further discussed in the consensus paper "Healthy Children and Young People: Laying the Foundation for Lifelong Wellbeing"<sup>116</sup>.

### ***Promoting mental health at workplaces supports mental wellbeing***

Employment status and positive atmosphere at workplace are important factors for people's mental wellbeing. Long-term unemployment or conflicts at work with other persons, work overload or incapability to manage the work can have a negative impact on mental wellbeing. Unemployment or sickness spells may weaken one's financial situation, leading to unbearable situation. These in turn can lead to low self-esteem, shame, hopelessness, isolation, mental distress and depression and absence from work.

Workplace interventions have been shown to promote mental health and wellbeing and reduce the risk of depression. Favourable psychosocial working environment, "healthy working climate" should be the target of every working place. Access to occupational health services promotes early detection of work related stress, depression or other mental disorders; and promotes problem-solving at work. Special emphasis should be put on encouraging employment and work conditions of people who experience or have experienced mental disorders. Mental and financial help and support for the long-term unemployed are required to prevent social isolation and hopelessness and to create possibilities for re-education/retraining, learning new skills, and maintaining an acceptable standard of living. Mental health interventions at workplace are further discussed in the consensus paper "Mental health and the work place"<sup>117</sup>.

### **3.8. Older people**

Ageing often signifies increasing losses in terms of physical capability, socio-economic conditions and social life. Older people often live separate from younger generation: alone as widowed, divorced or unmarried, with a spouse or in different care settings. Life changes due to ageing can be difficult and together with unsatisfactory living conditions contribute to depressive mood and depression. It is notable that in most Member States suicide rates of older people are higher than in any other age group.

#### ***Combatting social isolation***

Older people often suffer from social isolation due to changes in family structure and in relationships. Reduced physical condition due to normal ageing and disease and living in care settings, hospitals or older peoples' homes can contribute feelings of loneliness and sadness. Health promotion and preventive interventions targeted to reduce loneliness and increase contact with other people at different age groups assist in maintaining good mental health at older age. Older people living at home can be offered with contact points outside healthcare settings, in order to offer activities and reduce isolation. Social support for older people is further discussed in the consensus paper "Mental Health in Older People"<sup>118</sup>.

#### ***Recognition of depression in older people saves lives***

At healthcare sector it is essential to carefully search for and treat depression among older people. Adequate treatment includes both pharmaceutical and non-pharmaceutical approach<sup>18</sup>, the latter putting emphasis on both social support and social network but also other kind of interventions such as physical activity, when possible. Care settings, especially older people's houses are in front line for recognition of depression. It is important to ensure that care settings have sufficient financial and human resources to offer preventive measures. Depression among older people is further discussed in the consensus paper "Mental health in Older People"<sup>118</sup>.

### **3.9. Research on depression and suicide**

Today, most of the mental health research is conducted in the USA. Mental health research is more context-sensitive than many other fields of health research. Non-European mental health research results are not always transferable to Europe, due to differences in political and cultural

context and social and health care systems. There is need to strengthen policy-relevant and context relevant European research on mental health promotion and prevention of depression and suicide, to provide the knowledge basis for informed decisions of policy-makers, clinicians and citizens.

The current investment in Europe in research to support the minds and mental wellbeing of Europeans across the lifespan is not corresponding to the magnitude of costs for mental ill health in Europe and the importance of healthy minds for a successful transition of EU into a competitive knowledge society.

In mental health research, ethical conduct of research is especially important because research relates to the mind of the human being. Research design should maintain the quality of life and dignity of participants, irrespective of whether the research targets individuals, families, settings or communities. Research should include genetic, biological, social, psychological aspects.

Sometimes depression and suicide research involves commercial interests (e.g. market interests of the pharmaceutical industry). It is important that commercial interests are transparent, and that free reporting of research results is ensured in spite of industry-funding of mental health research.

### ***Cohort studies***

There is a need to establish the pathways from determinants to mental health and mental disorders and suicidal behaviours by longitudinal cohort studies. Data from existing national cohort studies need to be collated and analysed, and new European cohort studies are needed. Suicide and depression researchers need to form multi-disciplinary coalitions and networks on national and international levels.

### ***Prevention science***

The evidence base for promotion of good mental health in different settings and prevention of depression and suicides needs to be strengthened by good quality experimental studies. Due to the complex nature of human mental health, multidisciplinary collaboration and complementary approaches should be prioritised in searching for the best options to improve mental health of Europeans. Systematic research is also needed on how to bridge the gap between current knowledge and current practice in prevention of depression and suicide.

### ***Translational research***

New research evidences the role of interaction between genes and environment for the risk of depression and suicide. It seems that high risk for depression in some cases is an expression of genetic vulnerability in combination with early adverse life events. Further research in this area is needed to elucidate the mechanisms involved, and the new findings need to be translated into preventive actions.

### ***Health services research***

Health services play an important role in the fight against depression and suicide. In spite of this, European research on organisation and effectiveness of mental health services is scarce. Comparative health services research projects create an opportunity for real European added value in development of mental health services.

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