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# Internet Suicide in Japan: Implications for Child and Adolescent Mental Health

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## ABSTRACT

**Internet suicide, also known as 'net suicide', is a phrase which has become one of the most notorious terms to the Japanese in recent times. 'Net suicide' refers to suicide pacts that are prearranged between strangers who meet over the internet. Japan has one of the highest suicide rates in the world with 32,325 people killing themselves in 2004. A worrying new trend of net suicide has emerged; as many as 60 people a year have died of this method and the numbers continue to rise. This phenomenon, however, does not limit itself to Japan; for instance in February 2005, the death of two strangers in London, believed to be Britain's first internet suicide, has given cause for concern that this could set a precedent for future such events in Europe and elsewhere. Although there is much research regarding suicide pacts, far less is known about such 'net suicide' pacts. Suicide is a multifaceted problem encompassing cultural, social, religious and economic dimensions, and suicide prevention is therefore best managed within a multidisciplinary framework. By examining this Japanese phenomenon, I conclude that individuals as well as society will have to play a complex, dynamic and interactive role in preventing future tragedies.**

## KEYWORDS

*adolescent, internet suicide, mental health service, suicide contagion, suicide prevention*

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'NET SUICIDE' IS A phrase which has become one of the most notorious terms in the Japanese language in the last few years and refers to the process of recruiting, staging and committing suicide over the internet. On average, as many as 60 people (nearly 20 cases) die of what we call 'internet suicide' each year. On 11 February 2003, three young people were found dead in a vacant flat in Saitama County. Judging from the circumstantial evidence, it was concluded that this was an ordinary suicide pact. However, in due course, it emerged that this was a prearranged suicide pact conducted over the internet. As a result of the mass media repeatedly publicizing this unusual incident, more and more people are accessing 'suicide websites' for information. This has led to the secondary social phenomenon of 'chain suicide' whereby vulnerable Japanese youngsters have caused a 'chain reaction' by copying others who have died as a result of 'internet suicide'.

Although cases of suicides or murders planned through the internet have been published in other countries with high internet access rates, such as the USA or Korea, the scale of 'chain suicide' or 'net suicide' seems to be peculiar to Japan. Even though many reports have already been published regarding 'traditional' suicide pacts, studies regarding the relationship between internet usage and suicide pacts are still limited. In the *British Medical Journal* Rajagopal (2004), who has researched this particular cultural phenomenon (which was also given publicity by the BBC News Online in 2004) stated that 'general practitioners and psychiatrists should continue to remain vigilant against the small but not insignificant risk of such suicide pacts' (p. 1298) and recommended that 'prompt but concrete preventative measures be taken' (p. 1299).

The aim of this article is to analyse the subject of 'net suicide' in Japanese society with reference to the mental health state among adolescent and young adults.

I will first discuss the high suicide rate in Japan and then explore 'net suicide' by drawing on four published case studies. Finally, I will argue that preventative measures are required in Japan to protect young Japanese from falling into its traps.

### **Epidemiology of suicide in Japan**

I will now look at statistical data regarding suicide and then explore possible reasons for the suicide rate in Japan which is one of the highest in the world.

#### **Statistical overview**

The National Police Agency (2004) reported that the suicide rate in Japan has risen to its highest level since they began to keep records in 1978. In 2003, 34,427 people (24,963 male and 9464 female) committed suicide – 7% more than the previous year. This is three times the annual rate for traffic fatalities and amounts to nearly 100 people per day. The suicide rate in 2003 was 27/100,000 and was the highest of any G7 nation and the tenth highest worldwide. Of more than 30,000 victims, 613 were under 20 years of age, representing an increase of 111 young people from the previous year.

Suicide was the sixth leading cause of death overall in Japan, representing the sixth most common cause for men and the eighth most common cause for women, according to the demographic statistics published by the Ministry of Welfare and Labour (1997–2005). They showed that, among young adults (aged 15–24 years), suicide was the second most common cause of death for 15–19 year olds and the primary cause of death for 20–24 year olds, accounting for approximately 30% of all deaths.

The National Police Agency (2004) investigated the antecedents of deaths by suicide and concluded that health problems precipitated 37.5% of total suicides (3890 deaths);

economic problems (35.2% of suicides); domestic (9.3%), and work-related problems (9.3%).

According to the Ministry of Welfare and Labour (2002), on the other hand, of those who survived near-fatal suicide attempts, it is reported 75% suffered from some form of mental health difficulty such as depression, schizophrenia, or emotional or behavioural problems caused by drug misuse. The incidence of depression, in particular, was high and this suggests that these attempted suicides were highly correlated with mental health problems.

In the UK, the principal findings regarding suicide and mentally ill people are now well established (Femi, 2005). Approximately 25% of all people who commit suicide in the UK have been in contact with mental health services in the year prior to death, and half of these in the week before death. Suicides cluster in the first year after the onset of an illness and 63% of those who commit suicide have a history of self-harm (Femi, 2005).

Although Japanese research on the link between suicide and mental health lack statistical evidence, it is likely that mental health problems such as depression resulting from health, economic or domestic problems are contributory factors to suicide in Japan also.

**Reasons for the high suicide rate in Japan**

I will now discuss in greater detail the social, economic, cultural and medical factors that influence the high suicide rates in Japan.

*Social and economic pressure* After the Second World War, Japan went through difficult social, political and economic times but began to prosper in the 1950s to become one of the richest countries in the world. Recent global slumps, however, have frustrated the Japanese desire for further prosperity and this may have influenced the suicide rate. Figure 1 shows annual number of suicides for different socioeconomic groups. The data were compiled by the National Police Agency (2004).

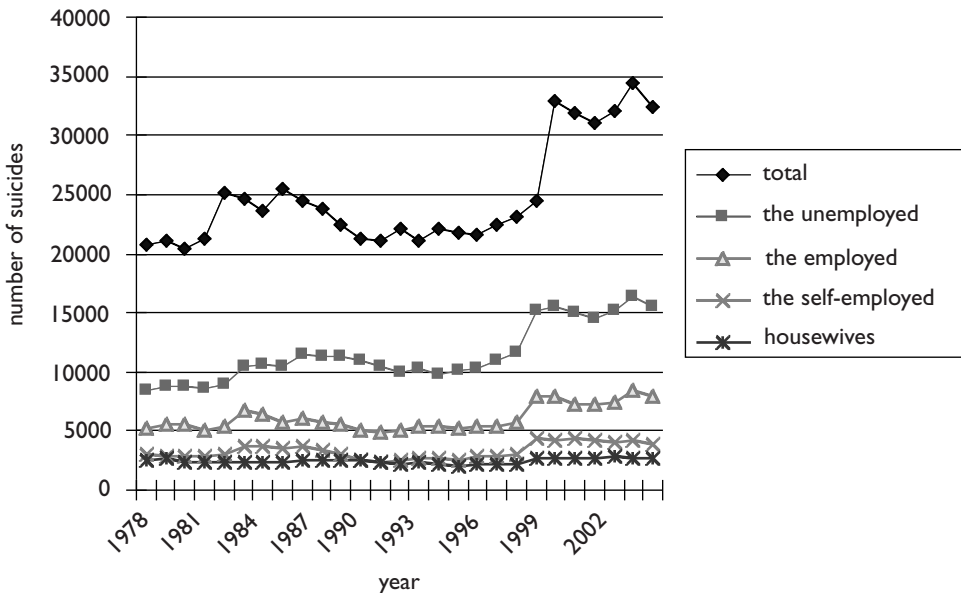


Figure 1. Annual suicide numbers by occupation (1978–2004).  
Source: National Police Agency (2004).

During the last 15 years, it is obvious that the number of suicides has significantly increased, particularly after 1998 (see Figure 1) and has continued to stay over 30,000 deaths a year up to the present day. In 1998, males were 4 times more likely to commit suicide than females and that, in turn, was a 10.5% increase from the previous year. A 2.8% rise for females was recorded in the same period. When it is broken down by employment, unemployed people have accounted for the greatest number of victims, followed by the employed, and finally by the self-employed.

In the autumn of 1997, three large financial businesses such as Sanyo and Yamaichi stock company went bankrupt and the number of the unemployed jumped to over 3 million. Unemployment had been stable at around 2 million previously (Ministry of Internal Affairs and Communications, 2004–2005). It seems clear that the poor economy has had an impact on the growing suicide rates since 1998. Figure 2 shows the yearly number of suicide victims and the number of unemployed people from 1997 to 2003. Even though it is difficult to say whether such suicides could have resulted directly from unemployment, this graph correlates the suicide rate with that of unemployment.

The sharp increase in suicide numbers at the time that Japan was going through an economic slump, was mainly the result of men in their 50s taking their lives. Kawakami (2003) points out that economic conditions have a significant impact on the suicide rate of middle-aged men in Japan.

However, by 2003, there were far more younger people (between 20–40s) committing suicide and for the first time the number of victims among primary-school children exceeded 10 in 2003 (National Police Agency, 2004). This seems to suggest that economic

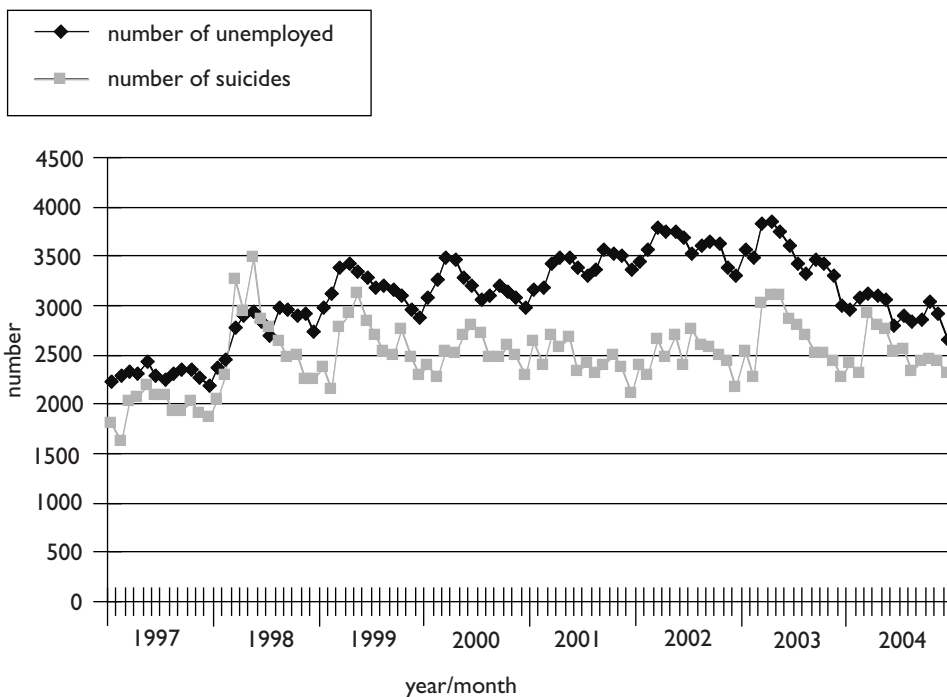


Figure 2. The yearly number of suicide victims and unemployed people from 1997 to 2004. Sources: The Ministry of Welfare and Labor (1996–2005); Ministry of Internal Affairs and Communications (2005).

instability not only affects the suicide rate among adults but also has a secondary negative impact on the suicide rate of younger people as well.

It is not clear why the suicide rate among young people in Japan is increasing. However, studies have shown that the prevalence of depression among children and adolescents is increasing (Hasin, Goodwin, Stinson, & Grant, 2005) and the increase in suicide in Japan may be related to this trend. Changes in social structure in Japan that are taking place against a backdrop of increasing economic instability may also have contributed to this.

Although it is predominantly working-age males who are most affected by economic recessions and are at increased risk of depression and suicide, these stresses may also impact on families, such that the children become more vulnerable. Vulnerable or depressed children and adolescents exposed to an environment where the solitary use of internet technology is commonplace may then be at risk of the phenomenon of 'net suicide'.

*Japanese culture* I will now touch on Japanese culture as a way of offering another explanation for the high suicide rate in Japan.

Historically, suicide has been regarded as a crime in western societies whereas in Japanese history there was a period when suicide was considered as an honourable way of escaping failure when one was confronted by inevitable defeat. One example of this is 'Hara-kiri', also known as 'Seppuku' in feudal periods. It is now acknowledged as an English word in the *Oxford English Dictionary*, where it is translated as 'an act of killing yourself by cutting open your stomach with a sword, performed especially by Samurai in Japan in the past to avoid losing honour'. According to ancient myths, one's soul and love dwelt in one's brain or belly, and so a Samurai, a Japanese warrior, would cut his stomach to show his spirit to his enemy. Although 'Hara-kiri' is clearly a part of Japanese cultural history, it still has an impact on the way the Japanese view suicide. For example, it remains the case that Japanese company presidents often commit suicide when they fail in some business or management venture. The consideration of suicide by a top executive may not simply be the result of being tired and unable to endure the social pressure but also because he feels some sort of guilt for letting his employees and family down. The taking of one's life is viewed by many as a demonstration of social responsibility. From this point of view, the Japanese culture seems to contain fewer inhibitions about the taking of one's life than other cultures.

Of course, the concept of 'life and death' has greatly changed with the times and the link between honour and responsibility and suicide among the young is no longer obvious. The recent rising suicide rate in 2003 was not necessarily correlated solely with high social pressures or high unemployment. Therefore, when talking about suicide among youngsters, it is essential to attempt to understand their individual mindset to find out why suicide appeals to them.

*Lack of mental health services* I will now look at the present situation of mental health provision for young people in Japan and compare this with that of other developed countries.

When people experience stress or some form of psychological crisis in western societies, they tend to seek the help of counsellors or mental health professionals. Since in Japan, however, there are relatively few qualified specialists in the mental health field, there are fewer places for those with mental problems to seek the help they need. Services in child and adolescent psychiatry are extremely limited. The Japanese textbook *Current Child and Adolescent Psychiatry* (Yamazaki, Ushijima, Kurita, & Aoki, 2002)

states that in 1962, 23% university hospitals provided child mental health services, and that this figure increased to 60% in 1982, 64.3% in 1983, and 85.5% in 2002. This increase suggests a significant and growing recognition of the need for child mental services but most of these services are only organized in special hospital outpatient clinics and neither out-of-hours services nor provision of inpatient units are satisfactory (Yamazaki et al., 2002). The access to mental health services is therefore restricted since these services are not yet available throughout the Japanese medical system.

The increase in mental health service provision, however, has not resulted in an increase in the use of such services. This may be due to the stigma attached to mental health services in Japan compared to western countries. This may be explained by a lack of mental health awareness and by Japanese culture in which it is less acceptable to disclose private concerns. When Japanese people experience distress they may be less disposed than other nationalities to seek professional help. This may explain why accurate estimates of the prevalence of depression are unavailable. Mental health services based upon western models might not necessarily be effective because of these cultural factors.

### **'Net suicide'**

Rajagopal (2004) relates two incidents in which a total of nine deaths occurred in the same region of Japan in October 2004. Both incidents were so called 'net suicides', and the victims were strangers who had only known each other through internet contact. The author noted that 'this is in contrast to traditional suicide pacts, in which the victims are people with close relationships' (p. 1298). These include spouses, lovers and friends. He went on to describe the fact that, a 'suicide pact is an agreement between two or more people to commit suicide together at a given place and time' (p. 1299). Youngsters who have suicidal desires use the internet in order to obtain information about suicide and look for the companions with the same current suicidal interest. When a youngster succeeds in finding his 'suicide' companion, they then plan the death via specialized suicide websites or chat rooms. Rajagopal also points out how websites which graphically describe suicide methods could trigger suicidal behaviour in predisposed individuals, particularly adolescents.

I would like to illustrate the key differences between 'net suicide' and 'traditional suicide pacts' by introducing four cases of 'net suicide' reported within the last few years in Japan. The following case studies are composed from multiple resources including Japanese books, newspaper articles and internet researches (Shibui, 2004).

#### **Case study 1: 11 February 2003 in Saitama county**

This case, briefly mentioned at the beginning of the article, was the first reported case of 'net suicide' in the Japanese media (Shibui, 2004).

Three bodies were found in a vacant flat. The victims were a 26-year-old unemployed man from the local neighborhood, a 24-year-old unemployed woman from Chiba county and also a 22-year-old unemployed woman from Kanagawa county. The flat had been vacant for a few years, and they were found in a traditional Japanese-style room where four sets of portable clay cooking stoves with charcoal were present. All the glass doors were sealed by adhesive tape. Their bodies had no obvious external wounds and it was obvious that their corpses were a few days old.

The cause of death was deemed carbon monoxide poisoning. Although there were no suicide notes, this group death seemed to be a suicide pact. The first person at the scene was a 17-year-old girl who stated that, after making internet contact with those found dead,

she had intended to commit suicide with them but lost contact with the organizer of the suicide pacts since he stopped responding to her.

According to this publication, in October 2002, the unemployed man who was considered to have orchestrated the 'first case' wrote the following message on a bulletin board of a suicide website called 'Suicidal Applicant Interchange', which is typical of the sorts of messages that those contemplating 'net suicide' leave: 'I am a man living in Saitama county. I'm thinking of dying using carbon monoxide poisoning. I'm seeking others who want to die together this winter'. The 17-year-old girl was one of those who responded to his appeal and joined the preliminary inspection of the flat with the other three future suicides where the suicide was to take place. [It must be said however that such preliminary inspections are not usual among those who meet on internet suicide websites. The norm is that they meet for the first time on the day the group suicides are to take place.]

Another victim in the 'first case', who was thought to be an unemployed woman from Chiba county, made the following contribution to another suicide bulletin board in September 2002 which gives us an idea of how people communicate on these sites:

I was fired this April and have applied for more than 80 jobs all resulting in failure. I'm mentally exhausted and my condition is getting worse day by day. I'll definitely die by the time this winter ends. I started preparing for suicide in June and my first choice method is carbon monoxide poisoning and second, hanging. I have studied carbon monoxide which is generally agreed by doctors to be a painless form of death. I failed in my last suicide attempt when I cut my wrists, but I'm sure I'll complete it next time.

The high-school girl, who subsequently discovered the bodies, had changed her mind and decided not to participate in this suicide pact in early February 2003. However, 2 months later according newspaper sources, she was also found dead in her room and the method of death was also carbon monoxide poisoning caused by the burning of charcoal. This incident received a tremendous amount of publicity in the media and established net suicide as a way of committing suicide in groups.

### **Case study 2: 5 February 2005 in Kanagawa county**

On the morning of 5 February 2005, six bodies were found dead in an estate car in Kanagawa county. There were four sets of portable clay cooking stoves with charcoal and three of the victims had left messages. The victims were a 22-year-old male university student from Tokyo, a 25-year-old male employee of an accounting company in Kanagawa county, a 20-year-old male college student from Tokyo, two unemployed women aged 21 and 41 from Tokyo and a 30-year-old woman from Tochigi county. All had got to know each other over the internet. (The counties of Kanagawa, Tokyo, Tochigi are all in the centre of Japan.) The oldest woman had a note in her hand saying, 'I am tired of my life. There is no need to hold a funeral'.

One of the victims, the 22-year-old student, had been interviewed by a news reporter 4 months previously as he was one of those who were seeking suicide companions over the internet. According to the report, though he had been calm and polite in the 4-hour news interview he commented, 'I failed to commit suicide with charcoal a few days ago. I'd like to succeed next time, although I don't want to die'. There was clearly ambivalence in his words. He stated that the dispute among two of his girlfriends was the reason for his suicide: 'Am I mad? I have occasionally lost my memory for a few weeks', he said. His friends, who were also interviewed, stated that he had four types of personality and it was the one who tried to avoid suicide who answered the interview. This young man also had a history of contact with mental health services. His family had been bewildered by his 'multiple personalities' but they tried to prevent his suicide by taking his car keys and

keeping an eye on his daily activity. However, despite their wishes, he went missing on 3 February and never returned. He had accessed another suicide website and found other companions with whom to die.

### **Case study 3: 29 March 2003 in Miyagi county**

On 29 March 2003, three youngsters who were about to kill themselves, were discovered by the police in Miyagi county in the north of the main island, Honshu. They were an unemployed woman in her early 20s in Miyagi county, a 14-year-old male secondary school student from Osaka county in the south of Honshu and a 17-year-old female high-school student from Fukuoka county in the southern island, Kyushu. It is extremely ironic that they had become acquainted through a website for suicide *prevention* and then attempted suicide by carbon monoxide poisoning using charcoal in a car. The oldest woman prepared the car and the boy and girl were in possession of tranquilizers and charcoal. When he went missing, the boy's mother looked through his computer and discovered their plan. The police who had received the report from his mother found the youngsters before the incident occurred. This case shows how it is possible for people from different parts of the country to come together with the intention of taking their lives.

### **Case study 4: 24 May 2003 in Kyoto county**

Other cases, however, have shown that primary detection and prevention does not mean suicide attempts won't occur again. On 24 May 2003, a 30-year-old unemployed man from Kyoto, a 21-year-old woman from Nagoya county, and an 18-year-old girl were found in the man's room in Kyoto county. They died of carbon monoxide using charcoal. There was a suicide note stating that they wanted to die because they were pessimistic about life. Among the victims, the 30-year-old man and the 18-year-old girl had previously been prevented from committing suicide.

All the reported cases of 'net suicide' including those mentioned above have in common the following characteristics:

1. Potential suicides meet and plan the event over the internet;
2. Suicide is usually committed through carbon monoxide poisoning by burning charcoal;
3. Net suicide groups usually consist of 2–3 people who are strangers from different parts of the county;
4. Suicide is committed either in a room or a car.

## **Characteristics of suicidal adolescents**

I will now review among other things the characteristics of suicidal adolescents and the impact of growth in internet use which sheds light on the phenomenon of 'net suicide'.

Hawton and James (2005) point out that suicidal adolescents have the following psychopathological characteristics in common. They tend to:

- Come from broken homes (separation, divorce, or death of parents);
- Have a family history of psychiatric disorder or suicidal behaviour;
- Have a psychiatric disorder;
- Misuse substances such as alcohol or drugs;
- Have a history of suicide attempts or self-harm.

Takahashi (1999)<sup>1</sup> also did research on the psychopathology of suicidal adolescents and mentioned how the following factors could also tip the balance in a young person's mind: (a) Life events/loss (unemployment, house moving, school transfer and bullying), (b) character (isolated, low self-esteem, depressed, aggressive, and a perfectionist). He

states 'that there is a range of risks for suicide operating together across a spectrum of separate domains' (pp. 52–66).

In Case Studies 1 and 2, we can clearly see a number of these risk factors. The victims had mental problems as well as several major life events. They had a history of self-harm and previous suicide attempts. Many suicides were the result of a combination of several adverse circumstances.

Before the advent of the internet, solitary people with suicidal ideation usually killed themselves alone (Brown, King, & Barraclough, 1995). However, all this has changed. These days, people express their negative feelings and share them with like-minded people over the internet. For many the internet is a way of making friends for life, but for others it is a place to find companions to death.

Another case mentioned in the Japanese newspapers in 2004 also indicates the vulnerability of youngsters. An unemployed 23-year-old man with a chronic allergic disease accessed the internet in order to prevent the suicide of others and was consequently drawn into 'net suicide' himself. This case demonstrates the power of the internet and how easily young people can be influenced into taking their own lives.

### Concept of death

Kobayashi (2003) describes children's cognitive development regarding death as follows:

Children in general have almost no understanding of death until three years old, and become aware of the fact that one loses the life function by the time they are five years old. However at this stage, they have little understanding of its irreversibility. At approximately nine years of age, they understand the irreversibility and universality of death. (pp. 880–884)

The individual's cognitive level in relation to death differs depending on his/her experiences of family deaths and their educational and cultural background. It may also be greatly influenced by TV, video games or the internet.

An attitude-based survey of images of 'life and death' among primary- and secondary-school students in Nagasaki county (where a 12-year-old girl stabbed her friend to death at school in June 2005) reported an interesting result. In this survey of about 3600 school children aged 8 to 14 years, 15.4% answered that they thought 'a dead person could return to life'. When comparing the prevalence of this idea in different areas, this belief was found to be higher in urban than rural areas. As to the reasons why children believed that 'a dead person could return to life', 29.2% of children chose the answer, 'because they have seen it on TV or movies', and 7.2% chose 'because one could be reset in a TV game, even if he died' (Nagasaki Prefecture Board of Education, 2005).

One can see that children are significantly influenced by TV, internet or films. Considering that the family unit is becoming smaller, it may be true that children are currently less likely to have the opportunity to encounter birth or death and are more affected by what they see in the media about these things. In other words, their awareness of 'life and death' issues arises more from the media than from personal experience.

### Growing internet usage among adolescents and young adults

The internet is an indispensable tool in this information-orientated age. According to a communication use survey carried out by the Ministry of Internal Affairs and Communications in 2003, the internet population in Japan was 69.42 million and this figure was

the second largest in the world, after that of USA. The percentage of the population that had internet access was 54.5%, representing a 10.5% increase from the previous year and it exceeded 50% for the first time in that year. The percentage of households that had at least one family member who used the internet even if the access was not in the house was 81.4% in 2003, which was 20.9% more than the previous year.

In terms of the internet utilization rate by age, the highest was 89.8% among 20–29-year olds followed by 88.1% (13–19-year olds) and 85% (30–39-year olds). Even among children aged 6–12, 52% were regular internet users. Furthermore, 42.9% of them responded that they used the internet at least once per day (Ministry of Internal Affairs and Communications, 2003).

Many specialists have suggested that anonymity seems to have contributed to the popularity of the internet. Making friends without actually physically meeting people seems to be one of the principal attractions in this form of communication. The amount of information relating to suicide available on the internet is enormous and varied. Some websites demonstrate the details of particular suicide methods or advocate specific methods whereas others describe particular individual and group suicides. Sometimes there are quite graphic images of the deceased or the articles left by them, such as suicide notes. There are also bulletin boards and chat rooms, where suicide is discussed by visitors and sometimes suicide notes are posted.

Becker, Mayer, Nagenborg, El-Faddagh, and Schmidt (2004) have discussed the risk of internet usage by vulnerable youths. According to their findings, 30% of all adolescents have suicidal thoughts and approximately half of them use the web. He describes how youths who display dependency, insecurity, fear and evasiveness may be especially at risk, since they may not be able to express their worries, fears, and sadness to a parent or guardian and thus seek advice on the internet instead.

One research study (cited in Kiesler & Kraut, 1999), demonstrated that the more participants in a field trial used the internet, the less socially engaged, and the more lonely and depressed, they became.

A further research paper (Morahan-Martin & Schumacher, 2003) assessed differences between 'lonely' and all other students ('nonlonely') in patterns of internet usage using the UCLA Loneliness Scale. This study demonstrated that 'lonely' individuals used the internet for emotional support more than the 'nonlonely' group. The lonely were more likely to use the internet to deal with negative moods, and to report that their internet use was causing disturbances in their daily lives. They described it as ironic that although lonely users reported enhanced social behaviour on line, their use of the internet interfered with their noninternet social activity and work and caused feelings of guilt. In other words, they were caught in a vicious circle in which they could fill a social void and a sense of emptiness by going on line, even though they were creating a void in their noninternet social lives by going on line.

Although there is no clear evidence in the case studies discussed that the young people affected by internet suicide were depressed, this is clear a possibility. Depressed young people may seek refuge in the solitary world of the internet. On the other hand, the benefits that the internet provides vulnerable people cannot be overlooked. Youngsters solve their problems by expressing themselves on the net and/or find mental health services that can support them through their difficulties. Becker et al. (2004) write,

benefits include help with illness and crisis management, disease definition, as well as information on self-help groups and tips for further reading. E-mails offer a low-threshold, informal, self-designed and modified way to contact therapists. (pp. 111–114)

Furthermore, internet-based cognitive-behavioural therapy offers a potentially effective way for young people to self-manage mild depressive symptoms in an easily accessible and confidential manner.<sup>2</sup>

### **The internet and its influence on the method of suicide**

According to a report by the Japanese Ministry of Welfare (1997–2005), the most common suicide method in 2003 was ‘hanging’. However, suicide as a result of ‘inhaling gas’, including carbon monoxide poisoning, increased to 3538 individual deaths (male 3121, female 417), which was 2014 more deaths (male 1764, female 250) than the previous year. This represented a 2.3-fold increase.

‘Charcoal burning’ is becoming the most popular method of ‘net suicide’ in Japan. As the victims did in the cases described earlier, those who want to kill themselves generally burn barbecue charcoal in a small and sealed environment. Burnt charcoal produces carbon monoxide in a short time and causes victims to die from carbon monoxide poisoning.

Chan, Yip, Au, and Lee (2005) claim that the emergence of charcoal burning as a method of suicide in Hong Kong had led to a sharp rise in the number of suicide pacts there. They suggest that the popularity of charcoal burning as a method of suicide has occurred for a number of reasons. One reason is that charcoal burning is a method that can be easily shared with others, unlike other methods of suicide such as jumping from a height or hanging. It would therefore be considered a desirable method for those who feel more secure about dying in groups. Another factor is that, like other means of carbon monoxide poisoning, it is often portrayed as nondisfiguring and painless. Finally, the report also pointed out charcoal’s easy availability, since having a barbecue is a common leisure activity, making charcoal widely available in supermarkets and convenience stores.

In Hong Kong between 2002 and 2003, 20 of the 22 suicide pacts (91%) used charcoal burners. Of all charcoal burning suicides, seven cases were suicide pacts, based on Coroner’s Court data (Chan et al., 2005).

As a result of its use by Japanese net suicide victims, charcoal burning is now associated more with ‘net suicide’ than with barbecue parties. The publicity that this method of suicide has received may have contributed to its popularity.

### **The concept of suicide behaviour as ‘contagion’**

After the first incident described earlier in 2003, at least 20 cases (59 people) in 2003, and 19 cases (57 people) in 2004, attempted what is called ‘net suicide’, according to several Japanese news reports. Considering the cases which were not reported, approximately 40 groups (120 people), as a minimum, were thought to be preoccupied with suicide given the repetitive coverage of net suicide during the previous 2 years. Some survived since they were detected in advance or gave up halfway through the attempt. However, most of them committed suicide by copying exactly the same method, that is, by using a sealed small space, taking a sedative and burning charcoal. The notion of suicide as a matter of ‘contagion’ has become widely discussed.

Patrick and O’Carroll (1996) describe ‘suicide contagion’ as ‘a process by which exposure to the suicide or suicidal behavior of one or more people influences others to commit or attempt suicide’ (pp. 260–271). They state that there is relatively strong evidence that ‘suicide contagion’ is a real phenomenon and that the effect of the contagion is not necessarily confined to suicide in distinct geographic areas. Indeed,

when one looks at the geographic locations where net suicides have occurred, they have been spread all over Japan, although there seems to be a tendency for suicides to occur in clusters in the same geographical area.

The report by Patrick and O'Carroll (1996) also suggests that newspaper and television coverage of suicide has been associated with a statistically significant increase in suicides. As mentioned earlier, in a survey of attitudes regarding life and death in Japan, it seems obvious that the ideas young people have about suicide are influenced to a considerable extent by TV and the internet. In this way it seems possible that the media promote the 'contagion' of suicide.

A similar recommendation is made in the guidelines for reporting on suicide by the American Foundation for Suicide Prevention (2005) in which they mention that media accounts are potentially harmful. The way suicide is described in the news contributes to 'suicide contagion'. Research suggests that inadvertent romanticizing of suicide or idealizing it as a heroic deed may encourage others to identify with the victim.

### **Suicide prevention strategies**

In the face of increasing suicide rates, in October 2006 the Japanese government enacted a law concerning suicide prevention, which made clear that suicide is a social problem rather than an individual problem and that it can be tackled at a societal level.

I now discuss potential suicide prevention strategies in a Japanese context, considering those aspects relevant to 'net suicide'.

#### ***Treatment approaches***

As demonstrated in the case studies, mental health disorders are a risk factor for suicide. The early identification and treatment of these disorders is therefore of considerable importance in preventing suicide. In this respect, the lack of mental health services – facilities as well as personnel – is an issue that has to be tackled. Self-help websites offering cognitive-behavioural therapy for mild depressive symptoms may also be helpful. Education for primary health care staff to diagnose and treat patients with mood disorders may also be effective in reducing suicide rates among those at risk. All medical personnel and not just mental health professionals have a role to play in suicide prevention.

#### ***Community-based efforts***

*Suicide prevention centres* The Japanese organization 'Inochi-no-denwa', translated as 'Life line' in English,<sup>3</sup> provides a community mental health telephone service similar to 'The Samaritans' in the UK. There are now more than 50 centres throughout Japan and since 2000 it has a free-dial service – 'Life line for suicide prevention'. Although there are no statistical data on how much this service has contributed to reducing the suicide rate, the fact that 45,650 out of the 714,138 people who accessed these services revealed some suicidal ideation implies that the service is attracting a high-risk population.

*School-based interventions* School-based interventions have been proposed for primary prevention. Takahashi (1999), however, argues that primary prevention remains weak in Japan. He points out that because there is considerable stigma around suicide, educators are reluctant to give direct 'suicide prevention' education to adolescents. Teachers should be helped to identify and refer those at risk and the effectiveness of school-based suicide education interventions should be evaluated.

### **Societal approaches**

**Restricting access to means** There is good evidence that restricting the means of suicide is an effective prevention strategy. For example, it has been noted that the removal of carbon monoxide from domestic gas reduced its use in suicide in Japan as in other countries (Lester, 1998). Other examples include restricting access to sedatives and other toxic substances. In 'internet suicide', the victims used sedatives in combination with charcoal which produced carbon monoxide. Charcoal is widely available for use in barbecues; restricting its availability should be considered.

**Media reporting** Many people who have suicidal thoughts are ambivalent about whether they want to die or not. It is possible that media publicity about suicides may lead vulnerable people to suicide. Therefore, it is extremely important for media professionals to understand how to report suicide. Useful guidelines are available including *Preventing Suicide: A Resource for Media* (World Health Organization, 2002) or *Guidelines for Reporting on Suicide* by the American Foundation for Suicide Prevention.<sup>4</sup>

### **Intervention after a suicide**

Suicide is a tragedy not only for victims but for their families and those close to them. Although there is stigma attached to the discussion of suicide, those affected by suicides should be offered postsuicide intervention as well as an opportunity to share their grief with others. At present in Japan, self-help community support groups play a role in this respect.

## **Conclusion**

In this article, I have tried to demonstrate the impact of internet usage on vulnerable adolescents and its link to 'net suicide'.

There has been increasing internet usage among adolescents in Japan as well as in other developed countries, which is testimony to its function as a valued tool of communication. However, the internet also has negative aspects. I have reviewed evidence that the internet is utilized by young people to facilitate group suicides. In some cases people are drawn into a 'net suicide pact' even if they had not initially desired it.

I have also looked at how the mass media have influenced 'suicide contagion' and shown that predisposed youngsters are prone to be affected by the media. I suggest that media workers who are involved in the information provided on suicide cases have to be cautious about what they say and how they present facts to the public. It is possible however that the mass media could be of benefit in suicide prevention if they presented the subject in a different way.

Finally, I have discussed the lack of mental health services available to Japanese adolescents. Although people are increasingly aware of the importance of child mental health, there is much to be done. Further studies are surely required into (a) the epidemiology of depressed children and adolescents, (b) internet use (which can be a risk for suicides), and (c) how to improve mental health service for Japanese children. Moreover, given the fact that suicide is a complex web of interweaving threads of mental, physical, social and family problems, a multidisciplinary approach is essential. This would involve specialists, the mass media, school teachers, family and peers.

If Japanese youngsters are to appreciate the dignity of life, it is important that they are given the opportunity to discuss openly issues surrounding life and death. If government, the educational system and society in general do not acknowledge this as a priority

they may well be contributing to the ignorance and therefore vulnerability of future generations of young people. Taking everything into account, we need to consider the possibility that internet use, including suicide websites and chat rooms, may trigger suicidal behaviour in predisposed adolescents. The Japanese government is now taking action against these websites by supporting voluntary controls of internet providers. It appears that greater vigilance is required by all aspects of the community in monitoring the duration and frequency of internet use if there is to be any success in reducing the numbers of people who die as a result of 'net suicide'.

### Notes

1. Some references are in Japanese. When formal translation is not available, the author has made her own and verified it by writing to the author. Asterisks indicate when no reply has been obtained.
2. See <http://www.ultrasis.com> and <http://www.livinglifetothefull.com/>.
3. See <http://www.find-j.jp/>.
4. See [http://www.who.int/mental\\_health/media/en/426.pdf](http://www.who.int/mental_health/media/en/426.pdf) and <http://www.afsp.org>.

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