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Gender differences in suicide in Sri Lanka – what does it tell us?

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Worldwide suicide is more common among males than females [1]. The male to female ratio of suicide among young adults in the United States is as high as 5:1 [1]. In contrast, attempted suicide is more common among females [1, 2]. This is sometimes referred to as the 'gender paradox' of suicide and self-harm behaviour [1]. Different theories have been put forward to explain the higher suicide rate among males. These include the finding that worldwide, males tend to use more lethal methods for suicide compared to females; as well as the role of cultural perceptions and gender stereotypes in suicide and self-harm behaviour [1].

Over the past three to four decades, Sri Lanka has experienced dramatic changes in the pattern of suicide. In 1975, a total of 1850 males and 534 females aged between 20-65 years died by suicide in Sri Lanka. But by the mid-1990s this had increased dramatically; in 1995, according to police reports, 6890 males and 1813 females between the ages of 20-65 years lost their lives due to suicide. In that year, Sri Lanka had the second highest rate of suicide in the world, of 47/100 000 [3]. A majority of these deaths were by self-poisoning – mostly by ingestion of toxic pesticides [3].

Fortunately, since then, the situation has changed. Suicide rates in Sri Lanka have shown a relative decline during the last two decades, which is largely attributed to measures taken in the mid-1990s – particularly the restriction of access to toxic pesticides [3]. In 2009, the overall suicide rate for Sri Lanka was 19.6/100 000 [4]. This is significantly lower than the peak of 47/100 000 in 1995, but still higher than that in many developed countries. According to police and government statistics, in 2009, a total of 4019 people died by suicide in Sri Lanka, compared to approximately 2457 deaths due to road traffic accidents. Self-poisoning by ingestion of pesticides remains the most common method of suicide, followed by hanging [5]. Thus, suicide remains an important public health problem in this country.

Interestingly, gender analysis by age in Sri Lanka show certain unexpected findings – evidence shows higher rates of suicide amongst younger females [4]. These findings give rise to some pertinent questions. Are patterns of suicide in Sri Lanka different between males and females? If so, how does it compare with international data on suicide? What are the implications in developing strategies to reduce rates of death by suicide in this country?

Trends of suicide by gender, over the past four decades in Sri Lanka

According to police data on suicide from 1975 to 2009, the overall rates of suicide in Sri Lanka have been clearly higher among males than females. In 1995, which recorded the highest rate of suicides, the rate in males was 2.9 times that of females [4].

In the younger age groups (<30 years) rates of suicide in females have been similar to, or higher, than that of males. In fact from 1989 onwards, the rate of suicide among females in the 26-30 year age is higher than that in males. In 1996, in the 26-30 year age group, the female to male suicide ratio reached a high of 1.5. This gender difference has persisted since 1989, and in 2009 the rate of suicide among females aged 26-30 years was 32/100 000, com-pared to 26/100 000 among males. Similarly, higher female: male suicide rates were seen in the 10-19 year age group [4]. Two psychological autopsy studies done in selected districts in Sri Lanka also reported that while overall there were more male suicides, in the younger age groups (<25 years), the number of female suicides were greater [6,7].

In most Western countries, rates of suicide are higher in males, and this generally holds true across all age groups [1, 8]. In rural China and India there are reports of suicide rate among young females exceeding that of males [10-11]. High rates of suicide among young women in rural areas of China have been linked to limited opportunities, relationship issues, mental health problems and easy availability of pesticides [11]. O'Conner et al. have described a high number of 'low planned' suicides among young Chinese women – death by 'impulsive' ingestion of pesticides at home, in the context of acute stress [12].

It is necessary to examine in depth the socio-cultural as well as possible psychological factors associated with suicide in young women in Sri Lanka, if we are to understand this phenomena and develop effective gender specific strategies for prevention. Suicide in young women often occurs in the context of acute interpersonal conflict, often with close family members. The changes in gender roles in recent years offer more opportunity to Sri Lankan females – in terms of work and economic independence but it does also lead to social and family tension related to changes of traditional gender roles and family hierarchies; there are often role conflicts between the traditional societal and cultural concepts of the 'idealized protected female' and the young female who goes out of the home, works or has a boyfriend [13]. Gender role change affects males too; but younger females may perceive relatively less ways of communicating their distress or protest, especially in a hierarchical culture where overt confrontation is frowned upon and stigmatised. Alcohol misuse may also play an indirect role in young female suicides, by further contributing to interpersonal conflicts [13]. Ongoing family conflicts against this socio-cultural background, together with learnt patterns of behaviour (self-poisoning) in response to stress combined with access to pesticides, may well be contributing towards the relatively high rates of suicides in young females in Sri Lanka.

In most age groups, the rates of suicide show a declining trend between 1975 and 2009 in Sri Lanka. In the younger age groups (<30 years) the rate of decline of suicide rates is greater for males compared to females.

In 2009, the rate of suicide among males aged 56-60 years was 65/100 000, compared to the rate of 8/100 000 among females. In Sri Lanka alcohol consumption and alcohol misuse occur mostly among males; this is a likely contributory factor towards the high rate of older male suicides [15].

What do these findings imply?

The high rate of suicides among younger females is reflected in suicides contributing significantly to the maternal mortality rate. Future policies and strategies aimed at reducing rate of suicide in the country need to take into account the different factors associated with young female suicides and explore gender specific interventions. One of the most important strategies is to help young people, especially young women, and families develop more adaptive coping strategies in the face of conflict related to gender role shifts and hierarchical change; together with avoidance of the glamourization of self-poisoning as a 'solution'. This is admittedly easier said than done, but it is worth focusing future research on innovative and culturally suited methods of engaging young people and families in such a discourse. Reduction of alcohol misuse and dependency is a key measure in the reduction of suicide among males, particularly older males; this may also indirectly contribute to decline of suicide rate among females by reducing family conflicts [16-17]. The treat-ment of depression, better access to mental health services and continued restriction of access to toxic pesticides are essential to reduce the overall suicide rate.

As recommended by the World Health Organisation, there is a need to develop a national strategy for prevention of suicide in Sri Lanka, which is also tailored for the local health system and socio-economic background to ensure sustainability; combined with ongoing monitoring for effectiveness.

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