INTRODUCTION

It is more than 25 years since the first issue of the Indian Journal of Social Psychiatry – the official organ of the then infant, Indian association of Social Psychiatry was published. In his insightful, inaugural Editorial, the founding Editor of the journal, the late Professor BB Sethi described in detail the need for a new organization of behavioural scientists in India, committed to the study of the influence of social factors and culture in the causation, treatment and prevention of behavioural disorders. In particular, he noted that: i) while the relevance of social factors to mental disorders was undisputed, it was relatively neglected in India, ii) industrialization and modernization was changing the face of India from a predominantly rural, conservative and agrarian society to a modern, urbanized one with the core of the Indian family changing from the traditional joint pattern to a nuclear one, and iii) due to the unprecedented, rapid social change that was taking place, India was an excellent place for the study of social and cultural processes as they relate to behaviour. Lots of things have changed everywhere in the world as also in India during the past 25 years. However, the justifications for starting an association and a journal devoted to social psychiatry in India more than two and half decades ago are equally (if not more) valid and true today, more than ever before.

Two phenomena relevant for social psychiatry, namely globalization and suicides particularly among farmers which have existed for a long time, have become quite important in India during the past two decades. The pace of globalization has become ultra rapid with various consequences. Suicides, in general and particularly among the age group of 15 to 30 years have steadily increased in numbers. Suicides by farmers in different parts of the country have been in the headline news regularly. Behavioural scientists have often been consulted to advice regarding dealing with suicides in general and suicides by farmers. This commentary will briefly explore the relevance and relationship of these two phenomena in India.

GLOBALIZATION

Globalization is a complex phenomenon. It has different definitions and various meanings. There is an on-going controversy and debate regarding its benefits as well as potential consequences and possible harm to various sections of the population in different socio-economic and cultural settings. It is now widely accepted that there are benefits and costs of globalization. Globalization produces both winners and losers. Globalization presents both opportunities and challenges. While the effects of globalization on economy, trade, environment, science and technology, education etc. have been extensively studied and written about, its effects on health and in particular, mental health have not been adequately researched. Although it is safe to assume that globalization has an impact on mental health of individuals and communities, there is very little direct research or published literature on effects of globalization on mental health. A broad range of literature across different disciplines has speculated on possible effects of globalization on various aspects of population mental health. One such speculation on the consequences of globalization in India is the increased number of suicides committed by farmers in the country during the past two decades. What are the issues related to suicides in India with special reference to the farming community? What is the relationship of farmers' suicides to larger socioeconomic and political changes that have been taking place in the country during the past two decades?

SUICIDES—THE GLOBAL SITUATION

Suicides, attempted suicides and other forms of suicidal behaviours are on the increase in most parts of the world. Suicide is among the top 20 leading causes of death globally for all ages. Every year, nearly one million (ten lakhs) people die from suicides. According to a report of the World Health Organization on violence and health (World Report on Violence and Health, WHO, 2002) about 815,000 people died from suicide in the year 2000, all over the world. This represented an annual global suicide rate of about 14.5 per 100,000 populations or one suicidal death about every 40 seconds. It is important to note that suicide rates from across the world are notoriously unreliable. The major source of suicide statistics globally is the WHO's
mortality data bank and deaths from suicide is an integral part of this data. Methods of ascertainment of the cause of death, as well as the reporting patterns including persons legally authorized to report deaths from suicide are widely variable across countries. Suicide and various forms of suicidal behaviour attract stigma, universally. In many regions and countries, prevailing social, cultural and religious attitudes contribute to hiding, non-reporting and under-reporting or false reporting of fatal as well as non-fatal suicidal behaviour. It is generally assumed that the official suicide rates under estimate the true rates by 20% to 100%. Statistics of attempted suicides also referred to as ‘Para suicide’ and ‘deliberate self-harm’ (DSH) are usually not available officially. Researches carried out by mental health professionals in different populations and in various countries indicate that attempted suicides occur about 8 to 20 times more frequently than completed suicides. Attempted suicides occur more frequently among young people. Rates of attempted suicides tend to be 2 to 3 times higher in women than men.

Suicides are measured as number of deaths by suicides per 100,000 (one lakh) population. Suicides rates vary considerably across countries and between different regions in the same country. Countries with high suicide rates i.e., rates above 20 per 100,000 include certain Eastern European countries such as Lithuania, Ukraine, Latvia and Belarus, the Russian Federation, and other countries such as Hungary, Kazakhstan, Japan, South Korea and Sri Lanka in South Asia. Countries with suicide rates lower than 3 per 1000,000 consist of certain Islamic countries such as Kuwait, Jordan etc., Latin American countries such as Peru and Asian countries such as Philippines, Maldives and Azerbaijan. Although part of the variation in suicide rates between countries may be due to variable standards and regulations of the suicide reporting systems and data collection mechanisms in different countries, it is generally accepted that there are indeed true differences and variations in suicide rates between countries and regions across the world. During the past two decades, there is also an upward trend in suicide rates universally. The paucity of reliable information on suicides and attempted suicides from many developing countries including India is striking.

The World Health Organization in 1989 recommended that all member states should recognize ‘suicide’ as a priority in public health and develop national prevention programmes, interlinked with other public health policies. WHO also recommended that member states should establish national coordinating committees to oversee the implementation of suicide prevention programmes. However, most developing countries including India have not so far been able to address the problem of suicides in an organized and coherent manner.

SUICIDES - INDIAN SCENARIO

Unlike in most other countries in the world suicides are recorded as a crime statistic by police personnel, in India. Attempted suicide in India is a punishable offence under Section 309 of the Indian Penal Code (IPC). Suicide statistics are compiled and maintained annually by the crime records bureau at the state and national level. Thus the only official source of information on completed suicides from all over the country is the report of National Crime Records Bureau (NCRB), which functions under the Ministry of Home Affairs of Govt. of India. The NCRB compiles information on a variety of crimes, accidents and suicides from all the states and union territories and publishes its reports annually. According to the NCRB, there were 1,34,599 deaths due to suicides in 2010, in India, the suicide rate being 11.4 per 100,000 (NCRB – 2010, http://ncrb.nic.in/ ). This accounts for 1 suicide every less than 5 minutes. The total number of suicides in the country in 1968 was around 40,000. This number doubled by 1992 and crossed the 100,000 mark in 1998 representing an increase of 175% in just about 3½ decades. More recently, the total number of suicides rose from 1,08,593 in 2000 to the current 1,34,599 in 2010, an increase of 23.9% during the decade. The true incidence of suicides may be considerably higher than what is reported by the NCRB each year. Specific local studies carried out in different areas by mental health professionals have shown higher suicide rates.

There are marked and noteworthy variations in rates of suicides across different states, union territories and cities in the country. The union territories of Pondicherry (Puducherry) and Andaman & Nicobar Islands have had rates consistently much higher than the national average. In 2010, the suicide rates in Pondicherry (Puducherry) and Andaman & Nicobar Islands were 45.5 and 36.1 per 100,000 respectively. Among the states, while states such as Sikkim, Chhattisgarh, Kerala ND Tamil Nadu have high rates (of 45.9, 26.6, 24.6 and 24.4 per 100,000 respectively) states such as Bihar, UP, Jammu & Kashmir, Manipur and Nagaland have rates lower than 2 per 100,000 (1.3, 1.8, 1.9, 1.4 and 0.5 respectively) (NCRB 2010). In terms
of absolute numbers of suicides, more than 60% of all
suicides in the country occur in the 4 southern states of
Kerala, Karnataka, Andhra Pradesh and Tamil Nadu and
the states of Maharashtra and West Bengal. Amongst
cities, Bangalore has consistently recorded highest
rates in the country.

Suicides by farmers in India

The phenomenon of suicides by farmers in India has
been extensively studied by various disciplines and
written about. Stories of the plight of farmers leading
them to helplessly kill themselves have regularly
appeared in the media both nationally and internationally (Sainath 2010, The Economist 2007, Renton 2011)). It has also been examined by state
appointed, high level expert committees in various
states such as Punjab and Karnataka (Bhalla et al 1988,
Veeresh 2002). Various aspects related to suicides by
farmers were systematically researched by social
scientists, economists, agricultural scientists and
mental health professionals (Deshpande 2002, Nagaraj
2007, Behre and Behre 2008). From around the mid
1990s, the number of farmers killing themselves rose
steadily and peaked around 2005. From less than 11000
farmer suicides a year before the year 1995, the annual
number of suicides by farmers increased to more than
18000 in 2004. Suicide by farmers constituted about 14
to 16 per cent of all suicides in the country. Since mid
1990s, more than a quarter million (2,56,892) (Table 1)
farmers have committed suicide in India. About two
thirds of these suicides occurred in the six states of
Maharashtra, Karnataka, Andhra Pradesh, Kerala,
Madhya Pradesh and Chhattisgarh. These numbers
which are by themselves quite high are likely to be an
underestimate of the actual numbers of suicides in the
farming community. Tenant farmers, Dalits and women
farmers who do not have land title deeds in their name
do not qualify to be recognized as farmers and many of
them who have committed suicide do not get counted
as farmer suicides. As economist Nagaraj (2007) of
Madras Institute of Development Studies notes, the
numbers of farmer suicides have continued to remain
high for a long period of time despite a fast decline in
the total farm population in the country. Sainath (2010),
a widely cited Rural Affairs Editor of the Hindu
Newspaper which has regularly covered the issue of
farmers' suicides in their columns, points out that
between the census years of 1991 and 2001, nearly 8
million cultivators quit farming.

The centre for Human Rights and Global Justice
(CHR&GJ) of the New York University School of Law
(2011) which recently published an exhaustive report
on the human rights of Indian farmers and of “the
estimated 1.5 million surviving family members who
have been affected by the farmer suicide crisis to date”
notes that a great number of those affected are cash
crop farmers and cotton farmers in particular and that
“indebtedness is a major and proximate cause of farmer
suicides in India”

Are suicides in India different from the rest of the
world?

Epidemiological analysis of suicides show that suicidal
phenomena in India is different from those occurring in
Western developed countries of the world in a variety
of ways such as age, gender marital status, choice of
method of committing suicide and presence of a
diagnostable mental disorder at the time of committing
suicide.

Age

One of the classic observations in epidemiology of
suicide is the predominance of suicides among the
elderly and the general tendency for suicide rates to
increase with age. There is a shift in the predominance
of the number of suicides from the elderly to younger
people all over the world. However, this is most
noticeable in India. More than 65% of all suicides are
committed by persons below 35 years of age in India.
About 35% is committed by persons between the ages
of 15 and 24 years. Only 7% of suicides are committed
by persons aged 60 years and above. These figures are
based on the NCRB data as well as data from a study on
the Epidemiology of Suicides in Bangalore (Gururaj and
Isaac 2001a and b).

Gender

All over the world, suicide rates in males are
consistently higher than rates in females. In fact, data
from across the world show that the ratio of male
gender suicides rates ranges from 3:1 to 10.5:1.
Globally, the only exception to this observation is rural
China. The ratio is vastly different in India too. The
male female ratio in India is 1.4:1. When one looks at
the ratio in regard to females below the age of 25 years,
there is a gender reversal of this ratio and it is 1:1.4.

Marital status

Most suicides recorded from the West indicate that
being in a stable marital relationship is generally a
protective factor against suicide. Being divorced,
separated, widowed, or being in a single status are
considered to be risk factors for suicide. In India more
Currently available data show that suicidal phenomena, stressful triggering factor. They were committed within hours of some one another. Many of the stressors were unresolved, cases were combined, cumulative, and inter-related to the causative factors which were many in most of the factors in the Bangalore study. It was also noticed that interpersonal relationships were important causative economic factors, unemployment, and disturbed strata. Various physical illnesses, stressful life events, belonged to the lower and middle socio-economic. It shows that nearly 90% of those who committed suicide were married. It is instructive to note the relationship of marital status in India and USA. In USA only 11% of persons who committed suicide had “married” marital status. The percentage for divorced and widowed was 5% and 6% in India, while they were 33% and 21% respectively in USA.

**Choice of method**

Guns are used in a large proportion of suicides in the USA. In many other parts of the world, too, use of gun is a popular choice. Western literatures also show that women generally tend to adopt “softer” methods such as consuming prescription drugs. In India, use of guns for suicide is rather infrequent. Use of dangerous and lethal pesticides of various types, hanging, and drowning is common for committing suicide in India. Self-immolation (burns) particularly by young women is a method peculiar to India and few other countries in Asia.

**Association with mental disorders**

Western literature reports that about 90% of all those who commit suicide suffer from a psychiatric disorder. A systematic review conducted by Jose Bertolote of W.H.O. (Bertolote and Fleischmann 2002) found that “98% of those who committed suicide had a diagnosable mental disorder”. While this may be true in the West, studies in India such as the Bangalore study of suicides show that a specific mental disorder was documented in less than 10% of the subjects. Regular and problematic alcohol usage was recorded in about 15% of the males who committed suicide (Gururaj and Isaac 2001). Whether conditions/information for the proper establishment of a psychiatric history or diagnosis in every completed suicide was adequate is a relevant question in the Indian context.

The Bangalore study as well as data from the NCRB shows that nearly 90% of those who committed suicide belonged to the lower and middle socio-economic strata. Various physical illnesses, stressful life events, economic factors, unemployment, and disturbed interpersonal relationships were important causative factors in the Bangalore study. It was also noticed that the causative factors which were many in most of the cases were combined, cumulative, and inter-related to one another. Many of the stressors were un-resolving in nature. Several of the suicides were of the ‘impulsive type’ and were committed within hours of some stressful triggering factor.

Currently available data show that suicidal phenomena, which occur in India, are different from the West in a variety of ways. These observations are of great relevance in planning suitable and meaningful suicide prevention strategies in India. It is generally agreed that preventive intervention should be collective, coordinated, inter-disciplinary, evidence-based, and multi-sectorial.

**FARMERS’ SUICIDES IN INDIA: AN EFFECT OF GLOBALIZATION?**

Although suicides by farmers, as by any other section of the population, occur due to a variety of causative and personality factors, suicides by over a quarter million of India farmers during 1995-2010 (which has been described by the Centre for Human Rights and Global Justice of the New York University School of Law (2011) as “the largest wave of recorded suicides in human history”) occurred during a period when the country was attempting rapidly to integrate itself into a global economic system. It is interesting to note that the title of the report in The Economist (2007) about suicides amongst India’s cotton farmers quite rightly asked “Is globalization killing India’s farmers?” There is a general consensus among experts from various disciplines who have systematically researched the trends in farmers’ suicides in India as well as several governments appointed expert committees about the common causative factors for farmers’ suicides. Some of these factors are: “debt trap” caused by heavy loans taken at punitive interest rates from rural money lenders, shift from food crops to cash crops which caused significant farmer vulnerability, increase in cultivation costs due to a variety of factors including entry of foreign multinationals, promotion of genetically modified seeds, increased use and prices of fertilizers and pesticides, steep increase in costs of various agricultural inputs, steady decline in state investment in agriculture, crashes in prices of crops, growing water stress and drought, corporatization of the agriculture sector etc. All these factors lead to a steadily deepening agrarian crisis in the country.

**CONCLUSION**

Like elsewhere in the world, suicidal behavior with consequent fatal outcome has become a major public health problem in India. While suicide is a complex phenomenon, it is well known that both emotional factors and socioeconomic/cultural factors play a significant role in its causation. Social and behavioral scientists in India have an important responsibility to collaborate with experts from various other disciplines.
to develop and implement effective suicide prevention programmes aimed at different sections of the populations. Sethi’s concluding words from his 1985 editorial “…India is an excellent place for the study of social and cultural processes as they relate to behavior and more so since change from a conservative to a modern India is occurring at an unprecedented rate” ring true today, more than ever before.

REFERENCES


Renton, A. (2011, 2 January). India’s hidden climate change catastrophe. The Independent, pp 4


Table 1 Farmers’ suicides in India 1995-2010 (NCRB)

<table>
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<th>Year</th>
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