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Editorial

THE FIRST EDITORIAL ON THE FIRST EDITORIAL: COMMENTARIES AND REFLECTIONS.....

Debasish Basu

Putting on one's own head the proverbial hat that once adorned the heads of many intellectual stalwarts is no easy task!

As the new Editor of the Indian Journal of Social Psychiatry, I was immediately confronted with the prospect of carrying on the torch from the able hands of my predecessors. The prospect was, to say the least, daunting. Illustrious names, starting from Professor Brij Bhusan Sethi, Professor Param Kulhara, Professor P. Raghurami Reddy, Professor Gauranga Banerjee, Professor Vinod K. Sinha..... all these illustrious names flashed before my mind. Names of people who contributed immensely to Indian psychiatry in general and to the cause of social psychiatry in India in particular. Names of people who, in the face of often difficult and trying circumstances, kept the flag of the Indian Association for Social Psychiatry high and flying by maintaining high quality and continuous publication of the Indian Journal of Social Psychiatry for more than a quarter of a century – to be specific, for 27 years. They carried the torch, the light, the fire, for all these years, through moments good and bad, through sunshine and shadows, through the gloom and the glee. And now it was my turn to carry it on.....

While wondering how to best capture the essence of this continuity from the legacy of the past to the uncertain but promising beckoning of the future, I borrowed this idea from what in Bengali is metaphorized as "*Ganga Jaley Ganga Pooja*" (making a ceremonial offering to Goddess Ganga with the holy water of river Ganga itself). What could be better than recalling the past and putting it through the perspectives of the present and the future? What could be better than recollecting the white light of the very FIRST editorial, written by the founder Editor of the Journal, Professor B.B. Sethi, and passing it through the prism of the collective wisdom of today's commentators to yield a rich multi-colored display of reflections? This could surely be a way to bridge the past, present and the future.....

It is with this idea and with this hope that I present to you this volume of 2012. Next to this first editorial, you will find re-printed the very FIRST editorial (Vol. 1, No. 1,

pp. 1-2) published in this Journal, aptly titled as "The relevance of social psychiatry in India" (Sethi, 1985). Professor Brij Bhusan Sethi, known to the world as "B.B. Sethi", has been described as "The great visionary who was destined to shape the destiny of psychiatry....in the country" (Trivedi, 2010). Amongst the brilliant array of academic and administrative achievements acquired during his rather short life span (1932-1996), he was the Founder Editor of the Indian Journal of Social Psychiatry, which he stewarded with dexterity for the first three formative years of the Journal (1985-1987). The first editorial underpins the relevance of studying social psychiatry in India. Especially remarkable are his almost prophetic and visionary closing statements in that editorial: "One does not have to be reminded that India is an excellent place for the study of social and cultural processes as they relate to behaviour and more so now since change from a conservative to a modern India is occurring at an unprecedented rate."

Following this re-print, there is the "collector's set" of articles – in a series called "Commentaries and Reflections" – that does just that: commenting and reflecting on the state of social psychiatry particularly in India, setting in the backdrop this first editorial but moving on to the current and prospecting on the possible future scenario.

The first of these articles is written by none other than Professor Vijoy K. Varma, who has probably the longest living association with the Association, being its Founding Member, first Secretary-General, later President, having an award instituted in his name, and a lifelong champion of social psychiatry in India and abroad. After a brief but vital foray into the past recalling the genesis of the Association (who else is better qualified to talk about this?), he has focused on issues such as psychiatry and social issues, social control of human drives and even underscored the futuristic scope of social psychiatry as dealing with the nuclear threat from the perspective of developing countries.

The second in this series is again by another luminary in this area, Professor Jitendra Trivedi. He has also had a long working association not only with the Association but in particular with its first editor. His reflections –

indeed, as the title suggests, a reappraisal – are focused on the relevance and scope of social psychiatry today. The concluding paragraph of his article is both an appeal and a vision: “There is an urgent need to curtail the transition of the George Engel's Bio-psycho-social model of disease to Bio-bio-bio model of contemporary psychiatry in order to retain the person-centered holistic approach in the field. With the 20th century predominantly being one of biological treatments and psychotherapy of mental disorders, let us hope that the 21st century would be one of Social Psychiatry.”

The third and the fourth ones in the series, again by two stalwarts in Indian and international psychiatry, Professor Mohan Isaac and Professor K.S. Jacob, both underscore similar themes but from different perspectives. While Professor Jacob eloquently dwells on his title “Chasing biological mirages, ignoring contextual reality” and emphasizes the need for holistic approaches, Professor Isaac argues that social psychiatry in India is “more relevant today than ever before” by focusing on the tragedy of suicides in India and exploring the socioeconomic factors especially the potential role of globalization. Both these articles are vitally important in their own right.

The fifth in this series is different from the rest; it truly stands apart. Written by Achal Bhagat, a PGIMER- and later Oxford-trained psychiatrist who chose to return to India and set up a NGO that works for the rights and rehabilitation of people with mental illness, this article is personal, appealing and emotional in its tone. Dr. Bhagat appeals for the cause of social psychiatry from a humanitarian and rights-based viewpoint. The need to carefully listen to the patient's narrative is paramount, and such listening immediately lets us appreciate the inevitable social perspective of psychiatric conditions. He argues that, in the final analysis, all “psychiatrists have to be social psychiatrists and not just prescribe medicines or cures.” This is a piece that has come out not from textbooks but from the heart.

The last one in this series is written by Dr. Kaustav Chakraborty, clearly and decidedly the youngest commentator in this series. His contribution is important because his generation, after all, will finally witness social psychiatry taking shape in India in the future, and upon his generation is placed the burden and the imperative to carry the torch forward on further. Thus, he provides the last crucial link in this past-present-future continuum of social psychiatry in India.

I am extremely grateful to all these authors for their thoughtful and brilliant invited commentaries. Along with the first editorial, this “Collector's set” of Commentaries and Reflections should provide the Journal – indeed, the social psychiatry scenario in India – the necessary continuity between its rich past and promising future.

REFERENCE

- Sethi, B.B. (1985). The relevance of social psychiatry in India (editorial). *Indian Journal of Social Psychiatry*, 1(1), 1-2.
- Trivedi, J.K. (2010) B.B. Sethi (1932-1996). In, *Icons of Indian Psychiatry*. Available from: http://www.indianjpsychiatry.org/temp/IndianJPsychiatry526179-5022108_012342.pdf (last accessed on November 4, 2012).

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The First Editorial (Reprinted)

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EDITORIAL

THE RELEVANCE OF SOCIAL PSYCHIATRY IN INDIA

It is a matter of great satisfaction to offer the editorial of the inaugural issue of the Indian Journal of Social Psychiatry - the official organ of the Indian Association for Social Psychiatry. The Association is itself very new and had its inception at the Transcultural Psychiatric Meet held in Madurai in August 1981, where a group of behavioural scientists concerned with the relative neglect accorded to the study of social factors in mental illness in India decided to constitute an organization specifically devoted to further this cause. As a result, in January 1982 in Madurai, an Adhoc Committee was formed with Dr. V.K. Varma as the Convener and Dr. Kirpal Singh as the Chairman. The Adhoc Committee subsequently met at different places and finally at the last meeting held in Ranchi in January 1984, a constitution was adopted and the organization was formally launched. The Association is committed to study the influence of culture in the causation, treatment and prevention of behavioural disorders; to promote national and international collaborations among professionals related to social psychiatry, and to make the knowledge and practice of social psychiatry available to other sciences and to advance the physical, social and psychological well being of mankind.

The relevance of social factors to mental disorders is undisputed. And accordingly it has been an integral part of psychiatry ever since its growth into a well defined corpus of knowledge. Abundant literature exists in psychiatry as well as social sciences to indicate that the human being, in health or disease, is subject to and influenced by extrapsychic dynamic forces which cannot but have important repercussions on the behavior. It is a well noted axiom that given certain fundamental biological needs which our behavior is intended to serve, the 'style' in which these needs are satisfied is determined by the influence of social interrelationships. It is not only interrelationships in which humans interact with humans which is important but the very nature of the environment (living and non-living) which has strong influence on determinants and course of (ill) health. It is well known that the social pressures can determine social organizations and thus the human relationships; it is also known that socially determined stressors can trigger off maladaptive

behavior, and it is also now well established that even biologically determined mental disorders require a certain mix of environmental forces to express themselves. The study of social factors in mental disorders has been at the forefront of psychiatric literature in the West. In India, though not totally absent, it has failed to be expressed in a coherent fashion. Epidemiological studies from India indicate the possible implications of factors like, social class, marital status, caste considerations, sibling position and family structure in relation to certain psychiatric disorders.

It has also been pointed out that the industrialization and modernization of India is changing the face of India from a predominantly rural and agrarian society to a urbanized one-the most telling impact of which is on the core of our society i.e. the family which seems to be undergoing a transition from traditionally a joint pattern to a nuclear one. This phenomenon may be related to increased frequency of mental disorders. At a clinical level too, it has been emphasized that our patients express their mental problems in a pattern which is socio-culturally determined. Consequently one hears of a need for therapies (e.g. psychotherapy) which are socially and culturally relevant. At this juncture however it would be appropriate only to underline the fact that even though indirect evidence exists to link social factors to mental disorders in India, yet the attention paid has not been of a very high order. One therefore hopes that this Association will fulfill this need and in the process encourage one to view psychiatric/behavioural disorders as they can be related to social factors. One does not have to be reminded that India is an excellent place for the study of social and cultural process as they relate to behaviour and more so now since change from a conservative to a modern India is occurring at an unprecedented rate.

B.B.Sethi

The First Editorial: Commentary and Reflections

WHITHER SOCIAL PSYCHIATRY?

Vijoy K. Varma

It is a matter of great pleasure to write this commentary on the very first *EDITORIAL* of the Indian Journal of Social Psychiatry, written by my esteemed senior colleague, late lamented Dr. B.B. Sethi who unfortunately left us quite prematurely. Our present editor, Dr. Debasish Basu, has caught on a really great idea of inviting commentaries on the Editorial. I am grateful to him for having invited me to write such a commentary.

The idea that later blossomed into the formation of the Indian Association for Social Psychiatry was mooted at the Transcultural Psychiatric Meet held in Madurai, Tamil Nadu, on 23-25 August 1981. It was felt that it may be desirable to have a separate professional organization at the national level in India for social and/or transcultural psychiatry. In addition to examining the social and cultural correlates of psychiatric disorders in its totality – the phenomenology, classification, course and outcome; as also its treatment – such an organization can examine the interface culture and personality and mental illness and engage in a scientific study of social issues relevant to the society and the nation.

Subsequent to the Transcultural Psychiatric Meet in Madurai, I consulted with the likely interested professional colleagues through a circular. In view of an overwhelmingly positive response to the formation of such an organization, a meeting of interested persons was convened to coincide with the annual conference of the Indian Psychiatric Society held in Madras (now Chennai) in January 1982. At this meeting, an *ad hoc* committee was formed with Col. Kirpal Singh as the Chairman and myself as the Convener. At this meeting, it was decided to name the organization as “the Indian Association for Social Psychiatry.” There was considerable debate between 'social' and 'transcultural' in the name and scope of the organization, but eventually, 'social' prevailed.

The subsequent formation and development of the organization took place both nationally and internationally. The *ad hoc* met on a number of occasions, often taking advantage of annual conferences and council meetings of the Indian

Psychiatry Society to conserve time and costs. In addition, we engaged in close collaboration with the World Association for Social Psychiatry and derived support, encouragement and guidance from it. The WASP leadership was very supportive and kind, including its stalwarts such as Joshua Bierer, Jules Masserman, Jack Carleton, A. Guilherme Ferreira, Jorge A. Costa e Silva, Alfred Freedman, Stanley Lesse, Alexander Gralnick and others. At its 10th World Congress held in Osaka, Japan in 1983, which I attended, the WASP Executive encouraged in the formation of the IASP, and pledged its full support in every way possible. At the last meeting of the *ad hoc* committee held in Ranchi on 14 January 1984, the constitution was adopted, office bearer and council members were elected the Society was fully launched.

Much of professional output of psychiatrists, psychologists and other mental health professionals in India can be subsumed under the rubric of social psychiatry. Modern psychiatry developed in a particular time period and a part of the world. The timing was the Victorian era of the 19th century and the locale European. It was only subsequently that it was extrapolated to other parts of the world and applied to other populations.

Till about 40 years ago, most of Indian psychiatrists cut their psychiatric teeth either in West or on the Western model. On return to the home country, they often encountered significant difficulties in applying the Western model to the ground realities in India. “One major concern of the Indian psychiatrists has been to translate modern psychiatry as it has evolved in the West to the Indian setting. ... This exercise has covered topics such as the epidemiology, types, manifestations, course and outcome of mental illness. Comparing the Indian situation to the Western textbooks has been a prime concern, particularly of the Indian psychiatrists trained in the West, and to a lesser extent all psychiatrists, as the Western frame of reference continues in their training and education (Varma, 1989).”

PSYCHIATRISTS AND SOCIAL ISSUES

Social psychiatrists globally have assigned to

themselves the role of examining social issues and offering solutions to these. It is a moot point if they possess any expertise in these and are qualified to pontificate on such issues. I have argued that, as concerned and knowledgeable citizens, they certainly have a responsibility in it. I have summarized my thoughts on this issue as follows (Varma, 1986, 1988, 1989):

"Lately there has been a lot of debate if and to what extent do we, behavioral and social scientists, have role to play in social issues. ... The usual debate in this controversy runs something like the following. The camp that denies any such special role to the scientist argues that these problems and issues are for everybody ... and this should not remain the exclusive domain of ... social scientists. *Secondly*, ... although the scientist has a better general orientation and a more rigorous training, he does not necessarily know more than the layman about the specific problem at hand – i.e., he does not have any special expertise in it." Choice of a solution may depend on personal choice and social and moral considerations, implications and the eventual objective desired. "*Finally*, it is said that with increasing complexity of society, the problems and issues become so complicated that an interdisciplinary approach to their solution is needed which the individual scientist is unable to provide."

The opposite camp sees important roles for behavioural scientists in advising in a resolution of social problems and issues. Proclaiming "I shall assert quite boldly that there are useful roles for psychologists in the present scene and in the development of future policy and practices," Russell (1961) outlined at least four roles for psychologists in the formation and evaluation of policy. These include (1) examination of policy issues for their psychological component, (2) summarizing and integrating current information, (3) research and (4) application of current knowledge and skills. It may be pointed out that the scientist is also a member of the larger community and has responsibilities as such. Also, the scientist is not only a citizen, but in many ways a more knowledgeable one.

Hubert H. Humphrey, the ex-Vice President of the United States and one-time Presidential nominee, emphatically expressed an important role for the behavioural scientist in the most crucial problem of human survival. "The behavioral scientist can help us resolve the awesome dilemmas we face. It is not just the physicist, the chemist, the biologist who can find new answers to the prevention of World War III; it is the

psychiatrist the psychologist, and allied professionals. From all these we need not only facts, we need questions. We need innovative concepts. We need challenges to cherished dogmas. We need imagination" (Humphrey, 1963).

In my write-ups to the souvenirs of the first (1985), the second (1986) and the fifth (1989) annual conferences of the IASP, I have drawn attention to the social issues and problems of particular relevance to our country. 'The great diversity of the Indian culture both in temporal and spatial contexts' has been pointed out, particularly in view of the problem of national integration. In the national context "problems of poverty and economic deprivation, technological backwardness, social and economic inequalities, urbanization, industrialization and social change, population control, cultural diversity and national integration and intrasocietal conflict and violence have been particularly identified as social problems. Increasingly, attention has also been drawn to crimes against women, including dowry death and rape and to the legal situation regarding attempted suicide and drug abuse."

SOCIAL CONTROL OF HUMAN DRIVES

"The proverbial (American) freedom of life, liberty and pursuit of happiness, has unfortunately degenerated, in the modern world, to mean freedom to *plunder*, to *waste* and to *pollute*. The limited resources of the planet earth are being exploited, plundered literally, without much concern for the future. The right to spend a particular commodity or to use a particular facility is perceived as limited, by and large, only by one's capacity to pay for it. ... Ecological pollution has reached such proportions that the delicate physical and chemical equilibrium which was responsible for initiating life on this planet in the first place and which has been sustaining it so far is threatened, thus jeopardizing all life (Varma, 1988)." Per Capra (1982, p. 28), "... rape has become a central metaphor of our culture – rape of women, of minority groups, and of the earth itself."

Further, Capra (1982, p. 226) has pointed out, "... to keep up a pattern of competitive consumption, many of the goods thus consumed are unnecessary, wasteful, and often downright harmful. The price we pay ... is the continual degradation of the real qualities of life – the air we breathe, the food we eat, the environment we live in, and the social relations that constitute the basic fabric of our lives." He further lamented that "Human

technology is severely disrupting and upsetting the ecological processes that sustain our natural environment and are the very basis of our existence. "...entire fabrics of life that took thousands of years to evolve are rapidly disappearing" (Capra, 1982, p. 252).

The free enterprise system implies that if you desire a particular commodity or service you can have it if you can pay for it. The larger implications on the eco-system are often overlooked. Living most of my life in a developing country brought many thoughts to my mind. In our country, most things and services were also in short supply. We all remember how we struggled for things like telephone, radio, scooter, car, etc. The moment a product or service became available, the demand always outstripped availability. So, no matter how much we progressed, we never felt fulfilled. In India, as in many other developing countries, the population growth also militated against anything ever becoming enough. I remember that we thought that with the computerization of train reservation system, the old long and tedious lines to make a train reservation would be a thing of the past. Unfortunately, that did not happen, as the demand grew more than the supply. If you can pay for it, you can travel wherever you want to, without any consideration of need. Should there be a quota, should the state regulate or control utilization of services and commodities? This may smack of a totalitarian control over free will.

However, the last 2-3 decades have witnessed increasing awareness of the need for such a control. We are becoming more and more aware that all human activities have implications for the planet Earth. All activities produce carbon dioxide which is toxic for the planet, and can be measured in carbon print. I pointed out over two decades ago the impact of the industrial revolution on the ecology (Varma, 1988). Now, we have been able to measure the consequences in global warming. We talk in terms of carbon print of all our activities; to illustrate, air travel. We realize that we are simply tenants of the planet and we must not destroy the eco system; we can do so only at our peril. Also, most energy sources are finite in quantity and non-renewable. I also pointed out that "all the consequences of tampering with the environment cannot be fully anticipated and the repercussions may act in strange and hitherto unforeseen ways (Varma, 1988)." Pollution to threaten ecological balance and viability may result from chemical waste, deforestation, accident involving chemical and biological toxin,

nuclear testing and accidents and, finally, full-scale nuclear warfare. Think of Bhopal gas tragedy, Three-mile, Chernobyl, the impact of tsunami of 2011 on the Japanese nuclear plant. I have pointed out that although "we may not rank as one of the most industrialized nations in the world, we in India have the dubious distinction of having been at the receiving end of the worst chemical disaster in human history, namely the Bhopal Gas Tragedy of December 1984 (Varma, 1988)." Also, we are becoming increasingly aware of global warming resulting from human activities and its implications for all of us. Considerations which were mere speculations, now occupy centre-stage in global planning, as evidenced by large-scale debate about global warming and Nobel Peace Prize to the former U.S. Vice-President, Al Gore, and to the Intergovernmental Panel on Climate Change in 2007.

THE NUCLEAR THREAT: PERSPECTIVE OF DEVELOPING COUNTRIES

"With the powerful nuclear weapons being available and the potential of any international conflict escalating into nuclear warfare being present, disarmament and abolition of warfare is considered not only desirable, but a must for human survival; the question often being posed being whether it will come before or after a nuclear holocaust (Varma, 1986, 1990)." As one of the latest nuclear states, we in India have been increasingly cognizant of what an all-out nuclear warfare can do. Although it has mostly concerned Western nations, which maintained a long-term *détente*, I have argued that "it would be patently wrong for the developing, third world countries, to assume a position of complacency about it (Varma, 1988)."

Although the Second World War represented a major defining epoch in world history, violence has continued since then. Also, there has been a lot of warfare since then, and more and more of violence has affected developing world. I have pointed out a number of factors in developing world which may actually facilitate international conflicts. These include: parochialism, pursuit of nationalism, distrust of the erstwhile imperial powers, lack of national identity, internal insurgency, lack of stable political traditions and conventions, totalitarianism, oligarchy and anarchy, vulnerability to be caught in cross-fire, and war as an outlet for the insoluble socio-economic problems (Varma, 1988). Although many of these concerns may have sounded far-fetched till a few decades ago, recent history has brought out its relevance.

The nuclear club is fast proliferating. India joined it in 1974, to be followed by Pakistan thereafter. Several countries are producing plutonium and may soon join the nuclear club. We are currently at the throes of the process and implications of the nuclear capability of North Korea and Iran. These are not idle debates, but actual matters of human survival.

As long ago as 1988 (Varma), I underscored as follows: "The present-day nuclear stalemate rests on a balance of terror and on the premise that it is a no-win situation. This situation can continue indefinitely, as such, provided we assume that the powers that be will continue to act in a fully analytical, rational fashion keeping the global perspective in mind. This probably is too much to hope for. Nations are governed by individuals with their own frailties... [with] chances of irrationality ... creeping in to the destruction of mankind. There is, accordingly, need for greater concern and consideration to the possible role of the developing countries in a nuclear holocaust which, hopefully, can be avoided."

EPILOGUE

Our founding Editor rightly outlined the scope and dimension of social psychiatry. In this, he took into account the particular socio-cultural variables relevant to our country, India. This includes social and cultural correlates of mental illness and its treatment. He also pointed out the technological changes underway in the country at the founding of the journal and its impact on family and mental illness. The subsequent development of social psychiatry in the country, as evidenced by deliberations of its annual conferences as also publications in the IJSP, have borne out the pathway so well identified by Professor Sethi.

REFERENCES

- Capra F (1982) *The Turning Point: Society and the Rising Culture*. Simon and Schuster
- Humphrey HH (1963) The behavioral sciences and survival. *American Psychologist*; 18:290-94
- Russell RW (1961) Roles of psychologists in the formulation and evaluation of policy. *Journal of Social*

Issues; 17(3):79-84

Varma VK (1985) Indian Association for Social Psychiatry. Souvenir of the first annual conference of the IASP

Varma VK (1986) The behavioral scientist and social issues. *Indian Journal of Social Psychiatry*; 2(3): 139-147

Varma VK (1986) Indian Association for Social Psychiatry. Souvenir of the second annual conference of the IASP

Varma VK (1987) World peace and social psychiatry: Perspective of developing countries. *Indian Journal of Social Psychiatry*; 3: 317-327

Varma VK (1988) The psychiatrist and social commitment. *Andhra Pradesh Journal of Psychiatry*; 1(1), 6-16

Varma VK (1989) Social psychiatry: The Indian perspective. *Indian Journal of Social Psychiatry*; 5:1-3

Varma VK (1989) Indian Association for Social Psychiatry. Souvenir of the fifth annual conference of the IASP.

Varma VK (1990) The psychiatrist and social issues in the third world. *In, Psychiatry: A World Perspective*, vol 4. Elsevier Science Publishers B.V., C.N. Stefanis et al., editors.

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RELEVANCE OF SOCIAL PSYCHIATRY IN INDIA – A REAPPRAISAL

J. K. Trivedi, Kailash. S

It is a matter of great honour and privilege to offer a commentary on the Editorial of the Inaugural issue of Indian Journal of Social Psychiatry (IJSP), 1985 by Prof. B.B. Sethi on the topic "Relevance of Social Psychiatry in India". Viewed from the prism of the 27 year old editorial, Social Psychiatry appears to be all the more important and significant in present day India. Social and cultural factors play an important role in mental health promotion, causation, management and prevention of illnesses. This section will aim at a current assessment and a refocus on the topic at hand and would eventually review the progress and important milestones of the Indian Association of Social Psychiatry (IASP) and the Social Psychiatry movement in India.

The veritable boom of biological psychiatry has been a feast for the etiology-starved psychiatric minds. Bio-medicalization of psychiatry has been influenced to a greater extent by the pharmaceutical industries. Every physician is trained to view 'disorders' as being caused by predominantly biological factors right from the period of undergraduate training. The realisation that disorders can also occur because of psychological and socio-cultural factors and learning their modes of intervention, can happen only with extensive individual training and expert supervision, which is far from adequate in every field of medicine. As the contribution of psychological and socio-cultural factors is more in the field of psychiatry, the above mentioned deficit in training becomes more apparent in this field.

In India, the role of socio-cultural factors in mental health is indispensable. Rapid urbanization and growing technology has cut across national boundaries and is continuously testing the ability of people to adapt to this modernisation. Disappearance of the joint family and the support system that comes along with it, is resulting in the depletion of one of India's most valued resources. Stigma, problems of the deprived and socio-cultural issues specific to women are areas of interest not only in the developing countries like India but also in developed countries. Family care and burden, disability, suicide including farmers suicide, religion, spirituality, help-seeking behaviour, pathway of care and preventive psychiatry are areas of specific interest in India and a great deal of work still needs to be done in

these areas.

Many reasons can be thought of for biological factors gaining greater attention than social factors. Biological factors can be easily assessed, are less time consuming, treated by medications and because of the complexity involved, psychiatrists are more interested in possessing it. Mental health professionals tend to follow the biological model and rely on medications for their treatment so that they are more likely to get respect from their fellow colleagues of other disciplines. On the other hand, social and cultural factors are difficult to assess, more time consuming, needs expertise to intervene and also the fact that it is easily understandable by many makes it less attractive for a psychiatrist to possess and practice it. There is also a perception that social and cultural factors are not that easily modifiable. Cutting a clear cut balance among these factors is the need of the hour for better care of the patients.

As aptly said by the first editor of IASP, most biological factors need significant social and environmental factors for their expression. Treating a disease which originates due to social factors, with biological means like medications and ignoring the social factors, would do no good for the patients. Socio-cultural factors not only play an important role in mental illnesses but also contribute significantly in most physical illnesses. Training the budding psychiatrists in assessing the socio-cultural aspects of mental health and disease and also in the modes of intervention would be of paramount importance in making Social Psychiatry reach the people in need.

A review of important milestones in the development of IASP and social psychiatry movement in India would give us an idea of the meticulous efforts that have been taken so far in this area. From the gestation of IASP in the Transcultural Psychiatric meet in Madurai, 1981 to its birth in Ranchi, 1984, the felt need for giving increased attention to socio-cultural factors in mental health and the need for an independent organisation for the same have been met to a certain extent by the IASP. The IASP today has more than 700 members from various disciplines related to mental health, aiming at

furthering the vision of its founding fathers. Attempts at keeping up the commitment made by the association to study the influence of culture on mental health and to share this knowledge in the practice of Social Psychiatry with other fields have been done by regular National conferences of IASP (NCIASP) and by the IJSP. From the first NCIASP in Kodaikanal to the last NCIASP in Patna, every conference has dealt with important social issues relevant to mental health. Three new awards have been added in the National conferences to encourage research in the field of Social Psychiatry. Keeping in pace with the growing technology, the official website of IASP has come into being from 2008, with all issues of IJSP from 2006 being accessible online.

Many memorable milestones aimed at International collaboration of IASP surely deserve a mention. The IASP organised the Regional Symposium of World Association of Social psychiatry (WASP) in New Delhi, 1989. It hosted the 13th Congress of WASP in New Delhi, 1992. IASP got formally affiliated with World Psychiatric Association (WPA) in 1993. IASP hosted the Regional Symposium of Transcultural Psychiatric Section of WPA in Chandigarh, 1995. Prestigious posts like the President and Secretary General of WASP, Regional representative from South Asia Zone to WPA, Co-Chairperson of Preventive Psychiatry section, WPA and the Secretary General of WASP have been held by esteemed members of IASP. IASP has also become a voting member of World Federation of Mental Health (WFMH). Recent NCIASP and specific symposia have been co-sponsored by WAP and WASP. All the above milestones signify better International collaboration and the ever increasing say of IASP in the global platform.

In spite of all the above mentioned efforts, the extent of the influence of Social Psychiatry movement in India on the day-to-day clinical practice and attitude of psychiatrist and policy makers remains questionable. Focus on training young mental health professionals would go a long way in furthering the cause of the association. On the other hand national policies aimed at resolving important socio-cultural problems like unemployment will improve the mental health of the population as a whole.

There is an urgent need to curtail the transition of the George Engel's Bio-psycho-social model of disease to Bio-bio-bio model of contemporary psychiatry in order to retain the person-centered holistic approach in the field. The Silver Jubilee conference of IASP held at Lucknow had aptly chosen "Mental Health: Prioritizing

Social Psychiatry" as the theme for the conference, clearly throwing light on the path which the Social Psychiatry movement in India should adapt in the forthcoming years. With the 20th century predominantly being one of biological treatments and psychotherapy of mental disorders, let us hope that the 21st century would be one of Social Psychiatry.

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The First Editorial: Commentary and Reflections

SOCIAL PSYCHIATRY IN INDIA: MORE RELEVANT TODAY THAN EVER BEFORE?

Mohan Isaac

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 diagnosable 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 female 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

than 65% of persons 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 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 methods chosen 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 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

Behere, P.B., & Behere, A.P. (2008). Farmers' suicide in Vidarbha region of Maharashtra: A myth or reality? *Indian Journal of Psychiatry*, 50, 124-127.

Bhalla, G.S., Sharma, S.L., Wig, N.N., Mehta, S., & Kumar, P. (1988). Suicides in rural Punjab. Report submitted to Government of Punjab by Institute for Development and Communication. Chandigarh, Himalaya Press.

Bertelote, J. M., and Fleischmann, A. (2002). Suicide and psychiatric diagnosis: a worldwide perspective. *World Psychiatry*, 1(3), 181-185.

Centre for Human rights and Global Justice. (2011). Every thirty minutes: Farmer suicides, human rights and agrarian crisis in India. New York, NYU School of Law.

Deshpande, R.S. (2002). Suicide by farmers in Karnataka: Agrarian distress and possible alleviatory steps. *Economic and Political Weekly*, 37(26), 2601-2610.

Gururaj, G., and Isaac, M. (2001a) Epidemiology of suicides in Bangalore. Bangalore NIMHANS (Publications No 43).

Gururaj, B., and Isaac, M. (2001b) Suicides: Beyond Numbers. Bangalore, NIMHANS (Publication No.44).

Nagaraj, K. (2008). Farmers' suicides in India: Magnitude, trends and partial patterns. Madras Institute of Development Studies, Available at: http://www.macrosan.com/anl/mar08/pdf/Farmers_Suicides.pdf (accessed on May 25, 2012)

National Crime Records Bureau (NCRB) (2010) Accidental deaths and suicides in India, 1995 to 2010. New Delhi, Ministry of Home Affairs, Govt. of India. Available at: <http://ncrb.nic.in/> (accessed on May 25, 2012)

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

Sainath, P. (2010, January 25). Farm suicides: a 12-

year saga. *The Hindu*, pp 10.

The Economist. (2007, January 18). Cotton suicides. The great unravelling, Is globalization killing India's farmers? *The Economist*, pp 32

Veeresh GK. (2002). Farmers' suicides in Karnataka-a scientific analysis. Report of Expert Committee for Study on Farmers' Suicides. Bangalore, Department of Agriculture, Government of Karnataka.

World Health Organization. (2002). World Report on Violence and Health. Geneva, Geneva, World Health Organization.

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

Year	Total number of suicides by farmers during the year	% of total suicides during the year
1995	10699	13.60
1996	13729	20.63
1997	13622	17.57
1998	16015	15.29
1999	16082	14.54
2000	16603	15.29
2001	16415	15.13
2002	17971	16.28
2003	17164	15.50
2004	18241	16.00
2005	17131	15.00
2006	17060	14.40
2007	16632	13.60
2008	16196	13.00
2009	17368	13.80
2010	15964	11.90
Total	256892	

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CHASING BIOLOGICAL MIRAGES, IGNORING CONTEXTUAL REALITY

K.S. Jacob

The usefulness of psychotropic medication in the treatment of various mental illnesses suggested that they are diseases of the brain. Recognition of biochemical abnormalities and the demonstration of brain pathology in severe mental disorders buttressed the argument. Identification and targeting of specific receptors, neurotransmitter systems and second messengers offered further support. Discovery of genetic loci in families with a clustering of schizophrenia and bipolar disorders and the progress in genetics focussed our efforts on elucidating molecular mechanisms of disease. The Human Genome Project, which determined the DNA sequence, was heralded as the dawn of a new era in the diagnosis, prevention and treatment of most, if not all, human diseases.

These trends, spanning five decades, have made biological psychiatry the dominant ideology for the younger generation of psychiatrists. Many of the residents and junior consultants now choose biological approaches to psychiatry to the exclusion of psychological and social perspectives.

Nevertheless, a reality check suggests that deciphering the human genetic code has done little to improve medical treatments or to enhance human health. Ten year later, the much exaggerated and hoped for revolution of new knowledge, with its much needed power to heal, has not arrived (Cohen, 2011). Most scientists now agree that the anticipated breakthroughs will take decades to come.

The original hope that a close examination of the genome would identify mutations or variants that cause diseases like mental disorders, cancer and heart ailments has been an illusion. It has given way to a realization that the causes of most diseases are enormously complex and not easily traced to simple mutations. Recent studies have identified tens of genetic variants that have been statistically linked to specific diseases. However, these provide only a partial explanation for the risk of particular disorders and have been of little value in predicting these diseases in individuals. The pharmaceutical industry is bogged down in a glut of information about potential targets for developing their drugs. While many novel targets and

therapeutic molecules are under investigation, new drugs, based on information from the sequence, have yet to be produced. The best available drug for treatment-resistant schizophrenia continues to be clozapine, discovered in the more than four decades ago.

Current understanding of the complexity of the issues and a decade of hindsight has now resulted in expectations that are more modest. Most scientists and psychiatrists agree that the biology project was over-hyped and over-sold. There is a realisation that the road ahead is long and will be paved with billions of small insights and that the major goals of the project may not be realised in our lifetime. We need to temper our incurable, even if understandable, optimism.

Yet, high rates of discordance for schizophrenia and bipolar disorder among monozygotic twins should have focussed our minds on environmental and non-genetic phenomena. However, the internet age and the information revolution have inundated us with trivia making it difficult to separate the wheat from the chaff. Many psychiatrists were drawn to the possibility of quick biological solutions and pharmacological fixes. While few psychiatrists in India manage careers in biological psychiatry, albeit with technology which is at least a decade behind that of the west, the rest memorise inconsequential details while peddling psychotropic medication for all human predicaments. This article highlights common errors of chasing biological mirages in clinical psychiatric practice. It argues for psychological and social perspectives and a more nuanced and holistic approach to mental health and illness.

DISEASE-ILLNESS DIVIDE

Patients emphasise suffering and distress while physicians and psychiatrists diagnose and treat "diseases" (Marinker, 1975; Eisenberg, 1977; Boyd, 2000; Tseng, 2001; Jacob, 2009a; Jacob, 2012). Physicians and psychiatrists translate the patient's experience of sickness into abnormality of structure and function. Such translation is conceptualised using universal models in terms of disease, learnt maladaptive thinking and behaviour or problematic

childhood and adult relationships. The process involves the counting of objective and behavioural symptoms while contexts, stressors, personality and coping are dismissed as incidental. Medication is nearly always prescribed.

The disease-illness divide is a classical example of divergence in patient and physician worldviews. However, the terms disease and illness tend to be synonymously and interchangeably used consequently resulting in a lack of conceptual clarity. Many aspects of the distinction between disease and illness have been highlighted (Marinker, 1975; Eisenberg, 1977; Boyd, 2000; Tseng, 2001; Jacob, 2009a; Jacob, 2012). These include: (i) absence of 1: 1 relation between disease and illness, (ii) similar degrees of pathology generating different amounts of pain and distress, (iii) illness occurring in the absence of disease (E.g. medically unexplained symptoms), (iv) the course of disease being different from trajectory of illness, (v) medicine and psychiatry highlight naturalistic explanations (disease, degeneration, dysfunction, infection, malignant change) while patient explanations focus on personalistic views (God, sin, punishment, karma, evil spirit, black magic, supernatural, stress), (Saravanan et al, 2005) (vi) multiple and contradictory causal beliefs are held simultaneously by patients and families, and (viii) patients and families consequently seek diverse treatments, often concurrently or sequentially (Saravanan et al, 2005).

The conceptualizations of disease and illness have many similarities (Tseng, 2001; Jacob, 2009a; Jacob, 2012). Both conceptualizations and models explain the sickness episode, are complex, dynamic and total phenomena, which help construct clinical reality and are culture specific and value laden. Consequently, psychiatrists and their patients inhabit different worlds. Both patient and doctor perspectives are part perception which do not reflect the whole.

Yet, clinical method objectifies patient problems in order to enable clinicopathological reasoning. Nevertheless, this process has very limited engagement with patients and their reality. Doctors employ technical language and body/disease centric information, which is useful only to other doctors, while patient experience and language useful to patients is dismissed as unimportant by medicine (Duggirala & Seemanthini, 2010).

MEDICALISATION OF DISTRESS

The classification of depression has been debated for

the past century. It provided a convenient stage for several disputes about the nature of mental illness (Kendall, 1977). The debate resulted in many polarised positions: (i) is depression a disease or a reaction type? (ii) are categories of depression independent entities or arbitrary concepts? (iii) should depression be classified based on symptomatology, aetiology or pathology? (iv) should depression be portrayed as categories or dimensions? The confusion is compounded by the fact that depressive symptoms, sadness and feelings of hopelessness and helplessness, which form the core, are found in a wide variety of conditions: medical diseases, psychoses, neuroses, as reactions to stress and as part of normal mood (Jacob, 2009b).

In the 1960's, the divisions of depression into psychotic/neurotic and endogenous/reactive (exogenous) categories were the controversies (Kendall, 1977). Psychotic-endogenous and neurotic-reactive labels were often considered synonymous with the former presenting with acute and severe depression, retardation, diurnal variation, weight loss and severe insomnia while the latter had symptoms of mild and chronic depression with anxiety, self pity and anorexia which was related to stress. However, stressful life events precipitated a proportion of episodes of "endogenous" depression making such differentiation complex. Others argued that such divisions were only separating mild from severe disorders. In addition, the multiple meanings prevalent in literature for these terms and difficulties in the precisely defining them resulted in their demise (Jacob, 2009b).

Operational criteria for diagnosis, introduced by Feighner et al (1972) and advocated by Diagnostic and Statistical Manual-III (DSM-III) (APA, 1980), caught the imagination of the psychiatric community. The criteria sidestepped much of existing controversies related to the categorisation of depression and focussed on reliability. The role of stress and coping styles were discounted. The new scheme, with its descriptive and *atheoretical* approach, became the new standard.

The current classifications (WHO, 1992; APA, 1994) retain the traditional categories melancholia (endogenous depression), dysthymia (neurotic depression) and adjustment disorder (reactive depression). However, major depressive episode (APA, 1994) straddles all three conceptual categories. It essentially represents severe depression, which can be seen in people with poor coping and /or with precipitating stress and early in the course of melancholia. However, the mandatory requirement of

excluding a depressive episode in people who present with classical dysthymia and adjustment disorders usually results in the use of the depressive episode label for such presentations. The ICD-10 (WHO, 1992) went one-step further and sub-classified the depressive episode into mild, moderate and severe based on a symptom count. The classification also reduced symptom thresholds for mild and moderate depressive episodes. Consequently, people who present with acute stress related problems (adjustment disorders) and chronic depression (dysthymia) usually satisfy the criteria for such episodes (Jacob, 2009b).

Nevertheless, the pharmaceutical industry quickly adopted it as the standard for testing antidepressant treatments. Fluoxetine and other SSRIs were found to be effective. Their usage in clinical practice increased as they did not have troublesome side effects of tricyclics. There was neither need to speculate on the role of the precipitating stress and coping strategies nor the requirement to manage them with psychotherapy (Jacob, 2009b). Fluoxetine became the panacea for loneliness, relationship difficulties, interpersonal conflicts, inability to cope with day-to-day stress and the like. Major depression was equated with biological disease. Focusing on cause was considered old fashioned. Why would anybody spend time on psychotherapy when these wonder drugs could elevate the patient's mood irrespective of its cause and context? The medicalisation of distress was complete (Jacob, 2009b).

The progressive medicalisation of distress has lowered thresholds for the tolerance of mild symptoms and for seeking medical attention for such complaints (Barsky & Borus, 1995). Patients visit physicians when they are disturbed or distressed, when they are in pain or are worried about the implication of their symptoms (Heath, 1999). Grief at loss, frustration at failure, the gloom of despair, the apathy of disillusionment, the demoralisation of long-suffering and the cynical outlook of pessimism usually resolve spontaneously without specific psychiatric intervention (Snaith, 1987). However, the provision of support currently mandates the need for medical models, labels and treatments to justify medical input (Jacob, 2006).

The need to individualise care, which is the essence of clinical practice, is complex. The individual patient experience, which has to be viewed through its immediate context (E.g. social class, economic status, caste, minority grouping, gender, sexuality and religion)

is ignored (Jacob, 2012). History, culture, development, specialist care, pharmaceutical and health insurance industries and politics, the broader filters influencing patient experience and perspectives, are considered inconsequential although illness narratives are also shaped by cultural, spatial and historical practice. Major depression owes its success to its loose definition, high rates of spontaneous remission and placebo response, clinical heterogeneity, the subordinate status of adjustment disorders and dysthymia and to the mechanistic application of the diagnostic hierarchy and criteria (Jacob, 2009b).

The recent demonstration of the limited use of antidepressants in mild to moderate depression (Kirsch et al, 2009) has resulted in the newer guidelines mandating the use of psychological interventions for such presentations with antidepressants being reserved for the more severe cases (NICE, 2011). Yet, the mechanistic application of diagnostic criteria for major depression is routine and the prescription of antidepressants to the exclusion of psychological interventions are common and continue as before.

NEED FOR HOLISTIC APPROACHES

The DSM tradition, which in 1980 represented "best effort", has now become "ground truth" ignoring the psychopathological tradition and the social context (Andreasen, 2007). Its use in non-clinical areas (e.g. legal responsibility, third party payments) changed the character and function of psychopathology. It has reduced their clinical role in understanding patient experience. The apparent sophistication of the current superficially scientific approach has changed practice. The fact that current biomedical approaches focus on reliability without regard to the validity of most categories, which are yet to be established, is rarely highlighted. While the atheoretical nature of the current diagnostic criteria is trumpeted, their biomedical underpinning is obvious.

The current criteria have reduced clinical interview to a checklist. While psychiatrists are exhorted to employ multiple models (e.g. psychoanalytic/dynamic, cognitive/behavioural, social/contextual, etc) (Lazare, 1973) to understand the patient, current practice tends to reduce the process to biomedical approaches (Andresen, 2007). Even as psychiatry mandates the examination of cultural issues and the need for a cultural formulation (APA, 1994), its position in the DSM IV Appendix suggests its secondary status. The DSM argues for a universalist approach rather than support

an individual or contextual analysis.

The younger generation of psychiatrists, raised in the DSM tradition, considers the diagnostic system and criteria as authoritative text (Andreasen, 2007). The universal and uncritical use of such operational definitions has spawned the need to memorise its contents. This has translated to knowledge of the criteria rather than a focus on the skill and understanding required for clinical interview and patient care. The original intended “gate keeping function”, which intended to set minimum standards, is lost and these texts have become resource and reference material for clinical psychiatry.

Patient-centred clinical methods need to explore disease and illness, attempt to understand the person and context, find common ground and enhance physician-patient relationship (Jacob, 2012). Treatments have to be bio-medically correct and yet, universal approaches have to be contextually appropriate. There is a need to move away from the so-called scientific certainty of an individual diagnosis, making way for a broader emphasis on individual experience and contextual analysis. There is a definite need to move beyond the DSM and its narrow biomedical approach in order to provide holistic care.

REFERENCES

American Psychiatric Association (1980) Diagnostic and Statistical Manual, IIIrd edition. Washington, DC: American Psychiatric Association.

American Psychiatric Association (1994) Diagnostic and Statistical Manual, IVth edition. Washington, DC: American Psychiatric Association.

Andreasen, N.C. (2007) DSM and the Death of Phenomenology in America: An Example of Unintended Consequences. *Schizophrenia Bulletin*, 33, 108-112.

Barsky, A.J., Borus, J.F. (1995) Somatization and medicalization in the era of managed care. *JAMA*, 274, 1931-4.

Boyd, K.M. (2000) Disease, illness, sickness, health, healing and wholeness: exploring some elusive concepts. *Journal of Medical Ethics: Medical Humanities*, 26, 9-17.

Cohen, J. (2011) Human Genome, a decade later. *Technology Reviews*. <http://www.technologyreview.com/biomedicine/26961/> (accessed on 8.5.2012)

Duggirala, V., Seemanthini, N. (2010) Patient Questions.

In *Towards a Critical Medical Practice: Reflections on the dilemmas of medical culture today*. (Eds A Zachariah, R Srivatsan, S Tharu on behalf of the CMC-Anveshi Collective); 246-265, Orient Blackswan, New Delhi.

Eisenberg, L. (1977) Disease and illness: Distinctions between professional and popular ideas of sickness. *Culture, Medicine & Psychiatry*, 1, 9-23

Feighner, J.P., Robins, E., Guse, S.B., Woodruff, R.A., Winokur, G., Munoz, R. (1972) Diagnostic criteria for use in psychiatric research. *Archives of General Psychiatry*, 26, 57-63.

Heath, I. (1999) Commentary: There must be limits to the medicalisation of human distress. *BMJ*, 318, 439-40.

Jacob, K.S. (2006) The cultures of depression. *National Medical Journal of India*, 19, 218-220.

Jacob, K.S. (2009a) Bridging the disease-illness divide in modern medicine. *National Medical Journal of India*, 22, 320-2.

Jacob, K.S. (2009b) Major depression: a review of the concept and the diagnosis. *Advances in Psychiatric Treatment*, 15, 279-285.

Jacob, K.S. (2012) Patient experience and psychiatric discourse. *The Psychiatrist*, (in press).

Kendall, R.E. (1976) The classification of depressions: a review of contemporary confusion. *British Journal of Psychiatry*, 129, 15-28.

Kirsch, I., Deacon, B.J., Huedo-Medina, T.B., Scoboria, A., Moore, T.J., Johnson, B.T. (2008) Initial Severity and Antidepressant Benefits: A Meta-Analysis of Data Submitted to the Food and Drug Administration. *PLoS Medicine*, 5, e45. doi:10.1371/journal.pmed.0050045.

Lazare, A. (1973) Hidden conceptual models in clinical psychiatry. *New England Journal of Medicine*, 288, 345-51.

Marinker, M. (1975) Why make people patients? *Journal of Medical Ethics*, 1, 81-4.

National Institute of Clinical Excellence. CG90: Depression in adults: depression guidelines. 2009. <http://www.nice.org.uk/guidance/CG90/NICEGuidance> (accessed 07.5.2012)

Saravanan, B., David, A., Bhugra, D., Prince, M., Jacob, K.S. (2005) Insight in people with psychosis: the influence of culture. *International Review of Psychiatry*, 17, 83-87.

Snaith, R.P. (1987) The concepts of mild depression. *British Journal of Psychiatry*, 150, 387-393.

Tseng, W-S. (2001) Handbook of Cultural Psychiatry. San Diego, CA: Academic Press.

World Health Organization (1992) International Classification of Diseases 10: Clinical description and diagnostic guidelines for mental and behavioural disorders. Geneva: WHO.

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The First Editorial: Commentary and Reflections

WHOSE AGENT AM I? OR, WHOSE LIFE IS IT ANYWAY?

Achal Bhagat

AGENDA AND DECLARATION....

I could write this paper as an academic debate about the usefulness of the discipline of social psychiatry. The ground I would cover would be familiar. I would make the following arguments in such an article:

- Mental Health is a bridge for human development.
- Psychiatric disorder has sociological causes and not just biological causes.
- There is stigma, exclusion, neglect, abandonment and discrimination of people living with mental illness.
- People living with mental illness do not only want to stop hearing voices but they want to reclaim the right to being the decision makers regarding their own lives.
- There is a lack of access to services.
- There is lack of human resource for mental health.
- Recovery of personhood needs social psychiatry.
- So, the psychiatrists have to be social psychiatrists and not just prescribe medicines or cures.

There is enough and more evidence for each one of the above statements and I would end up looking more intelligent than I am to my fraternity.

I would therefore choose to write this paper as a series of anecdotes that perhaps have no evidence base except that they are the experiences of real people who also happen to live with mental illness. I write in this format because we need to relearn to hear voices and not numbers. There is a practice of psychiatry beyond graphs and images, in people's narrative. I see this is power to listen to narratives accurately as the most important skill of being a social psychiatrist. I have made sure that I do not mention real names and only mention realities.

LISTENING TO THEM.....

While I was growing up one of the images that I had of myself was that of a certain tall, lanky, angry, young man who would kick around the bad guys. In reality, I am definitely a podgier, shorter version of an angry now

pretty old man who could not kick to save his life. I have learned to live with these contradictions in my view of myself. I am a sum total of my many identities; and that I do not need to remind myself everyday of the same was a lesson that I learned from Pinki. She is a young survivor of human trafficking whom I met a few years ago. I was in my view trying to help her see herself as a survivor and not a victim. In one of our sessions she asked me, "Do you have to remind yourself everyday that you are a psychiatrist, that you have moustache, that you like a certain food?" I said, "No, I know these things about myself." Then she said to me, "I also do not need to remind myself I am a victim, I am a survivor and that I am a woman. I may have been raped for many years but I have not forgotten who I am." Social Psychiatry needs to exist because people are people first and not their labels or their symptoms.

Mr. Datta, an old man, leaned on his stick and shuffled out of the talk. The talk was on schizophrenia. A renowned psychiatrist was on the dais. A news anchor chaired the session; he is the brother of a person with schizophrenia, we were told. We all listened to the drone of how schizophrenia is like any other illness, like diabetes or hypertension. We heard that schizophrenia is a result of biochemical changes in the brain. We were shown pictures of some scans which showed that the part of the brain that is responsible for sorting information and solving problems does not light up to a pink colour because it is not functioning properly.

As the old man shuffled out of the meeting, he murmured. It was a worried and restless whisper. He shook his head and murmured. His murmur sounded like an outburst and stopped the talk for a minute. Like a phoenix, he rose from his chair and asked the house, "Why not us? The government can look after everyone else. Why not us? What will happen to my child when I am not there? Will he be on streets? Or will he be locked away? Or will he live on the mercy of his brother? Will you look after him? Who will?" The house felt snubbed into a silence. There were no real answers. And then, the old man shuffled out.

The question was left hanging in the house.

SOCIAL PSYCHIATRY IS NEEDED BECAUSE....

Social Psychiatry is needed because the diagnosis of mental illness is equated with images of insanity and unfortunately binds the person in two assumptions.

The first is the assumption of incapacity. People think, a person living with mental illness cannot think for himself or herself; cannot be productive and thus has to be provided for. This limits 'the usefulness' of the person for the society. This lack of usefulness and the burden of provision of care on the society imply that the person living with mental illness has to live like a lesser being in the society. If you are a person living with mental illness, anyone can challenge your right to vote, your right to stand for elections, your ability to fulfill a contract, do a job, use a means of transport, be in a marriage, bring up children, manage your property, present yourself in a court of law, even your right to insure yourself. You are made a non-citizen at worst and an unequal citizen in the least because of this assumption of incapacity.

It is in this context that when plans are made for providing for the vulnerable, the government too does not focus on illnesses like schizophrenia. I quote a Principal Secretary, Health from one of the states in a recent meeting, "there are limited resources and these are needed to meet the physical health needs of those who can actually benefit." It is presumed that persons with illnesses like schizophrenia cannot benefit from the entitlements that others can and these are systematically withdrawn from them.

The second assumption that the society uses to address those living with schizophrenia is the assumption of being 'dangerous'. Whereas the assumption of incapacity discriminates against people and thus infringes their rights, the assumption of 'dangerousness' actively deprives persons with schizophrenia of their liberty. If you have schizophrenia you always live with the threat of being incarcerated in large inhumane mental institutions or equally damaging socio-cultural processes of exclusion. The exclusion of the person with schizophrenia is again systematic. It starts from withdrawal of information about the illness and gradually progresses to exclusion from family decision-making and then to the gates of the mental hospital or chains of Erwadi. Unfortunately, even in 2012 the society uses the mental health systems (read psychiatrists) as its agents to lock away (read chemically restraint) people with schizophrenia on the assumption of being 'dangerous'.

The most common behavioural definition of being

'dangerous' that is used by the society and its agents is that of 'non conformity'. Non-conformity is an easily proven characteristic for a person with schizophrenia. The first sign of non-conformity, coupled with a diagnosis of schizophrenia, for example, an unkempt beard evokes the assumption of being 'dangerous'. Such an assumption overrides all data that says persons with schizophrenia are no more likely to be dangerous than anyone else in a society. Social Psychiatry is needed to fight the assumptions of incapacity and dangerousness just as clinical psychiatry has for years supported these assumptions and reinforced them.

Social Psychiatry is needed because one of my colleagues recently presented a case of chronic agitated depression, a woman in her thirties from a village in Haryana, asking me he did not know why she was not responding to his treatment. He had followed all the algorithms and guidelines regarding anti-depressants. Unfortunately, no one had asked her about the violence she faced at home every day and no one had validated her anger.

Social Psychiatry is needed because in our research projects we suggest models for India, which use Inter Personal Therapy but overlook the fact that to attend such an IPT session the person would have to forgo his/her one day's livelihood. A social psychiatrist would ensure to that they demand that people living with mental illness get included in the employment guarantee schemes and are provided treatment nearest their homes.

Social Psychiatry is needed because psychiatrists think that they can talk about the reasons why Facebook shares sell or not, why women wear stilettos and guess who murdered whom in a closed home in a Delhi suburb but let out not even a whisper when people living with mental illness are abandoned by truckers near the forests in Karnataka.

Social Psychiatry is needed because a NHRC report describes the walls of Murshidabad Mental Hospital being black because of colonies of human lice. The roof at IMH in Chennai leaks and the women there are not given clothes to wear.

Social Psychiatry is needed because someone should be worried that Padmanabhan's, Jyothi's and Ramana's mother, who has breast cancer, does not know what will happen to her three not so young children when she dies. She looks for answers every day with the three different psychiatrists see consults and does not find any and I find myself equally helpless when she meets

me.

Social Psychiatry is needed because we want better answers. Surely, there are better answers than waiting for symptoms to abate as when symptoms do abate, you do not reclaim yourself from the illness.

Social Psychiatry is needed because we research on burden of psychiatric disorders for ten years and we do not have an employability program for people living with mental illness. The seminar rooms change furniture, audio-visual equipments change, many hospitals have marble and ceramic tiles and recovery is the buzzword but there is no Family Psychoeducation program and the rehabilitation program of the world famous unit is limited to a social worker organizing a Baishaki party in the ward. There is still no dignity in care, there is no participation of people living with mental illness in determining their own lives. District Mental health Programs are run as outreach clinics of medical colleges.

WISHFUL THINKING....

Will the social psychiatrists in India stand up and be counted? As there is never going to be a DM in Social Psychiatry and the profits from the conferences on Social Psychiatry are never going to fund large corpuses, who would pursue the identity of being a social psychiatrist with pride? Or are we the dangerous non-conformists with delusions of grandiosity in pursuit of a

better world? I am yet hopeful, not because an association for social psychiatry exists and its journal allows even people like me to write. I am hopeful because even though the optionlessness that the society creates for people living with mental illness is heart wrenching, the sense of survival and resilience of some people living with mental illness is celebratory. There is also hope because there are some innovators who are always trying to listen to people and make things simpler and closer to real life. Social Psychiatrists like their colleagues from many other adjectival branches of psychiatry have to answer the question, "Whose agent am I?" Am I the society's agent? Am I agent of the person I treat or Am I my own agent?

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RELEVANCE OF SOCIAL PSYCHIATRY IN INDIA – CURRENT STATUS

Kaustav Chakraborty

It has been a long twenty seven years since Dr. B. B. Sethi wrote his editorial in the very first issue of Indian Journal of Social Psychiatry, in which he rightly emphasized the need of studying social factors in the causation, treatment and prevention of psychiatric disorders. The time when he wrote the editorial India was undergoing through a sea of changes; be it political, economical, social, so on and so forth. Hence it was a very timely editorial as it stimulated many of the behavioural scientists to rethink about the social factors that play a crucial role in the ultimate expression of human behavior through various modifying roles on brain neurocircuitry. During the same time Indian Government came up with the National Mental Health Program (1982) and the Mental Health Act (1987) to usher a new era in the field of Psychiatry in India. These two initiatives along with a surge in research in social factors in psychiatric disorders gave impetus to the movement called 'social psychiatry' in India.

Social psychiatry has been traditionally defined as a branch of psychiatry that focuses on the interpersonal and cultural context of mental disorder and mental wellbeing. It involves a sometimes disparate set of theories and approaches, with work stretching from epidemiological survey research on the one hand, to an indistinct boundary with individual or group psychotherapy on the other. Over the years many sociologists have contributed theories and research which has enlightened psychiatry in this area. The relationship between social factors and mental illness was demonstrated by the early work of Hollingshead and Readlich in Chicago in the 1930s, who found a high concentration of individuals diagnosed with schizophrenia in deprived areas of the city; the Midtown Manhattan Study conducted in the 1950s by Cornell University hinted at widespread psychopathology among the general population of New York City; the Three Hospitals Study was a very influential work that has been replicated, that demonstrated forcefully that the poverty of the environment in poor mental hospitals lead to greater handicaps in the patients. Social psychiatry was instrumental in the development of therapeutic communities. Under the influence of Maxwell Jones,

Main, Wilmer and others, combined with the publications of critiques of the existing mental health system and the sociopolitical influences that permeated the psychiatric world, the concept of the therapeutic community and its attenuated form - the therapeutic milieu, caught on and dominated the field of inpatient psychiatry throughout the 1960s. Social psychiatry has also been instrumental in developing the concept of major 'life events' as precipitants of mental disorders. Social psychiatrists focus on rehabilitation in a social context, rather than treatment per se. Community psychiatry has been closely related to social psychiatry dealing with integration of persons with mental disorders into their own society.

The start of journey of social psychiatry in India cannot be traced back to any particular year or period, but at the same time it can be said that community psychiatry vis-a-vis social psychiatry has made a considerable progress over the last three to four decades Thara et al. (2010). Early epidemiological studies from India implicated factors like, social class, marital status, caste considerations, sibling position and family structure in causation of certain psychiatric disorders. Lately Indian society went through rapid urbanization and industrialization with disintegration of traditional joint family structure. Researchers also shifted their focus to pertinent issues like, unemployment, poverty, divorce, migration, political unrest, natural disaster, work place stressor, rape, child abuse, domestic violence, farmer suicides, so on and so forth. Over the years with geopolitical changes taking place, social factors contributing to mental disorders also got complicated and it has become almost impossible to disentangle the individual contributing effect of the factors. In such a scenario the need of the hour is to carry out multicentric studies with big sample size preferably with government funding to indentify the social factors which can be modified to prevent the emergence of psychiatric disorders which now pose a serious threat to the community. Moreover, the Indian society is ageing. The social issues with the elderly are too many to be ignored. Social psychiatry can contribute enormously in taking care of our elders who otherwise are groping for assistance.

It would be unfair not to mention the three path breaking events that took place in Indian psychiatry in between 1960's to 1980's which played crucial roles in the advancement of social psychiatry as well. First, it was personal efforts of stalwarts like Dr. Vidya Sagar, the then Superintendent of Amritsar Mental Hospital who involved the family members of the mentally ill in the management, by allowing them to stay with their patients in open tents pitched in the hospital campus. He showed that the patients recovered fast and were taken back to homes. Based on this principle, family wards were established in Christian Medical College, Vellore. Second, more and more general hospital psychiatry units (GHPUs) started working in 1960s and 1970s. The GHPUs had a number of advantages over the mental hospitals – they were easily approachable without stigma, they encouraged more outpatient care; they attracted more patients with minor mental health problems and helped in the integration of psychiatry into the general health system (Avasthi, 2011). Third, the implementation of the National Mental Health Program in 1982 heralded the integration of mental health with primary care. During the past 3 decades, there have been a large number of other community initiatives to address a wide variety of mental health needs of the community through programmes on suicide prevention, care of the elderly, substance use and disaster mental healthcare, and by setting up of daycare centres, half-way homes, long stay homes and rehabilitation facilities (Murthy, 2011). The rapid growth of psychiatry in the private sector is another important development in recent days.

The one area in my opinion where social psychiatry could have intervened or improved upon its performance is spreading the awareness regarding mental disorders and dispelling the stigma attached to it. There are the existing beliefs and practices in Indian society. These, relevant and appropriate at different stages of the evolution of society, are often not in line with the current understanding of mental disorders and mental health. Second, stigma is an important barrier to mental healthcare (Wig, 1997; Thara et al., 1998). Nothing much has been done from the Government point of view in order to challenge the stigma in public like in other medical conditions such as HIV and AIDS. The other area where social psychiatry lags behind is the area of psychiatric rehabilitation and integrating non medical treatment like cognitive retraining, psychotherapies, yogic exercises into the treatment of persons with mental illness. Psychiatric rehabilitation is

almost a non entity in India. With due respect to the efforts of certain non- governmental organizations and psychiatry department of some governmental medical colleges it will not be misleading to say that a large number of patients with psychiatric disorders in India are put on medication treatment for years together just because of lack of rehabilitation services. There have been researches on non somatic treatment and attempt has been made to deliver it in home-setting but no substantial progress has been made yet (Hegde et al., 2012).

Lots of things are happening in the field of Indian psychiatry at present - budgetary allocation for NMHP during Eleventh Five-year Plan has been increased by 3-fold from the previous plan; plans are there to modernize the psychiatry wing of government medical colleges and state run mental hospitals; drafting of the new Mental Health Care Act is under progress; there has been an ongoing discussion with the governmental authority to make psychiatry a compulsory subject in undergraduate curriculum; throughout the year psychiatric conferences are being organized all over the country; pharma companies are adding novel molecules to the ever-expanding psychopharmacologic armamentarium; so on and so forth. Despite this overall progress social psychiatry seem to be at crossroads. On one hand, there is ever-growing clout of biological psychiatry with almost all the psychiatric disorders getting their biological underpinnings. On the other hand, as happened with psychoanalytical psychiatry, social theories of psychiatric disorders also getting few takers among new generation psychiatrists. There is more emphasis on medical treatment of psychiatric disorders with seldom attempt at integrating the social factors which might have contributed to a huge extent and could thus have been beneficial if ameliorated. With no panacea for psychiatric disorders visible in near future, social psychiatry can play a key role in preventing the emergence of psychiatric disorders per se. There has been much talk about 'preventive psychiatry' nowadays. Social psychiatry can be one of its pillars. In a poor country like ours modifying these social factors can be a much more cost effective way of dealing with the epidemic of psychiatric disorders.

Probably much research has been done in the field of social psychiatry in India. Now it is the time to get our act together. The postgraduate curriculum should emphasize on the role of social factors in causation of psychiatric disorders – the interaction between 'gene and environment' is not certainly a new fact; so why the

trainees should be burdened with an overwhelming dose of biological psychiatry? The emphasis should shift from therapeutic to preventive psychiatry. A door to door campaign should be initiated. District Mental Health Program (DMHP), which is now covering nearly two hundred districts all over the country, can be utilized for this purpose. Governmental agencies should gear up their resources towards generating awareness regarding psychiatric disorders which in turn would be able to shatter the barrier of stigma. Transcultural researches in the field of social psychiatry should be encouraged in order to obtain more meaningful data so that we can actually identify the 'social pathways' to psychiatric disorders. Traditional forms of healing having research evidences should be incorporated into our treatment plan to bridge the gap between sophisticated gen-next psychiatrists and vast indigenous rural population. Social psychiatry as a movement will only succeed if we are able to keep our identity intact. Beyond any doubt, Indian Psychiatric Association (IPS) is the parent organization for all psychiatric professionals in India; Indian Association of Social Psychiatry (IASP) which arrived much later can play a crucial role in its endeavour to make mental health services available for all our fellow people. It is our privilege to have so many Indian stalwarts in the field of social psychiatry over the years; now the onus is on us to carry the legacy forward and we should not falter in that.

REFERENCES

- Avasthi, A. (2011) Preserve and strengthen family to promote mental health. *Indian Journal of Psychiatry*, 52, 113-126
- Hegde, S., Rao, S.L., Raguram, A., Gangadhar B.N. (2012) Addition of home-based cognitive retraining to treatment as usual in first episode schizophrenia patients: A randomized controlled study. *Indian Journal of Psychiatry*, 54, 15-22
- Murthy, R.S. (2011) Mental health initiatives in India (1947–2010). *The National Medical Journal of India*, 24, 26-35
- Thara, R., Islam, A., Padmavati, R. (1998) Beliefs about mental illness: A study of a rural south Indian community. *International Journal of Mental Health*, 27, 70–84
- Thara, R., Rameshkumar, S., Mohan G.C. (2010) Publications on community psychiatry. *Indian Journal of Psychiatry*, 52, S274-277
- Wig, N.N. (1997) Stigma against mental illness. *Indian Journal of Psychiatry*, 39, 187–189

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N.N. De Oration Award 2011

FARMER SUICIDE: NEED FOR MENTAL HEALTH INTERVENTIONS

R. Srinivasa Murthy

It is a great honour for me to deliver the Dr. N.N. De oration. Prof. De was a towering psychiatric personality. He was the first editor of the Indian Journal of Psychiatry. He wrote extensively on mental health services in the early 1950's. Many of his thoughts on this topic are relevant even today. What is most remarkable is that in his earliest writings he emphasised the need for mental health research. Some of the titles of his articles are: 'psychiatric research'; 'new drugs and psychiatric treatment'; 'newer methods of treatment'; 'is preventive psychology a feasible project?'; 'psychiatry in India', etc. It is a great honour to deliver the oration in his name.

PERSONAL EXPERIENCE

There are two personal experiences that I would like to recall with regard to farmers' suicide. In mid 2006, almost in the last few days of the finalisation of report of the 'National Commission on Farmers' I joined hands with Prof. N.N. Wig of Chandigarh and Dr. Lakshmi Vijayakumar of Chennai, to include a section on psychosocial interventions for prevention of farmers suicide (Appendix 1). During 2008, I was visiting professor, for a few months, the Mahatma Gandhi Medical College, at Sevagram, Maharashtra. It is during these visits that I came to face with the issue of 'farmers suicides'. Dr. Manik Bhise was undertaking his Master's thesis work with the families of the farmers who had committed suicide (Bhise, 2010, see Box 1). The visit taught me a number of lessons about community mental health care. I spent a full day with a team of three of us. To begin with, I was very apprehensive of walking into a village and asking people about the families where a suicide had occurred. I expected the community to be either secretive about the same or hostile to us. On the contrary, it looks like the stigma of suicide had been taken away by both the commonness of the issue and the much talked about compensation to the families. It was possible both to visit the families, talk to the family members, interact and discuss issues with the larger community. Much less than secrecy, there was openness and eagerness to know what the team was offering to the people. I also did not find any community level interventions in the villages for the surviving families or the general community or the

school children.

It is these thoughts of lack of the community mental health interventions that I want to address in this article. Some of the questions that I was troubled were the following: (i) Is there is mental health dimension to the farmers' suicide? (ii) Why is it that the issue is seen only from the monetary dimension in the public and political discourse? (iii) Why have the mental health professionals not taken leadership in this issue? (iv) How can we bring the mental health dimension into the large policy and interventions?

I hope to address some of these issues in this article.

INTRODUCTION

About 5 years back, India celebrated a very important historical milestone. On August 15, 2007, India completed 60 years of Independence. This mile stone was all the more significant as it coincided with one of the best phases of development in the country. The high annual growth rate of over 9% and a massive foreign exchange reserve all spoke of a "shining India". However, there was something missing in this bright picture. The farmers of the country who live in the rural areas and form over 70% of the population of the country were committing suicide more than at any other time (Deshpande, 2002, Nagaraja, 2007, Swaminathan, 2004, National Commission of Farmers, 2007, Sainath, 2006, 2010, Behere and Behere, 2008, Deshpande and Arora, 2010, Babu, 2010, Bhise, 2010, Behere and Bhise, 2012).

This crisis was of such importance that the Prime Minister of India, Mr. Manmohan Singh, in his address to the Nation on August 15, 2007, referred to it in the following way:

"We have kept our focus on giving a new deal to rural India. We have doubled the supply of credit for farmers, reduced its cost and, where farmers have been in distress, we have written off interest and rescheduled loans. We have helped increase farmers' income by raising substantially the support price for wheat and rice. Through Bharat Nirman, we are investing in rural connectivity – road, electricity and telephone connectivity. Bharat Nirman is our effort at bridging the

urban rural divide. This, I believe, is only a part of our total effort. There is more to be done and more will be done. In the coming years our main emphasis will be on agricultural development. We will soon launch a special programme to invest Rs 25,000 crore in agriculture, to enhance the livelihood of our farmers and increase food production. We will also focus on the needs of our farmers in dry and drought prone regions. I am touring a few states to personally review the agricultural situation across the country. Our growing economy and population need more food grains. I am confident that as we roll out our ambitious agricultural development programme, we will see a boost in food grain production in all parts of the country, particularly in regions untouched by the first Green Revolution. Farmers are the backbone of our nation. Unless they prosper, the nation cannot prosper. I reassure our farmers that their welfare lie at the core of all our concerns"(emphasis added).

During the last Independence address, on August 15 2011, (four years later) Prime Minister, Sri Manmohan Singh revisited the issue and noted the importance of farming sector as follows:

"I congratulate the country's farmers for their achievements this year. The production of food grains has been at a record level. Wheat, maize, pulses and oilseeds have all seen record levels of production. It is because of the hard work of our farmers that today there are proposals for export of food grains, sugar and cotton. We need a second Green Revolution in agriculture. We can tackle the problem of rising food prices only by increasing agricultural production and productivity. We also need to increase agricultural production to implement a food security law. We will accelerate our efforts in this direction in the 12th Plan. Today, I wish to assure our farmer brothers and sisters, particularly those who are small and marginal, that we will continue to take care of their special needs (emphasis added). It will be our endeavour to ensure that our farmers have easy access to fertilizers, seeds and credit. We also want to provide the best possible irrigation facilities to the farmers so that their dependence on rains is reduced".

However, the suicides in farmers continue to occupy the public space. Not a day passes without someone referring to the same, as a measure of failure of the larger development policies of the country. For example, writing about the importance of culture and soft power of the country, Sharada Ramanathan referred to the issue:

"But India's ambition to be a "superpower" by 2020 at the cost of her soft power heritage has run into tangible trouble: between 1997 and 2006, at least 1,66,304 farmers committed suicide in India, resulting in recent farmer uprisings against the usurping of land by corporates and the state. In Andhra Pradesh alone, at least 2,000 weavers committed suicide between 2006 and 2011. Kerala saw an uprising against a Coca-Cola factory on the grounds that it diverted groundwater from primary needs. And protests, ranging from Kudankulam to the Narmada valley, only reflect the widening conflict between the excluded majority and the benefitting minority in a skewed state developmental agenda" (The Hindu, June 5, 2012).

DIFFERING VIEWS ON FARMERS' SUICIDE

Suicide has been viewed differently by different people. During the 1990's there was big debate about suicide and euthanasia (Kusum, 1995). The context of farmers' suicides has been variously referred to as "the crisis of Indian Agriculture"; "the seeds of discontent"; "fields of despair"; "the death of the Indian farmer"; and the "dead end". The subject matter has occupied the centre stage of the debates in parliament, the mass media, and even a commercial movie has been made around the theme (Peepli Live, 2010), along with a number of documentaries (Before the Last Tree Falls, 2007).

Farmers' suicides have been perceived by the politicians, public, professionals differently and these have implications for the Indian community response. In India, farmers' suicides have been largely seen from two perspectives, namely, the crisis of agriculture and the crisis of the availability of loans to farmers. To date, the third dimension of mental health and psychosocial aspects and the need for a caring community to address the issue of farmers' distress has not been given any attention.

NOT A MENTAL HEALTH ISSUE?

A number of leaders have minimized the role of psychological factors. One example illustrates this attitude. Ms. Vandana Shiva, an international environmental activist, had this to say in the BBC Hard Talk on May 26, 2006:

"When 40,000 Indian farmers end their life, it is no more an issue of psychological aberration; it is no more an issue of depression on the part of a particular farmer. It has become an economic phenomenon".

I recognise that it is important to not to over emphasise one aspect over the other aspects. However, there is a

need to develop a multifaceted response to complex phenomenon.

The following review covers the setting of the problem, the three perspectives to understand the issue, with a plea for greater emphasis on the need for bringing the mental health dimension to understand and respond to the problem.

THE PROBLEM

The deaths of farmers, weavers and other marginalised groups in Punjab, Andhra Pradesh, Karnataka, Kerala and Maharashtra have been reported during the last one decade. Three significant systematic studies have come out from Chandigarh about the suicides in farmers of Punjab in late 1990s, the suicides in farmers of Karnataka during the 2000 and in 2010, from the Tata Institute of Social Sciences, Mumbai about the farmers' suicide in Maharashtra. One of the first studies of this phenomenon was from Punjab, from Northern India in 1998. This landmark study examined the psychosocial dimensions (Bhalla et al, 1998). It is significant that Prof. N.N. Wig of Chandigarh was part of the team and brought the psychological aspects to the study. In 2002, a similar task force examined the issue in Karnataka (Deshpande, 2002). In Kerala a high powered mental health committee was formed in 2004 (with Prof. Mohan K. Isaac as chairperson) to look into the psychosocial aspects of suicide. Unfortunately, this committee did not complete its task. In 2010, a comprehensive book 'Agrarian crisis and farmer suicides' brought together 19 contributors to address the issue from the many angles (Deshpande and Arora, 2010).

In recent times, the Maharashtra high court passed its judgment on this issue in May 2006. Currently a public interest petition has been admitted in the Supreme Court of India. However, in spite of the many measures announced, the directives of courts, the suicides in distressed farmers are not coming to a stop. It is interesting that the Chief Minister of Maharashtra, in a press statement asked, "We are looking for suggestions" to address the problem. The solutions that have been demanded by the farmers, and to some extent met by the Government, have included, restoration of the cotton price, loans waiver, interest waiver on loans, increase of crop productivity, change in the crop selection, marketing mechanisms for the produce, control over money lenders, expansion of irrigation, control over the availability of pesticides, compensation to families of the dead farmers etc.

Behere and Bhise (2012) have comprehensively reviewed this subject. They have noted the following:

"NCRB- 2007 data shows that nationwide 13.6 per cent of suicide victims were either engaged in farming or agricultural activities. In a country of 700 million farmers, it is ten in every 100,000 farmers who have committed suicide. This is higher than the total national suicide rate. Another analysis of NCRB data (Nagraja, 2007) shows that between years 1997 to 2006, about 2,00,000 farmers had committed suicide. Thus, on an average, nearly 16,000 farmers committed suicide every year, indicating that every 7th suicide in the country is a farmer suicide. Farmer suicides have increased at an annual compounded growth rate of about 2.5 per cent per annum over this time period. There is a high degree of variation in farmer suicide rates across different states in the country. According to the 2001 census of India, this is the only year, where we have reliable data on the number of farmer suicides in the country. The top five states in number of farmer suicides were Maharashtra, Karnataka, Andhra Pradesh, Chhattisgarh and Madhya Pradesh. In these states the farmer suicide rate is nearly 60 per cent higher than the general suicide rate, indicating an extremely distressing situation. In Maharashtra, the picture is bleaker. Between 1997 and 2006, the number of farmer suicide cases has more than doubled with the annual compounded growth rate of 9.8 per cent. During this decade, every fifth case of farmers' suicide in country had occurred in Maharashtra. The situation in Vidarbha is even worse. The central part of India is a particularly vulnerable pocket for farmer suicide (Behere and Bansal, 2009)".

THREE DIMENSIONS

The problem of increasing rates of farmers suicides has been linked with the larger economic changes like opening of the economy to foreign investment, globalization and related developments (Halliburton,1998, Swaminathan, 2004, Sainath, 2006,2010, Deshpande,2002, Nagataja,2007, National Farmers Commission,2007, Deshpande and Arora,2010, Vasavi,2010, Reddy,2010, Gyanmudra,2010, Majumdar, 2010, Babu,2010). There are three dimensions to the end result, namely, the agricultural dimension, the economic dimension and the psychosocial dimension. The first two dimensions have been extensively covered in the public domain and will be briefly summarized before considering the psychosocial dimension in detail.

Agricultural dimension has included the monsoon and the market; limited irrigation (rain-fed agriculture is very risky); poor water use due to free electricity to farmers and discounted supply of water; after spending so much on cash crops, the farmers find that the returns are lower than the cost-for cotton, the cost per quintal is Rs.2585, while the support price is Rs.1760; lack of crop insurance; low support price; high-cost intensive farming; shift to cash crops by large groups of farmers with increase in production and fall in prices; repeated crop failures; small land holdings; and use of Bt Cotton.

Economic dimension has included decreasing plan outlay in the Five year plans - fall from 14.9% in First plan to 5.2% in the Tenth plan; high interest charged by money lenders; limited loans available from the banks; harsh measures used to recover loan money; and loans taken for social needs like marriages and education.

Psychosocial dimension

One dimension that has not received attention is the psychosocial dimension of suicide. This is in spite of sufficient evidence even in the reports available from the mass media. There is reason for giving importance to this aspect, as the reports in the mass media speak of *"family did not take the expression of suicidal intent seriously? (When are you going to do it?) ; "there was poor awareness of the debt situation among the family members", "often the steps like selling of cows without the knowledge of the family led to impulsive suicides"*, to name a few of the issues that are psychosocial and not only economic. At a macro level, the caring and cohesive communities where there were social supports to address the adverse situations is almost absent. It is a world in which "each for himself/herself". These changes in the family and society need attention, not as the exclusive response to farmers' suicides but as additional measures.

One of the most comprehensive studies of farmers' suicide is from Karnataka (Deshpande 2002), of which Prof. Mohan K. Isaac, Psychiatrist was a member. In the report, the Committee noted that:

"Social support system is one of the important factors that averts seclusion and introversion. Any event of stress will not be faced by the individual and he/she can derive support from the family, friends, other social institutions. Such support will strengthen the belief in life and enhance entrepreneurial qualities. This also acts as a psychological insurance against any collapse of the person's faith in life. We have seen earlier that the family and village institutions are becoming more

concentric. In other words, the support system that was being provided by the family and the village system in the earlier days has been fast disappearing. This leaves, who is squarely caught in the web of the problems, vulnerable to the reality. If the 'events' and 'triggers' correctly match the time of the 'collapse in self-faith' of that individual, the decision towards suicide is taken"(p.269)

The Expert Committee made several recommendations, which can be grouped into FOUR important sub-systems, namely, those supporting (i) production sub-system; (ii) input sub-system; (iii) welfare sub-system; and (iv) support sub-system.

The Committee recommended a welfare sub-system for the farmers through the creation of a farmers welfare fund, a nodal department for the farmers and a wide social security system with facilities for pension for the aged farmers. The committee emphasised on support sub-system through facilities for health care , awareness of the harmful effects of alcohol, crop insurance and rationalisation of the credit system. In other words, the State should come out with a strong safety net programme.

Similarly, the National Commission on Farmers recommended the following psychological measures (NFC, 2006)

"Psychological Measures: There is need for public awareness campaigns to make people identify early signs of suicidal behavior, make them aware of different socially acceptable measures for solving problems and information on helpline centres; develop a group of volunteers from the community to provide counsel, encourage increased communication within families, media education on internationally accepted guidelines for reporting suicides and creation of taluk level mental health services. Agricultural and animal Sciences Universities could form Hope Generation Teams (like NSS) of young male and female students who could stay in the distress village for a few weeks and extend both technical and psychological support. An environment of Hope and Care has to be created."

Box 1: Case study of Vidharbha

Bhise(2010) used case control psychological autopsy study design to understand the mental health of farming households in which a suicide had occurred. The data came from 98 households with a suicide and 98 age, sex and occupation matched non-suicide (control) households. A detailed account of circumstances around suicide was obtained from key

informants of the family. The 'symptoms in others' questionnaire was used as a screening tool for presence of psychiatric illness. If screened positive, relatives were asked about further details to arrive at a probable diagnosis. Family history of suicide and mental illness was also obtained. CAGE questionnaire was used for alcohol related problems. In all the households with suicide, one close relative (survivor) was screened for the presence of psychological distress by administering Self Reporting Questionnaire-20 (SRQ-20). Children were screened using 'Reporting Questionnaire for Children (RQC). Sex ratio (male: female) was 8.8:1. Economic problems in terms of inability to bear cost of farming and thus leasing out the farms, need to sell farm/livestock, indebtedness and mounting pressure to repay debt was present to a higher extent in subjects. Psychiatric illnesses was a significant contributor to farmers' suicides. More than sixty percent suicide victims had some diagnosable mental illness as compared to only 16.3% of the controls. Most frequent was depression (37.7%), alcohol dependence (10.2%) and schizophrenia (3.1%). Most victims (56.1%) had significant change in behavior few days prior to suicide that could have been easily identified by relatives. About a fifth of the subjects (19.4%) had expressed suicidal ideas few days prior to the act of suicide, emphasizing the need to take all suicide gestures seriously. Stressful life events were strongest contributor for suicides in the form of crop failure (60%), relationship problems (17%), illness / disability (10%), responsibility of marriage of sister or daughter in the family (7%), and death of a close relative (4%). Survivors of farmers' suicide have significantly higher levels of psychological distress compared to controls. Among survivors, spouses and parents are most vulnerable to psychological distress. A high prevalence of suicidal thoughts (32.7%) in survivors is also cause of concern. Currently, Government help provided to farmers' suicide survivors is only of financial nature. This has no effect on reducing psychological distress among survivors.

WHAT IS KNOWN ABOUT PREVENTION OF SUICIDE

Suicide is the outcome of a complex set of factors. In the international literature, there is recognition of the role of biological, psychological, social and cultural factors contributing the phenomenon of

suicide.(Vijayakumar, 2003,2010 Herbert, et al,2008, WHO, 2010). There is evidence from studies in Karnataka, Kerala and Tamil Nadu and other centres in India that the role of social factors and stress is greater than the role of mental disorders(Hegde,1980, Prasad et al, 2006, Xavier et al, 2007, Ulrich,2008,Behere and Bhise,2009). In addition, the family members of suicides are more vulnerable than the general population. It is also well known from the experience of SriLanka, that the availability of effective services for early care of poisoning can limit the suicidal deaths. The experience of crisis centres like Sneha, Chennai, Sanjivini, Delhi, have demonstrated the value of suicide prevention services utilizing the volunteers and the emergency phone lines.

It is well known that the study of suicide is an aspect of the more general study of aggression and violence, and the common base lies in the realm of interpersonal relations. The book "World Mental Health", released in 1995 by the Harvard Medical School, focussed world attention on mental health problems and priorities in low-income countries. Suicide is one of the nine areas selected by this report. The major conclusions about suicide concern were the recognition of the wide variation in suicide rates across countries and rural-urban areas; determinants of suicide with a focus on social factors; means of completing suicide; and emphasis on an interdisciplinary approach to suicide. The report further identified the following mental health aspects of suicide. (Box 2)

Box 2: Suicide Prevention (Desjarlais et al, 1995)

1. To the extent that suicide can be explained as a treatable psychopathology underscores the need for mental health professionals to formulate programmes for its prevention and treatment.
2. Crisis management and suicide prevention should be part of "essential clinical services".
3. Effective health education messages need to be developed and disseminated through the mass media to advise people of available services and of the transient nature of many self-destructive impulses.
4. Regional centres of suicide research need to be established for the study of the variations in the contexts of suicide.
5. There should be changes in social policies to restrict access to hand guns, pesticides and other readily

available means of suicide.

6. The media coverage of suicides should be limited to reduce the number of imitative suicides.

7. There should be active dialogue and continuous interaction among ethicists, policymakers, clinicians, the judiciary and related disciplines towards social policy formulation.

The media can assist in prevention by limiting graphic and unnecessary depictions of suicide and by deglamorising news reports of suicides. In a number of countries, a decrease in suicide rates coincided with the media's consent to minimise the reporting of suicides and to follow proposed guidelines. Glamorising suicide can lead to imitation.

Towards suicide prevention, from the international literature, the following are the common themes, namely, (i) public awareness campaigns to increase suicide as a problem and to reduce stigma;(ii) promoting wellbeing, resilience and community capacity;(iii) services and supports within the community for groups with increased risk through Crisis centres;(iv) services for individuals at risk;(v) access to services- mental health care and emergency medical services; (vi) media presentation can have great impact on imitation suicides; (vii) training of the primary health personnel in mental health care can reach essential services; (viii) means restriction to reduce access to lethal methods of suicide(pesticides, guns) is important; and (ix) providing support to family members of suicides is important to prevent suicides.

MENTAL HEALTH INTERVENTIONS TO ADDRESS SUICIDES OF FARMERS

The review has highlighted the public health importance of farmers suicides and the relative neglect of psychosocial and mental health aspects of farmers suicide. It is important that mental health interventions occur at two levels, namely understanding the psychosocial causes and developing psychosocial interventions.

Firstly, there is an urgent need to understand the psychosocial and mental health causes of farmers suicide. As reviewed in this article, there is enough evidence to point to the mental health dimension of suicides among farmers (Bhise,2010, Gyanmudra,2010,Reddy,2010). They range from psychological distress to diagnosable mental

disorders. It is important that the investigations of the suicides of farmers focus on finding out the presence of mental illness, stress situations, and expression of suicidal ideas(Bhise,2010). Such studies not only will bring to focus the mental health dimension, but also guide towards developing psychosocial interventions.

Secondly, there is a need for the development of psychosocial and mental health interventions to address farmers' suicides at the level of individuals, families and communities and evaluate the effectiveness of the interventions. Specifically, there is need for multipronged interventions to address the issue as follows (Srinivasa Murthy, 2000, 2003, WHO,2010).

1. Acceptance of "normalcy" of suicidal feelings: The situation in India, where attempted suicide is a criminal act, leads to secrecy and a lack of willingness to seek help. It is important for the mass media to present the experience of suicidal feelings as a common human experience. Such an acceptance makes it easy for people to recognise their feelings of hopelessness and seek help to overcome the same.

2. Life skills to cope with stress: Adolescent and young adults are experiencing high levels of stress from various forces operating in schools, homes and the fast-expanding media. At the same time there is loss of the protective function of the joint family and the community. It is important for schools to provide life skills to all children as part of the educational experience. Life skills are living skills or abilities for adaptive and positive behavior that enable individuals to deal effectively with demands and challenges of everyday life. Life skills education provides ten skills, namely, critical thinking; creative thinking; decision making; problem solving; interpersonal relationship; effective communication; coping with emotions; coping with stress; self-awareness and empathy. In India this activity has been taken up as a measure in about two dozen centres. The Indian adaptation of life skills education has been developed by NIMHANS, Bangalore and demonstrated to be useful to address the emotional needs of school children (Bharath and Kumar, 2010).

3. Enrichment of family life: One of the common associations with suicide is family and interpersonal stress. Traditionally, family life was regulated and guided by social norms. However, urbanisation, women entering the working world and globalisation have put an end to traditional values. There is a need

for a redefinition of family life, particularly to reduce inter-generational conflicts.

4. Community institutions for crisis resolution:

Although the causes of suicidal behaviour are largely universal, solutions have to be local and rooted in local practices and institutions. Traditionally, crisis situations were solved by elders in the family, community leaders and religious leaders. There is a need to rebuild community life through common cultural, social and recreational activities to provide opportunities for group commitment to values and norms of behaviour. In addition, small homogenous communities can build places for people to meet, play and resolve their growth-related problems. Religious centres like temples, gurdwaras, churches and mosques can play a vital part by responding to the needs of the younger generation.

5. Crisis help-helplines: This has come to be a very important institutional mechanism for suicide prevention. There are both telephone hotlines and places for people in distress to drop in.

6. Early treatment of mental disorders: A significant proportion of individuals who attempt suicide have mental disorders (Vijayakumar, 2010, Bhise, 2010). Developing measures such as decentralised mental health care and integration of mental health with primary health care can lead to early identification of mentally ill persons. This approach also encourages regular follow-up and reintegration of individuals into society. In India, integration of mental healthcare with general healthcare as a way of increasing the availability and accessibility of mental health care is the basis of the mental health programme (Agarwal et al, 2004, Srinivasa Murthy, 2011). Integration of mental health care with general health care can be an important measure for suicide prevention.

7. Support for suicide attempters: In the majority of situations, an individual who has attempted suicide is not provided with adequate help to understand his/her life situation, adopt alternative methods of coping and avoid repeat attempts. Help should be available for all suicidal attempters, including psychiatric assessment, emotional support at the individual and group levels, and work with the families of attempters. It is known that this approach can limit the rate of repeat suicide attempts.

8. Support for families with suicide experience: The families of people who have attempted or completed

suicide experience intense more emotional turmoil and distress (Isaac, 2007, Bhise, 2010). Feelings of guilt, shame and failure are all part of this process. In some families the grieving of family members occurs in isolation from each other. Organising support groups, periodic home visits and adequate follow-up for about 3-6 months would be beneficial. Religion and religious rituals could be utilised to make sense of the loss and to come to accept it.

9. Limiting the availability of means of suicide: There is enough evidence that the limitation of the common means of suicide (gun control, pesticide control, limiting availability of non-prescription of medicines etc) is an important measure to prevent suicide. The Sri Lankan experience of interventions towards safe storage of pesticides shows the possibilities that are open in this area (Hawton et al, 2009).

10. Social policies: The larger social policies relating to alcohol use, urbanisation, pesticide use, family laws and displacement of people all have an important contribution to suicide rates. In this area, the important factors are to sensitise planners and policy makers to these issues, continuously monitor the effects of policies on suicide rates, and develop innovative methods of meeting the emotional needs of the people affected by these policies. Decriminalization of attempted suicide would be an important measure. In the final analysis, suicide prevention will come from social action in addition to economic interventions.

In conclusion, currently farmers' suicides have been understood in the country largely from the agricultural and economic perspectives. Mental health professionals have been not been active to present the mental health dimension of suicides among farmers, in spite of the large amount of evidence pointing to the important contribution of these factors. Equally, importantly, the mental health interventions have been largely lacking in most parts of the country. It is essential that this lacuna is addressed on a priority basis. Such an approach can bring solace to farmers in distress, prevent suicides, decrease the burden of the families and result in a holistic approach to the problem of suicides among farmers. Here lies the challenge for the mental health professionals.

REFERENCES

Agarwal, S.P., Goel, D.S., Ichhpujani, R.L., Salhan, R.N., and Shrivatsava, S. (2004). Mental Health: An Indian perspective (1946-2003). New Delhi: Directorate General of Health Services, Ministry of Health and

Family Welfare.

Babu,R.G. (2010) Suicide: a disturbing factor in the 'development model' of Kerala, India, *Journal of Public Health*, 18:483–487.

Behere, P.B., and Bhise, M.(2012) Farmers suicide in Central Rural India, In *Community Mental Health in India*, Eds. Chavan, B.S., Gupta, N., Arun,P., Sidana,A., Jadhav,S., Jaypee Brothers Medical Publishers, New Delhi, Pages 231-240.

Behere P.B., Behere A.P.(2008): Farmers' suicide in Vidarbha region of Maharashtra: A myth or reality? *Indian Journal of Psychiatry*, 50: 124-127.

Behere P.B, Bhise M.C. (2009) Farmers' suicide, *Indian Journal of Psychiatry*, 51: 242-243.

Bhalla GS, Sharma SL, Wig NN, Mehta S, Kumar P(1988) Suicides in rural Punjab. By Institute for Development and Communication, 1988: Report submitted to Government of Punjab. Himalaya Press, 1988.

Bharath,S., Kumar,K.(2010) Empowering adolescents with life skills education in schools: school mental health programme-does it work? *Indian Journal of Psychiatry*, 52: 344-349.

Bhise M,C(2010) Psychological autopsy of farmers' suicide. A dissertation submitted to Maharashtra University of Health Sciences Nashik for MD Psychiatry, 2010.

Deshpande,R.S.(2002) Suicide by farmers in Karnataka-agrarian distress and possible alleviatory steps, *Economic and Political Weekly*, June29: 2601-2610.

Deshpande, R.S., Arora,S.(2010) Agrarian crisis and farmer suicides, Sage, New Delhi.

Desjarlais, R., Eisenberg, L., Good, B., and Kleinman, A. (1995). *World Mental Health: problems and priorities in low-income countries*. New York: Oxford University Press.

Gyanmudra(2010) Farmers suicide: behavioural and social dimensions, In Eds. Deshpande, R.S., Arora,S.(2010) Agrarian crisis and farmer suicides, Sage, New Delhi.

Halliburton,M. (1998) Suicide: A Paradox of Development in Kerala, *Economic and Political Weekly*, 33: 2341-2345.

Hawton K, Ratnayeke L, Simkin S, Harriss L, Scott V(2009) Evaluation of acceptability and use of lockable storage devices for pesticides in Sri Lanka that might assist in prevention of self-poisoning. *BMC Public*

Health,9: 69- 71.

Hegde RS(1980) Suicide in rural community of North Karnataka. *Indian Journal of Psychiatry*, 22: 368-370.

Herbert, H, Phillips,M.R., Vijayakumar, L., Pirkis, P., Wang,H., Yip,P., Wasserman, D., José M. Bertolote, Fleischmann, A. (Eds) (2008)*Suicide and Suicide Prevention in Asia*, World Health Organisation, Geneva. 2008.

Isaac S(2007) The aftermath of suicide: Managing survivors' bereavement. *Canadian Journal of Psychiatry*,52: 129s- 136s.

Kusum (1995) *Suicide-some reflections*, Regency publications, New Delhi.

Majumder, R.(2010) Unemployment- The jobless of Punjab find a new way to government jobs — threaten suicide from atop high water tanks, *Tehelka Magazine*, 7, (29), Dated July 24, 2010.

Nagraja K: Farmers' suicides in India: Magnitude, trends and partial patterns. *Madras Institute of Development Studies*, 2007.

National Farmers Commission Report (2006) Government of India. New Delhi.

Prasad J, Abraham VJ, Minz S et al(2006)Rates and Factors Associated with Suicide in Kaniyambadi Block, Tamil Nadu, South India, 2000–2002. *International Journal of Social Psychiatry*,52: 65-71.

Ramanathan,S.(2012) Taking a hard look at soft power,*The Hindu*, June 5,2012.

Reddy,P.T.(2010) Distress and deceased in Andhra Pradesh: an analysis of causes of farmers' suicide, In Eds. Deshpande, R.S., Arora,S.(2010) Agrarian crisis and farmer suicides, Sage, New Delhi.Pages 242-263.

Sainath,P.(2004) Everybody loves farm suicides *The Times of India*, Aug 1, 2004.

Sainath P: Vidarbha (2006)*Slowing down the suicides*. *The Hindu*, Bangalore edition, 12 June, 2006.

Sainath,P.(2010) The high cost of some cheap weddings, *The Hindu*, May 26,2010.

Srinivasa Murthy,R.(2000) Approaches to suicide prevention in Asia and the Far East, In Eds.Hawton, K., and Heeringen, K.V. *The International Handbook of Suicide and Attempted Suicide*, Wiley, Chichester, 2000.Pages 631-644.

Srinivasa Murthy,R.(2003) Rebuild community life to prevent suicides, *The Tribune*, April 30, 2003.

Srinivasa Murthy (2011) Mental health initiatives in India (1947-2010), National Medical Journal of India, 24: 26-35.

Swaminathan, M.S.(2004) Drought, flood, seeds and suicides, THE Hindu, July 27, 2004.

Vasavi, A.R.(2010) Contextualising the agrarian suicides, In Eds. Deshpande, R.S., Arora,S.(2010) Agrarian crisis and farmer suicides, Sage, New Delhi. Pages 70-85.

Vijayakumar, L(Ed) (2003) Suicide Prevention: Meeting the challenge together, Orient Longman, Chennai.

Vijayakumar,L.(2010) Indian research on Suicide, Indian Journal of Psychiatry, 52, :Supplement 3, S291-296.

Ulrich,H.E. (2008) Impact of culture on Suicide: a South India case study, Louisiana Psychiatric Association Newsletter, 43: 4-12.

WHO (2010) mhGap Intervention guide: for mental, neurological and substance use disorders in non-specialised health settings, World Health Organisation, Geneva. Switzerland.

Xavier P.V, Dinesh N, John A.J, Radhakrishnan V.K, Suresh Kumar P.N, Ali ,A (2007) Position paper and action plan on farmers' suicide: Presentation to chief minister and health minister. Kerala Journal of Psychiatry, 22: 68-75.

Appendix 1:

National Commission on Farmers (NCF) Serving farmers and Saving Farming. Towards Faster and More Inclusive Growth of Farmers' Welfare. Fifth and Final report (October 2006).

Volume 1. Box V (Pages 18-19)

Moving From Suicide Relief to Suicide Prevention: 9 Point Action Plan

The NCF has in its various reports addressed the issue of agrarian distress in rural areas of the country and the need to address the farmer suicide problem on a priority basis. This has to be on the basis of a three-pronged strategy, viz. **i) Relief and Rehabilitation Measures** to alleviate the distress and suffering of the affected families in the short term, **ii) address the issue responsible** – unfavorable economics, risky technology, unfavorable weather, lack of irrigation water, institutional credit and remunerative markets, and **iii) Psycho-social counseling (emphasis added)**. While the measure is to provide immediate relief, the other two are preventive long-term measures.

The distress sweeping rural India flows from market failure and the gradual collapse of public services. The cost-risk-return structure of farming is adverse. Almost all the suicide and otherwise crisis-hit households record high health expenditures and are indebted to money-lenders. There is urgent need for both affordable health insurance, and the revitalization of primary health care centres. The National Rural Health Mission should be extended to such suicide hotspot locations on priority basis. The NCF in its Second Report stressed on the need for a Farmer's Livelihood Security Compact. This has to be an integrated package of measures comprising:

1. **Setting up State level Farmer's commission** with farm men and women represented for ensuring dynamic government response to farmer's problems.
2. **Credit: Microfinance policies** should be restructured to serve as Livelihood Finance, i.e. credit coupled with support services in the areas of technology, management and markets. The outreach of the formal credit system has to be expanded. In most cases, the indebtedness of farmers in distress areas is to informal money lenders. The cut-off amount for debt waiver could be worked out in consultation with Panchayats and farmers representatives in distress hotspot areas. Just for the season, but for a Credit cycle of 4-5 years and include consumption credit, so that the farmer has the capacity to spread his/her liabilities and meet the repayment requirements.
3. **Insurance:** All crops should be covered by crop insurance and insurance relief should be immediate, with the village and not block as the unit of assessment. There should be a Social security net with provision for old age support and health insurance. Lapsed life insurance policies of farmers should be revived as per extent rules and not allowed to expire. The integrated family insurance policy (Parivar Bima Policy) recommended by NCF in its First Report deserves to be examined and introduced to

begin with, in dry farming areas.

4. **Irrigation water:** Aquifer recharge, rain water conservation, equity, fairness and public good will have to be the basis of water policies. Decentralized water use planning has to be undertaken and every village should aim a Jar Swaraj with Gram Sabhas serving as Pani Panchayats.
5. **Access to quality and affordable inputs** is crucial: the government must urgently intervene to ensure that quality seed and other inputs reach farmers at affordable costs and at the right time and place. An integrated farming approach should be encouraged with support services in place.
6. **Technology:** Resource poor farmers have no coping capacity to withstand the shock of crop failure, particularly those associated with high cost technologies like Bt cotton. Low risk and low cost technologies which can help to provide maximum income to farmers should be recommended. Risk distribution agronomy should be propagated. Similarly, best possible advice based on remote sensing data should be used to identify locations for drilling wells.
7. **Remunerative Market and Price:** Swift action is required to overhaul the rythu bazars or farmers' markets, most of which are controlled by traders. There is also need for focused Market Intervention Schemes (MIS) in the case of life-saving crops such as cumin arid areas. A Price Stabilisation Fund should be in place to protect the farmers from price fluctuations. Swift action on import duties to protect farmers from international price is necessary (as in the specific instance of cotton farmers' suicide in Vidarbha).
8. **Information Dissemination and Delivery system:** The vital role of the Agricultural Extension Officer must be recognized and the system revived and strengthened. KVKs in each district should function as Krishi Aur Udyog Kendra, with a post harvest technology wing for providing training in value addition. Farm Schools may be established in the fields of good farmers. Village knowledge Centres (VKCs) or Gyan Chaupals should be set up in the farmers distress hotspots. These can provide dynamic and demand driven information on all aspects

of agricultural and non-farm livelihoods and also serve as guidance centres.

9. **Psychological Measures:** There is need for public awareness campaigns to make people identify early signs of suicidal behavior, make them aware of different socially acceptable measures for solving problems and information on helpline centres; develop a group of volunteers from the community to provide counsel, encourage increased communication within families, media education on internationally accepted guidelines for reporting suicides and creation of taluk level mental health services. Agricultural and animal Sciences Universities could form Hope Generation Teams (like NSS) of young male and female students who could stay in the distress village for a few weeks and extend both technical and psychological support. An environment of Hope and Care has to be created. (Emphasis added).

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THE CONUNDRUM OF EMOTIONALLY UNSTABLE PERSONALITY DISORDERS

Nitin Gupta

INTRODUCTION

Personality Disorders (PDs) are a major social, medical, and scientific problem (Cloninger & Svrakic, 2000). In the West, PDs are reported in up to 11%-23% of the general population (Cloninger & Svrakic, 2000). Amongst PDs, the Emotionally Unstable PD (EUPD) subtype has reported general population rates of 1%-2% (Cloninger & Svrakic, 2000; NICE, 2009). From India, a psychiatric outpatient based study reported a prevalence of around 34% and 29% on clinical and structured assessment respectively for all PDs; of these approximately 6% and 15% were EUPDs (Sharan, 2001). Optimal treatment for PDs is considered to be a co-prescription of psychotherapy and pharmacotherapy (Cloninger & Svrakic, 2000; Livesley, 2003). Operating from the perspective of a specific strategy than a specific method, the treatment is not considered to be simplistic (Beck et al, 2004). Patients with PDs, especially Cluster B (dissocial, emotionally unstable, narcissistic, histrionic), tend to be perceived as 'demanding' and may be prone to rejection due to the clinician's expectation of a poor prognosis (Cloninger & Svrakic, 2000; NICE, 2009).

In this narration I will share with you my experiences of diagnosing and managing EUPDs. I seek your company as I go down the memory lane retracing my days beginning as a psychiatric trainee and traversing nearly a decade of practice as a Consultant Psychiatrist.

THE INITIATION

In 1994 I joined the PGIMER, Chandigarh as a trainee in Psychiatry. During the 3-year training it was an experience in itself to learn that a great deal of technical jargon was associated with an apparently simple term-'nature', that I had heard and used so often as a 'lay person'. I learned about the technical nuances of a collection of 'holy' terms like temperament, personality, trait, and disorder. I found the concept of 'Personality disorder' both intriguing and difficult to understand. I struggled to grasp the theoretical and practical aspects related to the diagnosis and management of PDs. Along side, I learned about the concept, principles, and nuances of 'professional' psychotherapy and its application to PDs.

In my next three years of training as a senior resident I continued with a quiet self-assurance that I was reasonably competent in identifying patients with PD, first 'clinically' and then through a structured assessment tool like SCID and SCID-II (First, 1995). Over all, the most common PDs in my clinical practice were 'Cluster C' (anxious-avoidant, anankastic, dependent, passive-aggressive), followed by an infrequent presence of 'Cluster B' and 'Cluster A' PDs.

THE EARLY STEPS

In 1998, about 5 years into the training, a lady doctor colleague of 10 years brought to her 23-year-old younger brother to our outpatient. He reported lack of confidence, difficulty in interaction with others, feeling depressed, getting upset easily, sensitive to criticism and excessive use benzodiazepines and codeine containing cough syrups since early adolescence. The sister reported that he was 'childish in behaviour and thinking', but she considered this to be a much smaller problem. I made a diagnosis of Anxious-Avoidant PD with Benzodiazepine and Opioid Dependence Syndromes. Outpatient management consisted of tapering off of benzodiazepines and opioids, SSRIs, relaxation techniques, and supportive psychotherapy. Over the next few months I was frustrated by the persistence of his anxiety, evidenced both by subjective reports as well as objective observations in the relaxation therapy sessions. Also, he showed no real motivation to manage his substance dependence. Instead he displayed an intense preoccupation with how his family members did not try to understand him, and how this made him feel 'upset and anxious'. Interrelating his anxiety/personality, substance dependence, and family dynamics, I would reassure him in supportive manner.

One day the sister contacted me for an increase in his 'childish behaviour' of getting upset and damaging household objects; once while smashing crockery he had cut his hand and needed stitches. Inpatient treatment was considered. I still remember my 'over' confidence in my therapeutic formulation with my consultant (Dr A); I had mentioned the main reasons for recommending admission as - substance dependence,

anxiety, and (helping the family to effectively manage) the 'childish behaviour'.

About 10 days into the hospitalization, in the background of the patient's anxiety not coming down, the consultant asked me if the patient was suffering from any other problem. I simply said, "I don't think so". When urged to consider the possible reasons for the lack of improvement, I remember enumerating- motivation, resistance to change, family dynamics etc. Upon this the consultant asked if I had considered using the SCID. I said "No", reiterating the adequacy of the ICD-10 based clinical diagnoses. The consultant then showed me the report on patient's personality assessment. I found it hard to believe the additional diagnosis of Emotionally Unstable PD (EUPD). Displaying a typical 'denial' in the face of irrefutable evidence, I argued against this diagnosis. The consultant took me through the collated information in a gentle, supportive and non-confrontational manner and helped me work through my 'denial'. As acceptance seeped in, pieces of the jigsaw puzzle (as they were strewn around in my mind) started falling into their logical place. I gained the correct insight into the patient's problems. His anger with the family members was due to a very poor frustration tolerance. I recalled that during the sessions several times he would break into tears over the most trivial of reasons/issues under discussion - 'affective instability' that I had overlooked. His substance dependence was a combination of self-destructive impulsivity, and self-medication (for affective instability and anxiety). His 'difficulty in interaction with others' and 'childish behaviour' were manifestations of a pattern of interpersonal instability. In fact, he was displaying numerous features (and thereby fulfilling many criteria) of EUPD.

Perplexed at how I had missed an 'obvious diagnosis', I questioned my diagnostic abilities. Also, I wondered as to why his interpersonal disruption had remained localised to the family and had not been more widespread socially. The consultant enumerated the possible reasons. Due to the co-morbid Emotionally Unstable and Anxious-Avoidant PD, (i) the manifestations of both PDs overlapped, and (ii) the Anxious-Avoidant features (especially the social anxiety) restricted the manifestation of the Emotionally Unstable features in situations with familiar people (family) but not the unfamiliar people (outsiders). In subsequent discussions with the patient these assumptions were confirmed, and this helped me to 'rationalize' my distress related to the diagnostic error.

Thereafter, the treatment plan was changed to management of his personality problems using psychotherapy, with which I was not directly involved.

I am talking about this experience despite my contact with the patient lasting only a few weeks. The reasons for this are many. Firstly, dealing with this patient made me (i) realize my limitations and (ii) undertake a re-brush of my diagnostic skills in relation to PDs in general, and EUPD in particular. Secondly, I became aware of the dynamics associated with these disorders. Thirdly, I became more insightful of the difficulty in distinguishing EUPD from other PDs, and the associated co-morbidity which can have a significant impact on its management (Cloninger & Svrakic, 2000). As a consequence I became more careful and comprehensive in my assessment of personality and PDs.

A couple of years later, I accidentally met the patient's sister. When I enquired about the patient, she told me that about a year back he had died of a medication overdose. I was unprepared for this news. My despondency and struggle with the feelings of inadequacy (as a psychiatrist or a doctor) must have shown on my face. Because, as if to reassure me, she said "...it is not your fault.... it had to happen...he was not willing to address his problems despite our persuasion...he would have been helped if he had continued the treatment but did not want to....". I did not feel guilty for letting down a patient or a colleague. Rather, initially I felt 'shocked'. However, later on it strengthened my resolve for understanding and handling PDs better. I believe I was able to learn from this experience and, as my career advanced, became better at identifying PDs - especially EUPD. However, this incident 'hammered into' me another aspect of our professional training. We are all taught how to break the bad news to patients and their families, and handle its aftermath. But we are not taught how to handle receiving 'bad news' regarding our patients.

THE MID LIFE CRISIS

In 2000 I became a Consultant. My confidence in my diagnostic abilities had been reinstated in the preceding years; partly due to the inherent self-belief associated with being a Consultant. It was in this context that over a year spanning 2001-2002 the next major learning-cum-turning point came in my professional career.

A 20-year girl was admitted to the ward under my care with chief symptoms of sad mood, suicidal ideas, severe psychomotor retardation, and obsessive-compulsive

phenomena. Starting 18 months back, the symptoms had worsened over the last 2-3 months. A diagnosis of severe non-psychotic depression and co-morbid OCD was made, and ECT and SSRIs were initiated. Over the next 2-3 weeks the depression started to alleviate and OCD became more prominent. Additional information from the patient, her family members, and ward observations led to additional diagnosis of Emotionally Unstable PD-Borderline type; there was historical and ward observational evidence for histrionic traits manifesting as 'quasi-sexual suggestive gestures and comments'. A plan for CBT (for OCD) and supportive psychotherapy (for EUPD) was formulated. In view of the complexity of the case it was decided that she be managed by a relatively more experienced Senior Resident (SR). In the next 2-3 weeks a major management issue manifested in form of positive transference towards the SR, especially in the individual therapy sessions – resulting in the SR expressing inability to manage the patient and thereby having to opt out.

As a consultant with self-confidence in my psychotherapeutic skills, I took over the management of the case. At that time, in view of the resolution of her depression, she was about to be discharged from the ward. I held two sessions with her mainly to assess for psychotherapy. Towards the end of the second session, while discussing about her strained relationship with her father, she became very upset and indulged in deliberate self-harm (with great swiftness picking up a pencil from my table and stabbing it into her forearm). Subsequently, she apologised for this act and indicated keenness to discuss some of her childhood experiences which she said had had considerable impact on her. Concluding that her ego-strength was not good enough for reconstructive or re-educative approaches I decided on supportive psychotherapy for her. Self-assured, I did not think of seeking a second opinion or ongoing supervision from another colleague. This oversight displayed my lack of experience in the psychotherapy with EUPDs, especially in such a difficult patient like her. Over the next few months, after her discharge from the hospital our journey together was very eventful. I shall briefly touch upon the salient features that are pertinent to my exposition here.

For majority of the sessions she was accompanied by a family member, mostly her brother. The initial 3-4 sessions were used to make her agree to a therapeutic contract. She wanted sessions every other day with no time limit; attempts at limit setting led to her becoming

abusive and angry. I agreed for 3 one-hourly sessions a week – primarily as a 'reward' for her assurances not to indulge in self-harm, and secondarily as a 'compromise' to reduce disruption in the sessions. This offer also helped to make her agree to other terms of the therapeutic contract.

Being able to continue the sessions without any major problems, I was pleased that limit-setting was being largely effective. This sense of 'therapist' control was being additionally reinforced by the regular two-minute feedback from the brother that while she would listen to and be less unreasonable to my advice, she was very difficult and unreasonable at home. In hindsight, I overlooked the fast-evolving 'transference' issues manifest in her following behaviours: (i) In the initial couple of sessions she made threats of self harm and slashed her wrist prior to attending the second one, (ii) When I had to re-schedule a session she talked of (threatened) committing self harm, (iii) In the sessions **she repeatedly spoke of the therapist (me) being like a friend who helped solve problems.** My attempts at correcting this view led to her becoming angry and accusing me of not 'accepting her'.

Her university examination was due in a couple of months. Studies were making her increasingly anxious, and despite high-dose pharmacotherapy her OCD was worsening. To help her study better, on her insistence the next few sessions focussed only on managing her OCD (examination related fears/anxiety). The manifestation of her 'unstable personality' continued in the sessions. I was becoming 'used to' her 'immature demands and expressions'. In hindsight, this reflected my immaturity as a therapist. I was reassuring myself that I was still in 'control' of the situation. Her seeking my help for OCD led me to assume that I was being able to help her (to satisfy her need) as well as therapeutically effectively manage her (as per my/therapist's need). In reflection these were nothing but my sub-conscious 'rationalizations' at enhancing both my self-belief and confidence in the therapy process.

However, I did recognise the presence of positive transference. She talked about her feelings of affection for me and wanting me to be her friend. I tried to handle this by- empathic listening, invoking reflection from the patient, and adopting a neutral stance. My aim was to try and ensure a balance so that this positive transference could be utilized therapeutically, without provoking feelings of rejection. I felt 'smug' that the transference was being handled with reasonable

success. I was brought down to earth very quickly.

In the next session she brought a card and a gift-wrapped box. "It was Valentine Day yesterday...I want you to accept this as you are my friend". Taking it as a positive transference gesture I tried to handle it with my usual 'neutral' approach, stating that as her therapist I was unable to accept these. She got very upset saying "You have to accept it...you have a dirty mind...you think this is sexual...there is nothing like that...I just want us to be friends as you have been very helpful...you listen to me and give me advice....even my family listens to you....". She ended tearing up her treatment card. Apprehending further aggression I got up and walked towards the door. She tried to stop me by holding the half open door. Her brother who was waiting outside managed to hold her back. For the first time in my life a psychotherapy session had ended in my experiencing a spell of anxiety; there were some more firsts to come.

The very next day I received 4 valentine day cards speed posted to my home address. Unhappy at this turn of events I tried to look for the reasons. I concluded that my style of conducting psychotherapy sessions (i.e. use of positive comments, use of humour, and being a proactive therapist) had contributed to this situation. Hence, I decided on a course correction by making a conscious effort to mitigate these factors in the subsequent sessions.

I went through the next few sessions with some trepidation; without feeling the usual cloak of 'self-assurance'. To my good luck these were reasonably uneventful, centred around discussion on her studies and the transference issues. She asked if I was angry with her or had any doubt about her 'clean' intentions. I took the position that I saw her actions as inappropriate, but understood them in the context of the therapy, did not doubt her intentions and I was not angry. Since there were no anger outbursts or accusations, I presumed that the transference issues were getting resolved, and stability and balance were returning to the sessions. My apprehension and trepidation also subsided. I was lulled into complacency and was quite unprepared for the stormy course that followed:

[a] Before the next session was due, each day between 7pm-11pm she made up to 30 telephone calls at my residence. This, another, 'first of its kind' experience was also uncomfortable for my family. I felt annoyed and upset with her for violating boundaries and causing discomfort to my family. I had to spend considerable

time explaining to my family so that they would accept it as coming from a patient with unusual personal-cum-psychological circumstances. I also spent considerable time contemplating how to focus on this issue in our next session.

[b] The next session was even more revealing. She showed considerable anger against me for rejecting the Valentine Day gift, "...you love me but don't say it...I know that you love me ('projection')...I love you too...". I attempted to handle the transference and set limits in the context of these statements and her phone calls. Towards the very end of the session she wrote on a piece of paper that she wanted to have a sexual relationship with me, and if I refused she would indulge in serious self-harm and I would be the one to blame. She left the room leaving me holding the piece of paper – bemused, shaken, angry, a bit of all, and unsure of the utility and direction of this 'so-called' psychotherapy.

[c] She posted another set of letters to my residence expressing in detail her attraction and love for me, and her desire to have a sexual relationship with me.

[d] Another day, another session: I tried to discuss this new behaviour of 'letters'. On the pretext of discussing certain contents of the letters she asked for them. When I handed them over, she tore them all up. With a smug grin she said, "...I have destroyed the evidence that you could use against me...now you cannot do anything...". The session ended but I was again left wondering if I was handling the transference or the patient correctly. A gradually increasing feeling of despondency was setting in.

[e] If the preceding days were extremely difficult, the days that followed turned out to be deeply traumatic. She STALKED: repeated telephone calls at my home, surveillance outside my home for hours on end; she involved my family members (writing threatening letters, calling them on the phone and insisting they get me to speak to her, playing music on the phone; coming to my residence - throwing stones at the parked cars, and engaging in debate and verbal threats). There was considerable distress and anger in my family. I felt let down ...that she had betrayed the trust I had reposed in her as part of our therapeutic contract. I experienced intense conflict between my role as a 'therapist' and my role as a 'member of my family'. Even though I understood the 'psychodynamics' of her behaviour, I found intrusion of my 'personal space' as quite unacceptable, more so because it was affecting my family. There was an internal struggle in my mind about

'rejection' and 'non-rejection' of her. I experienced the phenomena of 'splitting' within me, and later on with the family members during discussions with them. I experienced a lot of anger at her actions, and a part of me wanted to react to this persistent, undesirable, unacceptable behaviour. On reflection, I probably had experienced a range of psychological phenomena – intense and conflicting emotions, thoughts, themes, behavioural impulses - that a person with 'emotionally unstable traits (if not PD)' goes through on a daily, or even a lifetime basis. It was not a nice feeling as it left me dysphoric and angry. Equally and more importantly, it made me feel 'inadequate and incompetent' as a therapist.

I was experiencing failure. Not only that, I was experiencing negative emotions - predominantly anxiety and anger - frequently and consistently. In all this emotional chaos, somehow something clicked in my troubled mind. I recalled the pearls of wisdom from my teachers emphasizing the importance of supervision during psychotherapy. **I thought to myself: Even though I was a consultant (with some experience in psychotherapy) and a psychotherapy supervisor that did not exclude me from seeking supervision or being supervised!** I immediately approached a senior colleague (Dr. A; *again*) for supervision and presented to him the whole case. A crisis plan and a contingency plan were formulated. The guiding principles involved: reduction in frequency of sessions, use of time-out during the sessions, limit-setting, personal discussion to be off-limits, and the appropriate involvement of patient's family in terms of sharing of relevant information.

I tried these measures over the next few sessions. The first consequent success came in that we jointly signed a new therapeutic contract. The second perceived success was that she became less disruptive, reduced her attempts at contacting me at home, and was more focussed on her studies. I call this as a perceived success because just when things appeared a bit calm, we had another difficult session. In the session, she became extremely angry, and said that she had lost trust in me and wanted revenge as I had been wasting her time and trying to take advantage of her. For these reasons and her upcoming examinations, she said she wanted to suspend the entire treatment (psychotherapy and medication). She emphasized that she would not hesitate to cause physical harm to me if I continued to cause distress or interfere with her life directly (through treatment) or indirectly (through her family). I

continued to experience a wide range of emotions with varying intensity: (i) I would not look forward to the scheduled

session day(s). (ii) I would experience apprehension and occasional physiological symptoms of anxiety on the session day. (iii) Many a times I would feel 'on the edge' during the sessions. (iv) I would be unsure as to what to expect and how exactly to respond to issues being discussed during a session. (v) I frequently experienced 'surges' of irritation/anger when matters around transference were touched upon. (vi) I would be unsure as to what to expect at the end of the workday when I would return home - if she had contacted my residence or family members. It felt as if I was functioning in a black hole, having to delve into the relative unknown; as if her unpredictability was 'rubbing off on me'. In essence, I was feeling more and more inadequate and inexperienced as a therapist.

I discussed all this in my next supervision session. Since, her history and recently observed behaviour evidenced the risk of she carrying out her threats, we agreed to take the matter to the Head of Department (HOD) who agreed with our 'threat perception'. Our management plan covered the following points. 1. Due to the potential of harm to me and in keeping with the patient's stated wishes, I was to suspend psychotherapy temporarily. 2. I was to continue her routine clinical follow-up for medication. 3. I was to continue with my regular supervision for this case. This decision brought me immense relief on two counts. Firstly, I was to have a break from these intensely emotion provoking sessions. Secondly, the review by the supervisor and the HOD had not found me negligent in my care of the case. However, I felt 'therapeutically inadequate' as the continuity of treatment had been compromised and therapy disrupted as per the patient's wishes. Also, in keeping with the principle of joint and mutual agreement in psychotherapy (Wolberg, 1967), deep inside I wished that the therapy could have been suspended by a mutual agreement with the patient. I wondered if these feelings were related to my perceived 'lack (or loss) of control' in the decision making process, or was this a last and faint manifestation of a positive counter-transference? I would rather some one else sit on this judgement!

As decided, I suspended the psychotherapy while continuing pharmacological management for OCD and risk management. A few weeks later she was able to take her examinations. After the examinations when she desired to resume psychotherapy I tried to explain

that that could happen only after I had discussed the issue with my supervisor. As a consequence there was re-manifestation of her previous undesirable behaviours for the next few days followed by her complete refusal for treatment. I interpreted this behaviour as arising from her feeling rejected by me/the therapist/'the loved one'.

After about 2 months she returned seeking help for her OCD and personality. The stress of her admission to a post-graduate course was apparently exacerbating the OCD. After discussion with my supervisor I re-started the psychotherapy with two sessions a week (along with my regular supervision). The sessions tended to focus on managing her OCD and discussions related to her problems with her family, with some reference to her personality issues, carried out in a supportive mode. With this approach there was some 'stability' without significant improvement. As her term examinations neared she increasingly demanded more frequent and longer sessions. As I and my supervisor did not consider this as necessary, I refused. The consequence was a re-manifestation of physical aggression and visits at my residence. After discussion with my supervisor and the HOD, psychotherapy was suspended, and I handed over her care to a colleague (a Senior Resident), who was to be supervised by the HOD. Thereafter the patient she did not make any attempt to contact me, and my journey with her ended at this point. I experienced mixed feelings of relief and failure. To be honest, the relief was more important as it involved my family too. Till now, from time to time I have kept wondering why she did not make any re-contact. Each time this self query is followed by an anxiety inducing counter-question, 'what if she had'?

I still recall with some consternation, my overconfidence in my abilities and my failure to pick up the widely strewn 'danger signs' with this patient: her histrionic traits, strong use of splitting/devaluation/idolization, tendency for paranoia, strong obsessionality in thinking, impulsivity, instability of mood, and a strong tendency for positive transference. I had initiated her psychotherapy assuming that the general principles of therapy would apply; with the use of standard textbook specific therapy elements for the management of EUPD. The overall experience was psychologically traumatic. There were occasions when I experienced anger towards her, which was a somewhat alien emotion to me in the context of my patients. It left me feeling inadequate as a therapist and pessimistic regarding effective management of EUPDs.

However, there were a few positives in this episode. 1. As a therapist I had not indulged in any acts of negligence and non-malificence (especially in view of my family being involved by the patient in the therapy process), 2. I had undertaken psychotherapy supervision appropriately, 3. My supervisor/s reassured me that I had made a good attempt to manage a person with a fully evolved EUPD (with OCD as a co-morbid condition) - a not so common presentation in the Indian clinical setting, and 4. I had a learning experience of a lifetime, and gained confidence as elucidated next.

THE GROWTH

When I considered that I had gained confidence from this experience of an 'ineffective management' of a patient with EUPD, I also wondered if it was another form of 'denial' on my part. To 'rationalize' that was not so, I need to highlight the change in my professional circumstances a year after this episode. I relocated to the UK as an NHS-based General Adult Consultant Psychiatrist. In this role, I encountered a reasonably large number of EUPD cases; mostly females. The management of mentally ill (including those with PD) cases in the UK is multi-disciplinary: involving psychiatrists, psychologists, social workers, and psychiatric nurses. My journey till that point, as detailed above had helped me further develop my clinical skills in the assessment and management of EUPDs. This, therefore, allowed me to preferentially focus my energies on developing skills on inter-disciplinary issues in the management of such cases, and helped me to demonstrate a certain degree of confidence as the lead-cum-responsible clinician for my colleagues. It needs no emphasis that EUPDs are probably the most challenging of all PDs and carry a high degree of risk of deliberate self-harm with an inherent tendency to fragment and/or 'sabotage' their own care (NICE, 2009).

THE OPTIMISM

It may appear 'cognitively dissonant', but in the last 4-5 years I have developed 'optimism' in managing patients with EUPDs. I justify my 'seemingly unstable' paradigm shift (from pessimism to optimism) because though I have had reasonable proportion of failures while working in the UK, but I have also achieved therapeutic success with some of these patients (wherein they have been able to control and/or attenuate their personality problems). Interestingly enough, there now exist 'reasonably stable and persistent/long-term therapeutic relationships' between myself and many of my patients with EUPD.

TO CONCLUDE...

My personal experience leads me to believe that a comprehensive assessment and psychotherapy-based management form the cornerstone of helping the patients suffering with EUPD. Such patients can make the therapist feel as 'inadequate'; require limit-setting with a degree of flexibility; and need a multidisciplinary approach (family being a good substitute in India). The other thought I have is that the Guru-Chela psychotherapy paradigm, in the strictest sense, may not apply in these cases (Neki, 1975). Lastly, it is no less important to ensure that the therapist is able to seek and access appropriate 'supervision' (Sen, 1997).

I think I have grown as a professional and my experience has helped me in becoming a more sensitive yet cautious therapist with a better recognition of my limitations in the psychotherapy of PDs. Yet, Emotionally Unstable PDs continue to provide me with 'highs' and 'lows' (more 'lows and anxieties' than 'highs!'), sometimes akin to a roller-coaster ride. I recall the remarks of one of the world's leading experts on Emotionally Unstable PDs (at the 2009 Annual Meeting of the American Psychiatric Association) that: (i) probably the hallmark and most predictable feature of such patients is their 'unpredictability', and (ii) after nearly four decades of my working with them, they still raise more questions than answers.

Where do I currently stand? My response to this question lies in these lines by Robert Frost:

"The woods are lovely, dark and deep, But I have promises to keep, And miles to go before I sleep, And miles to go before I sleep." (Excerpt from the Poem "Stopping by Woods on a Snowy Evening", 1923)

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a better, psychiatrist.

REFERENCES

- Beck, A.T., Freeman, A., Davis, D.D., and Associates. (2004). Cognitive therapy of personality disorders. The Guilford Press, New York.
- Cloninger, C.R. & Svrakic, D.M. (2000). Personality Disorders. In: Comprehensive Textbook of Psychiatry- Seventh Edition. Sadock, B.J. & Sadock, V.A. (editors). Lippincott Williams & Wilkins, Baltimore, 1723-1764.
- First, M.B., Spitzer, R.L., Gibbon, M., Williams, J.B.W. (1995). The Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II): Part I. Description. Journal of Personality Disorders, 9, 83-91.
- Frost, R. (1923).
- Livesley, J. (2003). Practical management of Personality Disorder. The Guilford Press, New York.
- Neki, J.S. (1975). Psychotherapy in India: Past, Present and Future. American Journal of Psychotherapy, 29, 92.
- National Institute for Health and Clinical Excellence [NICE] (2009). Borderline Personality Disorder: treatment and management. CG78NICE Guidance. National Institute for Health and Clinical Excellence, London, 1-41.
- Sen, B. (1997). In search of a meaningful existence. Indian Journal of Social Psychiatry, 13 (3-4), 77-82.
- Sharan, P. (2001). Structure of personality and personality disorders in the Indian context. PhD Thesis, PGIMER, Chandigarh.
- Wolberg, L.R. (1967). The Technique of Psychotherapy. New York, Grune & Stratton, 3.

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CRAVING IN SUBSTANCE USE DISORDERS
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Abstract

Drug addiction constitutes a chronic central nervous system disorder and one of the most serious public health problems globally. Most prominent feature of addictive behaviour is craving which can be described as the psychic pain of addiction. It is an intractable obstacle confronted by subjects with substance use disorders attempting to achieve abstinence. Craving is the key factor behind compulsive drug-taking behaviour. Direct relationship between craving and relapse, though not well established, appears to occur through intermediate factors. Incorporating craving measurements into routine clinical practice can increase the patient's capacity to recognize and monitor his internal states that are related to substance intake and this can be used in recommending appropriate treatment. Craving seems to be a nonunitary phenomenon, and different kinds of craving with different mechanisms have been proposed, so it is conceivable that different drugs (including proposed immunotherapy) can be more or less effective in different kinds of craving.

Key words: Addiction, craving, abstinence

INTRODUCTION

The Webster's Dictionary (Neufeldt, 1990) has defined "crave" to ask for earnestly, to want greatly, and to yearn for. Craving is an emotionally charged term and has irresistible, compulsive, appetitive and anticipatory qualities. Craving is a poorly understood term used to describe a variety of phenomenon related to subjective and objective states that may lead to substance consumption.

World Health Organization (WHO) Expert Committees on Mental Health and on Alcohol (1955) in 1954 concluded that the term "Craving" was inappropriate because of its everyday connotations. Later craving entered into ICD- 10 as one of the diagnostic criteria World Health organization (1992) but it does not feature in DSM IV diagnostic criteria (DSM IV merely states that craving is "likely to be experienced by most, if not all, individuals with substance dependence") (American Psychiatric Association, 1994). Rankin et al. (1979) referred to craving as a generic "predisposition to drink", comprising all levels of desire, but Kozlowski & Wilkinson (1987) used craving only to describe urgent desires. In spite of failure to reach a consensus in a meeting on craving by NIDA (US National Institute on Drug Abuse) in 1991, craving is enjoying the renewed interest in cue reactivity in relapse, neuroimaging and treatment modalities (MacKillop & Monti, 2007).

GENDER DIFFERENCES IN THE CRAVING PROCESS

Whereas addiction is often attributed to men, women also are clearly affected. Cocaine-dependent women

have an earlier age at onset, have more days of abuse in a given month and take less time to become addicted with greater severity. Cocaine-dependent women also demonstrate greater depressive symptomatology, longer abstinence, higher levels of drug craving and seek more help after relapsing while men have more antisocial personality disorders (Weiss et al., 1997). Also women exhibit less cocaine addiction-related pathology of the frontal cortex than do men (Chang et al, 1999).

THEORIES OF "CRAVING"

Various theories of craving are:

1. **Conditioning based models:** Four models based on Ivan Pavlov's classical conditioning are: the withdrawal model, the compensatory response model, the opponent process model, and the incentive conditioning model.

In *withdrawal model* individuals seek to consume drugs in order to escape aversive state and to relieve withdrawal-related discomfort. Initially the lack of drugs (an unconditioned stimulus) provokes a withdrawal syndrome (an unconditioned response). Associated with the lack of drugs are drug paraphernalia that become conditioned stimuli to the withdrawal discomforts. During abstinence, these cues may provoke a withdrawal response (a conditioned response) that is thought to create craving (Baker et al., 1986).

The opponent-process and compensatory response models state that the withdrawal response should be

opposite to the direct effects of the drug and be correlated to the level of tolerance Baker et al. (1986). These also explain why craving appears in the abstinent subjects long after the withdrawal symptoms have subsided.

The incentive model Stewart et al. (1984) posits that a stimulus such as a bar becomes conditioned, thus provoking similar physiological and psychological responses as actual drinking. If drinking does not take place, craving occurs to appreciate the positive aspects of alcohol as a reward.

2. Cognitive models: The various cognitive models involving information-processing systems are as follows-

Outcome expectancy model- Marlatt (1985) proposed anticipatory effect of positive outcome expectancies (beliefs) provoked by alcohol related cues. There is also motivational component i.e. intention to use, labeled "urge" and one may experience a craving and not an urge – that is, be tempted but not intend to consume.

Dual-affect model- Urges are modulated by positive and negative affect urge network (Baker et al., 1986). The positive affect urge network has information on the direct pleasurable effects of the drug. Negative network provokes urge based on the negative affect. Baker et al. (1986) suggested that positive expectancies of desirable drug effects are probably coded into the negative affect network: the drug is more desirable because of the deprivation.

Cognitive processing model- Craving occurs when drinkers accustomed to no limits are prevented from drinking. For example, an individual decides to consume a drink but if an obstacle prevents consumption, craving happens, considered to be a non-automatic, effortful response (Tiffany, 1999). Alcoholics exposed to alcohol cues had a slower reaction time on cognitively demanding tasks and perceive an "extended now" state, during periods of self-restraint resulting in relapse Vohs & Schmeichel(2003).

3. Psychobiological models: These models are directly influenced by biological neural systems (neural circuitry, reward systems, and neuroanatomical) and are as follows-

Neuroadaptive model- Craving is due to hypersensitization of the dopamine neural transmitter system that in turn increases the incentive salience of drugs. "Incentive salience" makes stimuli more attractive and turns ordinary wanting into excessive drug craving (Robinson & Berridge, 1993). Drugs cause neurobiological adaptations to maintain homeostasis and if drug consumption ceases, an imbalance in

cerebral activity results in craving. In early withdrawal state, craving occurs to alleviate the imbalance. In later recovery state, the altered brain functions returns to their original state but cravings may appear suddenly. This reactivation can be triggered by stress which may activate the reward memory (Anton, 1999).The reward memories may also reactivate neurochemical processes associated with past experiences of drug use and cause craving.

Theory of neural opponent motivation- Chronic drug exposure causes allostasis, defined as "a state of chronic deviation of the regulatory systems with establishment of a new set point". An allostatic state involves a feed-forward mechanism rather than the negative feedback mechanism of homeostasis. Overactivation of the brain reward system triggers the brain stress circuit or anti-reward system, in order to limit the reward. Long term drug intake dysregulates the underlying neurochemical functions (\downarrow Dopamine, \downarrow Serotonin, \uparrow Corticotropin-releasing factor) resulting in an allostatic state. Anti-reward system and neurotransmitter changes create powerful negative reinforcement. Craving arises from the action of memory of the rewarding effects of drug use superimposed on a negative emotional state (Koob & Moal, 2008).

Temporal-difference reinforcement learning model (TDRL)- In TDRL, actions are selected to maximize future rewards which are based on the strength of a value signal, defined as the expected future reward discounted by the expected time to the reward. This value signal is carried by dopamine and produce temporal-difference learning in the normal brain. TDRL is based on assumptions about cocaine, which produce a phasic increase in dopamine directly and push a person towards irrational behaviour (Redish, 2004).

Model of interoceptive dysregulation- Interoception refers to the sensations that originate from the interior of the body. The interoceptive state is mediated by anterior insular cortex which has bidirectional connections to the amygdala and the ventral striatum. Alteration in interoceptive processing is due to an altered "prediction error" which refers to the difference between the value of the anticipated sensation (i.e., the hoped for result) and the value of the current interoceptive state. Dysregulation of insular cortex (minimizes the body prediction error) causing non-adaptive adjustment of the body prediction error causes craving in addiction process (Paulus et al., 2009).

4. Motivational models: The motivational models of craving are as follows-

Motivational model of alcohol use- Final common pathway to alcohol use is motivational and the strength of the motivation depends upon the emotional state one wish to achieve (Cox & Klinger, 1988). A person's desire to drink depends on the degree of incentive motivation. The model also takes into account personality, historical factors, direct chemical effects, past reinforcement from drinking, situational factors, and expectancies.

Multidimensional ambivalence model- This model consists of two parallel, motivational pathways, approach (induces a craving) and avoidance (stops craving) and adds an "evaluative space" where these competing motives intersect. Also, it adds the key modulator "access to alternative valued activities". In the evaluative space, four subgroups can be found: approach, avoidance, indifference, and ambivalence. Indifference consists of low approach and low avoidance, whereas ambivalence consists of high approach and high avoidance (Breiner et al., 1999).

5. Personality theories

Eysenck's theory of personality says that subjects with high extraversion have difficulties in acquiring conditioned responses due to lower sedation thresholds and high neuroticism is thought to enhance conditionability (Eysenck & Eysenck, 1985). Because craving can be regarded as a conditioned response to drug, lower extraversion and higher neuroticism, relates to craving.

According to Gray (1987), Behavioural Approach System (BAS) regulates aversive motivation and the Behavioural Inhibition System (BIS) regulates appetitive motivation. High BAS sensitivity is reflected in engagement in goal-directed efforts when the person is exposed to cues that predict reward.

NEUROANATOMY OF CRAVING

Anton (1999) proposed a neuroanatomical model based on clinical experience, brain-imaging, and laboratory data. Various drugs increase dopamine levels in the nucleus accumbens. Three brain regions are subsequently activated: the amygdala; the dorsal lateral prefrontal cortex (DLPC), the region where reward memory are located, and the basal ganglia, a region involved in repetitive thought and behaviour patterns. The DLPC is also stimulated by sensory information from the frontal cortex in addition to affect from the amygdala and nucleus accumbens.

The DLPC in return sends information and sensitizes nucleus accumbens to future drug cues. In addition, the DLPC transmits the memory to the basal ganglia that may increase the craving reaction because of its role in

stereotypic thinking. The orbitofrontal is thought to inhibit impulsive behaviour by sending evaluative information to the DLPC. Because the orbitofrontal cortex is connected through the DLPC to the basal ganglia, its impairment may promote obsessive-compulsive state. Individual memories interact with the judgment center of the orbitofrontal cortex in a highly specific way when an individual evaluates the level of risk or reward in a given situation.

TYPES OF CRAVING

There are three types of craving based on three-pathway psychobiological model as proposed by Verheul et al. (1999):

1. *Reward craving*, involves those people who consume because of a desire for the positive effects of alcohol. The personality style is that of reward seekers, that is, a high sensitivity to positive reinforcement or rewarding events. They seek the neurotransmitter chemical reward involving the opioidergic/ dopaminergic system to compensate for a low level of cortical arousal.

2. *Relief craving*, involves those people who consume to relieve tension or arousal. The personality style is stress reactive. Relief craving is associated with aversive motivational system or the behaviour inhibition system (BIS) (Gray, 1987). Relief craving is possibly due to a dysregulation in the GABAergic/ glutamatergic systems and neural hyper-excitability.

3. *Obsessive craving*, involves those who are incapable of controlling their intrusive thoughts about drinking. The personality style associated is characterized by low restraint or disinhibition, that is, "the inability to restrain impulses in the face of impending appetitive and aversive stimuli". Obsessive craving may result from a serotonin deficiency.

Drummond (2000) also talked about "cue-elicited craving" (conditioned response to a cue) and "withdrawal-related craving" (during the withdrawal phase as an unconditioned response) with possibility of both types likely to coexist.

Koob & Moal (2008) also gave two types of craving. The first, Type 1, was induced by memory of cues that had previously been paired with drug use. Type 2 craving consist of a Type 1 craving situation superimposed onto a change in emotional state characterized by dysphoria, anxiety, or a residual negative emotion.

ASSESSMENT OF DRUG CRAVING

Both direct self-report questionnaires and indirect behavioural and physiological measures are used to assess the psychological experience of craving (Rosenberg, 2009):

Single-item ratings of subjective craving- Single-item

Likert-type rating or visual analogue scale (VAS) are used to indicate the degree of craving. Paper-and-pencil forms, control knob, dial or joysticks to a computer are used to record multiple repeated ratings of craving.

Multi-item self-report questionnaires- Various questionnaires like Obsessive–Compulsive Drinking Scale (OCDS) Anton et al. (1995); Obsessive–Compulsive Drug Use Scale (OCDUS) Franken (2002) and Temptation and Restraint Inventory (TRI) Collins & Lapp (1992) are used to assess craving Rosenberg (2009).

Free response procedures- The instructions are similar to the free association in psychoanalytic therapy, in that participants are asked to speak their thoughts aloud without any judgment, except that they do so during cue exposure or after imagining themselves in a drug related situation (Shadel et al., 2004).

Indirect or proxy measures of craving: Various indirect ways of assessing craving are as follows:

1. *Drug dreams-* Substance-related dreams are the expression of unconscious wishes to resume drug use. The frequency and prevalence of substance-related dreams are associated significantly, if only moderately, with craving (Rosenberg, 2009).

2. *Behavioural indications of craving-* Proposed behavioural indicators of craving in people include latency to consume one's drug of choice, amount or speed of consumption, interpuff or inter-sip interval, and willingness to “work” for access to one's drug.

3. *Psychophysiological measures of craving-* Increased salivation (measured by dental rolls placed in the subject's mouth) predicts relapse following treatment, though moderately. Greater self-reported craving and eye blinks are found when smokers recalled smoking-related sentences. Exposure to drug related stimuli resulted in significant increase in heart rate in smokers, problem drinkers and cocaine abusers (but not heroin addicts), and significant increase in sweat gland activity in all four groups (Rosenberg, 2009).

4. *Attentional bias-* Performance on attention-related tasks such as the addiction-stroop and dot-probe procedure may serve as proxy measures of subjective craving. Longer reaction times on addiction-related words from contrast words, distinguish substance abusers from non-abusers, and predict relapse following a period of abstinence (Cox et al., 2006). Also attentional bias is inferred by faster reaction time when the probe replaces a drug-related stimulus than when it replaces the neutral stimulus (Rosenberg, 2009).

ANTICRAVING MEDICATIONS

There is now a range of medications available for each of the major classes of addictive drugs: alcohol, cocaine, opiates, and nicotine.

1. Anticraving drugs for Alcohol

Three US FDA approved medications for the relapse prevention of alcohol are Naltrexone, Acamprosate and Disulfiram,.

Naltrexone- Naltrexone is approved by the US FDA in 1994 that diminishes the rewarding effects by reducing dopamine in VTA (Ventral Tegmental Area) and nucleus accumbens and release of endogenous opioids like endorphins (Anton, 2008).

It reduces craving for both dependent patients and social drinkers. There are reviews and meta-analyses, along with 29 published randomized placebo controlled trials, some supportive and some not (Kranzler, 2000; Richardson et al., 2008). Naltrexone significantly reduces craving and rates in heavy drinkers by 30-60%, though abstinence is seen usually in 25-35% cases Pettinati et al. (2006). The dose is 50-100 mg per day. Potential barriers are non-adherence (at least 80% compliance with daily administration of the drug is likely to be effective).

A long acting injectable formulation of Naltrexone (encapsulated naltrexone 380 mg in bio-degradable microspheres) was approved by the US FDA in 2006. Therapeutic levels are maintained for a month. It also has reduced side effects and less chance of hepatic toxicity (Johnson et al., 2004).

Acamprosate- It was approved in 2004 in US for clinical use. It affects calcium channels and decrease in CNS excitatory system by reducing glutamate Dahchour & DeWitte (2003). It has no abuse potential and has favourable side effect profile. Double-blind clinical trials (1.3–3 g/day, orally administered) and meta-analysis have shown the efficacy of acamprosate in decreasing craving and maintaining abstinence (Mann, 2004).

Comparison between acamprosate and naltrexone and other drugs: Overall acamprosate showed increase in the cumulative abstinence period, decrease the likelihood of return to drinking, and better compliance (effect better with higher doses) compared to naltrexone. More recent studies of naltrexone have found less favourable outcomes. Overall evidence favour acamprosate because of more number of studies have been conducted with it, with longer duration, and better acceptability in patient groups due to lesser adverse effects as compared to naltrexone. One potential advantage of naltrexone (though not studied well) is its convenience of administration. Taking two

tablets of acamprosate thrice a day may be cumbersome for some patients and may affect compliance as compared to the relatively simpler regimen of naltrexone one tablet per day (Dhawan & Jhanjee, 2007).

Effect is synergistic when acamprosate is combined with disulfiram (Besson et al., 1998). Acamprosate is said to be a cost effective treatment. However, in India, Disulfiram is cheaper than either Naltrexone or Acamprosate (Dhawan & Jhanjee, 2007).

Disulfiram- It reduces the daily struggle against urges toward alcohol. It is reserved for patients who have previously failed one or more courses of treatment or who are motivated to achieve complete abstinence (Brewer, 2005). Disulfiram use is now a second line treatment after Naltrexone and Acamprosate. Several reviews support the efficacy (Suh et al., 2006) but lack of double blind controlled and randomized controlled trials are hindrance. A long acting depot preparation in the form of an implant has similar pharmacological profile like oral Disulfiram (Johnsen & Marland, 1992). No current research evidence is available on this preparation.

Baclofen- It (15 mg/day for the first three days and 30 mg/day subsequently) is effective in reducing intake, inducing and maintaining abstinence. Also it has good tolerability and low side effects, without any risk of abuse and also relieves symptoms of alcohol withdrawal syndrome and delirium tremens (Addolorato et al., 2003).

Topiramate- It (25–300 mg/day for 12 weeks) promotes abstinence and reduces intake and craving. Recent studies have shown to reduce addiction severity and in increasing the patient's quality of life (Johnson et al., 2008).

Serotonin Reuptake Inhibitors and Ondansetron- Fluoxetine (20 mg/day for the first 2 weeks then 40 mg/day) has proved to be effective in reducing depressive symptoms and alcohol consumption together (Cornelius et al., 1997). Agabio et al. (2001) showed that SSRIs might be useful in patients with late-onset alcohol dependence, while ondansetron (0.5–4 mg for 6 weeks) could be effective in patients with early-onset alcohol dependence.

Buspiron- It has shown to be useful in alcohol detoxification of anxious subjects. A recent study, however, has not confirmed the efficacy of buspirone versus placebo in decreasing alcohol consumption (Fawcett et al., 2000).

Other Drugs

Tiapride- It has shown to promote abstinence, seems to be well tolerated, although 4 cases of late dyskinesia have been reported (Shaw et al., 1994).

Flupenthixol- It reduces alcohol intake in a rat model, but the anti-alcohol effect is weakly selective and nonspecific. Pilot studies suggest its role in treatment of substance abuse in psychiatric patients (Wiesbeck et al., 2001).

Methadone- Short-term methadone administration has shown to reduce alcohol consumption in heroin addicted patients (Caputo et al., 2002).

Glutamatergic compounds- Memantine and lamotrigine have shown to reduce craving but in animal models and further clinical studies are needed (Spanagel & Mann, 2005).

2. Anticraving agents for Cocaine

Many agents have been tested and demonstrated to be ineffective as treatment for cocaine dependence (Levy, 2009).

Various drugs such as dopamine antagonists (haloperidol, flupenthixol), dopamine-enhancing agent's (disulfiram and modafinil), dopamine agonists (bromocriptine, amantadine, pergolide and levodopa), topiramate, propranolol, vigabatrin, methylphenidate (in comorbid Attention Deficit and Hyperkinetic Disorder), buprenorphine, imipramine (in comorbid depression), nifedipine and nimodipine have shown some efficacy in reducing the reinforcing effects of cocaine but further studies are needed (Grabowski et al., 1994; Nunes et al., 1995; Compton et al., 1995; Handelsman et al., 1995; Kuzmin et al., 1996; Kampman et al., 2002; Kampman et al., 2003; Carroll et al., 2004; Kampman et al., 2004; Hart et al., 2006; Levy, 2009;).

Other drugs include mazindol, fluoxetine, carbamazepine, lithium, naltrexone and 4-iodococaine. All have been postulated to alter reinforcing effects of cocaine. Comparative studies are still pending (Levy, 2009).

3. Anticraving agents for Nicotine

Non-nicotine medications can be used in combination with nicotine replacement for nicotine cessation.

Bupropion was approved by the FDA for smoking cessation. It reduces craving by action on dopamine. Bupropion, alone (30.3%) or in combination with the nicotine patch (35.5%), had superior abstinent rates to the nicotine patch or placebo alone (Jorenby et al. 1996).

Varenicline (approved in 2006 by the FDA as an aid to smoking cessation) is a 4, 2 nicotinic acetylcholine receptor partial agonist. Varenicline had significantly

greater abstinence rates at 12 and 52 weeks than placebo or bupropion (Jorenby et al., 2006).

Rimonabant is a specific antagonist to cannabinoid receptor 1 (CB-1). Randomized controlled trials show that rimonabant is effective for patients wishing to lose weight and stop smoking. This drug is advancing through the FDA approval process (O'Brien, 2005).

Nortriptyline and clonidine both appear effective, but are considered second-line treatments (due to potential side effects and lack of FDA sanction as smoking cessation aids) (Marlatt & Witkiewitz, 2005).

4. Anticraving agents for Opiate Addiction

Strategy to maintain the patient with a medication in the same pharmacological category (methadone or buprenorphine) as the prior drug of dependence enables a subject with opiate addiction to function normally with little or no drug craving. Naltrexone can aid in the maintenance of the opiate-free state. If a former addict “slips” and takes a dose of heroin while taking maintenance naltrexone, the effects will be neutralized. Many report no craving possibly because they learn that opiates are unavailable because of the receptor blockade (O'Brien, 2005).

5. Anticraving agents for Inhalant abuse

Sharp & Rosenberg (1997) reported that pharmacotherapy is not usually useful in inhalant abuse. Once detoxified, antidepressants, anxiolytics, or neuroleptics can be used as an adjunct to counseling, depending on the problems that initially contributed to person's use.

IMMUNOTHERAPY FOR THE TREATMENT OF DRUG ABUSE

Antibody therapy prevents drugs of abuse from entering the CNS and reduce rush, euphoria. This is accomplished through a pharmacokinetic antagonism which reduces the amount of drug in the brain, the rate of clearance across the blood–brain barrier and the volume of drug distribution. Active immunization with drug–protein conjugate vaccines has been tested for cocaine, heroin, methamphetamine, and nicotine in animal and passive immunization with high affinity monoclonal antibodies has been tested for cocaine, methamphetamine, nicotine, and phencyclidine in preclinical animal models. The specificity of the therapies (table 1), the lack of addiction liability, minimal side effects (itching and redness at injection site) and long-lasting protection offer major therapeutic benefits Kosten & Owens (2005).

Table 1: Current status of vaccines in clinical trials (Frank et al., 2008)

Vaccine	Drug-Carrier	Human Studies
TA-NIC	Nicotine – cholera toxin b	Phase I Phase II
TA-CD	Cocaine – cholera toxin b	Phase I Phase IIa Phase IIb
NicVax	Nicotine – Pseudomonas exoprotein A	Phase I Phase II
NicQb	Nicotine – virus like particle	Phase I Phase II Phase IIb

PSYCHOLOGICAL MANAGEMENT OF CRAVING

Psychological treatment for reducing craving can be placed under broad two categories:

1. Procedures that are designed to decrease the likelihood of the onset of craving that include stimulus control, cue exposure, aversion therapy, coping imagery and self-monitoring.
2. Procedures that are designed to decrease the intensity and duration of craving include cognitive and behavioural skill training.
 - *Stimulus control*- Externally triggered craving can be reduced by minimizing exposure to the cues. Simple avoidance of the situation is the best strategy especially in those filled with multiple cues for indulgence, before coping responses are strong Marlatt & Witkiewitz (2005).
 - *Cue Exposure*- Cue exposure involves repetitive exposure to cues, producing extinction of craving responses. It is most effective when exposure to drug cues is paired with strategies designed to combat everyday temptations. Efficacy in reducing relapse to alcohol, nicotine, opiates, and cocaine is seen.
 - *Aversion therapy*- Aversion therapy involves pairing of alcohol cues with an aversive stimulus, a procedure by which alcohol cues come to elicit an aversive reaction rather than craving. In contrast to cue-exposure, the goal of aversion therapy is to increase reactivity to alcohol cues, because such cue reactivity is assumed to reflect conditioned nausea. Increased bodily reaction following aversive reaction should be associated with successful outcome (Baker et al., 1987).
 - *Coping Imagery*- “Urge Surfing” technique can be used to gain control by the patients. Client first labels the internal sensations and cognitive preoccupations as an urge or craving and then fosters an attitude of

detachment and disidentification regarding the wave of desire. Clients are initially taught the urge surfing technique through guided imagery and then to try it on their own whenever they are exposed to substance cues. Clients are asked to include four D's: Delay, Distract, Drinking water, and Deep breathing (Marlatt & Witkiewitz, 2005).

- *Self-Monitoring of Urges and Craving – The Craving Diary:* The client is asked to keep track of the internal and external cues that stimulate craving, their mood, the strength of craving, how long it lasted, coping skills such as urge surfing used to cope with craving, and how successful or unsuccessful these coping strategies were (Marlatt & Witkiewitz, 2005).
- *Social skills training-* These include learning to refuse like patient refusing a real glass of beer, thereby learning to emit appropriate response under realistic condition, others being like asking a friend to forego drinking in one's presence (Baker et al., 1987).
- *Cognitive strategies-* These include remembering the consequence of consuming or not consuming, reappraisal of the situation, remembering one's commitment to abstinence, remembering that cravings and desires for substances eventually go away, thinking positive and tell oneself that she/he can fight off craving, talking oneself through the craving, praying or asking for strength from higher power, practicing ahead of time how to refuse substance offers (Baker et al., 1987).

CONCLUSION

There is a need to move away from clinically based and simplistic causal definitions and models of the relationship between cravings and relapse. There is a need for greater sophistication and standardization in methods of measurement of craving including further development of research paradigms. With the arrival of new, promising medications aimed at preventing relapse, there is a potential for better craving measurement which would allow the identification of individuals that are most likely to benefit from drugs thereby improving cost-effectiveness. Such research is likely to include the use of neuroimaging studies to investigate the effects of medications on craving and brain function.

REFERENCES

Addolorato, G., Leggio, L., Abenavoli, L., et al. (2003) Suppression of alcohol delirium tremens by baclofen administration: A case report. *Clinical Neuropharmacology*, 26, 258–262.

Agabio, R., Colombo, G., Carai, M.A.M., et al. (2001) Novel pharmacotherapies and patents for alcohol abuse

and alcoholism. *Expert opinion on therapeutic targets*, 11, 1496–1520.

American Psychiatric Association. (1994) *Diagnostic and statistical manual of mental disorders*, Washington, DC.

Anton, R., Moak, D., Latham, P. (1995) The Obsessive Compulsive Drinking Scale (OCDS): a new method of assessing outcome in alcoholism treatment studies. *Archives of General Psychiatry*, 53, 225–231.

Anton, R. (1999) What is craving: models and implications for treatment. *Alcohol Research and Health*, 23, 165–173.

Anton, R.F. (2008) Naltrexone for the management of alcohol dependence, *New England Journal of Medicine*, 359, 715-721.

Baker, L.H., Cooney, N.L., Pomerleau, O.F. (1987) Craving for alcohol: Theoretical processes and treatment procedure. In: Cox, W.M., (Ed). *Treatment and prevention of alcohol problems*, pp. 184-199, Harcourt brace Jovanovich: San Diego.

Baker, T., Morse, E., Sherman, J. (1986) The motivation to use drugs: a psychobiological analysis of urges. *Nebraska Symposium on Motivation*, 34, 257–323.

Besson, J., Aebly, F., Kasas, A., et al. (1998) Combined efficacy of acamprosate and disulfiram in the treatment of alcoholism: a controlled study. *Alcoholism, Clinical and Experimental research*, 22, 573-579.

Breiner, M., Stritzke, W., Lang, A. (1999) Approaching avoidance: a step essential to the understanding of craving. *Alcohol Research and Health*, 23, 197–206.

Brewer, C. (2005) Supervised disulfiram is more effective in alcoholism than naltrexone or acamprosate or even psychotherapy: how it works and why it matters. *Addiction*, 17, 222-233.

Caputo, F., Addolorato, G., Domenicali, M., et al. (2002) The Services for Addiction Treatment: Short-term methadone administration reduces alcohol consumption in non-alcoholic heroin addicts. *Alcohol Alcoholism*, 37, 164–168.

Carroll, K.M., Fenton, L.R., Ball, S.A. (2004) Efficacy of disulfiram and cognitive behaviour therapy in cocaine-dependent outpatients: a randomized placebo-controlled trial. *Archives of General Psychiatry*, 61, 264–272.

Chang, L., Ernst, T., Strickland, T., et al. (1999) Gender effects on persistent cerebral metabolite changes in the frontal lobes of abstinent cocaine users. *The American Journal of Psychiatry*, 156, 716–722.

Collins, R.L., & Lapp, W. M. (1992) The Temptation and Restraint Inventory for measuring drinking restraint. *British Journal of Addiction*, 87, 625–633.

Compton, P.A., Ling, W., Charuvastra, V.C. (1995)

- Buprenorphine as a pharmacotherapy for cocaine abuse: A review of the evidence. *Journal of Addictive Diseases*, 14, 97-114.
- Cornelius, J.R., Salloum, I.M., Ehler, J.G. (1997) Fluoxetine in depressed alcoholics. A double-blind, placebo-controlled trial. *Archives of General Psychiatry*, 54, 700-705.
- Cox, W., & Klinger, E. (1988) Amotivational model of alcohol use. *Journal of Abnormal Psychology*, 97, 168-180.
- Dahchour, A., & DeWitte, P. (2003) Effects of acamprosate on excitatory amino acids during multiple ethanol withdrawal periods. *Alcoholism, Clinical and Experimental Research*, 27, 465-470.
- Dhawan, A., & Jhanjee, S. (2007) Manual for long-term pharmacotherapy, National Drug Dependence Treatment Centre, All India Institute of Medical Sciences: New Delhi.
- Drummond, D. (2000) What does cue-reactivity have to offer clinical research? *Addiction*, 92, 129-144.
- Eysenck, H. J., & Eysenck, M. W. (1985) Personality and individual differences. Plenum Press: New York.
- Fawcett, J., Kravitz, H.M., McGuire, M. (2000) Pharmacological treatment for alcoholism: Revisiting lithium and considering buspirone. *Alcoholism, Clinical and Experimental Research*, 24, 666-674.
- Frank, M., Berma, M., Rana A.K. (2008) Substance Abuse Vaccines *Annals of the New York Academy of Sciences*, 1141, 257-269.
- Franken, I.H.A. (2002) Behavioural approach system (BAS) sensitivity predicts alcohol craving. *Personality and Individual Differences*, 32, 349-355.
- Grabowski, J., Schmitz, J., Roache, J.D., et al. (1994) Methylphenidate (MP) for initial treatment of cocaine dependence and a model for medication evaluation. *Problems of Drug Dependence Proceedings of the 55th Annual Scientific Meeting, The College on Problems of Drug Dependence, Inc; Washington, DC: NIH Pub. No. 94-3749. Supt. of Docs., US Govt. Print. Off.*
- Gray, J. (1987) Perspectives on anxiety and impulsivity: a commentary. *Journal of Research in Personality*, 21, 493-509.
- Handelsman, L., Limpitlaw, L., Williams, D. (1995) Amantadine does not reduce cocaine use or craving in cocaine-dependent methadone maintenance patients. *Drug and Alcohol Dependence*, 39, 173.
- Hart, C.L., Haney, M., Ruben, E. (2006) Smoked cocaine self-administration decreased by modafinil maintenance: preliminary findings. Presented at International Study Group for the Investigation of Drug as Reinforcers Annual Meeting, Scottsdale, AZ.
- Johnsen, J., & Marland, J. (1992) Depot preparations of disulfiram: experimental and clinical results. *Acta Psychiatrica Scandinavica*, 86, 27-30.
- Johnson, B.A., Ait-Daoud, N., Aubin, H.J. (2004) A pilot evaluation of the safety and tolerability of long acting injectable naltrexone in patients with alcohol dependence. *Alcoholism, Clinical and Experimental Research*, 28, 1356-1361.
- Johnson, B.A., Rosenthal, N., Capece, J.A. (2008) Improvement of physical health and quality of life of alcohol-dependent individuals with topiramate treatment: US multisite randomized controlled trial. *Archives of Internal Medicine*, 168, 1188-99.
- Jorenby, D.E., Hatsukami, D.K., Smith, S.S., et al. (1996) Characterization of tobacco withdrawal symptoms: transdermal nicotine reduces hunger and weight gain. *Psychopharmacology*, 128, 130-138.
- Jorenby, D.E., Hays, J.T., Rigotti, N.A., et al. (2006) Efficacy of varenicline, an $\alpha 4\beta 2$ nicotinic acetylcholine receptor partial agonist, vs placebo or sustained-release bupropion for smoking cessation: a randomized controlled trial. *The Journal of the American Medical Association*, 296, 56-63.
- Kampman, K.M., Pettinati, H., Lynch, K.G. (2003) A pilot trial of olanzapine for the treatment of cocaine dependence. *Drug and Alcohol Dependence*, 70, 265-273.
- Kampman, K.M., Pettinati, H., Lynch, K.G. (2004) A pilot trial of topiramate for the treatment of cocaine dependence. *Drug and Alcohol Dependence*, 75, 233-240.
- Kampman, K.M., Volpicelli, J.R., Mulvaney, F., et al. (2002) Effectiveness of propranolol for cocaine dependence treatment may depend on cocaine withdrawal symptom severity. *Drug and Alcohol Dependence*, 63, 69-78.
- Koob, G.F., & Le Moal, M. (2008) Addiction and the brain antireward system. *Annual Review of Psychology*, 59, 29-53.
- Kosten, T., & Owens, S.M. (2005) Immunotherapy for the treatment of drug abuse. *Pharmacology & Therapeutics*, 108, 176-85.
- Kozlowski, L., & Wilkinson, D. (1987) Use and misuse of the concept of craving by alcohol, tobacco, and drug researchers. *British Journal of Addiction*, 82, 31-36.
- Kranzler, H.R. (2000) Pharmacotherapy of alcoholism: gaps in knowledge and opportunities for research. *Alcohol*, 35, 537-547.
- Kuzmin, A., Semenova, S., Ramsey, N.F., et al. (1996) Modulation of cocaine intravenous self-administration in drug naive animals by dihydropyridine Ca²⁺ channel

- modulators, *European Journal of Pharmacology*, 295, 19.
- Levy, J.V. (2009) *Pharmacology and Abuse of Cocaine, Amphetamines, Ecstasy and Related Designer Drugs*, pp. 99-102, Springer Dordrecht Heidelberg: New York.
- MacKillop, J., & Monti, P. (2007) Advances in the scientific study of craving for alcohol and tobacco. In: Miller, P, Kavanagh, D. (Eds.), *Translation of Addictions Science into Practice*, pp.189–209, Elsevier: Oxford.
- Mann, K. (2004) Pharmacotherapy of alcohol dependence: a review of the clinical data. *CNS Drugs*, 8, 485-504.
- Marlatt, G., & Witkiewitz, K. (2005) Relapse prevention for alcohol and drug problems. In: Marlatt, G.A, Donovan, D.M. (Eds.), *Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviours*, pp. 1–44, Guilford Press: New York.
- Marlatt, G. (1985) Cognitive factors in the relapse process. In: Marlatt, G., Gordon, J. (Eds.), *Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviours*, pp. 128–200, Guilford Press: New York.
- Neufeldt, V. (1990) *Webster's new world dictionary*. Warner Books: New York.
- Nunes, E.V., McGrath, P.J., Quitkin, F.M. (1995) Imipramine treatment of cocaine abuse: possible boundaries of efficacy. *Drug and Alcohol Dependence*, 39, 185.
- O'Brien, C.P. (2005) Anticraving Medications for Relapse Prevention: A Possible New Class of Psychoactive Medications. *The American Journal of Psychiatry*, 162, 1423–1431.
- Paulus, M.P., Tapert, S.F., Schulteis, G. (2009) The role of interoception and alliesthesia in addiction. *Pharmacology, Biochemistry, and Behaviour*, 94, 1–7.
- Pettinati, H.M., O'Brien, C.P., Rabinowitz, A.R. (2006) The status of Naltrexone in the treatment of alcohol dependence: specific effects on heavy drinking. *Journal of Clinical Psychopharmacology*, 26, 610-625.
- Rankin, H., Hodgson, R., Stockwell, T. (1979) The concept of craving and its measurement. *Behaviour Research and Therapy*, 17, 389–396.
- Redish, A.D. (2004) Addiction as a computational process gone awry. *Science*, 306, 1944–1947.
- Richardson, K., Baillie, A., Reid, S., et al. (2008) Do acamprosate or naltrexone have an effect on daily drinking by reducing craving for alcohol? *Addiction*, 103, 953-959.
- Robinson, T., & Berridge, K. (1993) The neural basis of craving: an incentive-sensitization theory of addiction. *The Behavioural and Brain Sciences*, 18, 247–291.
- Rosenberg, H. (2009) Clinical and laboratory assessment of the subjective experience of drug craving. *Clinical Psychology Review*, 29, 519–534.
- Shadel, W.G., Niaura, R., Abrams, D.B. (2004) Thinking about craving: An experimental analysis of smokers' spontaneous self-reports of craving. *Addictive Behaviours*, 29, 811–815.
- Sharp, C.W., & Rosenberg, N.L. (1997) Inhalants. In: Lowinson, J.H., Ruiz, P., Millman, R. B., Langrod, J.G. (Eds.), *Substance abuse: A comprehensive textbook* (3rd ed), pp. 246–264, Williams & Wilkins: Baltimore, MD.
- Shaw, G.K., Waller, S., Majumdar, S.K. (1994) Tiapride in the prevention of relapse in recently detoxified alcoholics. *The British Journal of Psychiatry*, 165, 515–523.
- Skinner, M.D., & Aubin, H.J. (2010) Craving's place in addiction theory: Contributions of the major models. *Neuroscience and Biobehavioural Reviews*, 34, 606–623.
- Spanagel, R., & Mann, K.F. (2005) *Drugs for Relapse Prevention of Alcoholism*, pp. 108-114, Springer: London.
- Stewart, J., deWit, H., Eikelboom, R. (1984) Role of unconditioned and conditioned drug effects in the self administration of opiates and stimulants. *Clinical Child and Family Psychology Review*, 91, 251–268.
- Suh, J.J., Pettinati, H.M., Kampman, K.M., et al. (2006) The status of Disulfiram: a half of a century later, *Journal of Clinical Psychopharmacology*, 26, 290-302.
- Tiffany, S. (1999) Cognitive concepts of craving. *Alcohol Research & Health*, 23, 215–224.
- Verheul, R., Van Den Brink, W., Geerlings, P. (1999) A three-pathway psychobiological model of craving for alcohol. *Alcohol Alcoholism*, 34, 197–222.
- Vohs, K., & Schmeichel, B. (2003) Self-regulation and the extended now: controlling the self-alter the subjective experience of time. *Journal of Personality and Social Psychology*, 85, 217–230.
- Weiss, R.D., Martinez-Raga, J., Griffin, M.L. (1997) Gender differences in cocaine dependent patients: a 6 month follow-up study. *Drug and Alcohol Dependence*, 44, 35–40.
- WHO Expert Committees on Mental Health and on Alcohol. (1955) The 'craving' for alcohol. *Journal of Studies on Alcohol*, 16, 33–66.
- Wiesbeck, G.A., Weijers, H.G., Lesch, O.M. (2001) Flupenthixol decanoate and relapse prevention in alcoholics: Results from a placebo-controlled study. *Alcohol*, 36, 329–334.
- World Health Organisation. (1992) *The ICD-10*

Classification of Mental and Behavioural Disorders:
Clinical Descriptions and Diagnostic Guidelines, WHO,
Geneva.

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SUBSTANCE ABUSE AMONG STREET CHILDREN: COMMUNITY RISK AND PROTECTIVE FACTORS

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Abstract

Background: The aim of the current research was to understand the community risk and protective factors for substance abuse among street children. The objectives of the study were; to assess the psychosocial profile of the street children and to study the community risk and protective factors among street children with and without substance abuse. **Methods:** The descriptive research design was opted for the study. The total no of 60 street children were randomly selected for the study which comprised 30 children with active substance use and 30 non users of male street children in Bangalore between the ages of 12 to 18 years. The tools used for the study were: Semi structure interview schedule, Check list for community risk and protective factors developed by the researcher. The researcher has collected the data for current study in collaborating with two non-governmental organizations namely SATHI and BOSCO-NILAYA at Bangalore, India. **Results:** There were certain factors present in the community which prevent the children not to use substance in difficult circumstances, known as protective factors. Similarly there were some other factors in the same which increased the chances/vulnerability of using the substance while they were on the street, known as risk factor. There were significant differences of the community risk factors { $t = 2.670$, $df = 58$, $p < 0.01$ } and protective factors ($t = -10.478$, $df = 58$, $p < 0.001$) between the user group and non user group. **Conclusion:** Community or environmental factors are not solely responsible for children to choose substance when they are in difficult circumstance. There are other risk and protective factor also present for the children in the form of Family, School, and Peer, which deserve further investigation.

Key words: Risk factors, Protective factors, Community, Street children.

INTRODUCTION

Street children constitute a marginalized group in most societies. They do not have what society considers appropriate relationships with major institutions of childhood such as family, education and health. The continuous exposure to harsh environments and the nature of their lifestyles make them vulnerable to substance use and this threatens their mental, physical, social and spiritual wellbeing. In many regions most of these children use alcohol and other psychoactive substances. In addition, these children are confronted with discrimination and view health and social services with suspicion. Street children live a transitory life style and are vulnerable to inadequate nutrition, physical injuries, substance use, and health problems including sexual and reproductive health problems. Street children exist in every part of the world and large groups of children unsupervised by adults have appeared in almost every country during some part of history. Most are found in large, urban areas of developing countries. It is estimated that there are between 10 and 100 million street children in the world today (WHO).

Some street children are part of entire families who live on the street. Some street children are '*on the street*,' which means that they still see their families regularly

and may even return every night to sleep in their family homes. Children '*of the streets*,' on the other hand, have no home but the streets. Even if they occasionally spend time in institutions for children or youths, they consider the streets to be their home. (WHO working Module-1)

The reasons why street children live on the street vary. However, there is one explanation that holds true for both developed and developing countries - **poverty**. Most street children go onto the street to look for a better way of life. The following are some of the common reasons- To earn money for themselves and support their families, find shelter, escape from family problems including rejection, escape from work demands in the home and escape from a children's institution. (WHO working Module-3)

Situation in India

UNICEF estimated 11 million street children in India in 1994, which is considered to be conservative. It also estimated 100,000 - 125,000 street children each in Mumbai, Kolkata and Delhi, with 45,000 in Bangalore. An another official figure available from a 1997 report of the DWCD, Ministry of HRD, Government of India stated that 11 million children lived on the street at that time, of which 4,20,000 lived in the six metropolitan

cities of the country. But these data are 8-12 years old and almost no effort has been made to update them (Childline India Foundation).

in his study sponsored by UNICEF in collaboration with ministry of welfare, conducted in 6 major cities, Mumbai, Chennai, Kolkata, Hyderabad, Bangalore and Kanpur in India has estimated there are 4,14,700 street children in these cities, and 4,00,000 to 8,00,000 homeless children in urban India. The estimate for the three metropolis of India Mumbai, Kolkata and Delhi is 1, 00,000 each. A very rough estimate would place the number of street children in the city of Bangalore at around 80,000. About 60 children land up at the Bus Station alone, every day, having run away from home .

What are Risk Factors and Protective Factors?

Studies over the past two decades have tried to determine the origins and pathways of drug abuse and addiction—how the problem starts and how it progresses. Many factors have been identified that help differentiate those more likely to abuse drugs from those less vulnerable to drug abuse. Factors associated with greater potential for drug abuse are called “risk” factors, while those associated with reduced potential for abuse are called “protective” factors. However, most individual at risk for drug abuse do not start using drugs or become addicted. Also, a risk factor for one person may not be for another. Risk factors can influence drug abuse in several ways. They may be additive: The more risks child is exposed to, the more likely the child will abuse drugs. Some risk factors are particularly potent, yet may not influence drug abuse unless certain conditions prevail.

MATERIALS AND METHODS

The present study was conducted with the following objective-To assess the psychosocial profile of the street children and study the community risk and protective factors for substance abuse among street children. A total sample of 60 street children were randomly selected for the study which comprise of 30 children with active substance use and 30 non users from the Non-Government Organizations working with the street children in Bangalore. The Descriptive research design was adopted for the present study. The inclusion criteria of the study was male Children between 12 to 18 years of age who are staying on streets and the exclusion criteria was female children, children with developmental disorders and any major psychotic illness.

A semi structured interview schedule was prepared by

the researcher to gather personal data and socio-demographic profile of the respondents. The schedule were consisted of both open ended and close-ended questions to bring out the specific issues like personal, family, social life, economic, health status and street life. This was prepared by the researcher based on extensive and systematic literature review and discussions with experts in the field.

Based on review of literature a comprehensive check list was developed to assess the community risk and protective factors which were suitable to assess this population. The check list was given to 5 experts in the field for face validation. The community domain consisted of 21 positives and negative questions. The checklist is having total 64 questions including the socio-demographic details, personal history and work history. The checklist was applied on the 5 street children before final administration on subjects. Initially the check list has more number of questions, after the pilot testing the irrelevant questions were eliminated from the list.

The researcher collected data from two different NGO called BOSCO-NILAYA and SATHI at Bangalore, working on street children. The investigator attended the camp organized by the SATHI. It was part of their project to conduct camp for street children in remote areas and rehabilitate them. The duration of the camp was one month. The researcher stayed in the camp and collected the data from the respondents by using interview method with the help of NGO worker. BOSCO-NILAYA is a half way home for the street children, where the investigator collected data by using the same method.

The collected data was analyzed by using the computerized programme of Statistical Package for Social Science (SPSS), version 16.0. Descriptive statistics that includes frequency distribution, mean, standard deviation item distribution of the questionnaire were applied to find out the univariate characteristics of the independent and dependent variables. Chi square test were carried out to check the homogeneity of the respondents profile from the non-user group and user group. Chi square test was also used to find out the difference in the frequency distribution of the individual items of the community risk and protective factors between the non-user and user group. While finding out the difference in the frequency distribution between the two groups i.e., non-user and user group, the researcher used the Fisher's exact test. The independent t test was used to find out the difference in community risk and protective factors between the

user and non-user group.

RESULTS

Section I: Personal Profile of the Respondents

The mean age of the non-user group was 13.97 years and the mean age of the user group was 14.07 years. The t - test to find out the significant difference between the age of the street children in two groups, shows no significant difference ($t = -.280, p > 0.05$) between the age of street children of two groups.

The mean education of the non user group was 6.07 years and the mean education of the user group was 5.67 years. The t - test to find out the significant difference between the education of the street children in two groups shows no significant difference ($t = -.575, p > 0.05$) between the education of street children of two groups.

Out of 60 children, majority of the children, 47 (78%) were coming from govt. coeducation school and 07 (11%) were from the govt. boys school. A total no of 06 (10%) children were illiterate out of 60. According to the group wise distribution, 23 (76.71%) of the children in non user group and 24 (80%) of children in user group were from govt. coeducation school. Similarly, 03 (10%) of children in non user group and 04 (13.3%) children of user group were from govt. boys school. Chi square test shows there is no significant difference ($p > 0.05$) between the children from govt. coeducation school and govt. boys school in non user and user group.

Majority of the children, 51 (85%) were hailing from nuclear family and 09 (15%) were from the joint family. According to the group wise distribution, 26 (86.7%) of the children in non user group and 25 (83.3%) of children in user group were from nuclear family. Similarly, 04 (13.3%) of children in non user group and 05 (16.7%) children of user group were from joint family. Chi square test shows there is no significant difference ($p > 0.05$) between the children from nuclear family and joint family in non user and user group.

A sizeable no of the children in non user and user group- 25 (83.3%) and 21 (70%) respectively-were belongs to Hindu religion. 13.3% and 26% were Muslim respectively from non user and user group. Chi square test shows there was no significant difference ($p > 0.05$) among types of religion in two groups.

Out of 60 children, majority of the children, 55 (91.7%) were hailing from Lower socio-economic strata of the society and 05 (8.33%) were from the Middle socio-economic status. According to the group wise

distribution, 26 (86.7%) of the children in non user group and 29 (96.7%) of children in user group were from the lower socio-economic strata. Similarly, 04 (13.3%) of children in non user group and 01 (3.3%) children of user group were from the Middle socio-economic strata of the society. Chi square test shows there is no significant difference ($p > 0.05$) between the children from LSES and MSES in non user and user group.

Out of 60 children 10 (16.66%) were left school because of different family issues, 11 (18.33%) were due to issues in school, 10 (16.66%) were illiterate and a majority of children 29 (48.33%) were left school because of peer influence and not interested in study. According to the group wise distribution, 14 (46.66%) of the children in non user group and 15 (50%) of children in user group were left the school due to peer influence and not interested in studies. Similarly, 06 (20%) children in non user group and 04 (13.33%) children of user group because of family reason, 03 (10) and 8 (26.66%) were left the school due to issues in school respectively in nonuser and user group. Chi square test shows there is no significant difference ($p > 0.05$) between the children in non user and user group who left the school for various reasons.

Section II: Community Protective and Risk Factors

Community Risk Factors:

Table-1 shows the significant difference in the individual items of community risk factors between the user and non user group. Fisher exact test shows that 73.9 % of children in user group were known to the adults who sold drugs when compare to 26.1% of the non user group which is significantly higher ($p < 0.01$).

There is no significant difference ($p > 0.05$) between user and non user group in the remaining items of community risk factors such as Is it easy if you wanted to get some beer, wine or hard liquor, Is it easy if you wanted to get some marijuana, How many adults you know who is involved in antisocial activities, Neighbours are fight characteristic, Lots of abandons building in neighbourhood, Population density is high in my neighbourhood and People move in and out in my neighbourhood.

Table-2 shows the difference in the community risk factors between the user and non user group. The user group scored a mean score of 4.43 compared to the mean score of 3.53 among the non user group. Independent sample t test shows that there is a significant difference ($t = 2.670, df = 58, p < 0.01$)

between user and non user group. The user group has more community related risk factors when compared to the non-user group.

Community Protective Factors:

Table-3 shows the significant difference in the individual items of community protective factors between the user and non user group. Fisher exact test shows that 80 % of children in non user group were noticed by neighbour when doing good job when compare to 6.7 % of the user group. The 73.3 % of the nonuser group had lots of adults in neighbour to talk something important when compare to 3.3% of user group. The 96.7 % of children in nonuser group had Sports teams' availability, when compared to 53.3% of children in user group. The 70 % of children in nonuser group were encouraged by neighbours to do their best, when compared to 6.7 % of children in user group which is significantly higher ($p < 0.001$).

There is no significant difference ($p > 0.05$) between user and non user group in the remaining items of community protective factors such as If a kid smoked marijuana, they caught by police, If a kid drink beer, wine and hard liquor, they caught by police, I like my neighbourhood area and I feel safe in neighbourhood.

Table-4 shows the difference in the community protective factors between the user and non user group. The user group scored a mean score of 2.50 compared to the mean score of 5.80 among the non user group. Independent sample t test shows that there is a significant difference ($t = -10.478$, $df = 58$, $p < 0.001$) between user and non user group. The non user group has more community related protective factors when compared to the user group.

DISCUSSION

The study on substance abuse among street children was conducted with the aim to assess the community risk and protective factors for substance abuse among street children. The results of the study are divided into two subsections, namely, **Section-1:** Personal profile of the respondents. **Section-2:** Community protective and risk factors.

Section I: Personal Profile of the Respondents

The children participated in the study ranged from the ages between 12 years to 18 years. The mean age of the non user group was 13.97 years and the user group was 14.07 years. The analysis shows no significant difference between the age of the street children between the user and non user groups. A point has to

be made that the mean age of the children in both the groups are similar. This indicates that though the vulnerability of being introduced to the drugs is same on both the age group the children in the user group choose it in a particular way to start it as a habit. Various studies done across the globe also points out to similar age variables. This points out that the predominant age group of children who start living in the street are in their adolescent or early adolescent. This shows that children belongs to this age group are particular vulnerable and the emphasis on empathetic care giving by the parents or care taker should be highlighted. The mean education of the street children in the present study is 6.07 and 5.67 for non user and user group respectively. The analysis shows no significant difference between the types of school of the street children between the user and non user groups. Majority of street children (78%) were coming from govt. coeducation school, 11% from govt. boys school and 10% were illiterate. It reflects that the children who have obtained for the current study were exposed to similar sort of scholastic environment.

The present study did not find any significant difference between the types of family of non user and user group. Most of the street children (85%) belong to nuclear family of both the group and 15% were from joint family. This points out that the parenting or care taking of the street children were seems to be similar in terms of family structure.

There was no significant difference in the religion of the street children. The maximum number of the children under the study belong to Hindu (77%), 20% were Muslim and 3.3% were Christian. It reflects that there were no variation of religion of street children and religion is not a predisposing factor. The children were on the street irrespective of their religion.

The analysis shows no significant difference in the socio-economic status of street children between the user and non user groups. The 91.7% were hailing from Lower socio-economic strata of the society, 8.33% were from the Middle socio-economic status and no one from upper socioeconomic strata. The current study reflects that the socio-economic status has an indirect role for the children to be on the street. The majority of the children were found to be lower socio-economic strata of the society. The issues like poverty, illiteracy etc were the underlying causes for children on street or run away from home.

There was no significant difference in the reason for

leaving school of street children between the user and non-user group. The analysis shows that majority (48.3%) of the street children leave the school because of peer influence and not interested in study whereas 18.3% due to issues in school, 16.7% due to family issues and 16.7% were illiterates. The issues in school include fight with friend at school, punitive teacher, failed in examination etc. The family includes father forced for work, poverty, taking care of siblings etc. school is an important factors for the children to be on the street.

Section II: Community Protective and Risk Factors

Fisher exact test shows the significant difference in the individual item of community risk factor between the user and non user group such as known to the adults who sold drugs (table-1). Community is most important domain to mould the children's behaviours. The community domain includes the environmental factor too. In the present study the user group were more familiar to the adult who sold drugs when compared to the non-user group. This may influence the children up to a great extent when they were in difficult circumstance to choose substance.

The Independent sample t test shows the difference in the community risk factors between the user and non-user group. The user group scored a mean score of 4.43 compared to the mean score of 3.53 among the non user group (table -2). The user group has more community related risk factors when compared to the non-user group.

Fisher exact test shows the significant difference in the individual items of community protective factors between the user and non user group such as noticed by neighbour when doing good job, lots of adults in neighbour to talk something important, Sports teams' availability and encouraged by neighbours to do their best (table -3). As we mentioned earlier that community domain includes environmental factors too, if the environment is not favourable the children may get affected by the negative aspect of it. Similarly if the environment is healthy the children can be influenced by it. The present study is able to find out certain aspect in the community which is healthy and statistically significant. The above mentioned factors were present in the non-user group and its lacking in user group. When the child is attached to the neighbourhood there may be fewer chances to be deviant. The above mentioned factors prevent the children not to choose substance while on the street.

The independent sample t test shows the difference in the community protective factors between the user and non user group. The user group scored a mean score of 2.50 compared to the mean score of 5.80 among the non user group (table -4). The individual items of community factors were found to be collectively differing from user to non-user group. The non-user group has more community related protective factors when compared to the user group.

From the above discussion it is obvious that the healthy environment and positive attitude of neighbours were preventing the children from substance in difficult circumstances, which is known as community protective factors. On the other hand unhealthy environment in the community creating vulnerable situation for the children and because of this they have high chance of choosing substance while on the street, which is known as community risk factors. The above mentioned findings are substantiated with the various literatures such as ; CASP hand book, UNODC's approach for anti-drug programme; National Centre for Mental Health Promotion and Youth Violence Prevention programme; Social Development Research Group; Joseph Rowntree Foundation - 2002 and National Institute On Drug Abuse; ; Preventing Drug Use Among Children And Adolescents-A Research-Based Guide for Parents, Educators And Community Leaders etc.

CONCLUSION

The main conclusion drawn from this study is that both the risk factors and the protective factors are present in the community. As per the study findings it can be inferred that more the risk factors higher the chance of choosing substance when the children are in difficult circumstances. Similarly, higher the protective factors lesser the chance of substance use. But the risk and protective factors are just a prediction; it can work as an indicator for the children and it may vary.

Many NGOs are working for the street children; their main focus is on promotive aspects like rehabilitation, service etc. Very few are working on preventive aspects. The present study findings may help the service provider to design a tailor made intervention plan to prevent the substance use among street children.

Table-1: Community Risk Factors

Sl. No.	Item	Category	User group		Non user group		p-value
			N	%	N	%	
1.	Is it easy if you wanted to get some beer, wine or hard liquor?	Yes	30	100	28	93.3	0.492
		No	00	00	02	6.7	
2.	Is it easy if you wanted to get some marijuana?	Yes	29	97.3	24	80.0	0.103
		No	01	3.3	06	20.0	
3.	How many adults you know who sold drugs	Yes	17	73.9	06	26.1	0.007
		No	13	35.1	24	64.9	
4.	How many adults you know who is involved in antisocial activities.	Yes	12	40.0	06	20.0	0.158
		No	18	60.0	24	80.0	
5.	Neighbours are fight characteristic	Yes	09	30.0	07	23.3	0.771
		No	21	70.0	23	76.7	
6.	Lots of abandons building in neighbourhood?	Yes	01	3.3	01	3.3	1.000
		No	29	96.7	29	96.7	
7.	Population density is high in my neighbourhood	Yes	26	86.7	27	90.0	1.00
		No	04	13.3	03	10.0	
8.	People move in and out in my neighbourhood	Yes	09	30.0	07	23.3	0.771
		No	21	70.0	23	76.7	

Table - 2: Community Risk Factors

Group	N	Mean	SD	t	df	p-value
User	30	4.43	1.25	2.670	58	0.010
Nonuser	30	3.53	1.35			

Table-3: Community Protective Factors

Sl. No.	Item	Category	User group		Non user group		p-value
			N	%	N	%	
1.	If a kid smoked marijuana, they caught by police	Yes	00	00	00	00	00
		No	30	100	30	100	
2.	If a kid drink beer, wine and hard liquor, they caught by police	Yes	00	00	00	00	00
		No	30	100	30	100	
3.	Neighbour noticed when doing good job	Yes	02	6.7	24	80.0	0.000
		No	28	93.3	06	20.0	
4.	I like my neighbourhood area	Yes	26	86.7	30	100	0.112
		No	04	13.3	00	00	
5.	Lots of adults in my neighbour to talk something important	Yes	01	3.3	22	73.3	P<0.001
		No	29	96.7	08	26.7	
6.	Sports teams are available.	Yes	16	53.3	29	96.7	P<0.001
		No	14	46.7	01	3.3	
7.	I feel safe in neighbourhood	Yes	26	86.7	30	100	0.112
		No	04	13.3	00	00	
8.	My neighbours are encourage me to do my best	Yes	02	6.7	21	70.0	P<0.001
		No	28	93.3	09	30.0	

Table - 4: Community Protective Factors

Group	N	Mean	SD	T	df	p-value
User	30	2.50	1.13	-10.478	58	P<0.001
Nonuser	30	5.80	1.29			

REFERENCE

- Benegal, V., Bhushan, K., Seshadri, S., Karott, M. . (1998). Drug Abuse Among Street Children in Bangalore . Available at : http://www.nimhans.kar.nic.in/deaddiction/CAM/Drug_Abuse_Street_Children_Bangalore.pdf ENREF 1 (last accessed on April 17, 2010)
- Cadell, S., Karabanow, J., & Sanchez, M. (2001). Community, empowerment, and resilience: paths to wellness. *Can J Commun Ment Health*, 20(1), 21-35.
- Center for Substance Abuse Prevention (CSAP) Washington-National Prevention Network (NPN) *Prevention Works! Develop Prevention Handbook December 2006.*
- Child Line India Foundation (2010) Child in India. Available at <http://www.childlineindia.org.in/child-in-india.htm> (last accessed on April 10, 2010)
- Family Risk Factors for Youth High-Risk Behavior- Office of Alcohol and Drug Abuse Prevention, Division of Behavioral Health Services 305 South Palm Street Little Rock, AR 72205 (501) 686-9030
- Gaidhane, A. M., Syed Zahiruddin, Q., Waghmare, L., Shanbhag, S., Zodpey, S., & Joharapurkar, S. R. (2008). Substance abuse among street children in Mumbai. *Vulnerable Children and Youth Studies*, 3(1), 42-51. doi: 10.1080/17450120701843166
- Preventing Drug Use among Children and Adolescent-A Research Based Guide for Parents, Educators and Community Leaders-2nd Edition Oct. 2003. U.S Dept. of health and Human Service, National Institute of health. National Institute on Drug Abuse, 6001, Executive boulevard Bethesda, Maryland 20892
- Sebastian, A. (1999). An Echo of the Cry from the Streets of Bangalore City, India: A Study of the Problems of Street Children, a Legal Perspective: ISS.
- Street Kids International (1996). Understanding street children's lives: A gold tooth work book for educators and children on drug use behaviour, friendship and decision making. 1st edition Toronto: Street Kids International.
- Tripathi, B. M., & Lal, R. (1999). Substance abuse in children and adolescents. [Review]. *Indian J Pediatr*, 66(4), 569-575.
- The United Nations Office on Drugs and Crime - 2007 (UNODC) develop an Early Interventions: At-Risk Groups and Communities (A comprehensive approach for anti-drug programmes)
- UNICEF (1993). The state of the world's children. 1st edition. 1993, New York: Oxford University Press
- WORLD HEALTH ORGANIZATION -Working With Street Children-Introduction, A Training Package on Substance Use, Sexual and Reproductive Health including HIV/AIDS and STDs., Mental Health Determinants and Populations, Department of Mental Health and Substance Dependence, Geneva, Switzerland.
- WORLD HEALTH ORGANIZATION -Working With Street Children-MODULE-1 A Profile of Street Children, A Training Package on Substance Use, Sexual and Reproductive Health including HIV/AIDS and STDs., Mental Health Determinants and Populations, Department of Mental Health and Substance Dependence, Geneva, Switzerland.
- WORLD HEALTH ORGANIZATION - Working With Street Children-MODULE-3. Understanding Substance Use among Street Children, A Training Package on Substance Use, Sexual and Reproductive Health including HIV/AIDS and STDs. Mental Health Determinants and Populations, Department of Mental Health and Substance Dependence, Geneva, Switzerland.
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- WORLD HEALTH ORGANIZATION - Working With Street Children-MODULE-6 Responding to the Needs and Problems of Street Children, A Training Package on Substance Use, Sexual and Reproductive Health including HIV/AIDS and STDs. Mental Health Determinants and Populations, Department of Mental Health and Substance Dependence, Geneva, Switzerland.

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Research Article

MAGICAL THINKING AND PARANORMAL BELIEFS AMONG THE SIBLINGS OF PATIENTS WITH SCHIZOPHRENIA

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Abstract

Background/Objective: Paranormal and magical thinking have often been recognized as important aspects related to psychopathology and phenomenology of schizophrenia, but whether siblings of people with schizophrenia also harbour these two elements is not well-studied. **Methods:** The total sampling size of this study was 90, consisting of 30 patients with schizophrenia in remission, 30 siblings of these patients, and 30 matched normal controls. Samples were selected purposively after matching the demographic criteria like age, sex and education matched with siblings of patients with schizophrenia group and normal controls. To interpret the data descriptive statistics, ANOVA and post-hoc analysis and correlation-coefficient were used. **Results:** The mean age of the siblings of the schizophrenia patients was significantly higher than mean ages of the samples of other two groups. In all three groups males were in majority. In patients' group half of the selected samples (50%/ $n=15$) were employed and in remaining two groups majority of the samples were found to be employed. Majority of the samples belonged to all three groups were married. Hinduism emerged as the dominant religion in the present study as majority of the samples of present study were Hindu by religious affiliation. In all areas of magical thinking both patients' and siblings had scored significantly higher than normal control group. **Conclusion:** Siblings of the individuals were found to have significantly higher level of magical thinking and paranormal beliefs than normal controls.

Key Words: Schizophrenia, Siblings, Magical Thinking and Paranormal Experience.

INTRODUCTION

The term paranormal suggests to a phenomenon which does not comply with principles of natural sciences and stays outside the realm of various subjects of the discipline of science (Thalbourne, 1982). According to American Parapsychological Association, paranormal phenomena are: *"Apparent anomalies of behavior and experience that exist apart from currently known explanatory mechanisms that account for organism–environment and organism–organism information and influence flow"* (Irwin, 1999). Examples of paranormal beliefs and experiences are: Extrasensory perception (telepathy, clairvoyance and precognition), witchcrafts, reincarnation, Psychokinesis and beliefs in supernatural elements like ghosts, demons and Satan, etc. Some people consider these beliefs and experiences are valuable for spiritual growth and personal development where as others recognize these as abnormal health liabilities. Very often paranormal beliefs and experiences are recognized as signs of psychological ill-health, or in patient groups, as part of the mental disorders the patients suffer from. Whereas magical thinking is described as a kind of non-scientific causal reasoning being adopted and harboured by common people. In mental health and behavioral science parlance, magical thinking has often been regarded as a mark of morbidity or pathology. As

per the understandings of mental and behavioural sciences a person indulges in to magical thinking because of his or her underlying psychological problems and insistence to magical thinking is the mark of that person's incapacity to interpret situations, events and stimuli in more rationalized manner or derive more feasible conclusion about various occurrences (Shafir & Tversky, 1992).

Schizophrenia is a severe mental illness in which affected people develop significant impairments in cognitive and perceptual activities. Schizophrenia affected persons' socio-occupational functions often get severely affected because of illness and a large chunk of these people have to depend on others for fulfillment of their basic needs. Schizophrenia affects about 1% of the population. Schizophrenia occurs in all populations with prevalence in the range of 1.4 to 4.6 per 1000 and incidence rates in the range of 0.16–0.42 per 1000 population (Jablensky, 2000). It is one of the most devastating mental disorders and is characterized by symptoms of thought, behavior, and social problems. The thought problems associated with schizophrenia are described as psychosis, in that the person's thinking is completely out of touch with reality at times. In schizophrenia, affected people have a disintegration of the process of thinking and of emotional responsiveness. It most commonly manifests as

auditory hallucinations, paranoid or bizarre delusions, or disorganized speech and thinking, and is accompanied by significant social or occupational dysfunction. Schizophrenia affected persons often experience gross perceptual abnormalities and those abnormalities appear as real phenomena to them and these people tend to draw a meaning out of those abnormalities. Often, individuals with schizophrenia claim their voices and perceptual distortions come from outside sources, like space aliens, therapists, their mothers, and so on, and those voices are trying to control or maneuver their thoughts. Some authors had tried to explain the presence of paranormal beliefs among schizophrenia affected people as: 'some terrified and confused patients try to make some sense out of a frightening world by concluding their voices are coming from an outside source, like space aliens. By drawing this explanation, they try to reduce the level of anxiety being caused by illness to a certain extent' (Malinowski, 1948; Langer, 1975).

Individuals with schizophrenia or schizophrenia spectrum disorders are often observed to have prominent magical thinking. In accordance with clinical outlook magical thinking can be defined as irrational belief that one can bring about a circumstance or event by thinking about it or wishing for it. Magical thinking is often intensified in psychiatric illnesses such as schizotypal disorder, obsessive-compulsive disorder (OCD), schizophrenia or depression.

Magical ideation is conceived of as a mild analog to the positive symptoms reported by patients with schizophrenia. It primarily comprises a tendency to assume hidden meanings in random configurations and to insist in a causal determination of coincidences. Although the concept of magical ideation (MI) was introduced as an indicator of schizotypy, subsequent works have unequivocally demonstrated that the continuum of MI is psychometrically relevant even within samples of healthy subjects scoring below what would be considered as indicative of a schizotypal personality disorder by commonly accepted standards. Most importantly, even entirely healthy subjects with relatively high MI scores display neuropsychological abnormalities that are qualitatively similar to those displayed by patients with schizophrenia.

Schizophrenia has been conceptualized to be disorder which stems from the affected person's family of origin. Earlier authors opined that families which have communicational deviations, emotional coldness, and

high degree of interpersonal difficulties may cause schizophrenia to some persons. Usually the parents of the affected person were emotionally distant, formal, and displayed confusing parental communication. This modeling of remote, unaffectionate relationships is then reenacted in the social relationships encountered in the developing years. The mostly lauded 'vulnerability-stress diathesis' model of mental illness states that the potential interplay between the proposed genetic predisposition to schizophrenia (diathesis) and the combined effects of certain life experiences (stress) in accounting for an individual's decomposition to clinical schizophrenia (Grossarth-Maticek et al., 1994). For this reason examining the presence of sub-clinical syndromes of schizophrenia or some characteristics of schizophrenia to first degree relatives of these patients becomes a valuable task to the mental health professionals. As schizophrenia runs through a particular family so first degree relatives like siblings of these people may as well have some hints of pathologies, i.e., magicality and high insistence to paranormal beliefs.

MATERIAL & METHODS

This study included 90 individuals of both gender {30 cases who were diagnosed with Schizophrenia as per ICD-10, DCR (WHO, 1992) criteria, 30 siblings of patients with schizophrenia and 30 normal controls}. For data collection socio-demographic and clinical data sheet, General Health Questionnaire (GHQ-12) (Goldberg & William, 1978), The Positive and Negative Syndrome Scale (PANSS) (Kay et al., 1987), Magical Ideation Scale (Eckblad & Chapman, 1983) and Revised Paranormal Belief Scale (RPBS) (Tobacyk & Milford, 1983; Tobacyk, 1988) were used. This study was conducted at the outpatient department of the Central Institute of Psychiatry, Ranchi, Jharkhand State, India. This institute happens to be the one of the oldest psychiatric centre of Asia and is a tertiary level Psychiatry Hospital with Post graduate teaching facility. Samples of the study were selected purposively in accordance with the inclusion and exclusion criteria of the study. Informed consents were taken up from all the participants of the study at the time of data collection. This study was also duly approved by the ethical committee of the institute.

RESULTS

Table 1.1: Comparison of Socio- demographic variable among patients with schizophrenia, their siblings and normal controls (Continuous Variables)

Variables	Groups N=90			f	df	p	Posthoc
	Patients (Mean±S.D.) n=30	Siblings (Mean±S.D.) n=30	Controls (Mean±S.D.) n=30				
Age	36.63±10.43	32.96±7.72	35.50±10.05	1.177	2,87	.313	a=b b=c a=c
Education	9.26±4.01	12.06±2.83	9.93±4.17	4.624	2,87	.012	a<b b>c a=c

Table 1.2: Comparison of Socio- demographic variable among patients with schizophrenia, their siblings and normal controls (Categorical Variables)

Variables		Groups N=90			χ ²	df	p
		Patients n(%)	Siblings n(%)	Controls n(%)			
Sex	Male	(28)93.3%	(27) 90.0%	(16)53.3%	17.746	2	<.001
	Female	(2)6.7%	(3)10.0%	(14) 46.7%			
Occupation	Employed	(15)50.0%	(24) 80.0%	(17) 56.7%	6.334	2	.042
	Unemployed	(15) 50.0%	(6) 20.0%	(13) 43.3%			
Type of Family	Joint	(13)43.3%	(13)43.3%	(15)50.0%	.358	2	.836
	Nuclear	(17)56.7%	(17)56.7%	(15)50.0%			
Domicile	Urban	(19)63.3%	(19)63.3%	(15)50.0%	1.469	2	.513
	Rural	(11)36.7%	(11)36.7%	(15)50.0%			
Marital Status	Single	(12)40.0%	(9) 30.0%	(6) 20.0%	2.857	2	.263
	Married	(18)60.0%	(21)70.0%	(24)80.0%			
Religion	Hindu	(24)80.0%	(24)80.0%	(26)86.7%	.608	2	.831
	Non-Hindu	(6) 20.0%	(6) 20.0%	(4) 13.3%			

Table-2: Comparison of paranormal beliefs and magical thinking with the patients of schizophrenia, siblings of schizophrenia patients and normal control

Variables	Groups N=90			f	df	p	Post hoc
	Patients (Mean±S.D.) n=30	Siblings (Mean±S.D.) n=30	Controls (Mean±S.D.) n=30				
Domains of Paranormal Belief Scale							
Traditional religious belief	25.16±4.42	25.00±2.67	22.83±4.35	3.334	2,87	.040	a=b b>c a>c
Psi	19.90±5.80	16.63±5.06	14.83±6.98	5.612	2,87	.005	a>b b>c a>c
witchcraft	22.53±5.50	20.66±6.37	15.00±7.01	11.523	2,87	<.001	a>b b>c a>c
superstition	15.33±5.45	14.63±5.21	9.63±5.46	10.022	2,87	<.001	a=b b>c a>c
spiritualism	21.06±4.68	18.36±6.08	13.73±7.76	10.374	2,87	<.001	a>b b>c a>c
Extraordinary life-forms	13.06±4.61	12.50±3.56	10.50±4.26	3.133	2,87	.049	a=b b>c a>c
precognition	22.46±6.38	20.50±5.52	17.80±6.55	4.326	2,87	.016	a=b b>c a>c
Magical Ideation							
Score of Magical Ideation Scale	15.83±4.93	10.23±3.79	8.00±3.71	27.898	2,87	<.001	a>b b>c a>c

DISCUSSION

The major aim of this study was to examine whether the paranormal beliefs and magical thinking exist in the siblings of schizophrenia patients or not. Schizophrenia has been regarded as disorder with myriad symptoms affecting almost all areas of functionality and life. Schizophrenia causes significant deficits in thinking and cognitions of affected people. It is also found that first degree relatives of patients with this disorder may also have some hints of derangements or dysfunctions at

subclinical level. Since individuals with schizophrenia show very prominent sings of paranormality and magicality, so their siblings may as well have some amount of these. Assessment of these deficits would be necessary to identify individuals at increased risk for developing the disorder. These deficits would reflect the underlying genetic risk for schizophrenia in their siblings as well since they are likely to share some of genetic diathesis for schizophrenia (Egan et al., 2000). So some symptoms which are prominently present in

patients may also be presented in their siblings sub-clinically. In past many researches had shown that in schizophrenia, magical ideations and paranormal beliefs can be prevailing along with other cardinal symptoms of schizophrenia. Individuals with schizophrenia would likely to have higher degree of paranormal beliefs and magical thinking than normal people (Thalbourne, 1994; Thalbourne & Delin, 1994). In present study it was noted that siblings of the patients with schizophrenia also reported higher scores in various domains of Revised Paranormal Belief Scale than adequately matched normal controls. This finding has been found to be in consonance with few previous studies (Ranndall & Desrosiers, 1980; Tobacyk & Milford, 1983). During the study few precautionary measures were taken to ensure the accuracy of data. Testing was conducted in a relatively quiet place. The patient was tested first, while the siblings of the patients waited in separate area when he/she had no access to the test material. The sibling was tested only after the patient completed testing. Lastly, the tests were administered on the adequately and appropriately matched normal controls. It was observed in present study that siblings of schizophrenia patients were more educated in compared to other two groups. This finding happens to be similar to the Killen et al (1974) study who found that high school students with an above IQ endorsed fewer paranormal beliefs than did students with an above average IQ. However in present study no such measure was applied to examine the IQ of selected samples. In present study 'gender' has been appeared as a major influential in constituting the paranormal beliefs. Here male participants had been observed to have higher inclination to paranormal beliefs than women, which are again supportive to findings of past studies (Tobacyk et al., 1984), but at the same time some authors also noted that females have significantly higher paranormal beliefs than males (Ranndall & Desrosiers, 1980; Tobacyk & Milford, 1983; Lindeman & Aarnio, 2005, 2007). Nonetheless, this difference could as well be explained by the relatively lesser representation of females in the selected samples. In addition to that Cultural factor might as well have some role behind this finding but it could not be said conclusively as in present study impact of cultural factors were not controlled. Clark (2005) for example, noted the prevalence of popular culture and new age beliefs in teenage females have some role in infusing magical thinking and paranormal beliefs, while Mason et al (2006) recorded a shift towards secular

views of the world, some of which incorporate new age beliefs and practices. The clearest demographic correlate of paranormal beliefs is gender. Most paranormal beliefs, including religious beliefs, are more often held by women than men (Goode, 2000; Vyse, 1997), and this was also expected in these studies. The relation between paranormal beliefs and other demographics such as age have been examined but clear patterns have not been detected (Rice, 2003; Vyse, 1997). Replicated demographic correlates of paranormal belief include sex, age and education. The effect of age and education are less conspicuous and less replicable. However, several studies indicate that age is positive correlate of paranormal beliefs (Thalbourne, 2005) and length or level of education is negatively correlated (Aarnio & Lindeman, 2005). Apart from this a significant difference was noticed in respect to occupation between patients with schizophrenia and siblings of patients with schizophrenia as, siblings of schizophrenic patients were more employed in compared to the patients group.

In this present study the patients reported higher traditional religious belief, PSI, witchcraft, superstition, spiritualism, extra-ordinary life forms, precognition in compared to siblings and normal controls and siblings. However this finding is quite expected that patients would likely to have higher level of paranormal beliefs and magical thinking. But at the same time it is also seen that siblings of patients also possess higher level of paranormal beliefs and magicity than normal people. This finding can be explained by the greater influence of home environment and faultiness in family functioning in various areas as well as longitudinal impact of impact on all areas of socio-occupational functions of the family. At the same time paranormal beliefs can also be injected by socio-cultural factors such as family, peer groups, media influences, and the persuasive power of social institutions (e.g., religious or cultural groups) and education (Clark, 2002, 2005; Schriever, 2000; Aarnio & Lindeman, 2006). An individual often adopts and maintains beliefs that his or her family, friends, or other social group members hold. Religious education and parents' religiosity are indeed positively connected with an individual's religiosity (Flor & Knapp, 2001; McCullough et al, 2003; Okagaki & Bevis, 1999). It has also been proposed that parents' and friends' paranormal beliefs lead an individual to similar beliefs (Vyse, 1997). Siblings' inclination to paranormal beliefs and magical thinking might as well be the result of few things, e.g. genetic predisposition or sharing and

modeling the same belief systems and thinking patterns. It could also be hypothesized that parental and greater family insistence and idolization to mystical, supernatural phenomena or imbibing divinity to explain every subtle things and odds in life could usher falsified thinking like paranormal beliefs and magical thinking to people.

In this study authors had also seen the positive association between paranormal beliefs, magical thinking and psychopathology of schizophrenia. Schizophrenia patients who scored high in paranormal belief scale (RPBS) and magical ideation scale (MGIS) also scored high in Positive and Negative Scale for Schizophrenia (PANSS). This matter could be interpreted through the "Theory of Transliminality"; which says that high scores on paranormal belief (and, for that matter, on mystical experience) go along with elevated scores on psychopathology, all of which (and perhaps also ESP) are phenomena caused by a "leaky" mental threshold (Thalbourne & Delin, 1994). This theory is defined as "the hypothesised tendency for psychological material to cross thresholds into or out of consciousness" (Houran & Thalbourne, 2001; Thalbourne et al, 2001). It was hypothesised that transliminality represented a psychological process that might function as a connecting principle between paranormal effects and other personality variables.

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REFERENCES

Aarnio, K. & Lindeman, M. (2005). Paranormal beliefs, education, and thinking styles. *Personality and Individual Differences*, 39, 1227-1236.

Aarnio, K., & Lindeman, M. (2006). Superstitious, magical and paranormal beliefs: An integrative model. *Journal of Research into Personality*, 41(4), 731-744.

Clark, L. S. (2002) U.S Adolescent religious identity, the media and the 'funky' side of religion. *Journal of Communication*, 52(4), 794-881.

Clark, L.S. (2005). *From Angels to Aliens. Teenagers, the Media, and the Supernatural*. Oxford University Press: USA

Eckblad, M. & Chapman, L.J. (1983) Magical ideation as an indicator of schizotypy. *Journal of Consulting and*

Clinical Psychology, 51,251-225.

Eckblad, M. & Chapman, L.J. (1983) Magical ideation as an indicator of schizotypy. *Journal of Consulting and Clinical Psychology*, 51, 215–225.

Egan, M.F., Goldberg T.E., Gscheidle, T. (2000) Relative risk of attention deficits in siblings of patients with schizophrenia. *American Journal of Psychiatry*, 157, 1309-1316.

Flor, D. L. & Knapp, N. F. (2001) Transmission and transaction: Predicting adolescents' internalization of parental religious values. *Journal of Family Psychology*, 15(4), 627-645.

Goldberg, D. & Williams, P. (1988) *A user's guide to the General Health questionnaire*. Windsor, UK: NFER-Nelson.

Goode, E. (2000) *Paranormal Beliefs: A Sociological Introduction*. Prospect Heights, IL: Waveland Press.

Grossarth-Maticek, M.R., Eysenck, H. J., & Boyle, G. J. (1994) An empirical study of the diathesis-stress theory of disease. *International Journal of Stress Management*, 1, 3-18.

Houran, J. & Thalbourne, M.A. (2001) Further study and speculation on the psychology of entity encounter experiences. *Journal of the Society for Psychical Research*, 65, 26-37.

Irwin, H.J. (1999). *An introduction to parapsychology*. 3rd ed. Jefferson, NC: McFarland, 1999. As cited in: P Brugger & C Mohr (2008). Editorial. The paranormal mind: How the study of anomalous experiences and beliefs may inform cognitive neuroscience. *Cortex*, 1 2 9 1 - 1 2 9 8 . Downloaded from: http://www.usz.ch/non_cms/neurologie/LehreForsch/Neuropsychologie/Publikationen/2008/08_09_BruggerCortex.pdf on 27/04/2011.

Irwin, H.J. (1993) Belief in the paranormal: A review of the empirical literature. *Journal of the Society for Physical Research*, 87, 1-39.

Jablensky, A. (2000) Epidemiology of Schizophrenia: The Global Burden of Disease and Disability. *European Archives of Psychiatry and Clinical Neuroscience*, 250 (6), 274–285.

Kay, S.R., Fiszbein, A., Opler, L.A. (1987) The positive and negative syndrome scale (PANSS) for schizophrenia. *Schizophrenia Bulletin*, 13(2), 261-276.

Killen, P. Wildman, R. W. & Wildman, R. W. II (1974) Superstitiousness and Intelligence., *Psychological*

Reports, 34, 1158.

Langer, E.J. (1975) The illusion of control. *Journal of Personality and Social Psychology*, 32,311-328.

Lindeman, M. &Aarnio, K. (2007). Superstitious, magical, and paranormal beliefs: An integrative model. *Journal of Research in Personality* 41, 731–744.

Malinowski, B. (1948) *Magic, science and religion*. Prospect Heights, Ill.: Waveland Press.

Mason, M., Webber, R., Singleton, A., et al (2006) The spirit of Generation Y: A summary of the final report of a t h r e e y e a r s t u d y . AustralianPolicyOnline<http://dlibrary.acu.edu.au/research/ccls/spir/sppub/sppub.htm>, (retrieved on 20/12/2010)

McCullough, M. E., Tsang, J., et al. (2003) Personality traits in adolescence as predictors of religiousness in early adulthood: Findings from the Terman Longitudinal Study. *Personality and Social Psychology Bulletin*, 29, 980–991.

Okagaki, L. & Bevis, C. (1999) Transmission of religious values: Relations between parents ' and daughters ' beliefs . *Journal of Genetic Psychology*, 160,303-318.

Randall, T. M. &Desrosiers, M. (1980) Measurement of Supernatural Belief. Sex Differences and Locus of Control. *Journal of Personality Assessment*, 44, 493-498.

Rice, T. (2003) Believe it or not: Religious and other paranormal beliefs in the United States. *Journal for the Scientific Study of Religion*, 42, 95–106.

Schriever, F. (2000) Are there different cognitive structures behind paranormal beliefs? *European Journal of Parapsychology*, 15, 46-47.

Shafir, E. &Tversky, A. (1992) Thinking through uncertainty: Nonconsequential reasoning and choice. *Cognitive Psychology*, 24 (4), 449–474.

Thalbourne, M.A. & Delin. P.S. (1994) An investigation into correlates of belief in the paranormal. *Journal of the Society for Psychical Research*, 89,291-292.

Thalbourne, M.A. (1982) *A Glossary of Terms Used in Parapsychology*. London: Heinemann.

Thalbourne, M.A. (1994) Belief in the paranormal and its relationship to schizophrenia-relevant measures: A confirmatory study. *British Journal of Clinical Psychology*, 33 (1), 78-80.

Thalbourne, M.A. (2005). Research note: Creative personality and belief in the paranormal. *European Journal of Parapsychology*, 20, 79-84.

Thalbourne, M.A., Houran, J., Alias, A.G., et al (2001) Transliminality, brain function, and synesthesia. *Journal of Nervous and Mental Disease*, 189, 190-192.

Tobacyk, J, Miller, M.J., Jones, G. (1984) Paranormal beliefs of high school students. *Psychological Reports*, 55, 255–261.

Tobacyk, J. & Milford, G. (1983) Belief in paranormal phenomena: assessment instrument development and implications for personality functioning. *Journal of Personality and Social Psychology*, 44, 1029-1037.

Tobacyk, J. & Milford, G. (1983) Belief in paranormal phenomena: assessment instrument development and implications for personality functioning. *Journal of Personality and Social Psychology*, 44, 1029-1037.

Tobacyk, J. (1988) A revised paranormal belief scale. (Unpublished manuscript). Ruston, LA: Louisiana Technical University.

Tobacyk, J. [J.] and Milford, G. (1983) Belief in paranormal phenomena: Assessmentinstrument development and implications for personality functioning. *Journal of Personality and Social Psychology*, 44, 1029-1037.

Tobacyk, J. J. (1988) A revised Paranormal Belief Scale. (Unpublished manuscript,Louisiana Tech University, Ruston, LA).

Vyse, S.A. (1997) *Believing in magic: The psychology of superstition*. New York: Oxford University Press.

World Health Organization (1992) *The ICD-10 Classification Of Mental and Behavioral Disorder. Diagnostic Criteria for Research*, Geneva, WHO.

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Brief Communication

DRUG RELATED KNOWLEDGE AND ATTITUDE AMONG ADOLESCENTS: A SCHOOL BASED SURVEY

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Abstract

Background: Awareness about drug abuse is of vital importance for prevention as well as treatment of drug abuse. This study was aimed to assess the drug related knowledge and attitude among school students. **Method:** Students of 8th and 9th standard were recruited through a drug awareness program from a high school in Chandigarh. The Knowledge and Attitude Addiction Questionnaire for Adolescents, a self-reported questionnaire was employed in this cross-sectional study. **Results:** Most of the students appeared to have adequate knowledge about addictive substances and their harmful effects to body but not about the treatment aspects. Their attitude towards addiction was affected by social stigma as majority considered it as a social evil and was not having any discussion with peers about addiction. **Conclusions:** Majority of students had adequate knowledge about addictive substances but their attitude and knowledge appeared to be limited with regard to treatment aspects and social stigma.

Key words: drugs, substance dependence, knowledge, attitude

INTRODUCTION

Adolescence is a transition phase when the mind is naturally motivated to experimentation and exploration of the world. It is the age when the majority of drug users start use of substances like inhalants and tobacco and later progress to alcohol and opioid preparations. Drug abuse has increased all over the world and the age of initiation of abuse is progressively falling. Earlier initiation of drug use is found to have more impairment, crime, and difficult to quit. High knowledge of harmful effects of substance was reported in students (Schwarz, 1997; Gassman et al, 2001; Giannetti et al, 2002; Prakash et al, 2009; Tsering et al, 2010), school educators (Moreira et al, 2009), health professionals (Coles et al, 1992; Happell et al, 2002) and general public (Bryan et al, 2000) and a positive relationship was found between knowledge about substance abuse and their attitudes toward it (Schwarz, 1997; Gassman et al, 2001; Giannetti et al, 2002). Most of the studies are from west and data from India is limited. This research was aimed to study the drug related knowledge and attitude among school students from north India.

METHODOLOGY

Students of 8th and 9th standard were recruited through a drug awareness program from a High School in Chandigarh. The Knowledge and Attitude Addiction Questionnaire for Adolescents, a self-reported questionnaire was employed in this cross-sectional study. Informed consent was taken from the school authorities and subjects. It was administered prior to

awareness lecture on 'Problems of drug addiction and its impact on Adolescents' by NN, in which he presented about drugs in vogue, myths related to drugs, complications and treatment. The same questionnaire was re-administered just after the lecture. Analysis was done using the SPSS version 14.0 for Windows (Chicago, Illinois, USA). Frequencies with percentages were calculated for categorical variables and mean and standard deviation were calculated for continuous variables and later chi-square test was used for group comparison.

RESULTS

The sample consisted of 116 boys and 94 girls, with the mean age of 13.9 year with overrepresentation of males over females (55.2% vs. 44.8%), 9th students over 8th students (52.4% vs 47.6%) and nuclear family set up over joint/extended (66.2% vs. 33.8%).

As shown in table-1 most of the students appeared to have adequate knowledge about addictive substances and their harmful effects to body and media remained main source of information. In comparison of responses prior to awareness lecture, their knowledge significantly increased about addiction (91% vs 96.7%), significantly lesser students considered it as a social evil (72.4% vs. 44.3%), and more were afraid from the high risk for addiction (56.2% vs. 72.4%) after the awareness lecture.

Knowledge and attitude towards addiction remained comparable for boys and girls. Higher proportion of students from joint/ extended family reported addiction as a physical/ medical illness (pre

Table-1: Drug Related Knowledge and Attitude Questionnaire

No. Question	value	Pre-intervention	Post-intervention	χ^2
1 Have you heard or read about addiction and addictive substances/drugs?	Yes	200 (95.2)	206 (98.1)	1.41
	No	8 (3.8)	4 (1.9)	
2 Did you know about addiction and addictive substances from the mass media	Yes	191 (91)	203 (96.7)	8.41**
	No	17 (8.1)	4 (1.9)	
3 Addiction is a physical/ medical illness	True	145 (69)	152 (72.4)	6.69
	False	62 (29.5)	33 (15.7)	
4 Addiction is a social evil, not a disease	True	152 (72.4)	93 (44.3)	35.63***
	False	54 (25.7)	114 (54.3)	
5 Using addictive substance is harmful to body	True	206 (98.1)	208 (99)	1.97
	False	4 (1.9)	2 (1)	
6 If I would tell you that you are at high risk for addiction, what's your reaction?	Much concerned	160 (76.2)	191 (91)	0.18
	Not concerned	1 (0.5)	2 (1)	
	Afraid	118 (56.2)	152 (72.4)	4.65*
	Not afraid	28 (13.3)	18 (8.6)	
Take precautions	174 (82.9)	187 (89.04)	0.27	
	Not taking Precautions	3 (1.4)		2 (1)
Gathering knowledge	150 (71.4)	155 (73.8)	0.002	
	Not gathering knowledge	3 (1.4)		3 (1.4)
7 How openly do you discuss about addiction with your friends/ others?	Never	42 (20)	50 (23.8)	0.61
	Occasionally	99 (47.1)	102 (48.6)	
	Often	28 (13.3)	28 (13.3)	
	Very frequently	27 (12.9)	25 (11.9)	
8 Would you like to maintain contact with a friend who has recently entangled into drug addiction?	Yes	49 (23.3)	63 (30)	2.21
	No	157 (74.8)	145 (69)	
9 There are medicines for addiction	True	153 (72.9)	165 (78.6)	0.93
	False	49 (23.3)	42 (20)	
10 Do you consider that addiction is preventable?	Yes	191 (91)	190 (90.5)	0.26
	No	15 (7.1)	18 (8.6)	
11 Once addiction has developed, do you consider it to be treatable?	Yes	179 (85.2)	182 (86.7)	0.09
	No	29 (13.8)	27 (12.7)	

P values: * <0.05; ** <0.01; *** <0.001

As a few students did not respond to particular questions, so those are considered as missing values.

intervention). Higher proportion of students from joint/extended family reported to be afraid if they would be told that they are at high risk for addiction. Higher proportion of students of 9th standard have heard or read about addiction and addictive substances/drugs (pre intervention); they knew about addiction and addictive substances from the mass media (post intervention). Higher proportion of students of 8th standard considered addiction as a medical disorder while students of 9th standard as a social evil in post intervention.

DISCUSSION

Adolescence is a transitional stage of physical and mental human development generally occurring between puberty and adulthood. Reproductive and Child Health Program mentions adolescents as being between 10-19 years of age (UN system in India, 2003). Currently world has 1.2 billion adolescent population and the largest numbers (243 million) are in India, which is ~20% of India's population (in 2011-1.21 billion) (*UNICEF's report, 2011*). Prevalence of substance use disorders is reported in the range of 1.8% - 57.4% amongst Indian adolescents (Thacore, 1972; Mohan et al, 1976 & 1977; Varma et al, 1977; Sethi et al, 1978; Khan & Unnithan, 1979; Kushwaha et al, 1992; Panicker, 1998; Tripathi & Lal, 1999; Saluja et al, 2007).

In our study most of the students appeared to have adequate knowledge about addictive substances and their harmful effects to body. Majority of students considered it as a medical illness but a social evil as well. Their attitude towards addiction was affected by social stigma as majority were neither having any discussion with peers about addiction nor interested to maintain any contact with any friend with drug dependence though the information about treatment availability and prevention aspects were reported by most.

In comparison of earlier study using the same instrument (Prakash et al, 2009), we reported less number of students considering it as a physical and medical disease (69% vs. 92%) while more number of students were afraid on having higher risk for addiction (56.2% vs. 36.4%). Most of the students appeared to have adequate knowledge about addictive substances and their harmful effects to body. Their attitude and knowledge towards addiction appeared to be limited in terms of treatment related knowledge and social stigma. Knowledge and attitude towards addiction remained comparable for boys and girls.

Our study also highlighted the importance of such drug awareness lectures in increasing their knowledge about addiction and reducing social stigma as after the awareness lecture students were more knowledgeable and lesser students were considering it as a social evil. Despite the prospective design of our study the main limitation remained the instrument used to assess knowledge and attitude towards drug dependence was not standardized. Assessment of drug related knowledge and attitude among adolescents is important as it guide to formulate effective intervention programs for the students. More precise, and thereby more credible, information on the relative risks of dependence on various illegal drugs needs to be disseminated, and that more positive attitudes towards those who misuse drugs need to be fostered.

REFERENCES

- Adolescents in India: a profile. UNFPA for UN system in India [online]. 2003 [cited 2011 Nov 10]. Available from: http://whoindia.org/LinkFiles/Adolescent_Health_and_Development.
- Bryan, A., Moran, R., Farrell, E., & O'Brien, M. (2000) Drug-Related Knowledge, Attitudes and Beliefs in Ireland: Report of a Nation-Wide Survey. Dublin: The Health Research Board.
- Coles, C.D., Good, L., Strickland, K. (1992) Knowledge and attitudes of public, addicts in treatment, and health care professionals about substance abuse in pregnancy. Atlanta: Georgia Mental Health Institute (unpublished).
- Demographic trends for adolescents: Ten key facts. UNICEF report 2011. [online] [cited 2011 November 10]; Available from: <http://www.unicef.org/sowc2011/pdfs/Demographic-Trends.pdf>.
- Gassman, R.A., Demone, H.W., Albilal, R. (2001) Alcohol and other drug content in core courses: Encouraging substance abuse assessment. *Journal of Social Work Education*, 37, 137-145.
- Giannetti, V.J., Sieppert, J.D., Holosko, M.J. (2002) Attitudes and knowledge concerning alcohol abuse: Curriculum implications. *Journal of Health and Social Policy*, 15, 45-58.
- Happell, B., Carta, B., Pinikahana, J. (2002) Nurses' knowledge, attitudes and beliefs regarding substance use: A questionnaire survey. *Nursing and Health Sciences*, 4, 193-200.
- Khan, M.Z., Unnithan, N.P. (1979) Association of socio-

economic factors with drug use among college students in an Indian town. Bulletin on Narcotics (United Nations publication), 31, 61-69.

Kushwaha, K.P., Singh, Y.D., Rathi, A.K., Singh, K.P., Rastogi, C.K. (1992) Prevalence and Abuse of Psychoactive Substances in Children and Adolescents. Indian Journal of Paediatrics, 59, 261-268.

Mohan, D., Arora, A. (1976) Prevalence and pattern of drug abuse among Delhi University students. Indian Journal of Medical Association, 66, 28-31.

Mohan, D., Thomas, M.G., Prabhu, G.G. (1977) Prevalence of drug abuse in high school population. Indian Journal of Psychiatry, 33, 20-24.

Moreira, F.G., Silveira, D.X., Andreoli, SB. (2009) Knowledge and attitudes related to drug abuse and prevention displayed by public school educators. Rev Bras Psiquiatr, 31, 95-100.

Panicker, R. (1998) Street children and drug abuse in India. In: Drug Demand Reduction Report. New Delhi; UNDCP Regional Office for South Asia, 34-36.

Prakash, O., Giri, O.P., Mishra, A.K., Kumar, S., Kulhara, P. (2009) Knowledge and attitude of Indian adolescents towards addiction: finding from an exploratory survey. Journal of Mental Health & Human Behavior, 14, 74-79.

Saluja, B.S., Grover, S., Irpati, A.S., Mattoo, S.K., Basu, D. (2007) Drug Dependence in Adolescents 1978-2003: A clinic based observation from North India. Indian Journal of Paediatrics, 74, 455-458.

Sethi, B.B., Manchanda, R. (1978) Pattern of drug abuse among male students. Indian Journal of Psychiatry, 20, 166-173.

Schwarz, C.J. (1997) Knowledge and attitude of undergraduate and graduate social work students towards addiction and those who use illegal drugs. Unpublished Master's thesis, California State University, Long Beach.

Thacore, V.R. (1972) Drug abuse in India with special reference to Lucknow. Indian Journal of Psychiatry, 14, 257-61.

Tripathi, B.M., Lal, R. (1999) Substance Abuse in children and Adolescents. Indian Journal of Paediatrics, 66, 569-575.

Tsering, D., Pal, R., Dasgupta, A. (2010) Substance use among adolescent high school students in India: a survey of knowledge, attitude and opinion. Journal of Pharmacy and Bioallied Sciences, 2, 137-40.

Varma, V.K., Ghosh, A., Singh, S., Sig, N.N. (1977) Drug abuse among college students in India. Indian Journal of Psychiatry, 19, 1-10.

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Book Review

Title	: Luminous Life: A New Model of Humanistic Psychotherapy
Author	: Partha Choudhury
Publisher	: Bauu Institute, Winter Park, Colorado, USA
Year	: 2011
Pages	: 108
Price	: US Dollar 15.95

Reviewer: Shubh Mohan Singh

Humanistic psychotherapies developed as an orientation that rejected the quantitative reductionism of behavioral approaches and the prominence given to unconscious drives in the psychodynamic schools of psychological interventions. Instead, humanistic psychotherapies emphasized human capabilities, personal growth and choice, and the development of an individual to his or her highest potential.

The book that is the subject of this review is an addition to the literature related to humanistic psychotherapies.

The model of humanistic psychotherapy that the author describes goes beyond a purely individualistic conception of an individual to that of an individual whose sum total of health is influenced by society, culture, philosophy, material wealth, physical health and spiritual health in addition to mental health. These the author calls modules. Thus the author gives equal emphasis to all aspects that are important to the life of a modern individual. The author goes on to describe these modules and also mentions various ways in which these aspects of healthy living can be strengthened. The author then goes on to describe and develop his conceptualizations of other additional modules of modern living such as time management, choice management, and creativity. Finally the author gives a vision for a more evolved, involved and sensitive society that cares for the environment, diversity of cultures, and is responsible with wealth and progress.

This book adds to the literature related to humanistic psychotherapy in that it takes a more holistic, empathic and understanding view of human life in the modern world. It conceptualizes human beings as vulnerable, fallible and yet ultimately capable of good for self and society. The values described in this book are particularly relevant to developing and changing cultures where an increasing access to wealth and choices has confused many. The modules described are very easy to follow and understand and the author

describes how they can be applied in clinical situations.

The author describes that he has arrived at this model of psychology through experience, research and thought. As I read this book, I realized that this book is a very experiential account of a clinician who has tried to make sense and help a lot of people with problems of living and loving. In doing so, the author has developed insights into what troubles people and how they can be helped. In fact, the feeling that I got after reading this book is that this book can be very useful as a self-help book for people who have psychological and existential problems. And reading this book, an individual can pick and choose what he or she may find most useful and try to apply those insights and solutions into his or her daily life. These solutions are common sense and easy to apply. Similarly, a mental health professional may find this book useful in that it emphasizes facets of life that may be neglected by certain therapists such as material and spiritual health. It also may be useful to the less experienced therapists to benefit from the experience and wisdom that the author has gathered over many years of clinical work. On the other hand, if the reader expects a very comprehensive and detailed theoretical psychological and psychotherapeutic model such as Person-Centered Psychotherapy as described by Carl Rogers for instance, one may be disappointed.

This slim volume is quite enjoyable and readable, and is very easy to follow. However, the lack of bulk in no way belies the wealth of insights that it contains. The book is also remarkably free from jargon and this makes it very useful in most clinical situations for both a therapist working with a client and a lay person who wants to develop an understanding into his or her own problems and develop some solutions.

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