

INDIAN JOURNAL OF SOCIAL PSYCHIATRY  
Vol. 30 (1-2), 2014  
CONTENTS

|   | Page |
|---|------|
| Editorial   |      |
| SOCIAL PSYCHIATRY: WHY WE (STILL) NEED TO HOLD ON TO IT   | 1    |
| D. Basu   |      |
| Perspective   |      |
| SOCIAL PSYCHIATRY: PAST, PRESENT AND FUTURE   | 5    |
| R.A. Kallivayalil, V.P. Punnoose  |      |
| Presidential Address 2013   |      |
| WHAT SOCIAL PSYCHIATRY HAS TO OFFER IN CONTEMPORARY PSYCHIATRIC PRACTICE?   | 7    |
| R.K. Chadda   |      |
| N.N. De Oration 2013  |      |
| BRIDGING THE MENTAL HEALTH GAP  | 14   |
| P. Kulhara  |      |
| Research Articles   |      |
| OCCUPATIONAL STRESS AND COPING STRATEGIES AMONG NURSES WORKING IN<br>MEDICAL-SURGICAL UNITS OF A TERTIARY CARE HOSPITAL           | 20   |
| R. Saini, S. Kaur, K. Das   |      |
| PSYCHOSOCIAL EXPERIENCES OF THE PATIENTS WITH COLOSTOMY/ILEOSTOMY:<br>A QUALITATIVE STUDY   | 28   |
| Shaffy, S. Kaur, K. Das, R. Gupta   |      |
| KNOWLEDGE, ATTITUDE AND PRACTICE RELATED TO TOBACCO USE AND ITS<br>CESSATION AMONG YOUNG MEDICAL PROFESSIONALS                    | 35   |
| S. Singh, S.K. Sinha, R. Saha, M. Jha, D.K. Kataria   |      |
| CORRELATES OF SUICIDE IDEATION IN PATIENTS WITH DEPRESSIVE DISORDER AND<br>ALCOHOL DEPENDENCE                                     | 43   |
| J. Kaur, A. Bhandari, V.V. Upmanyu, B.S. Chavan   |      |
| TRANSLATION AND ACCEPTABILITY OF A COMPREHENSIVE RISK ASSESSMENT INTERVIEW IN HINDI   | 49   |
| K. Jakhar, M. Chandra, S.N. Deshpande   |      |
| INTRODUCTORY, SHORT TERM COGNITIVE BEHAVIOUR THERAPY TRAINING FOR INDIAN<br>MENTAL HEALTH PROFESSIONALS: A QUALITATIVE EVALUATION | 54   |
| A.K. Gupta, A. Tripathi, P. Sitholey, T. Reeves, P.K. Dalal, A. Nischal   |      |
| PERSONALITY TRAITS, NATURE OF AGGRESSION AND FRUSTRATION TOLERANCE IN<br>CHILDREN WITH CONDUCT DISORDER                           | 61   |
| A. Sen, T. Mukherjee  |      |
| STUDY OF RESILIENCE, HOPE AND PERCEIVED STRESS IN HEALTHY AND NORMALLY<br>FUNCTIONING ADULTS                                      | 66   |
| B. Jadhav, A. Dagaria, H.S. Dhavale, S. Shanker   |      |
| Letter to Editor  |      |
| CULTURE AND DYNAMICS OF VIRTUAL RELATIONSHIPS   | 72   |
| D. Gupta, M. Mehta  |      |
| Book Review   |      |
| CHILD AND ADOLESCENT MENTAL HEALTH  | 74   |
| Subobh B.N.   |      |

Editorial

SOCIAL PSYCHIATRY: WHY WE (STILL) NEED TO HOLD ON TO IT

Debasish Basu

By the time you will be reading this editorial, the Jubilee Congress of the World Association of Social Psychiatry (WASP) would have just concluded in London (13-15 November 2014). The Theme of this important world event was: "Social Psychiatry: Past, Present and Future". This attractive theme catches the essence of the glorious journey of social psychiatry through the past half century, when the WASP was founded in 1964, marking this year as its golden jubilee (hence the "Jubilee Congress"). In fact, the International Journal of Social Psychiatry was started another 10 years ago, in 1954, this year being its 60th anniversary. And back home, this year also marks the 30th anniversary of your own Indian Association for Social Psychiatry (IASP) which was registered as a Society on 6th June 1984, as well as the 30th year of continuous publication of your own professional Journal – the Indian Journal of Social Psychiatry – since 1985.

With four "birth anniversaries" related to social psychiatry all lined up in the same current year, 2014 appears to me as particularly suitable for retrospection ("past"), introspection ("present") and prospectation ("future") on social psychiatry. And, to ask the singularly uncomfortable question: does social psychiatry, as a discipline, still needs to be there? Starting from the last century at least, hasn't enough already been said, thought of, debated upon, and decided conclusively? Haven't we gone through the historical pendulum swinging between the 'biological' and the 'psychosocial' poles of pitching psychiatry already over the past century, having stabilized at the integrative (some would say compromise) formulation of the biopsychosocial paradigm? If that is so, does social psychiatry need to exist in future? Along with the four "birth anniversaries" related to social psychiatry as outlined above, shouldn't 2014 be also the "death anniversary" of social psychiatry?

After all, it is now widely believed that psychiatry as a discipline is neither 'biological' nor 'social'. Rather, it is integrative and biopsychosocial, as highlighted in the previous year's editorial of this Journal (Basu, 2013). Attempts at parsing the discipline into tight and non-mutual compartments is like passing the knife through a

can of molten butter with the expectation of cutting it into neat solid pieces. Of late, enough evidence has been garnered that mind is an interface between the brain functions and the myriad of social-environmental factors that influence and modify one another. Research disciplines such as psychoneuroendocrinology, psychoimmunology, genome-environment interactions and epigenetics all are essentially 'hybrid' in nature, all buttressing this basic tenet of interrelationship, interdependence, and indeed, underlying non-mutuality of nature and nurture, of the ultimate inseparability of mind from its brain substrate and its social-environmental context. Why an attempt at maintaining a distinct 'social' psychiatry, then, after all these years?

The search for the answer to this question takes us back to those days in the 18th and 19th centuries when psychiatrists (or 'alienists' of those times) were primarily concerned with locking up "mad people" in asylums and often subjecting them to physical or mental torture in the name of treatment. Stigma and human rights violations have always been a part of how society has viewed people with mental illnesses. Even with brilliant exceptions such as Vincenzo Chiarugi in Italy, Philippe Pinel in France, William Tuke in England, and Benjamin Rush and Dorothea Dix in the USA, the mainstream treatment of mental illnesses ignored the psychosocial context important in therapy. The social and interpersonal context and its importance in the therapeutic process arose much later, in the 20th century first as an offshoot deviation from classical psychoanalysis (e.g., in the works of Karen Horney, Erik Erikson and Harry Stack Sullivan) and later – post World War II - in the concept and practice of the Therapeutic Community and Therapeutic Milieu by Maxwell Jones, Tom Main and others. Still further closer to our times, the phenomenal work of George Brown, Jim Birley, Julian Leff and many others established "expressed emotion" in family members of persons with schizophrenia and some other mental disorders to be both important in understanding relapse as well as being an important target of therapeutic intervention. A lot of family or socially based therapeutic strategies have come up, including de-stigmatization, de-

institutionalization, and community psychiatry. All these focus on the interpersonal-social context of mental illness as being important both for understanding and for managing mental illness.

The search for the answer to our question also takes us back to the 1930s when for the first time, sociologists Faris and Dunham investigated the social dimensions of mental illnesses. [Of course, before that, there was the classic work of Emil Durkheim on the sociology of suicide, where he dealt with suicide not as a mental illness but purely as a sociological phenomenon.] This was followed by a series of epidemiological studies in the 1950s till 1970s, firmly establishing the links between social variables and mental illnesses of almost all major categories. The links were not necessarily causal (e.g., social 'causation' vs. social 'drift' in chronic psychosis), but the association was undeniable, and helped in understanding, if not explaining, a part of mental illnesses. Similar work focused on disasters, various forms of social inequalities, migration and other social forces at work at the macro level, and life events at the micro level.

Thus, social psychiatry has contributed richly to our understanding of mental illnesses (causative, clinical, course and prognostic aspects) on one hand, and therapeutic aspects on the other. It is important to realize, however, that in this process, social psychiatry has been all along a crusader! It had to crusade against institutional psychiatry in the 18th and 19th centuries, psychoanalytic psychiatry in the early 20th century, and de-contextualized checklist-based clinical psychiatry in the mid-20th century.

The highest challenge social psychiatry has faced, however, and continues to face, is from the meteoric ascent of biological psychiatry since the late 20th century. A time had come when the future of social psychiatry was even questioned, and warnings were issued ("Mind the gap: social psychiatry may disappear", Pilgrim, 2005). Biological psychiatry, with all its tremendous and rapid advances in technologically based breakthroughs, seeming ease with which nature could be studied under the microscope (or the PET scanner, depending upon the decade in question), appeal of reducing complex phenomena into progressively tinier bits and pieces, and, of course, with its high administrative and financial backing, seems to be the order of the day, reducing psychiatry to a "bio-bio-bio" paradigm, as famously mentioned by the then American Psychiatric Association President Dr. Steven

Sharfstein, when he was talking about the psychiatrists playing into the hands of the Big Pharma ("As we address these Big Pharma issues, we must examine the fact that as a profession, we have allowed the biopsychosocial model to become the bio-bio-bio model", Sharfstein, 2005).

Thus, though the biopsychosocial model does talk of interrelationship between biological, psychological and social factors in health and disease, it is often in reality not more than a compromise formula, a "lip service" (Gabbard and Kay, 2001). Social aspects of psychiatry are often – willingly or inadvertently – relegated to a secondary role in the complex of biopsychosocial phenomena, leaving the primary and ultimate role to reductionistic biological aspects. Thus, interpersonal psychotherapy gets reduced to changes in brain circuitry, social isolation gets "explained" by oxytocin deficit, and human behavior and its vicissitudes are claimed to "caused" by genetic variations.

The champions of social psychiatry, however, have held their batons high through all these. Ten year ago, after the triumphant results of the human genome project were out, and everything started to be naively believed as 'heritable' and hence destiny, leaving little room for social factors and social manoeuvres in shaping health and illness, Leon Eisenberg wrote a memorable editorial in the British Journal of Psychiatry, provocatively titled: "Social psychiatry and the human genome: contextualising heritability". In the final paragraph of that wonderfully readable article, he famously declared:

"Thus, I am a celebrant: social psychiatry is not only alive and well, but it has a bright future precisely because of genomics." (Eisenberg, 2004)

More recently, in the 604-page, 43-chapter comprehensive book named "Principles of Social Psychiatry", editors Dinesh Bhugra and Craig Morgan titled the Preface as "Social Psychiatry: Alive and Kicking", where they boldly asserted:

"....mental disorder in all its facets is intrinsically social – it is both shaped by and in turn shapes the local social and moral worlds of individuals. We can safely put to bed any angst-ridden concerns about 'the future of social psychiatry'." (Bhugra and Morgan, 2010)

Finally, as proclaimed in the Presidential Address in 2013, "Social psychiatry was the psychiatry of past, is the present and will have a strong future" (Chadda, 2014, this issue). Similar point has been emphasized in

an important 'Perspective' article accompanying this editorial by the President-Elect of WASP (Kallivayalil and Punnoose, 2014, this issue).

Today, social psychiatry has permeated almost all aspects of psychiatric inquiry and interventions, as sampled in this very issue, where topics ranged from stress in nurses and healthy adults, to psychosocial aspects of colostomy patients, to correlates of suicidal ideation, to aggression in children with conduct disorder, to cultural and dynamics of virtual relationships, among many others. In all these, one theme stands out – that human beings and their behaviour do not exist in vacuum, and no study of mankind is complete without its social milieu. Social psychiatry has changed its course, halted, stumbled, but again found its way in different directions, keeping this basic theme in view. It has not been an easy journey!

The point I am making here is that social psychiatry has always been a protagonist, an activist, a rebel of sorts. History has tried to downplay the 'social' component of biopsychosocial in many ways, from the dark middle ages to the current biological era, but social psychiatry has always bounced back. It is now highlighted in even the most "medical" (read: biologically oriented) of all scientific journals.

The latest – and, to my mind, most illuminating – example of this is reflected in the October 2, 2014 issue of the New England Journal of Medicine (NEJM), the doyen of medical journals. Two "Perspective" articles in this same issue – and the editors have made both freely downloadable – highlight the importance of social factors in studying and practising medicine. The first one provides a breath-taking longitudinal case series of patients from the same family line across three generations: Muriel (born 1935), her daughter Janine (born 1958), and Janine's son Joshua (born 1977). All three had multiple documented physical and psychiatric comorbidities. What is astounding, however, is the social matrix in which these 'medical' disorders appeared and flourished, through all three generations representing three epochs. As mentioned by the authors: "This three-generation case study shows the intertwined effects of poverty, depression, alcoholism, drug addiction, unemployment, domestic violence, and occasionally incarceration on individual family members and the family as a whole. Each family member was born into a chaotic social context, and then social and presumably some genetic factors combined to lead to a downward personal spiral" (Sayer

and Lee, 2014; emphasis added). The other article, appealingly titled "Becoming a Physician: Rethinking the social history", exhorts the trainee clinicians to spend more effort in obtaining a social history that can help understanding, planning and monitoring the treatment of patients (Behforouz et al., 2014). Both the articles (especially the first fascinating three-generation case series, because the content of the second would already be familiar to exponents of social psychiatry) are worth reading in full. After reading these two articles exhorting the basic tenets of social medicine in general, and social psychiatry in particular, I was left with a feeling no less than amazement – these articles, in NEJM, and that too as recent as October 2014? Yes, these articles, in NEJM, and that too as recent as October 2014!

Social psychiatry is "alive and well", but we cannot rest our laurels on this complacency. The moment we become complacent, other forces will tend to downsize the social dimension of psychiatry and upscale the other dimensions. Yes, we need to be activists in this regard, in addition to being mental health professionals, or at least advocates, as emphasized in the Presidential Address this year (Varghese, 2014).

A day may indeed come when psychiatry will cease to need its social advocates, and will become only ONE psychiatry, which will be *sans* boundaries, when there will be no need for 'biological' versus 'psychosocial' polarity or even territoriality. Till that time, however, we will still need to hold on to social psychiatry lest it is deprived of its due. We need to be passionate about it. Modifying the famous Chris de Burgh song, we need to carry social psychiatry "like a fire in our hearts".

#### REFERENCES

- Basu D. (2013) The bio-psycho-social model: the "future" of psychiatry? After 36 years? (Editorial). Indian Journal of Social Psychiatry, 29 (1-2), 1-5.
- Behforouz HL, Drain PK, Rhatigan JJ. (2014) Becoming a physician: rethinking the social history. New England Journal of Medicine, 371, 1277-1279.
- Bhugra D, Morgan C. (2010) Preface. Social Psychiatry: alive and kicking. In, Morgan C, Bhugra D (eds.) Principles of Social Psychiatry, 2nd edition. London: Wiley-Blackwell.
- Chadda RK. (2014) What social psychiatry has to offer in contemporary psychiatric practice. Presidential address 2013. Indian Journal of Social Psychiatry, 30 (1-2), 7-13.

Eisenberg L. (2004) Social psychiatry and the human genome: contextualising heritability (editorial). *British Journal of Psychiatry*, 184, 101-103.

Gabbard GO, Kay J. (2001) The fate of integrated treatment: Whatever happened to the biopsychosocial psychiatrist? *American Journal of Psychiatry*, 158, 1956-1963.

Kallivayalil RA, Punnoose VP. (2014) Social psychiatry: past, present and future. *Indian Journal of Social Psychiatry*, 30 (1-2), 5-6.

Pilgrim D, Rogers A. (2005) Social psychiatry and sociology (editorial). *Journal of Mental Health*, 14, 317-320.

Sayer C, Lee TH. (2014) Time after time – health policy implications of a three-generation case study. *New England Journal of Medicine*, 371, 1273-1276.

Sharfstein S. (2005) Big Pharma and American Psychiatry: the good, the bad, and the ugly. *Psychiatric News*, 19 August 2005. Accessed from: <http://psychnews.psychiatryonline.org/newsArticle.aspx?articleid=109213> (last accessed on 25 October, 2014).

Varghese PJ. (2014) Advocacy in Mental Health: Offering a voice to the voiceless – Role of Social Psychiatry. Presidential address 2014 (abstract). *Indian Journal of Social Psychiatry*, 30 (3-4), A1.

---

Debasish Basu, Editor-in-Chief, *Indian Journal of Social Psychiatry*; Professor, Department of Psychiatry, Postgraduate Institute of Medical Education & Research, Chandigarh 160012 (E-mail: [db\\_sm2002@yahoo.com](mailto:db_sm2002@yahoo.com))

---

SOCIAL PSYCHIATRY: PAST, PRESENT AND FUTURE

Roy Abraham Kallivayalil, Varghese P Punnoose

Quality of life, self esteem and social function are integral components in human life. Social psychiatry is that discipline in psychiatry which encompasses these basic tenets. It is concerned with the effect of social environment on the mental health of the individual or the effect of mentally ill person on his social environment. The social environment of a person includes his culture, workmates, family and friends (Morgan and Bhugra, 2010). Hence this is a branch of psychiatry which has inter-digitations with other disciplines like psychotherapy, sociology and cognitive psychology. In a broader sense it overlaps with politics, economics and environmental science.

The main conceptual framework originated as a part of work by Maxwell Jones and Tom Main during World War II. They identified therapeutic potential of a group as a part of social organization. They also brought out the concept of Therapeutic Community. It is interesting to note that this movement contributed in shifting psychiatric care from asylum to community even before the introduction of chlorpromazine! Social psychiatry was established as a part of Royal Medico-Psychological Association in 1946. The first book on social psychiatry was brought out in 1952 by Maxwell Jones (Morgan and Bhugra, 2010).

During the initial days the definition and approach of social psychiatry varied from country to country. In Britain it was mainly based on psychotherapy while in Holland it had its roots in psychoanalysis. In Germany, it mainly aimed at preventing mental pathology in the community (Neve, 2004). In 1973 Social and Community Psychiatry group was established as a part of Royal College of Psychiatrists (Morgan and Bhugra, 2010). As years progressed, the close association which psychiatry had with sociology deteriorated due to the latter's association with anti-psychiatry movement.

Social psychiatry has made important contribution to the understanding of mental disorders. It has given evidence about the impact of social forces upon mental health. It also helped to promote co-operation between various disciplines (Sorel, 2001). India on its part also had made immense contribution to social psychiatry. Studies from India have shown that social factors like

caste and class play an important role in the pathogenesis and prognosis of mental disorders. Studies like IPSS and DOSMED also showed that prognosis of disorders like schizophrenia is better in countries like India (Kallivayalil, Chadda and Mezzich, 2010). Social factors were identified to be the major variables contributing to this desirable outcome.

In 1980s and 1990s, there were apprehensions that social psychiatry would be eclipsed by the great strides made in neurosciences. On the contrary, the emerging knowledge about brain functioning and human genomics opened up new vistas for research in the field of social psychiatry. The best example perhaps of such developments is the gene x environment studies. These studies have brought to light the epigenetic influence of social and environmental factors on psychopathology. Newer templates for study on human genome, family dynamics and group behavior may be very significant in the backdrop of resurgent global challenges like ethnic violence.

Public health specialists predict non-communicable diseases and life-style diseases to be the dominant health problems contributing to morbidity and disability in the coming decades. Even the re-emergence of infectious diseases is attributed to social, environmental and behavioural causes. Thus the scope and role of social psychiatry to work hand in hand with the public health and community health specialist is immense. In the future, social psychiatry can play a very special role by working with advocacy groups and policy makers, thus helping in taking decisions which can have a great impact on the society (Bhugra, 1993).

At the individual level, social psychiatry emphasizes on promoting coping ability, empowerment and thus autonomy of an individual. The emergence of Person Centered Medicine in the international scenario is in line with the principles of social psychiatry. The application of person centered psychiatry in primary care has been highlighted in a recent article (Kallivayalil and Punnoose, 2011).

People who suffer from serious mental illness have smaller social networks, which is mainly due to the discriminatory attitudes of the society we live in. This

diminished social network considerably restricts their full participation in social activities. This is relevant not only in the developing world but also in the developed world. Social interventions to tackle these discriminatory attitudes are very important and should be part of our management strategies.

The impact of rapid pace of modernization in developing world is also a topic worth serious study by the social psychiatrist. The adaptation or maladaptation of human nervous system to such fast changes should be more of a concern to the psychiatrist than to the philosopher (Toffler, 1970). Thus in the future social psychiatry should take up the challenge to bridge neuroscience with humanities and philosophy. Mahatma Gandhi once remarked that science without humanity is a social sin. In no other branches of science this observation holds so good!

#### REFERENCES

- Bhugra D. (1993) Indian Journal of Social Psychiatry: commemorative issue WASP. *Psychiatric Bulletin*, 17, 382-383.
- Kallivayalil RA, Punnoose VP. (2011) Person Centered Medicine in Primary Health Care: Academic Perspectives. *International Journal of Person Centered Medicine*, 1(3). DOI: <http://dx.doi.org/10.5750%2Fijpcmv1i3.97>
- Kallivayalil RA, Chadda RK, Mezzich JE. (2010) Indian Psychiatry: Research and international perspectives. *Indian Journal of Psychiatry* 52, Supplement 1, S38-S42.
- Morgan C, Bhugra D, eds. (2010) *Principles of Social Psychiatry*, 2nd Edition. London: Wiley-Blackwell.
- Neve M. (2004) A commentary on the history of social psychiatry and psychotherapy in twentieth-century Germany, Holland and Great Britain. *Medical History*, 48, 407-412.
- Sorel E. (2001) *Social Psychiatry: A mission and a vision for the 21st century*. Available as: <http://www.socialpsychiatry.org/aaspassets/docs/socpsychmisnvisnES.pdf> (last accessed on October 26, 2014).
- Toffler A. (1970) *Future Shock*. New York: Random House.
- 
- Roy Abraham Kallivayalil, President-Elect, World Association of Social Psychiatry; Professor & Head, Department of Psychiatry, Pushpagiri Institute of Medical Sciences, Tiruvalla, Kerala 689 101. E-mail: [roykalli@gmail.com](mailto:roykalli@gmail.com) (Corresponding Author)
- Varghese P Punnoose, Professor & Head, Department of Psychiatry, Government Medical College, Kottayam, Kerala 686 008.
-

## WHAT SOCIAL PSYCHIATRY HAS TO OFFER IN CONTEMPORARY PSYCHIATRIC PRACTICE?

R.K. Chadda

Mr Chairperson, Past Presidents of the Indian Association for Social Psychiatry (IASP), Members of the IASP, my respected teachers in the audience, ladies and gentlemen. I took over as President, Indian Association for Social Psychiatry two years ago. I am grateful to the IASP membership for bestowing on me the responsibility of the President for this period. The period has been wonderful and during this period we also won the bid to organise the XXI World Congress of Social Psychiatry at New Delhi in 2016. It is after 18 years that the IASP has returned to the city of Kolkata. I have fond memories of that conference. The membership of the IASP has grown almost four to five times during this period. I have chosen the topic "What social psychiatry has to offer in contemporary psychiatric practice?" for the presidential address today.

To begin with, I will like to discuss about the scope and historical developments in social psychiatry. Later I will elaborate upon the current status of social psychiatry and its relevance in the contemporary psychiatric practice.

Scope and historical contributions of social psychiatry:

Social psychiatry is the branch of psychiatry which deals with interplay between social factors and mental illness. This includes role of social factors in causation, clinical presentation, management, and course and outcome of mental disorders. Role of social factors in mental disorders as well as health has been known since long. The definition of health as given in the World Health Organization's constitution "health is not merely the absence of disease entity, but rather a state of complete physical, mental and social wellbeing", further emphasises the significance of social factors in health. The biopsychosocial model of disease, as proposed by George Engel (Engel, 1980), includes the contributions of biological, psychological and sociological factors in genesis and management of mental as well as medical illnesses. Thus the scope of sociological factors goes much beyond the discipline of psychiatry, and is applicable to a range of medical illnesses.

Role of social factors in causation and management of mental illnesses has been recognised for more than 100 years. The recognition of social factors in causation of

schizophrenia, the social causation hypothesis and the effect of illness on the social mobility, the social drift hypothesis are two important examples of interaction of sociological factors with mental health. It is well known that social adversities are associated with higher risk to develop mental illnesses. The finding of high prevalence of schizophrenia in the deprived areas of the city of Chicago in the landmark study by Hollingshead and Readlich in Chicago in the 1930s has been replicated by a number of researchers across the world. Contribution of sociological factors in personality development was well acknowledged in the personality theories by Erik Erikson, Harry Stack Sullivan and Karen Horney.

The initial experiments of mental health reforms in mental hospitals before the psychopharmacology revolution leading to improvement in condition of the hospitals as well as the inmates are well known examples of efficacy of social interventions in mental illness. Ill effects of long term institutionalisation and the beneficial effects of therapeutic community and deinstitutionalisation movement further emphasize the significance of social component of psychiatry. Role of expressed emotions in relapse in schizophrenia and wide differences in course and outcome of schizophrenia across different countries in the world, as found in the IPSS and DOSMED studies of schizophrenia have been the other important findings from research in the field of social psychiatry.

Decline in interest in social psychiatry since 1980s

The last quarter of the twentieth century was associated with marked improvement in our understanding of the structure and functioning of brain with advances in structural and functional imaging. We have probably become wiser in our understanding of the etiogenesis of most of the mental disorders, but still the exact etiology of most mental disorders remains obscure. The period also saw an introduction of a large number of new medications in treatment of mental disorders including a range of antidepressants, antipsychotics, lithium, and the use of anticonvulsants as mood stabilisers.

However, a critical review of the advances in biological

psychiatry in the last 3 decades reveals a considerable progress in fundamental research in genetics and neuroscience related to psychiatry, but no obvious breakthrough in treatments (Priebe et al, 2013). There have been no new antipsychotics, antidepressants or mood stabilisers that are clearly more effective than the drugs available introduced earlier (Saraga & Stiefel, 2011).

Mental disorders have a neurobiological, psychological and social dimension. The current thinking in psychiatric research considers neurobiological changes as the basis of mental disorders, which are expressed in form of psychological symptoms. The symptoms are, however, experienced in a social context. The neurobiological findings in an individual patient tend to be taken as the explanation for the illness. The neurobiological processes have also been proposed as explanations for how and why interventions work, including psychotherapy (Priebe et al, 2013). However, the recent lack of a definite progress in interventions in the mental disorders is a reason to pause and consider alternative paradigms rather than simply pressing on with 'more of the same'.

Some of the important research findings further supporting the need for considering social psychiatric interventions include the findings of the Global Burden of Disease (GBD) study showing the psychiatric disorders as one of the major contributors to the disease related burden (Murray et al, 2012). Duration of untreated psychosis has emerged as an important outcome variable affecting the outcome in psychosis. Other important findings of social psychiatry research include non-adherence to treatment in mental disorders, increasing suicide rates, not seeking help for mental health problems, unmet need for mental health care, and many others. Thus considering a social paradigm in psychiatry could be an important alternative strategy in psychiatric practice. The social paradigm has often been ignored, but the social psychiatry based interventions may be of help in these areas.

Though the psychiatric services are relatively well developed in the Western world, the non-Western countries in Asia, Africa and South America suffer a gross deficiency in the mental health resources. Social stigma to mental illnesses and lack of awareness about mental illnesses further adds to the problem. Social psychiatry methods can be of great help in this sector.

Solutions to some of the issues are discussed later in this

address.

#### Dealing with disease burden due to mental disorders

Mental and substance use disorders are notable contributors to the global burden of disease, directly accounting for about 7.4% of disease burden worldwide in the GBD 2010 study (Murray et al, 2012). The disorders were responsible for more of the global burden than HIV/AIDS and tuberculosis, diabetes, or transport injuries. A global shift in the burden of disease has been noticed from communicable, maternal, neonatal, and nutritional disorders to non-communicable diseases and injuries (Whiteford et al, 2013). Problems associated with the burden of mental and substance use disorders are especially severe in many developing countries, which spend less than 2% of their health budgets on mental health (World Health Organization, 2011).

A delay in seeking treatment is an important contributor to the burden. Even in developed countries, treatment is often delayed by many years after the onset of illness (Wang et al, 2007). The delay could be due to three reasons: scarcity of available human and financial resources, inequities in their distribution, and inefficiencies in their use (Saxena et al, 2007). Stigma about mental and substance use disorders is also an important reason for such a delay in seeking treatment. The combination of stigma and a very large treatment gap also contribute to violation of the basic human rights of the persons with mental illnesses (Kleinman, 2009).

#### Strategies for increasing manpower resources in mental health sector

Most of the low and middle income countries (LAMIC) have a gross deficiency of mental health care workers. The estimated total number of mental health care workers in 58 countries from the LAMIC group was 362,000 in 2005, representing 22.3 workers per 100,000 in low income countries and 26.7 per 100,000 in the middle income countries, comprising 6% psychiatrists, 54% nurses and 41% psychosocial care providers. This adds up to a shortage of 1.18 million mental health workers in the 144 LAMIC countries (Kakuma et al, 2010). India also has a gross deficit of the mental health care resources. As per recent estimates, average national deficit of psychiatrists is estimated as 77%. More than one third of the population of India has more than 90% deficit of psychiatrists. Figures for psychologists, psychiatric social workers and psychiatric

nurses working in mental health care are even lesser (World Health Organization, 2005).

There have been many attempts at increasing the manpower resources in the mental health sector. The strategies in India have included increasing the training facilities like establishment of centres of excellence on mental health and upgradation of the existing training centres under the National Mental Health Programme. The state funding for mental health has been augmented (Goel, 2011). However, the targets have often not been met even after strengthening of the strategies. In the past, over ambitious nature of programme and lack of budgetary support were cited as the reasons for failure, which have now been rectified to some extent. The private sector has also been contributing to the addition of manpower by opening training facilities for mental health professionals. However, the challenges also include maintaining quality standards at the new centres. Still, a lot more is required.

Task shifting or task sharing is another approach, which has been proposed to deal with the manpower deficit (Kakuma et al, 2011). The approach refers to delegating tasks to the existing or new cadres with either less training or narrowly tailored training. The primary role of the interventions in routine care can be taken up by the primary care or family physicians. Role of the mental health specialists like psychiatrists would change with their clinical role restricted to the complex psychiatric cases; whereas the less complex cases can be managed by the non-specialist doctors. This would also help in reach of the mental health care to the remote areas. Studies have shown that psychiatrists, neurologists and psychosocial workers are able to provide effective short term training, supervision and monitoring for the non-specialist health workers, enabling detection of mental disorders, referral, treatment, psychoeducation and follow up care (Chatterjee et al, 2003; Chadda et al, 2009; Patel et al, 2010). Social workers have been found to be helpful in facilitating support groups for patients and caregivers as part of multidisciplinary mental health team (Murthy et al, 2005). Trained nurses, social workers and lay workers have been found to be able to take up the follow up and educational roles (Patel et al, 2010).

The approach of task sharing has also received criticism (Maj, 2010). For example, a nurse cannot learn in 7 days what a psychiatrist has learnt in 5 or 6 years of postgraduate training, nor can psychiatrists withdraw

from their clinical practice to become only educators and supervisors. Clinical skills are easily lost if they are not cultivated, and a psychiatrist who has not been seeing patients for years will have little to share with other professionals. Here, it is important to emphasise that the need to train and supervise medical professionals can be reduced if psychiatry is given such a place in the undergraduate medical curriculum that corresponds to the prevalence and impact of mental disorders in the community (Maj, 2010). The Indian Association for Social Psychiatry has taken up this as an important agenda in its activities, and has been actively pursuing this with the Ministry of Health and Family Welfare, Government of India and the Medical Council of India.

Stigma to mental disorders and spreading community awareness about mental illnesses

Stigma to mental disorders has existed since centuries. Earlier, no effective treatments were available for psychiatric disorders, and the mentally ill persons were stigmatized because of their unusual behaviour, which would be unpredictable on occasions. In recent times, though a number of effective treatments are now available for almost all psychiatric illnesses, a number of myths still prevail in the community, since the negative beliefs about the mental illnesses are often deeply rooted and culturally sensitive.

Stigma is often responsible for a delay in seeking psychiatric help because the patients and families often try to hide the illness, increasing the severity, disability and behavioural complications associated with psychiatric disorders, which further increase the stigma. As per the World Health Report of 2001, nearly 450 million people suffer from mental illnesses worldwide, but only a small fraction receives treatment. As late as 1999, the Surgeon General's Report of the United States of America mentioned that stigma prevented more than half of the Americans needing mental health care from receiving appropriate help (US Department of Health and Human Services, 1999). Stigma interferes with accessing proper mental and general health care, medication adherence, procurement of a job, receiving marriage proposals, renting a house and acceptance in society as an individual (Murthy, 2011). Stigma also has an adverse impact on the public health programmes in form of a low priority being accorded to the mental health services, difficulty in getting good quality staff to work in these services, problems in finding suitable

employment for persons with mental illness and poor quality of services for physical illnesses for the persons with mental illness (Kadri & Sartorius, 2005).

Strategies targeting reduction of stigma may reduce the reluctance on the part of patients as well as their caregivers in seeking psychiatric care, and help in enhancing community support and reducing discrimination against the mentally ill (Wig, 1997). Fighting stigma against the mental illness has been one of the important activities undertaken by many professional organizations including the World Health Organization (WHO), the World Psychiatric Association (WPA), the World Federation of Mental Health (WFMH), the American Psychiatric Association, the Indian Psychiatric Society (IPS) and the Indian Association for Social Psychiatry (IASP). The WFMH has identified 10 October as the World Mental Health day, which has been adopted by many international organizations including the WHO and WPA. The day is now associated with a weeklong community awareness activities on mental health, undertaken all around the world.

The strategies at fighting stigma could operate at the individual, societal and institutional level (Khandelwal & Pattanayak, 2010). The individual level strategies focus on ensuring facilities for treatment, overcoming barriers to treatment and providing care and support to the persons with mental illness. Bringing the improved persons with mental illness to the mainstream can go a long way in reducing stigma. The treatment facilities need to be created in a way that these are easily accessible in the community. There is also need for community based rehabilitation so that once a person with severe mental illness goes back to community after improvement, the person is gainfully rehabilitated (Chadda et al, 2000). Self help and support groups in the community can play an important role here. Such strategies will go a long way in reducing stigma against the mental illness. The strategies at societal level would include spreading awareness about an early identification of mental illnesses and availability of effective treatments. A message that mental illnesses are just like any other physical illness is important to be given. Community participation in development of services by involving the local community leaders should be undertaken. The professional organisations need to take an active role in this area. At the institutional level, the State needs to take adequate steps at development of services and campaigns at national and local levels. The National Mental Health

Programme of India has been putting regular advertisements on the audiovisual and print media at promoting awareness about mental illnesses aimed at reducing stigma. A number of private organisations and individuals have also taken such initiatives (Murthy, 2011).

The mental health professionals need to take a more proactive role and sustain their efforts in the fight on stigma against the mental illness.

Strategies at caring caregivers of the persons with mental illness

Attention also needs to be focussed on the caregivers of the mentally ill, especially the family caregivers, who have received minimal attention from the mental health professionals for addressing their needs. In India and probably most of the LAMIC group of countries, most patients with mental disorders live with their families. The family takes care of them and their treatment. The family caregivers have to make a number of sacrifices on their own life while caring for their relative with mental illness. The family caregiver faces lot of stresses and burden. The phenomena have been studied in great detail in Indian setting (Pai and Kapur, 1983; Nehra et al, 2005; Chadda et al, 2007; Krishnan et al, 2013). However, not much formal help is available for the stressed family caregiver at most of the places.

With the family size becoming smaller over the years, the number of family members sharing the burden is decreasing, leading to more severe burden on the existing family caregivers. The family caregivers could include parents, spouses or siblings. The caregivers of patients with chronic mental illnesses like schizophrenia and bipolar disorder would find the role more and more difficult to fulfil as they grow old. The situation is especially critical if the parents are the caregivers. The stressed caregiver has not received much attention from the mental health professionals, as far as the professional services are concerned (Ganguly et al, 2010, Chadda et al 2010)). This is a big challenge to the social psychiatry.

At certain places in the country, some beginnings have taken place in this direction in form of development of self-help groups amongst the families. Some of such groups include Alliance for the Mentally Ill in Chennai, the Association for the Mentally Disabled (AMEND) in Bengaluru, Schizophrenia Awareness Association in Pune (Bhatia et al, 2012).

### Mental health promotion and prevention in psychiatry

Mental health promotion is considered an important strategy towards both primary as well as secondary prevention in psychiatry. WHO has defined health promotion as the process of enabling people to increase control over their health and improve it. Mental health promotion often refers to the positive mental health, which is the desired outcome of health promotion interventions (World Health Organization, 2004). There are a number of advantages for integrating promotion and prevention in the field of mental health. Preventing mental disorders involves not only targeting risk factors and early symptoms of the disease, but can also involve promoting associated activities that improve the overall quality of life of people and their society (Chadda, 2010).

Preventive strategies aim to reduce the incidence, prevalence, and recurrence of mental disorders, the time spent with symptoms, the risks for such mental illnesses, and the effects of illness on affected people, their families, and society (Patel et al, 2007).

An effective prevention programme in psychiatry needs to act at multiple levels. The general strategies used include acting on risk and protective factors, improving quality of life, and reducing stressors and enhancing adaptation. The specific strategies are focussed on the specific psychiatric disorders (Chadda, 2010).

Most research has come from the high income countries. There is strong evidence available in form of meta analytic reviews about the efficacy of preventive trials targeted at depressive symptoms, drug and alcohol use, and aggressive behaviour in children and adolescents. Group-based parenting interventions have been found to be effective in improving emotional and behavioural adjustment in children aged under 3 years (Jane-Llopis et al, 2003; Patel et al, 2007).

An uncontrolled trial of a community-based programme in rural India that emphasised education and awareness building, action against drunken men, advocacy to politicians to limit the sale and distribution of alcohol in bars and shops, and mass oaths for abstinence reported a 60% reduction in alcohol consumption. (Bang and Bang, 1991)

The increasing suicide rate in India over the last three decades has also been a matter of concern, where preventive strategies at identifying the at-risk person, and providing help to a person in distress can have an important role (Vijaykumar, 2012).

### Initiatives to be taken by social psychiatry

Social psychiatry has to play multiple roles in future including mental health promotion, spreading awareness about the mental illnesses, instituting early intervention, and identifying and acting at the risk factors for mental disorders. An understanding of the role that social factors play in the precipitation and perpetuation of psychiatric illnesses is critical in developing any educational activities. Even though psychiatrists or mental health professionals may not be able to reduce social inequalities, awareness of variations and informing policy makers is a role that they can easily fulfill (Bhugra & Till, 2013). Early interventions must include educating patients and families, as well as making the society at large aware of the impact of mental illness.

Psychiatric education today is more biologically focussed than a few decades ago. Role of psychological and social factors in etiology, course, outcome and treatment of various psychiatric disorders is often ignored. If this continues, main contributions of psychiatrists will be diagnostic assessment and psychopharmacological treatment, leaving psychotherapy to psychologists and psychosocial care to social workers and care managers? Psychiatrists have to be conversant with all aspects of the biopsychosocial model, if they want to deliver. They also need to be trained to work in community-based services, in collaboration with other professionals.

The majority of patients with mental and emotional disorders are seen in primary health care. An adequate education, training and support of the medical professionals in such services are indispensable. Future psychiatrists need to be prepared to provide this kind of education and support. They need to be flexible and respond to changing needs, and be ready to take responsibility towards society. However, they also need to be cautious and resist attempts of society to delegate all responsibility to psychiatry, especially the issues involving cultural sensitivities and values.

Role of social factors cannot be ignored despite all biological advances. Biology can never replace the social factors. The psychiatrist will always be working in a social situation, since communication is an important part of psychiatric assessment and psychiatric illnesses mostly manifest in interpersonal situations. The psychiatrist needs to be familiar with social risk and protective factors so as to take appropriate steps at mental health promotion and prevention.

A number of recommendations of the World Health Report of 2001 refer to social psychiatry methods such as provide treatment of mental disorders in primary care, bringing the services at doorsteps, giving care in the community, educating the public, involving communities, families and consumers, developing human resources, developing linkages with other sectors, and monitoring community mental health.

#### CONCLUSION

Social psychiatry was the psychiatry of past, is the present and will have a strong future. It is not possible to understand a person with mental illness without going into details of the social milieu, the person is coming from. Psychosocial interventions aimed at the patient as well as the family and the society at large would be needed, if the person is to be successfully treated and rehabilitated in the society.

#### REFERENCES

- Bang A, Bang R (1991) Community participation in research and action against alcoholism. *World Health Forum*, 12, 104-109.
- Bhatia V, Garg R, Galhotra A (2012) Family and mental health in India. In, *Community Mental Health in India* (Eds: BS Chavan, N Gupta, P Arun, A Sidana, S Jadhav). Jaypee: New Delhi, pp 77-88.
- Bhugra D, Till A (2013) Public mental health is about social psychiatry. *International Journal of Social Psychiatry*, 59, 105-106.
- Chadda RK (2010) Prevention in psychiatry. *Journal of Mental Health and Human Behaviour*, 15, 69-76.
- Chadda RK, Amarjeet, Jain A, Bapna JS, Singh TB (2000) Family rehabilitation of psychiatric patients: a study of involuntary admissions to a psychiatric hospital. *International Journal of Rehabilitation Research*, 23, 327-330
- Chadda RK, Singh TB, Ganguly KK (2007) Caregiver Burden and Coping: A prospective study of relationship between burden and coping in caregivers of patients with schizophrenia and bipolar affective disorder. *Social Psychiatry & Psychiatric Epidemiology*, 42, 923-930.
- Chadda RK, Sood M, Kumar N (2009) Experiences of a sensitization program on common mental disorders for primary care physicians using a problem based learning approach. *Indian Journal of Psychiatry*, 51, 289-291.
- Chadda RK, Singh TB, Ganguly KK (2010). A prospective study of relationship of caregivers' mental health with the perceived burden and coping in schizophrenia and bipolar affective disorder. *Indian Journal of Social Psychiatry*, 25, 45-51.
- Chatterjee S, Patel V, Chatterjee A, Weiss HA (2003) Evaluation of a community-based rehabilitation model for chronic schizophrenia in rural India. *British Journal of Psychiatry*, 182, 57-62
- Engel G (1980) The clinical application of the biopsychosocial model. *American Journal of Psychiatry*, 137, 535-544.
- Ganguly KK, Chadda RK, Singh TB (2009). A study of sociocultural perspectives of caregivers in burden coping behaviour in bipolar disorder and schizophrenia cases. *International Journal of Psychosocial Rehabilitation*, 13, 93-103.
- Goel DS (2011) Why mental health services in low- and middle-income countries are under-resourced, under-performing? An Indian perspective. *National Medical Journal of India*, 24, 94-97.
- Horowitz JL, Garber J (2006) The prevention of depressive symptoms in children and adolescents: a meta-analytic review. *Journal of Consulting and Clinical Psychology*, 74, 401-415.
- Jane-Llopis E, Hosman C, Jenkins R, Anderson P (2003) Predictors of efficacy in depression prevention programmes. Meta-analysis. *British Journal of Psychiatry*, 183, 384-397.
- Kadri N, Sartorius N (2005) The Global fight against the stigma of schizophrenia. *PLoS Med* 2(7):e136. Epub 2005 Jul 26.
- Kakuma R, Minas H, van Ginneken N, et al. (2011) Human resources for mental health care: current situation and strategies for action. *Lancet*, 378, 1654-1663.
- Khandelwal SK, Pattanayak RD (2010) Fight against stigma. In, *Community Mental Health in India* (Eds: BS Chavan, N Gupta, P Arun, A Sidana, S Jadhav). Jaypee: New Delhi, pp 334-344.
- Kleinman A (2009) Global mental health: a failure of humanity. *Lancet* 374: 603-604.
- Krishnan V, Sood M, Chadda RK (2013) Caregiver burden and disability in somatization disorder. *Journal of Psychosomatic Research*, 75, 376-380.
- Maj M (2010) The rights of people with mental disorders: WPA perspective. *The Lancet*, 378, 1534 - 1535

Murthy RS, Kishore Kumar KV, Chisholm D, Thomas T, Sekar K, Chandrashekari CR (2005) Community outreach for untreated schizophrenia in rural India: a follow-up study of symptoms, disability, family burden and costs. *Psychological Medicine*, 35, 341–351.

Murthy RS (2011) Mental health initiatives in India (1947–2010). *National Medical Journal of India*, 24, 98-107.

Nehra R, Chakrabarti S, Kulhara P, et al. (2005) Caregiver coping in bipolar disorder and schizophrenia: a re-examination. *Social Psychiatry Psychiatric Epidemiology*, 40, 329–336.

Pai S, Kapur RL (1983) Evaluation of home care treatment for schizophrenic patients. *Acta Pschiatrica Scandinavica*, 67, 80–88.

Patel V, Araya R, Chatterjee S, et al. (2007) Treatment and prevention of mental disorders in low-income and middle-income countries. *Lancet*, 370, 991-1005.

Patel V, Maj M, Flisher AJ, et al (2010) Reducing the treatment gap for mental disorders: a WPA survey. *World Psychiatry*, 9, 169–176.

Priebe S, Burns T, Craig TKJ (2013) The future of academic psychiatry may be social. *British Journal of Psychiatry*, 202, 319-320.

Saraga M, Stiefel F (2011) Psychiatry and the scientific fallacy. *Acta Psychiatrica Scandinavica*, 124, 70-72.

Saxena S, Thornicroft G, Knapp M, Whiteford H (2007) Resources for mental health: scarcity, inequity, and inefficiency. *Lancet*, 370, 878-889.

US Department of Health and Human Services (DHHS) (1999). *Mental health: a report of the Surgeon General – Executive summary*. Rockville, MD, Department of Health and Human Services, US Public Health Service.

Vijaykumar L (2007) Suicide and its prevention: The urgent need in India. *Indian Journal of Psychiatry*, 49, 81-84.

Wang PS, Angermeyer M, Borges G, et al. (2007) Delay and failure in treatment seeking after first onset of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry*, 6, 177-185.

Whiteford HA, Degenhardt L, Rehm J, et al. (2013) Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet* 382, 1575-1586.

Wig NN (1997) Stigma against mental illness: Editorial. *Indian Journal of Psychiatry*, 39, 187-189.

World Health Organization (2001) *The World Health Report 2001. Mental Health: New Understandings, New Hope*. World Health Organization: Geneva.

World Health Organization (2004) *Prevention of Mental Disorders: Effective Interventions and Policy Options - Summary Report*. Geneva: World Health Organization.

World Health Organization (2005). *Mental Health Atlas 2005*. Geneva: WHO; 2005.

World Health Organization (2011) *Mental Health Atlas 2011 - Department of Mental Health and Substance Abuse*, World Health Organization.

---

R.K. Chadda, Immediate Past President, Indian Association for Social Psychiatry; Professor of Psychiatry, All India Institute of Medical Sciences, New Delhi 110029 (E-mail: drrakeshchadda@gmail.com)

---

## BRIDGING THE MENTAL HEALTH GAP

P. Kulhara

### Abstract

India is a vast country with huge number of patients requiring and seeking mental health care from mental health professionals. The resources to deal with this gigantic problem of mental ill health are limited. There is appreciable imbalance between residence of people and location of mental health facilities-the rural urban divide and disproportionate distribution of mental health professionals. Most of our general hospital psychiatry units and mental hospitals are inadequately staffed; the scene of private psychiatry is no different. Undergraduate medical education in relation to psychiatry is perfunctory, postgraduate psychiatric training is fragmented. National Mental Health Programme and District Mental Health Programme have positively impacted mental health delivery services. The Mental Health Gap Action Programme- mhGAP initiative of the World Health Organization is a welcome step in the right direction. Mental Health legislation, interventions by the Supreme Court of India and the National Human Rights Commission have energized funding of mental health programme. Much more needs to be done to make mental health services affordable and accessible so that those who need these service the most.

### INTRODUCTION

India is a huge country with enormous population and also has numerous health, including mental health problems. According to Census of India, 2011, the total population of our country is about 1.22 billions of which 623 millions are males and 587 millions are females. Nearly 69% of the population is rural based and the rest 31% dwells in urban areas. 56% of the population falls in the age range of 15- 59 years, and rest of the population is either less than 15 years or more than 60 years of age. These population statistics are worth remembering as these have important bearing on mental health problems and service delivery related to these problems.

### MENTAL HEALTH PROBLEMS: GENERAL REMARKS

It is well recognized now that mental disorders account for 12% of Global burden of disease. 10% of Disability Adjusted Life Years- DALY across all groups of disorders are due to depressive disorders, schizophrenia and alcohol related disorders. Yet, money spent on providing care for the mentally ill- the mental health budget is very low in most countries and in India, it is less than 1% of GDP expenditure of total health budget

### EXTENT OF MENTAL HEALTH PROBLEMS & THE GAP: HISTORY

Way back in 1946, Sir Joseph Bhore remarked that even if the population of mentally ill patients requiring mental hospital care in India is taken as 2/1000 population, then hospital accommodation should be available for 800,000 patients as against the existing bed strength of 10,000 for the mentally ill! Mudaliar in 1962 noted with dismay that reliable statistics regarding mental morbidity in our country were not available. It was only in 1970 that Dube published the first major psychiatric epidemiological work for rural population and reported prevalence rate of psychiatric disorders as 17.9/1000 population.

### MENTAL HEALTH PROBLEMS: RECENT DATA

According to Gururaj & Isaac (2003), prevalence of mental disorders based on meta-analysis and pooled data analysis varies from 58.2/1,000 population to 73.00/ 1,000 population in our country. The prevalence of schizophrenia varies from 2.17/ 1,000 to 5.3/1,000 population and the incidence rates vary from 0.38 to 0.93 per 1,000 population. The prevalence rates of Common Mental Disorders- CMD range from 20% to 57% in Primary Health Care- PHC settings both in urban and rural set-ups.

### EXISTING MENTAL HEALTH RESOURCES

Directorate General of Health Services-DGHS of the Ministry of Health and Family Welfare- MoHFW,

Government of India- GOI conducted a National Survey of Mental Health Resources in 2002 and published figures for various categories of mental health professionals in our country. The mental health professional's scene in terms of availability of such personnel as depicted by these figures is quite pathetic. There are only about 3000 psychiatrists (now perhaps around 4000), the number of clinical psychologists is quite low (less than 600) and the quantum of psychiatric social worker is even more pitiable (less than 500). The position of psychiatric nurses according to this survey is quite heartwarming and this survey reports that there are nearly 7500 psychiatric nurses in the country! This survey reports that the total number of mental hospital beds is nearly 28,000 and nearly 3000 psychiatric beds are in the setting of general hospitals both in the government and private hospital settings.

#### MANPOWER RESOURCES REQUIREMENT AND THE GAP

The DGHS, MoHFW of the GOI (2003) provided guidelines for calculating mental health professional requirements. It recommended that there should be 1 psychiatrist per 100,000 population, 1.5 clinical psychologists per 100,000 population, 2 psychiatric social workers per 100,000 population and 1 psychiatric nurse for every 10 psychiatric beds in various types of psychiatric hospitals. Using these recommendations, the total number of psychiatrists at the present should be around 12,000, clinical psychologists around 18,000, psychiatric social workers around 24,000 and psychiatric nurses around 3000! Thus, it is patently obvious that we are way off of the recommended figures and the gap between existing mental health professional resource and the ideally required is huge.

#### MAGNITUDE OF THE PROBLEM AND THE MENTAL HEALTH GAP

*Schizophrenia as an example: the number game and the enormity of the problem*

As stated earlier, the incidence rate of schizophrenia varies from 0.38/ 1000 population to 0.93/1000 population. Using this as a reference point, possible number of new cases of schizophrenia per year in our country would be anywhere between 0.48 to 1.13 millions. Going by the reported prevalence rates of schizophrenia (2.17/ 1,000 to 5.3/ 1,000 population), the possible number of cases of schizophrenia in our country would be between 2.63 to 6.41 millions. It is widely believed that nearly 15% of patients with

schizophrenia eventually deteriorate to such an extent that they require institutional care; hence, for schizophrenia alone we need nearly 394,500 to 961,500 beds in institutional care setting! When one considers urban rural divide, then the stark reality strikes that majority of the patients are in rural settings but almost all of mental health care facilities are in urban areas. Therefore, whatever little mental health resource we have, even that is neither accessible nor affordable to those who need it the most. Reliable statistical figures for disability accrued by our patients with schizophrenia are not available, however, even if one concedes that nearly 40% of our patients have significant disability falling under the purview of Personal with Disability Act, then the resources (financial, rehabilitation and aftercare) to deal with this colossal amount of disability simply do not exist. The burden of care becomes gigantic and in the absence of any worthwhile socio-political, psychosocial rehabilitation or mental health initiatives, the family of the patient by default becomes the sole carrier of this burden. The number of patients with schizophrenia requiring care that we have and the resources that exist – trained mental health professional resource, institutional care facilities, psychosocial rehabilitation amenities and disability benefit dispensations do not simply match. The gap between mental health care seekers and mental health care provisions and mental health care providers is huge.

#### MENTAL HEALTH CARE: THE GAP

##### *Care Facilities and Care Providers:*

Basically, our country has the following care facilities that could or should provide services to the mentally ill:

1. General Hospital Psychiatric Units- GHPU
2. Mental Hospitals
3. Private Psychiatry
4. Rehabilitation and aftercare services

##### *General Hospital Psychiatric Units- GHPU and General Hospital Psychiatry in India: Still a long way to go*

The last 50 years have seen mushrooming and growth of general hospital psychiatry in our country. Even today, almost all of such GHPUs are in the setting of teaching institutions (medical colleges) both in the government and private sectors. Most of these medical teaching institutions are in urban areas and there are very few true rural medical colleges. Thus, these remain out of bounds for the care seekers- patients and families alike.

Most district hospitals do not have psychiatric units, and the same is true for industrial and other such sectors (Indian Railways paramilitary forces- Central Reserve Police Force- CRPF or Border Security Force- BSF as examples).

Mental Hospitals in India: Still a long way to go

The DGHS, MoHFW, GOI carried out a survey of mental hospitals in our country in 2002. This survey was conducted on 37 such facilities and evaluated these facilities on various parameters in terms of whether or not these were adequate. The findings of this survey are summarized in the table below:

| Parameters/<br>Facilities (n=37)          | Adequate   | Inadequate |
|---|------------|------------|
| 1 Infrastructure                          | 12 (32.4%) | 25 (67.6%) |
| 2 Staff                                   | 10 (27.0%) | 27 (73%)   |
| 3 Clinical & Lab. services                | 16 (43.2%) | 21 (56.8%) |
| 4 Availability of drugs etc.              | 28 (75.7%) | 9 (24.3%)  |
| 5 Quality of food and catering services   | 23 (62.2%) | 14 (37.8%) |
| 6 Availability of linen/ patient clothing | 15 (40.5%) | 22(59.5%)  |
| 7 Recreational facilities                 | 18 (48.6%) | 19 (51.4%) |
| 8 Vocational/ Rehab facilities            | 14 (37.8%) | 23 (62.2%) |

It is apparent that all of the facilities surveyed lacked in proper infrastructure, were woefully understaffed, had poor clinical and laboratory services, quality of food and catering services, linen and patients' clothing, and recreational, vocational and rehabilitation facilities were in poor state. The only redeeming feature was availability of essential drugs.

Private Psychiatry in India: Still a long way to go

It appears that as days go by, private psychiatry as a profession (? business) is booming but the returns to the patients are nose diving. The private psychiatry sector has same or similar problems that infest state mental hospitals i.e. shortage of trained mental health staff, lack of quality assurance, non-existent rehabilitation and after care facilities To complicate the matter further, private psychiatric services carry high price tag- expensive consultation fee, exorbitant in-patient care costs and injudicious and perhaps irrational use of costly laboratory services/investigations. These factors put together make private psychiatry out of

reach of common people. Services rendered by private psychiatrists mostly revolve around stand alone practice and involve management of acute disturbances and detoxification.

#### REHABILITATION AND AFTERCARE SERVICES IN INDIA

It is debatable whether these exist in any meaningful or organized way in our country. There are very few places with semblance of well organized and efficiently managed rehabilitation and after care services. Most mental hospitals provide cross-sectional services which have little or no component of long-term or follow-up services. Day care, halfway and sheltered homes and long term residential care are patchy and mostly run by a dynamic individual who has dedicated him/her-self to such a service concept. In this scenario, only a very very tiny fraction of those requiring aftercare and rehabilitation services actually receive the desired services. The cost of rendering such services and in reality being capable of paying for such rehabilitation service put these essential services of mental health care out of reach of most patients and their families.

#### BRIDGING THE GAP

Against this backdrop, are there any sensible strategies that can help in bridging this gap between needs of the patients and their caregivers and resources to cope with these ever escalating demands? Few valuable initiatives are as follows:

1. National Mental Health Program and District Mental Health Program
2. WHO Mental Health Gap Action Programme- mhGAP and mhGAP Intervention Guide Indian Adaptation-IGIA
3. Strengthening and Modernization of Mental Hospitals
4. Strengthening Undergraduate and Postgraduate Psychiatric Medical Education
5. General Practitioners Training and Training of other categories of mental health professionals for enhancing mental health care

#### National Mental Health Programme

Central Council of Health of Government of India approved National Mental Health Programme- NMHP in August 1982 with the resolution that "*Mental Health must form an integral part of the total health programme and as such should be included in all national health policies and programmes*"

The NMHP has 3 sub-programmes:

1. Treatment Sub-programme: that aim at integrating and making available mental health care at all levels of health care- PHC, District Health Care, Mental Hospitals and GHPUs
2. Rehabilitation sub-programme
3. Prevention sub-programme

Pioneering work done by Prof. Wig and his team at the Postgraduate Institute of Medical Education & Research, Chandigarh (popularly referred to as the Raipur Rani Project) and National Institute of Mental Health and Neurosciences, Bangalore established the feasibility of delivery of mental health care through primary health care- PHC

At the initiation of the NMHP, some targets were set. So what has been achieved? Unfortunately, for nearly 12 years nothing much was achieved partly due to lack of financial support and various bureaucratic hassles. However, except many expert groups meeting, workshops and symposia were held to give the impression that worthwhile work was going on! Eventually, during 1996-97- District Mental Health Programme- DMHP was started in 4 districts in the country.

District Mental Health Programme- DMHP

DMHP is now operating in more than 100 districts all over India

DMHP envisages that each district would have mental health facility at district level i.e. psychiatric beds, psychiatrists, clinical psychologists, social workers and nurses DMHP further envisages that the District Mental Health Team would act as a hub for co-ordinating activities between mental hospitals and PHCs

The DMHP was evaluated and reviewed in 2003 and various achievements and shortcomings were documented. The training of mental health professional was emphasized and availability of essential psychiatric drugs at district level was stressed. More money has been made available, and it is projected that in the next 2-3 years, the DMHP would be in place and operating in 250 districts. As a major health policy, community mental health approach and teams are seen as the primary care providers under the DMHP.

It is to be hoped that with expansion of NMHP at PHC level and DMHP at district level, psychiatric care for common people will become easy to get to and inexpensive. This will go a long way in narrowing the gap

between mental health care needs and resources to meet them.

World Health Organization-WHO Mental Health Gap Action Programme- mhGAP

In one of the technical report of the WHO, attention is drawn to the fact that about four out of five people in low- and middle-income countries who need services do not receive them. Even when these services are rendered or made available, the interventions often are neither evidence-based nor of high quality.

To ameliorate these anomalies, the WHO launched the mhGAP with the objective of scaling up care for mental disorders at the PHC level by non-specialist mental health professionals.

mhGAP Intervention Guide Indian Adaptation (mhGAP-IG) has been developed to facilitate mhGAP-related delivery of evidence-based interventions in non-specialized health-care settings in our country. The mhGAP-IG IA is a model guide and it is adapted to national and local situations

As a policy, it is mandated that implementation mhGAP IG IA at the national level will take into account stakeholders needs. It is further stated that suitable scaling of the action plan for human resources will be done, financing and budgeting issues will be addressed to in a realistic manner, information system development for priority conditions will be made operational, and periodic monitoring and evaluation of the mhGAP will be undertaken. District-level implementation of mhGAP will be much easier after national-level decisions have been successfully put into operation.

mhGAP IG IA: General Principles of Care

The general principles of care should give due consideration to the following:

- Health-care providers should follow GCP in their interactions with all people seeking care
- They should respect the privacy of people seeking care for the mental health problems, foster good relationships with them and their carers, and respond to those seeking care in a non-judgmental, non-stigmatizing and supportive manner
- The following key actions should be considered when implementing the mhGAP Intervention Guide
  - Communication with people seeking care and their carers

- Assessment
- Treatment and monitoring
- Mobilizing and providing social support
- Protection of human rights
- Attention to overall well-being

mhGAP IG IA: Schizophrenia as an example:

Care of patients with schizophrenia is included as a priority condition. To help non-specialist mental health professional in providing care to schizophrenia patients, pragmatic training is to be provided particularly to equip them with skills in recognition of common presentations and learning how to diagnose by identification of the following simple description of which are provided:

- Abnormal or disorganized behaviour
- Delusions (a false firmly held belief or suspicion)
- Hallucinations (hearing voices or seeing things that are not there)
- Neglecting usual responsibilities related to work, school, domestic or social activities
- Recognition of acute and chronic psychosis

These workers will also be trained in implementation of management plan. In their training, with regard to psychopharmacology will be emphasized that, start low- go slow and use one antipsychotic at a time. Chlorpromazine, haloperidol, risperidone should be offered; initiating and monitoring of antipsychotics medication should be done, and common side-effects should be managed.

As regards psychosocial intervention, simple psychoeducation should be practiced; rehabilitation in the community should be facilitated, regular follow-up must be maintained and referral to a specialist in difficult situations should be done.

Work on Indian adaptation was done at the Postgraduate Institute of Medical Education & Research, Chandigarh in collaboration with Union Territory of Chandigarh Directorate General of Health Services- UT DGHS (Nodal Officer, Medical Officer, Manimajra, UT Chandigarh.), Punjab DGHS (Nodal Officer, Chief Medical Officer, District Ropar, Ropar, Punjab) and Haryana DGHS (Nodal Officer, Chief Medical Officer, District Ambala, Ambala, Haryana). Field trials of the adapted version were carried out at Ambala and Ropar. These were duly submitted to and

approved by the MoHFW, New Delhi, DGHS of India at New Delhi and the India Office of WHO, New Delhi. Training period and modules have been accorded recognition by these authorities. This whole project was carried out in the year 2010-2011. However, its implementation and national, state or district level is still awaited.

Strengthening and Modernization of Mental Hospitals

Way back in 1996, the Supreme Court of India and National Human Rights Commission of India took serious note of dismal conditions of mental hospitals and the plight of the mentally ill and their families in our country. The Union and State governments and UT administrations were hauled up by the Supreme Court of India, and each state and UT was directed to set up a modern mental hospital. Under this directive, six very old and dilapidated mental hospitals have been renovated and modernized as Mental Health and Neuropsychiatric Institutes. GOI has allocated considerable amount of money for modernization of mental hospitals. The MoHFW & DGHS, GOI in consultations with States and mental health experts have formulated a policy and operational plan to reduce stagnation of patients in mental hospitals and reduce the number of long stay patients

So has it made any change? At least, all these facilities now have modern multipurpose buildings and services and other components have improved. Emergency services, guest house facilities, toilet and canteen facilities have substantially improved and so have laboratory services and dispensing of medication to outpatients. The plan/programme to have at least one mental hospital in each state and union territory is taking shape in as much that allocation of money has been done and the administrative machinery to operationalize this plan has been activated in all concerned states and union territories.

Up-gradation of Psychiatry at GHPUs & Medical Schools

According to the Medical Council of India (MCI), each medical school ought to have an independent department of psychiatry and 30-bed inpatient unit. To achieve this and for the government run medical schools, the GOI has given one-time grant for up-gradation of departments of psychiatry at various medical schools. Also, these departments are to be linked with DMHP where by these would be responsible for liaison with services, provide leadership role and

provide training to mental health personnel. 6 medical Institutions on the pattern of All India Institute of Medical Sciences, New Delhi have been established and are already admitting MBBS students. The Indian Psychiatric Society has taken a string initiative for UG Psychiatry and is very vigorously lobbying the Government of MoHFW, GOI and the MCI for granting psychiatry independent subject status with examination at UG level.

General Practitioners Training and Training of other categories of mental health professionals

Our country has huge resource base in general medical practitioners of various descriptions and types albeit sans any skills and expertise in mental health care. If these medical professionals are provided with proper training, then follow-up and after care by family physicians/general practitioners is a distinct possibility. These physicians can be trained in recognizing signs and symptoms of relapse; pharmaco monitoring and management of side-effects.

Similar training can be provided to other mental health professionals so that Clinical Psychologists, Social Workers, Psychiatric Nurses and Community Health Workers are able to take up active and meaningful role

and responsibility in rehabilitation of the mentally. Such a mass base would also of immense help in keeping the patients in the "treatment net" and addressing caregiver issues

#### CONCLUSIONS

The gap between and needs for care and resources to meet these is wide. However, this gap can be bridged, but it will require mammoth concerted efforts. Widening of the mental health gap from here on will worsen the plight of the patients and their caregivers.

#### REFERENCES

Available by contacting the author at [param\\_kulhara@yahoo.co.in](mailto:param_kulhara@yahoo.co.in)

---

Parmanand Kulhara, Currently Professor and Head, Department of Psychiatry, MM Institute of Medical Science and Research, Maharishi Markandeshwar University, Mullana, 133207 (Haryana) India. Formerly Professor & Head, Department of Psychiatry, Postgraduate Institute of Medical Education & Research, Chandigarh 160012. Email: [param\\_kulhara@yahoo.co.in](mailto:param_kulhara@yahoo.co.in)

---

Research Article

OCCUPATIONAL STRESS AND COPING STRATEGIES AMONG NURSES WORKING IN MEDICAL-SURGICAL UNITS OF A TERTIARY CARE HOSPITAL

Ruchi Saini, Sukhpal Kaur, Karobi Das

Abstract

Background/objective: Workplace stress has long been recognized as a challenge for nursing profession leading to deleterious effects on health. The current study was conducted with the objective to assess various factors leading to stress, perceived stress symptoms and coping strategies used by nurses to overcome stress. Methodology: A "descriptive Study design" was chosen. Total of 73 nurses were selected conveniently and were interviewed using Demographic Profile Sheet, modified Workplace Stress Scale (WSS) to assess the stress level among nurses, standardized Work stress Symptom Scale (WSSS) to identify physical and physiological symptoms experienced by nurses and Coping Checklist (CCL) to determine coping strategies used by nurses to overcome stress. Results: It was found that 33% nurses experienced average stress while 51% nurses experienced high level of stress. No significant association was found between the stress level of nurses and their demographic characteristics. The present study reported Job Challenge, Role ambiguity, Workload, improper feedback, lack of Job Autonomy, Social Support and Goal Clarity along with poor Inter-personal relations, Role Conflict and Job insecurity as significant predictors of stress among nurses. Further, more than 35% of the nurses experienced exhaustion occasionally. Higher response rates were seen on positive cognitive, problem-solving and religious coping strategies used by nurses to overcome stress. Conclusion: High level of stress among nurses in the current study recommends for planning of strategies at individual and administrative level to help nurses to cope with stress.

Key words: Nurses, Stress, Stress symptoms, coping strategies

INTRODUCTION

Over the past two decades, there has been a growing belief that the experience of stress at work has undesirable effects, both on the health and safety of workers and on the health and effectiveness of their organizations. This belief has been reflected not only in public and media interest, but also in increasing concern voiced by the trade unions and by scientific and professional organizations, including the International Labor Office (ILO, 1986).

Stress is conceptualized as being different from the events that precipitate it (stressors) and is viewed as an altered state of a person or an individual. Selye (1976) refers to stress as a naturally occurring state to which all living things are constantly susceptible. However, Lazarus (1977) claims that stress as an individual experience that depends on the impact it has on person.

Stress in nursing has been explained by many endogenous and exogenous factors. While the exogenous factors are environmentally job-related and refers to nurse's relationship with others i.e. patients, family, other nurses, physicians; the degree of competency and role functioning capability; several environmental stimuli and change; the endogenous factors arise within the nurse from previous experience and include such things as guilt from being unable to intervene with patients effectively, threatened self-concept when a new nurse is assigned to observe other nurses, headache, loss and thwarted ambition (Harris, 1989).

Several studies have attempted to identify and explain various occupational stressors among nurses. McVicar (2003) following Stordeur (2001) listed overload, inter-professional conflict, lack of clarity, task ambiguity and supervision problems as some of the job-related

stressors. Gray-Toft and Anderson (1981a,1981b) in their study identified seven major sources of stress i.e. dealing with death and dying; conflict with physicians; inadequate preparation to deal with the emotional needs of patients and their families; lack of staff support; conflict with other nurses and supervisors; workload and uncertainty concerning treatment. Saini et al (2011) in an another study described workload, decreased job autonomy, inadequate supervisor support, less opportunities of learning on job and inappropriate feedback were found as significant predictors of stress among nurses. Majority of the studies related to occupational stress among nurses reported overload and role ambiguity as a major factor leading to stress (Sullivan, 1993). These have been explained as a function of increased complexity of tasks and the lack of clarity of nursing functions (Castledine, 1998; Chapman, 1998)

The way of coping with the stress remains the topic of interest in the literature. Coping methods are self-regulating mechanisms the nurse can use such as healthful dietary control practices, regular exercise, meditative approaches such as yoga or biofeedback, relaxation techniques, professional therapy, visualization or hypnosis, pleasurable activities such as crafts or hobbies etc. The cognitive appraisal of the stressor and the internal and external conditioning factors determines the level of stress and its outcome. A feedback loop exists between coping outcomes and initiation of chain of events, in that ineffective coping outcomes serve as stressors to the cycle. The negative effects of stress on health have been extensively reported (Smith,2002; Shirom,2003).

The findings of the preliminary study conducted by the investigators and variable work environment in the medical-surgical units along with the curiosity to find the existing stressors in these units and the interaction between the stressors prompted them to take up the present study. Objectives were: to assess stress and factors predictive of stress among nurses; to determine adverse stress reactions as experienced by nurses and to identify various coping strategies used by nurses working in medical-surgical units.

#### MATERIALS AND METHODS

The study was conducted at Nehru Hospital, Post-Graduate Institute of Medical Education and Research (PGIMER), Chandigarh. It is a tertiary care hospital with bed strength over 1600. The study was conducted among nurses working in the Medical-Surgical units of

the hospital. These units admit patients suffering from conditions such as diabetes mellitus, liver diseases, pneumonia and other respiratory problems, acute renal failure, acute gastro-enteritis, gall stone disease, hernia, intestinal obstruction etc.

The study population consists of all the nurses working in the said units. Total enumeration was done and 73 nurses out of 89 (82%) were included in the study. Nurses who were on earned leave (05), maternity leave (02), ex-India (none) or absent (none) from duty were excluded from the study. Nine nurses did not agree to participate (09) in the study due to lack of enough time or because they did not find the study meaningful to them. The tools used for data collection were:

**Demographic Profile Sheet :** It contains items regarding personal and professional attributes of the study subjects such as name, age, gender, marital status, number of children, educational qualifications, work experience, work pattern, satisfaction with salary etc. The sheet was validated after review of literature and consultation from the experts.

**Modified Workplace Stress Scale (WSS) :** The Workplace Stress Scale, adapted from The Marlin Company, North Haven and the American Institute of Stress, New York was modified. Around 17 more items under various domains were added through relevant literature search to meet the needs of the present study and used to assess stress level of nurses. It contained 25 items under the domain of Job Challenge, Self-conflict, Workload, Performance Appraisal, Job Autonomy, Inter-personal relations, Informal Support, Role Conflict, Job insecurity and Goal Clarity. They items were rated on 5-point Scale- never, rarely, sometimes, often and very often. The mean stress scores as obtained by nurses on modified WSS was categorized based on 33th and 66th percentile into three categories as Low (<58), Moderate (59-68) and High (>69). Validity of the tool was assessed by seeking opinions from the experts in nursing and administration The suggestions from experts were discussed among co-authors and appropriate modifications were done. The Cronbach alpha ( ) was calculated for 10 subjects and among 25 items of WSS using SPSS and it came out to be 0.809.

**Work Stress Symptom Scale (WSSS):** The Work Symptom Stress Scale by K.Bjorkqvist & K.Osterman of Abo Akademi University (1992) was adopted to assess the physical and psychological symptoms experienced by the nurses due to stress. These symptoms were rated on 5-point scale from 0 to 5- Never, Seldom,

Occasionally, Often, Very Often. The scale gives the frequency of symptoms experienced by nurses during the last 12 months. Validity of the tool was assessed by seeking opinions from the experts in nursing and administration. The suggestions from experts were incorporated and relevant modifications were done. The Cronbach alpha ( ) was calculated for 10 subjects and among 10 items of WSSS using SPSS and came out to be 0.867.

**Coping Checklist (CCL):** The coping checklist (CCL) of Rao, Subbakrishna and Prabhu (1989) was used in the study. It is a comprehensive list of 70 items which has been grouped under 9 categories: (i) Positive Cognitive, (ii) Negative Cognitive, (iii) Problem-solving, (iv) Distraction, (v) Magical Thinking, (vi) Avoidance, (vii) Religious, (viii) Help-Seeking, (ix) External Attribution. It is a broad version of behavioral, emotional and cognitive responses that may be used to handle stress. Items are scored dichotomously (Yes/No) indicative of the presence or absence of a particular coping behavior. The coping strategy which reduces stress was rated 1 and which does not reduce stress was rated 0. The validity of the scale was established through expert opinion in the field of nursing and psychiatry. The Cronbach alpha ( ) was calculated for 10 subjects among 70 items of CCL using SPSS and came out to be 0.864.

The pilot study was conducted to assess the feasibility and to calculate the reliability of the tools. Ethical considerations were taken into account and permission was sought from Ethics Review Committee of PGIMER. Anonymity & confidentiality of the subjects was maintained during the study. They were given full autonomy to withdraw from the study at any time. After taking an informed verbal consent, the nurses were asked about the feasible time for the interview. Majority of the nurses agreed for the interview after their duty gets off, however, few of them had given time during their duty hours whenever they were free to the investigator. The interview was conducted in the retiring room of the nurses in their respective areas or wards. Due care was given not to disturb the working routine and patient care. Information regarding their demographic profile was collected and the subjects were interviewed regarding the presence of stressful conditions, stress, physical and psychological symptoms experienced and the coping strategies using the selected instruments. The interview took around 30

minutes. The data collection period extended upto 2 months. The data was then transferred into SPSS 15.0 and was analyzed using descriptive and inferential statistics.

## RESULTS

Total of 73 nurses working in Medical-Surgical units were enrolled in the study. The mean age of nurses was 32.3 + 8.0 years. Seventy percent of the nurses were female and married. Around 80% of nurses were living in the nuclear family. Ninety five percent of nurses had no, single or two children while remaining 5% of nurses had more than two children. Around 20% of nurses were residing in the hostel. Seventy percent of nurses were residing in the hospital campus within an area of about 2 km. Half of the nurses used their own vehicle to reach their workplace.

When the professional attributes of nurses were observed, around 62% of nurses possessed diploma in general nursing and midwifery. Around 81% of the nurses enrolled in the study were sister grade II and were directly involved in patient care while 19% of nurses were sister grade I or Assistant nursing superintendent and involved in supervisory functions of the unit as well. Eighty six percent of nurses had more than one year of experience of working in wards.

### Stress level among Nurses as per modified WSS

The mean stress scores as obtained by nurses as per modified WSS was 63.0 + 10.2. The findings of the study revealed that 16% and 33% of nurses experienced low and moderate levels of stress respectively while 51% of nurses experienced high levels of stress.

### Association of severity of stress as per the personal & professional attributes of nurses

Table 1 depicts the association of severity of stress as per the nurses' personal attributes. It shows that female (64.9%), unmarried nurses (75.7%) experienced severe stress while the male (8.3%), married nurses (66.7%) experienced low level of stress. It was also found that nurses' living in nuclear family (78.4) and managing household chores (40.5%), having no or single child (97.3%), residing outside the hospital campus (73%) and using own vehicle to reach the workplace (48.6%) experienced severe stress. Chi-square test was applied to find the association of severity of stress as per the nurses' personal attributes and the results were found statistically insignificant.

Table 1: Association of severity of stress as per the personal attributes of nurses (N=73)

| Socio-demographic Variables | n  | Stress     |               |            | 2 test value 'p' value |
|-----------------------------|----|------------|---------------|------------|------------------------|
|                             |    | Low n(%)   | Moderate (n%) | Sever (n%) |                        |
| Age                         |    |            |               |            | 0.513, df=2            |
| < 30 years                  | 37 | 05 (13.5)  | 13 (35.1)     | 19 (51.4)  | p=0.774                |
| >30 years                   | 36 | 07 (19.4)  | 11 (30.6)     | 18 (50.0)  |                        |
| Gender                      |    |            |               |            | 3.179, df=2            |
| Male                        | 21 | 01 (8.3)   | 07 (29.2)     | 13 (35.1)  | p=0.204                |
| Female                      | 52 | 11 (91.7)  | 17 (70.8)     | 24 (64.9)  |                        |
| Marital Status              |    |            |               |            | 2.455, df=4            |
| Married                     | 53 | 08 (66.7)  | 17 (70.8)     | 28 (75.7)  | p=0.653                |
| Un-married                  | 20 | 04 (33.3)  | 07 (29.2)     | 09 (24.3)  |                        |
| Type of Family              |    |            |               |            | 1.414, df=2            |
| Nuclear                     | 58 | 11 (91.7)  | 18 (75.0)     | 29 (78.4)  | p=0.493                |
| Joint                       | 15 | 01 (8.3)   | 06 (25.0)     | 08 (21.6)  |                        |
| Total no. of children       |    |            |               |            | 3.530, df=2            |
| ≤ 2                         | 69 | 12 (100.0) | 21 (87.5)     | 36 (97.3)  | p=0.171                |
| > 2                         | 04 | -          | 03 (12.5)     | 01 (2.7)   |                        |
| Residential Status          |    |            |               |            | 2.658, df=8            |
| Hostel                      | 16 | 03 (25.0)  | 04 (16.7)     | 09 (24.3)  | p=0.945                |
| Parent's Home               | 03 | -          | 01 (4.2)      | 02 (5.4)   |                        |
| With Family                 | 34 | 07 (58.3)  | 12 (50.0)     | 15 (40.5)  |                        |
| Paying Guest                | 10 | 01 (8.3)   | 03 (12.5)     | 06 (16.2)  |                        |
| Others                      | 10 | 01 (8.3)   | 04 (16.7)     | 05 (13.5)  |                        |
| Residence in Hospital       |    |            |               |            | 0.345, df=2            |
| Yes                         | 22 | 04 (33.3)  | 08 (33.3)     | 10 (27.0)  | p=0.842                |
| No                          | 51 | 08 (66.7)  | 16 (66.7)     | 27 (73.0)  |                        |
| Mode of Conveyance          |    |            |               |            | 4.302, df=8            |
| Walking distance            | 18 | 03 (25.0)  | 07 (29.2)     | 08 (21.6)  | p=0.829                |
| Public Transport            | 14 | 02 (16.7)  | 03 (12.5)     | 09 (24.3)  |                        |
| Hospital Transport          | 04 | -          | 02 (8.4)      | 02 (5.4)   |                        |
| Own Vehicle                 | 37 | 07 (58.3)  | 12 (50.0)     | 18 (48.6)  |                        |

When the professional attributes of nurses' were considered, nurses holding General Nursing and Midwifery diploma (70.3%), designated as Sister Grade II (94.6%), working on day-night shifts (100%), having more than one year of work experience in wards (81.1%) experienced severe stress. Chi-square test was applied to find the association of severity of stress as per

the nurses' professional attributes and the results were found statistically insignificant. It was also found that the nurses holding supervisory positions as Assistant Nursing Superintendent (ANS) and Sister Grade I experienced moderate (8.3%) and low levels (33.3%) of stress respectively. The results being statistically significant ( $\chi^2= 11.738, df=4, p=0.019, p>0.05$ ). (Table 2)

Table 2: Association of severity of stress as per the professional attributes of nurses (N=73)

| Socio-demographic Variables            | n  | Stress    |               |            | 2 test value 'p' value   |
|--|----|-----------|---------------|------------|--------------------------|
|  |    | Low n(%)  | Moderate (n%) | Sever (n%) |                          |
| <b>Educational Qualification</b>       |    |           |               |            |                          |
| GNM                                    | 45 | 06 (50.0) | 13 (54.2)     | 26 (70.3)  | 7.350, df=4<br>p=0.118   |
| B.Sc Nursing                           | 23 | 05 (41.7) | 07 (29.2)     | 11 (29.7)  |                          |
| Others                                 | 05 | 01 (8.3)  | 04 (16.7)     | -          |                          |
| <b>Designation</b>                     |    |           |               |            |                          |
| ANS                                    | 02 | -         | 02 (8.3)      | -          | 11.738, df=4<br>p=0.019* |
| Sister Grade I                         | 12 | 04 (33.3) | 06 (25.0)     | 02 (5.4)   |                          |
| Sister Grade II                        | 59 | 08 (66.7) | 16 (66.7)     | 35 (94.6)  |                          |
| <b>Total experience in Ward (Yrs.)</b> |    |           |               |            |                          |
| ≤ 1                                    | 10 | 01 (8.3)  | 02 (8.3)      | 07 (18.9)  | 1.729, df=2<br>p=0.421   |
| > 1                                    | 63 | 11 (91.7) | 22 (91.7)     | 30 (81.1)  |                          |
| <b>Work Pattern</b>                    |    |           |               |            |                          |
| Day Shift                              | 02 | 01 (8.3)  | 01 (4.2)      | -          | 7.197, df=4<br>p=0.126   |
| Day & Night Shift                      | 71 | 11 (91.7) | 23 (95.8)     | 37 (100.0) |                          |

\*p<0.05

**Predictors of Stress**

Table 3 depicts the level of stress among nurses as per variables operating at the workplace. It shows that majority of the nurses (94.5%) experienced stress due to lack of goal clarity followed by role ambiguity (93.2%), role conflict (86.3%), poor interpersonal relations (76.7%), workload (65.8%), improper performance appraisal (58.9%), lack of job autonomy (43.8%) and job challenge. It was also observed that low stress was experienced by nurses having good interpersonal relations (1.4%) and clarity of the goals (2.7%) on the job.

Hierarchical Multiple Regression Analysis of the various dimensions of modified WSS was done. The results show that all the dimension i.e. Job Challenge, Role ambiguity, Workload, improper Performance Appraisal, lack of Job Autonomy, Social Support and Goal Clarity, poor Inter-personal relations, Role Conflict and Job insecurity were significant predictors of stress among nurses. It was also found that Job Challenge accounted for 48.6% of variance in the stress followed by role ambiguity (25.5%), workload (6.6%), improper performance appraisal (3.9%), lack of Job Autonomy (2.9%), poor Inter-personal relations (1.7%), lack of Social support (1.9%), Role-conflict, job insecurity with lack of goal-clarity accounting only 0.9%, 0.1%, 0.7% of variance respectively in stress level of nurses (Table 4).

Table 3. Stress among nurses as per workplace variables (N=73)

| Independent Variables    | Low Stress (n%) | Moderate Stress (n%) | High Stress (n%) |
|--------------------------|-----------------|----------------------|------------------|
| Job Challenge            | 06(8.2)         | 35(47.9)             | 32(43.8)         |
| Role ambiguity           | -               | 05(6.8)              | 68(93.2)         |
| Workload                 | -               | 25(34.2)             | 25(65.8)         |
| Performance Appraisal    | 04(5.5)         | 26(35.6)             | 43(58.9)         |
| Job Autonomy             | 09(12.3)        | 32(43.8)             | 32(43.8)         |
| Inter-personal Relations | 01(1.4)         | 16(21.9)             | 56(76.7)         |
| Social Support           | 14(19.2)        | 53(72.6)             | 06(8.2)          |
| Role Conflict            | -               | 10(13.7)             | 63(86.3)         |
| Job Insecurity           | 27(37.0)        | 35(47.9)             | 11(15.1)         |
| Goal Clarity             | 02(2.7)         | 02(2.7)              | 69(94.5)         |

Table 4: Predictors of Stress\*\* as per Workplace Stress Scale (WSS)

| Independent Variables    | R <sup>2a</sup> | Adjusted R <sup>2b</sup> | R <sup>2</sup> Change | F Change | p*      |
|--------------------------|-----------------|--------------------------|-----------------------|----------|---------|
| Job Challenge            | 0.486           | 0.478                    | 0.486                 | 67.054   | <0.001* |
| Role ambiguity           | 0.740           | 0.733                    | 0.255                 | 68.644   | <0.001* |
| Workload                 | 0.806           | 0.798                    | 0.066                 | 23.336   | <0.001* |
| Performance Appraisal    | 0.845           | 0.836                    | 0.039                 | 16.988   | <0.001* |
| Job Autonomy             | 0.874           | 0.864                    | 0.029                 | 15.391   | <0.001* |
| Inter-personal Relations | 0.891           | 0.881                    | 0.017                 | 10.373   | 0.002*  |
| Social Support           | 0.910           | 0.900                    | 0.019                 | 13.498   | <0.001* |
| Role Conflict            | 0.919           | 0.908                    | 0.009                 | 7.039    | 0.010*  |
| Job Insecurity           | 0.930           | 0.920                    | 0.011                 | 10.326   | 0.002*  |
| Goal Clarity             | 0.937           | 0.927                    | 0.007                 | 7.111    | 0.010*  |

\*Significant at p<0.05, \*\* Stress as dependent variable

<sup>a</sup> Percentage variance in dependent variable as explained by independent variable

<sup>b</sup> Adjusted for number of independent variables

#### Stress Symptoms as experienced by nurses

As per modified WSSS, it was observed that more than 25% of the nurses experienced exhaustion (35.6%), weariness and feebleness (23.3%) and irritation (28.8%) during the last twelve months while around 20% of the nurses experienced difficulty to concentrate (19.2%), insomnia (19.2%), nervousness (15.1%) and indifference towards everything (13.7%) occasionally. It was also observed that reduced self-confidence was the least experienced symptoms experienced by nurses (6.8%).

#### Coping Strategies adopted by nurses

Coping checklist was administered to the nurses to identify the type of coping strategies used by them to tackle stress and burnout. In the current study, it was seen that maximum number of coping strategies used by majority of nurses were under the domain of Problem-solving strategies [73.46 + 17.42] such as discussing the problem with family member or friend, identifying couple of solutions to problems and solving the problem one by one followed by 'positive cognitive' coping strategies [64.49 + 19.98] such as thinking over the problem again and again, looking on the bright side of things and looking forward for the best thing to happen, religious [61.42+ 27.34] such as visiting a place of worship and organizing poojas. Further, it was found that minimum number of coping strategies used by majority of nurses were under the domain of negative coping [29.11+ 24.30] such as feeling hopeless and external attribution [20.55+ 30.99] such as blaming

own's fate and holding other people responsible for the situation.

#### DISCUSSION

Stressful conditions are prevalent in health care sector. Research has identified certain work-related factors involved in nursing exposing nurses to extremes of stress leading to deleterious effects on health. The present study focused on the stress, factors predictive of stress, perceived stress symptoms and coping strategies used by nurses to overcome stress in medical-surgical units of a tertiary care hospital.

The findings of the study revealed that 16% and 33% of nurses experienced low and moderate levels of stress respectively while 51% of nurses experienced high levels of stress. The personal attributes of nurses (e.g. age, sex, marital status, type of family, total number of children, residential status etc.) was not found to be significantly associated with the stress of the nurses while seniority level of nurses significantly reduced the stress among nurses. The findings being consistent with the Asuzu (2009) study which reported lower level of stress among senior nurses. McGarth et al (2003) reported presence of adult relatives, and financial difficulties as the most common external stressor present among nurses.

Various Job Stressors such as Job Challenge, Role ambiguity, Workload, improper Performance Appraisal, lack of Job Autonomy, Social Support and Goal Clarity along with poor Inter-personal relations, Role Conflict and Job insecurity were found to be significant

predictors of stress among nurses with Job Challenge accounting for 49% of variance. The findings are consistent with a meta-analysis (Blegan, 1993) which reported communication with supervisor and peers, autonomy, recognition as most significantly associated with job satisfaction among nurses.

As per Workplace Stress Symptom Scale, it was observed that more than 25% of the nurses experienced exhaustion followed by irritation and weariness and feebleness occasionally. The increase in exhaustion can be explained by the shortage of nurses, the patient mix, complexity of health problems of patients and the variety of roles adopted by nurses including clerical, technical, educative which increases their workload leading to their inability to finish work in time.

Among the Coping strategies used by nurses to overcome stress, higher response rates were seen on distraction followed by 'positive cognitive' coping strategies, and problem-solving strategies while lower response rates were seen on external attribution. The findings of the present study were found partially consistent with the findings of Rodrigues & Chavas (2008) study which reported that the most commonly used coping strategy by the nurses is positive reappraisal (Mean=10.34), followed by problem solving (Mean=9.91), and self-control (Mean=9.86). Chang et al (2007) reported that nurses who use problem-solving method to cope with stress had greater benefit than those who use emotion focused method of coping.

The limitations of the present study include its small sample size, neglect of personality traits of nurses and lack of control group yet it gives a comprehensive insight in understanding the stress among nurses working in medical-surgical units, their predictors, physical and psychological reactions of nurses and the prevalent coping strategies used by them to overcome stress. The findings can be used by nurse administrators to conduct stress management programs at the hospital level to reduce stress among nurses and to improve their mental health so as to increase the quality of work, reduce turnover and increase job satisfaction among nurses.

#### REFERENCES

Asuzu CC. (2009) Shift duty and stress coping strategies among nurses in the University College Hospital, Ibadan. *Anthropologist*, 11, 153-159

Blegan MA. (1993) Nurses job satisfaction: a meta analysis of related variables. *Nursing Research*, 42, 36-41.

Chang EML, Bidewell JW, Huntington AD, et al. (2007) A survey of role stress, coping and health in Australian and New Zealand hospital nurses. *International Journal of Nursing Studies*, 44, 1354-1362.

Chapman C. (1998) Is there is correlation between change and progress in nursing education? *Journal of Advanced Nursing*, 28, 459-460.

Castledine G. (1998) The role of clinical nurse consultant. *British Journal of Nursing*, 7, 1054.

Harris RB. (1989) Reviewing nursing stress according to a proposed coping-adaptation framework. *Advances in Nursing Science*, 11(2), 12-28.

International Labor Organization (1986) Psychosocial factors at work: Recognition and control, *Occupational Safety and Health Series No. 56*.

Kad VS, Chavan A, Chaudhari V, et al. (2010) Stress and its effect on health factory workers. Available at : <http://drjayantkulkarni.com/wp-content/uploads/pdf/23.pdf>. [last accessed on March 26, 2010].

Lazarus R. (1977) Cognitive and coping process in emotion, in *Stress and Coping: An Anthology*, p-144-158. New York: Columbia University Press.

McGarth A, Reid N, Boore RJ. (2003) Occupational stress in nursing. *International Journal of Nursing Studies*, 40, 555-565.

Marlin Company, North Haven CT & The American Institute of Stress, Yonkers, NY Directions. The Workplace Stress Scale. Available at: <http://americaninstituteofstress.org/wp-content/uploads/2011/08/2001Attitude-in-the-Workplace-Harris.pdf> [last accessed on March 26, 2010].

McVicar A. (2003) Workplace stress in nursing: a literature review. *Journal of Advanced Nursing*, 44, 193-201.

Gray-Toft P & Anderson TG. (1981a) The nursing stress scale: Development of an instrument. *Journal of Behavioral Assessment*, 3, 11-23.

Gray-Toft P & Anderson TG. (1981b) Stress among hospital nursing staff: Its causes and effects. *Social Science and Medicine*, 15A, 539-647.

Rao K, Subbakrishna DK, Prabhu GG. (1989) Development of coping checklist- a preliminary report. *Indian Journal of Psychiatry*, 31, 128-133.

Rodrigues AB & Chaves EC (2008) Stressing factors and coping strategies used by oncology nurses. *Rev Latino-am Enfermagem*, 16(1), 24-28.

Saini R, Kaur S, Karobi D. (2011) Assessment of stress and burnout among intensive care nurses at a tertiary care hospital. *Journal of Mental health and Human Behavior*, 16,43-47.

Selye H. (1976) *The stress of life*, revised ed. New York: McGraw Hill.

Shirom A. (2003) The effects of work stress on health. *Handbook of work and health psychology*, pp.63-83. Wiley, Hoboken, NJ.

Smith CS, Sulsky LM, Uggerslev KL. (2002) Effects of job stress on mental and physical health. *Handbook of Mental Health in the Workplace*, Sage, pp.61-83. Thousand Oaks, CA.

Strodeur S, D'Hoore W, Vandenberghe C. (2001) Leadership, organizational stress and emotional exhaustion among hospital nursing staff. *Journal of Advanced Nursing*, 35, 533-542.

Sullivan PJ. (1993) Occupational Stress in psychiatric nursing. *Journal of Advanced Nursing*, 18, 591-601.

---

Ruchi Saini, Sister Grade-II, Pediatric Intensive Care Unit, Advanced Pediatric Centre, Postgraduate Institute of Medical Education & Research (PGIMER), Chandigarh 160012. E mail: [ruchisaini716@gmail.com](mailto:ruchisaini716@gmail.com) (Corresponding author)

Sukhpal Kaur, Lecturer, National Institute of Nursing Education, Postgraduate Institute of Medical Education & Research (PGIMER), Chandigarh.

Karobi Das, Lecturer, National Institute of Nursing Education, Postgraduate Institute of Medical Education & Research (PGIMER), Chandigarh.

---

Research Article

PSYCHOSOCIAL EXPERIENCES OF THE PATIENTS WITH COLOSTOMY/ILEOSTOMY: A QUALITATIVE STUDY

Shaffy, Sukhpal Kaur, Karobi Das, Rajesh Gupta

Abstract

Background and objective: Colostomy/ Ileostomy affect person's quality of life causing unnecessary suffering and social isolation. It can result in serious maladjustments in life. Various studies have revealed the problems encountered and the impact of the ostomy on the daily lives of the patients. The current study was conducted with the objective to explore the psychosocial experiences of the patients with colostomy/ileostomy. Methodology: The researcher took the medium of 'Phenomenological Research Design' to unmask their minds and interpret them. Using purposive sampling technique, 40 patients were enrolled in the study. In-depth interviews were conducted with a semi-structured interview schedule. The questions asked were in the psychosocial domain. The conversation between the researcher and the subject was recorded side by side. Colaizzi's procedural steps were adopted to analyze the data. Results: The various subthemes which emerged under the psychosocial domains were embarrassment with the ostomy appliance, feeling of disgust and alienation towards the body and feelings of uncleanliness with the ostomy appliance which had affected their spiritual life. Most of them tried to hide their stoma bag from others, often forcedly accepting the ostomy in their life and had hoped that they will be healthy soon. Conclusion: It was felt that there was a need to provide counseling services to the subjects, so that they can adjust with their lives.

Key Words: Ostomy, Phenomenological study, Psychosocial aspect.

INTRODUCTION

Colostomy or ileostomy is the surgical creation of a stoma for the evacuation of body waste (Silva, 2003). Though the purpose of ostomy is to treat and reduce patient's pain and discomfort, however in many cases it may lead to intensified distress and suffering for patients, and can cause severe stress (Krouse et al, 2009). The common problems experienced by the subjects have been reported to be skin irritation (76%), pouch leakage (62%), offensive odor (59%), reduction in pleasurable activities (54%), and depression/anxiety (53%) (Richbourg et al, 2007). The creation of an ostomy leads to various physiological, psychological, and social problems for patients (Kilic et al, 2007). Ostomy patients are apprehensive about leakage and odor from the ostomy, and might therefore avoid interactions with people, become introverted, and seek solitude. Over time, this insecurity in social situations and lack of trust could lead to total social isolation (Karadag et al, 2003).

In psychological terms, adjustment refers to a person's adaptation to an environment or a set of circumstances. It involves many layers of functioning that include

physical, cognitive and emotional levels. Adaptation is considered in terms of the coping processes that support psychological well-being. People with stomas have to contend with substantial changes in bowel and body image. This is a transformative process requiring both psychological and social adjustments. Adjustment to having a stoma therefore, is defined as a person's perception of the overall impact of the stoma on self-care, body image and quality of life. People use a variety of resources to respond to the challenge of living with a stoma. These include their own inner resources and the acceptance and support of the significant others in their lives (Strode, 2012).

Interpersonal relationships are defined as the ease with which one relates and interacts with other people. The perception of strong social support from friends and family is regarded as vital to positive acceptance of the stoma, those with limited social support identifying more difficult adaptation. Studies show that understanding, help and support from a well functioning social network improves the person with a stoma self-acceptance (Martinson & Josefsson, 1991).

Many colorectal cancer survivors with stomas, who have incorporated their stomas into their lives well, demonstrate cognitive and behavioral coping skills that appear to be teachable to others. These adjustment strategies are useful for those who have just recently had a stoma as well as for those who have coping difficulties (Hornbrook et al, 2008).

A study conducted in 2010 revealed that there are number of problems faced by ostomy patients which affect their quality of life. In this study nine themes were explored. They were psychological functioning, social and family relationships, travel, nutrition, physical activity, sexual functioning, religious and economic issues. The findings show that the study subjects had some degree of cognitive and mental problems (Dabirian et al, 2011).

In a study investigating ostomate's perceptions of preparation for surgery and coping afterwards, also found disposal of equipment the most frequently reported difficulty which can lead to social inconvenience, embarrassment and even disgust (Kelly & Henry, 1992; Swan E, 2010). Another study shows that the patients with ostomy had higher rates of depression and less involvement in social activities compared to those that underwent bowel resection for the same diagnoses. (Kuchenhoff, 1981).

Uncontrolled evacuation, restricted leisure activities, uncontrollable noise (flatus), fear of soiling/embarrassment, fear of odor, issues with regard to privacy, impaired body image and restricted sexual activities had been documented in a study by Swan E (2010). In another study it was found that the ostomy patients had depression, solitude, and grief stemming from low self-esteem and undesired changes in body image which were more frequently seen in younger patients and females. (Szczechowski, 2002).

The present study aimed to investigate the effects of ostomy on psychosocial life of the patients.

#### MATERIAL AND METHODS

Phenomenological design was selected to describe the life experiences of the subjects under study. The study was conducted in the surgical OPD of Nehru Hospital in Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh. Study sample consisted of 40 patients with colostomy/ileostomy attending the surgical OPD after six weeks of surgery. Purposive sampling technique was used in this study.

The tools used for data collection were Socio-demographic data sheet of the patients which consisted of items such as name, age, sex, type of surgery, educational status, occupation, total family income, total number of family members, per capita income etc. A semi structured interview schedule consisted of open ended questions related to psychosocial domains. These were feeling of hesitancy, and embarrassment while looking at the ostomy site, reaction of family and children towards ostomy, impact of spiritual life after ostomy surgery etc.

A written permission was obtained from the Head department of General surgery, PGIMER. Informed written consent was obtained from the patients. Ethical clearance was sought from Institutional Ethics Committee to conduct the study.

To assess the feasibility of the study, pilot study was conducted on five subjects in the surgical OPD, Nehru Hospital, Post Graduate Institute of Medical Education and Research, Chandigarh. The various themes analyzed during the pilot study were Physical problems, Nutritional problems, Sexual problems, Psychological problems and Effect on the social, religious, economic and family relationships. These findings were incorporated in the main study.

The subjects were explained that the conversation would be kept confidential. The interview was recorded in the stoma room adjacent to the surgical OPD by maintaining the privacy during the interview procedure. The interviews were recorded and audio taped side by side. The data was collected between 10am to 5pm. The time spent for each interview varies from half an hour to one hour, according to the willingness of clients to talk. Some preferred to talk elaborately, while others were brief. The data was transcribed into verbatim forms and was analyzed using Colaizzi's steps for analysis. The recorded was then typed by the investigator. After that reading and re- reading of participant's descriptions was done. Then significant statements were extracted followed by formulating the meaning for each significant statement. It was followed by categorization of formulated meanings into cluster of themes. The extracted meaning and statements were validated by experts of psychiatry, psychology and nursing education. After careful analysis of the transcript of the in-depth interview, many subthemes have emerged. These subthemes were coded under the grouped analytical coding sheet by final description and categorizing the essence of phenomenon.

RESULTS

Socio- demographic data of the subjects

Mean age (yrs) of the subjects was 33.6±13.1, with the range of 16-66 yrs. About one third of the subjects (35%) were between 26-35 years. Majority (67.5%) were male. Approximately half of the subject had ileostomy. 35% of subjects each had undergone surgery three months and nine months prior respectively. More than half were working (57.5%), while 35% had monthly family income of 5,000. (Table 1)

Table 1: Socio-demographic data of the subject (N=40)

| Variables  | n%       |
|--|----------|
| Age (yrs)  |          |
| 15-25  | 12(30)   |
| 26-35  | 14(35)   |
| 36-45  | 06(15)   |
| 46-55  | 04(10)   |
| 55   | 04(10)   |
| Mean age (yrs) ±SD:33.6±13.1<br>Range: 16-66 yrs                 |          |
| Sex  |          |
| Male   | 27(67.5) |
| Female   | 13(32.5) |
| Type of surgery  |          |
| Colostomy  | 09(22.5) |
| Ileostomy  | 19(47.5) |
| Stoma made at the wound site and restoration of bowel continuity | 12(30)   |
| Post operative days  |          |
| 3 months   | 14(35)   |
| 3-6 months   | 06(15)   |
| 6-9 months   | 06(15)   |
| 9 months   | 14(35)   |
| Occupation   |          |
| Working  | 23(57.5) |
| Non Working  | 17(42.5) |
| Total family income  |          |
| 5,000  | 14(35)   |
| 5,000-10,000   | 10(25)   |
| 10,000-20,000  | 11(27.5) |
| 20,000   | 05(12.5) |

PSYCHOSOCIAL PROBLEMS IDENTIFIED AMONGST THE PATIENTS

After careful analysis of the transcript of the in-depth interview many subthemes emerged. These subthemes were coded under the grouped analytical coding sheet. Total 209 responses were identified under the psychosocial problems. The various subthemes

emanating from the study are given in table 2.

Description of subthemes

1. Embarrassment, depression and hesitancy related to body image, self and identity due to ostomy bag

Majority of the participants felt that they were embarrassed, depressed and were conscious about their body image, self and identity due to ostomy bag. Thirty eight formulated responses gave the clue about their psychosocial problem. One of the clients said 'I feel embarrassed when I clean my bag, it is visible from outside my clothes and when people ask me about it, then I feel very awkward.' Here patient was depressed and hesitant to clean the bag. It seems to be something very unpleasant and awkward for the patient to describe the function of ostomy bag to the people.

Another client said 'I have a great problem with the bag as I am not able to go outside. After eating any food I have to empty the bag in a short time. Secondly people are asking me about the bag and I feel it a great problem to explain to them again and again. It makes feel very embarrassed with the bag.' Patient was frustrated and felt embarrassed to explain about the bag. One of the client added that 'I use to cry at times after looking at my body. My interest in life has totally gone because my body has become unattractive.' Patient seems to be in a miserable condition feeling that his body was no longer attractive with the pouch.

2. Feeling of apprehension, anxiety, fear, frustration, anger, helplessness, hopelessness, grief, self blame and guilt due to ostomy

Most of the participants experienced feelings of apprehension, anxiety, fear, frustration, anger, helplessness, hopelessness, grief, self blame and guilt due to ostomy. Forty eight formulated responses gave the clue about this subtheme.

One of the clients mentioned that 'I become anxious when the bag is full because I have tension in my mind that the bag will leak. So I empty the bag soon.' Here patient felt the anxiety about the filling of the ostomy bag which lead to mental dilemma in the patient and lead to maladjustment in his life.

The other client said 'I feel heaviness and tension when the pouch is full. I have strong tension in my mind that the pouch should not leak.' The patient has frustration and apprehension related to the leakage of the pouch. The extent of frustration and helplessness is evident

from the words of one of the client 'Stoma is a great problem for me. I pray to God not to put stoma bag to any person in this world. My whole day passes in bed only. My family members are also in a great tension.'

The statement of one of the client is quoted below which shows the feeling of self blame 'I had done one mistake that I went to some private doctor. They had done the hemmoirectomy. Then I went to another private hospital (Fortis). They operated on me and fixed the bag. Then I came to PGI and now doctors planned for restoration of bowel continuity'. He also stated that 'I think that whatever has been done to me is according to God's wish. I think that I have done big mistakes in my life. I was doing all types of work with enthusiasm but now it is totally changed.'

### 3. Feeling of being unclean and smell with the with ostomy bag

This subtheme could not be ignored as some of the patients had feeling of smell and feeling of being unclean with the bag which silently affects their life and may lead to social detachment. Fifteen responses were studied under this subtheme. One of the client said 'I didn't feel good to go to religious places. I think that my body is not clean. I feel ashamed of myself.' Here patient had feeling of uncleanliness with the ostomy which was affecting his spiritual life. According to another client 'I didn't do any chanting after the surgery. But before the operation I used to go to religious places daily. I don't go now because I think that my body is not clean. I feel guilt, to go there.' Here the patient has expressed the feeling of guilt and restriction in going to religious places with the ostomy.

### 4. Decreased independence due to ostomy bag

Some clients developed increased dependency due to ostomy bag. Fourteen responses were studied under this subtheme. This theme represents that the patient had increased dependency in doing the normal activities e.g one of the clients said 'I faced a lot of problem at home due to ostomy. I am not able to go outside for a longer period of time. It restricted all my activities.' Patient felt that because of the ostomy, all the independently done activities were restricted which affected their work performance and made them dependent upon others. The other client added that 'I am dependent upon others. If the bag leaks and I need to change it, then I would seek the help of others.'

According to the views of one of the clients 'I am not going out from my home. If I have to go on a long

journey then my younger brother accompany me. If I am going to my friend's home then I empty it in his toilet. I feel embarrassed when I empty the bag outside. Doctors have told me that after four months my bag will be out.'

### 5. Strategies used to adjust with the ostomy

One of the strong subthemes which emerged while interacting with the participants are the various coping strategies used to adjust with the ostomy. Thirty five responses were analyzed under this subtheme.

One of the clients said, 'My life has become like a hell. I do exercises so that I can have control on my rectal muscles.' Another client said, 'I wear loose and long dresses.'

It is a very bad experience of my life. But I compromise with the bag because I think that it is fixated to heal my disease. I internally feel that this is a bad time for me but it will heal soon.

Denial had been adopted by few patients to avoid and to accept the disease pattern. It is mentioned here as it is something different. One of the client said 'I think that my disease is because of my sins in my previous birth.' It represented that the patient has perception that the reason of present disease was because of his previous birth karmas.

### 6. Keeping the secrecy about the pouch

Five responses were analyzed under this. It represents the strong emotional factor in context to patient's life. One of the client said 'My wife helps me at home. We have a good kinship with each other. But I haven't told her in detail about my disease because I felt that she would be in tension after knowing about my problem.' Here patient explained that he didn't want to tell about his disease to his family to reduce the undue tension and frustration in the family. The other client said 'Yes my colleagues came to see me in hospital and at home also. But I think that it is better if they do not come to see me. I have to tell them again and again about my disease. I didn't feel good to tell them about my bag and my disease.'

### 7. Challenges for the family and friends

This subtheme represented the challenges faced by the family and friends related to ostomy bag. Some family members and friends accepted the condition of the patient and tried to cooperate but others tried to avoid him/her. Patients felt more comfortable and less depressed if the family and friends accepted the

problem than others. Twenty nine responses were analyzed under this subtheme.

One of the clients said 'My wife cooks food at home. My sister helps me a lot. My sister had done a great job. She was the only person who changes my bag at home. She also does my dressing but my wife didn't want to look at the ostomy site. She felt very awkward after seeing my bag.' He added that 'My children do not come to me because they feel foul odor coming from me. It hurts me a lot.' So rejection by the family had affected the mental condition of the patient. The other client said 'My family supported me a lot that is the reason I didn't feel any emotional or psychological trauma after ostomy surgery.' In this context patient was psychologically comfortable because his family has accepted him.

One of the clients added 'Now, I only do small tasks at home. I wash the utensils. I don't cook food because my children told me that bag comes in contact with the food items. They feel irritated with the bag.' The other client said 'No one is helping me at home. I care for my bag independently. No one co-operates with me, rather they are blaming and reprimanding me. There is no bonding or kinship with me at home.' These two statements represented the rejection by the family members.

#### 8. Effect on the spiritual life

This subtheme has reflected the changes in the spiritual life. Ten responses were analyzed under this subtheme. One of the client said 'I think that all my disease has come because of my sins in previous birth.' The other client said 'My family member think that there is some curse on me that is the reason I have this type of problem. Most of the money is wasted on prayers.' Here patient had reported the frustration with the disease which lead to the changes in the spiritual thinking. Another client said 'I pray to God to give me strength and courage to face this problem. My thinking is changed after the ostomy. I think that it is the wish of God. According to the view of other client 'When my operation was done I cursed God for my condition. But when I see other patients who are in more problem than me then I have more faith in God because I am luckier than those patients. Now I pray to God to give me health.'

#### 9. Effect on the other aspect of life e.g. effect on the leisure activity, education and on the life as a whole)

This subtheme reflected the effect of the ostomy on the life of the patient as a whole. Under this subtheme the effect of the ostomy on the different context of life was analyzed like leisure activity, education and on the overall life. Fifteen responses were analyzed under this subtheme. One of the client said 'My daily activities are restricted with ostomy e.g. I am not able to take bath, not able to sit and walk for a longer period of time. I am not able to study. I am in need to take rest frequently. Ostomy has brought me to the position of mental breakdown. I am also not able to attend the social functions like marriages and parties, as I feel discomfort and shy with the bag.' So here patient has reported the multidimensional problems and restrictions related to ostomy. Patient expressed that because of the ostomy bag he was experiencing mental breakdown. It had affected his mental abilities, cognitive skills and the activities of daily living.

The other client said 'I think that I had seen all good and bad days in my life. At that time I thought that my good days were gone. I also had financial problem at that time and thought that if my bag would not be there then I would feel very happy. My whole life was disturbed due to ostomy.' Patient had experienced that when she had ostomy bag, then those days were the worst days of her life.

Another client said 'I think that my life is spoiled after the operation. I am not able to do any work after the operation. Before the operation I was a normal human being. I was enjoying my life but now all my freedom has gone. If any marriage invitation is there I directly tell people that I will not able to attend. I also avoid get together with my colleagues because I feel embarrassed in front of them. So I pray to God that no one should have this bag.' She added that 'I usually do knitting and embroidery. But after the operation I am not able to do any work at home.'

One of the clients said 'I was working as a computer instructor in a college then I shifted to a school. I applied for B.Ed but because of my disease all my plans got held up. I think that when I will be all right then only I will see that what studies can be resumed.' Here patient had shared that she was not able to continue her studies because of the problem experienced by the ostomy appliance.

Table- 2: Psychosocial problems identified amongst the patients (N=209)

| Sr. No. | Cluster of themes under Psychosocial problems  | Frequency of formulated responses | %age of responses |
|---------|--|-----------------------------------|-------------------|
| 1.      | Feeling of apprehension, anxiety, fear, frustration, anger, helplessness, hopelessness, grief, self blame and guilt due to ostomy. | 48                                | 23                |
| 2.      | Embarrassment, depression, disgust, hesitancy and alienation related to body image and sense of identity due to ostomy bag.        | 38                                | 18.2              |
| 3.      | Strategies used to adjust with the ostomy.   | 35                                | 16.7              |
| 4.      | Challenges for the family and friends  | 29                                | 13.8              |
| 5.      | Feeling of being unclean and smell with the ostomy bag.  | 15                                | 7.2               |
| 6.      | Effect on the other aspects of life e.g. Leisure activity, education and life as a whole.  | 15                                | 7.2               |
| 7.      | Decreased independence due to ostomy bag.  | 14                                | 6.7               |
| 8.      | Effect on the spiritual life.  | 10                                | 4.8               |
| 9.      | Keeping the secrecy about the pouch.   | 5                                 | 2.4               |

## DISCUSSION

This study was conducted on patients with colostomy/ileostomy. The aim of the study was to explore their life experiences, and to interpret the phenomenon as experienced by them.

An attempt was made to gain insight into the problems experienced by the patients and the coping mechanisms adopted by them in order to combat the stress. An attempt was also made to explore their fears and their haunting experiences for a prolonged period of time. Researcher wanted to gain insight into their thoughts, problems and feelings and intrude into their psyche. Phenomenology was selected as a medium to enter into their personal world. Colaizzi's method made analysis simple because it gives a systematic mode of dissecting data in clearly defined steps rather than just describing the lived experiences. Colaizzi's procedural steps consists of reading and re-reading of participants description, extraction of the significant statements, formulating meaning of each significant statements, categorizing formulated meanings into cluster of themes, integrating findings into exhaustive description of phenomenon, formulation of theoretical model from the phenomenon, returning to participants for description and then final description of essence of phenomenon was done.

Almost all the patients had anxiety about odor, leakage and felt embarrassed and depressed due to ostomy bag which can be considered to be parallel with the study conducted by Williams (2005) that relate to anxieties about odor, leakage, noise or appearance of stoma

under clothing and attractiveness to others. Research has shown that approximately 25% of people who have stoma operations experience severe problems with anxiety, depression and other negative emotions at some stage during the year after stoma surgery (White, 1997).

Postoperatively patients will often report a loss of confidence, independence and dignity, as well as fears of rejection and ridicule (Noone, 2010). The findings were similar to the present study in which participants had feeling of apprehension, anxiety, fear, frustration, rejection, ridicule and guilt towards the body due to ostomy. One of the clients said 'My children do not come to me because they feel the foul odor emanating from me. It hurts me a lot.'

Another important finding in this study relates to religious issues. Maximum participants in this study reported that their religious rituals changed after the ostomy. Now they were not visiting to the religious places because they thought that their body was not clean. They preferred to worship in the privacy of their homes. However, some considered that their religious rituals had not been affected and their faith in God increased after the surgery. One of the patient said 'I prayed to God to give me strength and courage to face this problem. My thinking has changed after the ostomy. I think that it is the wish of God.' Another client expressed that 'I have faith in God but I think that my body is not clean. So I didn't go to any religious place.'

The results are similar to the problems identified in another study which shows the detachment from

religious rituals because of the contents of the bag (Szczepkowski M, 2002). Another study administered a validated QOL instrument to 257 persons living with an ostomy in 13 cities in Europe and the Mediterranean. A significantly higher portion of subjects who underwent abdomino-perineal resection and creation of a colostomy reported that they felt compelled to stop praying and fasting (Holzer et al, 2005).

It is concluded that the findings of the study would be useful for health care providers when creating a supportive environment to improve quality of life in ostomy patients. Support groups in which therapists and patients could interact would provide an opportunity for participants to express their concerns about quality of life issues. A need was also felt to provide counseling services to the subjects to adjust to the ostomy.

#### REFERENCES

- Dabirian A, Yaghmaei F, Rassouli M, et al. (2011) Quality of life in ostomy patients: a qualitative study. *Journal of Patient Preference and Adherence*, 21, 1-5.
- Holzer B, Matzel K, Schiedeck T, et al. (2005) Do geographic and educational factors influence the quality of life in rectal cancer patients with a permanent colostomy? *Diseases of the Colon and Rectum*, 48, 2209-16.
- Hornbrook MC, McMillan C, Grant M, et al. (2008). The greatest challenges reported by long-term colorectal cancer survivors with stomas. *Journal of Supportive Oncology*, 6, 175-82.
- Karadag A, Menten BB, Uner A. (2003) Impact of stomatherapy on quality of life in patients with permanent colostomies or ileostomies. *International Journal of Colorectal Disease*, 18, 234-238.
- Kelly MP, Henry T. (1992) A thirst for practical knowledge. Stoma patients' opinions of the services they receive. *Journal of Professional Nursing*, 7, 350-51, 354-56.
- Kilic E, Taycan O, Belli KA, et al. (2007) The Effect of Permanent Ostomy on Body Image, Self-Esteem, Marital Adjustment, and Sexual Functioning. *Turkish Journal of Psychiatry*, 18, 302-310.
- Krouse RS, Grant M, Rawl SM. (2009) Coping and acceptance: The greatest challenge for veterans with intestinal stomas. *Journal of Psychosomatic Research*, 66, 227-232.
- Kuchenhoff J. (1981) Coping with a stoma - a comparative study of patients with rectal carcinoma of inflammatory bowel diseases. *Journal of Psychotherapy and Psychosomatics*, 36, 98-104.
- Martinsson ES & Josefsson M. (1991) Working capacity and quality of life after undergoing an ileostomy *Journal of Advance Nursing*, 16, 1035-41.
- Noone P. (2010) Pre- and postoperative steps to improve body image following stoma surgery. *Gastrointestinal Nursing*, 8, 34-39.
- Richbourg L, Thorpe JM, Rapp CG. (2007) Difficulties experienced by the ostomate after hospital discharge. *Journal of Wound Ostomy and Continence Nursing*, 34, 70-79.
- Silva MA, Ratnayake G, Deen KI. (2003) Quality of life of stoma patients: temporary ileostomy vs colostomy. *World Journal of Surgery*, 27, 421-424.
- Strode JD (2012). How do people adjust to living with a stoma? A nurse's search of the literature. The Waikato Institute of Technology School of Health. Available at <http://researcharchive.wintec.ac.nz> (last assessed on February 17, 2012).
- Swan E. (2010) Colostomy, management and quality of life for the patient. *British Journal of Nursing*, 19, 1346-1350.
- Szczepkowski M. (2002) Do we still need a permanent colostomy in XXI-st century? *Acta Chirurgica Iugoslavica*, 49, 45-55.
- White CA. (1997) Living with a stoma: a practical guide to coping with colostomy, ileostomy or urostomy. Sheldon Press, London.
- Williams J. (2005) Psychological issues in stoma care. In: T Porrett, A McGrath. (Eds.), *Stoma Care*. pp.157-68. Oxford: Blackwell Publishing Ltd.

---

Shaffy, Lecturer, MHR DAV Institute of Nursing, Jalandhar, Punjab

Sukhpal Kaur, Lecturer, National Institute of Nursing Education, PGIMER, Chandigarh.

Karobi Das, Lecturer, National Institute of Nursing Education, PGIMER, Chandigarh. E-mail: karobi20@gmail.com (Corresponding author)

Rajesh Gupta, Additional Professor, Department of General Surgery, PGIMER, Chandigarh.

---

Research Article

KNOWLEDGE, ATTITUDE AND PRACTICE RELATED TO TOBACCO USE AND ITS CESSATION AMONG  
YOUNG MEDICAL PROFESSIONALS

Shalini Singh, Suman Kumar Sinha, Rashmita Saha, Mukesh Jha, Dinesh Kumar Kataria

Abstract

**Background:** The right attitude, knowledge and practices of medical professionals with respect to tobacco use and its prevention forms an important component in tobacco control activity. The aim of the study was to assess the tobacco use among young medical professionals in Delhi, their knowledge about harmful effects of tobacco and their proficiency and practice in dealing with tobacco users. **Methods:** A cross-sectional study was carried out using an anonymous self-administered questionnaire based upon Global Health Professional Student Survey instrument in medical professionals below 33 years of age in Delhi. **Results:** The overall response rate was 95%. The sample comprised 215 medical professionals (54% females; mean age was 23.2 years: 52% were medical students, 48% young medical doctors). Tobacco use prevalence was 10.7% among doctors and 15.2% among students. All tobacco users were smokers. Among responders, 83.7% considered medical professionals as a role model for their patients (tobacco users 68.75% vs non-tobacco user 86.1%), 79% reported not having any formal training in tobacco cessation and 84.65% did not feel themselves to be proficient in delivering tobacco cessation services. Even though 94.8% do claim to provide evidence based tobacco cessation services. **Conclusions:** The prevalence of tobacco use among young medical professionals is less than that observed in the general population. The study points towards the requirement of formal training of medical professionals in tobacco cessation practices to make them more proficient. The training in tobacco cessation should be included and made mandatory in the medical curriculum to improve tobacco cessation services across the country.

**Key Words:** Tobacco, Doctors, Medical Students, Knowledge, Attitude

INTRODUCTION

It is a well known fact that smoking is injurious to health. As per the World Health Organization (WHO) it is the single largest preventable cause of mortality and premature death worldwide. WHO estimates that if the current trend continues, the annual death toll due to smoking will cross over 8 million by the year 2030 (WHO, 2011). Tobacco use has been identified as one of the primary modifiable lifestyle risks for cancer, heart disease, and stroke (Stein & Colditz, 2004; Cooper et al., 2004).

The 1950s path-breaking studies by Doll and Hill (1950, 1952, 1956) demonstrating the adverse effects of smoking have been replicated time and again. For example, the relationship between smoking and lung cancer was found to be one of the strongest in the history of cancer epidemiology, remarkably significant and remarkably conserved between diverse populations.

The consumption of tobacco is common practice in India. In India, tobacco consumption is responsible for half of all the cancers in men and a quarter of all cancers in women, (WHO 2012) in addition to being a risk factor for cardiovascular diseases and chronic obstructive pulmonary diseases. (Gupta et al., 1997; Padmavati, 2002). India also has one of the highest rates of oral cancer in the world, partly attributed to high prevalence of tobacco chewing (Vora et al., 1997; Franceschi et al., 2000; Moore et al., 2000; Dikshit & Kanhere, 2000).

Chewing tobacco and smoking are one of the common modes of use with nearly 30% of the population 15 years or older having smoked or chewed tobacco (Rani et al., 2003). Global Adult Tobacco Survey (GATS, 2010)-India, estimated that more than one-third of adults (35%) in the country use tobacco, out of which 21% use smokeless tobacco (ST), 9% smoke and 5% smoke as well as use ST. The prevalence of overall tobacco use among men was 47.9% and among women was 20.2%. More than 75% of tobacco users are daily users of

tobacco and three in every five of these, use tobacco within half an hour of waking up, indicating dependence on tobacco (GATS, 2010).

Interventions for tobacco cessation from behaviour therapy/counselling to pharmacotherapy, have proven to be efficacious. Even brief advice from physicians increases the tobacco cessation rates (WHO, 2009). Unfortunately, widespread dissemination of effective tobacco interventions remains elusive (Ebbert & Hays, 2008). Due to high addiction potential of nicotine, tobacco use leads to chronic dependence, which requires treatment. Only 5% of the world's population is estimated to have access to treatment for tobacco dependence (WHO, 2008). Existing tobacco cessation services in India, both in public and private sector are grossly inadequate.

Health care providers can play a key role in assisting patients to quit smoking (Mojica et al., 2004). Previous research has shown that health care providers' smoking behaviour is associated with their provision of smoking cessation counselling to their patients (Ceraso et al., 2009; Jiang et al., 2007; Pipe et al., 2009; Ulbricht et al., 2009). Given the importance of health professionals in educating patients about good health practices, they could play a crucial role in influencing the smoking habits of the patients and even of the general population. Additionally, health professionals have a key role to play in counselling their patients in tobacco cessation. As per GATS (2010)-India, among 47% of the smokers who had visited a healthcare provider in the past 12 months, only a little more than half (53%) were asked by the healthcare providers, about the smoking habits and only 46% were advised to stop smoking. In case of ST users, 34% were asked about their tobacco use habit and only 27% were advised to stop such use (GATS, 2010).

Global Health Professionals Survey (GHPS, 2005) in India indicated that only 10.5% health professionals received formal training in tobacco cessation counselling while about 99% believed that such training is required.

The main objective of this study was to determine tobacco use behaviour; assess the knowledge and attitudes of the medical students and young doctors regarding adverse health risks of tobacco use; and determine how well prepared the health professionals currently feel with respect to counselling their patients on tobacco cessation strategies. In short, to derive baseline data on tobacco use, as well as on the

knowledge and attitudes towards tobacco use among young medical professionals in Delhi and their proficiency to deal with tobacco using health care users.

## METHODS

The study population included medical students and young doctors who were working or were being trained at various medical colleges at Delhi University. The population was chosen keeping in view that the study aims to assess the current practices and proficiency in the younger segment of the medical fraternity i.e. young medical doctors, interns and final year medical students.

The study was cross sectional in design and was carried out using an anonymous self administered questionnaire based upon Global Health Professional Student Survey (WHO, 2000). The WHO questionnaire and study information sheet were in English as it is the commonly used language among the study population. The length of time needed for questionnaire completion was found to be 20 minutes.

Data collection took place in July 2011. The questionnaire was distributed randomly among 226 young health professionals of and below the age of 33 years. Those who agreed to participate were informed about the nature and purpose of the study. The responses were kept strictly confidential and this was ensured by asking the participants to put the completed questionnaires in designated boxes in the hospital and the library.

This study used the Global Health Professional Student Survey, a self-administered questionnaire developed by the Tobacco free initiative, a project of the World Health Organization, in collaboration with the Centres for Disease Control and a number of additional partners. This standardised survey instrument aims to monitor and document the prevalence of tobacco use among health professionals and assess their knowledge, attitudes and behaviours towards tobacco and tobacco control policies.

The first section of the questionnaire is made up of demographic questions, followed by a section on personal smoking behaviour. These include questions on how many cigarette one smokes, when a smoker started or quit smoking and their feelings towards smoking, towards "stages of change" (Not ready to quit within the next 6 months; thinking about quitting within 6 months; ready to quit now). The next section consists of 22 questions that assess knowledge of and attitudes

towards the adverse effects of smoking, the role of health professionals regarding smoking cessation in their patients, and some policy issues of smoking. The final section evaluates the training they may have for smoking cessation counselling, as well as their comfort level in counselling patients to stop smoking. Finally, the respondents were asked "What could the government do to support your efforts to reduce the tobacco use among your patients in the community?". This was an addition by the investigating team to the questionnaire to find out what do the young professionals feel needs to be added to the tobacco control initiatives by the Government.

The data was tabulated and descriptive statistics were used to compile and present results. Significance level (p) was set at 0.05. SPSS version 17 was used for calculation of confidence interval and level of significance.

Table 1: Demographic data and smoking rates (n = 215)

| Characteristics  | Current Smokers | Ex-Smokers | Never Smoked | Total |
|------------------|-----------------|------------|--------------|-------|
| All responders   | 28 (13%)        | 7 (3%)     | 190 (88%)    | 215   |
| Female           | 4 (4%)          | 1(1%)      | 112 (95%)    | 117   |
| Male             | 24(25%)         | 6 (6%)     | 68 (69%)     | 98    |
| Doctors          | 11(11%)         | 4(4%)      | 88 (86%)     | 103   |
| Medical Students | 17 (15%)        | 3 (2%)     | 92 (83%)     | 112   |
| Age <=24 years   | 17 (11%)        | 2 (1%)     | 134 (88%)    | 153   |
| Age 25-33 years  | 11 (18%)        | 5 (8%)     | 46 (74%)     | 62    |

Stages of change

Of the people who currently smoke, all responded to questions about stages of change. Nine (32%) said they were ready to quit now, 11 (39%) said they were thinking about quitting within the next six months, and 8 (29%) said they were not ready to quit within the next six months. In terms of amount of cigarettes smoked, there was a decreasing trend of cigarettes used daily on an average, representing those who are not ready to quit within six months, thinking about quitting within six months, and those ready to quit now, respectively, but this was not statistically different across the three categories. However, average daily cigarette consumption did differ significantly (p < 0.05) for those who have tried to quit in the past (12 cigarettes) compared with those who have not tried to quit in the past (18 cigarettes).

Attitudes and knowledge

Table 2 presents the results of the percentage agreement with knowledge and attitude statements in

RESULTS

The overall response rate was 95% (215). Of the 226 medical professionals approached for the study seven questionnaires were found to be incomplete and 4 people refused to participate in the study.

Demographics and smoking rates

Table 1 is a classification of respondents by sex, age and also provides smoking rates for each group. The sample comprised 215 health professionals. Tobacco use prevalence was 10.68% among doctors and 15.18% among students. All tobacco users were smokers with none reporting chewing tobacco in their lifetime. Overall, 28 (13.02%) currently smoke, 7(3.26%) were ex-smokers and 189 (87.91%) never smoked. The group was roughly equally distributed on the basis of gender (54% females, n=117), with a mean age of 23.17 years.

the questionnaire compared by occupation and by smoking status (ever/never smokers). All respondents agreed that smoking is harmful to health and, in general, all respondents had "appropriate" attitudes towards smoking. However, there were some significant differences between ever/never smokers and doctors and medical students regarding the advisory role that health professionals have.

More significant differences were seen in attitudes towards policy issues, where "ever" smokers were generally less likely to agree with statements that would change their current freedom to smoke. Most doctors and medical students agreed, however, that tobacco sales should be banned for children and youth. With respect to adverse effects of passive smoking, most health professionals agreed that they should advise smoking patients to avoid smoking around children. However, only 78.2% of "ever" smoking doctors and approximately 69.7% of "ever" smoking medical students agreed that neonatal death is associated with passive smoking.

Table 2 Percentage agreement with knowledge and attitude statements between 'ever smoker' and 'never smoker' among doctors and medical students (n=103 for doctors; n = 112 for medical students)

| Sr. No. | Question  | Medical Students  |                    | Doctors             |                      |
|---------|---|-------------------|--------------------|---------------------|----------------------|
|         |   | Ever Smoker       | Never Smoker       | Ever Smoker         | Never Smoker         |
| 1.      | Tobacco chewing is harmful to your health.  | 100.0             | 100.0              | 100.0               | 100.0                |
| 2.      | Smoking is harmful to your health.  | 100.0             | 100.0              | 100.0               | 100.0                |
| 3.      | Health professionals serve as role models for their patients and the public.                                    | 88.9*             | 93.5*              | 82.9                | 94.1                 |
| 4.      | Health professionals should set a good example by not smoking   | 92.2**            | 97.2**             | 93.1                | 95.7                 |
| 5.      | Patient's chances of quitting smoking are increased if a health professional advises him or her to quit.        | 82.8              | 89.6               | 81.0                | 86.7                 |
| 6.      | Health professionals should routinely ask about their patients smoking habits.                                  | 98.2              | 98.9               | 97.3                | 99.2                 |
| 7.      | Health professionals should routinely advise their smoking patients to quit smoking.                            | 96.6              | 96.2               | 85.3                | 96.6                 |
| 8.      | Health professionals who smoke are less likely to advise people to stop smoking.                                | 64.9              | 82.9               | 77.4                | 83.8                 |
| 9.      | Health professionals should get specific training on cessation techniques.                                      | 84.7              | 88.7               | 77.9                | 93.1                 |
| 10.     | Health professionals should speak to community groups about smoking.  | 78.9              | 83.9               | 89.0                | 89.7                 |
| 11.     | Smoking in enclosed public places should be prohibited.   | 97.6              | 100.0              | 78.9 <sup>§</sup>   | 100.0 <sup>§</sup>   |
| 12.     | Health warnings on cigarette packages should be in big print.   | 87.8***           | 91.4***            | 80.4 <sup>§§</sup>  | 87.5 <sup>§§</sup>   |
| 13.     | Tobacco sales to children and adolescents should be banned  | 98.9 <sup>+</sup> | 100.0 <sup>+</sup> | 96.1 <sup>+</sup>   | 98.6 <sup>+</sup>    |
| 14.     | Sport sponsorships by tobacco industry should be banned.  | 92.5              | 96.8               | 96.8                | 99.3                 |
| 15.     | There should be a complete ban on the advertising of tobacco products including surrogate advertising.          | 93.1              | 93.9               | 86.7                | 84.8                 |
| 16.     | Hospitals and health care centres should be "smoke-free".   | 95.6              | 100.0              | 84.8 <sup>§§§</sup> | 100.0 <sup>§§§</sup> |
| 17.     | The price of tobacco products should be increased sharply.  | 7.0               | 91.3               | 91.8                | 98.9                 |
| 18.     | Neonatal death is associated with passive smoking.  | 78.2              | 81.2               | 69.7                | 79.9                 |
| 19.     | Maternal smoking or tobacco use during pregnancy increases the risk of Sudden Infant Death Syndrome.            | 97.2              | 98.3               | 85.0                | 94.6                 |
| 20.     | Passive smoking increases the risk of lung disease in non-smoking adults.                                       | 100.0             | 99.7               | 100.0               | 100.0                |
| 21.     | Passive smoking increases the risk of heart disease in non-smoking adults.                                      | 98.9              | 98.6               | 95.4                | 97.1                 |
| 22.     | Paternal smoking increases the risk of lower respiratory tract illnesses such as pneumonia in exposed children. | 94.9              | 98.7               | 99.1                | 100.0                |
| 23.     | Third hand smoke is harmful for health.   | 77.7              | 79.3               | 72.5                | 71.9                 |
| 24.     | Health professionals should routinely advise patients who smoke to avoid smoking around children.               | 100.0             | 100.0              | 97.1                | 100.0                |

\*denotes the significant p values among doctors who are ever and never smokers. \*p=0.041, \*\*p=0.049, \*\*\*p=0.029. §- Denotes the significant values among medical student who are never and ever smokers. §p=0.015, §§p=0.011, §§§p=0.048. + denotes significant difference seen between doctor and medical students (p= 0.031)

### Worksite Practice

The doctors and medical students were also asked about the kind of smoke-free policy at their workplace. 71.6% (n=154) reported a 'No Smoking Policy' at their workplace, 3.3% (n=7) reported provision of smoking rooms while 25.1% reported that there is no policy in place. Table 3 shows the opinion of the respondents regarding enforcement of the smoke-free policy.

Table 3 Opinion of young medical professionals regarding enforcement of smoking policy at the worksite. (n=215)

| Characteristics    | Doctors % n | Medical Student % n | Total % n |
|--------------------|-------------|---------------------|-----------|
| Always enforced    | 21.3(22)    | 8.9(10)             | 14.9(32)  |
| Not enforced       | 19.1(41)    | 41.1(46)            | 40.5(87)  |
| Sometimes enforced | 34.9(36)    | 36.6(41)            | 35.8(77)  |
| Don't know         | 3.9 (4)     | 13.4(15)            | 8.8(19)   |

### Training in smoking cessation

The physicians and medical students were also asked if they had ever received formal training on strategies for smoking cessation and whether they felt prepared to counsel patients on how to stop smoking. A quarter (n=26) of doctors and 17% (n=19) of medical students claimed they had received formal training. However, as Table 4 points out, only 15.3% (n=33) of the health professionals felt very prepared to counsel patients while 70.2% (n=151) felt somewhat prepared and 14.4% (n=31) not prepared at all.

Table 4 Degree of "feeling prepared" among young medical professionals in smoking cessation counseling (n = 215)

| Degree of preparedness | Doctors % n | Medical Student % n | Total % n |
|------------------------|-------------|---------------------|-----------|
| Very well prepared     | 21% (22)    | 10% (11)            | 15% (33)  |
| Somewhat prepared      | 68% (70)    | 72% (81)            | 70% (151) |
| Not at all prepared    | 11% (11)    | 18% (20)            | 14% (31)  |

In response to the open-ended question to the respondents: "What could the government do to support your efforts to reduce the tobacco use among your patients in the community?" Fifty eight percent (n=125) of the participants chose to answer the question. Nearly 30% (n=37) of those who responded mentioned the need of formal training of health professionals by the government. The remaining

responses ranged from "a complete ban" on all tobacco products to less radical suggestions such as "stop advertising of tobacco products", "aggressive anti-smoking campaigns"; while some of the respondents felt that use of tobacco is a "personal choice", therefore the government would not be able to carry out any effective control measures.

### DISCUSSION

Smoking among young medical professionals in New Delhi is high. However, the smoking rate of 13.02% (24.49% for males and 3.42% for females) among young medical professionals is less than comparable rates found in the literature. Forty five percent (95% CI, 43.8-46.2) of men and 7% (CI, 6.4 to 7.6) of women were smokers according to a cross-sectional study done on a community based sample from New Delhi (Narayanan et al., 1996). The GATS, 2010 found tobacco use prevalence of 24.3% in Delhi out which 17.4% were smokers (Male-30.4%, Female-1.1%). Our study found prevalence of tobacco use 13.02% out of which all were smokers. This was less than that found in the general population (17.4%). The rate of smoking among female young medical professional (3.42%) is about three times more compared to the rate among females in general population (1.1%). The rate of smokers in the community reflects the culture and behaviour in which they live, and so the rate of smoking among young medical professionals varies in a similar manner as those adults in the general population.

A study on Italian general practitioners found that 28.3% smoked in 2000 (Pizzo et al., 2003), while Italy's National Statistical Institute found the rate of daily adult smokers to be around 25% in 2001 (Mackay & Erikson, 2002). In the Netherlands, overall smoking prevalence was 33% in adults in 2001 (Mackay & Erikson, 2002); several years earlier, another study found that 25% of physicians and 44% of nurses were smokers (WHO, 1997). In the United States, while nurses had a smoking prevalence of 18% in 1991, physicians had a low prevalence of 3.3% (Nelson et al., 1994). So a rate of 13.02% among doctors and medical students in New Delhi is considerable. The decreasing trend of cigarettes smoked as the individual's willingness to quit increases is consistent with Prochaska and DiClemente's stages of change theory (Prochaska et al., 1994).

As for the knowledge and attitude questions, the differences in agreement with the statements related to the responsibilities of health care professionals and smoking policy could be expected between the "ever"

and "never" smokers, as similar differences in attitudes between "ever" and "never" smokers were seen in another study done in the Netherlands (Waalkens et al., 1992). However, these differences were less than expected between doctors and medical students. Regarding knowledge of adverse effects of smoking, overall results were quite positive. Smoking cessation and the adverse health effects of smoking have been topics of common knowledge as well as of medical curriculum.

Counselling by health professionals on smoking cessation is crucial if their patients are going to quit smoking. The relatively low rate of health professionals having received formal training reflects the weak momentum of anti-tobacco drive. And indeed, while around 85.6% (n=184) claimed to have felt very or somewhat well prepared to counsel their patients on smoking cessation, only 21% (n=45) reported receiving any kind of formal training regarding the same. However, it may be possible that medical professionals not actively counselling patients on smoking cessation may underestimate the difficulty of successfully supporting their patients through to smoking cessation (Pizzo et al., 2003). More formal training about smoking cessation strategies through continuing education of

medical professionals in New Delhi may be justified. This need for more training on smoking cessation strategies has been highlighted in another study on post-graduate medical students in Bangalore by Mony & Jayakumar (2011) and general practitioners in Italy by Pizzo, et al. 2003. In the study done on clinical post-graduate students in Bangalore, while 80% of them enquired routinely about tobacco use in their patients, only 50% offered advice on quitting and less than a third assessed readiness to quit or offered assistance with quitting in their patients (Mony & Jayakumar, 2011).

The study also highlights the laxity in implementation of smoke free policy at workplace with only 21% doctors and 9% medical students respectively reporting that it is implemented strictly. This also reflects in higher smoking rates among the medical students as compared to the doctors in this study.

As compared to a survey of health professionals done in 2005 the current study found an increase in tobacco use (13.0% vs 9.6%). There has been an increase in tobacco smoking among male health professionals (about 60%) as well as among the female health professionals (about 80%). This may reflect an increased focus of cigarette companies on marketing their products to young professionals as well as towards females.

Table 5 Prevalence of current cigarette smoking\* among young health professionals by gender: A comparison with Global Health Professional Survey, 2005 (GHPS, 2005)

|                     | ALL   |     |            | MALE  |    |             | FEMALE |     |           |
|---------------------|-------|-----|------------|-------|----|-------------|--------|-----|-----------|
|                     | Total | %   | 95% CI     | Total | %  | 95% CI      | Total  | %   | 95% CI    |
| GHPS, 2005-India    | 1266  | 9.6 | 6.7-13.6   | 719   | 15 | 10.7-20.4   | 541    | 2.4 | 0.8-6.9   |
| Current Study, 2011 | 215   | 13  | 8.93-17.07 | 98    | 24 | 16.99-33.01 | 117    | 4.3 | 0.78-7.22 |

\*Current smokers defined as those who reported current daily or occasional smoking

This study on smoking rates, knowledge and attitudes of smoking among young medical professionals in New Delhi is an exploratory one, given several limitations. One limitation of this study was our inability to reach to all age-groups of health professionals, so this sample is not representative of the entire medical community. However, this study has targeted the younger age segment thereby giving a prospective edge to the findings.

Another concern is that the sampling frame, which comprises doctors and medical students from New Delhi in July 2011, is not representative of all health professionals in the country. Hence, these findings may need to be corroborated from other centres in India. In addition, all findings were based on self-reporting and

social desirability bias could not be assessed (Paulhus & Reid, 1991). We do believe, however, that the results continue to suggest some interesting trends between ever/never smokers and between doctors and medical students.

#### CONCLUSIONS

The primary prevention of diseases attributable to tobacco use requires effective treatment for the ultimate vector of this epidemic i.e. tobacco. This study indicates that almost 13% of young medical health professionals in New Delhi are smokers. Our study revealed suboptimal levels of knowledge and tobacco cessation practice among young doctors and medical students. Attitudes toward tobacco cessation by their patients was however generally positive and there was

substantial interest in further training in tobacco control. Given the important role physicians have in counselling their patients on smoking cessation techniques, these rates are disturbing and indicate a severe public health problem throughout the country. Steps need to be taken at a national level to address the fight against tobacco. These findings support the need for new campaigns to reduce smoking among health care professionals. Also, it highlights the need to equip the medical professionals with appropriate knowledge and skills to manage tobacco dependence. Use of these simple assessment tools and practice of these effective interventions by general medical and healthcare practitioners will go a long way in addressing the rising tobacco epidemic in India and making general healthcare more comprehensive. Additionally, students should receive supervised clinical opportunities to practice counselling, including opportunities to discuss and reflect on their experiences. The Medical Council of India is currently in process of revising the undergraduate curriculum. The Indian Association of Social Psychiatry and the Indian Psychiatric Society are actively advocating for including Psychiatry as an examination subject to increase the proficiency of medical students to deal with mental disorders which includes tobacco dependence. This paper will add to the evidence base for strongly making a case for such a recommendation.

#### REFERENCES

- Center for Disease Control (CDC), (2005) Tobacco Use and Cessation Counselling - Global Health Professionals Survey Pilot Study, 10 Countries, 54(20), 505-509  
A v a i l a b l e a t  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5420a2.html> (last accessed at 2nd August 2012).
- Ceraso M, McElroy JA, Kuang X, et al. (2009) Smoking, barriers to quitting, and smoking-related knowledge, attitudes, and patient practices among male physicians in China. *Preventing Chronic Disease*, 6(1), A06.
- Cooper R, Culter J, Desvigne-Nickens P et al. (2000) Trends and disparities in coronary heart disease, stroke, and other cardiovascular diseases in the United States: Findings of the National Conference on Cardiovascular Disease Prevention. *Circulation* 102, 3137–3147
- Dikshit R & Kanhere S. (2000) Tobacco habits and risk of lung, oropharyngeal and oral cavity cancer: a population-based case-control study in Bhopal, India. *International Journal of Epidemiology*. 29:609–14
- Doll R & Hill AB. (1950) Smoking and carcinoma of the lung. Preliminary report. *British Medical Journal*, 2, 739-748.
- Doll R & Hill AB. (1952) A study of the aetiology of carcinoma of the lung. *British Medical Journal*, 2, 1271-1286.
- Doll R & Hill AB. (1956) Lung cancer and other causes of death in relation to smoking: A second report on the mortality of British doctors. *British Medical Journal*. 2, 1071-1081.
- Ebbert JO & Hays JT. (2008) The missing link in tobacco control. *Canadian Medical Association Journal*, 179, 123-4.
- Franceschi S, Bidoli E, Herrero R, et al. (2000) Comparison of cancers of the oral cavity and pharynx worldwide: etiological clues. *Oral Oncology* , 36, 106–15.
- Global Adult Tobacco Survey (GATS), India (2010)- International Institute of Population Sciences (IIPS), Mumbai. New Delhi: Ministry of Health & Family Welfare, Government of India.
- Gupta R, Prakash H, Gupta VP, et al. (1997) Prevalence and determinants of coronary heart disease in a rural population in India. *Journal of Clinical Epidemiology*, 50, 203–9.
- Jiang Y, Ong MK, Tong EK, et al. (2007) Chinese physicians and their smoking knowledge, attitudes, and practices. *American Journal of Preventive Medicine*, 33, 15-22.
- Mackay J & Eriksen M. (2002) *The Tobacco Atlas*. Geneva: World Health Organization.
- Mojica WA, Suttrop MJ, Sherman SE, et al. (2004) Smoking-cessation interventions by type of provider: a meta-analysis. *American Journal of Preventive Medicine*, 26, 391-401.
- Mony PK & Jayakumar S. (2011) Preparedness for Tobacco Control Among Postgraduate Residents of a Medical College in Bangalore. *Indian Journal of Community Medicine*, Apr-Jun, 36(2), 104–108.
- Moore SR, Johnson NW, Pierce AM, et al. (2000) The epidemiology of tongue cancer: a review of global incidence. *Oral Diseases*, 6, 75–84.
- Narayan KMV, Chadha SL, Hanson RL, et al. (1996) Prevalence and patterns of smoking in Delhi: cross sectional study. *British Medical Journal*, 312, 1576-1579.

- Nelson DE, Giovino GA, Emont SL, et al. (1994) Trends in cigarette smoking among US physicians and nurses. *Journal of American Medical Association*, 271,1273-1275.
- Padmavati S. (2002) Prevention of heart disease in India in the 21st century. Need for a concerted effort. *Indian Heart Journal*, 54, 99–102.
- Paulhus DL & Reid DB (1991) Enhancement and denial in socially desirable responding. *Journal of Personality and Social Psychology*, 60, 307–17.
- Pipe AL, Sorensen M, Reid R (2009) Physician smoking status, attitudes toward smoking, and cessation advice to patients: an international survey. *Patient Education and Counseling*, 74, 118-123.
- Pizzo AM, Chellini E, Grazzini G, et al. (2003) Italian general practitioners and smoking cessation strategies. *Tumori*, 89, 250-254.
- Prochaska JO, Velicer WF, Rossi JS, et al. (1994) Stages of Change and Decisional Balance for 12 Problem Behaviors. *Health Psychology*, 13, 39-46.
- Rani M, Bonu S, Jha P, et al. (2003) Tobacco use in India: prevalence and predictors of smoking and chewing in a national cross sectional household survey. *Tobacco Control*, 12, e4.
- Stein CJ & Colditz GA (2004) Modifiable risk factors for cancer. *British Journal of Cancer*, 90, 299–303.
- Ulbricht S, Baumeister SE, Meyer C, et al. (2009) Does the smoking status of general practitioners affect the efficacy of smoking cessation counselling? *Patient Education and Counseling*, 74(1), 23-8.
- Vora AR, Yeoman CM, Hayter JP. (1997) Alcohol, tobacco and paan use and understanding of oral cancer risk among Asian men in Leicester. *British Dental Journal*, 188, 441–451.
- Waalkens HJ, Cohen SJ, Adriaanse H, et al. (1992) Smoking habits in medical students and physicians in Groningen, The Netherlands. *European Respiratory Journal*, 5, 49-52.
- World Health Organization. (1997) Tobacco or Health: A Global Status Report. Country Profiles by Region.
- World Health Organization. (2000) Noncommunicable diseases and mental health; Progress report. Report # MIP/01/APR.NMH 2001. Geneva. Accessed on 3rd August, 2012 from [http://www.who.int/mip2001/files/2157/MIP\\_01\\_APR.NMH.en.pdf](http://www.who.int/mip2001/files/2157/MIP_01_APR.NMH.en.pdf)
- World Health Organization (2005). Tobacco Use and Cessation Counselling. Global Health Professionals Survey Pilot Study, 10 Countries, 54(20); 505-509.) Available at <http://www.who.int/tobacco/surveillance/ghps/en/index.html> (last accessed on 3rd August, 2012)
- World Health Organization (2008) WHO report on the Global Tobacco Epidemic, 2008. The MPOWER Package. Geneva: World Health Organization, 2008. ISBN 978 92 4 159628 2.
- World Health Organization (2009) WHO report on the global tobacco epidemic, 2009: implementing smoke-free environments. Geneva. Available at <http://www.who.int/tobacco/mpower/2009/en/index.html> (last accessed on 4th August 2012).
- World Health Organization (2011) WHO report on the global tobacco epidemic, 2011: warning about the dangers of tobacco. Geneva. Available at [http://whqlibdoc.who.int/publications/2011/9789240687813\\_eng.pdf](http://whqlibdoc.who.int/publications/2011/9789240687813_eng.pdf) (last accessed on 4th August 2012).
- World Health Organization (2012) Smoking statistics. Geneva: WHO, 2002. Available at [http://www.wpro.who.int/media\\_centre/fact\\_sheets/fs\\_20020528.html](http://www.wpro.who.int/media_centre/fact_sheets/fs_20020528.html) (last accessed on 4th August 2012).

---

Shalini Singh, Junior Resident; Suman Kumar Sinha, Assistant Professor; Rashmita Saha, Junior Resident; Mukesh Jha, Junior Resident; Dinesh Kumar Kataria, Professor; Department of Psychiatry, Lady Hardinge Medical College, New Delhi, 110001.

Corresponding author: Dr. S.K. Sinha (Email: [drsumansinha@gmail.com](mailto:drsumansinha@gmail.com))

---

Research Article

CORRELATES OF SUICIDE IDEATION IN PATIENTS WITH DEPRESSIVE DISORDER AND ALCOHOL DEPENDENCE

Jaspreet Kaur, A Bhandari, V.V. Upmanyu, B.S. Chavan

Abstract

**BACKGROUND** Suicide ideation is an important determinant of suicide risk. Identifying the correlates of suicide ideation which is a prerequisite to threatened suicide, attempted suicide or committed suicide is important because earlier the identification the more feasible is intervention/prevention. **AIM** To identify correlates of suicide ideation in two groups of patients with depressive disorder and with alcohol dependence. **METHOD** The study was conducted at the Psychiatry Outpatient Department of Government Medical College & Hospital, Chandigarh. Patients who were diagnosed with depressive disorder and alcohol dependence were included in the study. Sample was N=100 males in each group. Suicide ideation was examined and its relationship was seen with various dimensions of personality, anxiety, hopelessness and negative automatic thoughts. The inclusion criteria were diagnosis of depressive disorder (Patients with first episode depression were included) or alcohol dependence (Patients with no active withdrawal symptoms were included), aged between 18 years and 65 years. The exclusion criteria were any co morbid psychiatric disorder or any co morbid major medical disorders. Correlations were calculated. **RESULTS** In patients with depression, the correlations of suicide ideation with depression, hopelessness, negative automatic thoughts, anxiety and personality dimensions were found to be significant. In Alcohol dependent persons, the correlations of suicide ideation with severity of alcohol dependence, hopelessness and negative automatic thoughts were found to be significant. **CONCLUSIONS** Suicide is a complex problem; the challenges of preventing suicide in developing countries like ours need particular attention. Hence, clinicians should be vigilant to such individuals who are scoring high on the above factors, as they would be more vulnerable to suicidal behaviour.

**KEY WORDS:** Suicide Ideation, Depression, Alcohol Dependence

INTRODUCTION

The health of the young is of great importance for the future of societies. In this context, the suicide rate is a sensitive measure of psychological and social state. As a consequence, suicide has always been a topic of considerable interest in different geographical areas of the world because an examination of the suicide rate, worldwide, of young adults may reveal something of their well-being. In addition, suicide remains such an enigma that comparative statisticians have their own interest.

In the historical perspective, it can be seen that probably there has been no human society or period in recorded history in which the phenomenon of 'suicidal behaviour' was non-existent (Latha et al., 1996). There is substantial evidence of the disturbing nature and extent of suicidal behaviour as an epidemiological problem. Much has been written on this subject.

Suicides are numerous in Shakespeare's plays, and in the entire romantic theatre. Suicide has a place in ethics, history, literature and art. Physicians, jurists, and theologians are concerned about it. It continues to provoke curiosity, to awaken sentiments of pity and terror, and to offer rich, paradoxical material for discussion. Many facets exist which arouse deeper human interest and which the sciences of man have more reasons to examine.

The first act of suicide probably occurred before the beginning of written records. In order to explore the history of suicide with any understanding, one must have some conception of the prevailing taboos and attitudes toward this behavioural phenomenon. Historically, society's attitudes toward suicide and the suicidal act reveal a wide range between a rational one of acceptance, an irrational one of superstition and a hostile one of punishment.

By the turn of the nineteenth century, the approach to an understanding of suicide had changed from a religious, moral and philosophical approach to psychological, sociological and statistical approach. The research and scientific interpretation of suicidal phenomenon, however, made their greatest advance in the twentieth century.

Durkheim claimed that the suicide rate varied inversely with social integration and that suicide types were primarily ego-anomic. However, Durkheim did not operationally define "social integration." Gibbs created the concept of "status integration" to correct this deficiency in Durkheim. He hypothesized that the less frequently occupied status sets would lead to lower status integration and higher suicide rates. Putting it differently, he expected status integration and suicide rates to be negatively associated. In a large series of tests from 1964 to 1988 Gibbs found his primary hypothesis to be confirmed only for occupational statuses, which Durkheim also had said were of central importance (Gibbs, 1988).

Henry and Short expanded Durkheim's concept of external and constraining social factors to include interaction with social-psychological factors of "internal constraint" (such as strict superego restraint) and frustration-aggression theory. Henry and Short reasoned that suicide rates would be highest when external restraint was low and internal restraint was high and that homicide rates would be high when internal restraint was low and external restraint was high (Henry & Short, 1954).

International data from the WHO indicate that suicide occurs in approximately 16.7 per 100,000 persons per year, is the 14th-leading cause of death worldwide, and accounts for 1.5 percent of all deaths (WHO, 2007). The cross-national lifetime prevalence of suicidal ideation, plans, and attempts is 9.2% (S.E. =0.1), 3.1% (S.E. =0.1), and 2.7% (S.E. =0.1). Across all countries, 60% of transitions from ideation to plan and attempt occur within the first year after ideation onset. Consistent cross-national risk factors included being female, younger, less educated, unmarried and having a mental disorder (Mathew et al., 2008)

Suicide ideation is an important determinant of suicide risk because it precedes suicide. The researchers in the area of suicide research have been more concerned with attempted or threatened suicide. Since the majority of individuals with suicide ideation will not die by suicide, the clinician should consider factors that may

increase risk among individuals with suicide ideation. Identifying the correlates of suicide ideation which is a prerequisite to threatened suicide, attempted suicide or committed suicide is obviously more important because the earlier the identification the more feasible is intervention and prevention.

Studies from India and abroad have consistently reported a high incidence of psychiatric illness in suicide attempters with a reasonable estimate of depression accounting for 75%, alcoholism 15% and miscellaneous psychiatric conditions 8% (Beck et al., 1979; Mathew et al., 2008). Consistent with other studies attempted and completed suicide suicidality has a strong and independent association with depression and substance abuse (Beck, 1993; Brown, 2000; Brown et al., 2000; Conner et al., 2001).

The aim of the present study was to identify correlates of suicide ideation in two groups of patients with depressive disorder and with alcohol dependence.

#### METHOD

The study was conducted at the Psychiatry Outpatient Department of Government Medical College and Hospital, Sector 32, Chandigarh. Patients who were diagnosed by a qualified psychiatrist, on the basis of clinical interview, as per ICD-10 with depressive disorder and alcohol dependence were included in the study. Sample was N=100 males in each group. Suicide ideation was examined in both groups and its relationship was seen with various dimensions of personality, anxiety, hopelessness and negative automatic thoughts. To assess the severity of depression and alcohol dependence, Beck Depression Inventory (Beck et al., 1961) and Severity of Alcohol Dependence Questionnaire (Stockwell et al., 1979) were used respectively. The other research tools used were: Scale of Suicide Ideation (Beck et al., 1979), Eysenck Personality Questionnaire (Eysenck & Eysenck 1975), IPAT Anxiety Scale Questionnaire (ASQ) (Cattell & Scheier 1963), Hopelessness Scale (Beck et al., 1974) and Negative Automatic Thought Questionnaire (Hollon & Kendall, 1980). The inclusion criteria were diagnosis of depressive disorder (Patients with first episode depression were included) or alcohol dependence (Patients with no active withdrawal symptoms were included), aged between 18 years and 65 years. The exclusion criteria were any co morbid psychiatric disorder or any co morbid major medical disorders like (Cancer, Cardiac Disease, Rheumatoid Arthritis, Tuberculosis, Diabetes, Head Injury, Epilepsy,

Dementia, Mental Retardation etc.). The patients who fulfilled the inclusion and exclusion criteria were referred by the psychiatrist for assessment. Informed consent was taken and the relevant tools were administered by the researcher, assuring confidentiality. Correlations were calculated.

RESULTS

In the patients with depression mean (S.D.) age was 35.73(9.24). The correlations of suicide ideation with depression, hopelessness and negative automatic thoughts were found to be significant ( $r=.86, p<.01$ ;  $r=.81, p<.01$ ;  $r=.70, p<.01$  respectively) (Table 1).

Table 1: Correlation Matrix (Patients with Depression; N=100)

| S. No. | Variable                    | 1 | 2   | 3   | 4   | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   |
|--------|-----------------------------|---|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1      | Suicide Ideation            |   | .86 | .81 | .70 | -.49 | .48  | .71  | -.06 | .72  | .61  | .57  | .78  | .74  | .17  | .02  |
| 2      | Depression                  |   |     | .74 | .68 | -.40 | .45  | .57  | -.08 | .62  | .56  | .49  | .75  | .68  | .22  | .06  |
| 3      | Hopelessness                |   |     |     | .66 | -.55 | .35  | .67  | -.16 | .64  | .59  | .48  | .72  | .69  | .22  | .02  |
| 4      | Negative Automatic Thoughts |   |     |     |     | -.45 | .314 | .62  | -.06 | .51  | .44  | .46  | .64  | .62  | .12  | -.02 |
| 5      | Extraversion                |   |     |     |     |      | -.20 | -.58 | .18  | -.32 | -.39 | -.34 | -.43 | -.34 | .04  | -.06 |
| 6      | Psychoticism                |   |     |     |     |      |      | .43  | .15  | .52  | .57  | .55  | .47  | .57  | -.08 | .04  |
| 7      | Neuroticism                 |   |     |     |     |      |      |      | -.02 | .59  | .55  | .58  | .73  | .60  | .04  | -.10 |
| 8      | Lie Score                   |   |     |     |     |      |      |      |      | -.00 | -.07 | .12  | -.12 | .02  | -.07 | -.08 |
| 9      | Q <sub>3(-)</sub>           |   |     |     |     |      |      |      |      |      | .72  | .61  | .76  | .73  | .14  | -.02 |
| 10     | C <sub>(-)</sub>            |   |     |     |     |      |      |      |      |      |      | .55  | .68  | .64  | .05  | -.00 |
| 11     | L                           |   |     |     |     |      |      |      |      |      |      |      | .42  | .61  | .01  | -.21 |
| 12     | O                           |   |     |     |     |      |      |      |      |      |      |      |      | .75  | .61  | .07  |
| 13     | Q4                          |   |     |     |     |      |      |      |      |      |      |      |      |      | .51  | -.03 |
| 14     | Age                         |   |     |     |     |      |      |      |      |      |      |      |      |      |      | .10  |
| 15     | Socio Economic Status       |   |     |     |     |      |      |      |      |      |      |      |      |      |      |      |

Value of correlation significant at .05 level = .194  
 Value of correlation significant at .01 level = .254

Suicide ideation positively correlated with psychoticism, neuroticism except with lie score ( $r=-.49, p<.01$ ;  $r=.48, p<.01$ ;  $r=.71, p<.01$  and  $r=-.06$  (NS) respectively). Positive correlations between suicide ideation and different dimensions of anxiety (Q3(-), C-, L, O, and Q4). The correlations were  $r=.72, p<.01$ ;  $r=.61, p<.01$ ;  $r=.57, p<.01$ ;  $r=.78, p<.01$  and  $r=.74, p<.01$  respectively. Suicide ideation did not correlate significantly with age and socio-economic status of the depressives ( $r=.17$  (NS); and  $r=.02$  (NS) respectively).

In the patients with alcohol dependence mean (S.D.) age was 33.88(9.43). The correlations of suicide ideation with severity of alcohol dependence, hopelessness and negative automatic thoughts were

found to be significant ( $r=.38, p<.01$ ;  $r=.52, p<.01$  and  $r=.30, p<.01$  respectively) (Table 2). There was significant correlation between suicide ideation and extraversion, psychoticism, neuroticism except with lie score. The correlation values were found to be  $r=.48, p<.01$ ,  $r=.83, p<.01$ ,  $r=.72, p<.01$  and  $r=.12$  (NS). Positive correlations between suicide ideation and different dimensions of anxiety (Q3(-), C-, L, O, and Q4). The correlation values were found to be  $r=.42, p<.01$ ;  $r=.35, p<.01$ ;  $r=.23, p<.01$ ;  $r=.42, p<.01$  and  $r=.45, p<.01$  respectively. Suicide ideation did not correlate significantly with age and socio-economic status of the alcohol dependent persons. The correlation values were found to be  $r=-.03$  (NS) and  $r=-.02$  (NS).

Table 2: Correlation Matrix (Alcohol Dependent Persons; N=100)

| S. No. | Variable                    | 1 | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14   | 15   |
|--------|-----------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1      | Suicide Ideation            |   | .38 | .52 | .30 | .48 | .83 | .72 | .12 | .42 | .35 | .23 | .42 | .45 | -.03 | -.02 |
| 2      | Depression                  |   |     | .48 | .36 | .23 | .35 | .26 | .10 | .16 | .11 | .15 | .12 | .25 | -.02 | -.03 |
| 3      | Hopelessness                |   |     |     | .27 | .24 | .52 | .38 | .07 | .38 | .29 | .27 | .40 | .39 | -.23 | -.08 |
| 4      | Negative Automatic Thoughts |   |     |     |     | .17 | .23 | .17 | .22 | .32 | .30 | .23 | .29 | .38 | .04  | -.04 |
| 5      | Extraversion                |   |     |     |     |     | .46 | .59 | .06 | .24 | .36 | .21 | .33 | .30 | -.05 | .01  |
| 6      | Psychoticism                |   |     |     |     |     |     | .73 | .15 | .53 | .35 | .26 | .49 | .51 | -.15 | .00  |
| 7      | Neuroticism                 |   |     |     |     |     |     |     | .09 | .42 | .52 | .27 | .49 | .34 | .10  | .03  |
| 8      | Lie Score                   |   |     |     |     |     |     |     |     | .07 | .20 | .33 | .28 | .38 | .07  | -.08 |
| 9      | Q <sub>3(-)</sub>           |   |     |     |     |     |     |     |     |     | .30 | .33 | .68 | .47 | -.09 | .19  |
| 10     | C <sub>(-)</sub>            |   |     |     |     |     |     |     |     |     |     | .44 | .66 | .63 | -.02 | .04  |
| 11     | L                           |   |     |     |     |     |     |     |     |     |     |     | .28 | .55 | .07  | -.08 |
| 12     | O                           |   |     |     |     |     |     |     |     |     |     |     |     | .79 | -.09 | .09  |
| 13     | Q4                          |   |     |     |     |     |     |     |     |     |     |     |     |     |      | -.01 |
| 14     | Age                         |   |     |     |     |     |     |     |     |     |     |     |     |     |      | .21  |
| 15     | Socio Economic Status       |   |     |     |     |     |     |     |     |     |     |     |     |     |      |      |

Value of correlation significant at .05 level = .194

Value of correlation significant at .01 level = .254

DISCUSSION

In this study, both the patients with depression and alcohol dependence correlated positively with hopelessness, negative automatic thoughts, psychoticism, neuroticism and various dimensions of anxiety. The positive relationship between depression, hopelessness and negative automatic thoughts has been linked to suicide behaviour in earlier researches also. These correlations are in the expected direction. Hopelessness, negative automatic thoughts and depression are closely related in accordance with Beck's cognitive theory of depression. Hopelessness is the cognitive variable that has received the most attention as a risk factor for suicidal behaviour. Hopelessness is a negative view or negative set of attitudes regarding the future. According to Beck's cognitive theory of depression this negative view of oneself, the world and the future, is a characteristic of the thinking of depressed individuals (Beck et al., 1979).

Hopelessness is a psychological dimension that is associated with increased suicide risk (Brown, 2000; Brown et al., 2000; Conner et al., 2001). Some authors have reported that patients with high levels of hopelessness have an increased risk for future suicide

(Beck et al., 1990; Beck et al., 1993; Beck et al., 1989). In a few other studies it has been seen that hopelessness also contributes to an increased likelihood of suicide ideation and suicide attempts (Paul et al., 2012; Phillip, 2011).

It is significant to emphasize that few empirical investigations have been made to examine the relationship of suicidal behaviour with extraversion, neuroticism and psychoticism. In both the depressive group and the alcohol dependent group suicide ideation correlated positively with psychoticism and neuroticism. Authors of another study investigated the relationship between extraversion, neuroticism and intent in attempted suicides (Pallis & Jenkins, 1977). Results revealed that for males there was an association between low intent to die and impulsivity. The study also revealed that for female subjects, the result was consistent with that of another study, who found no association between a clinical judgment of intent and extraversion or impulsivity (Kinsinger, 1977). This study also revealed that for both sexes there was an association between recurrent suicide attempts and neuroticism. In another study, authors made an attempt to investigate temperament characteristics of suicide

attempters. Data from both the sexes indicated that suicide prone individuals have unpleasant, arousable, and submissive temperaments, with arousability a strong discriminator of suicide attempters relative to the general population. Thus, temperament attributes identified for suicide attempters are best described as neuroticism or trait anxiety (Mehrabian & Weinstein, 1985).

Severe anxiety may also be a risk factor for suicide. Patients with depression and alcohol dependence in our study had significantly positive correlations with various dimensions of anxiety. Some studies have reported that a significant number of people who committed suicide were diagnosed as having an anxiety disorder and significantly increased suicide rate is seen in people with panic disorder (Fawcett et al., 1990). An epidemiological analysis of suicide ideation and suicide attempts identified anxiety as an independent risk factor for suicide attempts (Gould et al., 1998). In another community based sample authors found a significant association between panic attacks and suicide ideation and suicide attempts after controlling for demographic variables, major depression and alcohol/drug use (Pilowsky et al., 1999). In another inpatient sample, severe anxiety, agitation or both were found in four-fifths of patients in the week preceding suicide (Busch et al., 2003). Similar associations of anxiety have been noted in some but not in all studies (Placidi et al., 2000).

To conclude, it can be said that in both the depressive disorder patients and alcohol dependence patients' suicide ideation correlated positively with hopelessness, negative automatic thoughts, psychoticism, neuroticism and anxiety factors. Suicide is a complex problem; the challenges of preventing suicide in developing countries like ours need particular attention. Hence, clinicians should be vigilant to such individuals who are scoring high on the above factors, as they would be more vulnerable to suicidal behaviour.

#### REFERENCES

- Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. (1961) An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Beck AT, Weissman A, Lester D, Trexler L. (1974) The measurement of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology*, 42, 861-865.
- Brown GK, Beck AT, Steer AR, et al. (2000) Risk factors for suicide in psychiatric outpatients: A 20 year prospective study. *Journal of Consulting and Clinical Psychology*, 68, 371-377.
- Brown GK. (2000) A review of suicide assessment measures for intervention research with adults and older adults. Rockville, MD, National Institute of Mental Health.
- Busch KA, Fawcett J, Jacobs DG. (2003) Clinical correlates of inpatient suicide. *Journal of Clinical Psychiatry*, 64, 14-19.
- Cattell RB & Scheier IH. (1963) *Handbook for the IPAT Anxiety Scale Questionnaire*. Illinois: Institute of Personality and Ability Testing.
- Conner KR, Duberstein PR, Conwell Y. (2001) Psychological vulnerability to completed suicide: A review of empirical studies. *Suicide Life Threatening Behaviour*, 31, 367-385.
- Eysenck HJ & Eysenck SBJ. (1975) *Manual of the Eysenck Personality Questionnaire*. Great Britain: Hodder and Stoughton.
- Fawcett J, Leff M, Bunney WE. (1990) Suicide: Clues from interpersonal communication. *Archives of General Psychiatry*, 21, 129-137.
- Gibbs JT. (1988) *Young black male in America: An endangered species*. Dover, Mass: Auburn House.
- Gould MS, King R, Greenmald S, et al. (1998) Psychopathology associated with suicide ideation and attempts among children and adolescents. *Journal of Consulting and Clinical Psychology*, 37, 915-923.
- Henry AF & Short JF. (1954) *Suicide and homicide*. Glencoe III: Free Press.
- Hollon SD & Kendall PC. (1980) Cognitive self statements in depression: Development of an Automatic Thought Questionnaire. *Cognitive Therapy and Research*, 4, 383-395.
- Kinsinger JR. (1977) The relationship between lethality of suicidal intentions and assertive, aggressive and hostile traits. Unpublished PhD Thesis, University of Texas.
- Latha KS, Bhat SM, D'Souza P. (1996) Suicidal behaviour. *Acta Psychiatrica Scandinavica*, 94, 26-30.
- Mathew KN, Guilherme B, Evelyn J, et al. (2008) Cross national prevalence and risk factors for suicidal ideation, plans and attempts. *British Journal of Psychiatry*, 192, 98-105.

Mehrabian A & Weinstein L. (1985) Temperament characteristics of suicide attempters. *Journal of Consulting and Clinical Psychology*, 53, 544-546.

Pallis DJ & Jenkins JS. (1977) Extraversion, neuroticism, and intent in attempted suicides. *Psychological Reports*, 41, 19-22.

Paul L, Rosane N, Munazzah A, et al. (2012) Prospective study of risk factors for increased suicide ideation and behaviour following recent discharge. *General Hospital Psychiatry*, 34, 88-97.

Phillip S. (2011) Suicide ideation among adolescents: An exploratory study. *Research Journal of Applied Sciences*, 6, 167-173.

Pilowsky DJ, Wu L, Anthony JC. (1999) Panic attacks and suicide attempts in mid- adolescence. *American Journal of Psychiatry*, 156, 1545-1549.

Placidi GP, Oquendo MA, Malone KM, et al. (2000) Anxiety in major depression: Relationship to suicide attempts. *American Journal of Psychiatry*, 157, 1614-1618.

Stockwell T, Hodgson R, Edwards G. (1979) The development of questionnaire to measure severity of alcohol dependence. *British Journal of Addiction*, 74, 79-87.

World Health Organization (2007) *Suicide Prevention (SUPRE)*. Geneva, Switzerland: World Health Organisation.

---

Jaspreet Kaur, PhD, Clinical Psychologist, Department of Physical and Rehabilitation Medicine, Postgraduate Institute of Medical Education & Research (PGIMER), Chandigarh 160012. E-mail: jaspreetpgi@yahoo.co.in (Corresponding author)

A. Bhandari, PhD, Professor, Department of Psychology, Panjab University, Chandigarh.

V. V. Upmanyu, PhD, Professor, Department of Psychology, Panjab University, Chandigarh.

B. S. Chavan, M.D., Professor and Head, Department of Psychiatry, Government Medical College & Hospital, Chandigarh.

---

Research Article

TRANSLATION AND ACCEPTABILITY OF A COMPREHENSIVE RISK ASSESSMENT INTERVIEW IN HINDI

Kiran Jakhar, Mina Chandra, Smita N. Deshpande

Abstract

**Background/ objectives:** There is a substantial risk of violence among individuals with schizophrenia. The vector of risk producing behaviour is bidirectional in an individual. Although there are numerous instruments available in western societies for risk evaluation, Indian data in this field is scarce. The current paper describes the process of development and cultural validation of Hindi version of an existing risk assessment interview. **Methods:** After selecting an existing risk assessment interview, the interview draft was analysed in phases including translation, back translation, qualitative analysis and quantitative analysis. A training programme for qualitative analysis and applicability was finally conducted. The final draft was then renamed as PGIMER –RML Risk Assessment Interview (RML-RAI). **Results:** The translation included much individual work and lengthy group discussions involving psychiatrists, psychiatric social workers and psychologists to ensure that the most appropriate terms were being used in the translated instrument as a consensus decision. **Conclusion:** The progress of research in a multicultural society needs research tools which are culturally sensitive and valid. RML-RAI is an adequately modified Hindi version of an existing risk assessment interview for use in Indian conditions.

**Keywords:** Risk, schizophrenia, violence, suicide.

INTRODUCTION

Schizophrenia is associated with substantial risk both to the individual and the society. Among others, risks include suicide, aggression directed towards objects, others and self, self neglect, fire risk, and risk of coming to harm (Darves- Borno et al., 1999; Fazel et al., 2009; Haw et al., 2005; Symonds et al., 2006) Patients with schizophrenia are four to six times more prone to commit violent crime (Fazel et al., 2009). Equally patients with schizophrenia may be at increased risk of violent victimization (Dolan et al., 2012).

Almost a hundred instruments exist to assess risk in Western countries (Singh et al., 2012). Some authors developed 'screens' as a two-step approach to screen out the majority of patients with schizophrenia who are at very low risk of future violence instead of the comprehensive risk assessment tools which can take a long time. While all instruments were developed in the West, the majority are in English or other Western languages. Several items in these scales are not directly applicable to Indian patients.

Guidelines or scales to assess risk have not yet been developed in India, to the author's knowledge, but there is a great potential for risk assessment on account of the growing burden of chronic often untreated

mental illness (Thirthali et al., 2010). In an Indian prison, 10% of women prisoners suffered from major mental illness (Banerjee et al., 2009) Thus Professional translators can change the difficulty and appropriateness of test items inadvertently.

However no Indian baseline data is available except for police records, which are often disputed. In the absence of such data it would be difficult to score either the seriousness of the specified behaviour.

The present paper describes the process of development and cultural validation of Hindi version of an existing risk assessment interview, adapting and modifying the existing interview for use in Indian conditions.

METHODOLOGY

A Risk Assessment Interview, at one time in regular clinical use at the Camden & Islington Mental Health Foundation Trust, London was obtained (courtesy Dr. S. Jadhav). After due written permission from an authorized representative of the Trust, the interview was taken up for evaluation and translation.

The interview was initially examined by the authors for general appropriateness of use. Except for a few terms and items, which could simply be scored 'no' or 'not

applicable', it was decided that this interview was suitable for use but would need to be modified as an interview with no numerical scores. Rather we would look for presence or absence of target behaviour either during the current episode of illness, or ever present in the past.

At the first step, a trained Psychiatrist and a Psychiatric social worker separately translated the interview into Hindi. The two Hindi versions were back translated into English by another trained psychiatrist and psychologist, both of whom had not been involved in the initial translation. Thereafter both groups of translators along with the authors compared both the Hindi versions with the English one. The back translated version was in good agreement with the original English Version except for few minor discrepancies and differences which were reconciled. Grammatical corrections of the draft were done separately by a trained Psychiatrist and a social anthropologist. This was considered to be the first draft of the Hindi version.

The first draft was circulated for feedback to four senior residents (qualified psychiatrists) and four junior residents (post graduate students of MD Psychiatry). They were asked to apply it to two patients each in their daily clinical practice. The aim was to test the understanding of the interview by professionals, its language content, applicability of individual items, and estimate the time taken to administer it. Their inputs, regarding item clarity, applicability and grammar, were discussed and several suggestions were incorporated. This became the second draft.

A meeting was held for developing a quantitative assessment method for the descriptive subsection 6.1 "summary" by the authors, to make for simpler scoring. This was incorporated into the main interview thus formulating the third draft. The third draft was again distributed to the same senior and junior residents for feedback which was incorporated into the interview by the authors leading to the fourth draft.

Pilot testing of the fourth draft was done on ten patients with Schizophrenia and further suggestions and changes were again incorporated by the authors in the first week of February 2012. This was the fifth and final draft.

A training programme regarding the use, and applicability was held in third week of February 2012 by the authors for all mental health professionals working in the Department of Psychiatry and a few linguistic

suggestions, which did not factually change the items, were incorporated. The final draft was then renamed as PGIMER –RML Risk Assessment Interview (RML-RAI).

## RESULTS

During the first Hindi translation of the interview, a few items about the identification of the patient were omitted as they were not relevant to the Indian context – they included ethnicity, and 'service area'. The vast majority of Indian patients are Asian, and since Indian patients do not have to adhere to a particular 'service area', these items were deemed unnecessary and deleted. The item 'date of admission /referral date' was omitted as it would need to be applicable to both indoor and outdoor patients. Patients are usually not referred.

The initial place of application of this interview was to be the out patients' of the Department of Psychiatry. The term "patient" in the original was modified to "Service User" which was translated in Hindi as 'sewa upyog karta'. The RAI uses the word "service user" instead of "patient" as the term is more dignified.

In the subsection of information sources-'care co-ordinator', and 'community notes' were omitted as they are not relevant in the context of Indian mental health services. In the section 1 "history", there was discussion regarding choosing the appropriate words for "risk" as 'jokhim/khatra'. Finally while 'jokhim' was used for general risk, the term 'khatra' was used for specific areas or danger.

There is no single Hindi word for psychological 'rootlessness'. In subsection 1.2, a search for an appropriate Hindi term for rootlessness was made. The word 'nirmool' was decided by consensus. Since the word in itself conveys little meaning, an explanatory foot note was given as 'separated from one's social environment'.

In subsection 1.3, the somewhat approximate word 'anupalan?' was chosen between 'anupalan' and 'apyapti anuvarti' for 'compliance' as specific Hindi words were too difficult and unusual and would not have been understood by service user. There are two possible different phrases for the term 'disinhibiting factor' in Hindi- 'asanyam karak' and 'anta shakti karak'. Finally the simpler modified phrase 'asanyam keykarak' was chosen.

In subsection 1.5, the discussion centred around the Hindi translation of 'sexually inappropriate behaviour'. The two alternatives were 'anuchit yaun vyavahar/lainjik anushukat anuchit?? vyavahar'.

Again the simpler and commonly used 'anuchit yaun vyavahar' was selected. In subsection 1.8 the appropriate word for "loss" was chosen from 'hani/nuksan'.

In section 2 "environment", discussion regarding the words "upyog/istamal: uucch block/uuncchi imarat" was held and appropriate words in context were selected.

In section 3 "mental state", Hindi translation of Paranoid delusion, command hallucination and delusion of passivity of 'utpidan ka bhram/aadesh ka shruti bhram/nishkriyata ka vibhram' were adopted from the previous Hindi translation of the Diagnostic Interview for Genetic Studies (Deshpande et al., 1998).

But the original English names for Schizophrenia, manic depression were retained to avoid confusion as these are standard terms.

While the original scale was scored as yes/no, the modified interview had two options -present/absent in current/ever episode. In this we decided to follow the pattern from the Diagnostic Interview for Genetic Studies (Deshpande et al., 1998).

A column for suggestions and observations of interviewer was added at the end, as this interview would be applied by all the Psychiatrists, Clinical Psychologists, Psychiatric social workers and other mental health professionals in the Department. It was named "PGIMER-RML Risk Assessment Interview" (Appendix 1). It is a clinical interview rather than a scale. Since no Indian baseline prevalence data are available, a scale can only be developed in future.

#### FEEDBACK REGARDING APPLICABILITY

The final draft was applied on ten patients. Six out of ten mental health workers found it difficult to score question 1.7 in the HISTORY subsection. This question asks for 'evidence of recent severe stress'. The word 'recent' was translated as 'haal hi main'. But scoring was confusing. While the original interview was scored as yes/no, the modified interview had two options-present/absent during the current/ever episode. Since current meant 'haal hi main', it was decided to omit this word and merely ask for severe stress in the 'current episode' or 'ever'.

Another worker reported difficulty with the word 'gambhir tanav' - did it stand for violence or for major life event? Since all other administrators had no difficulty with this word, no further action was taken

and 'gambhir tanav' retained as such. One clinician felt the questions were too long. During the training session suggestions were provided as to how to break up longer questions into phrases, or read the original question followed by explanations to make it easier for patients to understand.

Three others had difficulty in the Hindi words for auditory hallucination and somatic passivity. But since these are technical words which need an exact translation, the same words were retained.

Three workers reported difficulty in the Hindi words for 'positive potential' (sakarata kshamta) and one for 'resources available' (upalabdha sansadhan) from question 6.2. Hence it was decided to include the English version of questions just below the Hindi one, so that worker could correlate both languages and understand the casual meaning of the translated words in both languages.

#### DISCUSSION

Schizophrenia patients are exposed to different risks as part of their disease related symptoms and disability. These risks have been inadequately recorded, especially in India. To our knowledge, there are very few Indian studies on suicide/self-harm (Bhatia et al., 2006; Das et al., 2008) and almost no published research on violence, self-neglect and victimization of Indian patients of Schizophrenia. There are numerous reports from abroad of patients with psychiatric disorders exposed to violence, self harm, self neglect, fire risk, risk of coming to harm, risk to others, and risk from others (Darves- Bornoz et al., 1999; Fazel et al., 2009; Haw et al., 2005; Symonds et al., 2006). Most Indian mental health professionals have little training in recognizing and managing risk in their patients. Clinicians may be reluctant to manage aggressive and assaultive patients in their open psychiatric centres and may refer them to closed facilities, thus depriving them of least restrictive alternatives for care. Further they also rely on pharmacological treatment in the hope that this approach alone will reduce aggressive behaviour (Antonius et al., 2010). The growing burden of chronic, untreated mental illness has increased the importance of risk assessment in psychiatry, not only to understand and manage the individual but also to generate better service policies (Pompilli et al., 2007; Shrivastava et al., 2010).

The present interview was translated as an effort to address this lacuna. Various problems arise due to

change in culture, language or country; one should understand the difference between language and culture as both are not similar in every context. A common language can be used by two different countries but cultural differences between those countries might affect its implementation. So several steps have to be followed to ensure cross cultural adaption. They represent 1- Translation by qualified translators, 2- Back translation- then 3- Committee review – which should be multidisciplinary including bilinguals, experts and lay persons to compare source and final version. It should include structured techniques to resolve discrepancies, modify the instructions, reject inappropriate terms or generate new terms so that the final version has cross cultural equivalence. Translation should be comprehensible. 4- Pre test technique should be used to check for equivalence in source and final version. 5- Consider the adapting of weights of scores to the cultural context (Guillemin,1995).

While many risk assessment and screening scales exist, a scale better focused on addressing Indian clinical, language and cultural sensibilities was necessary. A practical clinically focussed interview which could be completed in 15 minutes at the most, after initial psychiatric history and mental status examination, would be ideal. An existing scale being extensively used in similar clinical settings would meet this need. To this end the scale being used till recently (at present, replaced by a computerised scale) by the Camden and Islington Mental Health Foundation Trust, London of the NHS UK seemed to meet these needs. Permission was immediately granted for such translation and use by their authorized official.

The scale was modified in line with Indian social conditions as well as the proposed new Mental Health Bill and proposed modifications to the Persons with Disability Act of India. Many words in common use in the UK would not be easily understood or applicable here. Instances of homelessness, risk from others and suicide are increasing in India as in other parts of the world but single or simple words to describe these conditions have not evolved as yet. We decided to use the word 'service user' rather than patient. Some workers e.g. Care co-ordinator do not exist. Patients need not be referred by their GP, an essential provision in the NHS. These parts of the scale were either modified or omitted altogether.

We also wanted to broaden our scope of enquiry. Asking

for risk for a defined period in the past –such as a month- would only provide evidence of recent risks. That might not translate into similar risks in the future, which needed to be planned for. Hence instead of merely recording 'yes' or 'no' to questions (as present in the original) we preferred to find out whether the risk behaviour was present currently or had ever been noted in the past. This could provide clues to possible recurrence of such behaviour leading in turn to appropriate interventions. For recording these answers, we followed the pattern of the Diagnostic Interview for Genetic Studies (Deshpande et al., 1998). Our aim was to simplify the modified scale so that it could be understood by the vast majority of mental health professionals yet yield sufficient information to be useful. From the results above it was evident that some words were difficult to translate because they were not in common use, such as words for delusions and hallucinations. Yet these had to be retained because English words for these phenomena were not well known either. English names of disorders were retained although not well known, because their translation would be unintelligible to most. The method of translation, back translation and committee review was followed. Various versions were administered by residents to assess its intelligibility and usefulness in a clinical setting, finally followed by a training session and group discussion to arrive at the final version. Suggestions were followed wherever possible. It was suggested that both Hindi and English version be presented so that uncommon Hindi words could be correlated to the corresponding English ones. Since this was not a diagnostic instrument, but would rather supplement information for the clinician- it was more important to assess its acceptability to clinicians in the first instance. Hence the instrument was not tested for self scoring among patients or caregivers but among clinicians of widely varying clinical experience. This can be a focus of future work.

#### CONCLUSION

The progress of research in a multicultural society needs research tools which are culturally sensitive and valid. Risk assessment is important to quantify and predict future risk of harm towards self and others. RML-RAI is an adequately modified Hindi version of an existing risk assessment interview for use in Indian conditions. The final version of the interview is currently being tested in the out patients as well as inpatients. We welcome inputs and reactions by readers and also invite clinicians

to use this interview in practice and send us their views.

PGIMER-RML Risk Assessment Interview will be freely available at website: <http://www.indouspgp.info>

#### REFERENCES

- Antonius D, Fuchs L, Herbert F, Kwon J, Fried JL, Burton PR et al. (2010) Psychiatric Assessment of aggressive patient: A violent assault on a resident. *The American Journal of Psychiatry*, 167, 253-259.
- Banerjee A, Sengupta P, Ray TK. (2009) Person with major psychiatric illness in prisons- a three years study. *Journal of Indian Medical Association*, 107, 14-16.
- Bhatia T, Thomas P, Semwal P, Thelma BK, Nimgaonkar VL, Deshpande SN. (2006) Differing correlates for suicide attempts among patients with Schizophrenia or schizoaffective disorder in India and USA. *Schizophrenia Research*, 86, 208-214.
- Darves-Bornoz JM, Lemperiere T, Degiovanni A, Gaillard P. (1995) Sexual victimization in women with schizophrenia and bipolar disorder. *Social Psychiatry and Psychiatric Epidemiology*, 30, 78-84.
- Das PP, Grover S, Avasthi A, Chakrabarti S, Malhotra S, Kumar S. (2008) Intentional self harm seen in psychiatric referrals in a tertiary care hospital. *Indian Journal of Psychiatry*, 50, 187-191.
- Deshpande SN, Mathur MN, Das SK, Bhatia T, Sharma S, Nimgaonkar VL. (1998) A Hindi version of the diagnostic Interview for Genetic Studies. *Schizophrenia Bulletin*, 24, 489-493.
- Dolan MC, Castle D, McGregor K. (2012) Criminally violent victimisation in schizophrenia spectrum disorders: the relationship of symptoms and substance abuse. *BioMedCentral Public Health*, 12, 445.
- Fazel S, Gulati G, Linsell L, Geddes JR, Grann M. (2009) Schizophrenia and Violence: Systematic Review and Meta-Analysis. *PLoS Medicine*, 6, 8.
- Guillemin F. (1995) Cross- Cultural Adaptation & Validation of Health Status Measures. *Scandinavian Journal of Rheumatology*, 24, 61-63.
- Haw C, Hawton K, Sutton L, Sinclair J, Deeks J. (2005) Schizophrenia and deliberate self harm: a systematic review of risk factors. *Suicide and Life Threatening Behavior*, 35, 50-62.
- Pompilli M, Amador XF, Girardi P, Harkavy-Friedman J, Harrow M, Kaplan K et al. (2007) Suicide risk in schizophrenia: learning from the past to change the future. *Annals of General Psychiatry*, 6, 10.
- Shrivastava A, Johnston ME, Shah N, Innamorati M, Stitt L, Thakar M et al. (2010) Persistent suicide risk in a clinically improved schizophrenia patient: Challenge of the suicidal dimension. *Neuropsychiatric Disease and Treatment*, 6, 633-638.
- Singh JP, Serper M, Reinharth J, Fazel S. (2011) Structured assessment of violence risk in schizophrenia and other psychiatric disorders. A systematic review of the validity, reliability and item content of 10 available instruments. *Schizophrenia Bulletin*, 37, 899-912.
- Symonds CS, Taylor S, Tippins V, Turkington D. (2006) Violent self harm in Schizophrenia. *Suicide and Life Threatening Behavior*, 36, 44-49.
- Thirthalli J, Venkatesh BK, Naveen MN, Venkatasubramanian G, Arunachala U, Kishore Kumar KV et al. (2010) Do antipsychotics limit disability in schizophrenia? A naturalistic comparative study in the community. *Indian Journal of Psychiatry*, 52, 37-41.

---

Kiran Jakhar, Postgraduate trainee (Corresponding Author; Email: [kjakhar48@gmail.com](mailto:kjakhar48@gmail.com)); Mina Chandra, Chief Medical Officer; Smita N. Deshpande, Professor and Head; Department of Psychiatry, PGIMER Dr. Ram Manohar Lohia Hospital, New Delhi, India.

---

Research Article

INTRODUCTORY, SHORT TERM COGNITIVE BEHAVIOUR THERAPY TRAINING FOR INDIAN MENTAL HEALTH PROFESSIONALS: A QUALITATIVE EVALUATION

Arun K Gupta, Adarsh Tripathi, Prabhat Sitholey, Thomas Reeves, PK Dalal, Anil Nischal

Abstract

**Background:** Reports on psychotherapy training in India are scarce. This study was conducted to examine effects of an introductory short term Cognitive Behaviour Therapy (CBT) training on the trainees in terms of learning the basic principles and key strategies of CBT in order to undertake a clinical case using CBT under supervision. **Material and method:** The workshop on CBT was held in Psychiatry department of a Medical University in north India. The trainees were asked to complete an anonymous questionnaire containing subjective and objective questions related to training and a self rated evaluation of the awareness and understanding of 7 key terms which were discussed during CBT training before and after attending the course and again at follow up at 12 months. Follow up questionnaire also assessed if trainees had used the skills they had learnt in clinical practice in the intervening period. **Results:** All 29 trainees felt that their expectations of the CBT training were met. They also felt that some particular skills taught in the course would prove useful i.e. Socratic dialogue, hot cross bun/5 area approach, behavioral experiments, and thought records after CBT course. 22 (75.9%) trainees were followed up. 72.7% trainees reported using CBT skills with some success with patients and 27.3% undertook CBT case. Lack of time and of suitable clinical cases was reported as barrier in others. At follow up, trainees' self evaluation of their understanding and comfort of use of key CBT terms continued to be better than pre-training assessment. **Conclusions:** Introductory, short term CBT training had positive impact upon the knowledge and use of CBT skills in trainees. In addition, knowledge and skills attained during training were retained well by trainees.

**Key words:** Cognitive behaviour therapy training, impact of CBT training, CBT in India

INTRODUCTION

Over the past few decades, cognitive-behavioral therapies (CBT) have emerged as one of the effective first-line psychological treatments for many emotional and behavioral problems and made significant impact on the practice of psychiatry perhaps second only to developments in the psychopharmacology. Owing its problem focused, present oriented approach, CBT treatment is typically brief and time limited in nature in comparison to other traditional forms of psychotherapies. Its brevity and quality of evidence based results have made CBT the treatment of choice across the western world. Many different approaches have been developed to make it widely available including self help books, online and telephonic CBT.

Reliable data about the extent and practice of psychotherapy in India is not known. CBT is also less utilized in clinical practice in India (Kuruvilla, 2000).

Varma and Ghosh in a study of practice of psychotherapy, on 32 fellows of the Indian Psychiatric Society, found that short term supportive therapy was used by majority by them. Some practiced other form of psychotherapy including psychodrama (Varma & Ghosh, 1976). This state of affairs continues to remain largely unchanged (Kuruvilla, 2000; Varma et al., 2008). A variety of reasons seems to be responsible for this state of affairs including lack of training, time, inclination among trainees and lack of time for practicing clinicians, pharmacologization of mental healthcare and economic factors (Manickam, 2010; Rao, 1990).

There is an increased demand from psychotherapy trainees and trainers for better psychotherapy training procedures in India (Shamasunder, 1979; Shamasunder et al., 1993). However reports on psychotherapy training are meager (Tharyan, 2000; Kapur et al., 1996) and completely fails to provide any data on the

outcome. Additionally, the non-availability of trainers who are inclined, interested and committed to impart psychotherapeutic skills is reiterated by the many psychiatrists (Rao, 1990; Tharyan, 2000; Shamasunder, 2008). Although psychotherapy and CBT training need to form a necessary component of postgraduate psychiatry curriculum, the number of training institutes that devote time on psychotherapy are very few (Manickam, 2010). Increased clinical utilization of CBT is dependent upon development of skills amongst mental health professionals. Clearly this is determined by the availability and effectiveness of CBT training locally. The aim of this pilot study was to carry out introductory short term training in CBT and evaluate its effects on trainees.

**MATERIALS AND METHOD**

The workshop was held in Department of Psychiatry, King George's Medical University, UP, Lucknow. This

venue was picked up as the author (AKG) and course organizer graduated/post-graduated in psychiatry from this medical university. AKG has a Postgraduate Diploma in CBT from the University of Durham in 2006.

The course was offered to all the staff members, residents and therapists of the department of psychiatry. The course consisted of 6 mini workshop sessions, each session lasting three hours. The trainer requested feedback at the end of each session and alterations were made to the teaching style accordingly. The format consisted of power point presentations followed by workshops including role plays allowing trainees to practice the skills and techniques covered in the presentations (see Table 1). The power point presentations were in English, but the conductor delivered the content in both English and Hindi. The workshop language was Hindi.

Table 1. Course Content

| Day 1                              | Day 2                            | Day 3   | Day 4                               | Day 5  | Day 6                        |
|------------------------------------|----------------------------------|---|-------------------------------------|--|------------------------------|
| Introduction                       | Recap                            | Recap   | Recap                               | Recap  | Recap                        |
| Pre-workshop Questionnaire         | Five Areas Approach              | Automatic Negative Thoughts                   | Behavioral Experiments-introduction | Relapse Prevention                                 | Problem Solving-Introduction |
| What is CBT?                       | Using the Hot Cross Bun          | Workshop on Automatic Negative Thought Record | Workshop on Behavioral Experiments  | Clients suitability for CBT                        | Workshop on problem solving  |
| Contents of Workshop               | Workshop on Five Areas Approach  | Homework assignment for patients              | Role play on Behavioral Experiment  | Role Play on Eliciting Automatic Negative Thoughts | Activity Scheduling          |
| Importance of developing an agenda | Homework assignment for trainees | Homework assignment for trainees              | Homework assignment for trainees    | Homework assignment for trainees                   | Post-workshop questionnaire  |
| Workshop on Socratic Dialogue      |                                  |   |                                     |  | Taking the training further  |

The course had three main aims for trainees to 1) learn the basic principles of CBT; 2) learn key CBT techniques such as agenda setting, Socratic dialogue, the 5 areas approach, negative automatic thought record, behavioral experiments, CBT formulation, suitability criteria; and 3) become capable of undertaking a CBT case under supervision.

The trainees were asked to complete an anonymous questionnaire before and after attending the course and again at 12 months after training. They were asked to use the same 'nickname' on the questionnaires so their results could be compared.

The questionnaires have been developed to evaluate Introduction to CBT teaching in the United Kingdom (Patton, 2008). The pre-training questionnaire examined trainee's expectations and hope about training. The post-training questionnaire examined if the trainees' expectations had been met, perceived usefulness of the training and other practical issues like anticipated problems in practice etc. Pre, post training and follow up questionnaires at 12 months included a self rated evaluation of the awareness and understanding of seven key learning points which were taught on the course. This self evaluation test asked the

trainees to rate their own understanding of these key points from 1) having heard of the term, to 2) knowing what the term means (Understanding), to 3) being comfortable using the term (Confidence). 1 mark was given for 'Yes' response and 0 for a 'No' response.

The trainer (AKG) also agreed to provide supervision during CBT sessions through telephone and emails to the trainees during process of therapy. The trainees also arranged an international phone lines with a hand-free telephone for facilitation of oversees supervision of the trainees. AKG also left video CDs of CBT sessions conducted by him for perusal of trainees. These facilities were utilized by the interested trainees as and when needed.

Statistical analysis:

Data were summarized in counts and %. Discrete (categorical) groups were compared by chi-square ( 2) test. A two-tailed ( =2)  $p < 0.05$  was considered statistically significant. GraphPad PRISM (version 5.0) was used for the analysis.

RESULTS:

29 people attended the course. Most trainees (17) were junior residents. They mainly saw inpatients on a daily basis and outpatients twice or thrice weekly. The other trainees were 2 professors, 2 associate professors, 2 assistant professors, 1 senior resident, 1 music therapist, 1 occupational therapist, 1 clinical psychologist and 2 social workers. 24 trainees reported that they worked with patients on a one to one basis, usually daily in the case of junior doctors. Clinical supervision was widely available for junior doctors, and generally consisted of 4-8 hours per week. The more senior trainees had less access to supervision.

Paramedicals did not have any access to supervision. Most (21) had some prior knowledge of CBT, mainly through the psychiatric literature. 5 had attempted to use CBT before with a patient.

Trainee's expectations from the training

Generally the trainees hoped to gain understanding of the practical use of CBT so that they could use it themselves. Another hope was to have a better understanding of the patient as a whole and to not just rely on pharmacological treatment. Most of the trainees (17) expected to be able to use the skills learned on the course on a weekly basis in their clinical work.

Post-teaching questionnaire

All trainees felt their expectations had been met. Three main expectations were elicited; understanding of CBT theory, understanding CBT in practice, and indications for the use of CBT in patients.

The trainees thought that some particular skills taught in the course would prove particularly useful; Socratic dialogue, hot cross bun / 5 area approach, behavioral experiments, and thought records. 26 (89.6%) of the trainees hoped to use the skills they had learnt in clinical practice. 24 (82.8%) trainees felt that the course helped them to increase their overall clinical skills. Many (19, 65.5%) thought they would regularly use CBT with patients on at least a monthly basis. One trainee now felt he could teach other clinicians about CBT. Another trainee felt that the course had given him a better understanding of himself.

Trainees were asked if they foresaw any problems in applying their new knowledge (table 2). Most believed a lack of time in their busy working day and finding suitable cases for further training may be a barrier.

Table.2 Expected problems in application of knowledge of CBT (n=29)

| Response   | Number(%)* |
|--|------------|
| 1. Lack of time in their busy working day would be a barrier to this work  | 14 (48.3%) |
| 2. Difficulty in finding cases suitable for training                       | 11 (37.9%) |
| 3. More training and experience is needed                                  | 8 (27.6%)  |
| 4. Lack of therapist confidence  | 5 (17.2%)  |
| 5. Lack of adequate supervision  | 5 (17.2%)  |
| 6. Poor literacy levels amongst patients                                   | 4 (13.8%)  |
| 7. Patients being more comfortable with medication than talking therapies. | 3 (10.3%)  |

\* Not mutually exclusive

When asked what would have to change in their workplaces to facilitate regular use of CBT, most trainees thought a smaller workload, allowing more time with each patient and the availability of regular supervision would be necessary. One trainee felt the need for provision of adequate private working space.

Generally the feedback was all positive. Trainees thought the course was useful and interesting. They felt the delivery style was excellent, although some mentioned that additional role plays, case vignettes and videos of CBT in practice would be helpful. One trainee wondered if some information about CBT in children and adolescents could be supplied.

**Follow up:**

Of the 29 trainees, 23 were followed at 12 months. Of the 29 who attended 4 left the institution, 2 did not return their questionnaires and 1 was filled inappropriately leaving complete follow up data for 22 (75.9%) trainees.

The seven key CBT learning points scores of three key variables (Heard of the term, Understanding and Confidence) at pre training (at day 1), post training (at end of day 6) and follow up (after 12 months post training) were summarized in Table 3. Table 3 shows that after training, the scores of Heard of the term, Understanding and Confidence increased significantly ( $p < 0.001$ ) by 58.1%, 58.6% and 63.5% respectively at post training as compared to pre training. Further, the post training scores of Heard of the term (54.4%), Understanding (60.3%) and Confidence (47.9%) remains significantly ( $p < 0.001$ ) higher at follow up as compared to pre training. However, the scores of both Heard of the term and Understanding did not change at post training and follow up though it decrease by 3.7% and increase by 1.6% respectively at follow up as compared to post training. In contrast, the scores of Confidence decreased (15.7%) significantly ( $p < 0.05$ ) at follow up as compared to post training.

Table 3. Results of Self Evaluation Test on seven key CBT variables Pre Training, Post Training and at follow up

| CBT Factors                | Heard of the term     |                       |                   | Know what the terms means (Understanding) |                       |                   | Comfortable using the term (Confidence) |                       |                   |
|----------------------------|-----------------------|-----------------------|-------------------|---|-----------------------|-------------------|---|-----------------------|-------------------|
|                            | Pre-teaching (n=29)%  | Post teaching (n=29)% | Follow up (n=22)% | Pre-teaching (n=29)%                      | Post teaching (n=29)% | Follow up (n=22)% | Pre-teaching (n=29)%                    | Post teaching (n=29)% | Follow up (n=22)% |
| Activity scheduling        | 16 (55.2)             | 29 (100.0)            | 21 (95.5)         | 11 (37.9)                                 | 23 (79.3)             | 20 (90.9)         | 8 (27.6)                                | 20 (69.0)             | 13 (59.1)         |
| Positive data log          | 3 (10.3)              | 26 (89.7)             | 17 (72.3)         | 1 (3.4)                                   | 20 (69.0)             | 10 (45.5)         | 1 (3.4)                                 | 15 (51.7)             | 5 (22.7)          |
| Socratic dialogue          | 9 (31.0)              | 29 (100.0)            | 22 (100.0)        | 6 (20.7)                                  | 27 (93.1)             | 20 (90.9)         | 4 (13.8)                                | 26 (89.7)             | 18 (81.8)         |
| Core belief                | 9 (31.0)              | 28 (96.6)             | 21 (95.5)         | 6 (20.7)                                  | 26 (89.7)             | 20 (90.9)         | 2 (6.9)                                 | 26 (89.7)             | 17 (72.3)         |
| Negative automatic thought | 12 (41.4)             | 28 (96.6)             | 22 (100.0)        | 10 (34.5)                                 | 24 (82.8)             | 22 (100.0)        | 5 (17.2)                                | 26 (89.7)             | 18 (81.8)         |
| Formulation                | 16 (55.2)             | 27 (93.1)             | 20 (90.9)         | 9 (31.0)                                  | 26 (89.7)             | 20 (90.9)         | 2 (6.9)                                 | 23 (79.3)             | 12 (54.5)         |
| All or none thinking       | 13 (44.8)             | 29 (100.0)            | 20 (90.9)         | 10 (34.5)                                 | 26 (89.7)             | 21 (95.5)         | 6 (20.7)                                | 21 (72.4)             | 12 (54.5)         |
| Total                      | 78 (38.4)             | 196 (96.6)            | 143 (92.9)        | 53 (26.1)                                 | 172 (84.7)            | 133 (86.4)        | 28 (13.8)                               | 157 (77.3)            | 95 (61.7)         |
| Pre vs. Post               | 2=156.30, $p < 0.001$ |                       |                   | 2=141.20, $p < 0.001$                     |                       |                   | 2=165.30, $p < 0.001$                   |                       |                   |
| Pre vs. Follow up          | 2=110.00, $p < 0.001$ |                       |                   | 2=127.40, $p < 0.001$                     |                       |                   | 2=88.95, $p < 0.001$                    |                       |                   |
| Post vs. Follow up         | 2=2.50, $p = 0.114$   |                       |                   | 2=0.19, $p = 0.665$                       |                       |                   | 2=10.33, $p = 0.001$                    |                       |                   |

Most (16, 72.7%) trainees reported using principles of the CBT in their routine clinical practice with some success. However, only 6 (27.2%) trainees reported completing CBT of a case with varying degree of success. Busy daily schedule, heavy routine workload, unavailability of suitable case, perceived difficulty in seeking supervision, poor self confidence as therapist, and lack of motivation were reasons cited by others for not taking a case for CBT. Each trainee showed further interest in learning and gaining more knowledge about CBT and wished that they could attend further training programs in CBT.

#### DISCUSSION

Publications related to psychotherapy training are very limited in India. Earlier reports on psychotherapy training describe process but there is only limited studies discussing outcome are published (Gupta & Aman, 2012). Most crucial aspect of the any training program ought to be the outcome of that process. As far as the authors are aware this is the first such published study to evaluate effect of CBT training from the country. Most trainees attended the CBT training with the hope of understanding theoretical and practical aspects of CBT and its indications. The feedback from the trainees was positive and there was evidence that the course met its objectives in terms of giving the trainees an introduction to the theory and practice of CBT, and potentially allowing them to take on training cases under supervision in the future. Trainees' knowledge and understanding of key CBT terms had increased by the end of the course. The follow up assessment at 12 months suggested that comfort of using 7 key terms related to CBT mostly decreased by varying quantity but remained higher than the pre-training assessment. Many trainees started utilizing the knowledge gained during training in their routine clinical practice. Finally, training led to an increase in the interest of CBT among trainees and each trainee indicated a desire to participate in further training. However, only a limited number of trainees actually took a case for conducting a Cognitive Behavior Therapy formally. This small qualitative pilot study has shown that amongst mental health professionals in India there does seem to be interest for training in CBT, and in the clinical use of CBT with patients. For trainees' knowledge to be consolidated and grow, clearly the next step is the initiation of more training cases under regular supervision.

This study also highlighted many potential barriers of

the successful training programs for CBT and conducting CBT by trainees themselves. Although these results should be viewed with a degree of caution due to the limitations of the outcome measure; lack of time, lack of suitable training cases and lack of supervision were mentioned most frequently cited reasons. This Medical University is a tertiary care center hence mostly deals with severely ill psychiatric patients. Patients come with a hope of getting medications as a treatment. However, once readily available effective psychological treatment will be present, it is likely that more patients will demand for the same. Other issues raised and which may currently be a greater problem in India are poor patient literacy and patient preference for pharmacological treatment. Reducing the work load and increasing the emphasis on the knowledge and practice of CBT during postgraduate training program can increase the interest and commitment to learn it. Although psychotherapy training needs to form an essential part of post-graduate psychiatry training (Shamasunder, 2008), very few institutions devote time on psychotherapy training (Manickam, 2010). It is unlikely that the situations have changed till Date (Varma, 2008). Many authors opined that in absence of a wide network of specialist psychotherapy services in India, it is imperative for the general psychiatrist to have a 'working knowledge of psychotherapy' (Shamasunder, 2008; Singh, 2007). For this goal, wide availability of training needs to be assured.

Though the trainees demonstrated theoretical knowledge at follow up, trainee's knowledge and understanding of theory of CBT and its technique does not necessarily means their ability to perform therapy to an adequate standard in clinical practice. Active and adequate supervision for trainees is necessary to achieve satisfactory mastery over CBT. However, due to by its very nature of work, the supervising work is very time intensive and demanding. The availability of trainers and supervisors who are inclined, interested and committed to impart psychotherapeutic skills in India is limited to certain specific centers and has been emphasized by many psychiatrists (Rao, 1990; Tharyan, 2000; Shamasunder, 2008). The supervising task becomes even more cumbersome due to multilingual nature of the patients, trainees and trainers. Tharyan in an experiment showed that group supervision is feasible and acceptable in India though it cannot replace individual supervision (Tharyan, 2000). In view of the current lack of CBT expertise in most parts of India, it is likely that at least initially overseas

supervision of training cases could also be considered, if possible logistically. Telephone or email supervision with an appropriate and interested overseas supervisor is a possible solution, but the feasibility of this would need to be first assessed.

As the final aim of increased CBT training is greater availability of CBT to the local population, the question of whether CBT 'works' in an Indian population seems pertinent. CBT was developed in the West for a generally urban, industrialized and comparatively affluent population. Although Indian culture and society is rapidly changing to become more like the West, the majority of the population remains rural and levels of literacy vary tremendously, not to mention the immense diversity in languages spoken. Social, cultural and religious factors may play a large role in the attitude of local Indian populations to psychotherapies. Hoch suggest that western psychotherapies may not be appropriate to both the patients and trainees (Hoch 1990). Their personality, family organization and traditional Indian philosophy place obstacles in smooth and meaningful application of 'western' psychotherapy both in clinical practice and in training of therapist. Many other authors in India also observed that psychotherapies especially psychoanalytic therapies may not be suitable for majority of population in India and suited to only few people living in metropolitan cities (Varma, 1976; Neki, 1977; Surya & Jayaram, 1968, Sethi & Trivedi, 1982; Neki, 1973). Although these observations appear to be true more in case of psychoanalytic therapy only, this may be the case in CBT also, as the more traditional Indian role of the master (therapist) and pupil (patient) would not facilitate a helpful therapeutic relationship where the patient has a more active role. However, Shamasunder held the view that psychotherapy can be effectively conducted on the Indian population (Shamasunder, 1979; Shamasunder et al, 1993; Shamasunder 1998; Shamasunder, 2008). Rao worked on existential psychotherapy and opined that the existential psychotherapy is effective in Indians (Rao, 1990). It is also not within the scope of discussion to address the question of the efficacy of CBT in Indian populations; however the first step to answering this question is to make training in CBT more widely available in India.

This study suggests that even short term introductory CBT courses can be helpful for the interested groups of mental health professionals without any special modifications for India at least during training of

therapist. Given these encouraging results, the next step would be to carry out another CBT courses, but to use a more objective outcome measure to test the knowledge attained and thereby minimize bias in the results. Additionally, there needs to be a consensus amongst CBT professionals regarding the form and content of this objective test. One such objective test that is often used in western centers is REVISED COGNITIVE THERAPY SCALE (CTS-R) (Blackburn, 2001). However, use of CTS-R may need collaboration with a western centre which has suitably trained trainers who are well conversant with use of CTS-R. The evaluation of training will need to be combined with evaluation of its efficacy in patients with use of suitable rating scales in Hindi for various mental illnesses.

#### Limitations

This is a small qualitative study. The reliability of the data gained from the outcome measure must be treated with a degree of caution. By its very nature, the questionnaire is of a self report type, means that its results may lack objectivity and it may be particularly prone to bias. Although an anonymous questionnaire was used, trainees may have overstated their understanding in the post-training questionnaire if they were worried that they would be marked down if they admitted to it. Alternatively, fear of offending the trainer may have been an issue. The answers given to the questionnaires relating to trainees working environment and expectations for the course are likely to be less liable to bias. The group was heterogeneous and trainees had marked differences in professional qualifications and clinical experience. Trainees may not form a true representation of mental health professionals in India. They may have attended the course with a prior interest in CBT themselves, so may have been more likely to give more positive responses in the questionnaires. In addition, one must remember that knowing about and understanding the theory of CBT and its techniques does not automatically equate of being able to perform therapy to an adequate standard in clinical practice.

#### Acknowledgement:

We thank Northumberland Tyne & Wear NHS Foundation Trust for allowing Dr Arun Kumar Gupta for conducting workshops in Department of Psychiatry, King George's Medical University. We are also thankful to Director, Institute for Data Computing and Training (I.D.C.T.), Lucknow for providing valuable assistance in data analysis.

REFERENCE

- Blackburn IM, James IM, Milne DL, et al. (2001) The Revised Cognitive Therapy Scale (CTS-R): Psychometric properties. *Behavioral and Cognitive Psychotherapy*, 29, 431-446.
- Gupta AK, Aman H. (2012) An evaluation of training in brief cognitive-behavioural therapy in a non-English-speaking region: experience from India. *International Psychiatry*, 9, 69-71
- Hoch EM. (1990) Experiences with psychotherapy training in India. *Psychotherapy and psychosomatics*, 53, 14-20.
- Kapur M, Shamasunder C, Bhatti RS. (1996) *Psychotherapy training in India*. Bangalore: NIMHANS Publication. (Revised edition 2002).
- Kuruville K. (2000) *Cognitive Behavior Therapy: Yesterday, Today and Tomorrow*. *Indian Journal of Psychiatry*, 42, 114-124.
- Manickam LSS. (2010) *Psychotherapy in India*. *Indian Journal of Psychiatry*, 52, S366-70.
- Neki JS. (1992) Editorial: Confidentiality, secrecy and privacy in psychotherapy: Socio-dynamic consideration. *Indian Journal of Psychiatry*, 34, 171-173.
- Neki JS. (1973) Guru-Chela relationship: The possibility of therapeutic paradigm. *Journal of Orthopsychiatry*, 43, 755-766.
- Neki JS. (1977) *Psychotherapy in India*. *Indian Journal of Psychiatry*, 19, 1-10.
- Patton C. (2008) An evaluation of an introduction to cognitive behavioral psychotherapy teaching course. Unpublished small scale research project (personal communication).
- Rao KN. (1990) Practical steps in existential psychotherapy and one year follow-up of a case. *Indian Journal of Psychiatry*, 32, 244-251.
- Sethi BB, Trivedi JK. (1982) Psychotherapy for the economically less privileged classes (with special reference to India). *Indian Journal of Psychiatry*, 24, 318-321.
- Shamasunder C, Verghees M, Raguram RR, et al. (1993) Psychotherapy program for psychiatry residents at NIMHANS: A descriptive account. *Indian Journal of Psychiatry*, 35, 215-217.
- Shamasunder C. (2008) Some personal reflections relating to psychotherapy. *Indian Journal of Psychiatry*, 50, 301-304.
- Shamasunder C. (1979) What kind of psychotherapy in Indian setting? *Indian Journal of Psychiatry*, 21, 34-38.
- Shamasunder C. (1998) Who needs psychiatry, who cares for psychiatry. *Indian Journal of Psychiatry*, 40, 3-30.
- Singh AR. (2007) The task before psychiatry today. *Indian Journal of Psychiatry*, 49, 60-5.
- Surya NC, Jayaram SS. (1968) Some basic consideration in the practice of psychotherapy in Indian setting. *Indian Journal of Psychiatry*, 4, 153-156.
- Tharyan A. (2000) An experiment in psychotherapy training. *Indian Journal of Psychiatry*, 42, 142-7
- Varma VK, Ghosh A. (1976) Psychotherapy as practiced by the Indian psychiatrists. *Indian Journal of Psychiatry*, 18, 177-186.
- Varma VK, Sharan P, Gupta N. (2008) Development of an Indian Model of Psychotherapy: Thoughts and Directions for the Future. In: Varma VK & Gupta N, editors. *Psychotherapy in a Traditional Society: Context, Concept and Practice*. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd. Pg 227-243.
- Varma VK. (1982) Present state of psychotherapy in India. *Indian Journal of Psychiatry*, 24, 209-226.

---

Arun K Gupta, Consultant Psychiatrist, Northumberland Tyne & Wear NHS Foundation Trust Cherry Knowle Hospital, Ryhope, Sunderland SR2 0NB, UK; Adarsh Tripathi, Assistant Professor, Department of psychiatry, King George's Medical University, Lucknow, India; Prabhat Sitholey, Consultant Psychiatrist, Ex professor and Head, Department of psychiatry, King George's Medical University, Lucknow, India; Thomas Reeves, Cognitive Behavioral Psychotherapist, Department of Adult Psychology, Northumberland Tyne & Wear NHS Foundation Trust, Sunderland SR2 0NB, UK; PK Dalal, Professor and Head; Anil Nischal, Associate Professor, Department of psychiatry, King George's Medical University, Lucknow, India. Corresponding Author: Dr Adarsh Tripathi, E-mail: dradarshtripathi@gmail.com

---

Research Article

PERSONALITY TRAITS, NATURE OF AGGRESSION AND FRUSTRATION TOLERANCE IN CHILDREN WITH CONDUCT DISORDER

Amrita Sen, Tilottama Mukherjee

Abstract

**Background:** The essential features of Conduct Disorder are the repetitive persistent patterns of behaviour in which the basic rights of others or major age-appropriate societal norms are violated. **Objective:** The present study involved an in-depth probe into the selected personality variables of children with Conduct Disorder (CD) and comparison to their normal counterparts (NC) to provide a better understanding of their personality traits, nature of aggression and frustration tolerance in the Indian set-up. **Method:** A sample of 30 children with conduct disorder [Following ICD 10 criteria] without any co-morbidity and 30 children without any behavioural problems between the ages of 9 and 13 years were assessed. The children's personality traits, expression of aggression and frustration tolerance were evaluated using the Junior Eysenck Personality Inventory (JEPI) and Rosenzweig Picture-frustration Study (RPF) – Child Form. The mean values and standard deviations of the variables for each group were calculated and t-test was used to find out whether there is any significant difference between the two groups. Statistically significant group differences were found between the Children with CD and their control counterparts with respect to psychoticism and neuroticism (JEPI). **Result and Conclusion:** Children with CD and their control counterparts showed marked differences on the domains of ego defense and extrapunitiveness in dealing with frustrating situations. Finding suggests that higher psychoticism and neuroticism scores along with lower ego defense and higher extrapunitiveness are important factors in CD.

**Key words:** Conduct disorder children, personality, nature of aggression and frustration.

INTRODUCTION

The essential features of Conduct Disorder (CD) are the repetitive persistent patterns of behaviour in which the basic rights of others or major age-appropriate societal norms are violated.

Before addressing the relation between personality and conduct Disorder, several conceptual issues regarding construct of personality should be considered. The hypothesis that CD is linked to personality can be traced to antiquity.

According to Eysenck psychoticism and neuroticism are the traits of personality. Individual scoring high in psychoticism and neuroticism are not necessarily neurotic and psychotic, but are vulnerable to develop psychiatric disorder if faced with stressful condition. They have either genetic or an acquired weakness that predisposes them to pathology. Eysenck's notion of personality dimensions guides one to form knowledge regarding the type of psychopathology the individual is

suffering from. Moreover, according to Eysenck, as hereditary contribution in the development of personality types is greater in comparison to environmental factors, thus knowledge of personality types also helps us to predict psychopathology even in early childhood. Eysenck's contribution was that psychopaths (and criminals) would be expected to lie in the area defined by high extraversion (E), high neuroticism (N) and high psychoticism (P).

Conduct disorder children shows persistent deviant behaviour. The children's personality traits (temperament) develop from early childhood on the basis of their interaction with the environment in terms of society and perception of life events. Temperament is closely related to social behaviour. The child with difficult temperament becomes involved in more conflict than other children. Active and impulsive children often are targets of negative interaction, which also leads to conflict. Research shows irritable and impulsive children are at risk for aggressive, conduct

and antisocial disorder (Sanson et al., 2004). Finally, children's capacity for effortful control- their ability to restrain negative emotion and impulsive action- is linked to diverse aspects of competence.

The child with difficult temperament has a high chance for higher level of psychoticism and neuroticism.

Frustration is a negative emotional state that occurs when people are prevented from reaching desired goals (Coon, 2001). Frustration-aggression hypothesis states that frustration always leads to aggression. Although aggression is one of the outcome of frustration other response are also possible (Dollard et al., 1939). Some individuals who experience frustration become passive (Miller, 1994). But other studies prove that frustration does not always produce aggression (Gentry, 1970). Sometime it reduces depression and withdrawal (Seligman, 1991). Berkowitz (1989) modified the theory and proposed that frustration is a readiness to respond aggressively to the degree that it produces a negative emotion.

Aggression is our basic emotion and everybody experience it. But the expression of aggression made the person different from another. Some people are more easily aroused and expressed more aggression than others. No one is ever completely free of it. Aggression can be channelized in a creative way. It maintained through positive and negative reinforcement.

Frustration consists in the obstruction of behaviour. Rosenzweig defined 3 types of aggression and frustration tolerance situations and effects of frustration upon human behaviour.

When frustration directed towards a goal and in response the person may become concerned with the frustrating agent i.e Obstacle Dominance (OD), with absolving himself from responsibility i.e., Ego Defence (ED), or may continue to seek the goal by some other means i.e., Need Persistence (NP).

Assuming the Frustration-Aggression hypothesis, Rosenzweig also categorized people according to the direction in which aggression is expressed: (E) extrapunitive when overt and directed outwards; (I) intrapunitive when overt and directed against the self; and (M) impunitive when covert.

Children with conduct disorder generally show greater aggression and higher level of neuroticism, psychoticism and extraversion score than children without any behavioural problem.

The present study intended to see is there any difference on personality dimension and frustration tolerance in terms of direction and type of aggression in children with conduct disorder and normal control.

## METHODOLOGY

### Materials and Methods

#### Sample:

The 60 subjects investigated in this study were categorized into two groups: children with conduct disorder (Group I, n = 30), and normal controls (Group II, n = 30).

#### Inclusion Criteria for selection of child

Both Conduct Disorder (CD) children selected for this type of work were from the urban population, i.e., those who had been residing in Kolkata metropolis since their birth. All these children were boys from mediocre socio-economic status having the same mother tongue as Bengali and as second language English. They were referred by psychiatrists of the hospital or private clinics. The children were students of class 5 to 9 studying in Bengali medium school. The diagnoses of the children were made by psychiatrists and had also been confirmed/checked by psychologists [According to ICD-10].

- The CD children as well as the normal children [without any behavioural problems] were of 9 to 13 years of age.
- The children who were in average intelligence on mental status examination/ behavioural observation were considered as their range signifies "intellectually average functions" for an individual.
- Parents of the children were reported to observe the problems in their children for a period of one to two years for the CD children.
- Gave consent for the data collection.

#### Criteria followed for the selection of normal controls

A score of 9 and below was used as the cut off on Child Behaviour Questionnaire during selection of normal controls. The normal controls must not have any past history of psychiatric illness, chronic physical illness and organic illness. They must be responsive to the purpose of the study.

#### Exclusion Criteria

Children from families having a history of addiction or divorced parents or with any other gross physical and mental handicapped condition or physical or organic

illness were excluded from the study.

Measures used:

1. Socio Demographic Data Sheet: Specially designed to collect relevant information.
2. Child Behaviour Questionnaire [CBQ, Performa-B, Rutter,1967]
3. Junior Eysenck Personality Inventory [JEPO, Eysenck, 1975]
4. Rosenzweig Picture Frustration Study [RPFS, Rosenzweig, 1948] Bengali adaptation by Pareek et al,1968].

Procedure:

Having been diagnosed an individual child with CD [Conduct Disorder] was considered as the subjects and selected for investigation. The children belonging to the normal group were subjected to thorough screening through extensive interview by Child Behaviour Questionnaire [CBQ] and only the normal children were selected for the final study who responded positive, i.e., showing no complaint indicative of conduct disorder. Both the two groups were matched on the basis of age sex, socio economic status and other relevant variables. All the children, though Bengali speaking, had a good comprehension of English language.

The Junior Eysenck Personality Inventory (JEPO) and Rosenzweig Picture Frustration Study [RPFS] were administered individually on the child of both groups in one session to evaluate their personality disposition that predisposed them to exercise a particular type of behaviour and nature of aggression and frustration tolerance.

Statistical Analyses:

- A. Descriptive statistics (Mean and SD) were done to show the nature of the data.
- B. t-test was computed as far as statistical treatment was concerned.

**RESULT & DISCUSSION**

Profile of Conduct Disorder and their Normal Counterpart

(Conduct Disorder children – CDC Normal Children - NC)

The personality of the two groups of children namely conduct disorder and their normal counterpart shows significant group difference on two personality dimensions - neuroticism and psychoticism (Table 1). Thus children with conduct disorder showed a tendency

to be more aggressive, unempathetic, tough minded, impulsive, more interpersonal difficulty and more emotional difficulty.

Temperament is the emotional substrate of personality. According to Ahadi & Rothbart (1994) temperament is the matrix from which later child and adult personality develops. Neuroticism, extraversion and agreeableness are the personality factors, which could potentially modulate one's self-perception (Costa and McCrae, 1991). Negative self perception and therefore poor interactional pattern with the care giver and society make children vulnerable to develop conduct-disorder. Hankin and Abramson (2001) noted that neuroticism predisposes people to experience more negative life events. A Children with high neuroticism score is described as a worrier, he is easily affected by negative events and takes a longtime to return to a baseline of neutral emotionally after a negative

experience. They also shows irritability, emotional difficulty, apprehensiveness, interpersonal difficulty in other words, it encompasses a wide range of unpleasant thoughts and emotion.

Anderson, et. al, (2007) also found high neuroticism, low agreeableness and low conscientiousness among conduct disorder children (CD aged 13–18 years) which goes in tune with the present trend of findings.

Children with Conduct Disorder's significantly higher score in psychoticism dimension, indicates a fairly congruent picture of troublesome child; glacial and lacking in human feelings for his fellow-beings and for animals; aggressive and hostile, even to near-and-dear-ones [Anderson et al, 2007].

However, individuals scoring high in neuroticism, psychoticism are not necessarily neurotic or psychotic, but are 'at risk' for developing the disorders [Eysenck, 1975].

Table-1: Means(M), Standard deviations (SD) and t-value for the significance of mean differences in each of the variables of JEPO [Junior Eysenck Personality Questionnaire] obtained from the children of the two groups (conduct disorder children and normal children).

| JEPO         | Sample | Mean  | S.D.  | T-value |
|--------------|--------|-------|-------|---------|
| Psychoticism | CDC    | 7.29  | 1.95  | 8.174** |
|              | NC     | 3.26  | 1.93  |         |
| Neuroticism  | CDC    | 10.26 | 4.41  | 2.994** |
|              | NC     | 7.06  | 3.97  |         |
| Extraversion | CDC    | 16.03 | 3.03  | 0.668   |
|              | NC     | 15.45 | 3.775 |         |
| Lie-Scale    | CDC    | 11.19 | 3.53  | 1.188   |
|              | NC     | 09.97 | 4.53  |         |

\* Significant at 0.05 level \*\* Significant at 0.01 level

In the present study significant mean difference (Table 2) was found in between conduct disorder child and their normal counterparts in the dimension of ego defense. Lesser mean score in ego defense of CD children indicates they were neither inclined to consistently become preoccupied with a given source of frustration, take it personally nor to seek out constructive solutions to sources of frustration. It may be assumed that it is due to a decreased need to use the defensive function of ego to protect the ego from painful reality about self, one of the reasons being low reward dependence. CD children perceive the environment as less ego-threatening and therefore have lesser need to use projection concerns as far as ego defenses are concerned.

Table 2: Means(M), Standard deviations (SD) and t-value for the significance of mean differences in each of the variables of RPFS [Rosenzweig Picture-Frustration Study] obtained from the children of the two groups (conduct disorder children and normal children).

| JEPQ                     | Sample | Mean  | S.D.   | T-value |
|--------------------------|--------|-------|--------|---------|
| Obstacle-Dominance [O-D] | CDC    | 18.16 | 7.02   | 1.29    |
|                          | NC     | 15.93 | 6.59   |         |
| Ego-Defence [E-D]        | CDC    | 43.54 | 14.22  | 2.7**   |
|                          | NC     | 53.49 | 14.8   |         |
| Need-Persistence [N-P]   | CDC    | 35.74 | 12.845 | 1.6     |
|                          | NC     | 29.93 | 15.61  |         |
| Extrapunitiveness [E]    | CDC    | 39.97 | 6.94   | 3.99**  |
|                          | NC     | 29.35 | 13.07  |         |
| Intropunitiveness [I]    | CDC    | 23.25 | 7.86   | 0.591   |
|                          | NC     | 21.96 | 9.29   |         |
| Impunitiveness [M]       | CDC    | 42.90 | 13.14  | 1.22    |
|                          | NC     | 47.49 | 16.315 |         |

\* Significant at 0.05 level \*\* Significant at 0.01 level

Normal children with high E-D value are considered to be a type who attempts to defend him by excessively emphasizing the ego to ease stress in frustrating situation. So the strength of the ego is less strengthened in CD children than their normal counter parts.

Similarly, in the present study CD children were not inclined to consistently aggress towards themselves, nor to simply disregard source of frustration. Rather their significantly higher score on extrapunitiveness suggested aggression turned towards the environment or they blame the external world, lesser ego-resiliency and lesser flexibility of response to a broad array of potentially frustrating situations.

It is also evident that extrapunitiveness (aggression is turned on the environment) scores differ significantly in

case of conduct disorder group i.e children with conduct disorder's directed their aggression externally. They shows more aggressive behaviour than the normal controls (Daniel,1989).

### CONCLUSION

Thus it may be inferred from the present research endeavour that:

1. There is a significant group difference between child with conduct disorder and their normal control in terms of personality dimensions. CD children show significantly higher scores on psychoticism and neuroticism dimensions.
2. There is a significant group difference between child with conduct disorder and their normal control with respect to the direction of aggression i.e. ego defense and also to the type of aggression. Lesser ego defense and higher extrapunitiveness were used by the children with conduct disorder than their normal control group.

### REFERENCES

Ahadi SA, Rothbart MK. (1994) Temperament, development, and the big five. In CF Halverson, Jr GA Kohnstamm & RP Martin (Eds), the developing structures of temperament and personality from infancy to adulthood Hillsdale, NJ: Erlbaum, (pp 189-207).

Anderson SW, Bechara A, Damasio H, Tranel D, Damasio AR. (2007). Impairment of social and moral behavior related to early damage in human prefrontal cortex. *Nature Neuroscience*, 2, 1032–1037.

Berkowitz L. (1989) Frustration aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, 106, 59-73.

Costa PT, McCare RR. (1991) Neo Five-Factor Inventory. Psychological Assessment Resources, Inc. Florida, USA.

Coon D. (2001) Introduction to Psychology. Sydney Thomson Learning Pub, 525-527.

Dollard J, Doob LW, Miller Ne, et al. (1939) Frustration and Aggression. New Haven, CT: Yale University Press 105-102.

Daniel E. (1989) A study of disorders of conduct and emotion. Doctoral thesis, Bangalore University, NIMHANS, Bangalore.

Eysenck HJ, Eysenck SGB. (1975) Manual of the Eysenck Personality Questionnaire (Junior and Adult). Kent, UK, Hodder & Stoughton.

Eysenck HJ. (1975) Psychoticism as a dimension of personality, London, Pitman Press.

Gentry WD. (1970) Effects of frustration attacked prior aggressive training on overt aggression and vascular process. Journal of personality and social psychology, 16, 718-725.

Hankin BI, Abramson LY. (2001) Development of gender differences in depression. An elaborated cognitive vulnerability transactional stress theory, psychological Bulletin, 127, 773-796.

Miller NE. (1941) The frustration aggression hypothesis. Psychological Review, 48, 337-442.

Pareekh U, Devi RS, Rosenzweig S. (1968) Manual of the Indian Adaptation of the Rosenzweig Picture Frustration Study: Child Form, New Delhi. Rupa Psychological Corporation.

Rutter MA. (1967) Children's behaviour questionnaire for completion by teachers. Preliminary findings. Journal of Child Psychology & Psychiatry, 8, 1-26.

Seligman ME. (1991) Learned Optimism. New York: Knopf Publication, 107-141.

Sanson A, Hemphill SA, Smart D. (2004) Connections between temperament and social development: A review. Social Development, 13, 142-170.

---

Amrita Sen, Clinical Psychologist, 31/1, khudiram sarani, P.O. Birati, West Bengal, Kolkata -700051 (Corresponding Author, E-mail: amritasen2005@gmail.com); Tilottama Mukherjee, Assistant Professor, Department of Psychology, University of Calcutta. UCSTA, 92, A.P.C. Road, Kolkata-700009.

---

Research Article

STUDY OF RESILIENCE, HOPE AND PERCEIVED STRESS IN HEALTHY AND NORMALLY FUNCTIONING ADULTS

Bindoo Jadhav, Adita Dagaria, H.S. Dhavale, Sunitha Shanker

Abstract

Background/objectives: 'Stress' has become a common denominator in the life style of urban India. This study aims to examine the role of resilience, hope and stress in well functioning adults. Understanding how these variables operate and affect a person's response is important. Methods & Results: Two hundred individuals with post graduate qualification with minimum 3 years of work experience were included in the study. The Resilience Assessment Questionnaire, The Trait Hope Scale and Perceived Stress Scale were used to assess the level of resilience, hope and perceived stress respectively. Data thus obtained was pooled and statistical analysis was done. Conclusions: Majority of the participants fell in the range of being "Resilient", having mild to moderate level of hope and experiencing average level of stress. Hope along with its sub-factors, especially pathway subscale, significantly predicted resilience. There was no significant relationship observed between resilience and perceived stress.

Key words: Resilience, hope and perceived stress

INTRODUCTION

'Stress' has become a common denominator in the life style of urban India. Advancement of technology has had a paradoxical effect of making life more stressful. The rapid pace of this advancement makes demands on people to constantly adapt to frequently changing life conditions. Under the current circumstances it becomes important to study factors that are known to help people adapt to adversity in a flexible and healthy manner.

Mental health professionals have long been aware that people respond differently to similar situations. Those who remain unaffected or bounce back quickly are known to be more resilient and research has shown that resilient people are less vulnerable to stress and trauma (Hjmelldal, 2007). Resilience generally refers to the capacity for successful adaptation despite challenging or threatening circumstances and development of competence under conditions of pervasive and/or severe adversity. Resilience has been studied psychologically, biologically and sociologically and researchers believe that it involves an interaction of individual and environmental characteristics (Cohen, 2007; Smolka et al., 2007).

Hope involves conceptualizing goals, and having the confidence and ability to move towards these goals as well as the motivation gained by overcoming past barriers (Snyder, 1994). It has been viewed as having an

expectation that something desired will occur. Although there is little research done on these variables, it is outlined that hope, resilience, self efficacy and optimism form the higher order constructs called core confidence. Hjmelldal lists hope in the category of protective factors (Hjmelldal, 2007). Hope can be viewed as a trait and a state. As a state, hope is made of a person's various strategies for responding and as a trait hope is believed to change less over time, and is conceptualized as a person's attitude or approach to life.

Although there is a dearth of studies done on the relationship between resilience and hope, it is observed through separate research done on resilience & hope, and resilience & stress that they have an important impact on the way people deal with challenges in life.

This study aims to examine the role of resilience, hope and stress in well functioning adults. Studying these variables in healthy individuals will allow us to learn their significance as a protective factor. Understanding how these variables operate and affect a person's response is important. This understanding will allow us to design appropriate intervention strategies to help people adapt to stress. And more importantly it will play a huge role in preventive strategies, where young people can then be trained to develop resilience that will allow them to face the challenges of life in a hopeful manner.

#### AIMS & OBJECTIVES

1. To assess the level of resilience, hope and perceived stress in the participants.
2. To study the relationship between resilience and hope.
3. To evaluate the impact of resilience on the level of perceived stress.

#### MATERIALS:

1. Socio-demographic Proforma
2. Resilience Assessment Questionnaire (RAQ) (Organization Health, 2007): It is one of the currently available instruments to measure resilience. This questionnaire identifies the level of personal resilience and explores eight dimensions of resilience. These are: personal vision, flexibility and adaptation, organization, problem solver, interpersonal competence, active, self assurance and social connectedness. The maximum overall RQ Score is 160. The lowest possible overall RQ score is 32. For individual RQ dimensions, the maximum possible score is 20 and the lowest possible score is 4.
3. The Trait Hope Scale (Snyder et al., 1991): It was developed based on Snyder's theory of hope. The scale consists of 12 items, eight of these tap dispositional or trait like hope levels. Of hope related items, 4 measure pathway thinking and 4 assess agentic thinking. Respondents rate the degree to which each statement describes them (ranging from 1=definitely false to 8=definitely true). Higher scores indicate higher level of hopeful thought. The scale has both adequate internal reliability and temporal reliability.
4. The Perceived Stress Scale (PSS) (Sheldon & Cohen, 1983): This scale, developed by Sheldon Cohen, is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. Each item is rated on a 5 point scale ranging from never (0) to almost always (4). Positively worded items are reverse scored, and ratings are summed, with higher scores indicating more perceived stress.

#### INCLUSION CRITERIA:

- Participants in the age of 25- 60 yrs
- Minimum educational qualification – Post-Graduation in professional subjects
- Individuals willing to participate in the study

#### EXCLUSION CRITERIA:

- Individuals with history of any pre existing psychiatric disorders
- Individuals with lesser than 3 years of work experience

#### METHODS:

Ethics committee approved and informed consent was taken.

Sample: 200 individuals with post graduate qualification fulfilling inclusion and exclusion criteria included in the study. Study design: Cross-sectional randomized study. Socio demographic data was collected using semi structured proforma. The level of resilience was measured using the Resilience Assessment Questionnaire. The Trait Hope Scale was used to assess the level of hope in the sample studied. Perceived Stress Scale was administered to find out the level of stress perceived.

Statistical analysis: Demographic variables were analyzed using descriptive statistical methods. Inferential statistical methods were used to assess the relationship between resilience, hope and stress (Simple linear regression & Pearson Product moment correlation).

#### RESULTS:

In this study, 200 healthy & normally functioning individuals were assessed.

The mean age of the sample studied was 39.57 years, with 63% in the age range of 25 to 40 years. The minimum age of the sample was 28 years and maximum was 60 years. It was observed that 106(53%) of the participants were females and 94(47 %) were males. With regard to educational field, 41% people belonged to the medical field, 34% belonged to the engineering and technical field, and 25% were from the financial sector. It was seen that 92% were married and 49% had 3-10 years of work experience. The mean years of work experience of the sample studied was 12.59 years with minimum work experience being 3 years and maximum being 34 years.

Table 1: Socio-demographic profile of sample

| Socio-demographic Variables | No. of Participants (N=200) |
|-----------------------------|-----------------------------|
| AGE                         |                             |
| 25-40 yrs                   | 126 (63%)                   |
| 41-60 yrs                   | 74 (37%)                    |
| GENDER                      |                             |
| Females                     | 106 (53%)                   |
| Males                       | 94 (47%)                    |
| EDUCATIONAL FIELD:          |                             |
| Engineering                 | 68 (34%)                    |
| Medical                     | 82 (41%)                    |
| Finance                     | 50 (25%)                    |
| MARITAL STATUS:             |                             |
| Married                     | 184 (92%)                   |
| Single                      | 6 (3%)                      |
| Divorced                    | 10(5%)                      |
| WORK EXPERIENCE             |                             |
| 3-10 Yrs                    | 98 (49%)                    |
| 11-20 Yrs                   | 74 (37%)                    |
| >20 yrs                     | 28 (14%)                    |

Table 2: Scores on scales of resilience, hope & perceived stress

| Resilience Levels       | Mean Score & Percentages (N= 200) |
|-------------------------|-----------------------------------|
| Mean                    | 119.02                            |
| Not Very Resilient      | 0                                 |
| Somewhat Resilient      | 43%                               |
| Resilient               | 46%                               |
| Very Resilient          | 11%                               |
| <u>Hope</u>             |                                   |
| Mean                    | 66                                |
| Median                  | 67.5                              |
| <u>Hope Sub-Scales</u>  |                                   |
| Agency - Hope           | 25.01                             |
| Pathway-Hope            | 25.35                             |
| <u>Perceived Stress</u> |                                   |
| Mean                    | 20.75                             |
| Median                  | 21                                |

The mean level of resilience was 119.02, with lowest resilience score being 77 and highest score being 155. The mean resilience scores fell in the range of being 'Resilient'. Score 32 to 60 is in the range that indicates "Not very Resilient". None of the participants studied fell in this range. Scores 61 to 115 indicates " Somewhat

Resilient", 43% of the participants were in this range indicating that they have the stabilizing mechanisms in place, however have some difficulty in the face of change and challenges, so need to strengthen their resilience further. Scores 116 to 140 indicates the range of being "Resilient" - 46% people fell in this range, while 11% had scores from 140 to 160 indicating that they were "Very Resilient".

The mean scores of the subscales were as follows: Self assurance 16.36, Personal vision 16.15, Flexible & adaptable 15.25, Organized 13.27, Problem solver 14.83, Interpersonal competence 15.16, Socially connected 14.37 and Active 15.08.

Since the tools used for measuring hope and perceived stress do not have a cut-off score, a median was computed to arrive at a score that will allow us to categorize participants in to groups that scored high and low on The Trait Hope Scale and Perceived Stress Scale.

The mean score on the Trait Hope Scale was 66, the lowest hope score observed in the sample was 28 and highest score observed was 89. The median score of this measure was 67.5. The highest possible score on the Trait Hope Scale was 96, where higher score means higher levels of hope. The mean scores on the sub-scales of hope were as follows: Hope – pathway 25.35 and hope - agency 25.01.

In the perceived stress scale, mean score observed was 20.75, with the lowest score being 12 and highest score as 32. The median score of this scale was 21. The maximum score of this scale is 40, where higher scores mean increased perception of stress.

There were no significant findings in the correlation computed between socio demographic variables of age, gender, educational/professional field, and marital status, and the levels resilience, hope and perceived stress.

Table 3 shows the relationship between hope and the subscales of resilience.

It shows that there is a significant positive correlation between hope and the following sub-factors of resilience measured in the tool used: personal vision ( $r = .31, p = .004$ ), flexibility and adaptation ( $r = .27, p = .013$ ), organization ( $r = .24, p = .029$ ), problem solver ( $r = .33, p = .002$ ), interpersonal competence ( $r = .25, p = .018$ ), active ( $r = .31, p = .003$ ). No significant correlation was found with the subscales of self assurance ( $r = .072, p = .501$ ) and social connectedness ( $r = .09, p = .429$ ).

Table 3: Relationship between hope and the subscales of resilience

| Sub-scales of Resilience | r Value | p Value    |
|--------------------------|---------|------------|
| Personal Vision          | .31     | .004*      |
| Flexibility & Adaptation | .27     | .013*      |
| Organized                | .24     | .029*      |
| Problem Solver           | .33     | .002*      |
| Interpersonal Competence | .25     | .018*      |
| Active                   | .31     | .003*      |
| Self Assurance           | .072    | .501 (n.s) |
| Social Connectedness     | .09     | .429 (n.s) |

Table 4 shows the predictive relationship between resilience, hope & perceived stress.

It shows that hope significantly predicts resilience (Beta = .357, p = .001). The regression model was significant (F= 12.81, p = .001, R Square = .13). This model shows that there is a positive direct relationship, where for every one unit increase in hope there is a 0.35 unit increase in the level of resilience. And that this level of increase is statistically significant.

When independently measured, agency subscale of hope significantly predicts resilience (Beta = .539, p = .001)(F = 36.06, p = .001, R Square = .30), however when the pathway subscale is entered in the model it is only the pathway subscale that significantly predicts resilience (Beta = .369, p = .019) (F = 21.83, p = .001, R Square = .34) In the presence of the subscale of pathway, agency factor of hope loses its predictive power (Beta = .235, p = .133).

Resilience did not significantly predict perceived stress (Beta = .027, p = .800). The model for this was also not significant (F = .064, p = .800). It was also observed that there was no significant predictive relationship between the subscales of resilience and perceived stress.

Table 4: Relationship between resilience, hope & perceived stress

| Variables<br>(DV = Resilience)                    | Standard Coefficient | t test       | p Value       |
|---|----------------------|--------------|---------------|
|   | Beta                 |              |               |
| HOPE<br>(R Square = 13%)                          | .357                 | 3.58         | .001*         |
| Hope – AGENCY<br>(R Square = 33%)                 | .539                 | 6.00         | .001*         |
| Hope AGENCY<br>Hope – PATHWAY<br>(R Square = 33%) | .235<br>.369         | 1.51<br>2.38 | .133<br>.019* |
| DV = Perceived Social Support                     |                      |              |               |
| Resilience<br>(R Square = 1%)                     | .27                  | .254         | .800          |

\* p value- statistically significant

## DISCUSSION

This study is a new step towards a positive approach to the psychology of resilience and indirectly coping. The results noted above are discussed in this section.

The distribution of scores as seen in Table 2 indicate that the average number of people in the sample which comprised of professionals holding responsible positions are resilient and have the capacity to handle life challenges in an adaptive manner. It should be noted that none of the participants fell in the range of not being resilient. One of the main reasons for this finding could be the fact that, to obtain a professional post-graduation degree and managing (sustaining) a job that is in keeping with that education, along with managing other aspects of life itself is an accomplishment which will be possible only for people who have a certain level of resilience. From the above findings, one may hypothesize that resilience is an imperative psychological variable that predisposes one to meet the challenges of life. The scatter of scores in the subscales of resilience shows that there is an almost diffuse distribution of scores among the subscales with no one sub-factor of resilience being present predominantly.

The distribution of scores of the variable of hope showed that in our study an average number of people fell in the range of having mild to moderate levels of hope because the sample studied comprised of people who have set goals and accomplished them.

It is observed that there is a significant relationship between most subscales of resilience and hope (Table 3). Resilience is seen as a positive adaptive way of coping and not just lack of negative outcomes (Almedon & Glandon, 2007; Keyes, 2007). There are very few studies that have studied the predictive relationship between hope and resilience, and they have found that hope gives people the ability to be more resilient (McDonald & Stephenson, 2010). Self confidence and self efficacy are prerequisites for resilience (Lin et al., 2004; Rutter, 1987). Many researchers have agreed that hope is characterized by an expectation that a desired goal will be attained (Averill et al., 1990; McGeer, 2004; Peterson, 2000; Pettit, 2004; Seligman, 2002). In our study, correlation between subscales of resilience and hope shows that sub-scales having a component of self-efficacy, more adaptability and a problem solving approach correlated with hope.

It is also seen that hope significantly predicts resilience and that the pathway subscale of hope has more predictive power than the subscale of agency (Table 4).

There are studies that have viewed hope as a trait and a state and it is believed that the trait component of hope changes less over time and is conceptualized as a person's attitude and approach towards life (Farran et al., 1995). Trait hope is important in moderating state hope and influencing emotional recovery and reduced stress reactivity (Ong et al., 2004). Our study has measured trait hope, which is vital in taking steps towards meeting challenges with resiliency. Synder saw hope as cognition but there are researchers who view hope as an emotion or a state with an affective component (Synder, 1994; Bruiniks & Malle, 2005; Rosenman et al., 1990). This deeply rooted emotional strength allows them to bend enough to become resilient.

Agency thinking is the appraisal that one is capable of executing the means to attain desired goals, while pathway thinking is the appraisal that one is capable of generating those means. This may be the reason why, though independently agency is important, pathway subscale of hope is more significant in predicting resilience as compared to agency, when both are measured together. Belief that one has the ability to generate and create solutions may be more vital to resilience than the belief that one has the ability to execute the available solutions.

Resilience did not significantly predict perceived stress (Table 4). Most studies on resilience and stress have focused on stress response or people and children who have some form of disability or illness. Also, studies on perceived stress have found that higher resilience leads to lower perception

of stress (Abolghasemi & Varaniyab, 2005). However, in our study, the level of resilience did not predict a significant change in the level of stress perceived. One possible explanation for this could be that our study focused on people who were functioning well. In such a context the perception of stress may take a different form. It can be put forward that the participants of the study, in their daily life do not particularly perceive certain events as stressful, but simply handle it as it comes and bounce back to previous levels of functioning. However when asked to report (in the scale) they bring it to special focus that could have lead to many reporting the perception of mild to moderate stress.

Also, this study measured perceived stress and not actual presence of stress in the face of stressors, and majority of the sample studied had fairly good level of

resilience. Their belief in their ability to emotionally handle a situation (regulate emotions), to generate solutions, plan and execute the solutions and their emotional strength in itself may allow them to return to homeostatic psychological levels faster.

The focus of this study was resilience, hope and stress. On the surface, the relationship between these three variables seems very apparent. However, this study is a small step towards bringing about a paradigm shift towards positive and preventive psychology.

We measured hope as a trait, which significantly predicted an increase in resilience. Questions that arise from these findings are: Can hope as a trait be developed or cultivated in children? Can this be learnt in adulthood? If it can, it will enable us to accommodate in our mindset a perspective of prevention, rather than only focusing on treatment. In the case of children, these variables may be taken up as important elements of a healthy developmental model.

Until now, variables like hope have been studied in the context of depression; studying hope in well functioning individuals is relatively new in our country. This study is an attempt to bring to light the need to focus on such and other positive variables that will allow us to strengthen the existing strengths in these individuals with an aim to prevent psychological disorders.

#### CONCLUSIONS

In our study of 200 individuals, the mean level of resilience was 119.02. Majority of the participants fell in the range of being "Resilient", having mild to moderate level of hope and experiencing average level of stress. There were no significant findings in the correlation computed between socio demographic variables, and the levels of resilience, hope and perceived stress. Hope along with its sub-factors significantly predicted resilience. Pathway subscale of hope was more significant in predicting resilience as compared to agency subscale. There was no significant relationship observed between resilience and perceived stress.

#### REFERENCES

Abolghasemi A, and Varaniyab TS. (2005) Resilience and perceived stress: predictors of life satisfaction in the students of success and failure. *Procedia - Social and Behavioral Science*, 205, 748-752.

Almedon AM, Glandon D. (2007) Resilience is not the absence of PTSD any more than the health is the

absence of disease. *Journal of Loss and Trauma*, 12, 127-143.

Averill JR, Catlin G, Chon K. (1990) *Rules of hope*. New York: Springer-Verlag.

Bruiniks P, Malle BF. (2005) Distinguishing hope and optimism and related affective states. *Motivation and Emotion*, 29, 327-355.

Cohen S, Kamarck T, Mermelstein R. (1983) A global measure of perceived stress. *J Health Soc Behaviour*, 24, 385-396.

Farran J, Herth KA, Popovich JM. (1995) *Hope and hopelessness: Critical, clinical, constructs*. Thousand Oaks, CA: Sage.

Hjmeltdal O. (2007) Measuring protective factors: The development of two resilience scales in Norway. *Child and Adolescent Psychiatric Clinics of North America*, 16, 303-321.

Keyes CLM. (2007) Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychological Association*, 62, 95 - 108.

Kim-Cohen J. (2007) Resilience and development psychopathology. *Child and Adolescent Psychiatric Clinics of North America*, 16, 271-283.

Lin KK, Sandler IN, Ayers, TS, Wolchik SA, Luecken LJ. (2004) Resilience in parentally bereaved children and adolescents seeking preventive services. *Journal of Clinical Child and Adolescent Psychology*, 33, 673 - 683.

McDonald J, Stephenson AM. (2010) *The resilience of hope*. Amsterdam & New York: Radopi; 63 – 81.

McGeer V. (2004) The art of good hope. *Annals of the American Academy of Political & Social Science*, 592, 100 - 127.

Ong AD, Edwards, Bergeman CS. (2004) Resilience and adaptation to stress in later life: empirical perspectives and conceptual implications. *Ageing International*, 29, 219–246.

Organization Health (n.d). Resilience Assessment Questionnaire. Organization Health Psychologist. Retrieved on October 2012 from <http://www.orghealth.co/uploads/PDFs/Resilience%20Assessment%20Questionnaire.pdf>.

Peterson C. (2000) The future of optimism. *American Psychologist*, 55, 44 - 55.

Pettit P. (2004) Hope and its place in mind. *Annals of the American Academy of Political & Social Science*, 592, 152-165.

Rosenman IJ, Spindel MS, Jose PE. (1990) Appraisal of Emotion- eliciting events: Testing a theory of discrete emotions. *Journal of Personality and Social Psychology*, 59, 899-915.

Rutter M. (1987). Psychosocial resiliency and protective mechanisms. *American Journal of Orthopsychiatry*, 57, 316 -329.

Seligman MEP. (2002) *Authentic Happiness* New York: Free Press.

Smolka MN, Buhirt M, Schumann G, et al. (2007). Gene-gene effect on central processing of aversive stimuli. *Molecular Psychiatry*, 12, 307-317.

Snyder CR. (1994) *The psychology of hope: You can get there from here*. New York, NY: The Free Press.

Snyder CR, Harris C, Anderson JR, et al. (1991) The Will and the Ways: Development and Validation of an Individual-Differences Measure of Hope. *Journal of Personality and Social Psychology*, 60, 570-585.

---

Bindoo Jadhav, Associate Professor; Adita Dagaria, Resident, H.S. Dhavale, Head; Sunitha Shanker, Clinical Psychologist; Department of Psychiatry, K.J.Somaiya Medical College and Research Centre, Behind Everard Nagar, Sion, Mumbai, Maharashtra, India - 400022. Corresponding Author: Bindoo Jadhav; E-mail: [blmaru@gmail.com](mailto:blmaru@gmail.com)

---

## CULTURE & DYNAMICS OF VIRTUAL RELATIONSHIPS

Deepika Gupta, Manju Mehta

The 21st century is the era of digital revolution. The symbiotic relationship between individuals and technology has many interfaces- interpersonal relationships, group formation, blog culture, information seeking & broadcasting as well as retail. Researchers across the globe have estimated that 76% of Internet users comprise of youth under 24 years of age, spending approximately 60 minutes daily on the services with social media pages and entertainment portals being the most visited sites. Virtual community culture is picking up pace by providing an electronic environment to initiate & maintain relations (Carter, 2005); interact with individuals of common interest; forum to ask questions or social assistance for queries like hobby groups, travel options, career guidance; support group for dealing with shared distress or common concerns like giving up drugs or battling chronic illness amongst others (Abrams, 2003; Wright, 2000). Virtual relationships that are forged through these media have been reported to be contingent upon the time spent online, frequency of usage and whether the user has an active presence or is merely a lurker. These can be very satisfying to the individual or very poor as compared with real world relationships (Leimester & Krcmar, 2005; Cummings et al., 2002).

The culture in these communities is in sync with the culture that social theorists posit real life societies to have. There is a group norm and code of behavior, an administrator akin to a group leader, some active and some passive participants. There is a sense of belonging that is provided to the members who willingly seek and give information (Ridings et al., 2002). However, there are undoubtedly many red flags associated with excessive governance and dependence on technology that we constantly need to guard ourselves against. These are risks of privacy violation & identity thefts, cyber bullying & harassment, risks of self-disclosure to inappropriate people and to inappropriate extents and the waste of time by spending all leisure time aimlessly and obsessively surfing sites. In addition to these, there is a growing risk of losing one's identity and falling into the trap of a dual identity. The software enhanced perfection of photography, the illusion of a big social circle of 'friends' and the well-wishers who always 'like'

us pave the way for a self-centric identity. The gap between the real self and virtual self builds and becomes wider, the constantly insecure and validation seeking self emerges, the reliance on solitary distanced relations start taking over. No doubt easy and quick connectivity allows for greater communication possibility between loved ones, but excessive reliance may counteract the very purpose. There is gradual and widening reduction in engagement with individuals in one's own environment breeding poor interpersonal relations and increasing the risk of loneliness and depressive symptomatology. The scope for instant updates and constant checks feeds into our needs for instant gratification which sooner than later spills over into other aspects of our self as well. Whang et al. reported that the profile of those individuals inclined to engage excessively in virtual relationships have the following characteristics: highly burnt out with respect to work, small social support network, lonely, low self esteem, tendency to use escaping from reality as a coping mechanism, having unhealthy interpersonal boundaries and poor communication skills (Whang et al., 2003).

The advantages of this 'necessary evil' also are many as they simplify and deconstruct our world with the click of a finger. Information, critical reviews and limitless ideas are available with the click of a button which we maybe recycle, modify, build on to suit our needs; consolidate vast body of data with an advantage of timely reminders and in the process develop greater digital competence. The virtual world also provides avenues to break the gates of communication and relationship formation which the physical world provides in terms of long distance, geographical separation, impression formation based on physical attributes of the person or stigma associated with conditions, individuals can choose the groups to mingle with based on similar initial interests and hence pave the way for development of close relationships (McKenna et al., 2002). It was also reported that relationships formed through virtual communities the participants to forge 67% acquaintances, 79 % friendships and 71% romantic partnerships that transferred into real world relationships (McKenna et al., 2002). Contrary to above

reported view point that engagement in virtual relationships breeds increased depressive symptomatology and loneliness, it was also found that the independence and avenue for self-expression that the virtual world provides can serve to enhance not just the self-esteem of the individual but also allow a space to form relationships which would serve to enhance the perceived social support and lower depression and loneliness (Eysenbach et al., 2004).

The importance however, in this given time and age is not to conclude whether virtual relationships are good/bad; needed/not needed. They have come to form integral part of our lives. The focus, hence, is to identify for oneself the purpose these are fulfilling in our lives and where are they taking us - towards growth or dependence. For instance, do we express ourselves only through intense status updates, do we resolve issues by deleting/blocking people from our pages, do we substitute our real life relations for virtual life relations, do we derive our self-esteem through our online popularity and is the virtual space making us more self-critical and self-obsessed. It is time to revisit the understanding that the real self is far more precious and expansive than the sum total of virtual selves.

#### REFERENCES

Abras C. (2003) Determining success in online education and health communities. Unpublished PhD thesis, University of Maryland, Baltimore County, MD.

Carter D. (2005) Living in virtual communities: An ethnography of human relationships in

Cyberspace. *Information, Communication & Society*, 8, 148-167.

Cummings JN, Butler B, Kraut R. (2002) The quality of online social relationships. *Communications of the ACM*, 45, 103-108.

Eysenbach G, Powell J, Englesakis M, Rizo C, Stern A. (2004) Health related virtual communities and electronic support groups: Systematic review of the effects of online peer-to-peer interactions. *British Medical Journal*, 328, 1166-1170.

Leimeister JM, Krcmar H. (2005) Evaluation of a Systematic Design for a Virtual Patient Community. *Journal of Computer-Mediated Communication*, 10,00. doi: 10.1111/j.1083-6101.2005.tb00269.x

McKenna KYA, Green AS, Gleason MEJ. (2002) Relationship formation on the Internet: What's the Big Attraction? *Journal of Social Issues*, 58, 9-31.

Ridings CM, Gefen D, Arinze B. (2002) Some antecedents and effects of trust in virtual communities. *Journal of Strategic Information Systems*, 11, 271-295.

Whang LS, Lee S, Chang G. (2003) Internet Over-Users' Psychological Profiles: A Behavior Sampling Analysis on Internet Addiction. *Cyber Psychology and Behavior*, 6, 143-150.

Wright K. (2000) Perceptions of on-line support providers: An examination of perceived homophily, source credibility, communication and social support within on-line support groups. *Communication Quarterly*, 48, 44-59.

---

Deepika Gupta, Clinical Psychologist, Department of Psychiatry, Postgraduate Institute of Medical Education & Research, Dr. Ram Manohar Lohia Hospital New Delhi 110001; Manju Mehta, Professor of Clinical Psychology, Department of Psychiatry, All India Institute of Medical Sciences, New Delhi, India -110029. Corresponding author: Dr. Deepika Gupta, Email: deepika101gmail.com

---

BOOK REVIEW

Title : Child and Adolescent Mental Health

Editor : Usha S Nayar

Publisher : SAGE Publications India Pvt. Ltd.

Year : 2012

Pages : 363 pages

Price : Rupees 1150

ISBN 978-81-321-0965-5

Child and adolescent psychiatry is an important area in psychiatry as the issues and needs of children and adolescents are different from that of adults. This book is a collection of chapters on important issues related to mental health and well being of children and adolescents in the contemporary society.

The authors of the chapters are from different parts of the world, belonging to different professional backgrounds (medical professionals, psychologists, educationists, etc.) who are involved in handling of the children and adolescents. The book has 7 sections and 22 chapters with contribution from 39 authors. The section 1 has one chapter and it talks about how empirical economic techniques which assist decisions about allocation of resources to and within child and adolescent mental health systems. This is a very important area which is rarely covered in child and adolescent mental health literature. Section 2 has two chapters and it presents clinical case studies related to depression and suicide among children and adolescents. Section 3 has three chapters discussing about special contexts related to violence, physical health, and risk behaviours. Section 4 has three chapters which talk about how school and school environment impact the mental health of children and adolescents. Section 5 has four chapters and talk about child welfare at home and issues related to caregiving. Section 6 has five chapters which emphasis on action

and innovative practices. Section 7 has four chapters on specific countries child centric policies, status and/or children's perspectives.

The book highlights that children and adolescents are growing up in a rapidly evolving competitive world (harsh environmental factors, revolution in information and communication technology, competitiveness, etc.) which will have an effect on the mental health. As multiple factors affect the mental health of children and adolescents, there is a need to involve different stakeholders (family, children, medical professionals, psychologists etc.) in preventing and treating mental health problems.

This book has few shortcomings. First book has talked only about depression and suicide in children and adolescents and has ignored several common mental disorders like attention deficit hyperactive disorders (ADHD), specific learning disorders, bipolar disorders, obsessive compulsive disorders etc., the inclusion of this elements would have made it more clinically relevant. Second in section 6 in the chapter on 'countering the rush to medication' the authors have expressed reservations about medications without giving much evidence. In adolescents certain disorders like schizophrenia, obsessive compulsive disorders pharmacotherapy along with non-pharmacological methods are well established mode of management. Third there is little representation of the rural mental

health of the children and adolescents in India. Rural area is an important area because of the lack of manpower and resources in rural area compared to urban area. This is a challenge to handle the mental health of children and adolescent in rural India. Fourth the authors have discussed the issues in the chapters and it would have been useful if they would have provided roadmap in each section for resource poor developing countries.

In conclusion, the chapters are well written, well organized and readable. The cover page of the book is colourful, apt and well thought of. The chapters have been well presented and layouts of the chapter are

attractive. The book is overpriced for developing countries like India. The book would have been an important addition to the clinicians who are working with children suffering from mental health disorders if it would have talked about other common mental disorders. I consider this will be a good addition to the reading list of anyone working in the field of child and adolescent mental health.

---

Subodh B.N., Assistant Professor, Department of Psychiatry, PGIMER, Chandigarh, India 160012.

Email: drsubodhbn2002@gmail.com

---