Kerala Journal of Psychiatry

Vol 24 . No 2 July 2010

Official Publication of Indian Psychiatric Society, Kerala State Branch

Address for correspondence:
11/1339 'Blessing'
Iringadan Palli Road, Kovoor
PO Calicut Medical College-673 008.
Phone (Res) 04952355370, Mobile: 98472 80957
Email: drharishmt@gmail.com

CONTENTS

Kerala Journal of Psychiatry

Vol 24 . No 2 July 2010

EDITORIAL

MOVING AHEAD FOR BETTER MENTAL HEALTH...

The health care and medical education sectors in our country have been undergoing several changes over the past few years. The growth of private health care providers and increase in health care costs, increasing penetration of heath insurance including the RSBY scheme targetting the poorer sections of our society are a few of these changes. Privatisation and the Public – Private models are an essential part of devedlopment, but the kind of unregulated privatisation that is taking place in our country raises several fears and doubts. The governemts have been striving to bring in some regualtory framework in the form of new laws (The clinical establishments bill, for instance), but how far they will be effective has to be seen.

The controversy surrounding the Medical Council of India and its eclipse has been a shameful chapter, to put it in mildest words. How far the newly made arrangements will be able to modify the alarming course of medical education – both in public and private sector – is another concern.

Coming closer home, Kerala has seen the most drastic changes in the governemt health care sector over the past few years. The ban of private partice by government medical faculty, implementation of specialty and administrative cadres in the Health service department, the changes brought about after implementation of the National Rural Health Mission etc are noteworthy. The availabilty of NRHM funds have made visible improvement in the ambience of most governemnt health centers and hospitals. Availabilty of man power has also improved, thanks to the policy of making need based, ad hoc, super numery appointments.

Banning of private practice of medical college faculty has been a bold decision in the right direction. It is hoped that the medical college faculty will concentrate on their academic and research work once they are paid well, and do not have to rely on income from private practice. But the poor state of record keeping in our collegiate hospitals, lack of availability of fund for research, inadequate library facilities etc casts doubts on when and whether it will actually happen. There hae been improvement in the availabilty of journals as most medical college libraries have subscription to portals like MD consult, Proquest etc. Above all, the much attitudinal change is the hardest to occur. One can definitely hope that things will improve in future. Establishment of the Kerala University of Health and Allied Sciences is another recent achievement which has all the medical, nursing and paramedical colleges as its affiliates. This can help in improving academic and administrative activities of these institutions.

The implemntation of specialty / adminstrative cadres in the Health service department is a welcome step that can have far reaching consequences. For the first time the governemt has come out with number of speicalists needed to serve the state. It is seen that one third of the posts of psychiatrists are vacant. Now that it is clear that we need more psychiatrists, the governemnt can recruit them. Before the implemntation the specialty cadre, such a move to recruit specialists for the health service department was impossible. It is also worth mentioning that the numbers of post graduate seats have increased last year and further increase is planned the next year as well. Hopefully this will increase the availabilty of psychiatrists in the state. We also need more psychiatrists to work in the new private medical colleges.

After the implemenation of the specialty cadre, it is seen that majority of the psychiatrists are posted at the governemnt mental health centres. This has reduced the availablity of

psychiatrists at the District and Taluk head quarter hospitals. This is not in keeping with the spirit of the National Mental Health Policy. The governemt has to ensure that at least one psychiatrist is available at all district and major Taluk hospitals. This will reduce the harships of the poor patients who have to travel long distances in search of a psychiatrist.

This is also the time to think of restructuring the government mental health centers in our state. Do we need to continue with the way these hospitals are run? What should be their role? It is unfortunate that the psychiatric fraternity of our state has never thought of these hospitals and hopw to improve them The only time any one pays attention to the poor souls inhabiting these hospitals is when they are in the news – usually following some unfortunate adverse event.

Only 20 to 25% of the inmates in these centers are those in need of acute care. The rest belong to different subcategories like chronically ill patients abandoned by families, forensic admission and mentally ill persosns from other states captured and brought by police. At least one third of the inmates of these hospitals are forensic admissions. Many of them are involved in serious crimes like murder and unfit to undego trial because of mental illness. Once admitted there, they languish for years without reaching fitness to stand trial. If mental health units are opened within the central prisons, these patienst can be manged there by a psychiatrist working in the nearest government hospital who can vist them on a fortnighly basis. Another chunk of inmates are homeless menatlly ill from other states, who land up there after police arrest. If we can come out with some programs to send them back to their home states, it will reduce the number of long stay patienst considerably. If energetic efforts are made, at least some of those patients abandoned by families can be re united with their families. The help of social welfare departments, legal service authorities and NGOs can be moblised for this. With the success of these measures, the governemt can downsize the public mental hospitals and strengthen community mental health programs which can have small in patient units and rehabilitation centers spread out over the state.

Kerala has the best health care indicators in the country as far as physical health is concerned. But high suicide rates, increasing alcohol consumption, growth of superstitions market and increasing number of alternative medicine practitioners etc point to undetected psychological distress and morbidity. Improving the community mental health services is the way out. It is heartening to note that the government has decided to go ahead with implementation of community mental health programs in our entire 14 districts. This will ensure that vast majority of the population; especially those in rural areas will have access to mental health care. Provision of free medications will be a boon to them and increase treatment adherence. But the main criticism against existing DMHP / CMHP is that they end up only as medication programs for those with chronic psychoses, and fail to provide any service for the those with common mental disorders (anxiety, depressive and stress related disorders). I think this has to change and both psychiatrists and the government has to provide specific services to relieve the distress of this subgroup as well.

In addition to this we need specific programs to tackle suicide and alcoholism Such a combination can help to significantly improve the mental health status of our population. Kerala has to rise up to the occasion and demonstrate how a unique model of low cost public mental health program can be developed and implemented.

Dr M. T. Harish DPM, MD, MBA
Associate Professor of Psychiatry
Medical College Kozhikode

RELIGION AND SUICIDE

Dr. P.N.Suresh Kumar

Although most religions oppose suicide, suicide rates vary considerably among religions and between areas with predominant religion. For example WHO (1999) reports lower rates of suicide in Muslim predominant countries. Suicides in Muslim predominant districts of Kerala are far lower than other states (SCRB, 2002). Suicide rates among catholic populations have been recorded as lower than rates among Protestants and Jews (Marselli, 1879). Suicide risk may also be lower among persons who have higher rates of participation in religious practices (Neeleman, 1998). Some of these differences may arise from technical artefacts including variance in reporting of suicide, with a tendency toward lower rates in countries with strong sanctions against suicide. For example, catholic countries have striking recent increases in suicide rates that are attributed to better data collection and greater acceptance of religious funerals for suicides (Kelleher et al, 1998). It may be that degree of orthodoxy and integration with religion are more accurate measures of risk within this category, than is simple institutional religious affiliation.

Ecological association between religions variables and suicide rates are stronger for women than for men, stronger for measures of belief than observance and is mediated by tolerance to suicide. In individuals, stronger religious beliefs were associated with lower tolerance to suicide and for men exposure to a religious environment may protect against suicide by reducing its acceptability (Neeleman et al, 1997).

Suicide rates are lower in religious than secular countries. It is not clear whether a n association between religious and suicidal behaviour also applies at the individual level. Neeleman's study (1997) simultaneously examined individual and contextual issues of protective factor against suicide.

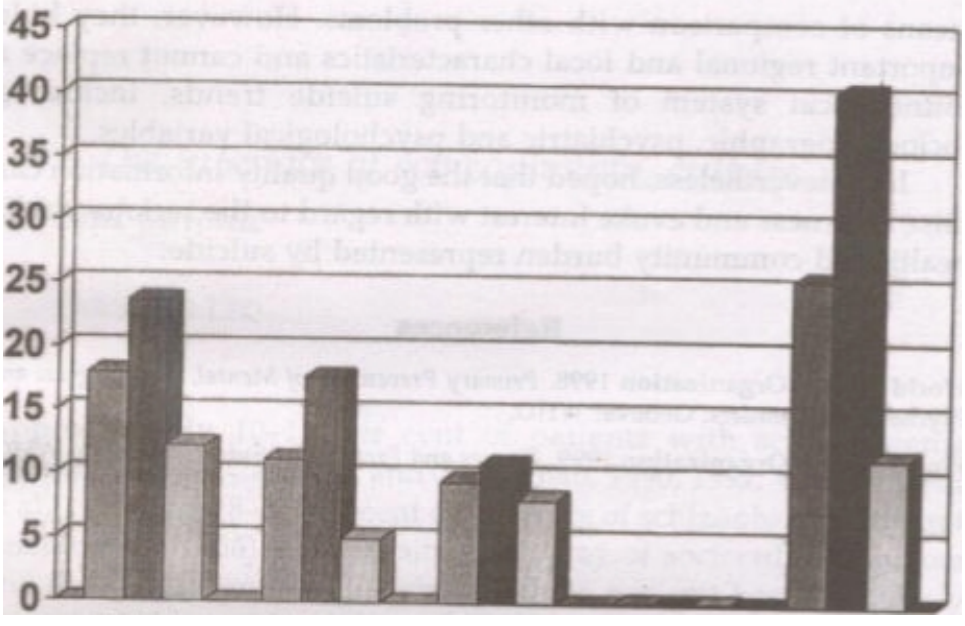
A comparison of suicide rates according to prevalent religious denominations in countries brings to light a most remarkable difference between countries of Islam and countries of any other prevailing religion. In Islamic countries (for example, Kuwait), where committing suicide is strictly

Dr. P.N.Suresh Kumar, MD, DPM, DNB, PhD
Anaswara, V.T.Road, P.O.Civil Station
Calicut-673020, Kerala, India, Phone-0495-2372684, Fax-0495-2373829, e-mail-drpnsuresh@satyam.net.in

forbidden, the total suicide rate is close to zero (0.1 per 100,000 population. In Hindu (for example India) and Christian countries (for example, Italy), the total suicide rate is around 10 per 100,000 (Hindu 9.6, Christian11.2). In Buddhist countries (for example, Japan), the total suicide rate is distinctly higher at 17.9 per 100,000 population. At 25.6, the total suicide rate is markedly highest in atheist countries (for example china) where religious observances have been prohibited for a long period of time (for example Albania). With regards to gender, the suicide rates according to prevailing religion in countries are generally higher among men than women. The highest male: female ratio can be found in atheist and Christian countries, namely 3.5:1 in both cases; the lowest is seen in Hindu countries, at 1.3:1. Certainly these findings do not take personal levels of religiosity into consideration; they might indicate the importance of religious context, that is, the prevalence of a religion in a country, and its influence, as an important cultural factor in the determination of suicide deaths (Bertolote & Fleischmann, 2003).

CHRISTIANITY

Suicide is considered a sin against God among monotheistic religions including Judaism, Christianity and Islam (Tondo, 2000; Dublin, 1963). The Ten Commandments to Moses do not explicitly



Suicide rates (per lakh) according to religion

Role of religion in suicide prevention

mention suicide, but forbid 'killing'. Apparent rarity of suicide in the Old Testament and throughout Jewish history may reflect a view of life as sacred. Judaism did not permit religious burial of suicides, based on 2nd century Talmudic writings (Mishnah) paralleling contemporary Roman and Christian laws and practices. Although they did not explicitly condemn suicide, some Talmudic Scholars proposed that suicide could preclude external happiness. Punishment was intended only if suicides were 'intentional' as indicated by communication of intent, a criterion that may underline the variety of suicides reported in ancient Hebrew texts. Nevertheless, mass suicides occurred during the centuries of persecution of the Jew (Tondo, 2000; Dublin, 1963)

Early Christianity became concerned with 'voluntary martyrdom' at the hands of Roman military, which was provoked by groups of the faithful presumably to assure a favourable after life, but at some risk of depleting number of early converts. Self-sacrifice was accepted as altruistic, but taking ones own life was considered egotistical, and therefore sinful. Saint Augustine (AD 354-430) condemned suicide as an act against God by extension of the Sixth Commandment to Moses ('Thou shalt not kill') (Dublin, 1963). The second Roman Catholic Council of Orleans (AD 533) expressed the first official disapproval of suicide, considering it (ambiguously) as either the Devil's work or an expression of mental insanity, and the Council of Barga (AD 563) forbade burial of suicides (Sullivan 1982; Zilboorg, 1996). Suicide was condemned not only as a sin against God and the will of God, but also an 'ideological' defect in the control of free will. Thomas Aquinas (1225-1274) considered suicide a sin against God and the state and particularly dangerous for making repentance impossible. Suicide emerging from morbid or despair was particularly abhorrent to the early church but despair was to be dealt with by benevolence as well as by reason and penance. It was only by the 20th century that Christianity softened its teachings on suicide by accepting a lack of effective conscience implicit in suicide, but condemnation for suicide was not abandoned until 1983. As recently as 1995, Pope John Paul II restated church opposition to suicide, euthanasia and abortion as crime against life not unlike homicide and genocide (Tondo, 2000; John Paul II, 1995).

ISLAM

Islam has generally condemned suicide based on the belief that Allah's will determine the destiny and the time of death, but tolerates suicide as a form of self-sacrifice, particularly holy wars. Islam encourages submission to God's will in suffering and sickness. As a consequence Muslim patients do not really talk about suicide. It appears that Islamic art and literature rarely address the themes of suicide. Often one finds in clinical practice, depressed Muslim patients, who divulge their suicidal ideas quickly go on to state that they would not carry out their ideas because it is against their religion. It takes that much more for a Muslim to cross the bridge and therefore if a Muslim patient mentions suicidal plans he should be taken quite seriously. Islam asks man and woman to wait for his or her destiny, rather than

snatching it from the hands of God. If he doesn't he will be depicted as unfaithful wretch (Venkoba Rao, 1992).

HINDUISM

Hinduism's view of suicide is more complex. According to some scholars, the Hindu scriptures give complicating view about whether suicide is permissible. Some forbid it, but others permit it for those who have attained enlightenment. Some think that the more tolerant attitude of Hinduism is because of the belief in reincarnation and the eventual detachment of the soul from the body, a view shared by Buddhism. Other Hindus, however, state that since Hinduism is pantheistic, to kill one's body is wrong, for that would be equivalent to killing of the God in oneself.

Adityanjee (1986) from his paper on the cross-cultural aspects of suicides and suicide attempt in India 'Traditionally, Hindu religion has taken very tolerant view of suicide unlike Christianity or Judaism. Under Brahminic influence, the Hindu has been traditionally inclined to self-destruction purely for the joy of sacrifice because even with no particular reason, renunciation of life was considered praiseworthy. The Brahma Purana, one of the important Hindu scriptures, reports five kinds of suicides as justifiable and acceptable. This ambivalence is reflected in the discourse of the distressed in Hindu society. Vedic and Upanishadic period penalised suicide in general.

Ramayana and Mahabharata have recorded instances of suicide. When Lord Sri Rama died there was an epidemic of suicide in Ayodhya. Bhagavad Gita is against self-torture and self-killing. Brahmanical view was that any one who tries to kill oneself but fails should fast for a stipulated period. Hinduism accepts ritual suicide by a widow (Sati) as a way to cancel her husband's sin, and to gain honour for their children; Raja Ram Mohan organised agitation against Roy sati and this practice is now rare. During Vedic and Upanishadic times, apart from sati, death from drowning at the confluence of rivers to achieve 'punya' (salvation in the next life), the self destruction for incurable diseases, ascetics undertaking great journey towards the last year of life (Mahaprasthanam), were allowed. Vedic and Upanishadic period penalised suicide in general but with the above exceptions

BUDDHISM

Buddhism also claims detachment from the body, but condemns suicide as a violation of the requirement that men should live for the time desired and cannot hope to avoid sufferings to which they had been condemned from previous lives. Also, suicide implies insufficient detachment and indifference to life (Dublin, 1963).

SUICIDE COUNTERS

Venkoba Rao (2003) used the term 'suicide counters' namely those factors that tend to inhibit the suicidogenic impulses. The patients who experience suicide ideation do not proceed to completion owing to the overwhelming opposing influence of countries economic, religious, moral, ethnic and social nature. The care of their children, of their spouses, fear of stigma that would descend on the family and fear of damnation in the hell tend to prevent them from completing the art.

Religious factors that instigate suicide confer cognitive resistance to suicidal behaviour. The sociological literature shows that religion does have a lowering effect on suicide ideologies (Stack et al, 1994). In a clinical setting, it is not uncommon for devout Christians and Muslims in this country to say that while they are severely depressed and thoughts of suicide have occurred to them, they would not consider suicide because it is against their religious beliefs. It is to born in mind as cultural ideas are internalised so are a culture's ideas about suicide. A more liberal attitude to suicide would increase an individual's and collective vulnerability to this idea (Kral, 1998).

Among the Indians however these cultural and religious sanctions are less strong. All other things being equal the lower the cultural obstacles to suicidal behaviour, the easier it is for the individual to cross them. Venkoba Rao (1975) and Vijayakumar et al (1999) have described that the religious prohibitive and therefore protective forces available to Indians are weaker.

Stack (1983) have compared and contrasted the social integration theory with religious commitment theory of religion and suicide. The social integration theory was based on two dimensions of religion, the number of shared religious beliefs and practices, the greater the subordination of individual to group life, the lower the chances of alleged destructive individualism and free enquiry; and as such lower the risk of suicide. The actual content of religious dogma and rites is viewed as secondary, the sheer number of dogmas and rites are central. In contrast to classic integration view, the theory of religious commitment holds that just a few life saving religious beliefs may be all that are necessary to lower suicide risk. Vast number of rituals and beliefs may not be necessary. Belief in an after life for example may make worldly suffering more endurarable and less life threatening. The provision of idealistic role models and alternative stratification system for building self-esteem, glorification of the states of poverty (a key risk factor in suicide), and so on are seen as life saving aspects in American religions.

CONCLUSION

To conclude the words of Albert Einstein by aptly quoted 'creating a new theory is not like destroying an old barn and erecting a skyscraper in its place. It is rather like climbing mountain, gaining new and wider views, discovering unexpected connection. But the point from which we started out still exists, although it appears smaller and forms a tiny part of our broad view'.

(Note: The author may contacted for details of references)

SCHIZHOTYPAL FEATURES AND PREMORBID ADJUSTMENT IN OCD PATIENTS

Dr. Aneesh S Bhat

INTRODUCTION:

Obsessive Compulsive Disorder is a common chronic and disabling disorder marked by obsession and compulsions that are ego dystonic and causes significant distress to the patients and their families. The essential feature of obsessive compulsive disorder the symptom of recurrent obsessions and compulsions which are distressing, time consuming and interfere with the persons life, occupational function, usual social activities and relations.

In the last decade prevalence of OCD symptoms in general population is found to be remarkably high. Since 1984 at least three studies carried out in N.America found the prevalence of OCD to be >2%in general population which is 40 times higher than what earlier estimated .Robins et al 1984 found a prevalence figure of 2.5%,[Bland et al 1988] found a prevalence figure of 3.0%, [Kamo et al 1988] found a prevalence of 2.5%of OCD in general population, in India study by [Khanna et al 1993]shown prevalence of 0.6%. Studies all over world shows nearly similar prevalence rate. It is estimated that nearly 50 million people worldwide affected by OCD at present. The mean age of onset being 20 years with female to male ratio of 1:2.The course of OCD is usually chronic and at times resistant to treatment.

There is strong association of various personality disorders with OCD and some types of personality features are more common in OCD patients. Inspite of the advent of newer drugs like SSRI's few patients with OCD are resistant to treatment, reasons for resistance include inadequate trial of drug, co-morbid conditions, differences in psychosocial factors.

In personality disorders schizotypal personality has lot of similarities with OCD like odd behavior, odd beliefs, unusual experiences etc. Also neurobiologically in schizotypal a similar dorsolateral prefrontal cortex circuit shares anatomic substrates similar to those of the OCD orbitofrontal circuit. Exploring the interface of schizotypal and obsessive-compulsive symptoms is important for diagnostic clarity and could have important implications for treatment and long-term prognosis.

A few studies about co-morbid conditions in OCD mention that OCD patients with co-morbid schizotypal feature have poorer outcomes. A study by [Jenike M.A.et al 1986][1] about concomitant OCD and schizotypal personality

Dr. Aneesh S Bhat. MD
Senior Resident
Department of Psychiatry
Medical College, Kozhikode

disorder suggested that 90% of non schizotypal patients improved with treatment were as only 14%of schizotypal patients improved suggesting that schizotypal features are strongly negatively correlated with treatment outcomes. They found that those with concomitant schizotypal personality disorder with OCD had very poorer treatment outcomes. Few other studies have found that schizotypal behavior is strongly related with obsessive compulsive behavior [Aardema et al 2006][2]. Some studies found that relation of schizotypy with OCD is significantly higher than that between OCD symptoms and either anxiety or depression [Norman et al 1996][3]. A study by [Frank Tallis, Roz Shafran][4] shows systematic and positive relationship between the presence of schizotypal features and OCD, independent of the effects of depression and anxiety.

In view of emerging evidence of poor response to treatment in OCD patients and their relationship to personality features, the study in this area is undertaken.

OBJECTIVES

1) To study prevalence of schizotypal features and its relationship in OCD patients.

2) To assess their premorbid adjustment level.

3) To assess the relationship of demographic factors

MATERIALS AND METHODS

STUDY CENTRE:

Department of Psychiatry, Calicut Medical College.

SUBJECTS:

Out patients with ICD-10 diagnosis of OCD attending to psychiatry OP.

STUDY PERIOD:-

Three months.

TYPE OF STUDY:-

Descriptive cross sectional study.

INCLUSION CRITERIA

1) Patients with diagnosis of OCD by ICD-10.

2) Age 18 to 65 years.

3) Those who have given consent.

EXCLUSION CRITERIA

1) Head injury or mentally retarded patients.

2) Those who have not given consent.

Informed and written consent obtained from all patients enrolled in the study.

STUDY TOOLS

1) Demographic profile and patients treatment details.

2) Schizotypal Personality Questionnaire-Brief.

3) Premorbid Adjustment Scale.

4) Yale-Browns Obsessive Compulsive Scale.

METHODOLOGY

Study was conducted on out patients attending psychiatry OP. Patients were assessed cross sectionally. 23 patients with clinical diagnosis of OCD by ICD-10 diagnostic criteria were selected. Out of 23 patients 1 patient did not give consent, and 1 could not complete questionnaires so was dropped from the study. Total 21 patients participated in the study, out of which 12 were females, and 9 were males.

Informed consent was taken from every patient. Sociodemographic data was collected from patient and relative accompanying the

patient, Old and recent treatment records and duration of treatment was noted, any co-morbid diagnosis was reported separately.

After initial assessment every patient was assessed for OCD severity by applying Y-BOCS. Total score was calculated for each patient.

Patients premorbid functioning was assessed by using Premorbid Adjustment Scale [PMAS]. Total score of PMAS was calculated for every patient.

Every patient was given Malayalam version of Schizotypal personality Questionnaire-Brief [SPQ-B] to rate. The score was calculated in three subscales of SPQ-B which are (a) cognitive perceptual, (b) interpersonal, (c) disorganized. Total score was also calculated by adding all the three subscale scores.

STATASTICAL ANALYSIS

Statastical analysis was done by using SPSS 13 software program.

RESULTS

After statistical analysis it was found that significant correlation exist between duration of illness, treatment duration and SPQ-B scores. As mentioned in Table 2 P value for SPQ-B and duration of illness comes around 0.029 (<0.05),and for duration of treatment 0.030 (<0.05).Subscale (c)disorganized has significant relation with duration of illness and treatment. There exists significant relationship of YBOCS scores with comorbid diagnosis. Table 3 shows significant relationship between YBOCS scores and SPQ-B scores p value 0.03 (<0.05).

a =cognitive perceptual

b =interpersonal

c =disorganized

SPQ-B- Schizotypal personality questionnaire-brief.

PMAS- Premorbid adjustment scale.

Table 1

	Total Pvalue	a	b	c	SPQ-B	YBOCS	PMAS
Sex f=12,m=9	P	0.314	0.951	0.390	0.985	0.831	0.294
Marital M=10,Um=11	p	0.466	0.657	0.925	0.512	0.960	0.505
Occupation U=14,p=2,f=5	p	0.591	0.749	0.734	0.853	0.413	0.540
SES L=14,M=7	P	0.475	0.941	0.314	0.926	0.660	0.575
F H/O Mental illness N=10,P=11	p	0.312	0.203	0.638	0.134	0.819	0.307

YBOCS-Yale-Browns Obsessive Compulsive Scale.

DISCUSSION

From the above results it is found that there is significant correlation between total score of SPQ-B and duration of illness and duration of treatment received. Also in subscale there is significant relation between disorganized behavior and duration of illness and duration of treatment [See Table 2].

The findings from this study are in accordance with the study conducted by [Moritz S et al 2004][5] which provides evidence that positive schizotypal symptoms are antecedents for treatment failure in OCD and needs to be evaluated whether these at-risk individuals benefit from additional intervention.

Patients with long term OCD have higher scores in SPQ-B scales, where as those who have short term illness and also who responded well to treatment have low scores on SPQ-B. This suggests that schizotypal features have negative correlation with disease duration and treatment outcomes.

Few other studies which further supports this findings like a study by [Stanley MA 1990][6] which examined the prevalence and nature of schizotypal features in obsessive-compulsive disorder (OCD) and found that Twenty-eight percent of the sample had schizotypal features, although only 8% met criteria for schizotypal personality disorder. These findings are quite high than another study which mentions 5% prevalence of schizotypal personality disorder in OCD patient [Baer L, Jenike MA et al 1990][7].

Other study on personality disorders in OCD shown prevalence of 4% of schizotypal disorder [Müller B et al 2001][8]. Few other studies like a study by [Jenike MA et al 1986][9] mentions schizotypal personality disorder as poor prognostic factor in treatment of OCD.

The above mentioned references support findings that there is a strong relation in between schizotypal personality and OCD treatment outcomes. More the schizotypal features poorer is the outcome of treatment.

As a schizotypal disorder is schizophrenia spectrum condition few studies also tried to find if any relation exists between OCD, schizotypal disorder and schizophrenia. A study by [Poyurovsky M, Koran LM 2005][11] on Obsessive-compulsive disorder (OCD) with

Table 2

	Pearson correlation sig.(2-tailed)n=21	Age	Edu	Duration of illness	Duration of Rx	Co morbid diagnosis
a	P	.745	.334	.355	.151	.223
b	P	.738	.742	.294	.421	.390
c	P	.598	.942	.024(*)	.043(*)	.767
Total SPQ-B	P	.544	.541	.029(*)	.030(*)	.214
YBOCS	P	.135	.065	.211	.606	.002(**)
PMAS	P	.809	.817	.329	.718	.191

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed)

Table 3

Correlations

		TOTAL SPQ	YBOCS
TOTAL SPQ	Pearson Correlation		
	Sig. (2-tailed)		
	N		
YBOCS	Pearson Correlation	.899	
	Sig. (2-tailed)	.030*	
	N	21	
PMAS	Pearson Correlation	.326	-.204
	Sig. (2-tailed)	.150	.376
	N	21	21

*. Correlation is significant at the 0.05 level (2-tailed)

schizotypy vs. schizophrenia with OCD found that there are substantial areas of overlap between the two disorders in clinical characteristics, affected brain areas and pharmacotherapy and accurate diagnosis of both disorders in their "pure" and overlapping forms is necessary in order to evaluate etiological mechanisms underlying schizophrenia and OCD, and to provide adequate treatment and prognosis. A meta-analysis conducted by [Frommhold K.2006][12]on Obsessive-compulsive disorder and schizophrenia mentions that further investigations and studies are needed in larger cohorts of schizophrenic and OCD patients in order to identify a schizo-obsessive schizophrenia and a schizotypal subtype of obsessive compulsive disorder and to substantiate the algorithm for treatment. So OCD-schizophrenia interface has to be studied more extensively.

Findings from this study also shows that there is positive correlation in high SPQ-B scores and higher scores of Y-BOCS.That means patients with schizotypal feature show minimal decrease in symptoms even after treatment.

There was significant correlation between Y-BOCS scores and other comorbid diagnosis indicating that other psychiatric diseases like depression and anxiety disorder also affects treatment response.

No correlation was found between Premorbid Adjustment and other factors. The duration of illness and treatment duration remained independent of premorbid adjustment of the patient.

CONCLUSION

From above study following conclusion can be drawn that Schizotypal feature in OCD prolongs treatment duration with poor outcome. So due attention should be given to presence of schizotypal or any psychotic feature in OCD and any adjuvant treatment should also be considered necessary for such resistant cases of OCD.

LIMITATIONS

First , was in this study the sample size was small. Second , limitation treatment naive cases of OCD are difficult to get usually patient receives treatment for some duration from peripheral health facility, indigenous, religious treatment and ignorance about this illness among the general population.

REFERENCES

MA Jenike, L Baer, WE Minichiello, CE Schwartz and RJ Carey Jr . Am J Psychiatry 1986; 143:530-532. Concomitant obsessive-compulsive disorder and schizotypal personality disorder.

Aardema F, Kleijer TM, Trihey M, O'Connor K, Emmelkamp PM. Psychol Rep. 2006 Aug;99(1):213-20. Processes of inference, schizotypal thinking, and obsessive-compulsive behaviour in a normal sample.

Norman RM, Davies F, Malla AK, Cortese L, Nicholson IR. Br J Clin Psychol. 1996 Nov;35 (Pt 4):553-66. Relationship of obsessive-compulsive symptomatology to anxiety, depression and schizotypy in a clinical population.

Frank Tallis 1 , Roz Shafran 2. [1]Charter Nightingale Hospital , London, [2]Department of Psychology, University of British Columbia.Schizotypal personality and obsessive compulsive disorder. 1997 John Wiley & Sons, Ltd

Moritz S, Fricke S, Jacobsen D, Kloss M, Wein C, Rufer M, Katenkamp B, Farhumand R, Hand I Behav Res Ther. 2004 Feb;42(2):217-27. Positive schizotypal symptoms predict treatment outcome in obsessive-compulsive disorder.

Stanley MA, Turner SM, Borden JWb Compr Psychiatry. 1990 Nov-Dec;31(6):511-8 Schizotypal features in obsessive-compulsive disorder

Baer L, Jenike MA, Ricciardi JN 2nd, Holland AD, Seymour RJ, Minichiello WE, Buttolph ML Arch Gen Psychiatry. 1990 Sep;47(9):826-30 Standardized assessment of personality disorders in obsessive-compulsive disorder.

Müller B, Wewetzer C, Jans T, Holtkamp K, Herpertz SC, Warnke A, Remschmidt H, Herpertz-Dahlmann B Fortschr Neurol Psychiatr. 2001 Aug;69(8):379-87 Personality disorders and psychiatric comorbidity in obsessive-compulsive disorder and anorexia nervosa

Jenike MA, Baer L, Minichiello WE, Schwartz CE, Carey RJ Jr. : Arch Gen Psychiatry. 1986 Mar;43(3):296. Coexistent obsessive-compulsive disorder and schizotypal personality disorder: a poor prognostic indicator.

Sobin C, Blundell ML, Weiller F, Gavigan C, Haiman C, Karayiorgou M J Psychiatr Res. 2000 Jan-Feb;34(1):15-24. Evidence of a schizotypy subtype in OCD

Poyurovsky M, Koran LM J Psychiatr Res. 2005 Jul;39(4):399-408 Obsessive-compulsive disorder (OCD) with schizotypy vs. schizophrenia with OCD: diagnostic dilemmas and therapeutic implications.

Frommhold K. Fortschr Neurol Psychiatr. 2006 Jan;74(1):32-48 Obsessive-compulsive disorder and schizophrenia. A critical review

HISTORY OF ANTIDEPRESSANTS

Dr. Rajmohan V, Dr. Mohandas E

Antidepressants entered into the psychopharmacology armamentarium a little more than fifty years ago. In the last five decades serendipitous and targeted research has lead to the discovery of newer and improved agents for the treatment of depression. The area of antidepressant research is a fertile one with new targets and new drugs emerging ever so often. A brief sojourn into the history of antidepressants will help us in understanding the complexity involved in developing these agents and pay tribute to the stalwarts whose life work has helped cure millions of the gloom brought about by depression.

PRE-HISTORIC ERA

The earliest example for the use of a specific drug to treat madness is found in Greek mythology. Melampus, a Greek physician used the milk of goats that has eaten black hellebore (a purgative) to cure the daughters of the King of Argos. The principle for this treatment was probably rooted in the belief that madness is due to demonic possession and could be cured by expurging such demons through body orifices. Hippocrates believed that the removal of harmful humours from the body helped in curing mental ailments. White veratrum an emetic which contains the alkaloids protoverine A and B was used by Hippocrates to treat obstinate mania and melancholy. The 16t century saw the use of poppy (Papaver Somniforum) for the cure of pain and sorrow. Paracelsus prepared an elixir called 'Laudanum' using poppy. In the mid 18th century, Albrecht von Haller recognized that opium was responsible for the analgesic and antidepressant effects of poppy. The late 18th century saw the emergence of opium as a panacea in psychiatry due mainly to the work of John Brown. Opium tincture was introduced into the treatment of depression by Emil Kraepelin and its use was endorsed by Eugen Bleuler. The regime was a three weeks procedure of opium up titration on a daily basis from 3 to 25 minims, followed by gradual tapering of the dose before stopping. There is however no documentation regarding the effectiveness of this treatment. The other frequently used treatments were dinitrile succinate and haemtoporphyrin. Less frequently even reserpine was tried as an antidepressant, though data on its potential to induce depression emerged soon. (Healy, 1999)

The next few years did not offer much in terms of drugs for the treatment of melancholia or depression. The major discoveries in this area came during the latter half of the 20th century.

THE ERA OF ANTIDEPRESSANTS

The 1950s is called the "golden decade of psychopharmacology". The decade saw the

Dr. V. Rajmohan MD
Assistant Professor of Psychiatry KMCT Medical College and Consultant Psychiatrist, Baby Memorial Hospital Kozhikode
Dr. E. Mohandas MD
Chief Consultant Psychiatrist, Elite Mission Hospital, Koorkkencherry, Thrissur, Kerala

introduction of Chlorpromazine in 1952, meprobamate in 1954, and finally chlordiazepoxide in 1960. The same decade saw the introduction of the first antidepressants Iproniazid, a monoamine oxidase (MAO) inhibitor by Nathan S Kline, and later imipramine, a tricyclic antidepressant by Roland Kuhn both in 1957. The following decades saw an exponential rise in the antidepressant pharmacopeia with newer and improved drugs being introduced for the management of depression. It was around this time that Max Lurie a psychiatrist with a private practice in Cincinatti, coined the term 'antidepressant' while referring to the effect of isoniazid in depressed patients. (Berger & Barchas, 1977)

MONOAMINE OXIDASE INHIBITORS

The MAO inhibitors are hydrazide compounds. The hydrazides were discovered in the 1870s by Emile Fischer, the father of organic chemistry. He while working in the lab of Adolf von Baeyer discovered phenylhydrazine by accident in 1874. This discovery earned him the 1902 Nobel Prize for Chemistry. Later in 1912, Hans Meyer and Josef Malley synthesized isonicotinyl hydrazine as part of their doctoral thesis. For almost 40 years, this compound lay forgotten until its resynthesis and rediscovery and testing for its antitubercular properties in 1952. (Lopez Munoz et al, 2007)

Mary L Hare, a Cambridge researcher was able to demonstrate oxidative disamination of biogenic amines using an enzyme she called tyramine hydroxylase in 1928. (Hare, 1928) The enzyme identified by two groups (Herman Blaschko and Derek Richter in Cambridge and Cecilia Pugh and Judd Quastel in Cardiff) and was named 'monoamine oxidase' in 1937. In 1952, Ernest Albert Zeller of Chicago observed that iproniazid was capable of inhibiting MAO.

The origin of the first antidepressant drugs, the MAOIs, lies in the antitubercular hydrazide agents that had been used since the early 1950s. The introduction of isonicotinyl hydrazine or isoniazid, brought a revolutionary change in antitubercular treatment by bringing down the mortality from 188 per 100,000 to 4 per 100,000. In 1952, Irwing J Selikoff and Edward Robitzek, observed that ipronizid when compared with isoniazid had a greater power to stimulate the central nervous system, something they considered an adverse drug effect. Iproniazid showed greater psychological wellbeing, vigour and vitality when used to treat tuberculosis patients. This side effect inspired Jackson A Smith of Baylor University Texas, who analyzed it as a tranquilizer and observed improvements in two depressed patients. The effects of isoniazid were further investigated by Gordon R Kamman in United States and Carlos Castilla del Pino in Spain. (Delay et al, 1952; Kammam et al, 1953)

In 1957 April the meeting of American Psychiatric Association (APA) at Syracuse, the first data on the effects of iproniazid on depression in patients with tuberculosis was presented by George Crane from NewYork and Frank Ayd from Balimore. However both did not refer to it as an antidepressant. Nathan S Kilne and colleagues were the first to assess the effect of ipronizid on non tubercular depressed patients with chronic psychotic depression. Their results though presented in the APA meeting were not published till a year later. They observed a 70% patients who had received iproniazid had undergone substantial improvement. The same year Hoffman-La Roche Company sponsored a symposium on the biochemical and clinical aspects of Marsilid (Iproniazid) and other MAO Inhibitors. Smith, 1953) In this symposia 8 studies with benefit to around 300 patients, mainly depressed was presented. One year after the Syracuse meeting,

more than 400,000 patients with depression were treated with this drug and this opened the way for the first group of specific antidepressant drug. (Lopez Munoz et al, 2007)

Iproniazid soon gave way to more potent MAO inhibitors like isocarboxacid and tranylcypromine and phenelzine. Tranylcypromine though synthesized in 1948 by William Yost and Alfred Burger was recognized as an MAO inhibitor till 1959. The research by Smith Kline revealed this and its acceptability and safety profile made it the preferred MAOI alongside phenelezine. The commercial life of iproniazid was cut short in 1961 due to its reported nephrotoxicity and jaundice. The hepatotoxic effects lead to the pull out of the other hydarzines and the increased risk of hypertensive reaction or cheese reaction lead to the withdrawal of tranylcypromine from the market in 1964. The safety problems lead to further research on MAO agents and the identification of MAO-A and MAO-B isoforms by Johnston. These findings lead to the introduction of specific MAO-A/ MAO-B inhibitors, and reversible inhibitors of MAO (RIMA). (Lopez Munoz et al, 2007)

TRICYCLICS AND TETRACYCLICS

The Rhone-Poulenc laboratories had developed a host of antihistaminics and in 1948 Geigy chemists F Hafliger and W Schlindler used iminodibenzyle as the basis of synthesis of these chemicals. One such chemical G 22150 was under investigation by Roland Kuhn as a hypnotic. Though initially onvestigated as an antipsychotic, the intolerable side effects lead to this being sidelined for investigation on another moiety G22355. Though this did not have any rle as an antipsychotic Kuhn found that 3 depressives showed marked improvement. Consequently 37 other depressives were put on the drug and within a year the results were published in Schweizerische Medizinische Wochenschrift on the occasion of the second world congress of psychiatry in Zurich in September 1957. Geigy introduced this new compound imipramine into the market under name of Tofranil in the end of 1957. In 1961 the second tricyclic antidepressant amitryptyline was synthesized by Frank Ayd and was introduced by Merck. In 1963 came nortryptiline, 1965 came trimipramine, 1966 saw the introduction protriptyline, and in 1969 came doxepine and dotheipin. Although developed in 1958 clomipramine hit the market in 1975. (Healy, 1999)

In 1967 Max Wilhem and Paul Schmidt developed the first tetracyclic antibiotic maprotiline at Ciba laboratory. A few years later came mianserin, but this had only a marginal therapeutic advantage. (Healy, 1999)

Selective Serotonin Reuptake Inhibitor (SSRI)

In the 1970s Bryan Molloy and Robert Rathbun at Eli Lily observed that antihistamine diphenhydramine shows some antidepressant-like properties. 3-Phenoxy-3-phenylpropylamine, a compound structurally similar to diphenhydramine, was studied, and Molloy synthesized dozens of its derivatives and testing it in mice resulted in nisoxetine, a selective norepinephrine reuptake inhibitor currently widely used in biochemical experiments. Later, test carried out by Jong-Sir Horng in May 1972, showed the compound later named fluoxetine to be the most potent and selective inhibitor of serotonin reuptake of the series. A controversy ensued after Lilly researchers published a paper entitled Prozac, the first selective serotonin uptake inhibitor and an antidepressant drug claiming fluoxetine to be the first selective serotonin reuptake inhibitor (SSRI). Two years later they had to issue a correction, admitting that the first SSRI was zimelidine developed by Arvid Carlsson and

colleagues. Zimelidine was developed in the early 1980s by Arvid Carlsson, who was then working for the Swedish company Astra AB. It was discovered following a search for drugs with structures similar to brompheniramine (it is a derivative of brompheniramine), an antihistamine with antidepressant activity. Zimelidine was first sold in 1982. (Judd, 1998)

Fluoxetine made its appearance on the Belgian market in 1986 and was approved for use by the FDA in the United States in December 1987. Fluoxetine was the fourth SSRI to make it to market, after zimelidine, indalpine and fluvoxamine. However, the first two were withdrawn due to the side effects, and a vigorous marketing campaign by Eli Lilly made sure that in the popular culture fluoxetine has been perceived as a scientific breakthrough and associated with the title of the first SSRI. Fluvoxamine was one of the first of the SSRI antidepressants to be launched (1984, in Switzerland) and was developed by Solvay Pharmaceuticals. It was launched in the US in December 1994 and in Japan in June 1999. (Healy, 2001)

Sertraline appered in1970s, when Pfizer chemist Reinhard Sarges invented a novel series of psychoactive compounds based on the structures of neuroleptics chlorprothixene and thiothixene. Further work on these compounds led to tametraline, a norepinephrine and weaker dopamine reuptake inhibitor. Development of tametraline was soon stopped because of undesired stimulant effects observed in animals. A few years later, in 1977, pharmacologist Kenneth Koe, after comparing the structural features of a variety of reuptake inhibitors, became interested in the tametraline series. He asked another Pfizer chemist, Willard Welch, to synthesize some previously unexplored tametraline derivatives. Welch generated a number of potent norepinephrine and triple reuptake inhibitors, but to the surprise of the scientists, one representative of the generally inactive cis-analogs was a serotonin reuptake inhibitor. Welch then prepared stereoisomers of this compound, which were tested *in vivo* by animal behavioral scientist Albert Weissman. The most potent and selective (+)-isomer was taken into further development and eventually named sertraline. Sertraline was approved by the U.S. Food and Drug Administration (FDA) in 1991. (Crouzon, 2005) In 1992 Glaxo Smith Kline Beecham marketed paroxetine. Citalopram was introduced in 1989 by the pharmaceutical company Lundbeck. Escitalopram was developed in a close cooperation between Lundbeck and Forest Laboratories. Its development was initiated in the summer of 1997, and the resulting new drug application was submitted to the U.S. FDA in March 2001. (Healy, 2001)

NEWER ANTIDEPRESSANTS

Bupropion was invented by Nariman Mehta of Burroughs Wellcome (now GlaxoSmithKline) in 1969, and the US patent for it was granted in 1974. It was approved by the United States Food and Drug Administration (FDA) as an antidepressant on December 30, 1985 and marketed under the name Wellbutrin. However, a significant incidence of seizures at the originally recommended dosage (400–600 mg) caused the withdrawal of the drug in 1986. Subsequently, the risk of seizures was found to be highly dose-dependent, and bupropion was re-introduced to the market in 1989 with a maximum recommended dose of 450 mg/day. (Judd, 1998)

Venlafaxine was first introduced by Wyeth in 1993, and its active metabolite desvenlafaxine was synthesized in 2006 and

was later FDA approved in 2008. Duloxetine was created by Lilly researchers David Robertson, David Wong, and Joseph Krushinski. The first publication on the discovery of the racemic form of duloxetine known as LY227942, was made in 1988. The (+)-enantiomer of LY227942, assigned LY248686, was chosen for further studies, because it inhibited serotonin reuptake in rat synaptosomes two times more potently than (–)-enantiomer. This molecule was subsequently named duloxetine. (Wyeth, 2008)

Milnacipran has been approved and sold in Austria since September 1998 under the brand name Ixel. Cypress Bioscience bought the exclusive rights for approval and marketing of the drug for any purpose in the US and Canada in 2003 from the manufacturer Pierre Fabre; the approval procedure in both countries is ongoing. In Chile, under the "Ixel" brand name is being sold by Silesia Laboratories. In Israel, milnacipran is distributed by Mediline Limited. In January 2009 the U.S. Food and Drug Administration (FDA) approved milnacipran (under the brand name Savella) for the treatment of fibromyalgia. Mirtazapine a successor of mianserin was introduced by Organon International in 1994. (Wikipedia, 2009)

Agomelatine was discovered and developed by the European pharmaceutical company Servier Laboratories Ltd. On 27 July 2006 the Committee for Medical Products for Human Use (CHMP) of the EMEA recommended a refusal of the marketing authorisation of Valdoxan/ Thymanax (agomelatine). The major concern was that efficacy had not been sufficiently shown. The CHMP had no special concerns about the side effects. On 20 November 2008, Valdoxan was given a positive opinion by the EMEA, and was subsequently given marketing aurthorisation in the European Union on 20 February 2009. In March 2006, Servier sold the rights to market agomelatine in the United States to Novartis. Novartis currently lists the drug as scheduled for submission to the FDA no earlier than 2012. (Servier, 2009)

CONCLUSION

Antidepressants revolution has changed the course of depression treatment offering new hope to millions of patients and their family. Antidepressant pharmacopeia has in the last 50 years come of age and the search for newer and improved drugs makes this an interesting area of research. The research into newer antidepressant targets also promises to unravel the hitherto hidden pathophysiology of depressive disorder. A better understanding of this enigma that we call depressive disorder will help in designing more efficacious antidepressants that promise cure with lesser adverse effects.

REFERENCES

Berger P, Barchas JD. Monoamine oxidase inhibitors. In: Usdin E, Forrest IS, ed. Psychotherapeutic drugs. New York: Marcel Dekker; 1977; 2:1173-1216.

Delay J, Laine B, Buisson JF. Anxiety and depressive states treated with isonicotinyl hydrazide (isoniazid). Arch Neurol Psychiatry. 1952; 70: 317-324.

Crouzon J. A short blurb on the history of sertraline,. "The brains behind blockbusters". *Science* 2005; 309 (5735): 728

Hare MLC. Tyramine oxidase: a new enzyme system in the liver. Biochem J. 1928; 22:968-979.

Healy D. The Antidepressant Era. Cambridge: Harvard University Press; 1999: 10-100

Healy D. The Antidepressant Drama. In: Treatment of Depression: Bridging the 21st Century. Ed: Weismann MM; American Psychiatric Press 2001: 7-35

Judd LL. A decade of antidepressant development: the SSRIs and beyond. J Affect Disord. 1998; 51:211-213.

Kamman GR, Freeman JG, Lucero RJ. The effect of 1-isonicotinyl-2-isopropyl hydrazide (IIH) on the behaviour of long-term mental patients. J Nerv Ment Dis. 1953; 118:391-407

López-Muñoz F, Alamo C, Juckel G, Assion HJ. Half a century of antidepressant drugs: on the clinical introduction of monoamine oxidase inhibitors, tricyclics, and tetracyclics. Part I: monoamine oxidase inhibitors. J Clin Psychopharmacol. 2007 Dec; 27(6):555-9.

Servier. "VALDOXAN (AGOMELATINE), A NOVEL ANTIDEPRESSANT, RECEIVES EUROPEAN MARKETING AUTHORISATION". Servier UK. 25 February 2009. http://www.pharmiweb.com/PressReleases/pressrel.asp?ROW_ID=5770. Retrieved 6 July 2009.

Smith JA. The use of the isopropyl derivative of isonicotinylhydrazine (Marsilid) in the treatment of mental disease. Am Pract. 1953; 4:519-520.

Wikipedia. http://en.wikipedia.org/wiki/Milnacipran. Retrieved on 21st December.2009.

Wyeth (2008-02-29). "FDA Approves Pristiq". Press release http://www.wyeth.com/news?nav=display&navTo=/wyeth_html/home/news/pressreleases/2008/1204331198948.html Retrieved 2008-02-29.

A STUDY OF PERSONALITY PROFILE, PERCEIVED STRESS AND SOCIAL SUPPORT IN ADJUSTMENT DISORDER PATIETS WITH SUICIDAL ATTEMPT

Dr. Abdul Razak. A

INTRODUCTION

Suicidal attempts are increasing alarmingly across the globe and contribute to significant morbidity and health care utilization. Adjustment disorder is one of the commonest cause of suicidal attempts. Study in Kerala also shows that adjustment disorder is the commonest psychiatric diagnosis in suicidal attempt patients (Sajush Baby, Manju P Haridas, KF Yesudas).

Adjustment disorder entered the DSM II nomenclature in 1968 and was recognized in ICD9 in 1978 replacing the term transient situational disturbances. By definition adjustment disorder is a state of subjective distress and emotional disturbances usually interfering with social function and performance and arising in the period of adaptation to a significant life change or to the consequence of a stressful life events.

Since certain personality traits or disorder are established risk factor for suicide or attempt. Studies also shows that perceived stress is high and social support is low in adjustment disorder (Uhlenhutch and Balter et al).

The present study to assess the personality profile, perceived stress and social support of a group of patients attended in our suicide preventive clinic and their relationship with sociodemographic data and with each other.

AIMS

1. To study personality profile, perceived stress and social support in a group of deliberate self harm patients with adjustment disorder.

2. To study relationship between personality profile, perceived stress and social support and with sociodemographic data and with each other.

METHODS AND METHODOLOGY

Study centre

Department of Psychiatry, Medical College, Calicut

Subject

Patients attending suicide preventive clinic of Psychiatry department of Calicut Medical College with a diagnosis of adjustment disorder by ICD 10.

Dr. A. Abdul Razak MD
Junior Consultant in Psychiatry
District Hospital, Manjeri

Study period

2 months

Type of study

Descriptive cross sectional study

TOOLS

1. Semi structural data sheet of sociodemographic data

2. Eysenck personality questionnaire (EPQ) by Eysenck – Is a 90 item yes or no, self answering questionnaire by which he divided personality into 3 ie. Psychoticism, Extraversion and Neuroticism.

3. Perceived stress scale by (Cohen, Ramarck and Mermelstein 1988) – 14 items – 5 point scale score 0-56

4. Social support scale: 19 item – 4 point scale

METHODOLOGY

30 consecutive subjects attended suicide preventive clinic with a diagnosis of adjustment disorder by ICD 10 were selected for study. Sociodemographic data collected from patient and bystanders. Validated Malayalam version

RESULTS

Sex distribution

Sex	Social support	Perceived stress
Male (13)	44.92	44.85
Female (17)	45.65	43.29
Total (30)	45.33	43.97
P value	0.705	0.547

Education

Education	Social support	Perceived stress
1.00 or <10 (9)	44.33	47.56
>10 (21)	45.76	42.43
Total (30)	45.33	43.92
P value	0.489	0.589

Religion

Religion	Social support	Perceived stress
Hindu (23)	44.87	44.61
Muslim (7)	46.86	41.86
Total (30)	45.33	43.97
P value	0.373	0.36

Occupation

Occupation	Social support	Perceived stress
Employed (15)	45.13	42.80
Unemployed (9)	47.11	43.89
Students (6)	43.17	47.00
Total (30)	45.33	43.97
P value	0.34	0.76

Marital status

Marital status	Social support	Perceived stress
Married (11)	47.09	44
Unmarried (17)	44.12	44.76
Divorce (2)	46	37
Total (30)	45.33	43.97
P value	0.322	0.326

Domicile

Domicile	Social support	Perceived stress
Rural (18)	44.78	44.39
Urban (12)	46.17	43.33
Total (30)	45.33	43.97
P value	0.472	0.686

Family type

Family type	Social support	Perceived stress
Nuclear (27)	45.37	43.96
Joint (3)	45.00	44.00
Total (30)	45.33	43.97
P value	0.907	0.361

EPQ

EPQ	Social support	Perceived stress
Neuroticism (24)	45.58	50.33
Extroversion (6)	44.33	40.38
Total (30)	45.33	43.97
P value	0.598	0.008

of Eysenks personality questionnaire, perceived stress scale and social support scale were given to patients. Total score of each scale was calculated and correlated with sociodemongraphic profile and with each other.

Statistical analysis

Using SPSS 13 software

DISCUSSION

This study included a sample of patients from a tertiary care centre being referred to the suicide prevention clinic following DSH. The results might have been affected by the referring practices of the various departments in this hospital. There is also no much studies about adjustment disorder.

In our study 17 patients are females and 14 boys. Other studies shows adjustment disorder is twice common in women than men (Kaplan and Saddock). Mean age in our study is 25.2. Usually the disorder can occur in any age but more common in adolescence.

By definition itself adjustment disorder is percepitated by one or more stresses. So perceived stress is high in adjustment disorder, which also shows in our study. In our study adjustment disorder is more common in neuroticism patients and there is increased perceived stress in neuroticism patients.

There is no significant difference in perceived stress and social support in different scores, educational group, religion, occupational stress, marital status, domicile and family state.

There is negative correlation between social support and perceived stress which is expected.

CONCLUSION

Adjustment disorder is common in neuroticism patients. Perceived stress is more common in neuroticism patients. There is negative correlation between social support and perceived stress.

LIMITATION

1. The finding cannot be generalized due to the small sample size

2. There is no control group

3. Only a singe interview with the patient is conducted which is done in close to the suicidal attempt. Hence patients stress at that time may reflect in responses.

REFERENCES

Sajush Baby et al. Psychiatric diagnosis in attempted suicide.

Kaplan and Saddock. 8th edn

PREVALENCE OF ANXIETY AND DEPRESSION AMONG ALCOHOL DEPENDENT SUBJECTS

Dr. Arun B Nair

BACKGROUND

Studies conducted in different centres across the world have uniformly shown a high prevalence of co-morbid axis I disorders among alcohol dependent subjects. Among these disorders, depressive and anxiety disorders contribute a significant share.

The Multicentre study of Psychiatric co-morbidity in Alcoholics (MUPCA) identified a 6 months prevalence rate of 53.1% of co-morbid psychiatric disorders among alcoholic dependent subjects. 42.3% had anxiety disorders out of which specific phobia (18.5%), social phobia (13.7%), agoraphobia (13.1%) and generalized anxiety disorder (12.9%) were common. 24.3% had affective disorders. Various studies have shown a prevalence rate of 2-39% in social phobia, 8-56% in generalized anxiety disorder, 3-60% for panic disorders, 2-41% in agoraphobia and 3-12% of OCD among alcohol dependent subjects.

The cause-effect relationship between alcohol dependence and anxiety-depressive disorders have been a contentious issue which have been examined by several investigations. Matt G Kashner et al opined that alcohol use disorders and anxiety disorders demonstrate a reciprocal causal relationship over time, with anxiety disorders leading to alcohol dependence and vice versa. Marc A Schuckit pointed out that the high rates of co-morbidity in some studies reflect a mixture of true anxiety disorders among alcoholics at a rate equal to or slightly higher than that in the general population, along with temporary, but at times severe substances-induced anxiety disorders.

Few Indian studies have examined the cause-effect relationship between alcohol use disorders and anxiety-depressive disorders. It is in this context that the present study is undertaken to assess the prevalence of anxiety and depression among alcohol dependent subjects.

OBJECTIVES

1. To study the prevalence of depressive and anxiety disorders among alcohol dependent subjects

2. To assess whether anxiety-depressive symptoms or alcohol use started first in the above subjects

3. To get a subjective report whether alcohol use helps in alleviating the symptoms of depression and anxiety

Dr. Arun B Nair MD
Assistant Professor of Psychiatry
TD Medical College, Vandanam
Alappuzha

MATERIALS AND METHODS

The study population consisted of 40 consecutive alcohol dependent patients who had attended de-addiction clinic, Medical College Calicut, who had completed at least 2 weeks of total abstinence.

The study period was from 1st June 2007 to 31st July 2007.

INCLUSION CRITERIA

1. Alcohol dependent subjects who had attended de-addiction clinic, Department of Psychiatry, Medical College Calicut

2. People between 18-65 years of age

3. People who had completed at least 2 weeks of total abstinence

EXCLUSION CRITERIA

The following persons were excluded from the study

1. Those with mental retardation

2. Those with acute medical illness who are not able to co-operate

3. Those not willing to give consent

Informed consent was taken from all participants

STUDY TOOLS

1. Sociodemographic data was collected using a specially designed proforma. It also contained two additional questions – (a) whether symptoms of anxiety / depression started first or alcohol use started first and (b) whether alcohol use has helped to alleviate the symptoms of anxiety / depression. These questions are to be answered only by those found to have a diagnosis of depressive or anxiety disorders as per MINI.

2. MINI International neuropsychiatric interview schedule: This was used to assess whether the subjects had a comorbid axis I diagnosis. This schedule developed by Sheehan D et al conforms a screener and the main part. The main part has modules covering all major psychiatric illness.

3. Hamilton Depression Rating Scale was applied to all patients to rate the depression.

4. Hamilton Anxiety Rating Scale was applied to all patients to rate the anxiety.

RESULTS

Overall 40 alcohol dependent subjects were included in the study. All of them were males. Out of these 18 (45%) had a comorbid anxiety disorder. Among these 8 people had social phobia (20%), 6 had agorophobia (15%), 4 had generalized anxiety disorder (10%) and 3 had panic disorder (7.5%). The prevalence of depressive disorders was 11 (27.5%) out of which, 7 had major depressive episode (17.5%), 3 had bipolar depression and one had dysthymia (2.5%).

Out of the 40 subjects, 25 people (62.5%) had either an anxiety disorder, depressive disorder or both. Four subjects (10%) had both comorbid anxiety and depressive disorders together.

Subjects with a family history of regular alcohol use had a statistically significant higher prevalence of depressive disorders than those without. Family history of mental illness was also associated with higher prevalence of depressive disorders and anxiety disorders.

Those subjects with comorbid anxiety disorders had an earlier age of onset of drinking (15.2 yrs) compared to those without (19 yrs); and this difference was statistically significant (P value 0.014). 88% of those with anxiety disorders reported that anxiety symptoms had started before the onset of drinking (P value <0.01). 94.5% of those with anxiety disorders

Table 1 : Prevalence of depressive and anxiety disorders

Diagnosis	No.of patients	Percentage
Anxiety disorders	18	45
Social phobia	8	20
Agorophobia	6	15
GAD	4	10
Panic disorder	3	7.5
Depressive disorders	11	27.5
Major depressive episode	7	17.5
Bipolar depression	3	7.5
Dysthymia	1	2.5

Table 2 : Sociodemographic data

		Depressive disorders		P value
		Present	Absent	
Religion	Hindu	3	11	0.092
	Muslim	7	11	
	Christian	1	7	
Socioeconomic status	Low	10	15	0.818
	Middle	1	13	
Family h/o alcohol	Present	10	22	0.05
	Absent	1	7	
Family h/o mental illness	Present	8	1	0.01
	Absent	3	28	

Table 3 : Sociodemographic data

		Anxiety disorders		P value
		Present	Absent	
Religion	Hindu Muslim Christian	5 11 2	9 7 6	0.081
Socioeconomic status	Low Middle	11 7	14 8	0.45
Family h/o alcohol	Present Absent	16 2	16 6	0.15
Family h/o mental illness	Present Absent	9 9	0 22	0.01

Fischer's exact test P <0.05 significant

Table 4 : Age of onset of drinking

	Age (yrs)	P value
Anxiety disorders	15.2	0.014
Others	19	

Table 5 : Age of onset of drinking

	Age (yrs)	P value
Depressive disorders	18.5	0.984
Others	18.6	

Table 6 : Whether anxiety symptoms or drinking started first

	No.	%	P value
Symptoms	16	88	<0.01
Drinking	2	11	

Table 7 : Whether depressive symptoms or drinking started first

	No.	%	P value
Symptoms	3	27.2	0.652
Drinking	8	72.8	

Table 8 : Whether drinking helps to alleviate anxiety symptoms

	No.	%	P value
Yes	17	94.5	<0.001
No	1	5.5	

Table 9 : Whether drinking helps to alleviate depressive symptoms

	No.	%	P value
Yes	7	63.6	0.752
No	4	36.4	

Chi-square test P<0.05 significant

stated that alcohol helped to alleviate the symptoms of anxiety (P value <0.01).

DISCUSSION

The prevalence rate of anxiety disorders (45%) and depressive disorders (27.5%) as per this study is similar to that observed in MUPCA study which had found a prevalence rate of 42.3% and 24.3% for anxiety and depressive disorders respectively. The prevalence of individual anxiety disorders like social phobia (20%), agorophobia (15%) and generalized anxiety disorder (10%) were also comparable to those obtained in the MUPCA study.

There was a statistically significant association between family history of mental

illness and prevalence of depressive as well as anxiety disorders (P value 0.01). There was a statistically significant association between family history of alcohol use and prevalence of depressive disorders (P value 0.05).

An earlier age of onset of drinking was seen in those subjects with anxiety disorders than those without (15.2 yrs vs 19 yrs, P value 0.014 significant). These were similar to the results observed by Schneider et al 2001.

88% of the subjects with anxiety symptoms reported that anxiety symptoms started before onset of drinking behaviour (P value <0.01). 94.5% of those people with anxiety disorders reported that drinking helped to alleviate symptoms of anxiety (P value <0.01).

The results of the study are similar to those obtained in the studies by Thyer et al and Amies et al which have shown a high prevalence of alcohol use among social phobia and agoraphobic patients. But the fact that a majority of the subjects stated that anxiety symptoms started before onset of alcohol use should alert us of the possibility of a preexisting anxiety disorder at subclinical level in a major share of alcohol dependent subjects. The fact that a major share of those with anxiety disorders have reported alleviation of anxiety symptoms following alcohol use is also reported by authors like Thyer et al and Amies et al.

CONCLUSIONS

The present study has identified that a significant proportion of alcohol dependent subjects have comorbid anxiety and depressive disorders and that a significant majority of those with anxiety symptoms have reported that symptoms of anxiety started before onset of alcohol use. Majority of the patients with anxiety disorders also reported that alcohol use helped to alleviate anxiety symptoms to some extent. Depressive and anxiety disorders were more common in subjects with a family history of mental illness while depressive illness was more associated with family history of alcohol use.

LIMITATIONS

The small sample size of the present study is an important limitation. The fact that no female subjects were available is also an important limitation worth mentioning. The details about whether alcohol or symptoms of illness started first; as well as about relief of symptoms following alcohol use, were both based on subjective reports from the participants.

FUTURE DIRECTIONS

The present study throws light on the fact that anxiety symptoms are prevalent in a major share of those subjects with comorbid anxiety disorders even before onset of alcohol use and that drinking is often used as a 'self medication' measure to relieve symptoms. This calls for a larger and more structured study with a larger sample size to assess the extend of the problem, since identification of these symptoms at an younger age could go a long way on preventing the disastrous effects of alcohol dependence in future.

REFERENCES

· U Schneider et al. Comorbid anxiety and affective disorder in alcohol dependent patients seeking treatment. The first multicentre study in Germany. Alcohol and Alcoholism vol.36, No.3, pp.219-223, 2001.

· Mimi Roberts et al. Anxiety disorders among abstinent alcohol dependent patients. Psychiatric Services 1999; 50: 1359-61.

· Marc A Schuckit, Victor Hesselbrock. Alcohol dependence and anxiety disorders. What is the relationship. Am J Psych 1994; 151: 1723-24.

· Matt G Kushner, Kenneth K Sher, Darin J Erickson. Prospective analysis of the relation between DSM III anxiety disorders and alcohol use disorders. Am J Psych 1999; 156: 723-732.

· Culrike Willinger. Anxiety as a predictor of relapse in detoxified alcohol dependent patients. Alcohol and Alcoholism. Vol.37, No.6. pp.609-12, 2002.

· Alcohol dependent patients with comorbid phobic disorders. A comparison between comorbid patients, pure alcohol dependent and pure phobic patients. Annemiek Schade et al. Alcohol and Alcoholism Vol.39, No.3, pp.241-246, 2004.

· Do comorbid anxiety disorders in alcohol dependent patients need specific treatment to prevent relapse? Annemiek Schade et al. Alcohol and Alcoholism. Vol.38, No.3, pp.255-262, 2003.

· Driessen M, Veltrup C, Wetterling T, John U, Dilling H (1998). Axis I and Axis II comorbidity in alcohol dependence and the two types of alcoholism. Alcoholism: Clinical and Experimental Research 22, 77-86.

· Kessler R et al (1997). Life time co-occurrence of DM III R alcohol abuse with other psychiatric disorders in the National comorbidity survey. Archives of General Psychiatry 51: 313-321.

· Swendsen JD et al. The comorbidity of alcoholism with anxiety and depressive disorders in four geographic communities. Comprehensive Psychiatry 39: 176-184.

· World Health Organization (1992). International Classification of Diseases, 10th edn, WHO, Geneva.

· Thyer BA et al. Alcohol abuse among agorophobics. Alcoholism treatment quarterly. 1987; 4: 61-67.

· Amies PL et al. Social phobia: a comparative clinical study. Br. J Psychiatry 1983; 142: 174-179.

A STUDY OF SOCIAL ANXIETY AND LEVEL OF MOTIVATION IN ALCOHOL DEPENDENCE

Dr.Manoj .K

Symptoms of anxiety or depression or personality traits such as antisocial behaviour, conduct problems, violence, criminal acts or personality disorders are frequently associated with alcohol dependence and sometimes precede it. Kushner et al (2000) concluded that anxiety disorder and alcohol disorder could each initiate the other. Driessen et al (2001) concluded that severe trait anxiety persisting after 3 weeks of abstinence, comorbid depressive or anxiety disorders and combinations of these with moderate or severe anxiety and depressive states are associated with current anxiety.

Schneider et al (2001) observed an overall comorbidity rate in treatment seeking alcohol dependent patients of 42.3% for any anxiety disorder 13.7% for social phobia, 13.1% for agoraphobia and 5.2% for panic disorder.

The NEMESIS study (Ravelli et al 1998) reported that 8.3% of population with an alcohol dependence had a panic disorder with or without an agoraphobia 4.5% has agoraphobia and 7.4% has social phobia.

Level of motivation is an essential pre-requisite to bring about change in alcohol abuses. Current literature suggests that lack of motivation to change is not a trait rather motivation is fluid and can be influenced (Stewart et al 1995). My present study finds to: assess the social anxiety and level of motivation in alcohol dependent patients.

AIM

1. To assess the level of social anxiety and level of motivation in alcohol dependent patients.

STUDY PERIOD

Venue: Psychiatry department Calicut Medical College.

INCLUSION CRITERIA

1. Those who give informed consent
2. Patients free of 'withdrawal symptoms'
3. Duration of abstinence 2wks – 4wks
4. Patients more than 18 years of age

Exclusion criteria

1. Comorbid physical illness
2. Patients using other substances other than tobacco

Study tools

1. Sociodemographic data

Dr. K. Manoj MD
Senior Resident, Dept of Psychiatry
Medical college, Calicut

2. ICD-10 criteria for alcohol dependence syndrome
3. Miniplus – To screen the patient for anxiety and other psychiatric disorder
4. Leibowitz social anxiety scale
5. University of Rhode Island change assessment scale

Statistical analysis using SPSS version

Operational procedure

Those who are meeting ICD-10 criteria for alcohol dependence and those who are free of withdrawal symptoms were taken for the study. Informed consent taken and was sociodemographic details were collected. Miniplus was applied to screen the patient for anxiety and other psychiatric disorder. If

Table 1: Motivation score with Hindus

Religion	Mean	Number	Std. Deviation
Hindu	11.1432	19	1.78
Muslim	9.47	7	1.86
Christian	9.75	4	2.10
Total	10.5	30	1.93

P value 0.96

Table 2: Comparison of motivation score with occupational status

Occupation	Mean	Number	Std. Deviation
Fully employed	10.5	20	2.02
Partially employed	10.85	6	1.75
Unemployed	10.47	4	2.24
Total	10.56	30	1.93

P value 0.928

Table 3: Comparison of motivation score with marital status

Marital status	Marital status with number	Motivation mean	Std. Deviation
Unmarried	8	10.27	2.28
Married	22	10.67	1.84
Total	30	10.67	1.93

P value 0.629

Table 4: Comparison of motivation score with social anxiety score

	N	Mean	Std. Deviation
Social anxiety patients	3	12.06	1.66
Without social anxiety	27	10.40	1.92
Total	30	10.56	1.93

P value 0.162

Table 5: Comparison of motivation score with family h/o alcoholism

	N	Mean	Std. Deviation
Family h/o alcoholism present	17	10.14	1.85
Family h/o alcoholism absent	13	11.11	1.97
Total	30	10.56	1.93

P value 0.179

Table 6: Comparison of motivation score with family h/o mental illness

	N	Mean	Std. Deviation
Present	5	9.82	1.56
Absent	25	10.87	1.97
Total	30	10.568	1.93

P value 0.092

Correlation

	N	Pearson correlation	Significance
Age	30	0.348	0.06
Education	30	-0.33	0.862
Onset	30	0.083	0.665
Amount	30	0.151	0.425
Last drink	30	0.187	0.321

patient has social anxiety 'Leibowitz social anxiety scale' was applied. For every patient URICA was applied to assess the level of motivation.

DISCUSSION

Total 30 patients were included in the study of which 19 patients were hindus, 7 muslims, 4 christians (Table 1). 20 patients were fully employed, 6 patients partially employed, 4 patients were unemployed (Table 2). 8 patients were unmarried and 22 were married. Out of 30 patients, 3 patients got social anxiety. Of the 30 patients motivation scores of 8 patients comes under precontemplation stage (9.3). 10 patients in contemplation stage (11.0), 12 patients in action stage (12.6). About 40% of the patients could be classified as being high on motivation.

Out of 30 patients, 3 patients (10%) were found to have a diagnosis of social anxiety. These finding is in concordance with the earlier studies. Earlier clinical and epidemiological studies have shown substantial co-occurrence of anxiety disorders with alcohol use disorders. A large community based study of psychiatric disorders, such as the ECA study (Regier et al 1990) reported that 12.2% of the population with an alcohol dependence had a comorbid anxiety disorder.

Schnieder et al (2001) found overall comorbidity rate of 42.3% for any anxiety disorder, and specifically for panic disorder 5.2%. Agoraphobia 13.1% and social phobia 13.7%. A possible explanation for the high comorbidity rates is the 'self medication' hypothesis. Although at first the use of alcohol may decrease anxiety symptoms, later on it promotes persistent and excessive use by a vicious cycle (Kushner et al 2000). So in this study we included two hypothesis driven questions they are (1) whether alcohol use or anxiety started first (2) whether alcohol use was helped to alleviate the symptoms of anxiety. All 3 patients responded anxiety started first and alcohol use alleviated anxiety.

Thus this finding is corroborative with the self medication hypothesis as suggested by others. In a previous study done in our own centre conducted by Dr.Arun found that about 45% of the patient has got a comorbid anxiety disorder and this study also found corroborative evidence for self medication hypothesis.

Of the 30 patients nearly half of the patients' motivation comes under action phase. However none of the sociodemographic parameters including age, education, marital status significantly influenced level of motivation. Neither did alcohol related parameters such as age of onset and number of years of dependence. This finding is similar to the findings obtained by the study by Pratima Murthy et al.

CONCLUSION

In conclusion it can be said that social anxiety disorder is a significant comorbid diagnosis in patients attending deaddiction clinic. Although numbers are small this study also found support of the subjective self medication hypothesis for alcohol abuse in anxiety. Also this study found that 40% of the patients attending DAC has got high motivational scores in URICA. Specifically the 3 patients who need a diagnosis of social anxiety had good motivational scores.

LIMITATION

1. Very small sample size. So that study cannot be generalized

2. The scale has got complex scoring procedures and the scale was based on prochaska declemmente's stage of changes of model. It is a theoretical model. So the motivation assessment was a difficult procedure.

FUTURE DIRECTIONS

1. Further studies may be undertaken to find out the impact of baseline levels of motivation, change in motivational status as a part of therapy, and the implication of these on outcome, both in respect of drinking, health status and psychosocial outcomes.

2. Further studies should be done to find out the relationship between social anxiety and alcohol dependence.

REFERENCES

Ravelli A, Bijil R and Van Zessen G. Netherlands Mental Health Survey and incidence study (NEMESIS) Tijdschriftvoor psychiatrie 40: 531-544.

Driessen M, Meier S, Hill A, Wetterling T, Lange W and Junghanns K (2001). The course of anxiety, depression and drinking behaviours after completed detoxification in alcoholics with and without comorbid anxiety and depressive disorders. Alcohol and Alcoholism 36: 249-255.

Kushner MG, Abrams K and Borchardt C (2000). The relationship between anxiety disorders and alcohol use disorders: a review of major perspectives and findings. Clinical Psychology review 20: 149-171.

Matt G, Kushner Ph.D, Kenneth J, Sher Ph.D and Darin J, Erickson MA. Prospective analysis of the relation between DSM-III Anxiety disorders and alcohol use disorders.

Romach KR and Doumanio S (1997). Alcoholism and anxiety disorders. In dual diagnosis and treatment, Kramler HR and Rounsuville BJ eds pp.137-175. Murul Dekker, Newyork.

Diclemente (1999). Motivation for change: implications for substance abuse treatment, psychological science 10(3): 209-213.

Diclemente et al (1999). Motivation for change and alcoholism treatment. Alcohol research and health 23(2): 86-91.

Dr. Prathima Murthy, Ms. Prasanthi N, Dr. Nagarajaiah, Dr.K. Reddemma, Dr. V. Shanmugam. Motivational levels and influencing factors in alcohol dependence. Indian Journal of Psychological Medicine 2008. P (38-41).

Regier DA, Farmer ME, DS Locke, Keith SJ and Goodwin FK (1990). Comorbidity of mental disorders with alcohol and other drug abuse. Results from the epidemiologic catchment area study. Journal of the American Medical Association. 2511-2518.

AN INTRODUCTION TO THE MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW (M.I.N.I.) AND ITS MALAYALAM VERSION

Dr.C.T. Sudhir Kumar[1,5], Dr.Dinesh N[2], Dr.Sandhya Cherkil[2], Ms Seema Satish[2], Dr.Siby Mathew[2], Dr. Sen Varghese Kallumpuram[3], Dr. Harish Tharayil[4], Dr.Gopinath Ranjith[5,] Prof. VM Mathew[1,2,3], Prof. Sophia Frangou[1]

Structured diagnostic instruments are one of the cornerstones of good practice in psychiatric research and clinical work. Unfortunately such instruments have been invariably developed and validated in Western, mostly English speaking, cultures and therefore require cross cultural translation and validation before they can be meaningfully used in other settings. To our knowledge the use of formal diagnostic assessments in Malayalam is extremely limited because of the lack of validated instruments. To address this issue we have recently completed the translation and validation of the Mini-International Neuropsychiatric Interview (M.I.N.I.) into Malayalam.

Psychiatric diagnoses currently rely on detailed descriptions of behaviours and internal experiences based on patients' self-report or observed by relatives or clinicians. It is therefore vital that such information is elicited and recorded in a structured fashion and then evaluated against operational criteria for mental disorders. The importance of formal diagnostic assessments is underscored by the lack of laboratory tests or other investigations to validate psychiatric diagnoses. Hence it is of paramount importance to ensure that the diagnostic interviews are of high quality and include questions covering all relevant criteria to enable diagnosis according to current classificatory systems.

Structured diagnostic interviews were developed to minimise variability and improve reliability of clinical diagnoses in psychiatry. Unlike informal clinical interviews, structured interviews are based on questions that are precise and standardised. As a result these interviews have high inter-rater reliability and predictive power across sites and cultures. [1] The Present State Examination (PSE) [2] was the first standardised structured clinical interview to be adopted on an international

[1]Department of Psychosis Studies, Section of Neurobiology of Psychosis, Institute of Psychiatry, King's College London, UK.
[2]Collaborative Research Unit, Amrita Institute of Medical Sciences,Ernakulum, Kerala, India.
[3]Kent and Medway NHS and Social Care Partnership Trust, UK.
[4]Department of Psychiatry, Medical College Hospital, Thiruvananthapuram, Kerala, India.
[5]South London and Maudsley NHS Foundation Trust, UK

Address for correspondence
Dr. CT Sudhir Kumar- doctorctskumar@hotmail.co.uk

basis. [3] Since then a number of structured interviews have been developed. The most commonly used instruments are the DIS (Diagnostic Interview Schedule) [4], SADS (Schedule for Affective Disorders and Schizophrenia) [5], SCID (Structured Clinical Interview for DSM diagnosis) [6], and CIDI (Composite International Diagnostic Interview). [7]. Administration of most of these diagnostic interviews usually takes up to three hours and requires extensive training. These two requirements create difficulties in their more widespread adoption.

In response to this the M.I.N.I was developed in 1990 by David V. Sheehan, Professor of Psychiatry and Director of Psychiatric Research, University of South Florida College of Medicine, and the late Yves Lecrubier, at Centre Hospitalier Sainte-Anne - Paris, France. It maps onto diagnostic criteria for the DSM-IV (Diagnostic and Statistical Manual of mental disorders) [8], and ICD-10 (The ICD-10 classification of mental and behavioural disorders). [9] The goals in the design of M.I.N.I were for it to be short, inexpensive, simple, clear, easy to administer, highly sensitive (i.e. able to capture important subsyndromal symptoms), specific, compatible with international diagnostic criteria ,and useful in clinical psychiatry as well as research settings. Since its introduction the M.I.N.I. has become the most widely used psychiatric structured diagnostic interview instrument in the world. The latest version of the M.I.N.I. 6.0 was released January 1, 2010. It focuses both on current and life time diagnoses. It requires limited training and can be administered in 15 minutes.

The M.I.N.I includes modules assessing the 19 most prevalent disorders based on data from Epidemiological Catchment Area study [10] and the National Co morbidity Survey. [11] These modules focus on major depressive episode, suicidality, manic episode, hypomanic episode, bipolar disorder (I and II), panic disorder, agoraphobia, social phobia, obsessive compulsive disorder, post traumatic stress disorder, alcohol dependence and abuse, other substance dependence and abuse, psychotic disorders, mood disorders with psychotic features, anorexia nervosa, bulimia nervosa, generalised anxiety disorder, and antisocial personality disorder. Numerous validation and reliability studies have been conducted comparing the M.I.N.I to other standardised diagnostic instruments. It has been validated against the Structured Clinical Interview for DSM diagnoses (SCID-P) in English and French and against the Composite International Diagnostic Interview for ICD-10 (CIDI) in English, French and Arabic. It has also been validated against expert opinion in a large sample in four European countries (France, United Kingdom, Italy and Spain). [1], [3], [12] The results of these studies showed that the M.I.N.I has acceptably high validation and reliability scores, and can be administered in a much shorter period of time (within 20 minutes on average) than the instruments compared. It has been used reliably for multicentre clinical trials, epidemiological studies, outcomes research as well in non-research clinical settings [3] www.medical-outcomes.com).

An additional feature of the M.I.N.I. is that it is available in different versions that maximise flexibility of use. Clinicians have the option of using a screen version (M.I.N.I- Screen) which consists of 31 questions that can be answered within 5-10 minutes. Based on the symptoms endorsed by the patient the interviewer can use supplementary questions from the relevant disorder-specific modules of the full instrument. The M.I.N.I-Plus is a lengthier version that requires 45-60 minutes to complete and has been designed for specialist or research centres. MINI-

Kid is used in child and adolescent psychiatry and consists of questions in language that is easy for children and adolescents to understand. This "family" of instruments allows great flexibility for interviewers and clinicians as it is permissible to use modules from different versions depending on research or clinical priorities.

The success of the M.I.N.I. is also based on its high patient acceptability. Patients considered that the M.I.N.I. covered all their symptoms and that the questions asked were not distressing but encouraged further spontaneous comments. Sixty percent of those who made spontaneous comments reported that the specific questions helped them remember some symptoms. [13]

The M.I.N.I is currently used in more than 100 countries and been translated into 43 languages [14], [15], [16], [17] including Hindi, Urdu, Bengali, Gujarati and Punjabi. The M.I.N.I was translated into Malayalam as part of Collaborative Research Unit (CRU) activities between Institute of Psychiatry, London and Amrita Institute of Medical Sciences, Ernakulum following the principles of back-translation. [18], [19] In translating the document the following steps were followed:

a) Initial translation to Malayalam. The M.I.N.I screen and M.I.N.I were translated to Malayalam (SC, SS, SM, GR and SK). During this phase support and feedback were obtained from (i) 5 psychiatrists who were native Malayalam speakers and were also proficient in English, some having worked in English speaking countries for a minimum of 5 years (ii) 2 English language teachers who were also native Malayalam speakers and (iii) patients. For the latter, the instrument was discussed with patients under the care of the Department of Psychiatry at AIMS for advice about the clarity of different questions and for suggestions for improvement.

(b) Back translation from Malayalam to English. A bilingual psychiatrist (SVK) who had not been involved in the translation of the instrument to Malayalam completed the back translation to English

(c) Refinement based consensus. The third stage involved further consensual revisions based on discussion between the original translators and the back translator concentrating on mismatches and ambiguities in the back translation.

(d) The final stage consisted of inviting independent practitioners to comment on the translation and their relevant suggestions were incorporated. Modified items were back translated again to reach the final version. The process of translation and back translation including details of linguistic and cultural challenges encountered will be reported elsewhere.

Researchers and clinicians working in non-profit or publicly owned settings (including universities, non-profit hospitals, and government institutions) may make copies of the M.I.N.I. 6.0 instrument in paper form for their own clinical and research use. We sincerely hope that M.I.N.I – Malayalam will provide a meaningful assistance for clinicians and researchers in mental health in Kerala for their future work. The translated version of the MINI in Malayalam is available from the corresponding author. The copyright of the instrument belongs to Professor Sheehan and further information about permission to use the instrument can be found at www.medical-outcomes.com.

Acknowledgements:

We would like to thank Dr.Anil Kumar.T.V, Dr.E.Mohandas, Dr. Jayaprakash.K.K, Dr.Sajith.S.G, Dr.Mohan Roy.G, Dr.Jaisoorya.T.S, Dr.Mohammed Ali, Dr.Indu PS, Dr. Ritzy Kallumpuram, Dr. Somanath.C.P

and Mr. Venu.K.B who helped with their valuable comments on the draft of M.I.N.I – Malayalam. We would also like to acknowledge the support provided by Dr.Manjumol.S, Mr. Krishna Kumar and Dr.Sajan Mathews during various stages of this translation process.

We dedicate this article to Prof. Lecrubier who passed away recently.

REFERENCES

Lecrubier Y, Sheehan D, Weiller E, Amorim P, Bonora I, Sheehan K, Janavs J, Dunbar G. The MINI International Neuropsychiatric Interview (M.I.N.I.) A Short Diagnostic Structured Interview: Reliability and Validity According to the CIDI. European Psychiatry 1997; 12: 224-31.

Wing JK A standard form of psychiatric present state examination. In:Hare EH, Wing JK eds. Psychiatric Epidemiology. London, England:Oxford University Press; 1970: 93-131 .

Sheehan DV, Lecrubier Y, Harnett-Sheehan K, Amorim P, Janavs J, Weiller E, Hergueta T, Baker R, Dunbar G: The Mini International Neuropsychiatric Interview (M.I.N.I.): The Development and Validation of a Structured Diagnostic Psychiatric Interview for DSM IV and ICD 10. J. Clin Psychiatry 1998; 59 (suppl 20): 22-33.

Robins LN, Helzer JE, Ratcliff KS, Seyfried W. Validity of the diagnostic interview schedule, version II: DSM-III diagnoses. Psychol Med. 1982; 12: 855-70.

Endicott J, Spitzer RL. A diagnostic interview: the schedule for affective disorders and schizophrenia. Arch Gen Psychiatry 1978; 35: 837-44.

Spitzer RL, Williams JBW, Gibbon M et al. Structured Clinical Interview for DSM- III-R. Washington, DC: American Psychiatric Press; 1990.

World Health Organisation. Composite International Diagnostic Interview (CIDI), Version 1.0. Geneva, Switzerland: World Health Organisation; 1990.

American Psychiatric Association. Diagnostic and Statistical Manual of Mental disorders, 4th edn. Washington, DC: American Psychiatric Association; 1994.

World Health Organization. The ICD-10 classification of mental and behavioural disorders: Diagnostic criteria for research, Geneva: World Health Organisation; 1993.

Regier DA, Farmer ME, Rae DS, Myers JK, Kramer M, Robins LN, George LK, Karno

M, Locke BZ. One-month prevalence of mental disorders in the United States and sociodemographic characteristics: the Epidemiologic Catchment Area study. Acta Psychiatr Scand.
1993; 88:35-47

Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen HU, Kendler KS. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. Arch Gen Psychiatry 1994; 51:8-19.

Sheehan DV, Lecrubier Y, Harnett-Sheehan K, Janavs J, Weiller E, Bonara LI, Keskiner A, Schinka J, Knapp E, Sheehan MF, Dunbar GC. Reliability and Validity of the MINI International Neuropsychiatric Interview (M.I.N.I.): According to the SCID-P. Eur Psychiatry 1997; 12: 232-41.

Pinninti NR, Madison H, Musser E, Rissmiller D. MINI International Neuropsychiatric Schedule: clinical utility and patient acceptance. Eur Psychiatry 2003; 18: 361-4.

Mordal J, Gundersen O, Bramness JG Norwegian version of the Mini-International Neuropsychiatric Interview: feasibility, acceptability and test-retest reliability in an acute psychiatric ward. Eur Psychiatry 2010; 25:172-7.

Otsubo T, Tanaka K, Koda R, Shinoda J, Sano N, Tanaka S, Aoyama H, Mimura M, Kamijima K. Reliability and validity of Japanese version of the Mini-International Neuropsychiatric Interview. Psychiatry Clin Neurosci. 2005; 59: 517-26.

Kadri N, Agoub M, El Gnaoui S, Alami KhM, Hergueta T, Moussaoui D. Moroccan colloquial Arabic version of the Mini International Neuropsychiatric Interview (MINI): qualitative and quantitative validation. Eur Psychiatry 2005; 20:193-5.

Rossi A, Alberio R, Porta A, Sandri M, Tansella M, Amaddeo F. The reliability of the Mini-International NeuropsychiatricInterview—Italian version. J Clin Psychopharmacol. 2004; 24: 561-3.

Brislin RW. Back-translation for cross-cultural research. J Cross Cult Psychol. 1970; 1: 185-216.

Harkness and Schoua-Glusberg: Questionnaires in Translation, 1991, 87-122.

Q-Pin SR

Quetiapine 50/100/200mg Sustained Release Tablets

The **Versatile** Antipsychotic

Nexvenla-OD

Desvenlafaxine 50 / 100mg Extended Release Tablets

The **NEXT** Generation Antidepressant

A STUDY OF PSYCHIATRIC MORBIDITY AND ITS RELATIONSHIP WITH INTENT AND LETHALITY IN ATTEMPTED SUICIDE

Dr.JITHU V.P

INTRODUCTION

Attempted suicide ,one of the most important psychiatric emergencies,is an unsuccessful self-induced annihilation in which ,a person has performed an actually or seemingly life threatening behaviour ,with the intent of jeopardizing his/her life or to give the appearance of such intent ,but which has not resulted in death.(Beck 1972).It is an intentional,but unsuccessful act of killing oneself. (Alem et al).

While the national rate of suicides in 2005 was 11.2/lakh population,the rate for Kerala was an alarmingly high value of 27.9/lakh population.Attempted suicide was found to be 8 to 20 times more than completed suicide and approximately 14/hour.(SCRB 2005).

Psychiatric patient's risk for suicide is 3 to 12 times greater than that of non –patients with 70-90% suicides having a DSM-1VTR diagnosis with Axis I category being the most represented.Adjustment disorder was the most common psychiatric diagnosis followed by Depressive episode and substance use disorders in the studies conducted by Brian et al (1999) and Galgati et al (1998).

Suicidal intent is the actual wish to die or the intensity of the patients wish to terminate life or the sense of purpose inherent in the act.(Hamdi 1991). Lethality is the seriousness of physical consequences or risk to life of the suicide attempt.(Nasser 1999).It denotes the extent of methods used to accomplish the act so as to ensure death.Studies by Nasser et al ,Hamdi et al had found a significant relationship for psychiatric morbidity with intent and lethality of attempt.But studies in this area are limited.

The purpose of this study was to throw more light in to assosciation between psychiatric morbidity and intent and lethality of attempt if any.

OBJECTIVES

1.To assess the psychiatric morbidity among suicide attempters.

2.To assess the intent and lethality.

3.To find out relationship if any between psychiatric morbidity and intent and lethality of suicide attempt.

MATERIALS AND METHODS

Venue:Psychiatry Out Patient Department,Medical college,Calicut.

Dr.V.P. JITHU MD
Assistant Professor
Department of Psychiatry,
Medical College,Calicut.

Duration:Two months:1st june to 31st july 2007

Inclusion criteria:

1. Suicide attempters attending the department with in one week of their attempt.
2. Those aged 11 years and above.
3. Those giving informed consent.

Exclusion criteria:

1. Those not giving consent.
2. Mentally retarded patients.
3. Demented /Delirious patients.
4. Those having acute physical problems.

TOOLS:

1. Socio demographic proforma.
2. ICD-10 Symptom Checklist.
3. ICD-10 DCR.
4. Suicide Intent Scale (Pierce 1977)
5. Lethality of Suicide Attempt Rating Scale-(Smith 1984)

Socio demographic details were assessed using the Sociodemographic proforma.

Psychiatric diagnosis were made using the ICD-10 Diagnostic Criteria for Research , ICD-10 DCR after the initial screening using ICD 10 Symptom Checklist.(WHO 1994).Psychiatric diagnoses were independently made by a consultant psychiatrist. Suicidal intent was measured using Pierce Intent Score Scale (Total possible score =25.Low intentionality=0-3,Medium intentionality=4-10,High intentionality=>/=11) Lethality of the attempt was measured using Smith's Lethality of Suicide Attempt Rating Scale(Low Lethality=1-4,High Lethality=5-10).

Chi-square test was used to assess the relationship between various socio demographic variables and psychiatric diagnosis with intentionality and lethality. A P Value of <0.05 was considered significant.

TABLE 1:SOCIODEMOGRAPHIC DATA

SOCIODEMOGRAPHIC FACTORS		NUMBERS
AGE	10-20 Yrs	13
	21-30	22
	31-40	10
	41-50	0
	51-60	0
	61-70	1
	71-80	0
SEX	Male	25
	Female	21
MARITAL STATUS	Unmarried	19
	Married	23
	Widow	03
	Separated	01

RELIGION	Hindu	35
	Muslim	10
	Christian	01
DOMICILE	Rural	41
	Urban	05
EDUCATIONAL STATUS	$<10^{th}$ Std	20
	$>10^{th}$ Std	26
OCCUPATION	Unemployed	23
	Unskilled	20
	Skilled	02
	Professional	01

FAMILY H/O SUICIDE	In 1* relative	05
	In 2* relative	03

TABLE 2:MODE OF ATTEMPT

MODE OF ATTEMPT	Numbers	%
ORGANOPHOSPHOROUS POISONS	18	39
CORROSIVE	01	2.1
NATIVE POISONS	01	2.1
MEDICINE OVERDOSE	14	30.4
HANGING	07	15.2
CUTTING	03	6.5
SELF-IMMOLATION	02	4.3
DROWNING	00	0
JUMPING	00	0

TABLE 3:PSYCHIATRIC DIAGNOSIS

DIAGNOSIS	Numbers	%
ADJUSTMENT DISORDERS	27	58.6
DEPRESSIVE EPISODE	12	26.1
SUBSTANCE USE DISORDER-ALCOHOL	02	4.3
SCHIZOPHRENIA	03	6.5
BPAD-DEPRESSION	01	2.1
PERSONALITY DISORDER	01	2.1

TABLE 4:INTENTIONALITY SCORES

INTENTIONALITY	Numbers
LOW:0-3	02
MEDIUM:4-10	08
HIGH; >/= 11	36

TABLE 5:LETHALITY SCORES

LETHALITY	Numbers
LOW: 1-4	12
HIGH: 5-10	34

TABLE 6:RELATIONSHIP WITH INTENTIONALITY

		Low	Medium	High	P value
AGE	10-20 Yrs	1	8	4	
	21-30	1	0	21	
	31-40	0	0	10	
	41-50	0	0	0	0.724
	51-60	0	0	0	
	61-70	0	0	1	
	71-80	0	0	0	
SEX	Male	1	5	19	
	Female	1	3	17	0.878
MARITAL STATUS	Unmarried	0	5	14	
	Married	2	3	18	
	Widow	0	0	3	0.260
	Separated	0	0	1	
RELIGION	Hindu	1	5	29	
	Muslim	1	3	6	0.349
	Christian	0	0	1	
DOMICILE	Rural	2	8	31	
	Urban	0	0	5	0.467
EDUCATIONAL STATUS	<10th Std	0	2	18	
	>/=10th Std	2	6	18	0.205
OCCUPATION	Unemployed	1	7	15	

	Unskilled	1	1	18	
	Skilled	0	0	2	0.068
	Professional	0	0	1	
FAMILY H/O	In 1*relative	0	2	3	
SUICIDE					
	In 2*relative	0	1	2	0.718
PAST H/O PSYCHIATRIC DISORDER	Present	0	1	6	
	Absent	2	7	30	0.797
MODE OF ATTEMPT	Organophosphorous poisons	1	3	14	
	Corrosives	0	0	1	
	Native poisons	0	0	1	
	Medicine overdosage	0	3	11	0.891
	Hanging	0	2	5	
	Cutting	0	0	3	
	Self-immolation	1	0	1	

CHI SQUARE TEST Pvalue <0.05 significant

TABLE 7:RELATIONSHIP WITH LETHALITY

		Low	High	Pvalue
AGE	10-20	4	9	
	21-30	5	17	
	31-40	3	7	0.828
	41-50	0	0	
	51-60	0	0	
	61-70	0	1	
	71-80	0	0	
SEX	Male	8	17	
	Female	4	17	0.324
MARITAL STATUS	Unmarried	5	14	
	Married	6	17	
	Widow	0	3	1.0
	Separated	1	0	
RELIGION	Hindu	6	29	
	Muslim	5	5	0.019
	Christian	1	0	
DOMICILE	Rural	12	29	
	Urban	0	5	0.164
EDUCATIONAL STATUS	<10th Std	6	14	

	>/=10th Std	6	20	0.6
OCCUPATION	Unemployed	6	17	
	Unskilled	6	14	
	Skilled	0	2	0.8
	Professional	0	1	
FAMILY H/O SUICIDE	In 1*relative	2	3	
	In 2*relative	1	2	0.771
PAST H/O PSYCHIATRIC DISORDER	Present	0	7	
	Absent	12	27	0.091
MODE OF ATTEMPT	Organophosphorous poisons	6	12	
	Corrosives	0	1	
	Native poisons	0	1	
	Medicine overdosage	5	9	0.276
	Hanging	0	7	
	Cutting	0	3	
	Self-immolation	0	2	

CHI-SQUARED TEST ; Pvalue <0.05 significant

TABLE.8: RELATIONSHIP BETWEEN CURRENT PSYCHIATRIC DIAGNOSIS AND INTENTIONALITY

CURRENT PSYCHIATRIC DIAGNOSIS	Low	Medium	High	P value
ADJUSTMENT DISORDER	1	6	20	
DEPRESSIVE EPISODE	0	1	11	
SUBSTANCE USE DISORDER-ALCOHOL	1	0	1	0.639
BPAD-DEPRESSION	0	0	1	
SCHIZOPHRENIA	0	1	2	
PERSONALITY DISORDER	0	0	1	

CHI-SQUARED TEST ;P Value <0.05 significant

TABLE.9:RELATIONSHIP BETWEEN CURRENT PSYCHIATRIC DIAGNOSIS AND LETHALITY

CURRENT PSYCHIATRIC DIAGNOSIS	Low	High	P Value
ADJUSTMENT DISORDER	10	17	
DEPRESSIVE EPISODE	0	12	
SUBSTANCE USE DISORDER-ALCOHOL	1	1	0.116
BPAD-DEPRESSION	0	1	
SCHIZOPHRENIA	0	3	
PERSONALITY DISORDER	1	0	

CHI-SQUARED TEST P Value <0.05 significant.

TABLE.10:RELATIONSHIP BETWEEN INTENTIONALITY AND LETHALITY

INTENTIONALITY	LETHALITY		P Value
	Low	High	
Low	2	0	
Medium	4	4	0.004
High	6	30	

CHI-SQUARED TEST P Value <0.05 significant.

TABLE.11:RELATIONSHIP BETWEEN CURRENT PSYCHIATRIC DIAGNOSIS AND INTENTIONALITY AND LETHALITY.

CURRENT PSYCHIATRIC DIAGNOSIS	INTENTIONALITY	LETHALITY		P Value
ADJUSTMENT DISORDER		Low	High	
	Low	1	0	
	Medium	4	2	0.028
	High	5	15	
DEPRESSIVE EPISODE		Low	High	
	Low	0	0	
	Medium	0	1	
	High	0	11	

SUBSTANCE USE DISORDER-ALCOHOL		Low	High	
	Low	1	0	
	Medium	0	0	
	High	1	1	
BPAD-DEPRESSION		Low	High	
	Low	0	0	
	Medium	0	0	
	High	0	1	
SCHIZOPHRENIA		Low	High	
	Low	0	0	
	Medium	0	1	
	High	0	2	
PERSONALITY DISORDER		Low	High	
	Low	0	0	
	Medium	0	0	
	High	1	0	

CHI-SQUARED TEST P Value <0.05 significant.

DISCUSSION

46 patients who gave consent to participate in the study were included. 21 patients were excluded as some of them did not give consent and as some of the attempts were accidental.

Maximum number of suicide attempts in this study was in the 21-30 year age group(22 patients). Ponnudurai (1996)reported that second and third decade were the age groups with highest suicide risk which is supportive of the findings in this study. Narang(2000);Gopalasharma(1993) have found the highest risk to be below 30 years of age.

It was found that almost equal number of males and females attempted suicide(Males=25; Females=21).A similar finding was obtained by Sudhirkumar (2000).But several Indian studies have shown a male preponderance(Sharma et al, 1993;Ganapathy and Venkoba Rao,1966).

Marriage was found to have a protective effect on suicide in the Indian setting by Unni(1999).But marital status had no significant influence on suicide attempt rate in this study.

Looking in to the religious aspect,it was found that while 35 Hindus attempted suicide ,the corresponding numbers for Muslims and Christians were 10 and 1 respectively. The reasons may be (1)being a minority group (2)strong religious belief is found to have a protective effect on attempted suicide(Mondal et al,1998).

Significant difference was seen with regard to the domicile of these patients. While 41 patients were from rural background, only 5 patients were from urban background.This is acceptable considering the drainage area of this tertiary care centre which is predominantly rural. Schmidtke et al(1996) have opined that socio-economic deprivation with a rural background is a potential risk factor for suicide. Family historyof suicide is an important risk

factor in all cases of attempted suicide (Vahia 2000). But in this study, only 8 patients (17.4%) gave a family history of suicide.

In India, Organophosphorous poisoning was the most frequent method used by patients to attempt suicide, showing easy availability of insecticides (Galgali et al,1998;Venkoba Rao 1965). Overdosage of prescription drugs followed next (Jain et al,1999). This study also had a similar finding. Though hanging was attempted by 7 patients (15.2 %), it did not top the list as was noted by Ponnudurai and Jayakar.(1980).

Adjustment disorders topped the list among suicide attempter's psychiatric diagnoses in this study.Similar finding was obtained byParish(2000),Brian et al (1999).

There are several studies showing the importance of depression in suicide attempters,Vahia(2000);Jain(1999).In this study also,Depressives constituted 12 (26.1 %) of the attempters.

Diagnosis of Alcohol use disorders could be made in 2 patients(4.3%). But, of the 21 patients who were excluded from the study due to lack of consent, 7 patients had a diagnosis of Alcohol use disorder,which brings up the tally to 9 patients out of the total 67 patients seen in the OPD. Alcohol use disorder was the third most common psychiatric diagnosis in previous studies conducted in this Department.

With significance level set at $P<0.05$, religion was found to have significant relationship with lethality. This is an avenue which needs further research.

A significant relationship could be established between intentionality and lethality (P value:0.004). A high positive correlation was found between intent and lethality in a previous study (Shearer et al,1988). Also ,in this study, Adjustment disorder had a significant association with intent and lethality (P value :0.028). For the other psychiatric diagnoses, association could not be proved due to shortage of samples in their respective groups.

CONCLUSIONS

Adjustment disorder and Depressive episode (both together constituted 84.7% of the total sample size.) were the two conditions strongly associated with suicidal risk in this setting.

In the case of suicidal attempt, intentionality and lethality were found to have strong association with each other.

LIMITATIONS

The major bulk of the patients were having a diagnosis of Adjustment disorder and Depression ,with other diagnoses having very minimal number of patients. With a much more larger sample and longer study period ,this would have been more clear.

REFERENCES

Alem,A Kebede,D ,Jacobson,L ,Kullgren,G, 1999 Suicide attempts among adults in Butjira,Ethiopia.*Acta Psychiatr.Scand.*100:70-76.

Beck,A.T,Beck,R,Kovacs,M 1975. Classification of suicidal behaviours. Quantifying Intent and medical Mlethality.*Am.J.of Psychiatry* 132(3)285-287.

Beck,A.T,Davis,J.H,Fredericks,C.J 1973 Classification and nomenclature Suicide prevention in the seventies.

Brian,H.K.W; Clarice,E.H; Kua,E.H,1999 :Suicidal behaviour among young people in Singapore:Gen.Hospital Psychiatr.21:128-133.

Galgali,R.B,Rao.S,Ashok.M.V, Ayyappa,P, Srinivasan,K,1998: Psychiatric diagnosis of self poisoning cases:Ind.J. Psychiatr.40(3)254-259.

Ganapathy,M.N, Venkoba Rao,1996:A Study on suicide in Madurai J. Ind. Med.Assocn.46:18-23.

Gupta,.S.C,Harjeetsingh and Trivedi.J.K,1992.Evaluation of suicidal risk in depressives and schizophrenics.A two year follow up study.*J.Psychiatr.34(4):298-310.*

Hamdi,E,Amin,Y, Mattar,T.1991. Clinical correlates of intent in attempted suicide. *Acta Psychiatrica.Scand.*83:406-411

Howard S Sudack Psychiatric emergencies *Kaplan and Sadocks Comprehen sive Textbook Of Psychiatry8th edition.Pg 2447-2448*

Jain,V;Singh,H;Gupta,S.C;Kumar,S:1999: A Study of hopelessness, Suicidal intent and depression in cases of attempted suicide.Ind,J. Psychiatr.:41(2)122-130.

Mondal,D;Sen,K.D;Choudhari,R.J,1998: Religiosity and suicide 40(2)75

Narang,R.L;Mishra,B.P,Mohan,N:2000. Attempted suicide in Ludhiana Ind.J.Psychiatr:42(1)83-87.

Nasser,E.H;Overholser,J.C;1999: Assessing varying degrees of lethality In depressed adolescent suicide attempters. *Acta.Psychiatr.Scanda.*99:423-431.

Parish.N (2000). A comparative study of male Vs female suicide attempters. Ind.J.Psych.:42-48.

Ponnudurai,1996:Suicide in India:Ind.J.Psychol. Medicine.19(1)19-25..

Ponnudurai and Jayakar,1980:Attempted suicide in Madras. Ind.J.Psychiatr.28(1)59-62

Pierce,D.W.1977 Suicidal intent in self injury.*Brit.J.Psychiatry.*130:377-385.

Shearer,S.L;Peters,C.P;Miles,S;1988: Intent and lethality in suicide attempts among female border line inpatients.. Am.J.Psychiatr.145:1424-1427.

Smith K,Conroy,R.W,Ehler,B.D.1984 Lethality of suicide attempt rating scale.*Suicide Life Threat. Behaviour.*14(4):215-241

State Crime Records Bureau 2005.

Sudheer kumar,C.T,1998.M.D.thesis,JIPMER ,Pondicherry.

Subramanian N. A.M.Kunhikoyamu Medical college Calicut. Psycho sociodemographic correlates of intent and lethality in attempted suicide

Unni,K.E.S,1999.Human self destructive behaviour Textbook of Post- graduate Psychiatry.(Niraj Ahuja and J.N Vyas.).

Vahia,V.N ,Sonavane,S ,Gandhi A and Vahia,I, 2000.Suicide and Depression.*JIMA*,98(5)232-236

W.H.O. Diagnostic Criteria for Research 1993

W.H.O. I.C.D.10.Symptom Check list.

SERVICE UTILIZATION BY MENTALLY ILL AMONG RURAL INHABITANTS OF NORTH KERALA: A CLINIC BASED RETROSPECTIVE DATA ANALYSIS

Dr. Anjith Divakaran
Dr. Sushil Kakkan
Dr. Raghuram Thazhe Mangool

ABSTRACT

Introduction:

There is no existing data on service utilization among the mentally ill in rural Kerala. However, there are compelling reasons to believe that psychiatric help seeking is actually lower than expected in these areas due to myriad reasons.

Aim:

To explore the service utilization in psychiatry among the rural inhabitants of north Kerala.

Method:

A descriptive study comprising of a retrospective chart review of outpatient psychiatry hospital records of MES medical college, a tertiary care hospital situated in Perinthalmanna for a period of 2 years from January 2008 to January 2010.

Results:

More number of males used the mental health services than females. The most common diagnosis was depression followed by anxiety disorders, schizophrenia and bipolar disorder in that order. The commonest presentation in the pediatric population was MR and that in the geriatric age group was depression. Males presented with more of anxiety and sexual dysfunction and females, with depression and acute psychosis. It was also worth noting that service utilization by pediatric and geriatric age group was low.

Discussion:

Important gender differences in service utilization were evident in north Kerala. People's explanatory models of mental illness, different gender role expectations, stigma and lack of empowerment of women might be the possible reasons for the same. Service utilization by dependent populations such as pediatric and geriatric age group was also lower than expected possibly due to various factors such as lack of awareness, underestimated importance, stigma and convoluted pathways of care due to inadequate and/or delayed referral from other

First Author & corresponding author: Anjith Divakaran MD, Assistant professor of Psychiatry, Dept.of Psychiatry, MES medical college, Perinthalmanna.
Second Author: Sushil Kakkan DPM, Dip NB, Associate professor of Psychiatry, Dept.of Psychiatry, MES medical college, Perinthalmanna.
Third Author: Raghuram Thazhe Mangool MD, Associate professor of Psychiatry, Dept.of Psychiatry, MES medical college, Perinthalmanna.

specialties.

Conclusion:

Awareness programs targeting vulnerable populations like women, children and the elderly is the need of the hour to enhance the well being of the mentally ill in the community.

Introduction

Mental health planning in Kerala is still in its infancy. Government estimates show the point prevalence of severe mental illnesses here to be 1%[1]. There are a total of 1714 beds in mental hospitals and a density of 0.77 psychiatrists per one lakh mentally ill. Therefore mental health services are either unavailable or inaccessible to the majority, especially those in rural areas.

However, merely availability or accessibility alone won't ensure utilization of health care services. This depends on a large number of factors with complex interplay such as culture, explanatory models of mental illness, stigma, cost of services, gender and the like.

Culture influences how problems are reported by the patient, their explanatory frameworks also stigma. Explanatory models held by patients, their families and the community at large would influence the pathways of care in psychiatry. For example, it is a common phenomenon to seek treatment for depression from the General practitioner but from a psychiatrist for schizophrenia [2]. It has been found that people perceive depression as a reaction to psychosocial contexts and do not prefer medications, unlike schizophrenia where openness to medication treatment is more frequent[3].

Several factors predict stigma in mental illness viz older age, lower socioeconomic status, lower education[4], , symptomatic profile, causal attribution, familiarity, labeling by psychiatrist and finally the influence of media. Another form of stigma is self-stigma which is thought to be an internal form the same, whereby the individual perceives the act of seeking professional help for distress as a threat to their self-worth and as a weakness of character[5]. Lin & Pariah[6] found that embarrassment and being viewed as unbalanced prevented people from seeking help for psychological problems.

Psychiatric services are a costly affair. The economic burden is more for those who belong to lower socioeconomic class, those with severe and chronic illness, families with multiple affected members and those who seek treatment from private sector.

Gender differences in service utilization are well known in mental health. More females were found to seek help for common mental disorders compared to males [7]. These gender differences have led to the suggestion that "gender is a critical determinant of mental health" and that risks for mental health are gender specific [8].

Barriers to service utilization as described above will ultimately lead to adverse social, health and economic consequences for the individual and their families and have negative consequences for society.

In this regard, we conducted a study on service utilization among rural inhabitants. The aim of the study was to explore the service utilization among mentally ill rural inhabitants.

Participants

The study was conducted in MES medical college which is a tertiary care centre situated in Perinthalmanna; Malappuram District .This is the highest populated district of Kerala (36.3 lakhs) with the highest decadal (1991-2001) growth rate of 17.22%. On the contrary, it has the lowest per capita income (Rs.21685)[9], the lowest position with respect Human

development index (0.749) [10] as well as the lowest gender related development index (0.689)[11]. The catchment population of our hospital belonged to a rural agrarian economy with low income. The study sample consisted of all patients who attended the outpatient psychiatry services for a period of 2 years from January 2008 to January 2010.

Materials and method

A retrospective chart review of the outpatient psychiatry hospital records was done. The data was coded and data entry & statistical analyses were done using Statistical Package for Social Sciences (SPSS-11). After ascertaining a normal distribution, parametric statistical test (independent samples t test) was used for continuous variables such as age and Chi square tests were used for categorical variables such as sex and diagnosis.

RESULTS

Descriptive statistics

Altogether, 1045 subjects attended the psychiatry clinics during the specified period. A higher number of men (N=566) attended the clinics compared to women (N=479), Chi-square=7.24, P<0.01. Also, women presented at a higher mean age (37.23±16.01) compared to men (35.20± 15.90), t=2.04, p=0.04.

Among the diagnoses, depression was the most frequent (48.1%) followed by anxiety disorder (14.2%), schizophrenia (8.1%) and bipolar affective disorder (6.1%) (Table no: 1, fig.no:1)**.** It is worth noting that of the 503 patients with depression 128 had co-morbid anxiety disorder (fig no: 2). Men presented with more of anxiety disorder (÷2=19.70, p<0.01) and sexual dysfunction (÷2=26.47, p<0.01) as compared to women, who presented with more acute psychosis (÷2=4.5, p=0.03) (Table no: 2). Here, the mean age of men with anxiety disorders was more (33.44±13.94) compared to women (28.13±11.38), t=2.27, p=0.02. Also, women with somatoform disorder had more chronic form of the disorder (t=2.83, p=0.01)(Table no:3). These apart, there were no significant differences in the age at presentation of men and women as far as diagnostic categories were concerned.

Table No: 1

Diagnostic break-up		
Diagnosis	Frequency	Percent
Depression	503	48.1
Schizophrenia	85	8.1
BPAD	64	6.1
Anxiety disorder	148	14.2
Psychosis NOS	49	4.7
Somatoform disorder	14	1.3
Delusional disorder	11	1.1
Organic psychosis	6	.6

Adjustment disorder	31	3.0
OCD	5	.5
Delirium	2	.2
Dementia	7	.7
Sexual dysfunction	34	3.3
ADHD	3	.3
Substance use	6	.6
Sleep disorders	8	.8
Acute psychosis	14	1.3
MR	54	5.2
SLD	1	.1
Total	1045	100.0

Table no: 2

Sex Differences within diagnostic groups					
Diagnosis	Male	female	χ2	df	p
1.Depression	233	270	2.72	1	0.09
2.Schizophrenia	44	41	0.10	1	0.74
3.BPAD	33	31	0.06	1	0.80
4.Anxiety	101	47	19.70	1	<0.01
5.Psychosis NOS	30	19	2.46	1	0.11
6.Somatoform disorder	6	8	0.28	1	0.59
7.Delusional Disorder	5	6	0.09	1	0.76
8.Organic psychosis	5	1	2.66	1	0.10
9.Adjustment Disorder	14	17	0.29	1	0.59
10.OCD	4	1	1.8	1	0.18
11.Dementia	3	4	0.143	1	0.705
12.Sexual Dysfunction	32	2	26.47	1	<0.01
13.sleep disorders	4	4	0.00	1	1.00
14.Acute psychosis	3	11	4.5	1	0.03
15.Mental Retardation	39	15	10.66	1	<0.01

Table no: 3

Age & Sex distribution within diagnostic categories.						
Diagnosis	Sex				t	p
	Male		female			
	N	Age Mean(SD)	N	Age Mean(SD)		
1.Depression	233	40.00(15.24)	270	39.83(14.99)	0.13	0.89
2.Schizophrenia	44	34.70(13.12)	41	35.00(15.10)	0.09	0.92
3.BPAD	33	35.82(17.84)	31	38.68(14.92)	0.69	0.49
4.Anxiety	101	33.44(13.94)	47	28.13(11.38)	2.27	0.02
5.Psychosis NOS	30	34.63(12.36)	19	41.53(15.37)	1.72	0.09
6.Somatoform disorder	6	31.17(11.23)	8	49.00(11.94)	2.83	0.01
7.Delusional Disorder	5	36.80(18.72)	6	46.83(12.35)	1.06	0.31
8.Organic psychosis	5	51.80(20.26)	1	48	0.17	0.87
9.Adjustment Disorder	14	27.43(12.20)	17	24.71(13.12)	0.59	0.55
10.OCD	4	26.00(8.28)	1	42	1.72	0.18
11.Dementia	3	82.00(9.64)	4	70.25(6.70)	1.92	0.11
12.Sexual Dysfunction	32	32.72(8.04)	2	22.50(3.53)	1.76	0.08
13.sleep disorders	4	23.75(11.44)	4	33.50(9.11)	1.33	0.23
14.Acute psychosis	3	38.00(15.39)	11	30.91(17.71)	0.62	0.54
15.Mental Retardation	39	14.44(7.62)	15	13.80(8.27)	0.26	0.79

Table NO: 4

Age distribution within diagnostic categories in pediatric age group				
Diagnosis	Age in years			
	N	Minimum	Maximum	Mean(SD)
1.MR	39	5	17	10.18(3.26)
2.Depression	17	7	17	14.71(2.73)
3.Anxiety	14	7	17	12.50(3.00)
4.Schizophrenia	6	12	15	14.00(1.09)
5.BPAD	8	14	17	16.25(1.16)
6.ADHD	3	4	9	6.33(2.51)

Figure no: 1

Figure no: 2

Whereas 831(79.5%) patients in the age group of 18-59 years attended the clinics, only 115(11%) patients were of the geriatric age group(e"60 years) and only 99(9.4%) in pediatric (d"17 years). There was a bias towards the economically productive age group compared to the dependent age groups.

The most common reasons for consultation in the pediatric age group were for evaluation of Mental retardation (39.4%) depression (17.2%) and anxiety disorder (14.1%).The help seeking age group in MR ranged from 5 to 17 years (Table no: 4). More boys were brought with complaints of MR than girls (÷2=10.66,p<0.01). The minimum age at which a diagnosis of depression/anxiety was made was 7 years and BPAD, 14 years. The earliest diagnosis of schizophrenia was made at 12 years and that of ADHD, at 4 years of age.

In the geriatric age group commonest diagnoses were depression (62.6 %), anxiety disorder (7%), dementia and BPAD (6.1% each).

DISCUSSION

In the present study we explored service utilization among the mentally ill residents of north Kerala. Our sample consisted of rural people who sought outpatient services from MES medical college, Perinthalmanna. Since the hospital was providing care without a fee, affordability was not a barrier to help seeking.

Our study revealed that more men used the mental health services than women, contrary to studies done in developed countries which consistently showed that females outnumbered males in help seeking [7].There was no significant sex difference even in depression, which means that even though more women might have suffered from depression, they did not seek help from the mental health professional. With respect to women taking decisions about their own health care, Kerala ranks 8th among the Indian states[12]. However, this may not be true of the women in Malappuram as reflected in the Gender related Development index. A study on women with schizophrenia showed that they are disabled and stigmatized not only by the illness but also by the social attitudes to marital separation and divorce, thus eventually suffering from double stigmatization [13]. Another study found that Mean stigma scores for patients with depression were lowest for those presenting with somatoform symptoms rather than those with depressive symptoms [14]. Considering the finding that women presented at a higher mean age compared to their male counterparts, it seems that stigma experiences are more for females, especially those of a younger age group, probably related to concerns about getting marriage proposals or fear of divorce. Therefore, women might have presented with somatoform symptoms to the general practitioner or the physician than the psychiatrist amounting to low service utilization by them.

The study found that a majority of patients presented with depression (48.1 %). Although this was a heterogeneous group consisting of presentations of varying severity including Dysthymia and Recurrent forms of depression, it could be a reflection of the high prevalence of depression in the general population. The National Co-morbidity Survey (NCS) done in United States in 1991 estimated a lifetime prevalence of major depression to be 17.1% in general population. If the full unipolar spectrum is considered lifetime prevalence approximates to 20-25%. This is much higher than the lifetime prevalence of schizophrenia(1%) or full bipolar spectrum (2.6-7.8%)[15]. The higher prevalence of depression in the community along with referral bias might have lead to the higher proportion of depressives in the current study. It is worth noting that though anxiety disorders as a group was the second most common diagnosis

made (14.7%), it is underrepresented compared to depression, considering the proportion of anxiety disorder in the community. This gap could be partly accounted for by those with anxiety disorder who had a high rate of co-morbidity with depression (12%). There was a large sex difference in the number of people who presented with anxiety disorders, women being significantly lesser. Overall, it could be inferred that the underrepresentation of anxiety disorders could have been mainly a result of decreased service utilization by women. (There were however no significant differences between the sexes in numbers when presenting with more severe mental disorders like schizophrenia, and bipolar affective disorder.

In Children and adolescents (d”17 years) the most common reason for consultation was evaluation of Mental retardation (39.4%). This was due to the referral bias because the clinic had the services of a psychologist and these children were referred mainly for IQ assessment, while children with other disorders were mainly seen by the pediatrics department. The help seeking age group in MR ranged from 5 to 17 years. This shows the delay in seeking help in even common and easily recognizable childhood disorders and may also indicate a serious default in timely referral to psychiatrist by general practitioners. Also, more boys were brought with complaints of MR than girls (÷2=10.66,p<0.01), showing a gender bias in help seeking by parents for their children. This may probably be due to lower role expectations from the female child. The proportion of children who used the services was a meager 9.5%, which is worrisome considering the high prevalence of childhood mental health problems in the community. A systematic review by Sayal K [16]Using a pathways to care model found that only up to one-third of children with mental disorders receive services for the same .He concludes that factors such as the type and severity of disorder, parental perceptions, child age and gender, family and social background determine whether the affected children access services or not. Over all, the data point towards special mental health needs of the pediatric population. It must be remembered that this might be the tip of an iceberg since a large number of child mental health problems in the community are undetected.

A total of 115 patients in the geriatric age group (e”60years) attended the clinics, constituting 11% all in all. The most common presentation in the geriatric population was with depressive disorder, amounting to 62.6 % of all diagnoses made in this age group. The second commonest was anxiety disorder (7%) followed by dementia and BPAD (6.1% each).Taking into consideration the fact that most of psychiatric disorders run a chronic course and that there are many illnesses with onset in old age, the elderly were not adequately represented in the clinical sample. This finding is in keeping with studies which have shown that the elderly are less likely than younger adults to perceive a need to seek help[17, 18], and also less likely to have enabling resources such as access to properly trained geriatric mental health professionals and health insurance[19, 20]. However another study showed that majority of the elderly exhibited positive help-seeking attitudes and positive treatment beliefs making these unlikely barriers to their use of mental health services [21].

Strengths and limitations:

As far as we know it is the only data available about psychiatric service utilization in the rural population of Malappuram. The limitation is that ours was a clinic based sample and it cannot be generalized to the entire population.

CONCLUSION

National epidemiologic surveys from Europe [22], and the United States [23] report that 25% to 50% of community dwelling individuals have met criteria for a mental disorder in their lifetime. In sharp contrast, the Kerala government estimates a point prevalence of 1% for major mental illness and 2-3% for less severe mental illnesses. Paucity of data from Kerala makes a head to head comparison of lifetime prevalence rates impossible. Nonetheless, it is clear that there is a gross underestimation of the public health importance of mental illnesses.

Apart from the high prevalence rates of mental illnesses, surveys in developed countries have also highlighted strikingly low rates of mental health service use, with 65% to 80% of individuals with diagnosable mental health problems not receiving professional help. These being the case in developed countries, the rural population of Kerala have many a hurdle to cross before getting professional help. These begin with the scarcity of services, poor quality of services, affordability of care, and lack of knowledge about how to access them. In addition, negative health beliefs, gender divide and stigma have indeed emerged as major factors determining psychiatric service utilization.

German Intervention studies show that de-stigmatization may lead to increased readiness to seek professional help [24]. Hence, we badly need Anti Stigma Programs like the Changing Minds Campaign by the Royal College of Psychiatrists in the UK[25]. As gender emerged as a major barrier to help seeking , it is time for us to have a more "gender sensitive approach" in mental health policies[26] as advocated by WHO. The current study underlines the need to conduct epidemiological studies to find out the actual prevalence of mental health problems in the community followed by prompt changes in government policies. Awareness programs targeting vulnerable population like women, children and elderly is the need of the hour to enhance the well being of the community.

REFERENCES

www.kerala.gov.in/economic_2007/chapter12.pdf. Medical and public health. 2007 [cited.21-8-2010]

Lauber, C., et al., Lay recommendations on how to treat mental disorders. Soc Psychiatry Psychiatr Epidemiol, 2001. 36(11): p. 553-6.

Angermeyer, M.C., T. Held, and D. Gortler, [Pro and contra: psychotherapy and psychopharmacotherapy attitude of the public]. Psychother Psychosom Med Psychol, 1993. 43(8): p. 286-92.

Wolff, G., et al., Community knowledge of mental illness and reaction to mentally ill people. Br J Psychiatry, 1996. 168(2): p. 191-8.

Vogel, D.L., Wade, N.G, Haake, S., Measuring the self-stigma associated with seeking psychological help. Journal of Counselling psychology 2006. 53p. 325–337.

Lin, E. and S.V. Parikh, Sociodemographic, clinical, and attitudinal characteristics of the untreated depressed in Ontario. J Affect Disord, 1999. 53(2): p. 153-62.

Tedstone Doherty, D. and Y. Kartalova-O'Doherty, Gender and self-reported mental health problems: predictors of help seeking from a general practitioner. Br J Health Psychol. 15(Pt 1): p. 213-28.

http://www.who.int/mental_health/media/en/249.pdf. Mental Health: A call for Action by World Health Ministers, Gender Disparities in Mental Health. 2001 [cited.21-8-2010]

www.kerala.gov.in/dept_planning/er/chapter3.pdf. Income and Population. [cited.21-8-2010]

www.kerala.gov.in/dept_planning/er/chapter20.pdf. Human Development and Socioeconomic well being. [cited.21-8-2010]

http://planningcommission.nic.in/plans/stateplan/sdr_pdf/shdr_kerala05.pdf. Human Development Report. 2005 [cited.21-8-2010]

http://www.nfhsindia.org/NFHS-3%20Data/ke_state_report_for_website.pdf. [cited.21-8-2010]

Thara, R., S. Kamath, and S. Kumar, Women with schizophrenia and broken marriages—doubly disadvantaged? Part I: patient perspective. Int J Soc Psychiatry, 2003. 49(3): p. 225-32.

Raguram, R., et al., Stigma, depression, and somatization in South India. Am J Psychiatry, 1996. 153(8): p. 1043-9.

Sadock, B.J.S., V.A Ruiz, P, ed. Comprehensive textbook of psychiatry. 9 ed. Vol. 1. 2009, Lippincott williams & Wilkins: Philadelphia. 2186.

Sayal, K., Annotation: Pathways to care for children with mental health problems. J Child Psychol Psychiatry, 2006. 47(7): p. 649-59.

Wetherell, J.L., et al., Mental health treatment preferences of older and younger primary care patients. Int J Psychiatry Med, 2004. 34(3): p. 219-33.

Klap, R., K.T. Unroe, and J. Unutzer, Caring for mental illness in the United States: a focus on older adults. Am J Geriatr Psychiatry, 2003. 11(5): p. 517-24.

Bartels, S.J., Improving system of care for older adults with mental illness in the United States. Findings and recommendations for the President's New Freedom Commission on Mental Health. Am J Geriatr Psychiatry, 2003. 11(5): p. 486-97.

Ayalon, L., et al., Integration of mental health services into primary care overcomes ethnic disparities in access to mental health services between black and white elderly. Am J Geriatr Psychiatry, 2007. 15(10): p. 906-12.

Mackenzie, C.S., et al., Older adults' help-seeking attitudes and treatment beliefs concerning mental health problems. Am J Geriatr Psychiatry, 2008. 16(12): p. 1010-9.

Alonso, J. and J.P. Lepine, Overview of key data from the European Study of the Epidemiology of Mental Disorders (ESEMeD). J Clin Psychiatry, 2007. 68 Suppl 2: p. 3-9.

Kessler, R.C., et al., Prevalence and treatment of mental disorders, 1990 to 2003. N Engl J Med, 2005. 352(24): p. 2515-23.

Schomerus, G. and M.C. Angermeyer, Stigma and its impact on help-seeking for mental disorders: what do we know? Epidemiol Psichiatr Soc, 2008. 17(1): p. 31-7.

www.changingminds.org. [cited.21-8-2010]

http://www.who.int/mental_health/evidence/en/promoting_mhh.pdf. Promoting Mental health. 2004 [cited.21-8-2010]

IMPACT OF COMMUNITY MENTAL HEALTH PROGRAMS OF IMHANS

Dr. P Krishna Kumar, Ms. Tripthi Jose

Integrating mental health services with the primary health care system is the only solution to the problem of scarcity of mental health services in rural areas. The theme of world mental health day-2009 reflected this fact. The theme, "**Mental Health in Primary Care: Enhancing Treatment and Promoting Mental Health**", aimed to emphasize the importance of incorporating mental health care in the primary health care for better delivery of mental health services to the community.

Currently community mental health program is active in the five northern districts of Kerala. Mental health services, though to a limited extent, is made available in the PHC/ CHC level in the 5 northern districts of Kerala, through the community mental health clinics supported by NRHM and DMHP.

The district mental health program started functioning in Wayanad district in June 2007 under IMHANS. DMHP started in Kannur district under the aegis of the Department of Psychiatry at Calicut Medical College in the same year. IMHANS started the NRHM supported community mental health program (CMHP) in Kozhikode in November 2007, Malappuram in February 2008 and Kasargode in February 2009. At present there are 17 clinics in Kozhikode district, 48 clinics in Malappuram district, 17 clinics in Kasargode district, 13 clinics in Wayanad district, and 22 clinics in Kannur district. Mental health services are available in the community health centre level in all the five districts of the erstwhile Malabar area. In Malappuram district psychiatry services are available in the PHC level. This is a unique achievement and no where in India such wide coverage of community psychiatry services is available**.**

This was possible because of the National Rural Health Mission, Kerala included community mental health program in the "Arogya Keralam" project. The DMHP for Kannur and wayanad are also now supported by the NRHM. It is felt that the NRHM guidelines are more flexible and could be modified as per the "felt needs" of the state. It is ideal to include mental health as a component of the NRHM rather than separating mental health from the main stream health programs.

The impact of the community mental health program could be summarized in the following headings**:**

1. Mental health services made available, though to a limited extent, in the CHC/ PHC level in the five northern districts. It could be a beginning to integrate mental health services in the primary health care system**.**

2. Steady availability of psychiatry care in

Director: Dr. P Krishna Kumar DCH, Dip NB(Paed), MD(Psy)
Institute of Mental Health and Neuro Sciences(IMHANS)
Kuthiravattom, Kozhikode
Ms. Tripthi Jose MSW
Coordinator, IMHANS

the local primary/ community health centre and free medicines ensured better drug compliance and follow up and better quality of life

3. This also helped to reduce the number of hospitalizations and reduce the revolving door phenomena

4. Rehabilitation centres could be started in several centres in Malappuram and Kozhikode district and this is actually a beginning of the community based rehabilitation of mentally ill persons and a step in the direction of doing away with the asylum type of mental hospitals

5. Community based awareness programs and training programs resulted in better public awareness about mental health problems and early identification and referral services. This also helped in reducing the stigma attached to mental illness to a certain extent.

6. Finally, we could show that community care of the mentally ill is less expensive and more cost effective compared to hospital based care.

7. The effective implementation of the CMHP and the DMHP, Wayanad and Kannur could be taken as proof for the usefulness of including mental health as a component of NRHM and could be a model to other states.

Patient Data:

Till 2009 December total 6881 patients are registered and are on regular follow up in Malappuram, Kozhikode, Kasargode and Wayanad districts. In 2010 till now 1182 patients are registered. Around 2000 patients are registered in DMHP, Kannur. The details are shown in the table below

Table 1- Sex

Sex	Total	%
Female	3660	53
Male	3221	47
Total	6881	

Table 2- Age

Age group	Total	Percentage
Below 10 yrs	186	3
11- 20 yrs	575	8
20-60yrs	5500	80
Above 60 yrs	620	9
Total	6881	

Table 3- Diagnosis

Diagnosis	Total	%
Schizophrenia	2139	31
BPAD	1303	19
Depression	971	14
Delusional disorder	64	0.9
Schizoaffective	79	1.1
Epilepsy	270	4
Mental retardation	609	9
Dementia	59	0.8
Alcohol	85	1.2
Neurotic disorders	300	4
Organic mental disorder	43	0.6
Psychosis NOS	1078	16
	7000	

REHABILITATION CENTRES:

Rehabilitation centres for mentally ill persons function in the following places in Balusseri, Thalakkulathoor & Cherootty road in Kozhikode district and at Edavanna, Edakkara, Kunnumbram, Manjeri, Areekode, Nilambur, Malappuram and pookkottumpadam in malappuram district.

Effectiveness of the CMHP:

Patient care:

The effectiveness of a community mental health program could be quantitatively assessed to a certain extent by studying the number of hospitalizations and also its impact on hospital based care. Ideally an effective community program should result in reduced number of hospitalizations and reduction in the number of follow up patients in the mental hospitals. We have analyzed the out patient and in patient data at the Government Mental Health Centre (GMHC), Kozhikode. The GMHC, Kozhikode caters to needs of the five northern districts of Kerala where effective community mental health program now exists.

It could be seen that number inpatients at the GMHC, Kozhikode decreased over the years after starting the community program (Fig. 1). The number of patients attending the GMHC for

follow up treatment is also significantly decreased (Fig.2). At the same time there was marginal increase in the number of new cases attending the GMHC (Fig 3). This could be because now more patients are referred and also because patients seen for the first time in the CMHP are usually referred to the GMHC for detailed work up.

Table 4 - In patient data- GMHC

year	IP Male	IP female	IP child	IP total
2005	1936	689	1	2626
2006	1858	693	2	2553
2007	1558	623	4	2185
2008	1422	660	1	2083
2009	1224	612	0	1836

Figure – I – GMHC IP Data 2000 to 2009

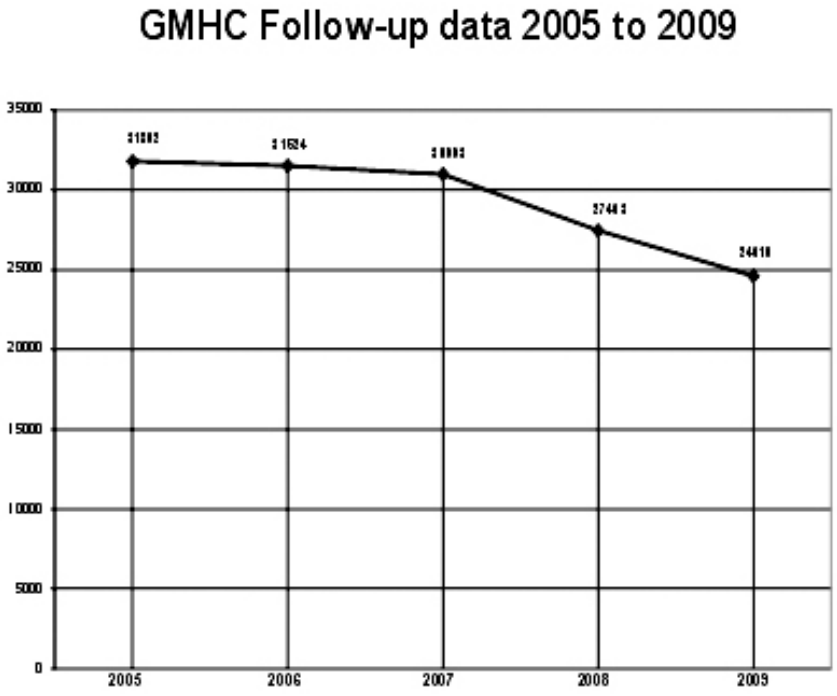
Table 5- Out patient data- GMHC

Year	OP male	OP female	OP child	OP total
2005	1421	689	133	2243
2006	1597	832	356	2785
2007	1410	816	375	2551
2008	1513	929	468	2910
2009	1565	1055	324	2944

GMHC OP Data 2002 to 2009

Table 6 - Follow up patient data GMHC

Year	Repeat OP male	Repeat OP female	Repeat OP child	Repeat OP total
2005	22118	9613	71	31802
2006	21693	9345	486	31524
2007	20894	9526	573	30993
2008	18274	8624	565	27463
2009	16314	8048	248	24610



ECONOMIC DATA – COST EFFECTIVE ANALYSIS:

It is world over agreed upon that the quality of life is better in patients managed in the community itself when compared to patients in mental hospitals. It is also a known factor that community care is less expensive compared to hospital based care.

We have analyzed the expenditure for the inpatient care for GMHC Kozhikode during the year 2009. The expenditure for diet, medicines and dress is given below. This does not include staff salary and electricity and water charges. The total amount required for IP care in the GMHC will be much more than what is given below if staff salary, electricity, water charges and incidental expenses like caring for physical illness are also considered.

Table 7 Expenditure for inpatient care GMHC Kozhikode 2009

Sl. No.	Item	Amount Spent
1	Diet	80,00,000-
2	Medicines	14,45,462-
3	Dress	5,00,000-
	Total	99,45,462-

Economic Advantage after the introduction of CMH Program

- o No. of inpatients in 2005: ***2626***
- o No. of inpatients in 2009: ***1836***
- o Reduction in the No. of inpatients : ***790***
- o Expense of inpatient care for one patient (2009): ***Rs. 5417-***
- o Considering the ***figure-I*** it is expected that the inpatients at GMHC could have been 2626 or more if the mental health program was not implemented.
- o Hence the expense for the year 2009 would have been: ***Rs. 1,35,42,500-***
- o The amount saved through mental health program: ***Rs. 35,42,500-***
- o **The amount saved through mental health program as a percentage of total expenditure:** ***26.15%***

CONCLUSION:

Majority of patients with mental illness could be effectively managed in the community. Community based care is effective and less expensive**.** Extending the community mental health program to all the 14 districts of Kerala will help to provide mental health services in the CHC/ PHC level. This will help to reduce the burden of mental health centres and to utilize the GMHCs exclusively for those patients who really require specialty and in patient care. This will also help to reduce the expenditure of patient care and effective utilization of the fund allotted for mental health.

ACKNOWLEDGEMENT:

We acknowledge the contribution of Dr. Roshan Bijlee, Dr. Ganga G Kaimal, Dr. Kishore Kumar, Dr. Rajagopalan, Dr. JH Manoj, Dr. Ashokan, Mr. Binse MG, Mr. Jinil M Kurien, Mr. Mithun George, Mr. Aneesh, Ms Asha Paul, Mr. Paulachan , Ms. Suja mathew, Mr. Amal Thomas, Ms. Soumya Sukumaran , Mr. Rajeevan, Ms. Greeshma MG, Ms. Preethi, Mr. Shaji, Mr. Shahid N, Ms. Sreeja K, Ms. Shagina P, Ms Shijina, Ms. Shyni, Mr. KM. Basheer, Mr. Kunhikrishnan, Ms. Prathyusha P and Ms. Sara Joseph who were the team members who made the community mental health program a success.

We thank Dr. Dinesh Arora, State mission Director, and Mr. Suresh, State Program Manager, NRHM and the District Project Managers and all the staff of NRHM and Dr. D Raju, Secretary, State Mental Health Authority, for their help in organizing the community mental health program.

MAKING SENSE OUT OF NON-SENSE: UNDERSTANDING AND MANAGING SOMATOFORM DISORDERS

Dr. Varghese P Punnoose

"I am more sick than my doctors think"
Alfred Nobel

In modern medicine, clinical disciplines traditionally consider only those symptoms which are associated with a physical sign or a laboratory finding as significant. Even when these are absent, a pathophysiology which is known or at least presumed may also lend some respectability for the symptoms. For example, complaints like *weakness of limbs* when associated with changes in deep tendon reflexes or *chest pain* when ischemic changes in ECG are demonstrated or *headache* descriptions suggestive of vascular origin or *fatigue* when investigated shows high TSH values are readily accepted as genuine symptoms. In training undergraduates and post graduates in clinical sciences, only those cases with demonstrable findings and laboratory evidences are thought to be worthy of any serious diagnostic considerations. Hence it is not surprising that they are never taken up for a bedside discussion or for a case conference. But in actual clinical settings, either in general practice or in specialty settings, the situation is quite different. In a well-known British study, Bridges and Goldberg (1985) found that approximately 20% of patients in family practice primarily present with functional somatic symptoms which meets research criteria for somatization. A significantly high proportion of patients present with complaints which are not justified by the presence of a corresponding physical sign or a laboratory finding.

As far as the management of these patients are concerned, initially investigations are suggested with enthusiasm and curiosity from the part of the physician to unearth an elusive mysterious diagnosis. Many a young doctors are carried away by the medical fairy tales in which great clinicians of yesteryears (either intuitively or by ordering for an extraordinary investigation) making rare diagnoses which has eluded the less diligent eyes of the lesser mortals! But as the patient continues to present with new set of symptoms in every visit or persist with the same complaints and the investigations continue not to reveal anything significant, the initial interest and enthusiasm gives way to frustration and helplessness. This can lead on to unpleasantness and loss of trust in the doctor-patient relationship. The patient who initially had complied to every suggestion for a new investigation or procedure with a hope of getting a diagnosis may start accusing the doctor of forcing unnecessary investigations (with ulterior motives). The physician on the other hand may try to believe and explain the symptoms as resulting from vague constructs like allergy, wear and tear due to ageing, psychosomatic, perimenopausal symptoms etc. He may have ambivalent feelings about the possibility of missing a real

Dr. Varghese P Punnoose MD
Associate Professor of Psychiatry
Govt. Medical College Kottayam Kerala

problem. A physician is also likely to experience guilt over his inability to help the patient, over his incompetency as a clinician, and over the expenses which the patient had to incur. As a reaction formation to these feelings, she may start seeing the patient as a malingerer who is eating up her valuable time and using up the limited medical resources unnecessarily. On the patient's side also the emotions can run high. He feels betrayed and not cared by his doctor. On the relentless pursuit of finding a meaning to his symptoms he may start believing in equally imprecise constructs like low blood pressure, high ESR, eosinophilia etc which may be inadvertently and covertly agreed by the physician who is equally if not more at a loss to explain the symptoms!

Unfortunately in India, undergraduate and post graduate medical and psychiatric training is grossly inadequate to understand and effectively deal with these cases which are considered to be functional! This article is written in the background of clinical experience of the authors in a consultation –liaison setting of a general hospital psychiatry unit.

Reasons for medically unexplained physical symptoms remaining one of the areas which are least explored despite their common occurrence may include the following.

1. Traditionally these conditions are not considered as part of core psychiatry. The nosology and classification of these conditions are confusing and controversial.

2. Psychiatrists who are trained in mental hospitals are least exposed and not having adequate expertise in this area.

3. Reluctance from the part of patients to seek psychiatric help

4. Difficulties encountered by general practitioners and specialists in making a referral for psychiatric help

Authors from West have proposed many models in understanding functional somatic symptoms. These models are either directed to psychiatrists or primary care physicians. (Balint 1964, Bass and Benjamin 1993, Bass and Murphy 1990, Sharpe, Mayou, Bass 1995). Incorporating the research from the developing world, WHO also has come out with training packages addressing the need of such communities (Sell, H.L., Srinivasa Murthy, R., Seshadri, A. et al .1990). Each of these models has their own strengths and problems. Every centre need to develop and evolve models suiting their needs and limitations as there cannot be a single ideal universal algorithm which may suit a condition as complex and diverse as functional somatic symptoms.

A model for understanding functional somatic symptoms which is expected to be friendly to the non-psychiatrist users is suggested in this article. The non- psychiatrist medical professional may consider the following possibilities when he is encountering medically unexplained somatic symptoms.

1. Symptoms which are in excessive (disproportionate to) the "real disease"

2. Anxiety disorders and Depressive disorders presenting with physical symptoms

3. No physical or mental disorders to account for the somatic symptoms

4. Acute and dramatic presentation of physical symptoms without a medical cause

5. Concern and conviction of a disease when none exists

6. Deliberate feigning of diseases

1. Symptoms which are in excessive (disproportionate to) the "real disease"

This constitutes one of the most frequently encountered situations in clinical practice. This pattern of excessive complaining and dissatisfaction may baffle and annoy the physician who expects the patient to show a corresponding improvement directly proportional

to the physical signs and lab reports. This may be due to the following factors

a) The normal regressive behavior associated with any medical illness

b)The propensity of certain temperamental - personality types to perceive symptoms in high intensity

c) The autonomic responses associated with anxiety leading to physical symptoms

d) The reward-punishment contingencies perpetuating illness behavior

2. Anxiety / Depressive disorders presenting with physical symptoms

The conventional view is that it is the psychological symptoms and not physical symptoms which constitutes the legitimate presentation of these emotional disorders. The neurobiological basis of Anxiety disorders and Depressive disorders points to the involvement of dysfunctional serotonergic, nor-adrenergic or dopaminergic neuronal circuits. If the physician realizes that the same dysfunctional circuits can produce "real" physical symptoms and they are thus legitimate manifestation of disorders which are primarily emotional, that will give an explanatory model which will not produce cognitive dissonance to a medically trained mind. Thus he will consider Anxiety disorders and Depressive disorders higher up in the priority list of differential diagnosis putting them much ahead of rare conditions like acute intermittent porphyria or pheochromocytoma.

3. No physical or mental disorders to account for the somatic symptoms

When the somatic symptoms cannot be explained based on the above mentioned situations, they become much more difficult to be understood. Even the psychologically minded physicians find it difficult to empathise with this group. Medical professionals not trained in psychiatry may find it very difficult to understand the subtle difference between these disorders and conditions which are of factitious nature. One has to admit that these patients constitute the group which is difficult to tag a diagnosis and manage in the usual way by virtue of the very nature and chronicity characteristic of these disorders. Naming them as somatoform disorders or sub typing them into somatization disorder or pain disorder may help to differentiate them from malingering or factitious disorders but may not help much in understanding or managing them. But if the physician can understand these disorders are resulting from abnormal processing and perception of signals in the central nervous system that may help not only them, but also the patients or their worried relatives to make sense out of this baffling presentation.

4. Acute and dramatic presentation of physical symptoms without a medical cause

A psychiatrist may label them as a Conversion disorder or a Dissociative disorder when such disorders are presumed to have a causal relationship to a psychological conflict which may be unconscious. When he makes a referral to a psychiatrist, a medical professional is usually not bothered over these subtleties and is worried whether he is missing an organic cause, is concerned about symptom removal, and is often curious about the psychological stressor identified. Very often experienced physicians have evolved their own method of dealing with "hysterical" cases from their experience and not from any formal psychiatric training. One has to admit that these methods are effective at least for symptom removal. The practical difficulties in referring these patients for a psychiatric consultation often cited by physicians are also very valid in the background of our cultural context.

5. Concern and conviction of a disease when none exists

For the psychiatrist, this group whose main

concern is not the symptoms, but the beliefs about health, disease and diagnosis may be hypochondriasis, a sub type of somatoform disorder. Understanding the relationship between health anxiety and beliefs about diseases and ill health may provide better insight for the physician in empathising with these patients who are very likely to elicit negative emotional responses from the therapist and other care takers.

6. Deliberate feigning of diseases

The subtle difference between factitious disorders and malingering does not bother the non-psychiatrist. The fact that these disorders are relatively rare compared to the more common place conditions described above should be imparted to them rather than heading for the hair splitting arguments over factitious versus malingering.

These six situations need not be considered essentially in the exact order given as above. The priority in this article has been assigned depending on the frequency usually encountered in clinical practice in a general hospital setting. We have abided to the clinical dictum that *'uncommon presentations of common conditions are much more common than common presentation of rare conditions'* in assigning this priority. The clinician should use his practical wisdom in determining priorities in individual cases.

Management

Managing *FuSSy (Functional Somatic Symptoms)* patients is a challenging task for any physician. First and foremost, it is crucial to accept the real nature of the symptoms, with the exception of factitious disorders.

Many models have been proposed by Western authors for understanding and managing functional somatic symptoms. For example, Linda Gask (1995) described a practical model for the detection, acknowledgement and management of these conditions which can be easily learned and used in primary care. The three stage model emphasizes the importance of shared care between the psychiatrist and the primary health care team. This "Reattribution Model" further emphasizes the crucial role of offering an explanation for the physical symptoms experienced.

The following general principles can be suggested in the management of chronic somatization in primary care. (O'Dowd 1988, Bass and Murphy 1990, Goldberg et al1992, and Bass and Benjamin 1992.)

1. Reassurance that nothing is wrong does not help

2. The patient does not want simple straight forward symptom relief, but understanding.

3. Avoid challenging the patient but instead agree that there is a problem

4. Little is gained by a premature explanation that the symptoms are emotional.

5. A positive organic diagnosis will not cure the patient.

6. Try and be direct and honest with the patient about areas that you agree on and those that you disagree on.

7. Regular scheduled appointments are required

8. Clear agenda setting can be helpful in each consultation

9. Diagnostic tests should be limited.

10. Provide a clear model for the patient.

11. Involve the patient's family.

12. Involve colleagues in the primary care team.

13.Don't expect a cure.

OFFERING AN EXPLANATORY MODEL

A patient with medically unexplained somatic symptoms is often at a loss to understand the why and how of his symptoms. Quite often he is given vague and contradictory explanations by doctors which may not be suiting his belief systems and explanations. Prescriptions of psychotropic medicines given without a convincing explanation are very likely to be perceived by the patient as dishonest.

A model which focuses on dysfunctional neurotransmission and brain circuits which are influenced by external stressors and internal conflicts leading on to symptoms may be appropriate in the first three situations. Abnormal signal transmission and processing in the nervous system may also be brought in as legitimate explanations for these conditions. Whenever pharmacological agents are prescribed they should be explained as agents which can correct these irregularities and not as tranquillizers. One cannot expect to make every doctor skilled in individual psychotherapies, but basic principles of behavioural management and counselling- communication skills can be trained to every medical professional.

Conclusion

Making psychiatry a compulsory subject with at least six weeks of clinical training and examination is likely to equip any doctor with these skills. Teaching of psychiatry at post-graduate level of every clinical subject should also be seriously considered. In post-graduate psychiatric training and examination, the importance given to consultation- liaison psychiatry should be enhanced to meet the challenges and need in this area. The consultation- liaison work between psychiatrists and specialists in other clinical subjects should strengthened. Only with these policy changes, the medical profession will be able to meet these unseen but vast needs in health care.

"Writing prescriptions is easy, understanding people hard" Franz Kafka.

REFERENCES

Balint, M. (1964). The doctor, his patient and the illness. Pitman, London .

Bass, C. and Benjamin, S. (1993). The management of chronic somatization.

British Journal of Psychiatry, 162, 472-80.

Bass, C. and Murphy, M.R. (1990). Somatization disorder : critique of the concept and suggestions for future research. In somatization : physical symptoms and psychological illness (ed. C. Bass). Blackwell, Oxford.

Bridges K W and Goldberg D P (1985) Somatic presentations of psychiatric illness in primary care settings. *Journal of Psychosomatic Research* 32: 137-44

Golberg, R.J., Novack, D.H., and Gask, L. (1992). The recognition and management of somatization : what is needed in primary care training. Psychosomatics, 33, 55-61.

Linda Gask Management in primary care. In Treatment of Functional Somatic Symptoms; Oxford Univ. Press 1995.

Michal Sharpe, Richard Mayou, and Christopher Bass: Concepts, theories and terminology. In Treatment of Functional Somatic Symptoms; Oxford Univ. Press 1995.

Sell, H.L., Srinivasa Murthy, R., Seshadri, A. et al .(1990). Recognition and management of patients with functional complains (Psychosocial problems, ill defined somatic complains). A training package for primary-care physician. In psychological disorders in general medical settings, (ed. n. Sartorius, D. Goldberg, G. de Girolamo et al.), pp. 189-200. WHO/Hogrefe and Huber, Toronto.