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Editorial

Stigma and Community Interventions: Has enough been done ?

Rajesh Sagar, Raman Deep Pattanayak

Stigma forms an invisible but significant barrier in the treatment seeking process and in the recovery and reintegration efforts for people suffering from mental and behavioral disorders. As conceptualized by Thornicroft,¹ stigma has three closely related constituent elements comprising of problems of knowledge (ignorance), problems of negative attitudes (prejudice) and problems of behavior (discrimination). Widespread stigma in community adds to the disability of the person with mental illness and affects the family members.

The award paper by Garg et al² published in current issue has highlighted this fact that the families of mentally ill persons also bear the brunt of stigma and discrimination similar to the patients, especially in case of chronic disorders such as schizophrenia. Further, the substance using patients and their caregivers had highest total stigma of all disorders.² These feelings of stigma and discrimination are deeply entrenched in the psyche of the patients and their family members affecting many spheres of their life (marriage, business, education, relationships etc) and self-identity. In Asian countries, stigma might be perceived as being more severe, because it is attached to the family as a whole.³

In case of physical illnesses (e.g. tuberculosis, leprosy), the availability of effective, curative treatments have been able to cut down the stigma associated with them.⁴ As far as psychiatric disorders are concerned, the availability of treatment has had many positive effects, majorly on the de-institutionalization of patients and the move towards community-based care. However, unlike the treatment for infectious illnesses, the mental health treatments available are geared at control, rather than cure, and even then, an adequate or full control may not be as likely. The medications are likely to continue for a long term and occasionally, the treatment per se is viewed as a source of stigma, rather than being a source of comfort. Most patients hide their daily medication from their friends, relatives or colleagues.

Indeed, with the advent of psychotropic medications and human rights movement, several positive changes have been seen in terms of stigma reduction, if not elimination. Past century has seen a major change in stance from 'protecting the society from mentally ill persons by keeping them in mental asylums' to protecting their human rights and caring for mentally ill in the community. There have been several other positive changes and initiatives for mentally ill persons. However, stigma and negative attitudes continue to have a major impact on public health programmes and services for mental illness, which remain underutilized.⁵ As stigma is a ubiquitous phenomenon, engaging in only individual level interventions (treatment, rehabilitation, self help etc) are unlikely to affect the attitudes of the communities in a significant manner. There is a need for more emphasis on the community interventions as well as workplace interventions.

Interventions proven to be effective for other stigmatizing physical diseases can serve as a useful source to refer for stigma reduction in mental illness as well.⁴ It has been seen from review of literature that following interventions at a community level may help in stigma reduction (a) Education: with an aim to inform the general public and community groups in order to

increase their knowledge about the illness and provide facts that counter the false assumptions on which stigma is based, (b) Contact: refers to all interactions, direct or through media, between the public and persons affected with the specific objective to reduce stigmatizing attitudes. Additionally, there might be some role for advocacy as a means for stigma reduction, even though it remains under-researched as a strategy. Advocacy programmes, for example as seen in case of HIV/AIDS, work towards provision of an enabling environment, influence the policies and discriminatory laws, and to improve access to treatment and care for persons affected. Target-specific stigma change, where the programmes are crafted specifically at the key groups that have power in the lives of people with mental illness—e.g. employers, legal justice system, health care providers and policy makers are shown to be effective.⁶ A carefully coordinated approach based on social marketing techniques designed to achieve a social good have worked.⁷

Coming to the action in Indian context, it is worthwhile to begin with a mention of an international, collaborative programme (Open the Doors) initiated by World Psychiatric Association⁸ nearly two decades ago, and now established with an international network in more than 25 countries, including India. Various anti-stigma interventions ranging from speaker's bureaus and contact-based educational programs, to protest-based programs, to mass media campaigns using television or radio and novel applications of drama and the arts, run with the goal of reduction or elimination of stigma related to schizophrenia. It is envisaged as a long-term programme rather than a short-lasting campaign.⁸ Unlike any of earlier programs, the unique aspect is that it actively involves the patients and family members at all the possible steps right from planning to evaluation of programme. The specific targets, therefore, may vary from one region to another depending on local needs and stakeholder's perceptive.⁵ In 2004, Dr. Abdul Kalam, then President of India had helped launch an anti stigma effort in India in collaboration between SCARF and the WPA Global programme. However, somehow, the WPA global programme has still not enjoyed a wide coverage in India compared to some other countries

The National Mental Health Programme (NMHP) by the Government of India has emphasized on the Information, Education and Communication (IEC) activities to create awareness and removal of stigma for mental illness. The efforts are made to address mental health issues through print and electronic media. As part of NMHP IEC activities, a series of advertisements and public messages were conceptualized and disseminated through national television and radio programmes with an aim of generating awareness regarding mental disorders and their treatment among people.⁹ Similarly, National AIDS control Organization also initiated public awareness messages through national media aimed at stopping the workplace and other discrimination against people living with HIV/AIDS.

Large scale initiatives towards stigma reduction are still lacking in India.¹⁰ Though there have been efforts by several agencies, but only few among them have been far-reaching and sustainable. Indian Psychiatric Society had committed to fight against stigma since its inception (e.g. 'Free the society from stigma of mental illness' theme in 1997). Certain legislations are in place and are currently being revised e.g Persons with Disability Act and Mental Health Care Bill. These are aimed to ensure social inclusion of mentally ill persons with provisions for protection of rights, provision of care, employment opportunities, affirmative action and non-discrimination for persons with mental illness. However, more needs to be done in terms of implementation and resource allocation. Many community and non-governmental organizations have been working in the field of chronic mental illness as well as substance use, with an effort

at evaluation of the community based rehabilitation of a mental disorder. ¹¹ Quality research on effectiveness of specific anti-stigma interventions is, however, conspicuously lacking.

To create a large scale initiative in a huge country is a challenge, especially in face of limited manpower and resources. National Institute of Mental Health and Neurosciences has sought to coordinate efforts in four major metropolitan cities to develop Local Action Groups with involvement of families and support organizations. Certain simple initiatives e.g printing messages on milk packets, distribution of pamphlets at hospitals and shopping malls, newspaper coverage etc were employed to create awareness. School based educative initiatives can facilitate the dissemination of information to a larger geographical area, and at an early age. Collaborations have been made with social groups to develop specific programmes for law enforcement personnel, general practitioners and medical students, all of which will assist in reducing stigma. The limitation of funding and other resources have not allowed to assess the effectiveness and outcome data. ^{10,12}

In parallel with the people with physical disabilities, people with mental illness-related disabilities may need what are called 'reasonable adjustments', which can be implemented at the workplace.¹ Several changes are necessary, for example, the development of psychological services for people with mental illness in work, support programmes for gaining employment or awareness campaigns.

There is a need to develop national mental health policies in accordance to international standards. World Health Organization has published standards to guide countries in producing and revising mental health laws, though, nearly 40% of countries in the world do not have a mental health policy, including India. International organizations can contribute towards better care and less discrimination by indicating the need for national mental health policies and by giving guidance on their content. ¹⁰

There is no simple solution or cure to remove stigma of mental illness. The roots of stigmatization, and reasons for its continuation, are quite complex and embedded in the socio-cultural norms of a society. Besides health care professionals, other important channels such as media, healthcare, social services, educational system, law enforcement and legislation have an important role to play in dealing with stigma.

In future, use of culturally appropriate messages framed in an easily understandable fashion need to be disseminated at a larger scale. The community leaders can be involved for a far-reaching effect. Future research will guide on the most effective strategy or a combination of strategies to reduce stigma by generating the evidence base. It is to be re-emphasized that there is important to reach out to the family members and take their perspectives into account while planning the anti-stigma programmes. To be judged effective, interventions must fundamentally change the stigma experiences of people, and produce a lasting change in behaviours, and not only the knowledge and attitudes. ¹³ Finally, it seems that enough has not been done. Rather, the coordinated, large-scale efforts have been few and far in between. There is a need to strengthen the efforts aimed at stigma reduction in Indian context.

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International perspective

Review article

Community Mental Health Service: An experience from the East Lille, France

Jean Luc Roelandt, Nicolas Daumerie, Laurent Defromont, Aude Caria, Paula Bastow, Jugal Kishore

Abstract

Over the past 30 years in the Eastern Lille Public Psychiatric sector, there had been progressive development of set up in community psychiatry. This innovative set up conforms to WHO recommendations. The essential priority is to avoid resorting to traditional hospitalisation, and integrating the entire health system into the city, via a network involving all interested partners: users, carers, families and elected representatives. The ambition of this socially inclusive service is to ensure the adaptation and non-exclusion of persons requiring mental health care and to tackle stigma and discrimination. It gives a new perception to psychiatry that is innovative and experimental, and observing human rights, i.e., citizen psychiatry. This experiment also provides lesson to India for effective implementation of its national mental health program.

Keywords: Community Mental Health, Citizen Psychiatry, Lille, France, India

Introduction

For thirty years, every effort has been made to integrate psychiatry into the field of medicine, and mental health into the health field. Mental health has become everyone's business: psychiatry and social exclusion specialists and non-specialists are united in fight against mental disorders. Information about diseases and treatments, prevention and psychosocial rehabilitation are part of the patients' rights and society's duties. This mix of all sectors is termed as "citizen psychiatry"^{1,2} based on the 'five principles', which were developed over time:

1. Human and civic rights are inalienable. Psychiatric disorders can never invalidate them.
2. Justice and psychiatry, prison and hospital, imprisonment and care must no longer be confused.
3. Society, and therefore mental health services, has to adjust to patients' needs, not the other way round.
4. Citizen Psychiatry supersedes the strategy of French sectorization, in force since 1945, as it promotes the closure of medical and social exclusion places like asylums and large institutions.
5. Fight against stigmatization and discrimination is essential: raising the population's awareness in order to modify the prejudices of danger, misunderstanding and incurability against people with mental problems and facilitating access to care.³

The application of these principles to the functioning of a healthcare service implies changes in fundamental practice that can be summarized as follows:

- (a) Change of paradigm: Psychiatric services should no longer have partners but be a partner.
- (b) Liaison of the psychiatry sector with mental health participants: users, families, towns' health and social leaders.
- (c) Coordination of responses to the population's needs in healthcare requires the involvement of local elected officials, in order to give coherence to a global and non segregated position, between health, social and cultural services.
- (d) Involvement and integration of users and families in healthcare and its management.

Socio-demographic context of the psychiatry sector in East Lille

The psychiatry sector of East Lille covers an area of 2653 hectares in the south-eastern area of the metropolis of Lille, i.e. 6 towns of the Eastern suburb, which has a population of 86,000 inhabitants living in the urban zone. Eastern Lille Suburbs comprises the following towns: Faches-Thumesnil, Hellemmes-Lille, Lesquin, Lezennes, Mons-en-Barœul and Ronchin.

The E.P.S.M (Former Psychiatric hospital of Armentières renamed Etablissement Public de Santé Mentale, Lille Métropole, i.e., Public Mental Health Institute Lille Métropole) Lille-Métropole, whose administrative headquarters are located in Armentières 25 km West of Lille, is in charge of the service administrative management. This area is close to the Nord-Pas-de-Calais region of France, in which 4.2% of the population is of foreign origin and has more unemployment (15.6% vs. a national average of 11.1%). Health statistics show an abnormally high death rate, the shortest life expectancy in France and an under resourced health system. The Nord-Pas-de-Calais region is, historically, having big asylums and 4 big hospitals located in around Lille, whose psychiatry units started to integrate themselves closer in to the community ten years ago.

In 1998, the psychiatry service of Eastern Lille suburbs, Public Mental Health Institution, Lille Metropole (EPSM Lille Métropole) was promoted as a pilot site for community mental health by the mental health division of World Health Organisation (WHO). Since 2001, it has recognized the French WHO Collaborating Centre for Research and Training in Mental Health (WHOCRTMH) for its community mental health program. WHOCRTMH is one of the founding members of the International Mental Health Collaborating Network (IMHCN), created in 2001 in Birmingham, for the promotion of international cooperation in the field of pilot experiences in community mental health.

Historical background

In 1977, there was shift in the management of mentally ill subjects in one of the sectors. The leadership decided to change the treatment modality in adult psychiatry sector. From the 6 units in the Mental Hospital at Armentières hosting over 300 chronic mentally ill people, about 60 “restless” people from the whole region and the Loos Lez Lille prison, were restricted to the regional units for compulsory treatment, and 15 tuberculosis patients.

To help the transformation, a private non-profit Medico-Psycho-Social Association (AMPS: Association Médico-Psycho-Sociale) was created early in 1977, which gathered all good will of that time to change the asylum system and to develop psychiatric sectorization. In conjunction with the hospital of Armentières, the AMPS gathered the elected officials of the 6 towns in the sector, care professionals, social partners and people interested in the implementation of the sectorization policy in East Lille. To begin with, it brought about the opening of the Maison Antonin Artaud (medico-psychological centre) and favored the free acquisition of the premises by the municipality of Hellemmes. It acted as the lever for all the subsequent development that was carried out.

The first mission of the AMPS was to raise the population’s awareness about mental health issues and the importance of integrating people suffering from mental health problems into the City. Numerous meetings were organized in the neighbourhood. Then, research was carried out to study more precisely the stereotypes of “mental illness” and “madness” and the stigmatization of “mentally ill” or “mad” people. This research work, supported by the Nord-Pas-de-Calais Regional Council early in 1979, enabled the implementation of a policy of integration and public education. The project was able to develop common ground for psychiatry team and local artists, keeping as an objective of rooting out the negative image of madness and mental illnesses by the population in the towns of the sector. Several cultural and artistic programs were organized together by the psychiatry teams and municipal authorities.

In 1982, AGORA (Greek word for an open "place of assembly"), a centre of housing and deinstitutionalization, specializing in the rehabilitation of long term patients, was created. Its employees were paid by the AMPS. This experience initiated first contacts with social landlords, for the setting up of an associative and 'therapeutic flat', then for access to dispersed associative housing facilities. These thirty years of common work within the association and with health and social authorities enabled the changes, and this constitutes the psychiatry sector of the Eastern suburb of Lille today. The change occurred in 2 essential steps:

The first step (1975-1995) was the shift from the psychiatric hospital to the community, by the development of sectorization with the help of the global budget. In 1975, 98% of the budget was devoted to full-time hospitalisation (i.e. 300 beds in Armentières).

The second step (1995-2006) consisted of decentralising and opening the psychiatry service by integrating team professionals in the health, social and cultural services of the towns. This integration increased the partners' participation (users, families, professionals and elected officials) in the decisions of the psychiatry service. The overall objective is that the psychiatry team goes out of its ghetto and thus professionals become "nice to know" by the population. Structures cannot be set up without the local elected officials' legal agreement. The overall philosophy is one of care and support. The practice is open and multi-faceted.

In 2009, 80% of professional staff was assigned to the city, while 20% remained assigned to full-time hospitalisation (26 beds, 9 are occupied in average). Today's care structures of the East Lille sector are, thus, spread within the cities, over a dozen different places, and always in contact with one another, which facilitates the patient's moves between each unit. These supported places are either rented most of the time or put at the disposal of patients by the towns, and are located closest to the treated population.

In 2010, following the positive development in France of the mental health local council (National Program 2008-2011) where the AMPS has been transformed into a mental health local council (MHLC) gathering the 6 municipalities of the eastern Lille mental health services territory. The MHLC provides a discussion platform for 6 towns' mayors, citizens, users of mental services, families, artists, cultural services, low income housing services, curators, social services, sanitary services, and psychiatric services. Similarly, prevention and information education communication activities are planned with the involvement of all stakeholders.

Caring Places: Accessibility and Continuity

Consultations

The psychiatric consultation centre "Maison Antonin Artaud" is located in a municipal house in Hellemmes. This place also hosts social receptions of the Unité Territoriale de Prévention et d'Aide Sociale d'Hellemmes (Territorial unit of prevention and social help / General Council) and the support service for gypsies.

The Van Belleghem medico-social centre is located in a Communal Centre of Social Action (in Faches-Thumesnil). This centre also hosts consultations for Maternal and Child Welfare, the Alfred Binet child psychiatry centre, sports medicine and social services. Psychiatric consultations are available within the Sports-Medical Centre located in the premises of the swimming pool in Ronchin. They are also available in the premises of the Territorial unit of prevention and social action of Hellemmes and Mons-en-Baroeul, which deals with elderly people and children (Maternal and Child Welfare) and is in charge of the follow-up of people in a precarious situation in the towns being served. Finally, they are available in the Medical House (Maison Médicale) of Mons-en-Baroeul, where one of the offices is rented to the sector team.

In all these places, consultations are offered. Besides psychiatrists of the sector, psychologists, psychomotility therapists and psychoanalysts offer diverse techniques such as psychoanalytic, cognitive-behavioural or systematic therapies.

Any person wishing to have a mental health care in that service, automatically see his/her general practitioner first, who provides an introductory liaison letter. These people are welcomed within 24 hour by a nurse of the sector, who assesses the situation and the emergency level, according to the attending physician and the result of the nurse assessment. If need be, the user is seen on the very same day by a psychiatrist. For cases that are judged as non urgent, an interdisciplinary meeting is organized twice a week, in order to provide user with better guidance and care.

Services of inclusion and care activities integrated in the City

Centres of therapeutic activities are called services of inclusion and care activities integrated in the City. A devoted team organizes inclusion and care activities in all artistic, sport and cultural places in the 6 towns of the sector and in the Frontière\$ centre.

Altogether, 48 different activities are offered per week, with 60% of them taking place in 21 places outside the service (association, social centre, maison folie, media library, retirement home, sports facilities, etc.).

In this system, activities are made upon medical prescription and reviewed regularly with users. They are all carried out in municipal structures, in conjunction with the local associative network, and are led by professional artists, sports professors (49 hours of weekly time paid by the EPSM Lille-Métropole). These activities include Plastic arts workshop, aesthetics workshop, media library, sports, dance, music, singing and video activities, as well as psycho bodily activities (body awareness “vécu corporel”, stimulation, aquarelax).

Also, a therapeutic workshop has been developed at the FRONTIERE\$ Centre in Hellemmes. This artistic centre in the inner city is co-located with a contemporary art gallery, financially being supported by the Regional Direction of Cultural Action (Direction Régionale de l'Action Culturelle), which organizes monthly exhibitions. The planning is meant to be diverse, as it opens towards inhabitants' leisure and daily life. No matter where they take place, activities are above all designed as a springboard to support the users' integration into local life and to give them the tools to break their social isolation. These activities include the possibility to have one's meal in municipal restaurants or in a municipal room where meals are being delivered by a caterer.

The psychosocial rehabilitation teams (apartment service, activities service, work placement service), lead inclusion activities and are also in charge of home visits, scheduled nurse interviews, and socio-educative guidance in conjunction with the City's services. Whether at home or in a unit, the multidisciplinary team offers a personalized follow-up with adapted intensity and frequency, in conjunction with a psychiatrist in-charge. Over 500 patients benefit from this type of support every year.

Full-time hospitalization

The historic part of the local services, the Jérôme Bosh Clinic, a full-time in-patient unit, remains located in EPSM Lille-Métropole at Armentières. This in-patient service will be transferred to the Lille General Hospital in the near future. In these fully renovated premises, 20 patients can be hospitalised and benefitted from the intensive care program. In 2006, the mean occupancy was 10 beds out of 20 for a mean length of stay of 8 days. During hospitalization, besides medical, psychological, nurse and socio-educational interviews, the patient benefits from artistic therapeutic activities (plastic arts, video, and music) and from bodily support (psychomotility, hydrotherapy, relaxation, dietetics, and aesthetics). The unit is completely open (doors are not locked, a person at the entry is in charge of watching entries and exits), and whatever the kind of placement is, it could be compulsory by legal order or by a third person request or free will of user. Patients have access to the information applicable to them, including their

medical treatment. They also attend meetings between carers and users, twice a week. There is a close articulation with the teams of the sector, which establishes first contact with the patient during hospitalization, to consider his/her discharge. Some hospitalized people are also taken to the FRONTIERE\$ Centre, in order to benefit from therapeutic activities, and meals in the Concorde room (in a municipal town), with patients in day care.

Alternatives to hospitalization

Therapeutic host family as an alternative to hospitalization: Therapeutic host families as an alternative to hospitalization were established in 2000 and there are currently 12 beds already available. In this case, the patient in an acute situation is sent to the family either directly, after a consultation, or secondarily after a hospitalization, for some days or some weeks. The instructions given to families are to host the person, not to cure him/her. A nurse and the social and medical team take care of support during home visits (management of treatment, link with therapeutic activities and consultations with the sector, in order to develop the individual project). Support is similar to that offered within the full-time hospitalization unit located in the hospital: medication, hydrotherapy and therapeutic activities carried out in the city in consultation centres and the towns' activity centres.

Families are paid up to 1036 euros per patient per month by the EPSM Lille-Métropole. They are an integral part of the psychiatry sector team. They provide attention and support which are important for patients. In family stays as an alternative to hospitalization, the average length of stay is 21 days. The host family in this way is therapeutic through the family dynamics complemented by the professional team and thus, enables personalised care of good quality.

Intensive care integrated in the City as an alternative to hospitalisation: This unit of 10 beds organizes reinforced follow-up of people who need it, during a repeatable period of 8 days. This follow-up takes into account the close circle of supporters and the patients' needs for a brief time, and for a reinforced follow-up (nurse interview, psychiatry, psychological consultations, relaxation, activities, etc.). This mode of intervention involves all carers (private nurses, general practitioner, local pharmacist, etc.) and all the person's de facto caregivers (family, friends, circle, etc.). It is the same team, along with the psychiatrist on call in the sector, which can be mobilized within 24 hour for people in the need of the service. It responds to post emergency situations, in order to guarantee total continuity of care and guidance to the patients. Reduction in stays and admissions for full time hospitalizations related to host families and development of home care treatment is given in Table 1.

Table 1: Paradigm shift from full time hospitalisation to home care treatment in Lille, France

For 86 000 inhabitants	1971	2002	2010
People in care	589	1677	2572
Ambulatory care (number of acts)	0	23478	48315
Admission to hospital / acute beds	145	444	360
Compulsory treatments	145 (100%)	99(22%)	87(24%)
Mean length of stay (in days)	± 213	14.5	6.5
Number of days of hospitalisation	77,640	4248	2490
Number of people admitted in host families (AFTAH)		87	63
Number of people admitted in home care treatment (SIIC)			234

Inclusion and rehabilitation: “DARE TO CARE”

The aim of the social inclusion program of WHO was to include and integrate care of mentally ill person within social groups and the regularization of the administrative, financial and social situation of the user. Mental health service at Lille has adopted WHO theme “Dare to Care” (WHO 2001) and other recommendations^{4,5} by developing and combining these three components in order to reach the overall objective: housing; employment; leisure, arts and culture.

1. Housing

Associative apartments: Access to associative apartments spread in the social fabric of the town is one of the major components of inclusion work. An “**apartment committee**” gathers the members of the Medico-Psycho-Social Association (AMPS: Association Médico-Psycho-Sociale), the representatives of public housing offices (HLM: Habitation à Loyer Modéré), social landlords, caregivers, the representatives of users and family associations and trustees. This committee decides on the allocation of apartments located in the public housing stock. The president is a locally elected official. The AMPS covers the deposit; the patients cover the rent and the general expenses, with the help, if need be, of the trustee or the guardian and the team. The caring and socio-educational team is in charge of medical and socio-educational follow-ups. The therapeutic program comprises regular consultations with the psychiatrist in charge, the treatment taken, nurse interviews and schedules of therapeutic activities. Since the creation of the Committee, 150 apartments have been put at the disposal of patients, mostly as a co-tenancy of two or three people, with the presence of one student per apartment, who is hosted ex gratia to share the tenants’ lives.

Currently, 57 apartments are supported by the “apartment committee” and 95 people, who accepted a contract of social inclusion and care, are being benefitted from this method of housing allocation. They are follow up by a specific mobile team, all days of the week i.e., 7X24 hrs.

Résidence André Breton: This associative and therapeutic residence is another form of access to accommodation, again within the framework of the public housing system. It is located in Fâches Thumesnil and comprises six sheltered apartments and a large therapeutic apartment which hosts six people with severe handicap. The residence is completed by 5 social accommodation facilities entirely managed by the municipality. This accommodation is made possible by the constant presence of hospital staff (care assistants, health education assistants, education assistants and hospital service agents). Each patient is the tenant of his/her apartment. It is a genuine alternative to the concentration of the severely handicapped in specialised homes, which is a new form of handicap segregation. Assistance is given to the person who enables a good mix of the population, rather than segregation.

Housing to avoid very long term hospitalization

The Résidence Ambroise Paré, located in a block of low-rent accommodation, comprises two studios, one of which is occupied by a student, one 3-room apartment occupied by two users residents, and a 4-room apartment housing a student and 2 residents. This scheme is part of a social program of low rent accommodation approved by the municipality of Lille and social landlords.

The Résidence Samuel Beckett is a former centre for housing and social rehabilitation, for patients from the sector, settled here as a first step to change the service (discharge of patients who have stayed in hospital for a long time). This centre, which is owned by the municipality of Fâches Thumesnil, hosted the hospital day-activity and the regional centre for the setting up of basketball boards in the cities. Today, the structure, which is put at disposal by the EPSM Lille-Métropole, hosts:

- an apartment accommodating a therapeutic host family, providing an alternative to hospitalization, with a user host for a mean period of six months, that corresponds to the rehabilitation period. The family also insures supervision duties in exchange of free accommodation.
- a second 5-room apartment, next to the first one, which is a therapeutic, associative, social and transitional hosting place, for patients who are medically stabilized and in transit for sheltered accommodation, a private or social apartment, a retirement home or any other accommodation facility. A student is also accommodated with the beneficiaries.

There is a housekeeper in the transitional apartment premises. The educational team is there during evenings and weekends. It observes and assesses the people's self-sufficiency and ability to live alone or in a shared apartment and to manage their daily life on their own. The sector nursing staff is in-charge of the visits and monitors therapeutic treatments.

2. Economic rehabilitation

Partnership with the Centre d'Adaptation à la Vie Active (CAVA - Centre for adaptation to working life): The CAVA located in Fâches-Thumesnil, is an association through the French law of 1901 (*Association de Handicapés de Fâches Thumesnil*: Association of disabled people of Fâches Thumesnil), which is a part of the field of inclusion through economic activities. Its purpose is to promote access to the job market for people with major difficulties of social and professional exclusion (recipients of minimal social income, long-term unemployed people). It has 20 places via a *contrat d'Accompagnement dans l'Emploi* (C.A.E.) (supervised work placement) or via a *contrat d'avenir*. The partnership with the sector leads to:

- The provision of 15 places within a specific setting, reserved for users referred to the centre by a sector psychiatrist. The aim is to "reboot" professional abilities (working patterns, professional relationships, team working, etc.). Patients are referred to the centre either directly or after an assessment by the occupational therapist of the therapeutic workshop in the Frontière\$ Centre, which was set up within the CAVA premises during 2006.
- The implementation of a socio-professional inclusion scheme for the disabled (DISPHP: *Dispositif d'Insertion Socioprofessionnelle en direction des Personnes Handicapées*), which

offers applicants a personalized and tailored course of socio-professional inclusion. This comprises successive steps: first, in training centers, in order to define the person's professional level and to validate it through work experience. Then, according to identified abilities and needs, the person is referred to qualifying training, possibly to a sheltered environment or, for most people, to the ordinary environment, via a *contrat d'accompagnement dans l'emploi* (CAE) (supervised work placement), within municipalities, local communities or partner associations.

The establishment of vocational rehabilitation integrated in the city: Following a three-year study carried out by a committee of experts, an experimental project was created, led by the municipality of Lezennes in the framework of the AMPS, composed of representatives of users and family associations, and associations of professionals in the field of economic inclusion. It is "integrated in the city" insofar as it is devoid of any production unit; all handicapped workers practise their professional activity within municipalities, local communities and partner associations, via the Work Centre. It enables people who are unable to integrate normally into the ordinary environment and who can however, find their place in conditions adjusted to their handicap.

Therapeutic work: In 2006, a new project to this scheme was added: "therapeutic work", whose purpose is to renovate and to furnish associative apartments, which needed furnishing or improvements to the living spaces. It is based on the principle of voluntary service and self-help by and for users, and it is led by a workshop supervisor, and an occupational therapist, assisted by an artist. It is a first step towards the return to employment, through the help of active groups.

3. Art, culture and leisure

The Frontiere\$ Centre: The Frontiere\$ Centre initiates artistic activities, in the framework of a hospital /culture partnership, which was created 18 years ago. It started with the rehabilitation of the J. Bosch Clinic, a former unit for compulsory treatment, by the patients who had stayed there, with the help of an architect. A scale model of the Centre was presented during a cultural week *Pavillon 11 – Procès de la folie* in 1984. At that time, the mental health department sector Lille-Métropole wanted the Centre to be located in the city. This was impossible because of local political and medical pressures, which wanted employment linked to "madness" to remain at the site in Armentières. The sector was a part of the "Health, Culture and Musical practice in institutions" mission, organised in 1983-84 by the French Ministry of Culture and the French Ministry of Health. Since then, 49 hours of cultural work per week have been implemented by the EPSM Lille-Métropole for artistic activities. Full-time artistic participation was created two years ago. For over a year, an arts professor has been hired by the E.P.S.M. Lille-Métropole. All cultural structures of the sector, or the city of Lille, are entrusted with these activities; groups are led by artists and supervised by nurses. For activities carried out by the school of body practice in Villeneuve d'Ascq and the Dance association in Lille, groups are organized by these institutions and users and resident users are gathered in these artistic schools.

Art has the particular faculty of establishing equality between patients and non-patients for artistic production. It allows evaluation and social acceptance. Contemporary art at least, the spearhead of our work in the sector, like mental disorders, requires interpretation, it cannot be understood immediately. The integration of artists into the psychiatric sector contributes to the production of imaginative works: its creativity reaches beyond the stigmatization that people with mental disorders suffer from. As is suggested in this brief description, it is not Art Therapy: The purpose is not to "cure through art", but rather to enable non-stigmatisation thanks to art and contact with artists.

Network: No longer have partners, but be a partner

In addition to the multiplicity of care facilities and their integration into the urban framework, the originality of the East Lille sector is its diversity of links established with the different partners, within a real network.

The elected officials: The elected officials lead this partnership and are committed to social inclusion by making available- housing facilities, consultation places, municipal rooms for catering and therapeutic activities. By making use of their networks of relationships, they open doors and smoothed difficulties in order to provide their fellow citizens, suffering from mental illness, with a real place in the community.

Social institutions: Social institutions are other essential partners: social workers, a communal center of social action and the general Council are often included in the support, and guarantee people's rights. Using these services, in collaboration with educational associations ensures housing provision and solutions to problems of financial resources and rehabilitation.

The cornerstone of this collaboration can be illustrated by the sharing of the General Council's premises in the Centres for Prevention and Social Action of Mons en Baroeul and Hellemmes, for psychiatric consultation. In addition, special links have been established via formal agreement with the associations in Lille devoted to the homeless, in collaboration with 6 other general psychiatry sectors. This service has been the promoter and partner of a mobile team concerned with Mental Health and homelessness, called DIOGENE, which meets homeless people in the area of Lille, and can refer them to a public psychiatric facility if need be.

Cultural institutions: The National Lille Orchestra, the theatrical association QUANTA, the Nieke Swennen company, independent artists, plastics technicians, photographers and musicians have made it possible to offer therapeutic activities that are fully integrated into the local cultural landscape. Going to a concert, creating a ballet and taking part in an exhibition preview are new experiences for some patients, and a factor facilitating better contact with others and with the real world. The Frontiere\$ gallery was managed for years by the artist Gérard Duchêne, and is now being run by David Ritzinger. Its window onto the street displays this alliance between care and art.

Users and family groups: Users and ex-user groups are favored partners, which are considered as "experience experts" in the field of Mental Health. These associations, members of the FNAPSY (*Fédération Nationale des associations d'ex-patients en psychiatrie, i.e., National Federation of associations for psychiatry, ex-patients*), develop a program of representation and training for users. They are actively associated to the research programs. Representatives from UNAFAM (*Union Nationale des Amis et Familles des Malades psychiques (National Union of Friends and Families of people with psychiatric disorders i.e., national union of families and friends of mentally ill people)*) sit on the Commission for allocating accommodation, and are called upon more and more to take part in events organized by the sector and in its projects.

Mutual self-help groups (GEM: *Groupes d'entraide mutuelle*), meeting and self-help centres managed by users, have become essential partners for rehabilitation and for the fight against social isolation. They were created in 2005 through government funding (French Mental Health Plan 2005-2008) and run by users themselves in autonomy most of time. In 2009, 280 groups were in activity, out of which half of these groups were piloted 100% by users NGOs. These groups certainly do fight against isolation, yet they tend, above all, to become bridges allowing users to progressively leave the psychiatric care system.

Health partners in the towns

Last but not least, another long-standing partnership has been established with the other local care providers. First of all, general practitioners in the urban districts in the sector, who are essential collaborators in all follow-up, are involved. They enable the referral of a patient to a CMP (medico-psychological centre) consultation and receive regular reports for each consultation or hospitalization. Outside hospitalization, the GPs are the only prescribers for patients, nominated by the consultant psychiatrist. The frequency of exchanges in mail, phone calls and meetings enable constant discussion on the way a patient should be catered for, given that, as family doctors, GPs are closest to the patients' daily life.

Several pharmacists are also part of this partnership, so that medication can be delivered to chemist's offices, in accordance with the need for proximity and routine observance of prescribed treatments.

Private Nurses are also often called upon to visit patients' homes, providing medications and for nursing and hygiene care, on medical prescription.

Very close links have been established with the **Meeting and Crisis Centre** (CAC: Centre d'Accueil et de Crise) in the regional university hospital in Lille. This unit takes in patients during an acute state of distress up to 72 hours. When a patient from the sector is hospitalized, a contact is made by the sector team, which routinely goes to the CAC to decide with the patients and the referring physician as to how the patient is to be supported in the sector, with a view of continuity between this emergency unit and short to medium term care in the sector. Usually it leads to intensive follow-up in the city and/or to care in a host family.

Role of the international and national network of good practices in psychiatry in the reorganisation of the psychiatry service in East Lille (EPSM Lille Métropole)

How did the psychiatry sector of East Lille, and by extension of its referral institute EPSM Lille Métropole, benefit from International Network and continued to be included it in its future plans? We owe this mainly to experiences drawn from the international network, training visits organized by the hospital for the whole staff of the East-Lille service in different European and national sites, consequently introducing new practices to Lille which seemed interesting and positive for the support of the population in the towns of our sector:

- The studying of all good practices in Trieste⁶⁻⁹ in 1976 led to their implementation in east Lille suburb in 1977.
- Host families as an alternative to hospitalization (one family= one bed), during a conference with all alternative global experiences in Trieste in 1986¹⁰ (example taken from Madison USA 1998) led to implementation of same in Lille in 2000.
- Home care 7 days a week with a mobile team: seen in Birmingham in 2000 and same was implemented in Lille in 2005.
- Totally open psychiatric wards were seen in Merzig, 1997 and in Trieste, 1995 and same was implemented in Lille in 1999.
- Nurses in the front line for welcoming patients, using appropriate tools: seen in Mauritania in 2001 and same was implemented in Lille in 2003 in the whole sector.
- Crisis centres for 72 hour Centre Hospitalier Universitaire de Lille (University Health Centre), 2001.
- Operational networks with the attending physicians Oviedo, 2002 and was implemented in Lille in 2003 with a network of GPs.
- Cooperatives to access work seen in Trieste in 2003 and similarly, were set up in Lille in 2007 in an experimental program with municipalities.
- Clubs and volunteers in Quebec 1987, in Luthon and Monaghan 2005 and same were implemented in Lille in 2005 thanks to the law about Self-help groups (GEM: Groupements d'Entraide Mutuelle).
- Peer support program has been witnessed in Canada 2008, USA 2009, and UK 2009 and same are being planned for Lille in 2011.

The East Lille Mental Health sector is one of the founding members of the International Mental Health Collaborating Network, created in 2001 in Birmingham. In its collaboration a pilot programs in Community Mental Health for the promotion of international cooperation has been started in Lille. The IMHCN “Mental Health and citizenship” International NGO was founded in Lille in 2006.¹¹

The Future of Citizen Psychiatry

It is perfectly possible to implement the WHO recommendations^{4,5} in France or in any other country by centralizing services for emergencies and stabilizing patients for short stay and rest of the mental services can be given through outpatient or community based health centers. Instead mental health services in Lille are truly integrated into the community with the active support of locally elected representatives.¹¹⁻¹⁴ For that purpose, it is essential to go beyond hospital-centrism and to clearly shift from “psychiatry hospital services” to “individual health and social services”, in the person’s living environment.¹⁵⁻¹⁶ Networking is essential for this paradigm shift.

For thirty years, the psychiatry service of East-Lille has evolved from the isolationism of Armentières to the Eastern suburb of Lille, fully integrated in the urban fabric, becoming more complex and more flexible. With the municipalities and the EPSM Lille-Métropole, we have set up all the structures. We only have to transfer the beds of the former psychiatric hospital, which have been almost empty since then, into a caring structure for the city; the ideal would be a general hospital. This is planned for 2012 as a 10 bed unit, close to the CHR (Regional Hospital Centre) of Lille. The integration of Mental Health into general health psychiatry in medicine is almost achieved, and it is logical to change the last psychiatric beds into a general hospital.

The integration of the mental health services into the city at proximity of citizens after a preparative work is also a powerful anti stigma strategy.¹⁷ The re-localisation of in-patient beds closer to the affected population will definitely mark the end of psychiatric imprisonment and isolation in asylums. This is 21st century psychiatry, which started thirty years ago, a psychiatry in favour of users, integrated in the community, that is to say, for the people.

Community Mental Health Service in India and training need

Unlike the West, in India, mental health care is delivered by outside institutions, means already de-institutionalized care. Family is a key resource in the care of patients with mental illness. Families assume the role of primary caregivers because of the Indian tradition of interdependence and concern for near and dear ones in adversities. They are meaningfully involved in all aspects of care of their sick relatives despite it being time consuming and lot of expenditure.¹⁸

Health is a state subject and government must provide basic minimum care to all mentally sick subjects. From the very beginning after independence of India, community psychiatry was practiced. Dr. Vidya Sagar had as early as 1950s involved family members of patients admitting into Amritsar Mental hospital.¹⁹ As far as treatment in general hospital is concerned the first Psychiatric Unit was set up at R.G. Kar Medical College Kolkatta in 1933. Many community-based mental health delivery projects were launched during 1970s and 1980s leading the government mental health program. The famous Raipur Rani experiment in Haryana²⁰ and Sakalwara in Karnataka²¹ established that mental health delivery is possible through primary health centers.²² During this period primary care psychiatry replaced the term community psychiatry in India. After Alma Ata Declaration of World Health Assembly in 1977 that emphasized primary health care approach to achieve “Health for All” by the year 2000. Since then training of PHC doctors, nurses and community level workers started to handle mental health and replacing psychiatrists which were available in meager number.²³⁻²⁶ In spite of such development, community psychiatry does not take concrete shape in India. Training of general doctors and other health professionals has been envisaged in national program.

The Government of India has launched the National Mental Health Program (NMHP) in 1982, keeping in view the heavy burden of mental illnesses in the community, and the absolute inadequacy of mental health care infrastructure in the country to deal with it. The program envisages a primary health care community based approach in the rural areas supported by professional psychiatric supervision from the district level and referral services by the mental hospitals and mental health units of the general hospitals.²⁷ Mental health is still not a priority at the national and local level although mental disorders contribute significant amount of disease burden. Stigma of mental disorders is more than that found in France and there are number of false beliefs and myths existing amongst the health professionals and the community.²⁸⁻³⁰ Training programs should include the socio-cultural, political and occupational aspects of mental health. This can be better imparted in trainees citing examples of community psychiatry practice in France and other areas in the world.

Number of psychiatrists in India is very less as compared to Western countries. However, India has huge health infrastructure in rural and urban areas and large number of Accredited Social Health Activists (ASHAs), Auxiliary Nurse Midwives (AMNs), Male Health Workers and others such as Anganwadi workers, link workers, and volunteers. Health workers are visiting the families but their focus is on family planning, maternal and child health, and communicable diseases. It is already known that providing mental health services improves the quality of overall health care delivery system.²⁹ In presence of strong family system and existing peripheral health institutions such as primary health centers, subcenters, angawadis, India can definitely provide better mental health services. Indian health workers are capable to handle mental disorders at the primary level if minimum skills are provided. House to house visits by the health workers can also include screening, referral and follow-up for mental disorder supported by medical officer of PHC.³⁰ Under the present National Mental Health Program number of PHC doctors is trained in handling psychiatric patients. Training should include other health professionals such as nurses, pharmacists, doctors of traditional system of Indian medicine, health workers male and females, ANMs, and ASHAs. These are forefront health force dealing with various stages of mental illnesses. Empowering them with appropriate training would be a significant improvement in mental health care delivery in presence of paucity of trained psychiatrist in the country. Unlike Western world, families are already taking maximum burden of mental disorders in India. There is a need to take strong steps towards full integration of families in the care of mentally ill patients. At the same time through multi-prong approach family system should be protected from disintegration due to urbanization and industrialization. Mental health delivery system of Lille Metropole France is an excellent example of fully integrated mental health services with social system. India can learn from the Lille Metropole experiment for better generation of community participation, integration and rehabilitation.

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Stigmatizing experiences of patients with psychiatric disorders and their caregivers

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Abstract

Background: There has been extensive research on the stigma experienced by patients with psychiatric disorders and their family members. However, very few studies have attempted to compare both the perspectives. **Aim:** To measure and compare the stigma experienced by patients with psychiatric disorders and their caregivers. **Method:** A total of 143 patients suffering from various psychiatric disorders (including substance use disorders) who visited at the psychiatry out-patient clinic were included, along with their family members. In addition to the sociodemographic and clinical variables, they were assessed using a stigma scale (Hindi version). **Results:** Patients with psychiatric disorders scored significantly higher than their caregivers on the total stigma scale score as well as on the subscales for discrimination, disclosure and positive aspects. Patients with substance dependence as well as their caregivers had highest total stigma score. The mean difference among the patients and caregivers was highest among the obsessive compulsive disorder subgroup ($p=0.012$) and lowest among the schizophrenia subgroup ($p=0.045$). **Conclusion:** Stigma and discrimination are deeply rooted among patients and their caregivers. Tackling stigma and discrimination should form an integral part of the therapeutic process.

Keywords: Psychiatric disorders, stigma, substance dependence

Introduction

Stigma against mental disorders is a powerful and potentially reversible contributory factor towards the reluctance of many people to seek help for mental illness. Stigma may be present at the individual, family and community level.¹ Patients with mental disorders are stigmatized and suffer adverse consequences which might include social isolation and rejection, decreased access to treatment, discrimination in education, employment and marriage. The added burden that stigma imposes on the struggle to recovery can alter behaviour, generate anxiety, and ultimately cause isolation from the mainstream culture.²

The impact of 'family stigma' also referred to as 'courtesy' or 'associative' stigma is deleterious. Parents are often blamed for causing mental illness in their children through poor parenting.³ Caregivers face challenges like financial burden, rejection by others, self-doubt, blame, shame, guilt, marital stress, difficulty in marriage of ill person and his siblings in the family, dealing with psychiatric symptoms in public, and disclosing the illness to others.³⁻⁷ These stigmatizing experiences of the caregivers may lead to deterioration among the relations between patients and caregivers, thus further aggravating the problems faced by the patients.⁸

Stigma and discrimination experienced by patients with psychiatric disorders and their family members has been extensively studied during recent times. However, only a scant research has attempted to compare the stigma among the patients and their caregivers. In an Indian study on stigma among patients and caregivers, it was found that both patients and caregivers experienced stigma and discrimination.⁹ In one study, caregivers felt that patients suffered more stigma than

the caregivers in most of the areas.¹⁰ An important lacuna of the research is that stigma has been estimated on the basis of subjective reports of the patients and caregivers and hence, is not measurable and cannot be compared.

The present study was planned to compare the experiences of stigma and discrimination among patients with psychiatric disorders (including substance dependence) and their immediate family members using a standardized objective measure of stigma in Hindi.

Materials and method

The study was conducted at the Department of Psychiatry, Government Medical College and Hospital, Chandigarh between April and May 2012. The Ethics committee of the institution approved the study.

The sample consisted of 143 consecutive patients having psychiatric disorders meeting the selection criteria (specified below) and their family members who accompanied them to the hospital for treatment. Patients having psychosis, depression, obsessive compulsive disorder (OCD) and substance dependence who were more than 16 years of age, who could read and understand Hindi and agreed to participate in the study were included. For inclusion into the study, the family members should have been living with the patient for at least past one year and should have been directly involved in the patient care.

Patients who had family history of mental illness, dual diagnosis, had poly or multiple substance dependence, mental retardation or those having any other stigmatizing condition like HIV, TB, leprosy, epilepsy and vitiligo were excluded. The diagnosis was made as per ICD 10 diagnostic criteria.¹¹ Informed consent was taken and the assessment was made on the following scales:

- **Semi structured proforma:** Sociodemographic data was recorded on a semi structured proforma that included age, gender, education, occupation, marital status, locality, family type, distance from hospital and monthly family income for both the patient and the caretaker. Clinical parameters included diagnosis, total duration of illness, course of illness (episodic or continuous), months of illness during the illness period, current status of the patient (in remission or not) and whether the patient had ever been admitted to a psychiatric facility or not.
- **Stigma scale:** For the purpose of this study, the Hindi version¹² of the stigma scale developed by King et al¹³ was used. The scale consists of 28 items, divided into three domains namely discrimination (13 items), disclosure (10 items) and positive aspects (5 items). The score on individual items is added to get the total score. The scale was found to be reliable in a sample of 218 patients (cronbach's alpha 0.840) and 202 caregivers (cronbach's alpha 0.812).
- Severity of the illness was measured on the category appropriate scale for measuring the severity of illness (YBOCS for OCD¹⁴, Hamilton rating scale for depression¹⁵ and Brief Psychiatric rating scale¹⁶ for schizophrenia and other psychotic disorders).

Statistical analysis

All analyses were conducted using SPSS for Windows (version 15.0; SPSS Inc., Chicago, IL, USA). Discrete categorical data were presented as n (%); continuous data are given as mean±SD or median and interquartile range, as appropriate. Normality of quantitative data was checked by measures of Kolmogorov Smirnov tests of normality. For skewed data, Kruskal Wallis test was used. For normally distributed data, one way ANOVA was applied. For categorical data, comparisons were made by Pearson Chi-square test or Fisher's exact test as appropriate. Predictors for difference of score between caretakers and patients Scores were identified by

multivariate regression analysis. All statistical tests were two-sided and performed at a significance level of $\alpha=.05$

Results

Results showed that 42% patients were less than 30 years of age whereas 50.3% caregivers were more than 45 years old. Male caregivers accompanied 62.2% of patients. 78.3% patients had a continuous illness and 74.1% patients had been admitted to a psychiatric facility at some point in their life. Table 1 shows the diagnoses-wise break-up of the participants' sociodemographic and clinical data.

Table 1: Sociodemographic and clinical variables (as per diagnosis)

Variable	Category (n)	Diagnosis					p
		OCD (n= 7)	Substance dependence (n = 21)	Depression (n = 50)	Schizo- phrenia (n = 21)	Other Psychotic disorders (n = 44)	
Patients							
Age	< 30years (60)	2	6	20	10	22	.126
	30-45years (44)	2	10	10	8	14	
	> 45 years (39)	3	5	20	3	8	
Gender	Males (69)	2	21	15	7	24	.001
	Females (74)	5	0	35	14	20	
Education (years)	< 12 years (89)	4	14	31	13	27	.992
	> 12 years (54)	3	7	19	8	17	
Marital status	Single (52)	2	4	12	9	25	.006
	Married(91)	5	17	38	12	19	
Type of illness	Episodic(31)	0	3	18	3	7	.037
	Continuous (112)	7	18	32	18	37	
Ever admitted to hospital	Yes (106)	7	15	45	13	26	.003
	No (37)	0	6	5	8	18	
Caregivers							
Age	< 30 years (34)	2	6	11	4	11	.754
	30-45 years (37)	1	6	16	7	7	
	> 45 years (72)	4	9	23	10	26	
Gender	Males (89)	5	6	34	13	31	.015
	Females (54)	2	15	16	8	13	
Education	< 12 years (79)	3	16	24	14	22	.146
	> 12 years (64)	4	5	26	7	22	
Marital status	Single (22)	3	0	7	3	9	.065
	Married (121)	4	21	43	18	35	
Relation to patient	Parents (47)	2	6	12	8	19	.224
	Spouses (62)	3	13	25	9	12	
	Offspring (19)	2	1	9	1	6	
	Siblings (15)	0	1	4	3	7	

Most patients having schizophrenia and other psychotic disorders were less than 30 years old. Higher number of patients in each diagnostic subgroup had less than 12 years of formal education. Patients were accompanied by parents and spouses and male family members in all the subgroups except persons with substance dependence who were accompanied by wives. As can be seen from table 2, the stigma scale scores were not significantly different for different caregivers.

Table 2: Relation of caregivers to patients and their total stigma scale scores

	N = 143	Total stigma scale score mean ± sd	p
Patients	Males (89)	20.15 ± 10.667	0.230
	Females (54)	22.09 ± 8.894	
Caregivers: relation to patient	Siblings (15)	20.26 ± 13.139	0.468
	Children (19)	17.73 ± 10.316	
	Parents (47)	23.87 ± 8.639	
	Spouses (62)	19.67 ± 9.860	

The mean stigma scale score of 143 patients was 27.66 ± 10.65 , 10.30 ± 6.09 , 11.09 ± 5.65 and 6.27 ± 2.66 on the total scale score, discrimination subscale, disclosure subscale and positive aspects subscale respectively. The corresponding scores for caregivers were 20.86 ± 10.07 , 7.88 ± 5.54 , 9.24 ± 5.78 and 3.73 ± 2.05 respectively. The difference between caregivers and patients on all the sub scales was statistically significant (p value < 0.05). Thus, the stigma was found to be significantly higher among the patients as compared to caregivers.

The effect of various variables on the difference of the stigma scale scores among the patients and the caregivers was seen using multiple regression analysis (Table 3). It can be seen that the difference among the patients and caregivers was affected by the type of diagnosis, whether the illness was episodic or continuous and the months of illness. Further analysis revealed that the mean difference of stigma scores was highest among patients with OCD and their caregivers (mean difference 16.14 ± 12.06 , p value 0.12) and it reduced among the groups in depression (mean difference 6.88 ± 11.87 , p value 0.000), substance dependence (mean difference 6.76 ± 10.31 , p value 0.007), other psychotic disorders (mean difference 6.38 ± 11.22 , 0.000) and schizophrenia (mean difference 4.38 ± 9.38 , p value 0.045) in that order. (Table 4).

Further analysis showed that among the patients, the total stigma score decreased in the order of substance dependence (34.66 ± 9.57), OCD (32.86 ± 10.88), psychotic disorders other than schizophrenia (27.95 ± 9.92), depression (25.02 ± 10.89) and schizophrenia (24.57 ± 9.32). Among the caregivers also, the total stigma score was maximum among caregivers of patients with substance dependence (27.90 ± 8.82) and reduced in the order of psychotic disorders other than schizophrenia (21.57 ± 9.93), schizophrenia (20.19 ± 8.88), depression (18.14 ± 10.09) and OCD (16.71 ± 8.81). The stigma scale score was significantly higher for patients than caregivers in all the diagnostic subgroups (Table 4).

Table 3: Multiple regression analysis

	beta	t	Sig. (p value)
(Constant)		-.510	.611
Age	-.129	-1.067	.288
Gender	-.070	-.655	.514
Education	.011	.103	.918
Occupation	.062	.585	.560
Marital status	.253	1.956	.053
Diagnosis	-.274	-2.099	.038
Total Duration of Illness	.358	1.863	.065
Episodic or Continuous	.301	2.432	.017
Months of Illness	-.395	-2.005	.048
Current status (in remission or not)	-.166	-1.373	.173
Has the patient ever been admitted	-.122	-.605	.547
Severity of illness	.127	.828	.410

**Dependent variable: difference between stigma scale scores of patients and caregivers*

Table 4: Difference among the stigma scale scores among patients and caregivers

Diagnosis	Patients stigma score (mean ± sd)	Caregivers stigma score (mean ± sd)	p value
Obsessive compulsive disorder (7)	32.86 ± 10.88	16.71 ± 8.81	0.012
Substance dependence (21)	34.67 ± 9.57	27.90 ± 8.82	0.007
Depression (50)	25.02 ± 10.90	18.14 ± 10.10	0.000
Schizophrenia (21)	24.57 ± 9.32	20.19 ± 8.88	0.045
Other Psychotic disorders (44)	27.95 ± 9.92	21.57 ± 9.93	0.000

Discussion

The present study is an attempt to measure and compare stigma among patients and their caregivers using a standardized scale. Although stigma is a major factor determining entry into the treatment facilities, adherence to treatment, and rehabilitation, there is very limited research on stigma and the scanty information is based on subjective statements and case studies without

using standardised tools. To our knowledge, this is the first study that directly measures stigma using a scale that gives an objective score.

Majority of the patients in our study were young and they were accompanied by elderly family members, mostly parents. It is a common scene in the Indian psychiatry clinics to see elderly parents accompanying their offspring who are mentally ill. It might be due to the social structure in our country where parents are concerned about the health of their offspring even after they are married and are settled into their jobs. This has been reported in previous studies also where parents were most common relatives accompanying the patients to the hospital and the mean age of patients and family members was less than 30 and more than 45 respectively.⁹⁻¹⁰

The father of a 30 years old male patient with schizophrenia narrated "his wife left him after he developed this illness. But we cannot leave him since he is a part of us."

Parents of a 23 years old female with schizophrenia narrated their woes "a boy came to see her with his family members. However, one of our neighbors told them that our daughter was once admitted to a psychiatry ward. They insulted us and refused to marry her."

Results of the present study showed that patients have significantly higher stigma than their family members and this difference persisted across all diagnostic subgroups. This difference might have resulted from multiple factors. The first reason could be the fact that whereas both patients and family members face stigma and discrimination from the society, patients have another source of stigma in the form of family members. Expressed emotions of the family members like critical comments and hostility are well known constructs that can act as stigmatizing for the patient. It has been previously reported that expressed emotions related to mental disorders are a source of stress for the patient.^{10,17,18} Though we did not measure expressed emotions in our study, this could be one reason for higher stigma among patients. Apart from expressed emotions, family members often blame the patients own personality and their thinking pattern for their disorder, which could result in more stigma for the patient.⁹ In addition, the patient is the actual sufferer who is faced with a number of restrictions, both from the external world and from within himself. These restrictions can be in the areas of employment, education, marriage, social relations and many others.¹⁹ Higher stigma in patients than caregivers has been found in a previous study in which the caregivers responded that more number of patients were affected by stigma than caregivers.¹⁰ In another study, more patients experienced problems in work, social relations, study and marital relations.⁹ Though the illness of the patient puts many restrictions on the family members also, they still have their jobs, social relations and other activities that can act as a buffer and reduce their stigma. In a previous study, it was found that significantly higher number of caregivers (26.67%) than patients (3.33%) reported no effects on their emotions and work due to the illness.⁹

Persons with mental illness may internalize mental illness stigma and experience diminished self-esteem and self-efficacy. This process is referred to as self-stigma. Research suggests that self stigma results in a loss of self-esteem and self-efficacy and leads to limited prospects for recovery. From a modified labeling theory perspective, these studies assume that prior to being labeled as 'mentally ill,' individuals have internalized cultural stereotypes about mental illness.²⁰ When individuals face the onset of a mental illness, the stereotypes they have about the illness become relevant to the self. Individuals constrict their social networks and opportunities in anticipation of rejection due to stigma, which leads to isolation, unemployment, and lowered income. They may also be less willing to seek treatment due to perceived stigma. Along with

internalized stigma, these “failures” result in self-esteem and self-efficacy decrements.²⁰ All these factors may lead to higher stigma among patients than caregivers.

A 23 years old patient with depression reported “Most of the people in the neighborhood are not aware that I am taking these medications. But my family members call me lazy as I have sedation. They do not understand that it is due to the disorder and the medications. Whenever I have any arguments with my siblings, they do not hesitate in calling me mad and crazy.”

An 18 years old patient suffering from depression reported “I do not know how I will live with this problem. I would not like to tell about this to anyone while I apply for a job or during a marriage proposal. If people get to know of my psychiatric disorder, they will reject me.”

Another 30 years old patient with depression reported “since I have developed this illness, I hesitate in going out and meeting other people, even my best friends. What if they get to know that I have a psychiatric disorder and I am seeing a psychiatrist? Its better to avoid them than being rejected by them.”

The results of the present study suggest that patients with substance dependence and their caregivers experience higher stigma than persons with psychiatric disorders and their caregivers. This could be because of the fact that substance dependence is still not considered as a disorder by most people. It is considered as a character flaw and moral weakness by majority. A person with substance dependence is held responsible for his and his family members’ problems and it is considered that he willfully indulges in substance dependence. The biological model of substance dependence is mostly ignored while forming these views.²¹⁻²² When a person is considered responsible for his own condition, he is likely to be rejected, discriminated against and is viewed unfavorably. Further, the society stereotypes substance users as persons with bad habits, bad character and are dangerous to society. Patients with substance dependence also face a lot of stigma from their family members apart from outsiders. A previous study has also found high stigma among patients with substance users seeking treatment.²³

Similarly, many family members are considered as responsible for the substance dependence of the patients. Neglect by parents in childhood and lack of love from wife are often considered the reasons for the beginning and continuation of substance dependence by the patients. These feelings of stigma are internalized by the patients as well as by the family members and thus lead to stigma and discrimination. A previous study reported that most parents blamed their parenting style for their adolescents’ substance abuse. They also reported that most neighborhood adolescents’ were told by their parents to stay away from their patient.^{21,24}

A 40 years old patient with opioid dependence reported “I am sick of all the comments from the society and even my family members. My children have started hating me. People do not talk to me and do not want to work with me. Please help me”

24 years old son of a 50 years old patient with alcohol dependence narrated “every now and then we get a call from someone in the village about my father lying on the road in a drunken state. People call him drunkard and call me the son of a drunkard.”

It was found that the difference between stigma scores of patients and caregivers was highest among OCD and least in the schizophrenia subgroup. OCD patients are highly distressed by their obsessions and compulsions. Since obsessions occupy significant amount of time in the life of a person with OCD and compulsions are visible to outsiders, these can be a source of great distress and stigma to the patient.²⁵ The family members of a person with OCD on the other hand may consider this as excessive and willful behavior and not as a disorder, thus having less stigma.

A 35 years old patient with OCD narrated “I am sick of repetitive handwashing. My family members keep telling me that I should control this behavior and my friends laugh at me whenever I wash hands without any reason.”

The finding of stigma among family members of patients with schizophrenia getting close to that of patients can be easily understood in terms of the visible behavior of the patient. Merely a diagnosis of schizophrenia leads to panic in the family about an untreatable disorder in which the person has abnormal behavior. The public image of a person with schizophrenia and the actual abnormal behavior in the form of delusions, hallucinations, self talking, self smiling leads to increased stigma.²⁶ In addition, in many parts of the world, it is believed that schizophrenia is a punishment for the sins committed by the patient or his family members. These causal beliefs further enhance stigma.²⁷ All these lead to a high level of stigma among the patients with schizophrenia and their family members.

The wife of a 30 years old person with schizophrenia cried while telling this story “I can not go anywhere with him. He keeps looking in the sky and talks to himself all the time.”

Another lady reported her problems about her husband suffering from schizophrenia “most of the neighbors try to stay away from us when we go out. Some have even told me not to get him out of the house as he might hurt someone without any reason.”

Thus, the feelings of stigma and discrimination are deeply rooted in the psyche of the patients with psychiatric disorders and their family members. Though stigma has been found to be present as long as mental illness has been known, there is scant research on this social issue especially from India. There are many reasons for this lack of research. Firstly, stigma is a difficult construct to measure. There are not many scales available that measure stigma objectively. Secondly, there has been a recent interest among the researchers to study the biological underpinnings of the psychiatric disorders and the social issues like stigma get ignored. A search in the Indian Journal of Psychiatry reveals that out of the 86 original articles including award papers published since 2011, 14 have been related to biological psychiatry and none to stigma. Stigma needs to be researched in detail so that the interventions to reduce stigma can be planned and self esteem, self efficacy and quality of life of the patients and their family members can be enhanced.

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Assessment and Comparison of the Memory Profile in Traumatic Brain Injury and Subarachnoid Hemorrhage Patients

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Abstract

Background: Traumatic brain injury (TBI) and Subarachnoid Hemorrhage (SAH) are the leading cause of death and disability in both developed and developing countries. They have significant cognitive and behavioral consequences, affecting the quality of life of both patients and their families. **Aim:** To compare the memory functioning of TBI and SAH and study the effect of demographics on the same through a retrospective study. **Method:** A sample of 210 patients clinically diagnosed as TBI (N=165; M=145/F=20) and SAH (N=45; M= 35/F=10) were using Post Graduate Institute of Memory Scale (PGI-MS) which assesses 10 memory domains. **Results:** Odds Ratio (OR) was calculated by categorizing the scores as average and impaired on PGI-MS, the percentage of impaired cases of SAH were significantly less as compared to TBI (8.9% v/s 22.4% ; OR=0.34) Moreover, only two domains were found to have significant results, i.e., delayed recall and recognition. When the scores were adjusted for age, education and gender, memory impairment was found to be statistically significant in domains of remote memory (OR= 0.10) recent memory (OR=0.32), delayed recall (OR=0.26), immediate memory (OR=0.30), new learning ability (OR=0.38), and recognition (OR=0.17). **Conclusion:** A primary prevention (awareness program about risk factors) and tertiary prevention (holistic rehabilitation) would play a crucial role in improving the quality of life of both patients as well as the population at risk.

Key Words: Neuropsychology, Memory, Traumatic Brain Injury, Subarachnoid Hemorrhage, India

Introduction

Traumatic brain injury (TBI) occur when a sudden trauma causes a closed or a penetrating head injury. The resulting brain damage can be focal (confined to one area of the brain), or diffuse (involving more than one area of the brain). A focal TBI usually is caused by sudden contact. Diffuse injury is more likely to be caused by an acceleration/deceleration trauma. Incidence rates of TBI are high in both industrialized and non-industrialized countries and have been estimated variously to be between 150-250 cases per 100,000 population per year.¹ In specific to India, it was estimated that nearly 1 million persons are disabled due to TBI annually, a likely underestimation of the current scenario.² Subarachnoid Hemorrhage (SAH) refers to extravasation of blood into the subarachnoid space between the Pia and Aachnoid membranes. It comprises of 1 to 7% of all strokes.³ It is a medical emergency and can lead to death or severe disability, even when recognized and treated at an early stage. Up to half of all cases of SAH are fatal and 10–15% of casualties die before reaching a hospital and those who survive often have neurological or cognitive impairment in which memory is one of the cognitive domains most frequently affected.⁴⁻⁶ It can also occur in people who have suffered a head injury as well. Unfortunately there is a lack of epidemiologic studies regarding SAH due to stroke, though internationally it has a high mortality rate and disability rate.⁷ Studies have shown that there TBI and SAH cause significant cognitive and behavioral consequences thereby, affect the quality of life of such patients and their families.¹¹ In specific to TBI, A systematic review⁸ has shown clear evidence of an association between traumatic brain injury and long-term cognitive impairments. According to Post-acute rehabilitation and community integration study on TBI patients,⁹ individuals who sustain brain injuries frequently have difficulties in arousal, attention, concentration, memory, and other cognitive abilities that impede their ability to perform their occupation in everyday life. Alterations in perception, motor control, balancing, emotional functioning, social interaction and control of behavior are also common after brain injury and are closely linked with cognitive issues. A similar study has shown impaired cognition (thinking, memory, and reasoning) are the most frequent sequel after TBI.¹⁰ There is also evidence of severe deficits in the areas like speed processing, divided attention, working memory, executive function and long term memory after traumatic brain injury.¹¹ Hence, there is ample of literature supporting the memory is one of the most common cognitive domain found to be affected after TBI. Whereas SAH cognitive sequel is concerned, they suffer from short-term and/or long-term deficits, which vary as a result of the bleed or the treatment. The most frequent cognitive domain found to be impaired is memory.¹² However, evidence for

more diffuse deficits, such as reduced psychomotor speed and decreased sustained attention, have also been reported.¹³ A recent meta-analysis has shown¹⁴ patients with SAH commonly experience deficits in memory, executive function, and language. These cognitive impairments interact to affect patients' day-to-day functioning, including activities of daily living, instrumental activities of daily living, return to work, and quality of life. Hence, there is no dearth of research pertaining to memory or cognitive impairment after TBI or SAH internationally. Both neurological conditions pose a serious hindrance in the overall well being of the patients ranging from physical, to neuropsychological, emotional and social domain of life which is quite evident from the researches mentioned above. Unfortunately there is a paucity of such research on Indian population; hence, this is an attempt to study the comparison in memory functioning after TBI and SAH and the effects of age education and gender on the same.

The study aimed to compare the memory functioning profile in patients with TBI and SAH, and also to study the effect of age, education and gender on the memory profile of patients with TBI and SAH.

Materials and Method

This was a retrospective study following a purposive sampling. A data of 434 patients was available out of the OPD work. Out of which only 210 [TBI (N=165; M=145/F=20) and SAH (N=45; M= 35/F=10)] patients within the age ranges of 20-69 years shared the same evaluation and hence, were included in the study. The remaining patient data records were incomplete (availability of part assessment) or did not fulfill the inclusion criteria. *Inclusion Criteria* included:

- All adults between 20-69 years of age
- Clinically diagnosed with TBI and SAH
- Both genders
- All education levels
- Urban and rural
- Right/left handedness
- All patients assessed within one year of injury

Exclusion Criteria included any history of psychiatric illness, any acute systemic illness and mental retardation. All 210 patients suffered from acquired brain injury clinically diagnosed by neurologists and neurosurgeons and were referred to clinical psychology service in neurosurgery for neuropsychological assessment at PGI-Chandigarh, from 2002-2005. Since it is an OPD generated work following a retrospective design, all neuropsychological assessment were done as a part of clinical services.

Tool of assessment

The memory evaluation was done using Post Graduate Institute of memory scale (PGIMS),¹⁵ by Pershad and Wig^[15] gives a valid clinical evaluation of memory functions. It is a specially designed test for evaluation of memory in semi-literate people suitable for the Indian population. It has age and education specific norms for age range from 20 to 69 yrs of age. It is a structured verbal test which measure different components of memory (remote and recent memory, mental balance, attention and concentration, delayed and immediate recall, verbal retention of similar and dissimilar pairs, visual retention and recognition of common objects). The scoring was done using mean and standard deviation for the whole study sample (irrespective of the age) to maintain the homogeneity of the sample scores. The Table below represents the 10 subtests of PGIMS along with its functions as given below.

PGI-MS Domains	Function
Remote Memory	Ability to Remember Personal/Historical Events of the Past
Recent Memory	Ability to Remember Relatively New Information
Mental Balance	Temporal Sequencing
Digit Span	Attention and Concentration, Mental Control, Working Memory
Immediate Recall	Short- Term Memory
Delayed Recall	Verbal Working Memory
Retention For Similar Pairs	Simple Learning Ability
Retention For Dissimilar Pairs	New Learning Ability
Visual Retention	Visuo-Spatial Memory
Recognition	Visual and Verbal Memory

Statistical analysis

A statistical analysis was done using an odds ratio (OR) using Fisher's Exact Probability statistic. It is used to measure the association which quantifies the relationship between the two groups. The odds ratio was used to determine whether a particular exposure (TBI or SAH) is a risk factor for a particular outcome (memory impairment), and to compare the magnitude of various risk factors (age, education and gender) for that outcome. The 95% confidence interval (CI) is used to estimate the precision of the OR. A small CI indicates a higher precision of the OR. Hence, all the results were seen at the p value of 0.05.

Results

As evident in table 1, age was found to be highly statistically significant between TBI and SAH (37.1±12.51 vs. 44.6 ±9.46; p = <0.001). There was a difference of (-7.56 years) which indicates that younger population suffer from TBI more than SAH. There was also an evidence of just significant difference in marital status (p=0.08) and gender (0.09) showing that unmarried male population are probably more prone to TBI than SAH. However, there was no significant difference evident between educational level (p=0.16).

Table 1: Demographic Characteristics of TBI and SAH group

Characteristic	TBI	SAH	P
	(N = 165)	(N = 45)	
	Mean ± S.D. or N (%)		
Age (years)	37.1 ± 12.51	44.6 ± 9.46	< 0.001*
Education			
Illiterate	07 (04.24)	07 (15.91)	0.16
Primary	19 (11.52)	05 (11.36)	
Middle	18 (10.91)	07 (15.91)	
Secondary	52 (31.52)	10 (22.73)	
Higher Secondary	27 (16.36)	06 (13.64)	
College	30 (18.18)	06 (13.64)	
Post Graduate	12 (07.27)	03 (06.82)	
Gender			
Female	20 (12.1)	10 (22.2)	0.09
Male	145 (87.9)	35 (77.8)	
Marital status			
Single	020 (14.49)	01 (02.38)	0.08
Married	117 (84.78)	41 (97.62)	
Widowed	001 (00.72)	00 (00.00)	

Table 2: Comparison of Memory Domains between TBI and SAH group

Cognitive domains	TBI (N=165)	SAH (N=45)	OR (Not Adjusted) 95% CI	P	OR (Adjusted) 95% CI	P
Remote memory	147 (89.09)	44 (97.78)	1.00	0.10	1.00	0.05*
Normal	18 (10.91)	1 (2.22)	0.19 (0.02 -1.43)		0.13 (0.02 1.06)	
Abnormal						
Recent memory	107 (64.85)	35 (77.78)	1.00	0.10	1.00	0.01*
Normal	58 (35.15)	10 (22.22)	0.52 (0.25 1.14)		0.32* (0.13 0.78)	
Abnormal						
Mental Balance	102 (61.82)	29 (64.44)	1.00	0.74	1.00	0.07
Normal	63 (38.18)	16 (35.56)	0.89 (0.45 1.78)		0.46 (0.19 1.09)	
Abnormal						
Attention and Concentration	140 (84.85)	41 (91.11)	1.00	0.28	1.00	0.17
Normal	25 (15.15)	4 (8.89)	0.54 (0.17 1.66)		0.42 (0.12 1.44)	
Abnormal						
Delayed Recall	105 (63.64)	36 (80.00)	1.00	0.04*	1.00	<0.001*
Normal	25 (15.15)	9 (20.00)	0.43 (0.19 0.97)		0.26 (0.10 0.64)	
Abnormal						
Immediate memory	87 (52.7)	29 (64.44)	1.00	0.16	1.00	0.005*
Normal	78 (47.27)	16 (35.56)	0.61 (0.31 1.21)		0.30 (0.13 0.70)	
Abnormal						
Simple Memory	123 (74.55)	35 (77.78)	1.00	0.65	1.00	0.18
Normal	42 (25.45)	10 (22.22)	0.83 (0.38 1.83)		0.54 (0.22 1.32)	
Abnormal						
New Learning ability	101 (61.21)	32 (71.11)	1.00	0.22	1.00	0.02*
Normal	64 (38.79)	13 (28.89)	0.64 (0.31 1.31)		0.38 (0.17 0.87)	
Abnormal						
Visual Retention	96 (58.18)	25 (55.56)	1.00	0.75	1.00	0.25
Normal	69 (41.82)	20 (44.44)	1.11 (0.57 2.16)		0.63 (0.28 1.38)	
Abnormal						
Recognition	124 (75.15)	40 (88.89)	1.00	0.05*	1.00	<0.001*
Normal	41 (24.85)	5 (11.11)	0.37 (0.13 1.02)		0.17 (0.05 0.52)	
Abnormal						
Total PGIMS	55.9 ± 21.19	60.5 ± 14.64	1.00	0.05*	1.00	0.002*
Average (> 40)	128 (77.6)	41 (91.1)	0.34 (0.11 1.00)		0.14 (0.04 0.49)	
Impaired (≤ 40)	37 (22.4)	4 (8.9)				

OR: Odd Ratio

As evident in Table 2, the overall total PGI -MS score ($p= 0.05$) and two domains, namely, delayed recall ($p= 0.04$), recognition ability ($p=0.05$) were found to be statistically significant showing that memory impairment is evident in both the groups. Moreover, memory functioning was found to be more impaired in TBI than in SAH, i.e., (66% Vs 34%).

Whereas, when the scores were adjusted (OR) on age, gender, marital status and education there was an evidence of high statistically significant results in total PGI-MS ($p=0.002$) along with six domains, namely, delayed recall ($p= < 0.001$), recognition ability ($p=<0.001$), immediate recall ($p=0.005$), remote memory ($p=0.05$), new learning ability ($p=0.02$) and recent memory ($p=0.01$) in both the groups. This result shows that there was 20% increase in the memory impairment in the TBI as compared to SAH cases when they were adjusted (86% Vs 14%). Hence, these results show that demographics mentioned above pose more memory impairment in younger, unmarried male populations.

Discussion

The cognitive sequel after TBI and SAH are quite prominent, especially in the areas of memory, information processing speed, attention and concentration and executive function.⁷ Since SAH and TBI share similar clinical features including cognitive and behavioral consequences such as amnesia, loss of consciousness, impaired attention and concentration.¹⁶ Hence, the present study was planned for Indian population to study and compare the memory sequel after TBI and SAH and also study the effect of age, education and gender

on the same. A standardized test was used to assess the memory. The overall memory and specific individual memory domain were statistically analyzed using odds ratio. Both the groups (TBI and SAH) were assessed on ten memory domains recent memory, remote memory, mental balance, attention and concentration, delayed recall, immediate memory, simple memory, new learning ability, visual retention and recognition as seen in (Table 2). On categorizing the total score of PGI-Memory Scale as average (> 40) and impaired (≤ 40) the results showed that memory was impaired in both the TBI and SAH cases. The obtained results correlate well with the systematic review which suggests that there is a strong relationship between (TBI) and short/long-term cognitive impairments involving memory loss, attention deficit and language irrespective of severity of injury.⁸ Similar findings were also evident in a meta-analysis which stated that survivors of SAH commonly experience deficits in memory, executive function, and language. Moreover, this cognitive impairment, including memory effect patients' day-to-day functioning, including activities of daily living, instrumental activities of daily living, return to work, and quality of life, hence, leading to various behavioral issues such as depression, anxiety, fatigue, and sleep disturbances.¹⁴ Though there is an evidence of memory impairment in both the TBI and SAH group. But the percentage of impaired cases in SAH is significantly less as compared to TBI (8.9% vs. 22.4%; OR=0.34) which means that there is 66% of less chance of memory impairment in SAH as compared to TBI. The findings are consistent with the study where memory dysfunctions are found to be subtle in SAH cases, in contrary to patients with non-focal, extensive, or generalized brain injury are more likely to have memory dysfunction and alterations in consciousness.¹⁷ Moreover out of ten domains, only 2 domains; delayed recall ($p= 0.04$) and recognition ability ($p=0.05$) were found to be statistically significant which mean that there are less chances of impairment in their delayed memory (assessing verbal memory) and recognition ability (visual memory) (91% and 95%) as compared to TBI (75% and 59%) respectively. Since these two abilities assesses, verbal and visual memory. This could also be correlated with a study which has shown that patients with SAH show normal performance on tests of verbal cognition and memory.¹³ The present study was also analyzed from socio-demographic angle where scores were adjusted for age, education and gender. Results were found to be highly statistically significant when adjusted for the variables age, education and gender ($p=0.002$) as compared to non- adjusted Odds Ratio ($p=0.05$). As evident in Table 2, that there was 20% increase in the memory impairment in TBI as compared to SAH cases. The total score on PGI-MS, showed that the percentage of impaired cases in SAH had significantly reduced as compared to TBI, which means that there is 86% of less chance of memory impairment in SAH as compared to TBI. Also, more memory domains were found to be significantly impaired in TBI and SAH. Six cognitive domains were found to be highly significant, namely, delayed recall (< 0.001), recognition ability (<0.001), immediate recall (0.005), remote memory (0.05), new learning ability (0.02) and recent memory (0.01) as compared to non- adjusted Odds Ratio where only 2 memory domains were found to be significant which shows that age, education and gender has a significant impact on the memory domains post TBI or SAH. In specific, age was found to be highly statistically significant between TBI and SAH (37.1 ± 12.51 vs 44.6 ± 9.46 ; $p<0.001$), there was a difference of -7.56 years which indicates that younger population suffer from TBI more than SAH. These findings were also evident in an international study where they stated that the greatest incidence of TBI occurs in younger adults followed by the elderly population.¹⁸ Hence, TBI is the leading cause of morbidity and mortality which represents a major public health burden for the individuals less than 45 years.¹⁹ while the average incidence of subarachnoid hemorrhage is 9.1 per 100,000 annually with an increasing risk of 60% higher in the very elderly (over 85) than in those between 45 and 55 years as per the latest review of 51 studies from 21 countries.²⁰ Therefore, both the conditions pose a major public health problem in their respective age risk factor. The second factor that influences the prevalence of TBI and SAH is gender. In our study males were found to have suffered more memory impairment due to TBI than SAH (Table 1). Our results are in line with the Brain Injury Association research,²¹ which stated that males experience TBI as twice as often as females. This could be due to the fact that men are more likely to suffer from TBI as they are more likely to engage in activities that are vulnerable to TBI. 50-70% of TBI results of road traffic accidents involving car crash, motor cycle etc.²² In contrary, the incidence of SAH were significantly higher in women than in men.^{20, 23-24} Risk of SAH is about 25 percent higher in women over 55 years compared to men the same age, probably reflecting the hormonal changes that result from the menopause, such as a decrease in estrogen levels.²⁰ Though this was not ruled out in present study. As far as education is concerned, no significant influence was evident in the present study ($p=0.16$). Though there are very few

international studies which suggests that low education leads to more cognitive deficits after brain injuries.²⁵⁻²⁶ Hence, age and gender do play an important role in determining the risk factor associated with the condition and that was quite prevalent in our study too, where memory impairment was more prominent after we adjusted the scores of the variables mentioned above. (Table 1 and 2)

There are several limitations of the study which need to be mentioned. Complete data was only available for the PGI-Memory Scale. Clinical parameters were partly available for some of the samples. It was not included because from such incomplete information, no firm inferences could be drawn. Most of the patients did not maintain follow up in clinical psychology hence, no follow up data was available which could have impacted the result, if available. The segregation of the sample on the basis of severity of TBI and SAH (GCS scores) was partly available. Hence the severity of the injury and memory functions could not be correlated.

Overall from the present study findings, it can be said that TBI has more prominent memory sequel than SAH which not only impair memory functioning, but also hampers their wellbeing. Moreover, age and gender has influential role in determining the precipitating factors of TBI and SAH.

In terms of 'Future Directions', such study can be planned prospectively with a longitudinal design where complete neuropsychological assessment which can further be compared with other clinical parameters to make firm claims. A multidisciplinary approach to rehabilitation study can be planned to improve the quality of life of such patients in which at level of primary and prevention (awareness programs about the risk factors) would improve the quality of life of population at risk while at the tertiary prevention (holistic rehabilitation including early and timely neuropsychological rehabilitation) would aid in neuro-plasticity, thereby helping the patient to restore his functional capacity to an extent²⁷ and its efficacy has been proven by many national and international studies.²⁸⁻³⁰

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Original article

Concept and understanding of premature discharge in Indian patients

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Abstract

Introduction: Due to lack of formal sex education in India, the unpleasant past sexual experiences and at times normal physiological activities can lead to various myths and sexual beliefs. Base on their beliefs, individuals seeking treatment for early ejaculation have their set of expectations. Premature ejaculation (PME) in Indian population thus, has personal meaning and there is no common agreement on it. **Method:** With the help of semi-structured questionnaire, we surveyed the sexual activity, sexual beliefs and past sexual experiences of those seeking treatment for early ejaculation (n=62) and compared them with an age-matched control (n=50). **Results:** Those seeking treatment for early ejaculation expected more number of strokes (39.1 vs 32.6) in lesser time (11.5 min vs 16.3) during sexual encounters i.e. more rapid thrusting. Significantly more of those seeking treatment for early ejaculation felt that masturbation was not a normal activity and that both male and female partners must climax simultaneously for satisfactory sexual experience. Also, significantly more of those seeking treatment for early ejaculation reported their first sexual experience to be unsatisfactory. **Conclusion:** In the cultural context of India, those seeking treatment for early ejaculation may be distressed due to their inability to meet their own expectations in addition to distress of inability to hold ejaculation as desired. It is essential to re-educate such individuals before considering the diagnosis of PME. Various diagnostic criteria for PME have not emphasized the exclusion of cultural factors as contributors to distress of PME.

Keywords: Premature ejaculation, masturbation, sexual expectations, first sexual experience

Introduction

Premature ejaculation (PME) has been a common cause for treatment seeking in sexual disorder clinics in India and elsewhere.¹⁻⁵ Index case is usually an individual in distress due to (a) early ejaculation on vaginal penetration and (b) inability to hold ejaculation as desired. However, while making a diagnosis and formulating a management plan, clinicians also need to know if partner satisfaction, client expectation, psycho-social factors and past experiences and performance are contributors to the client's distress.

It has been more than half a century since systemic studies on this disorder have been carried out, yet a comprehensive definition still has eluded us (table 1). The American Psychiatric Association's definition is the most frequently quoted in research publications but has been criticized for using terms like 'persistent', 'minimal', 'recurrent' and 'shortly after' that are vague, multi-interpretable and lacking quantification.^{7,11,12} Similarly the World Health Organization's definition of PME,⁶ does quantify early ejaculation (before or within 15 seconds of beginning of intercourse) but provides no empirical evidence for the same. Other definitions listed in Table 1 have also been challenged as being authority based rather than evidence based. This fallacy was recently addressed by a committee of experts appointed by the International Society for Sexual Medicine [ISSM].¹⁰

Table 1: Various definitions of premature ejaculation

World Health Organization ⁶ (WHO, 1992)	For individuals who meet the general criteria for sexual dysfunction, the inability to control ejaculation sufficiently for both partners to enjoy sexual interaction, manifest as either the occurrence of ejaculation before or
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	very soon after the beginning of intercourse (if a time limit is required, before or within 15 s) or the occurrence of ejaculation in the absence of sufficient erection to make intercourse possible. The problem is not the result of prolonged absence from sexual activity.
American Psychiatric Association ⁷	Persistent or recurrent ejaculation with minimal sexual stimulation, before, on or shortly after penetration and before the person wishes it. The condition must also cause marked distress or interpersonal difficulty and cannot be due exclusively to the direct effects of a substance.
Masters and Johnson ⁸	The Foundation considers a man a premature ejaculator if he cannot control his ejaculatory process for a sufficient length of time during intravaginal containment to satisfy his partner in at least half of their coital connections.
American Urology Association ⁹	Ejaculation that occurs sooner than desired, either before or shortly after penetration, causing distress to either one or both partners.
International Society for Sexual Medicine ¹⁰	Lifelong PE be defined as a male sexual dysfunction characterized by ejaculation which always or nearly always occurs before or within about one minute of vaginal penetration, and the inability to delay ejaculation on all or nearly all vaginal penetrations, and negative personal consequences, such as distress, bother, frustration and/or the avoidance of sexual intimacy. This definition is limited to men with lifelong PE who engage in vaginal intercourse.

PME can be conceptualized as consisting of three important constructs i.e. (1) short intra-vaginal ejaculatory latency time [IELT], (2) a lack of perceived self-efficacy or control about the timing of ejaculation and (3) distress and interpersonal difficulty related to the ejaculatory dysfunction.^[13] The construct of distress, especially personal distress (not partner distress or interpersonal distress) discriminates men from with or without PME.¹⁰ Studies have reported that distress due to PME significantly reduces quality of life especially intimacy of individuals.^{14,15} The distress perceived by the client is understood to be due to impairment in other two constructs.

In India, in the absence of any formal sex education at any level, the understanding of sexual intimacy is largely dependent on watching sexually explicit materials either visual or audio-visual and sharing experiences with peer group.^{16,17} Prevailing myths regarding sexual practices like masturbation and seminal loss and the resultant set of ideas, has lead to treatment seeking for issues like perceived small size of penis and nocturnal seminal emission.^{2,18-21} Prevailing social and religious norms in most parts of India disapprove of masturbation and sexual activity prior to marriage.

The authors have observed that most individual with poor sex education in India have set of expectations from themselves regarding their sexual performance in each sexual encounter. These beliefs include, sexual performance expected from self (in terms of number of strokes and total duration of intercourse in minutes) and partner satisfaction (simultaneous orgasm in spouse). Inability to meet their own expectations during sexual encounters compounded by their guilt for any past sexual activity, especially for masturbation, is evident in most of our

patients. Individuals seek treatment for distress arising from their inability to meet their own expectations. Thus, premature ejaculation (PME) in Indian population has personal meaning. In this exploratory survey we look for the prevalence of such beliefs in those seeking treatment for early ejaculation and compare that to a normative population. In addition to these, we also look for the role of first sexual experience (satisfactory vs. non-satisfactory) in those later seeking treatment for early ejaculation. In this study, we have attempted to elucidate additional factors for distress in individuals with PME.

Materials and Method

Individuals who approached our Marital and Sex Clinic (MSC) (at a tertiary health centre in North India) with complain of early ejaculation were interviewed using a semi-structure questionnaire. A control group consisting of health workers, students, other hospital staff and male care-givers of patients with mental illness was also assessed using the same questionnaire¹⁸. The inclusion criteria for both the groups were: male individuals with at least one sexual experience and consenting for participation in the study. Individuals with mental illness (except sexual dysfunctions), using any psychotropic drug or using medications for improved sexual performance and individuals where in sexual experience is limited to commercial sex worker(s) i.e. with no stable partner were excluded. Mental illness was screened by psychiatrist based on clinical interview. A total of 50 health individuals were found to be age-match with the treatment seeking group and were included in final data.

The semi-structure survey questionnaire was developed from clinical experience of the authors and information obtained from published literature. After obtaining written consent for participation, the questionnaire was administered by one of the authors (JK). The responses were analysed for statistical significance by using SPSS (Version 13.0). Chi-square and t-test were used for analysis.

Results

Sixty two individuals approached our MSC with complain of early ejaculation. Thirty one individuals out of sixty two individuals seeking help for early ejaculation, reported it to be their only complain. Twenty five of the rest additionally complained of ill-sustained erection, while six had symptoms suggestive of Dhat syndrome (*Dhat syndrome: a culture bond syndrome characterized by nocturnal seminal emission with multiple somatic complains that are believed to be result of seminal emission). The clinical profile of patients and their partners is given in table 2. Both the groups matched for their age but significant statistical difference was noted between groups on their marital status and education.

Table 2: Socio-demographic details

	Study group (n=62)	Control group (n=50)	t-test/ p values
Age			
Mean(S.D.)	29.32 (6.39)	31.14 (3.72)	0.081
Marital Status			
Single	20 (32.3%)	7 (14%)	0.048*
Married	41 (66.1%)	43 (86%)	
Divorced	1 (1.6%)	- (-)	
Education			
Illiterate	7 (11.3%)	2 (4%)	0.021*
Upto matric	25 (40.3%)	23 (46%)	
Inter/Diploma	14 (22.6%)	3 (6%)	

Graduate or higher	16 (25.8%)	22 (44%)	
Occupation			
Employed	57 (91.9%)	45 (90%)	0.152
Unemployed/Idle	1 (1.6%)	4 (8%)	
Student	4 (6.5%)	1 (2%)	
Partner Details			
	(n=40)	(n=43)	
Partner Age			0.292
Mean(S.D)	28.8 (6.56)	29 (4.28)	
Partner Occupation			0.462
Employed	8 (20%)	6 (14%)	
Unemployed/Idle	32 (80%)	37 (86%)	

The responses to questions related to sexual activity, sexual beliefs and distress due to early ejaculation are reported in table 3. Both the groups had indulged in masturbation and had similar age at the time of first sexual experience. About 58.1% of those seeking help for early ejaculation had satisfactory first sexual experience as compared to 84% in the control group. Similarly on sexual beliefs, large number of individuals seeking treatment for early ejaculation did not feel that masturbation was a normal activity. This group also reported fewer minutes required for satisfactory sexual intercourse although the number of strokes required for satisfactory ejaculation were not statistically significant. More people in the control group believed that simultaneous climax of both partner is not necessary for satisfactory intercourse. As expected, the study group reported significant distress and increased severity of their condition.

Table 3: Sexual activity and beliefs.

	Study group (n=62)	Control group (n=50)	t-test p values
<i>Sexual activity</i>			
Have you ever done masturbation?			0.462
Yes	60 (96.8%)	45 (90%)	
No	2 (3.2%)	5 (10%)	
Are you currently doing masturbation?			0.387
Yes	13 (21%)	14 (28%)	
No	49 (79%)	36 (72%)	
Age of 1st sexual experience.			0.670
Mean (S.D)	22.49 (4.433)	22.84 (3.951)	
Was the 1st sexual experience satisfactory?			0.005*
Yes	36 (58.1%)	42 (84%)	
No	20 (32.3%)	8 (16%)	
Never had intercourse	6 (9.7%)	0 (0%)	
<i>Sexual belief/ Attitude</i>			
Is masturbation a normal activity?			0.002*
Yes	11 (17.7%)	24 (48%)	
No	49 (79%)	24 (48%)	

Don't know	2 (3.2%)	2 (4%)	
Is nightfall a normal activity?			0.101
Yes	19 (30.6%)	25 (50%)	
No	38 (61.3%)	21 (42%)	
Don't know	5 (8.1%)	4 (8%)	
What should be the time taken for satisfactory intercourse (in minutes)?			0.026*
Mean (S.D.)	11.58 (9.29)	16.34 (11.84)	
What should be the adequate number of strokes before ejaculation for satisfactory intercourse?			0.059
Mean (S.D.)	39.17 (31.42)	32.64 (28.12)	
Should you and your wife (or partner) climax at the same time for satisfactory intercourse?			<0.001**
Yes	49 (79%)	34 (68%)	
No	9 (14.5%)	16 (32%)	
Don't know	4 (6.5%)	- (-)	
Do you think your partner is satisfied with your performance?			<0.001**
Yes	4 (6.5%)	47 (94%)	
No	55 (88.7%)	3 (6%)	
Don't Know	3 (4.8%)	- (-)	
Distress			
How would you rate the severity of the problem?			<0.001**
No problem	3 (4.8%)	46 (92%)	
Some Problem	9 (14.0%)	3 (6%)	
Significant Problem	50 (80.6%)	1 (2%)	

Discussion

In this study we have attempted to document the differences in sexual experiences and sexual beliefs/ attitudes of persons seeking treatment for early ejaculation with an age-matched comparator group. The published studies from India on sexual dysfunction are sparse²² and have largely focused on prevalence of sexual disorders, including PME, in treatment seeking population, either those attending marital and sex clinics,^{2,18,20} addiction treatment centers^{23,24} and those attending other psychiatry clinics including general clinics.^{1,2} To the knowledge of the author, this is the only comparative study from India exploring sexual beliefs in treatment seeking population.²² A similar study from this centre using the extended questionnaire has been published elsewhere.¹⁸

In our centre, we have predominantly rural and lower education class of patients seeking treatment from the sex and marital clinic while others have shown vice-versa.^{1,18} Two thirds of our patients seeking treatment for early ejaculation had been married and hence had a stable sexual partner. More than ninety percent of individuals in both groups had indulged in masturbation and nearly seventy percent in each group continued to practice masturbation. However, only 17% of those in the treatment seeking group believed this to be a normal activity compared to nearly half of those in control group. More number of individuals in

treatment seeking group were married and continued to masturbate. Since more of them believed masturbation as not normal, the guilt of doing so contributed to their distress.

Comparative figures from India have reported that only 50.4% of males and 38.6% of females considered masturbation as a healthy activity.¹⁷ Reasons cited for masturbation not being a normal activity in both groups include: causes physical weakness, reduces penile size, causes thinning of semen, leads to guilt, leads to impotency and few also reported it to be the cause of premature ejaculation.¹⁸ In contrast, no statistical difference was noted for normalcy of nocturnal seminal emission although more subjects in treatment seeking group reported it as abnormal/ pathological (63% Vs 42%).

The age of first sexual experience in our study is considerably higher than that reported in other studies from India. Aggarwal et al., (2000) reported an average age at first sexual intercourse of 17.5 years in a study on medical students in Delhi.¹⁶ Indirect evidences of sexual activity among youth can be found in studies related to premarital sex. Sachdev (1998) reported that as many as 40% of male university students has experienced premarital sex.¹⁷ A large study involving 51,000 youth (ages 15 to 24) from six states, released by Population Council and International Institute of Population Science, reported that 25% males in age group 15-24 indulged in premarital sex.²⁵ The higher age at first sexual experience in our study may probably be due to larger range of age in both groups as compared to studies that focused on adolescents and youths in the community.

Both groups in our study did not differ on age at first intercourse but significantly differed on their 'satisfaction' of first sexual experience. In the study group, significantly, less number of subjects (58.1% Vs 84%) had satisfactory first experience. More importantly, unsatisfactory intercourse was twice more common those seeking treatment. Considering that 'satisfaction' with sexual intercourse may be summation of multiple parameters (right partner, right time, right location, right mood, right performance etc.), the unresolved past unpleasant experience and feelings may affect the current performance (performance anxiety). Prospective studies that determine outcome of individuals with unsatisfactory first sexual experience or failed intercourse shall further enlightened the understanding on this issue.

Interestingly in our study, people seeking treatment for early ejaculation have significantly lower expectation of minutes spend in sexual intercourse but on an average expect more number of strokes during each intercourse. It appears that people seeking treatment for early ejaculation believe in more strokes per unit time i.e. more rapid thrust during intercourse. Although we did not specifically ask about *rapidity* of strokes,¹⁰ it may be possible that individuals seeking treatment for early ejaculation have an inclination towards rapid thrusting during sexual intercourse. It is also possible that the constant fear of losing control over their erection forces them to complete the act fast. Rapidity of male thrusting has not been a subject of research but clinical practice suggests that it may play a role in determining total time spent and pleasure experienced during sexual intercourse. This hypothesis needs further research and would provide an additional evidence for etiological basis for the disorder and its possible treatment avenues.

Individuals seeking treatment for early ejaculation in our study reported that for a good sexual experience, both partners should have simultaneous climax. Because of their inability to hold ejaculation for a suitable period, they believed that their partner(s) were unsatisfied because of him. Thus, for the patient, their ability to hold ejaculation is central to satisfaction of self and their partner without understanding that women may not be able to achieve adequate arousal to climax in many sexual encounters. We have observed that in men in general, do not inquire directly about sexual satisfaction from their spouse/ partner but merely assume it based on their own ability to hold ejaculation. Furthermore, both the partners do not feel that female partner has any role in helping the male to prolong the time to ejaculation. As the onus for sexual satisfaction lies entirely with the male partner, nearly all individuals who

seek treatment, including those in our study group, are not accompanied by their spouse/partner. This leads to poor treatment adherence and higher drop-out.²⁶

This study highlights that the distress of individuals complaining of early ejaculation may be due to their past sexual experiences and current sexual beliefs, part of which are cultural in origin. Since individuals did not meet their own expectations for a satisfactory intercourse, they perceive increased distress. It would be prudent to offer remedial sex education for correcting their belief system and to allay anxiety arising out of past sexual experiences. It would also make sense to defer the diagnosis until it is ascertained that the correct information has not improved their performance. An additional exclusion clause 'distress arising from cultural beliefs that influence sexual activity' is hence proposed. We are currently looking at the implications of using this exclusion criterion in terms of (a) changes in performance (b) Change in perceived distress and (c) Change in diagnosis.

This study did not involve comparison between actual performances in both groups and hence we did not use IELT for comparison. The present study did not explore the role of female partner (who may also be influenced by cultural beliefs) in attenuation/ exaggeration of patient's distress and it can be area of future study. Other factors like quality of time spent in foreplay, sexual position and time since previous ejaculation could also influence the time to ejaculation.¹⁰ Another limitation of the study was that we included individuals with other sexual symptoms. Presence of subclinical anxiety symptoms and level of sex education attained are other factors that could have contributed to our study findings. The study intended to compare belief systems of those presenting with complains of early ejaculation irrespective of their complain reaching a diagnosis threshold.

It is suggested that cultural relevant belief system related to sex be assessed and addressed, especially in restrictive communities before applying western diagnostic methods for sexual disorders.

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Original article

Use of Alcohol among treatment seeking illicit drug users in India

Hem Sethi, Sonali Jhanjee

Abstract

Introduction: Concomitant multiple substance use by clients in drug abuse treatment settings has been recognized as an important treatment issue for many years, and remains under-researched in Indian context. **Aim:** To examine the patterns and prevalence of concomitant alcohol and illicit drug use among the patients seeking treatment for illicit drug use. **Method:** A total of 110 patients attending the National drug dependence treatment centre having multiple drug use were included for the present study. Data was collected by face-to-face structured interview on a semi-structured proforma. **Results:** It was observed that overall 38.2% of the illicit drug users had concomitant Alcohol use. Concomitant use of alcohol was found to be 37.1%, 45.5% and 44.4% among heroin, cannabis users and doda (opium) users respectively. The maximum quantity of alcohol consumption was reported by patients who used opium (Doda) (mean=703.13 ml/day). A multinomial logistic regression analysis showed that middle aged males and those with lower educational levels, were at greater risk for concomitant exposure to alcohol and illicit drugs. **Conclusion:** Many people use alcohol in combination with illicit drugs. Clinicians should warn every patient about alcohol-drug interactions, especially those at high risk for concomitant exposure. These findings have implications for prevention, as well as clinical risk for adverse consequences of concomitant alcohol and illicit drug consumption.

Key words: Alcohol, polydrug use, illicit drug use

Introduction

A combination of population and substance-specific approaches has defined the monitoring of illicit drugs use during the last decades but most drug monitoring information remains substance-specific.¹ In contrast, the understanding of polydrug use in various drug using population subgroups has been more limited.¹ Polysubstance use by clients in drug abuse treatment settings has been recognized as an important treatment issue for many years,²⁻⁴ as interactive or additive effects of multiple substance use may have more serious consequences than the use of single substance. Among many combinations are possible, use of alcohol and other drugs are the most common patterns.⁵ This clearly indicates the importance of treatment programs to assess as well as treat both illegal drug and alcohol abuse.

The present study investigates the patterns and prevalence of concomitant alcohol and illicit drug use among the patients seeking treatment for illicit drug use

Materials and Method

A total of 110 male patients were selected from outpatients visiting the National Drug Dependence Treatment Centre (NDDTC), AIIMS, India. All the patients were current polydrug users and were seeking treatment for their primary drug use namely heroin, opium and cannabis. Current use was defined as use in last 30 days. Data was collected by face-to-face structured interview on a semi-structured proforma. This proforma included assessment of socio-

demographic profile and the assessment of both drug and alcohol use. Dependence upon different substances was according to clinical diagnosis by DSM-IV, which can be used to assess dependence upon a range of substances. The data was analyzed using a Statistical Package for social sciences (SPSS). Logistic regression was used to analyze the binary criterion variables.

Results

Illicit Drug and Concomitant Alcohol Use, by Socio-Demographics (Table-1)

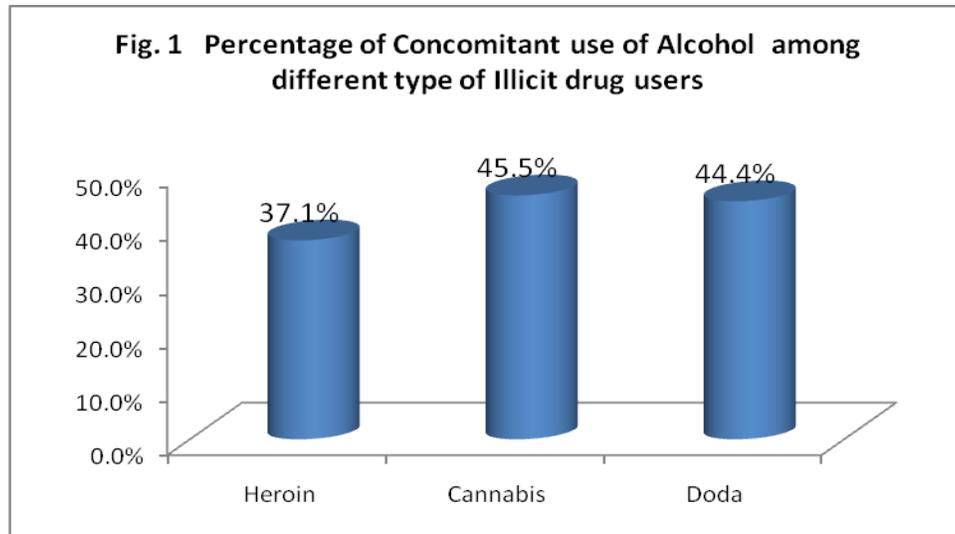
All subjects were male ranging between the ages of 17 to 70yrs with a mean age of 36.5+11.5yrs. No statistically significant difference between the two groups was noted in the sociodemographic profile. However, a higher percentage of illicit drug users with concomitant alcohol use belonged to middle age group (31-50 yrs) (61.9%), were married(78.6%) and were Hindus(78.6%) when compared to those without concomitant use of alcohol.

Table 1: Socio-demographics of the sample by the concomitant use of Alcohol.

		Concomitant use of alcohol				Total(n=110)	
		Yes(n=42)		No(n=68)			
		Count	Col %	Count	Col %	Count	Col %
Age	upto 20 yrs	2	4.8	4	5.9	6	5.5
	21-30 yrs	8	19.0	24	35.3	32	29.1
	31-40 yrs	15	35.7	20	29.4	35	31.8
	41-50 yrs	11	26.2	13	19.1	24	21.8
	51-60 yrs	5	11.9	5	7.4	10	9.1
	61yrs and above	1	2.4	2	2.9	3	2.7
Marital Status	Unmarried	9	21.4	15	22.1	24	21.8
	Married	33	78.6	53	77.9	86	78.2
Religion	Hindu	33	78.6	45	66.2	78	70.9
	Muslim	4	9.5	18	26.5	22	20.0
	Sikh	5	11.9	5	7.4	10	9.1
Education	Illiterate	32	76.2	55	80.9	87	79.1
	Primary(5yrs)	2	4.8	2	2.9	4	3.6
	Middle(8yrs)	4	9.5	3	4.4	7	6.4
	10th/ 12th.	1	2.4	2	2.9	3	2.7
	Graduation	3	7.1	2	2.9	5	4.5
	Post Graduate			4	5.9	4	3.6

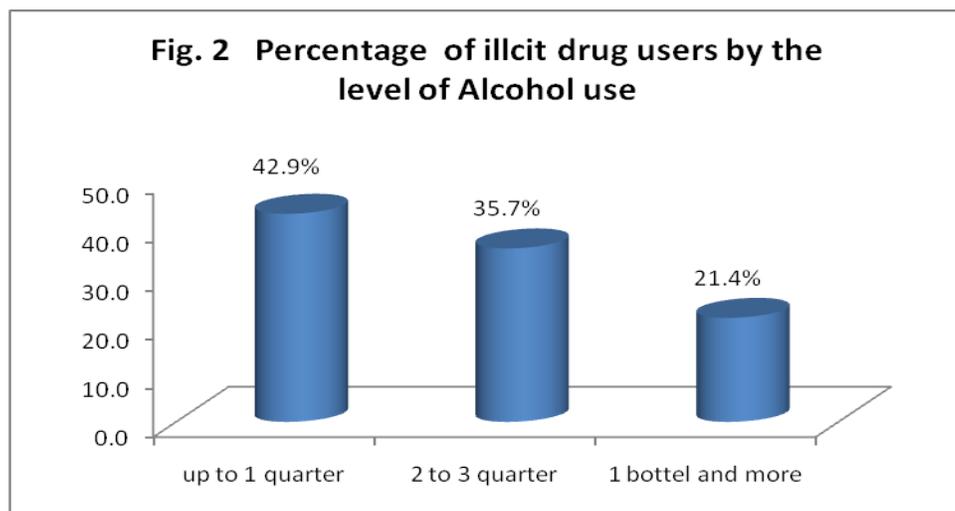
Illicit Drug with Concomitant Alcohol Use, by type of illicit drug (Fig 1).

Among the Illicit drug users, the concomitant alcohol use was reported by 38.2 percent of the total sample. The illicit drugs with which the alcohol was most frequently used reported to be cannabis (45.5%), opium (Doda)(44.4%) followed by Heroin(37.1%).



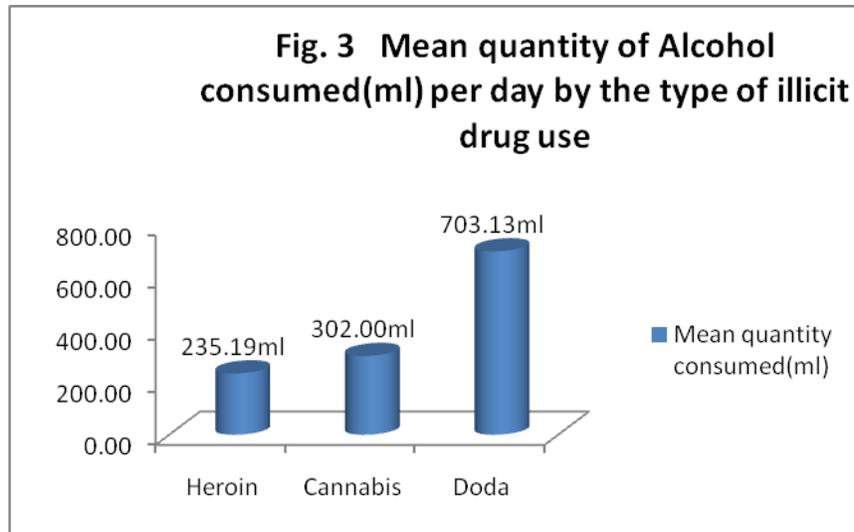
Concurrent Illicit Drug Use and Level of Alcohol Use (Fig. 2)

Among past month illicit drug users having concomitant alcohol use, most users (42.9%) consumed up to one quarter of the bottle (180ml) of country liquor daily along with the other illicit drugs



Mean alcohol consumption by type of Illicit Drug Use (Fig. 3)

The median consumption of alcohol among the illicit drug users was found to be 337.5ml. The Patients who used Doda had the maximum consumption of alcohol (mean=703.13/day) while the heroin users drink on an average 235.2ml per day a lesser amount than the other illicit drug users



A logistic regression analysis was also carried out to find out the important variables related to the concomitant use of Alcohol among the illicit drug users. The results demonstrated that the males in the middle age group (30 to 50 yrs) who were using illicit drugs were two times more likely to be concomitant alcohol users compared to other age groups (OR=2.168, 95%CI=1.031,4.559). Further, the odds of having concomitant use of alcohol among illiterate illicit drug users were more than among the educated users (OR=1.345, .500,3.622).

Discussion

Literature suggests that individuals with concurrent abuse or dependence of alcohol and illicit drugs may differ from those with alcohol abuse or dependence alone. Overall, about 38 percent of current illicit drug users used alcohol concurrently in the present study. This behavior was more prevalent among certain groups—namely middle aged males aged between 30 to 50 yrs and illiterates reflecting differentials in rates of use of alcohol overall. Present study results also show that one fifth of the illicit drug users were heavy drinkers consuming one or even more than one bottle of country made liquor per day.

Studies of concurrent drug use have demonstrated that the use of alcohol in combination with other drugs has been associated with more severe psychological and social consequences than alcohol abuse or dependence alone.^{6,7}

Concurrent alcohol use also varied depending upon the type of illicit drug used. The illicit drugs with which the alcohol was most frequently used were reported to be cannabis (45.5%) and opioid users [Doda (44.4%) and heroin (37.1%)] respectively. Among cannabis users 40% were drinking up to one quarter and an equal percentage of cannabis users were consuming 2 to 3 quarter of alcohol per day. General survey studies of incidence of drug use demonstrate that most cannabis users drink alcohol and those who use alcohol are much more likely than 'teetotalers' to use cannabis. In addition, heavy users of cannabis tend to drink more alcohol than light or infrequent users.⁸⁻¹²

The maximum quantity of alcohol consumption was reported by patients who used opium (Doda) (mean=703.13 ml/day). It was observed that 50% of the doda users were consuming one bottle or more than that of alcohol. Use of opium with other substances that depress the central

nervous system, such as alcohol, antihistamines, barbiturates, benzodiazepines, or general anesthetics, increases the risk of life-threatening respiratory depression. Nearly half (49%) of heroin users in the present study consumed alcohol concurrently up to 1 quarter of the bottle per day. Concomitant use of other drugs (polydrug use), particularly central nervous system (CNS) depressants such as alcohol and benzodiazepines, appears to be a common practice among heroin users and use of alcohol and benzodiazepines in conjunction with opioids is a common characteristic of overdose incidents and is associated with greater risk.¹³⁻¹⁷

Ethanol and heroin act additively on the central nervous and respiratory systems, producing cardiopulmonary arrest that is more often fatal than that produced by heroin alone. Thus, treatment agencies should consider alcohol use as a risk factor in developing their opioid overdose prevention strategies.

Since no systematic prospective studies have been carried out in India, on this issue therefore more detailed intensive studies are recommended to find out the potential adverse health consequences of simultaneous alcohol and illicit drug use. Prevention and treatment providers should continue to emphasize the risks of using alcohol and illicit drugs together, with targeted messages for those groups at greatest risk for this behavior.

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Original article

Assessment of subjective well being status of elderly people in old age homes in Kolkata in relation to their perceived physical health and cognitive functioning

Jharna Bag

Abstract

Introduction: There is a limited data on the subjective well being of elderly people living at old age homes in India. It is needed for planning better maintenance of physical health as well as cognitive function for their overall well being. **Method:** A descriptive survey was conducted. The data were collected from 50 elderly people who were selected by total enumeration sampling from two different old age home in Kolkata. They were assessed using Subjective Well Being Inventory and a self developed checklist for perceived physical health problems. Cognitive function was assessed by using Mini Mental State Examination. **Results:** More than half (52%) of the elderly people have reported high subjective well being status. Regression analysis showed that perceived physical health problem ($p < 0.001$) and having children ($p = 0.010$) were statistically significant predictors of subjective well being. **Conclusion:** In order to improve the quality of life of elderly people health workers should give more emphasis on psychosocial aspects of this population. Improved psychosocial aspects can increase perceived physical health hence subjective well being. **Keywords:** Elderly people, Perceived Physical health status, Subjective well being status, Cognitive function

Introduction

Life expectancy worldwide has risen on average by 4 months each year since 1970.¹ Because more people are living longer, health professionals will be expected to help the geriatric population to make these added years to their lives healthy and productive. WHO report of 2004 states that 236 elderly people per 10,000 suffer from mental illness mainly due to stress, heart disease, stroke and cancer.² The process of aging also tends to create psychological and social problems for the individual and society. In developing country, where seriously impaired older persons live in the community, in almost all cases they are cared by a spouse or grown-up children. However, with the urbanization, the joint family system is gradually moving towards nuclear families and elderly are left alone and they move to an institution. But still a large percentage of today's aging population continues to live independently despite having variety of chronic health problems.³ Careful assessment of aging person's perception of his or health, health practices, and knowledge of safety factors affecting their own health is an important part of primary care in all settings, especially for family practitioners and nurses.⁴ Indian society is moving towards an industrialized urban society where changes are causing adverse effects on subjective well-being of aged people.⁵ So, it is more important to study about subjective well being of senior citizens living in old age homes.

Optimism was found to be a predictor of both subjective and psychological wellbeing.⁶ Therefore assessment of the aging person's perception of his or her health is required as type of perception has an effect on wellbeing. Thus, the study was undertaken with the following objectives (a) To find out the perceived physical health problems of the elderly people (b) To screen cognitive function of the elderly people; (c) To identify the subjective well being status of the elderly people; and (d) To predict the relation of subjective

well being with perceived physical health problem, cognitive function and selected demographic variables.

Materials and Method

A non-experimental approach as well as descriptive survey was conducted to collect the data after taking the written consent from the participants. The data were collected from 50 elderly people who were selected by total enumeration sampling from two different old age homes which was selected conveniently from Kolkata. A Structured questionnaire was used to obtain information about demographic data. Perceived physical health problems were assessed by a self developed checklist which had two main areas, i.e. physical and psychosocial, with the maximum score was 92. Reliability of the tool was established by using test retest method($r=0.95$). Subjective well-being of elderly people was assessed by SWBI standard three point rating scale which had 40 items with the maximum score of 120. Cognitive function was assessed by using Mini mental status examination which is a standardized scale; Maximum total score of this scale is 30. Total time taken to collect the data from each subject was approximately one and half hours. Data were analyzed by using statistical package SPSS 20.0.

Results

Sociodemographic characteristics

Mean age of the elderly people living in old age home was 74.5 ± 6.7 years and the mean duration of stay was 6.4yrs. Majority of them were female (74%). Most of the elderly people followed Hindu religion (96%). 48% of the elderly people had education of graduation and above. 66% of the elderly were widows, less than half (42%) of the elderly people were getting pension. More than half (58%) of the elderly people had children. Most of them (68%) had given the reason for living in old-age home as 'no one to take care'. 78% expressed that they had been suffering from known diseases; the commonest diseases are hypertension (52%) and arthritis (80%).

Perceived physical health problem, cognitive function and subjective well being

As shown in Fig 1, one third of elderly were in category I, which means they had mild perceived physical health problems. 24% were in category II that means they had moderate perceived physical health problems, 38% of the elderly people were in category III, and means they perceived severe physical health problems.

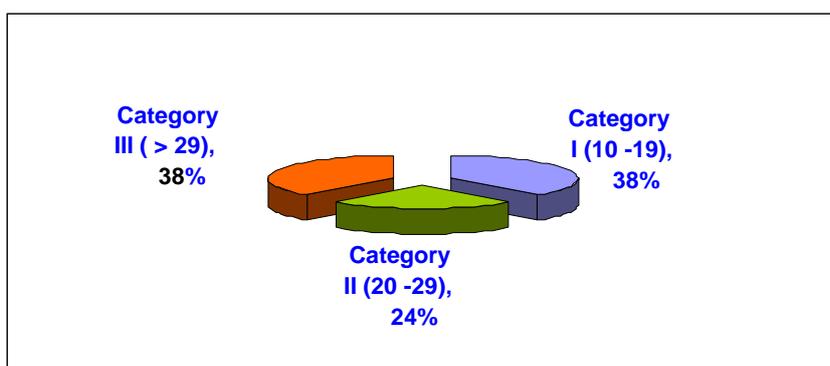


Figure 1: Distribution of score of Perceived physical health problem.

As shown in Fig 2, 86% elderly were cognitively unimpaired, 12% were mildly impaired and 2% were severely impaired. The mean score of cognitive function of the elderly people was 26.44 ± 2.99 . As shown in Fig 3, 52% elderly people had high well-being status, among them 36% were females and 16% were males and 40% had moderate well-being status. The mean scores of total items were 79.40 ± 12.96 .

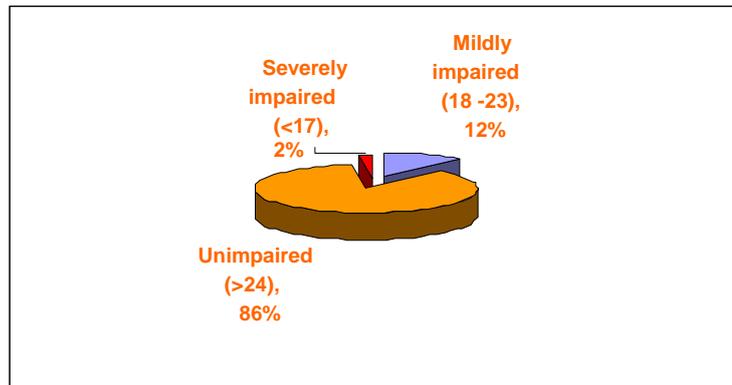


Figure 2: Distribution of scores of cognitive function

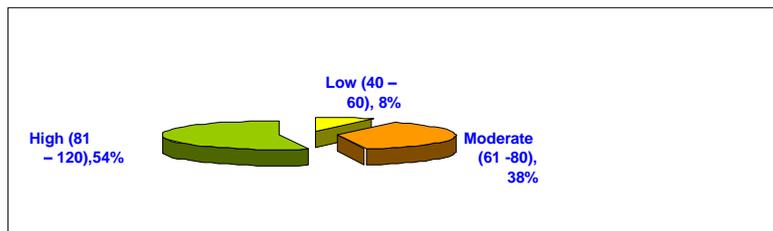


Figure 3: Distribution of scores of subjective well being status

Regression analysis

As shown in table No: 1, R^2 value of 0.408 indicated that 40% of the subjective well being in variance was significantly explained by predictors like score of perceived health problem ($p=0.000^*$) and having children ($p=0.010^*$). Other variables like age, gender, source of income, education and duration of stay had no influence on subjective well being.

Table: 1 Regression analysis

Predictors	Standardized coefficient	t-value	Level of significance
Age	-.130	-.894	.376
Sex	.153	1.066	.292
Duration of stay at old age home	.224	1.548	.129
Score	-.510	-3.878	.000*

Perceived Health Problems			
Score	.099	.688	.495
MMSE			
Having Children	.377	2.714	.010*
Source of income	-.031	-.247	.806

R² : 0.408; N=50; P<0.05; Subjective well being as independent variable

Discussion

There is consensus among many gerontological studies that high subjective well being among the elderly people is mainly a result of adaptation, emotional regulation, and accommodative strategies such as rescaling goals and adjusting aspirations to the given situation. In this paper we aimed to see the relation of subjective well being with perceived physical health problem, cognitive function and selected demographic variables.

In the present study it was found that there was no association between cognitive function and subjective well being of elderly people, this result is incongruent with another study which was done in China that shows a higher level of cognitive abilities is positively associated with good subjective well-being.⁷

More than half (58%) of the elderly people reported that they had children and regression analysis showed that having children is a significant predictor for good subjective well being. Having children can increase the perceived social support of elderly people and literature shows that low social support is associated with poor self rated health.⁸ Other than having children, subjective wellbeing was not predicted by any other variables like education, gender, age, source of income, duration of stay in old age home etc. But, this finding was incongruent with another study conducted in India in which subjective wellbeing of the institutionalized elderly was predicted by age, education and financial support.⁴ 38% of the elderly people reported severe perceived physical health problem and severe perceived physical health problem appears to be a sensitive predictor for low subjective well being. This finding is similar to the other study which shows that poor perceived health status rather than the presence of a chronic condition is detrimental to individual's subjective well being.⁹

This study was limited in many ways. Firstly randomization of the subjects could not be done and secondly sample size was small due to limited time period. However in the absence of more objective measures, perceived health status may be a suitable measure of health status in epidemiological studies.

Therefore, it is recommended to conduct a future study to find out the subjective well being in a larger setting. In order to improve the quality of life of elderly people health workers should give more emphasis on psychosocial aspects of this population because improved psychosocial aspects can increase perceived physical health hence subjective wellbeing.

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Brief communication

Assessment for prevalence and pattern of depression in cancer patients

Dwipen Kalita, Manigreeva Krishnatreya, Bhaskar Sarma Neog, Kabindra Bhagabati, Amal Chandra Kataki, Gayatri Gogoi, Nazmul Hoque

Abstract

The study aimed to assess the prevalence and severity of depression in cancer patients and to look for any association with socio-demographic profile. Patients registered for various cancers at a regional cancer centre were followed-up between July 2013 to October 2013. Depression in cancer patients was screened using the Mini International Neuropsychiatric Interview (MINI) questionnaire and administered the Hamilton Depression Rating Scale (HDRS) for severity of depression. Out of 183 cancer patients screened, 44 (24%) patients were identified to have depression using MINI. Mild to moderate depression was seen in 68% of married patients, and severe to very severe depression in unmarried and widowed group, severe to very severe depression was more prevalent in the illiterate group of patients (33%), and there was no association of subjective economic inequalities with degrees of depression. Further studies on larger sample size without selection bias will reveal the prevalence of depression in cancer patients.

Keywords: Cancer, Depression, Hamilton depression rating scale, Socio-demographic profile

Introduction

Depression is a major cause of concern in cancer patients. Clinical depression is common and more often unrecognized source of suffering in cancer patients.¹ It is an important factor leading to drop out before the start of cancer directed treatment. Depression also contributes to suicidal tendencies in cancer patients. Prevalence of depression varies depending upon the type and sites of cancer with reported rates of 1% in acute leukemia to 40% in other cancers.^{2,3} There are two core symptoms of depression namely depressed mood and a marked loss of interest or pleasure in most or all activities.⁴ The aim of this study was to relate the socio-demographic profile of cancer patients with their depression levels and to see if there is any association between educational level, marital status, and economic condition of these patients with degrees of depression.

Materials and Methods:

This study has been approved by the institutional ethics committee of our institute. In this analysis patients registered and undergoing treatment for various cancers at a regional cancer centre were followed-up at the department of clinical psychology and psychiatry for evaluation of depression and its levels. The study was carried out from July 2013 to October 2013. The mini international neuropsychiatric interview (MINI) questionnaire version 5.0.0 was used for screening and processing of the symptom for depression. Hamilton's depression rating scale (HDRS) was used for grading of depression [0-7: no depression; 8-13: mild; 14-18: moderate; 19-22: severe; ≥ 24 : very severe]. Patients excluded from this study were, patients with previous history of psychiatric illness, below 18 years of age, bed ridden patients, patients in delirium, and patients with exaggerated symptoms due to the disease or its complications. A self administered questionnaire on the financial status of the patients was recorded by the clinical psychologist. The economic status of the patients was broadly divided into financial adequacy and financial constraints.

Results

In our cross sectional study, out of 183 cancer patients screened for depression, 44 patients were identified with depression using the MINI. In this study, 31 (70%) patients were males and 13(30%)

patients were females. All the unmarried and widowed patients were females. All the patients in this study group had received and completed the cancer directed treatment.

Severity of depression and marital status

In the married group, mild depression was seen in 18 (47%) patients, moderate depression was seen in 8 (21%) patients, severe depression in 4 (11%) patients, and very severe depression was seen in 8 (21%) patients. In the unmarried females (2 patients), 1 had very severe depression and 1 had moderate depression. In the widowed females, 2 (50%) patients had mild depression and 2(50%) patients had moderate depression.

Severity of depression and economic inequalities

In the present study 25 (57%) patients were subjectively financially adequate (FA) and the rest 19 (43%) patients were subjectively financially constrained (FC). In the FA group mild depression was seen in 11(44%) patients, moderate depression in 7 (28%) patients, severe depression in 2(8%), and very severe depression in 5(20%) patients. In the FC group, mild depression was seen in 9 (48%) of patients, moderate depression in 4(20%) patients, severe depression in 2 (10%), and very severe depression in 4(22%) patients. Statistical analysis for associating the economic inequality and the severity of depression was done using the Chi square test, which showed no significant difference (Chi Square coeff =0.066, p =0.7966, df:1).

Severity of depression and educational status

In the literate group of patients, mild depression was seen in 44% (13/29) of patients, 27% (8/29) patients were having moderate depression, 7% (2/29) patients were having severe, and very severe depression was seen in 21% (6/29) patients. In the illiterate group of patients, 47% (7/15) had mild depression, 20% (3/15) patients had moderate depression, severe depression was seen in 13% (2/15) and very severe depression was seen in 20% (3/15) (20%) .

Discussion

Amongst the different psychiatric disorders in cancer patients the prevalence of depression is high.⁵ Chochinov et al has shown in the terminally ill cancer patients depression rates ranges from 13 to 26% and Hoska et al reported as high as 28% in cancer patients.^{6,7} In this cross sectional study, 24% of patients with cancer had depression. This is an under estimate of the actual number due to exclusion criteria of the present study. The rates were dependant on how stringent diagnostic system was applied and how the physical symptoms were classified. Lack of awareness of psychiatric distress symptoms amongst oncologists leads to drop out from cancer directed treatment. In this study, all the patients had received and completed the cancer directed treatment in spite of their severity of depression due to the referrals from the respective oncologists for the management of their psychiatric distress. This has highlighted the importance of understanding the psychological distress by concerned oncologists and referral of these patients for psychological and psychopharmacological treatment. Socio-demographic inequalities in a homogenous and developed society can significantly contribute to different out comes in the cancer survival,⁸ and in a developing society like ours with significant disparities among different groups it may influence more so in the management of cancer patients suffering from depression. In analysis, the association of severity of depression with subjective economic inequality is insignificant, as depression of varying degrees is seen both in patients with subjective financial constraints and those with financial adequacy.

The failure to detect and treat elevated levels of psychological distress may jeopardize the outcome of cancer therapies, decrease patient's quality of life and increase health care cost.⁹ In this study because of early recognition of psychiatric distress there was excellent compliance to cancer directed treatment.

Further studies on large sample size without selection bias will reveal the prevalence of depression in cancer patients and no significant association of degrees of depression with socio-demographic

parameters could be established in this study. Early recognition of psychiatric distress for the identification of depression is an integral part in the comprehensive management of cancer patients.

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Case Report

Self mutilation of nose in schizophrenia: A case report

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Abstract

Self-mutilation is not a single clinical entity and occurs in various psychiatric syndromes. Major self-mutilation is rare and catastrophic complication of severe mental illness. Patients with command hallucinations, religious preoccupations, substance abuse and social isolation are the most vulnerable. We report and discuss a case of complete self mutilation of nose in a patient with schizophrenia.

Key words: Self mutilation, mental illness, schizophrenia,

Introduction

Self-mutilation, the deliberate destruction or alteration of body tissue without conscious suicidal intent, occurs in a variety of psychiatric disorders. Major self-mutilation includes amputation of limbs or genitals and eye-enucleation.¹ Minor self-mutilation includes self-cutting and self-hitting. Instances of deliberate self-injury are observed in both psychotic and non-psychotic individuals. Patients with command hallucinations, religious-preoccupations, substance abuse and social isolation are the most vulnerable.

Male genital self-mutilation in schizophrenics and autophagia of amputated penis in a case of schizophrenia has been reported.^{2,3} Krasucki et al reported female genital self-mutilation in a case of schizophrenia.⁴ Similarly, ocular self-enucleation¹ and a case of hammering multiple nails into own head each week has also been reported.⁵ Alireza et al reported self-mutilation of the nose in a patient of schizophrenia with cotard syndrome.⁶ Self-induced nasal ulceration and septal perforation due to nose-picking (rhinotillexomania),^{7,8} were the types of self-induced nose injury but none of them described mutilation involving bony part of nose as seen in the patient described below.

Case description

Mr R, a 30 year old married male, educated upto 5th standard, of rural background and lower socioeconomic status was referred from ENT department, after management of epistaxis to seek psychiatric opinion regarding severe self-inflicted injury to his nose. He was accompanied by his mother who was 60 years old and living with patient.

On detailed history, patient reported that for the past three months, he had been hearing voices of some people clearly, even when alone and in an awake state. These voices would mostly discuss about him in third person. As per mother, he was convinced that some people were planning to take his son away from him and were trying to kill him. Patient would occasionally complain that 'whatever I think, people come to know about it', however he did not elaborate further. Over this period, patient had been very suspicious towards other people and would confine himself to a room, not allowing any visitors. He would be seen talking to himself when alone. His predominant mood was fearful and irritable.

There was a gross socio-occupational dysfunction and he would not pay much attention to self care. His sleep had decreased considerably. On the day of incident, he was sitting alone in his room, when he started hearing voices commanding him to cut his nose (“kaat-le, kaat-le”). He picked up a sharp piece of metallic sheet and slowly cut the tip of his nose. Still when the voices did not stop, he picked up the metallic sheet again and cut his nose this time. According to patient, he did not experience any significant pain during the commission of the act.



Image 1: Self-mutilation of nose

In the past psychiatric history, five years back, he suffered from an episode of psychotic illness for nearly 2-3 weeks. As per available information, it was characterized by suspiciousness, fearfulness, aggressive behaviour and socio-occupational dysfunction for which he was admitted and put on psychotropic medication. He became symptom-free over next month, after which treatment was discontinued. He remained asymptomatic till the current episode.

There was no family history of any mental illness. He was married at the age of 17 years, and has two children (daughter 12 years, son 10 years). His wife left him to stay at her maternal place after past psychotic episode five years back. There was history of intermittent alcohol intake, mostly in social context, with no harmful/dependent pattern of use. Pre-morbid personality appears to be well-adjusted. General physical examination revealed no abnormality except for the wound over his nose (Image 1). Mental state examination revealed that he is conscious and oriented. Eye to eye was made but not sustained. Psychomotor activity was within normal limits. Speech was occasionally irrelevant. Thought content revealed delusion of reference, delusion of persecution and thought broadcast. Both 2nd person (commanding) and 3rd person (discussing) auditory hallucinations were present. The higher mental functions were intact with absent insight. A diagnosis of schizophrenia was made and further management was done in ward setting. Patient was discharged after improvement with three sessions of modified electro-convulsive therapy and an atypical antipsychotic (olanzapine) and advised for follow up.

Discussion

Self-harm, self-injury and self-mutilation are often used interchangeably. Favazza and Rosenthal⁹ classified three different types of self-mutilation viz (a) superficial or moderate self-mutilation as seen in the individuals with personality disorders, posttraumatic stress disorder, factitious disorder and schizophrenia; (b) stereotypic self-mutilation often found in mentally challenged individuals; and (c) Major self-mutilation which is most commonly associated with severe psychopathology, often resulting in permanent loss of an organ or its function.⁹ The three main forms of major self-mutilation are ocular, genital, and limb mutilation, and are almost always seen in psychotic patients.¹⁰ Patients with a history of such self-harm attempts have greater symptoms of depression, greater suicidal thoughts, increased number of hospitalisations, and longer duration of illness, compared to patients without a history of self-harm.¹¹ Patients with schizophrenia are known to attempt self-harm under command hallucinations, catatonic excitement or because of associated depression, depersonalization, dysmorphophobia and delusions.⁶

Self amputation of nose is a relatively rare entity. In another case report from Iran⁶, a schizophrenia patient with cotard's syndrome believing that she is already dead, resected the tip of her nose. She explained it as a form of cosmetic surgery, as misinterpretation of her face was one of starting points in her complex symptoms. The present patient, however, had done a complete amputation of nose under influence of commanding hallucinations. Such patients are increased risk of recurrent epistaxis, wound infection, chronic osteitis and myiasis and need coordinated multispeciality management and greater degree of social support. Long term psychiatric therapy consisting of behavioral, pharmacological, and psychotherapeutic interventions should be implemented to prevent further self injurious behaviour, and to meet their highly complicated treatment needs.

The site or body part on which the injury is caused may have a symbolic significance for a particular patient. Understanding of these clinic-psychopathological issues related to self-mutilation is of help in management of such cases. Efforts should be directed at early institution of treatment, periodic risk assessment and prevention of harm to self or others in psychotic patients.

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Case Report

Delusion of twin delivery in a post-menopausal woman: Another dimension of Delusional Procreation Syndrome

Ajeet Sidana, Rajan Jain

Abstract: Delusional procreation syndrome (DPS) consists of sequential delusions in every possible stage of procreation such as having spouse/partner, getting pregnant, having delivered a child (labour and childbirth), and becoming parents/grand-parents and so on. Till now, only few case reports have been reported and that is from the southern part of India only. Here the authors reported a case of a post-menopausal woman having delusion of twin delivery and propose twin dimension of DPS.

Keywords: case report, delusional procreational syndrome, post-menopause

Introduction

The content of schizophrenic delusions is naturally dependent on the social and cultural background of the patient. Delusions of persecution, reference, morbid jealousy, grandiosity, guilt, nihilism are common types of delusions as per thought content.¹

The recent addition to these is that of delusional procreation syndrome (DPS) described by Manjunatha et al (2010).² DPS consists of sequential delusions in every possible stage of procreation such as having spouse/partner, getting pregnant, having delivered a child (labour and childbirth), and becoming parents/grand-parents and so on. These are the 'self-referential delusions' referring to the involvement of patient himself/herself in its content.

Hindu marriage is regarded as means to establish relation between two families and procreation of children is one of the predominant aims of hindu marriage. However, it laid more stress on procreation of male children, as sons were supposed to enable a man to clear off one of his natal spiritual debts.³

Here, we report the first case of a post-menopausal schizophrenic woman having delusion of delivery of identical twin male babies, and hence, propose another dimension of DPS i.e. twin dimension.

Case History

Patient was a 47 years old Hindu post-menopausal female, graduate, married for 21 years, homemaker from a middle socioeconomic status family. She was known case of psychiatric illness for past 16 years, with an episodic course, current being fifth episode for past 1.5 months. Each of the episodes was characterized by delusions of reference and persecution, auditory hallucinations, 2nd person (voices commenting) and 3rd person, odd behaviours, decreased self care and socio-occupational dysfunction.

In addition, during the current episode for nearly 10 days before presentation, she also started saying for the first time that she had delivered two baby boys a few hours ago. She held this belief with conviction in spite of family member's confrontation. Associated behaviour and affective response was in keeping with her belief. She was behaving as if she was in post-partum period. She reported being very happy after 'birth' of two sons. She would complain of pain in her back. She did not do any household work because she said that her body was weak because of caesarean section. She even named her babies as 'Vaibhav' and 'Balwan'. On further exploration, she reported that her caesarean section was done by a team of doctors from abroad and she was given incision in her back. However, when confronted about absence of incision mark, she justified that incision would not be visible to naked eyes. She further explained that because of her narrow pelvic outlet, that caesarean section was done

through her back to deliver the babies. She could feel the pain of that incision in her back till day of admission. She believed that her sons were under care of her elder sister. She explained that it was not good for the health of her babies and they could fall ill if they would be under her care. Whenever confronted that her belief was untrue, she did not agree and would get irritated. She confirmed that last sexual intercourse with her husband was more than a year ago and accepted that it is not possible to have babies without intercourse. But at the same time, she reported that her case was different since God blessed her with two sons and He can do whatever he wants.

She had a past history of complicated labour and intra uterine death during her first pregnancy 17 years ago, and a history of caesarean section during her 2nd pregnancy for cephalo-pelvic disproportion. Patient is mother to 16 year old girl, who is the only child.

Patient's menstrual cycles were irregular almost since two years and stopped completely due to menopause one year ago. She gained around 17 kilograms of weight during last nine months. However, there was no history suggestive of an underlying medical disorder. From the available information, there was no family history of psychiatric illness and she had a well adjusted pre-morbid personality. Physical examination revealed obese female with BMI 53. Mental status examination revealed euthymic affect, delusion of procreation, 2nd and 3rd person auditory hallucination, intact cognition with absent insight. A diagnosis of schizophrenia, paranoid subtype was made.

Her baseline positive and negative syndrome scale (PANSS) score (positive syndrome, 31; negative syndrome, 11; general psychopathology, 37) was 79.⁴ She was started on atypical antipsychotic risperidone 4mg/day which was increased to 6mg/day after one week. Three weeks later, she no longer held the delusional belief nor any kind of hallucinations. Her positive and negative syndrome scale (PANSS) score (positive syndrome 10; negative syndrome 8; general psychopathology 18) was reduced to 36. She was maintaining well on same treatment during the last follow up visit six months ago.

Discussion

The stages of procreation in human life cycle are important and involve the establishment of relationships through sequences of marriage/partners, pregnancy and becoming parents, grandparents etc.

Jenkins et al (1962) reported 'delusion of childbirth and labour' in a 19-year-old male bachelor.⁵ Manjunatha et al (2010) reported the similar delusion i.e. delusion of delivery and brought under the broad rubric of DPS.² Present case report is in continuation with original description of delusional procreation syndrome (DPS). Our patient presented with primary, bizarre delusions of childbirth and labour (delivery of two male babies with abnormal location of incision for caesarean section). She had affective and behavioural response with the same delusional beliefs.

Origin of current delusional belief can be understood in term of patient's socio-cultural background. It is widely believed that every Indian family should have at least one male offspring to inherit and transmit the values and customs to their next generation. In the present case; throughout her life, she wanted to have a male child. Patient was having past history of complicated labour, IUD and caesarean section in her past two pregnancies. The content of delusion is understandable in terms of patient's preference for male children and her earlier obstetrics history. There are different dimensions in procreation of human beings and similarly, DPS has different dimensions. Manjunatha et al (2011) reported proxy dimension of DPS.⁶ In this report, authors propose twin dimension of DPS.

The above case report adds to a limited literature on DPS especially from an Indian perspective. The content of the psychopathology in current episode can be understood in the light of the previous personal experiences and socio-cultural context of the patient.

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- (b) The principal author and at least 50% of all authors and the person presenting the paper must be members of the North Zone, I.P.S.
- (c) The coauthors who are not members of the society are not eligible for receiving cash prize or certificate.

The full papers received for consideration for the Awards shall be considered by a panel of judges appointed by the Chairman, Awards Committee who shall select papers of sufficient merit for final rating at the time of presentation. Out of the papers considered to be of sufficient merit by majority of judges, the Chairman, Awards Committee shall select three papers for each award with the highest pooled percentage scores for presentation at the Annual Conference.

A panel of judges will be appointed by the Chairman, Awards Committee. Out of the total marks, 60% will be for preparation and compilation of the paper and 40% for its presentation at the Conference. The paper with the highest pooled rank order shall be declared the winner, In case of a tie, both the papers will be declared as joint winners.

All the authors of the Award winning papers, who are the members of the IPS, North Zone. shall be considered to have won

the award and will be issued certificates and be eligible for the award money as follows:

(a) 25% of the money shall go to the author presenting the paper.

(b) The remaining 75% shall be distributed as follows:

(i) If there are two authors who are eligible for the award money, 60% to the principal author and 40% to the co-author.

(ii) If there are more than two authors who are eligible for the award money, 50% to the principal author and 50% to be equally divided amongst the co-authors.

If in the opinion of a majority of judges, no paper is of high enough merit, there will be no award that year.

No paper shall be eligible to contest for an award where a member who has won that award in the immediately preceding year appears as an author or co-author.

None of the judges of the award and none of the members of the Awards Committee shall be contestant for any Award that year.

The assessment of papers by the panel of judges as certified by the Chairman, Awards Committee shall be ratified by the Executive Council of IPS(NZ)

The practical and logistic problems from time to time in assessment process will be dealt with appropriately by the Chairman Awards Committee in consultation with President.

No one paper or substantially similar paper shall win more than one award on the basis of presentation at the Annual Conference, in case more than one award is announced at a Conference.

The paper can be considered only for the category for which it has been nominated.

All the papers submitted for awards will be the property of the zone for publication in the Journal of the Society.

The authors should furnish a declaration containing following items at the time of submission.

- a) The Principal author and 50% of the co-authors are members of society
- b) This or substantially similar paper has not won an IPS North Zone Award earlier or been submitted for another award this year.
- c) This or substantially similar paper has not been published or been submitted for publication in any scientific journal.
- d) Consent from all authors about submission of the paper and a certificate that there is no copy right infringement in the contents of the paper.
- e) None of the author has won the same awards in the immediate preceding year

SPECIFIC GUIDELINES

Dr. A.K. Kala Award

This award will be given for original research in Biological psychiatry. There is no age bar. Award Money: Rs. 2,500/-.

Dr. Buckshey Award

This award will be given to the paper presented by the member of North Zone IPS who is not above 35 years of Age at the time of presentation. Award Money Rs. 1000/- The paper must be accompanied with proof certifying age of the Principal/Presenting author.

Dr. G.C. Boral Award

There is no age bar to compete for this award. Award Money: Rs.1000/-

Nomination for Bombay Psychiatric Society Silver Jubilee Award (Best Paper of the conference):

All the award papers can compete for the best paper award. The authors, if they desire to compete for this award, should send a declaration about their desire and willingness to compete for the nomination for the BPS award. It may please be noted that the papers submitted for the Awards of

IPS-North Zone will not be automatically considered for the nomination for the BPS Award, unless a specific declaration to that effect is provided in writing at the time of submitting the paper or before the last notified date for submission of the award papers.

Free papers (i.e. the papers other than the award papers) can also compete for the best paper award to the nomination for BPS award. For this, the authors of the free paper must submit four copies of the full text of their paper along with the declaration as explained above, to the Chairpersons, Awards Committee. This submission will have to be in addition to the four copies of abstract of the free paper to be submitted to the President. The last date for sending the full text of the paper with the declaration will be the same as the last date notified for the submission of the Award Papers.

GUIDELINES FOR EVALUATION OF AWARD PAPERS

A panel of judges shall rate the papers. There shall be three judges in each panel. Out of the total numbers i.e. 100, 60% will be for preparation and compilation of the manuscript & 40% for presentation during the conference. The assessment of the written manuscript will be on the following pattern.

Written manuscript evaluation	60
1. Topic/Title, its relevance and methodology.	12 marks
2. Survey of literature/reference bibliography.	12 marks
3. Presentation of results and discussion.	12 marks
4. Conclusion and how far they are substantiated by the study.	12 marks
5. Clarity, lucidity, precision of language and over all elegance of paper.	12 marks

Presentation during conference: 40

1. Style, clarity, compactness of expression and presentation 20 marks
2. Use of audiovisual aids (if any) 10 marks
3. Appropriateness, quality visibility comprehensibility and novelty 10 marks
3. Response to points raised in discussion 10 marks

*In case no paper is of high enough merit (i.e. score 50% of more marks), there shall be no award that year.

PANEL FOR SELECTION OF BEST PAPER TO BE NOMINATED FOR BPS AWARD

There will be two panels of three judges, one for evaluation of written manuscript and one for presentation for all the award papers submitted, and the full papers/manuscripts of the Free papers submitted for BPS award.

Presentation during conference: 25

1. Style, clarity, compactness of expression and presentation. 10 marks
2. Response to points raised in discussion. 10 marks
3. Use of audiovisual aids, if any 5 marks

Appropriateness, quality, visibility, comprehensibility, and novelty.

Written manuscript evaluation. 75

1. Topic Title its relevance and methodology. 15 marks
2. Survey of literature/reference bibliography. 15 marks
3. Presentation of results and discussion. 15 marks
4. Conclusion and how far they are substantiated by the study. 15 marks
5. Clarity, lucidity, precision of language and over all elegance of paper. 15 marks

INDIAN PSYCHIATRY SOCIETY

NORTH ZONE

1. Full name in block letter:

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2. Place & Date of Birth

3. Mailing Address

.....
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4. Permanent Address (if different from the above):

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5. Email id Contact No.....

Remarks by Gen Secretary
and Treasurer

Decision by the Council

President

Date of Election

6. Qualifications:

(Bachelor's degree and above): Degree/ Diploma University Month & Year

7. Professional training in your specialty:

Designation Name of Institution From to (Month & Year)

