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EDITORIAL

Research should not be need based!

Rajshekhar B, Consultant psychiatrist, Hyderabad. AP. India

Research, whether academic research or clinical trials (drug trials), is very essential for the advancement of medical science. If we are writing paracetamol in general practice & haloperidol in psychiatry, so confidently, it is because of the earlier academic research, clinical trials,& also our clinical experience .

Equally important is academic research. By this I mean research which is not clinical trials. This includes thesis work, presentation of papers in scientific conferences, & publication in journals; & other related aspects.

Frankly speaking, both types of research are inseparable. If we don't have inclination, interest or calibre to do academic research, we cannot even do clinical trials properly, because both type of research involves same kind of work.

Till some time back, there was not much of interest on part of medical professionals to do academic research, though few of them were actually involved in clinical trials. One of the reasons for this could be that one gets monetary benefits by getting involved in a clinical trial. Also all aspects, including protocol designing, statistical analysis, etc are taken care by the sponsor. In contrast to this, one doesn't get such immediate returns in academic research. There are some who do bit of paper presentation & publication during post graduation, because their professors have pressurised them, but once they finish PG they stop doing everything. When asked why, the answer would be 'no time', 'too busy with practice', 'lot of home responsibilities'!

Now the scenario is bit changing, thankfully 'for good'. Those who had an eye on 'greener pastures abroad', were already doing academic research because that is one of the desirable criteria for studying & working abroad, & one would have an edge over other candidates. In India also now we are going to see this happen, in fact this has already started. ***MCI in its recent guidelines, has stated that the desirable criteria for promotions for teaching posts is publication in an indexed National / International journal.*** These directions from MCI have thrilled few professionals; while others are relaxed saying that it doesn't affect them as they are already in higher posts. Many others, esp. youngsters are perturbed & annoyed, saying that it is too early for MCI to do so, and they should have taken stock of ground realities before taking such decisions. These 'realities', they say, are 'not having enough research facilities in institutes', 'not having enough time & expertise', etc.

Whatever 'excuses' we give; the 'reality', the 'fact' is that we cannot stop these regulations to come into force very soon. So why shouldn't we get prepared for such eventuality?

But beware 'there is a bit of risk inherent in such decisions'. Now we may have low quality papers getting published, very soon, with lot of biases & recommendations, & other such undesirable things. Also there will be a spurt of 'n' number of low quality journals, with vested interests.

So what is the way out? We already have lot of journals! There is a dire need to improve the quality of existing journals; to have the papers peer-reviewed, if possible double-blind. Also the papers should confirm to the standardized format of 'manuscript submission guidelines'. We should have a print version & also online version, so that we can make our presence felt, which will make online submission easy & we become more 'eco-friendly by reducing wastage of paper' (this is a catchy word in 21st century; people will listen to us if we keep talking about environment!!). Lastly, hopefully, getting it indexed, if possible, in pubmed!!! Big dream isn't it.

Coming to the title of the editorial: **Research should not be need based!** Let me clarify, **'Research should always be need-based',** but these needs should include deficiency in our understanding & knowledge of science, needs of the community, needs of persons with mental illness, our incompleteness in understanding our patients, which is so essential in medical science, esp. in psychiatry. **Our research should fill the existing lacunae of what we already know.** We should deter from doing 'replication studies', 'there is no such study from India, sort of studies', unless & until it is absolutely essential for understanding Indian patients, esp. if culture significantly influences those aspects.

Let us also do academic research, not just clinical trials!

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Let us do research not just for promotions, or for recognition; but also for the advancement of medical science!!

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PRESIDENTIAL ADDRESS

Psychiatric research in India - road least travelled

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Respected Chairperson, distinguished guests, esteemed members of Indian Psychiatric Society, ladies and gentle men. It gives me immense pleasure to welcome all to this port city-Visakhapatnam. The pleasure gets doubled as I am also the organizing secretary and multiplied because of the opportunity of addressing my home crowd which is more deliberate than incidental. I am more delighted that the august gathering includes three of my teachers.

Let me start my address by thanking each member of the Indian Psychiatric Society Andhra Pradesh state branch for unanimously electing me to be its president - an honour unthinkable for a boy from a remote rural village of Andhra Orissa border which is more in news for its Naxalite activities than for academic achievements. I believe and request that you continue to shower your blessings and guide me to discharge my duties and fulfill my responsibilities as president for the coming one year.

I deem it privilege though for many it is customary to deliver the presidential address by selecting a topic not only of personal interest but also a road map for the future development. After considering many areas I thought the challenges faced by Indian Psychiatric research are relevant and appropriate. It is also close to my heart because I, like all of you believe that research alone would surge any science forward.

When we look back and talk about history of Psychiatry, it is always history of mental hospitals and evolution of mental health delivery services. Nothing much is discussed about the contributions of Indian Psychiatry towards etiological, nosological, diagnostic and therapeutic aspects. Hence I thought it is time we rest our vision and attitude.

Indian work has influenced international classification of mental disorders. There have been attempts to influence the international classification through cultural deviations in different societies on presentation of mental disorders. Dhat Syndrome comes immediately to everyone's mind.

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Wig and Singh tried to extract categories from DSM II relevant to India. They cited Asian, German, and Scandinavian work in support of clinically different group of psychosis different from schizophrenia and manic depressive disorders. The first major study which recognized the problems of ce onset of psychosis with good prognosis was the International Pilot Study of Schizophrenia (IPSS) done at Agra by Dube group. The Determinants of Severe Mental Health Disorders (DOSMeD), has provided findings related acute and transient psychosis. Chandigarh is the Indian center for this international effort. The Indian Council of Medical Research's multicenter study of acute psychosis and Chandigarh Acute Psychosis study reported respectively 52% and 40% of patients who could not be classified as schizophrenia or MDP. This is not the occasion to review the whole contribution of Indian Psychiatry to the refinements of world classification but suffice it to say that the work done in India is limited in spite of large patient population available. However, epidemiological studies like IPSS, DOSMED and SOFACOS (Study of Factor Affecting the Course and Outcome of Schizophrenia helped to put India on the global research map.

When we talk about measuring the psychopathology the contributions are mostly related to adoptions and adaptations of psychometric tool designs of western origin. NNSen's Personality trait inventory perhaps is one of the first original Indian attempts.

Use of EEG as investigational tool in psychiatric disorders has been fascinating to Indian investigators. Davis and Mukherjee tried to correlate the EEG studies with outcome after ECT. I should say that many interesting studies have come from Haq's group in Ranchi and Gangadhar's team in Bangalore. Recent studies are using newer and novel tools to understand the mental disorders. Use of Spectro-photometric assay, Brainstem Evoked Responses, MRI and PET studies are quiet exciting and very promising.

Biological experiments done elsewhere by Indian origin psychiatrist started finding mention in the international literature. In India to start with the methodologies were rudimentary. Dermatoglyphic studies were done almost in all the centers. Soft Neurological signs, ABO blood group, lymphocytic abnormalities, histamine tolerance etc were some of the studies done to correlate etiological factors. Studies of laterality are also quiet high on the

list of our researchers.

Schizophrenia has always fascinated the Indian psychiatrist. Biological and phenomenological investigations dominated schizophrenia research. Biological research was mostly directed towards replication of the research findings of the west. As Kulhara succinctly put it lacked the modern research sophistication.. On the other hand phenomenological research forced outsiders to take serious note of similarities and differences between the East and West. Research in psychological, psychosocial and rehabilitation aspects of schizophrenia continue to be neglected. Of late coping strategies, stigma and care giver issues have been of interest to the researchers in India. Biological research has been good in patches but is not in tune with recent developments in international arena.

Surprisingly and unfortunately the focus of the researchers in affective disorder is less enthusiastic to say the least. Any path breaking paper in Bipolar Disorders is conspicuous by its absence. Depression scored better so far as the attention of the researchers is concerned. Of late interest in life event correlation has waned. Biological research in depression is nowhere near what is being done abroad.

The studies on suicide are important in our understanding of suicide and hence suicide prevention. Most of the studies are either correlative or epidemiological. Venkoba Rao contributed considerably in this area from Madurai.

I need not mention anything more than what Pratima Murty et al said regarding addiction research in our country. I quote "Clinical research in this area has focused mainly on alcohol and substance related co-morbidity. There is disappointingly little research on pharmacological and psychosocial interventions."

Evidence based medicine and Randomized Controlled Trials are the in things so far as treatment methodologies are concerned. Study of four patients with 'mental deficiency' conducted at the Inter Provincial Hospital; Kanke is perhaps the first designed efficacy study. Replicative studies of narco-analysis, ECTs, insulin coma Therapies, psychosurgeries are some more examples.

Researchers have shown interest in efficacy of Indian forms of treatment. Ayurveda and yoga are unique contributions of therapeutic interventions of Indian origin in many psychiatric disorders. It my not be out of place to remember that the isolation of Reserpine from *Rauwolfia serpentina* is a great innovative Indian contribution.

Of late lot of interest is generated in clinical research in India. India is the international hub for most of international multi-centric studies. Large patient population, well trained researchers and high quality data generation are some of the reasons for the world to look towards India.

All through these times, Indian research in Psychiatry tried to move in tune with trends in western science. If one tries to find any original concept or study which stands as landmark in international psychiatry, may feel disappointed. Most of the work was, has been and is replicative. There are few which refute the western findings. For that, attitudinal change and self belief is required. We need people consistently engaged in such activities. Required research climate amongst the scientific community is need of the hour. Encouragement by co Indian investigators by way of quoting the Indian literature helps the atmosphere. The colonial mind set of replication and shy of refutation should change. Cutting edge research is the need of the hour.

Resource allocation for health research from public funds is essential if research is to be of use for national development. However, few governments in the developing world are willing to allocate a sizeable amount of resources for health research in general and for psychiatric research in particular. Because of limited funding from the public sector, researchers have a restricted choice of topics, and thus are frequently unable to institute research into wider problem areas.

Limited access to up-to-date journals and books in their particular disciplines is probably the greatest challenge facing psychiatric researchers. Low salaries of researchers are a perennial problem. This has forced researchers and scientists to devote substantial amounts of their time to income-generating activities such as private clinical practice and consultancies instead of research.

Obtaining valid data is more difficult for researchers in the developing world than in developed countries, for a number of reasons. For instance, many of the psychiatric instruments used in developing countries to collect information are geared to Western culture and their direct translation into local languages would definitely make the validity of the instruments questionable.

Despite the multitude of challenges facing them, probably the most important incentive for psychiatric researchers in developing countries is their conviction that they are working in places where the need for their research is greatest, that at some future date (hopefully soon) policy- and decision-makers will recognize mental health problems as a priority that needs resource allocation, and that the results of their research will improve the mental health conditions of individuals, families and communities

I hope younger generation of psychiatrists would take research seriously and contribute to keep India on top in the world psychiatry literature. Thank you ladies and gentlemen for your patient listening!

REFERENCES Nil

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GUEST EDITORIAL

Information Technology & psychiatry

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ABSTRACT

The advances in the area of Information Technology has a pervasive influence on the society. There is no field where IT cannot help in improving its quality. IT has improved the processing speed of information, ease with which information can be transferred and shared. It is bringing more transparency in services and made the life more comfortable. Thru this paper I am putting my humble efforts to share with mental health professionals how Information Technology(IT) and Information Technology Enabled Services (ITES) can help us and our clients to improve the quality, reliability, convenience, comfort, cost effectiveness and development of services. I have discussed various areas within the field of mental health to which IT and ITES can contribute. This article is also intended to stimulate all our colleagues to start using and using more of IT and ITES in psychiatric practice. Tele-medicine and Tele-psychiatry are used interchangeably in this article as we are also physicians and will be interacting with other medical colleagues' while delivering the services.

Key words: Information Technology(IT), Information Technology Enabled Services (ITES); Psychiatry

Definitions:

Information Technology: Information technology (IT) is the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a microelectronics-based combination of computing and telecommunications.[1] - *wikipedia*

Information Technology Enabled Services. ITES is defined as outsourcing of processes that can be enabled with IT and covers diverse areas like Finance, HR, Administration, health care and telecommunication etc. All the services which use IT to enhance the services are termed as ITES .Some examples of ITES' are:

Medical:

- Medical Transcription
- Electronic medical records
- Telemedicine
- E-journals & E-books
- Websites of various societies and e-groups

General:

- Back office operations
- Call Centers
- Content Development / Animation
- Data Processing
- Engineering and Design
- Geographic Information System Services
- Human Resource Services
- Insurance Claim Processing Legal Databases
- Payroll
- Remote Maintenance
- Revenue Accounting
- Support Centers
- Web site services
- E-library

Telemedicine: "Telemedicine is the use of electronic or digital communication technologies as a method of delivering health/ medical education and medical care". These include: transmission of still images, audio feeds, telephone calls, e-mails, or video transmissions, audio and video counselling

History of Telemedicine

In the 1900s, people living in isolated areas of Australia used two-way-radios to communicate with the Royal Flying Doctor Service of Australia for medical purposes. The first form of Telemedicine took place with the invention of the telephone in 1906. By using telephone, sick patients could vaguely communicate with the doctor. Unfortunately the doctor could not actually see the patient

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and could only rely on the information the patient provided them. In the 1920s, ship radios were used to link physicians with sailors at sea during medical emergencies. Nebraska Psychiatric Institute in 1955 was the first to use closed-circuit television. In the 1970s, paramedics in isolated areas of some Alaskan and Canadian villages were able to link to hospitals in urban towns via satellite to perform lifesaving techniques. Today however with the use of newer technology, specialists and consultants are able to react faster and more efficiently to those in need.

Although the initial use of videoconferencing in psychiatry began long ago, no psychiatric service applied it in a truly integrated and sustained manner until the early 1990s, when digital transmission of information started.

Applications of Telemedicine in Psychiatry:

By the use of this, specialists aim to bring their services to the patients instead of having the patients come to their services. It also greatly aids those who live in inaccessible or underdeveloped areas. Telemedicine can bring patient and doctor together for providing possible clinical services directly as add on services to the direct clinical services, Can bring the psychiatrist and patient together thru intermediary general practitioner for delivering clinical care.

Psychiatrists thru teleconferences can share the psychiatric knowledge and latest developments. Teleconferences can bring Psychiatrists and General practitioner together for imparting psychiatry knowledge to general practitioner.

Telemedicine saves time, effort and travel cost, boarding cost of patient and patient's attendant. For psychiatrists and G.P's it saves their time, effort and boarding cost while acquiring the psychiatric knowledge and acquiring knowledge becomes more accessible and economical.

Tele-psychiatry cannot completely substitute the personal interactions and can act as add on method with its advantages. It is not advisable to start treating a patient thru

Tele-psychiatry without personally talking with the patient and without doing physical examination as we might miss the existing and contributing medical conditions. Tele-psychiatry can be used for consultations and clarifications in between personal consultations. Prescriptions cannot be given thru Tele-psychiatry. We have to use the services of G.P to give the prescriptions. Prescriptions can be delivered thru Fax / Fax- thru email. Such Fax/Email prescriptions may or may not be honoured due to its legal validity and in India such system is not yet evolved. Patient or the learner will not get the same satisfaction and confidence as that of direct personal interaction. Tele-psychiatry is not a substitute but an add on service. Tele-psychiatry can be used to deal with emergency psychiatry cases thru General practitioners or physicians.

TYPES OF TELEMEDICINE

Store and Forward

This does not require the presence of doctors and works best for non-emergency situations. This usually takes the form of a 'multimedia email' that contains medical information including: medical images, bio-signals, or videos. This email is then sent to a specialist. As the specialist is not online with the patient, they may review the information on their own or consult other specialists. Once the specialist has reached a conclusion, they will then send back their reply to the patient.

Real Time

This can be as simple as a phone conversation or as complicated as robotic surgery. A communication link allows them to communicate in real time. Video conferencing is the most common form of communication. Many times during the session, peripheral devices are attached to computers to aid the specialist. For example a tele-otoscope would allow the specialist to see inside to patient's ear and a tele-stethoscope allows the specialist to hear the patient's heartbeat.

Tele-radiology

This is the ability to send x-rays / CT Scan / MRI images from one location to another for diagnostic purposes. Once the x-ray has been sent by one party and received by another, it can be viewed on the computer or printed out. Images can be send by the laboratory to the patient or to the psychiatrist directly thus avoiding the effort and cost of patient / attendant of collecting the reports physically. Psychiatrist can directly store the images in the patient file as e-copy and retrieved easily whenever required.

Video Conferencing

This is basically a conference between a doctor and a patient/ Between Psychiatrists / Between psychiatrists and General Practitioner. It involves both parties communicating to each other live over long distances via web cams. This is helpful as the patient can digitally show the doctor what is wrong with them. The doctor can then base his decision. CME programs can be conducted thru video conferences.

Video interviews can be conducted by the Mental health

service administrators for selecting the staff required for their services.

Home Care

This is especially helpful for those who cannot leave their home for physical reasons. Home Care allows patients to communicate live to their doctor/ specialist via video or voice links on their home computer. Through the use of their PC, the patient can also send their doctor their current medical situation such as their pulse, blood pressure, chest sounds, the content in their syringe, etc.

ADVANTAGES

Telemedicine is advantageous for the patients, the specialists/ doctors and for the economy. It allows more people to stay out of hospitals. This in turn, allows them to continue working and to avoid high medical costs. Telemedicine is beneficial for the doctors because it allows them to communicate with other doctors across the globe. It helps collaboration & exchange of ideas & research. The economy benefits include less expenditure as the State no longer has to spend money on transporting patients to and from the hospital. Tele medicine is also eco-friendly as pollution resulting from transportation is minimized and the parking problems of metros can be reduced.

DISADVANTAGES

1. Not everyone who needs it receives it
2. Specialists need to be trained
3. Not everyone has access to a computer or video monitor
4. Language barriers
5. Inertia in starting the services delays the use of such services by many professionals.

SOCIAL & ETHICAL ISSUES

Reliability All equipments used in telemedicine MUST be reliable especially in an emergency situation. For example, what if in the middle of a consultation the hardware gives out leaving the patient alone to deal with their issues? .

It is advisable to always have backup hardware and stored information to avoid such difficulties. Information can be uploaded to the websites and used in case of emergency requirements from any place. It is advised to have hardware and software technologist available on phone to sort out emergency technical problems.

Integrity of Data

Security It would be possible for someone to hack into a database and have access to confidential information of the patients. Software programs are available to minimize such risks your software technologist will be in a position to help by providing the latest and most suitable software for your needs.

Privacy and Anonymity: The network may not be secure and therefore may breach the patient's privacy. Software programs are available to reduce such risks but it may cost the organization.

Equality of Access: Not everyone has access to the equipment and machinery used by a doctor to monitor a patient

Control: Some users may abuse the system and constantly call their doctor. It is advised to hand over the written instructions to the patient and their attendants' the ground rules of how to use such services and avoid discomfort to the psychiatrists.

Unemployment of ambulance drivers, secretaries, and nurses., They can switch to other alternate developing services.

TECHNOLOGY & CME

Technology continues to influence all aspects of our professional practice. Dr Robert Hsiung has illustrated the impact of the Internet on the Royal College's maintenance of certification program, which is now mandatory for admission to and renewal of Fellowship and for the use of the designation FRCPC. His innovative program illustrates, not only is multimedia online CME possible, viewers can also participate in a live "discussion" of the presented material. This integration of interactive learning has helped in meeting all of the criteria for the Royal College's accredited group learning activities. The resulting credits will be particularly valuable for those psychiatrists practising in locations where regular grand rounds at their local hospital are not in place.

The day is not far when Indian doctors including psychiatrists will be mandated by Govt. of India & MCI to do so. This issue was highlighted by the CME chairperson Dr Prasad Rao G in ANCIPS 2011 at New Delhi, when he was proposing the issue of accreditation of CME hours of IPS by MCI. If this comes into force, doctors practicing in remote rural & tribal areas may get benefited with help of online CMEs.

Grand Rounds are an integral part of most of our teaching hospitals' continuing professional development activities. There seems to be no significant reason why the widespread transformation of existing Grand Rounds, irrespective of their current setting, to online CME activities should now not occur.

Enhancing Mental health Awareness through IT:

Mental health awareness can be effectively increased using websites meant for general public, carers of

mentally ill and organizations involved in caring mentally ill persons.

Technology & patient care

Huang M has provided an overview of virtual reality in psychiatry. Although not extensively in use, virtual reality technology is now being introduced for the treatment of various mental health disorders.

Both Hsiung and Huang are fellow members of the Psychiatric Society for Informatics (PSI), an affiliated organization of the American Psychiatric Society. The PSI, started in 1995 is dedicated to promoting the understanding and use of IT in psychiatry. PSI now has as members recent graduates of psychiatric informatics fellowship programs. Expertise in technology and informatics is being recognized as another mainstream psychiatric subspecialty.

In medicine, the delivery and monitoring and also teaching of therapy could be advanced by greater use of IT. Such technology could catalyse a model of community care delivered mainly in the home, by enhancing access to effective self-help, audit of outcome and professional training.

Marks I has proposed that the NHS can apply IT to mental health care in two ways. First, when health care professionals diagnose an anxiety or depressive disorder, they could give to the patient an information leaflet containing self-help guidance. Second, professionals could prescribe for patients a password giving round-the-clock access to interactive self-help guidance at home, either using the Internet or by telephone using interactive voice response, plus brief helpline advice from a live therapist if necessary. A prerequisite for prescribing such passwords is NHS funding for these in the same way that the NHS funds medication prescriptions. (1)

Computer -aided psychological testing:

Some of the psychological testing tools are available in soft versions and can be used quickly and effectively using computers. Reports can be generated easily and print outs taken easily. Even reports can be transmitted to intended persons thru emails. All psychological tests should be verified and interpreted by the experts considering various human issues.

Computer-aided therapy in a West London clinic

Computer-aided CBT was used successfully in an NHS self-help clinic in west London. (1) The clinic's four computer-aided therapy programs - for panic disorder and phobias; generalized anxiety; OCD; and non-suicidal depression - was effective. Patients filled a screening questionnaire which they had obtained from their GP. This was followed by a 30min screening interview with a therapist, face to face or by telephone, to assess the person's suitability for one of the therapy programs.

Most people thus referred were suitable and were provided appropriate computer-aided therapy system. The clinic's results were encouraging. Users of the computer-assisted therapies improved significantly. The therapist managed four times more referrals by delegating routine aspects of care to computer-aided therapy. Therapist contact with patients was reserved for the initial screening (which itself could be done largely by electronic communication) and to give brief advice if the patient's progress was slow. Computer-aided delivery was found to be cost-effective.

Benefits of home-based computer-aided therapy Patients

1. Guidance is available 24/7, by Internet or telephone, with live helpline back-up as needed
2. Freedom from having to travel to a clinic is particularly valuable for people at work and hard-pressed parents
3. Many people prefer to disclose sensitive information to a computer, rather than to another person
4. The patient has a sense of self-empowerment;
5. Access is always to the most recent form of therapy, as Internet and telephone systems can be updated more easily than CD-ROMs and books.

Health care professionals

Reduced work burden helps to provide effective treatment. The self-help systems are 'clinician extenders' (not 'replacers'), cutting per-patient time and cost. Giving patients home access to the programs is cost & time-effective. This also saves both the space and expenses needed to offer computer-aided therapy in a clinic and to update the systems at intervals.

Therapists and managers

Therapists and managers, as well as patients, benefit from the rapid audit of outcome and the cost of therapy.

Researchers

This may speed up the study of many psychotherapeutic processes; such systems can be modified to vary the therapeutic ingredients, and every key press by patients can be recorded and analysed.

Students and their teachers

Self-education tools save teaching time.

Adverse effects

Some professionals fear computer-aided therapy systems might throw them out of jobs. But in fact these new techniques do not replace clinicians but rather allow them to use their time better on tasks that a computer cannot do. Medico-legal issues will arise eventually, when patients sue in the way that they do after face-to-face therapy.

Marks has remarked that with careful organisation, funding and monitoring by the NHS and teaching establishments, computer self-help systems could greatly speed access to effective treatment, outcome audit and teaching.

Patients and carers may easily approach internet-based services than seek out help through a mental health centre initially. This could be both because of ease of access as well as the still prevailing stigma of mental illness.

However, telecommunications connections should be supplemented with supportive working relationships that include healthcare practitioners involved with the physician- patient encounter. These processes can include face-to-face meetings, videoconference meetings, and opportunities for healthcare practitioners to work together at one location so as to create a shared understanding regarding patient care.

Some studies have shown that there is an overall tendency for psychiatrists to use fewer IT applications compared with other providers. This might because of psychiatrists' lesser reliance on laboratory and imaging studies. Also there are concerns about patient privacy (for example, with regard to computerized patient notes). The way out is an adoption of privacy standards.

Gadgets useful for using IT more effectively :

Desktop computers, laptop computers, notebook computers, tablet computers, scanners, web cameras, Personal digital assistance(PDA), Digital note takers, Digital note pads, I-phones, I-pads, Black berry phones, plug and surf internet tools,

The Future of Technology in Psychiatry

With the greater presence of IT, the most powerful trend will be toward greater information generation and sharing. This will help researchers and health provider organizations to monitor outcomes. The clinicians will add their cases to the data pool, whether to create knowledge about particular illnesses or to be reviewed in their standard of applying care.

Such data sharing may compromise patient confidentiality. The IT also may affect doctor-patient relationship. Can the same degree of warmth be communicated through a videoconference connection? The psychiatrist may begin to see the patient less as a person and more as a data point.

Let's have positive attitude We cannot avoid IT and should not. If we have clear understanding of our goals and who we are as psychiatrists, we can employ these changes to our benefit. (4)

CONCLUSION

The landmark Institute of Medicine (IOM) report, 'Crossing the Quality Chasm', concluded that IT "must play a central role in the design of health care systems if a substantial improvement in health care quality is to be achieved."
Psychiatry, is quite well poised to stake its claim in this digital revolution and the stakeholders should ensure that they don't 'miss the boat' this time.

Limitations, submissions, and future thought for this article:

It is difficult to cover the total field of IT and ITES in one article. Lot more information is available which can be used but could not be incorporated in this article. IT is a fast evolving area what is available in the field today will become outdated within next few months. Constant updating of information is useful. I welcome feedback and critical comments from readers and wish to submit subsequent article incorporating what is not covered in this article, new subsequent developments and felt need of readers based on their feedback subjected to editorial approval. As I am not a IT professional but a professional having interest in IT, lacuna and mistakes are likely to occur in this article readers are requested to correct them for the benefit of our members.

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REFERENCES

1. Marks I, Mataix-Cols D, Kenwright M, et al (2003) Pragmatic evaluation of computer-aided self-help for anxiety and depression. British Journal of Psychiatry, 183, 57-65.
2. Marks I. Psychiatry in the future: Information technology can pull mental health care into the 21st century. Psychiatric Bulletin 2004 28: 319-320
3. Mojtabai, Ramin. Datapoints: Use of Information Technology by Psychiatrists and Other Medical Providers. Psychiatr Serv 2007 58: 1261
4. Huang MP and Alessi N. Psychiatry in the Digital Age. 1997. Available from http://www.healthieryou.com/exclusive/psychindigage.html. (last assessed on 2010 Dec 18).
5. Turner JW. Telepsychiatry as a Case Study of Presence: Do You Know What You Are Missing? Journal of Computer-Mediated Communication. 2001; 6 (4).

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REVIEW ARTICLE

Asperger's syndrome

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ABSTRACT

Asperger's syndrome is an autism spectrum disorder characterized by significant difficulties in social interaction, along with restricted and repetitive patterns of behaviour and interests. In contrast to other autism spectrum disorders, there is relative preservation of linguistic and cognitive development. Although not a essential diagnostic criteria, physical clumsiness and atypical use of language are frequently reported.

Key words: Asperger's syndrome

INTRODUCTION

Asperger's Syndrome is a developmental disorder closely related to autistic disorder and Pervasive developmental disorder NOS and classified with these disorders along a continuum called Autism spectrum disorder (ASD).

HISTORIAL ASPECTS

Hans Asperger (1906-1980), an Austrian Paediatrician in 1944 described 4 boys aged 6 -11 years who had difficulty integrating socially into groups despite adequate verbal and cognitive skills. He originally labeled the condition as 'Autistischen Psychopathen im Kindesalter' or autistic personality disorder in childhood. Concept of autistic psychopathy was introduced to English-speaking readership by Van Krevelen (1963).Lorna Wing (1981) coined the term Asperger's Syndrome as she felt that term Psychopathy was inappropriate. Her influential review and series of case reports popularized Asperger's Syndrome.

EPIDEMIOLOGY

Recent prevalence of ASD has been reported to be 1 in 115 according to CDC, USA. Researchers report an increasing trend of ASD. It is unclear whether a similar trend is applicable to prevalence of Asperger's Syndrome Only two epidemiological surveys have specifically looked into prevalence of Asperger's Syndrome (Ehlers & Gillberg;1993, Kadesjo et al ;1999) .Methodological differences across studies have resulted in a wide range of reported prevalence of 0.3 -484 per 10,000 (Fombonne & Tidmarsh ;2003).It is more common in males .

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NOSOLOGICAL ISSUES

Prior to ICD-10 and DSM-IV, several diagnostic criteria were proposed to clinically define Asperger's Syndrome .These includes: Asperger's criteria, Wing's criteria, Gillberg's criteria, Tantam's criteria and Szatmari's criteria. The use of various diagnostic schemes in research literature is confusing (Volkmar & Klin; 2000).

ICD-10 and DSM-IV distinguish Asperger's Syndrome from autism primarily on the basis of a relative preservation of linguistic and cognitive capacities in the first 3 years of life. Asperger's Syndrome has been renamed Asperger disorder in DSM-IV. DSM-IV diagnosis is based on impairment of social interaction and the presence of stereotypical or repetitive behaviours. Diagnosis requires that the impairment is clinically significant, occurs before 3 years of age and excludes clinically significant delay in language, cognition or other skills. In DSM-IV-TR, the diagnosis of autism always takes precedence over that of Asperger's Syndrome. Thus, if a child meets criteria for autistic disorder, the diagnosis must be autism even if he or she displays excellent language and cognitive skills and other 'typical' features of Asperger's Syndrome. DSM-IV has been criticized as being overly narrow (Eisenmajer et al; 1996) and rendering diagnosis of Asperger's Syndrome virtually impossible (Miller & Ozonoff; 2000).

CLINICAL FEATURES

Children do not present with clinically significant delays in language acquisition, cognitive development, or self-help skills. Language acquisition may occur precociously in some cases . Parents may report a pedantic quality in

child's speech. There are three aspects of communication pattern .First, speech may be marked by poor prosody. Rate of speech may be unusual or may lack in fluency and there is often poor volume modulation. Second, speech is often tangential and circumstantial. Third ,the style of communication is characterized by marked verbosity.

Patients of Asperger's Syndrome typically approach others in an inappropriate or eccentric fashion. They may express interest in meeting people ,but their wishes are hampered by insensitivity to other person's feelings .They have lack of intuition and spontaneous adaptation giving an impression of social naiveté and behavioural rigidity. At home as the parents mould their behaviour as opposed to peers in social settings there may be a contrast in clinical presentation.

Patients collect a large amount of factual information on certain topics . These topics dominate the content of communication .This symptom may not be easily recognized in childhood .Interest in these circumscribed topics impairs learning in general and has a negative impact on reciprocal social interaction. History of delayed acquisition of skills required for motor coordination has been reported in Asperger's Syndrome. Patients are often awkward and poorly coordinated. They may exhibit unusual gait, odd posture and poor handwriting skills.

SCREEINING TOOLS

The Autism Spectrum Screening Questionnaire (ASSQ, Ehlers etal; 1999) is a 27-item checklist standardized for completion by lay informants .It has high internal consistency and good validity. The Gilliam Asperger Disorder Scale (GADS, Gilliam 2001) is based on DSM-IV criteria. It has been standardized on a multicultural sample .It has subscales for social interaction, restricted patterns of behaviour, cognitive patterns, pragmatic skills and early development. The Asperger Syndrome Diagnostic Scale (ASDS, Myles etal 2001) is appropriate for children and adolescents age 5 through 18. The items are base on DSM-IV and ICD-10 criteria. It has five subscales - language, social behaviour, maladaptive behaviour, cognitive characteristics and sensori-motor behaviours.

DIFFERENTIAL DIAGNOSIS

The following disorders need to be distinguished from Asperger's Syndrome :

1) Autism
2) PDD NOS
3) Schizoid personality disorder
4) Schizotypal disorder
5) Depression
6) Schizophrenia
7) ADHD
8) Social anxiety disorder
9) Obsessive Compulsive disorder
10) Multidimensionally impaired disorder (MDI)
11) Multiple Complex developmental disorder (McDD)
12) Semantic Pragmatic disorder (SPD)

CONCLUSION:

Despite being an uncommon diagnosis ,Asperger's Syndrome is an enigmatic condition which aptly depicts the prototypical variability unique to ASD . Mental health professionals need to thoroughly understand this important disorder to be able to offer appropriate therapeutic interventions to the patients and their caregivers .

ACKNOWLEDGEMENTS Nil

REFERENCES

1) Ehlers S and Gillberg C. The epidemiology of Asperger's syndrome: a total population study. J Child Psychology and Psychiatry. 1993(34):1327-50.
2) Ehlers S, Gillberg C and Wing L. A Screening Questionnaire for Asperger Syndrome and Other High-Functiuoning Autism Spectrum Disorders in School Age Children .J Autism and Developmental Disorders. 1999 Vol 29, (2):129-141.
3) Eisenmajer R , Prior M ,Leekam S et al. Comparison of clinical symptoms in autism and Asperger 's disorder. J American Academy of child and Adolescent Psychiatry. 1996. 35(11):1523-31
4) Fombonne E and Tidmarsh L. Epidemiological data on Asperger disorder. Child and Adolescent Psychiatric Clinics of North America. 2003.12:15-21.
5) Kadesjo B, Gillberg C and Hagberg B. Autism and Asperger syndrome in seven-year old children: a total population study. J Autism and Developmental Disorders. 1999, 29(4):327-31.
6) Miller JN and Ozonoff S. The external validity of Asperger disorder: lack of evidence from the domain of neuropsychology .J Abnormal Psychology, 2000. 109(2):227-38
7) Volkmar FR, Klin A and Schultz RT. Asperger's disorder .American Journal of Psychiatry, 2000. 157(2):262-7

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REVIEW ARTICLE

Influence of diet on personality traits: ancient Indian theories

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ABSTRACT

The way diet influences personality has been well talked about in ancient Indian texts. The present paper reviews the literature available in this field.

Key words : Diet; personality; Indian theories

INTRODUCTION:

Our ancestors have been emphasizing for centuries that the food we consume influences our personalities. Western Science is just now trying to understand the truth behind it. What is the rationale behind the Indian emphasis that the type of food that we consume influences behaviour, and consequently the personality traits? While genetic and evolutionary factors are outside our control, the type of food we consume is more or less under our direct control, paving way to improving our attitudes, behaviour and personality.

DISCUSSION

Ancient Indian Science divided food into three basic categories called the a) Sattwic food ii) Rajasic food iii) Tamasic food.

To understand this concept, one has to essentially understand the three Gunas or the three basic personality traits (The **Triguna Theory of Personality**). They are the i) Sattwa guna ii) Rajo guna iii) Tamo guna.

They are also called Sattwa, Rajas and Tamas.

The qualities of the Gunas

The qualities of Sattwa: Persons who predominantly have the qualities of this Guna, are called Sattwic personalities. These individuals are usually calm and composed. They are comfortable with themselves. They are self absorbed and self satisfied as in contemplation. They do not derive pleasure from harming others, nor do they enjoy at the expense of others sufferings. They are altruistic and forgiving in nature; they try to help those in need. They put others before self and are truthful and honest. They do not generally succumb to the temptations of greed or lust. By and large they exhibit saintly qualities.

The qualities of Rajas : Those who harbour more of Rajas are called Rajasic personalities. These individuals are basically dominating and aggressive. They have leadership qualities in abundance. They make good inspiring leaders or politicians. They are comfortable in professions like the defence. They protect the weak and fight against the evil. With liberal inclusion of Sattwic qualities, these Rajasic personalities can make great achievements in the area of public causes. Conversely, an excess influence of Tamas on them could make them tend towards cruelty and criminality. They then could use their courage and leadership with utter perversion, and total disregard for the feelings of others. Many of the world's rulers and Kings suffered with this kind of personality.

The qualities of Tamas: The Tamasic persons are dull and lazy, and maybe depressed. They are negative in their approach. They tend to live at others expense. They may be cunning and deceitful, and vindictive towards those who they perceive as having harmed or challenged them in the past. Unforgiving in nature, they are not at peace with themselves. They may become paranoid at the intentions of others or at society in general. By and large they are unproductive and lead lives analogous to parasites. Alcohol consumption is common with them. A significant percentage of these individuals lean towards drug abuse and crime.

Our individual personalities: We are a mixture of these fundamental traits. It is something like the three basic colours. Mix them up in different proportions and we would get innumerable colours; or like the seven musical notes.... Sa Re Ga Ma Pa Da Nee... different combinations would present as different tunes, and there is no limit to the variety of tunes that we can create. So is it with human personality; there is no limit to the number of types of

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personalities we meet every day. Each one is a mixture of the three basic traits, in his or her unique proportions.

Gunas applied to food

The Sattwic food: Pure fresh vegetarian food including fruits and nuts, not very rich or spicy, is believed to nurture the qualities of Sattwa in an individual. Moderation in intake is also given importance. Gorging food because it is tasty is not a Sattwic quality.

The Rajasic food: Meat, spice and all non vegetarian food nurture the qualities of Rajas.

The Tamasic food: Stale food, food products that are fermented or stored, are likely to nurture the Tamasic qualities.

Eating particular foods for long, influences our thinking pattern, attitudes, and our personalities.

What to eat For those who are lazy and dull, it may be appropriate to advise consuming a larger share of Rajasic food, while for those who are basically aggressive, it is better to suggest a predominantly Sattwic diet. Tamasic food is best avoided other than as pickles or taste enhancers in limited quantities.

Does food influence behaviour? While it appears simple to draw an analogy by comparing the aggressive behaviour of carnivores with the docile behaviour of the herbivores in the animal kingdom, we should not forget the fact that carnivores become aggressive because they have to chase their food, while the herbivores do not suffer the need to be aggressive; they are blessed to find food all around them.

But again, there is a caveat here; it is common knowledge that the meat eating communities, among humans, are generally aggressive and the strict vegetarians are sober and quiet. Unlike in the animal kingdom, the meat eaters here do not have to chase their food.

CONCLUSION

Whether the quality of food that is consumed influences behaviour, and consequently the personality traits of a person, requires controlled studies, both prospective and retrospective, on large samples.

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REFERENCES

1. Mahabharata, Aswamedha Parva, Section 36.
2. Bhagavad Gita Chapter 14.

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ORIGINAL ARTICLE

A comparative study of care giver burden in psychiatric illness & chronic medical illness

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ABSTRACT

Background Caregivers of patients are at greater risk of mental and physical health problems.
Aims To compare the caregiver burden in psychiatric illness and chronic medical illness.
Methods. The caregiver burden was assessed on Montgomery Borgatta Caregiver Burden Scale.
Results The caregiver burden in families of psychiatric clients is higher than that of other medical illness, & increases with the duration of illness
Conclusion Interventions aiming at reduction of caregiver burden should be routinely incorporated in the management of persons with mental illness.

Key words Caregiver burden; psychiatric illness; medical illness

INTRODUCTION:

Caregiver is someone, who has the responsibility for meeting physical and psychological needs of patient. Caregivers are generally at greater risk of mental and physical health problems. The most common mental health consequences are DEPRSSION, ANXIETY AND A CONDITION CALLED BURNOUT… the complete drain of our physical, spiritual and emotional reserves, occurs when a caregiver slips beyond exhaustion or depression.

As the disease progresses it carries with it a tremendous burden both physically and psychologically on the family members who are doing the care giving. It is known that caring for someone with PSYCHIATRIC ILLNESS is associated with a higher level of stress than caring for someone with functional impairment from other chronic illnesses.

The caregiver burden can be quantified into objective, subjective and demand burdens.

1. Objective burden: measures the disruption of the caregiver's life.
2. Subjective burden: measures emotional impact of care giving responsibilities on caregiver.
3. Demand burden: measures the extent to which the caregiver feels care responsibilities are overly demanding.

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REVIEW OF LITERATURE

There are many studies conducted to assess the care giver burden in terms of objective burden and subjective burden. The burden upon informal caregivers of mentally ill patients was first acknowledged by Grad and Sainbury in 1963.In various studies it is proved that 18 to 47 percent of caregivers land in depression.

Caregivers of persons with mental illness report burden in different areas including effects on family functioning, social isolation, financial problems, and health.(1)

Karlikaya etal in their study on caregivers of dementia have found that the level of burden does not correlate with the duration of illness but have enough variability with age, gender and educational status.(2) Ohaeri JU, etal concluded that poor social support and severity of illness have major role in determining the amount of burden on caregiver. (3)

AIMS

1. To compare the care giver burden in psychiatric illness and chronic medical illness.
2. To study the association between demographic factors like age, gender, duration of illness and caregiver burden.

MATERIALS & METHODS

Hypothesis

I. The level of burden in caregivers of psychiatric client is more than that of care givers of chronic

medical illness.

II. Caregiver burden increases with the duration of psychiatric illness.

III. Caregiver burden increases with the age of care givers.

IV. Female caregivers feel more burden than male care givers.

Inclusion criteria care givers

1. above the age of 20yrs .
2. who are blood related to patient.
3. who were staying with patient since last 6 months. Exclusion criteria care givers who are not willing to participate in study.

Sample

The study included two major groups of care givers each of 50 members..

1) care givers of inpatients of Govt.hospital for mental care who are diagnosed as per the guidelines given in ICD-10.

2) care givers of following chronic medical illness who are in patients of KG.H AND TB&CHEST HOSPITAL, Visakhapatnam. tuberculosis - 20 patients chronic bronchial asthma-10patients, diabetes milletus -10 patients, rhematoid arthritis-10 patients .

Tools used

The Montgomery Borgatta Caregiver Burden Scale (Montgomery RJV, etal. 2000). was used to assess the burden. For people who can understand, the scale was given in English and for the rest of them the study was done by interview technique. This scale contains total 14 questions and each will have 5 answers.

SCORING SYSTEM : the total score of 6 questions (1,3,5,8,11,14) gives the objective burden(OB)… the total score of 4 questions (2,7,9,13) gives the subjective burden(SB)… the total score of 4 questions (4,6,10,12) gives the demand burden (DB)

Table. 1 Montgomery Borgatta Caregiver Burden Scale: scoring

BURDEN	RANGE	REMARKS
OB	0- 30	>23- HIGH SCORE
SB	4- 20	>13.5-HIGH SCORE
DB	4- 20	>15-HIGH

Statistical analysis: Descriptive statistics, Levines test for Equality of Variance and T-test were used and SPSS13.0 software was used for this purpose .

AGE	FREQUENCY	PERCENT
20 - 30	26	26.0
30 - 40	28	28.0
>40 yrs	46	46.0
Total	100.0	100.0

GENDER	FREQUENCY	PERCENT
MALE	44	44.0
FEMALE	56	56.0
Total	100.	100.0

EDUCATION	FREQUENCY	PERCENT
<10TH	38	38.0
GRADUATES	20	20.0
ILLITERATES	42	42.0
Total	100.0	100.0

DURATION	FREQUENCY	PERCENT
<1YR	18	18.0
13 YRS	23	23.0
3- 5 YRS	19	19.0
<5 YRS	40	40.0
Total	100.0	100.0

COMPARISON OF BURDEN

The scores in the caregivers of psychiatric patients are significantly higher than that of chronic medical illness care givers.

Table. 6 Association of burden with age of caregiver

AGE OF CAREGIVER	ILLNESS	M VALUE			t VALUE			SD		
		OB	SB	DB	OB	SB	DB	OB	SB	DB
20- 30	PSY. ILLNESS	20.75	14.58	12.08				2.52	3.08	2.90
	CH.MED	13.57	9.86	7.14	6.77	4.44	4.7	2.87	2.17	2.31
30 - 40 YRS	PSY.ILLNESS	21.47	15.13	13.67				4.15	3.13	2.49
	CH.MED	16.38	9.15	7.31	3.59	5.30	6.53	3.33	2.82	2.62
>40 YRS	PSY. ILLNESS	22.57	16.00	12.74				4.44	3.64	4.04
	CH. MED	17.09	10.65	6.96	4.69	4.86	5.95	3.41	3.80	2.30

Table. 7 Association of burden with gender of caregiver

GENDER	ILLNESS	M VALUE			t VALUE			SD		
		OB	SB	DB	OB	SB	DB	OB	SB	DB
MALE	PSY. ILLNESS	21.45	15.058	13.00				3.44	2.118	1.970
	CH.MED	15.92	9.58	7.38	6.006	7.742	8.026	2.48	2.56	2.66
FEMALE	PSY.ILLNESS	22.03	15.63	12.77				4.33	3.99	4.08
	CH.MED	15.92	10.46	6.85	5.272	5.055	7.003	4.31	3.65	2.03

Table. 7 Association of burden with duration of illness

DURATION CAREGIVER	ILLNESS	M VALUE			t VALUE			SD		
		OB	SB	DB	OB	SB	DB	OB	SB	DB
<1YR	PSY. ILLNESS	19.11	12.78	10.11				2.26	3.70	4.01
	CH.MED	14.44	9.22	7.78	3.02	2.32	1.45	4.03	2.72	2.63
1 - 3 YRS	PSY.ILLNESS	21.64	15.00	12.45				4.76	3.71	4.03
	CH.MED	15.75	11.17	6.67	3.32	2.76	4.29	3.59	2.82	2.01
3- 5 YRS	PSY. ILLNESS	23.67	15.89	12.78				4.77	4.28	2.16
	CH. MED	16.20	9.60	7.80	3.61	3.67	4.45	4.18	2.98	2.70
> 5 YRS	PSY.ILLNESS	22.24	16.52	14.29				3.34	1.80	2.41
	CH.MED	16.58	9.95	6.68	5.75	7.04	10.3	2.87	3.68	2.23

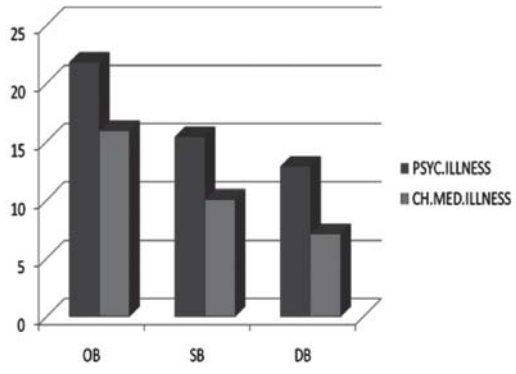

Fig. 1 COMPARISON OF CARE GIVER BURDEN IN PSYCHIATRIC & MEDICAL ILLNESS

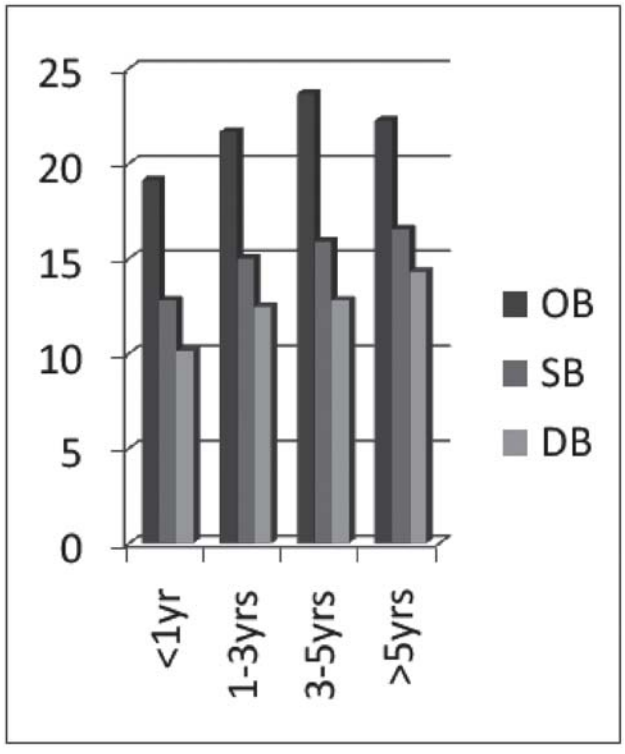

Fig 2 Association of burden with duration of illness As the duration of illness increases the subjective and demand burden increases whereas the objective burden increases up to some extent and then it decreases in the care givers of psychiatric clients.

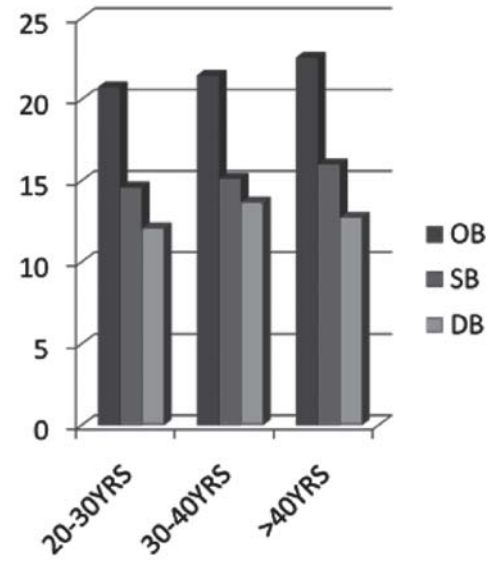

Fig.3 CARE GIVER BURDEN INCREASES WITH INCREASE IN AGE

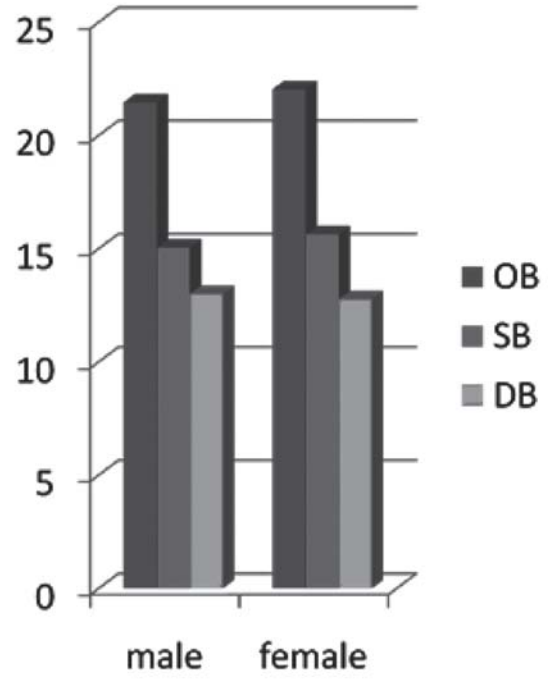

Fig. 4 Both Male And Female Have Similar Burden, With A Slight Higher Values For Females In Ob And Sb And Males In Db

DISCUSSION

Many of the studies on caregiver burden proved that the burden among caregivers of psychiatric illness is significantly high. In 2005 Karlikaya G etal found that the level of burden does not correlate with the duration of illness but have enough variability with age, gender and educational status.(2) In this study also the caregiver burden is significantly high in caregivers of psychiatric illness and the hypothesis is accepted.

The objective burden goes on increasing with the duration of illness up to some extent but subsequently it decreases as the care givers BECOME LESS SITIVE and they modify their life style and get accustomed to that. The subjective burden which mainly measures the emotional impact on caregivers goes on increasing, in the same way demand burden also increases.

Our results show that burden increases with increase in the age of the care giver as his ability to cope up with the physical and mental stress starts diminishing and hypothesis in the study is accepted but the demand burden decreases as he understands the disease process better.

There is only little difference in burden of female and male care givers where the objective and subjective burden in females and demand burden in males are slightly high which is not statistically significant and hypothesis is negated.

A study conducted in 2004 by Erie County Department of Senior Service Caregiver Resource Centre showed very high values of burden than in this study, explicable by family relations and social support in Indian culture.

CONCLUSION:

The caregiver burden in families of psychiatric clients is statistically higher than that of care givers of other medical illness. The care giver burden increases with the duration of illness as well as with the age of care givers. The care giver burden in our population is less as the objective and demand burden doesn't cross the reference HIGHER value in the given scale whereas the emotional impact is on higher side

LIMITATIONS:

1) The division of duration of illness is not homogenous inviting statistical errors.
2) There are different medical illness grouped under chronic medical illness.
3) There are different mental illness grouped under psychiatric illness.
3) The financial status and educational status of the family were not included in the study.

Implications What might help these caregivers?

OBJECTIVE BURDEN: home care, adult day care, friendly visiting, assistive equipment

SUBJECTIVE BURDEN: professional counseling, supporting groups.

DEMAND BURDEN: professional counseling, knowing more about disease.

ACKNOWLEDGEMENTS Nil

REFERENCES:

1. Ganguly, K. K., Chadda, R. K., & Singh, T. B. (2010). Caregiver burden and coping in schizophrenia and bipolar disorder: A qualitative study. American Journal of Psychiatric Rehabilitation, 13(2), 126-142.
2. Karlikaya, G. Yukse G, Varlibas F & Tireli H. Caregiver burden in dementia: A study in the Turkish population. The Internet J Neurology. 2005 Vol. 4 (2).
3. Ohaeri JU. Caregiver burden and psychotic patients' perception of social support in a Nigerian setting. Soc Psychiatry Psychiatr Epidemiol.1998;7(6):494-501.
4. Krupnik, Y. Pilling, S., Killaspy, H. & Dalton, J. (2005). A study of family contact with clients and staff of community mental health teams. Psychiatric Bulletin, 29, 174-176.
5. Chou KR, Chu H, Tseng CL, Lu RB. The measurement of caregiver burden. J Med Sci 2003;23(2):73-82

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ORIGINAL ARTICLE

Diagnostic categories of patients admitted into the prison ward of Institute of Mental Health, Hyderabad during the period 2009-2010

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ABSTRACT

Background Criminal behavior is said to have an association with some psychiatric illnesses, esp. Schizophrenia. There is a modest significant relationship between schizophrenia and violence & crime which persists even after controlling demographic and socio-economic variables.

Aims To find out what diagnostic categories of psychiatric illnesses are prevalent in the patients admitted to prison ward of Institute of Mental Health, Hyderabad.

Methods Retrospective analysis of records of prison ward patients was done.

Results One in five of the patients admitted to prison ward had Schizophrenia mostly of paranoid type. Majority of patients were readmissions, because of poor compliance.

Conclusions There is a dire need to strengthen prison mental health services.

Key words: psychiatric illness; prisoners; crime

INTRODUCTION:

A criminal offender (accused or convicted) may have mental health treatment needs. The U.S. Supreme Court held in Estelle v. Gamble, 429 U.S. 97 (1976), that the state must provide medical services to prisoners that are necessary to avoid "deliberate indifference" to prisoners' serious needs. Data from the 1990s indicate that about 50 percent of prisoners identified as mentally ill have taken a prescribed medication and about 60 percent have received some form of mental health service. (1)

LIETRATURE REVIEW

Psychiatric illnesses have been implicated to be associated with increased rates of violent behavior, & mental health services have a responsibility to reduce such violence for the sake of their patients as well as the wider community. There is also a reported correlation between having schizophrenia and increased rates of antisocial behavior in general and violence in particular. Some reports suggest that these associations are not just statistically but also clinically and socially significant. (2) Later research has shown that the association between offending behavior and Schizophrenia & Affective illness is modest and may often be mediated by coexisting substance misuse. The risk of a serious crime being committed by someone with a major psychiatric illness is small and does not justify subjecting them, as a group, to either increased institutional containment or greater coercion. (3) Most of the violence among those with schizophrenia is perpetrated by members of relatively small subgroups, who probably constitute no more than 10-15% of the patient population. .

Aims To find out what diagnostic categories of psychiatric disorders are prevalent in the patients admitted to prison ward of Institute of Mental Health, Hyderabad.

MATERIALS & METHODS

Operational procedure Retrospective analysis of data gathered from inpatient medical records of all the criminal ward patients of Institute of Mental Health (IMH), Hyderabad treated from June 1st 2009 to May 31st 2010 was done. Demographic factors like age, sex, etc were noted. ICD-10 (WHO 1992) criteria were used by the treating psychiatrist for diagnosing psychiatric illness, & the same was documented in case records. Wherever diagnostic label was not clearly mentioned, details inside the case sheet were studied and appropriate diagnosis was arrived at. Also, number of times subjects were admitted in IMH was noted.

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RESULTS

Table. Diagnosis-wise distribution of study sample

Diagnosis	n	%
Paranoid Schizophrenia	49	39.51
Psychosis Unspecified	18	14.51
Depression	18	14.51
Bipolar Affective Disorder-last episode Mania	10	8.06
Others (Dissocial Personality Disorder) , etc)	29	23.38

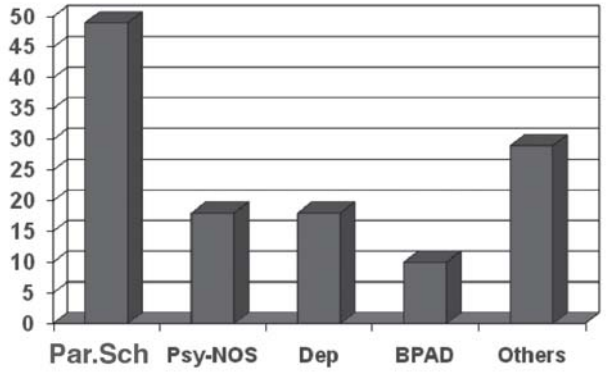

Fig. Diagnosis-wise distribution of study sample

The total study sample was 124. The mean age of subjects at the time of admission into IMH was 30 yrs with S.D of 8.32.

The Mean duration of in-patient stay was 95 days with S.D of 9346.

One out of five subjects had a diagnosis of Schizophrenia mostly of paranoid type. Second most common diagnosis was personality disorder.

More than 50% of the subjects were repeat admissions and most of them were diagnosed as Psychosis-unspecified initially, and nearly half were re-diagnosed as Paranoid Schizophrenia later. Subjects with Depression were more likely to get re-admitted than that with Psychosis Unspecified. The gap between first admission and repeat admission was 65 days (mean with S.D of 24.32).

This is very important in understanding the need to diagnose and treat appropriately in order to relieve the patient's illness and reduce burden on the hospital and conserve the resources for emergency work up.

DISCUSSION

Our results show that most of the patients coming from prisons have either major psychiatric disorders or personality disorders. Medical officers in jails should be trained to identify the psychiatric symptoms early & manage appropriately. Poor drug compliance leads to multiple admissions & the illness becomes more resistant to treatment. More frequent the relapse of illness, worse is the prognosis. This also helps us understand what type of psychotropics need to be stocked in prisons and what type of mental health services are needed to keep them mentally healthy. The duration of inpatient stay & also repeated admissions are not only burdensome to patients in respect to illness but also for the health services because of the costs & manpower involved. Hospital bed maintenance is more costly compared to prison accommodation. According to patients, prisons provide more space, good food and better social interactions; therefore they feel more comfortable in prisons. This suggests the need for providing mental health services in prisons.

CONCLUSIONS

Limitations

i) No personal interviews of the subjects could be conducted and we had to depend on the hospital records. (Berksonian bias) ii) Lack of proper past and family history of conduct disorder which is the basis for most of the criminal acts.

Implications

There is a dire need to strengthen prison mental health services. (4) This would help in early identification of psychiatric illness, monitoring of treatment compliance & also would avoid relapses, thus avoiding unnecessary readmissions.

ACKNOWLEDGEMENTS Nil

REFERENCES

1. Morse SJ. Mentally Disordered Offenders - The mental health and criminal justice systems. Available from: http://law.jrank.org/pages/1590/Mentally-Disordered-Offenders-mental-health-criminal-justice-systems.html. (last assessed on 2010 Jul 1).
2. Hodgins S, Mednick SA, Brennan P A et al. Mental disorder and crime: evidence from a Danish birth cohort. Arch Gen Psych 1996; 53: 489-96.
3. Wallace C, Mullen P, Burgess P, Palmer S, Ruschena D, Browne C. Serious criminal offending and mental disorder. Case linkage study. Br J Psych 1998; 172: 477-84.
4. Rajshekhar B, Keshavulu B, Tejam P, Ashok Reddy K, , Anand B, Gowri Devi M, etal. Diagnostic categorization of psychiatric patients coming to criminal ward of Institute of mental health, Hyderabad from legal authorities. Ind J Psychol Med. 2004; 25: 84-93.

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ORIGINAL ARTICLE

A comparative study on attitudes towards mental illness

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ABSTRACT

Background Mental illnesses are associated with stigma with associated unfavorable societal attitudes.

Aims To study the attitudes of people towards mental illness.

Methods The attitude of caregivers of persons with mental illness & also lay public was assessed on instruments.

Results A favorable attitude towards mental illnesses was found in the sample. Caregivers had more positive attitude than the lay public.

Conclusion Knowledge of the prevailing attitudes of people towards mental illness helps in adopting methods to make these attitudes more positive, which helps in better outcome & recovery.

Key words : attitude; mental illness

INTRODUCTION:

Mental illness through exaggeration and misunderstanding has been the subject of ridicule and disrespect since ages. Mental illness was abhorred and detested as a curse and mentally ill patients ostracized and subjected to inhuman cruelty. The damaging consequences of such notions are - stigma; rejection; loss of esteem; discrimination; restriction of opportunity; reluctance to seek, accept or reveal psychiatric treatment. WHO in the lexicon of psychiatric and mental health terms (2nd Edition 1994 Geneva) defines Attitude as 'an acquired behavioral disposition, assumed to account for variations in social behavior under seemingly similar conditions'. Attitudes are simply expressions of how much we like or dislike various things.

During the twentieth century with the advent of improved patient care, large psychopharmacological armamentarium, psycho-education, advances in communications and technology, there has been a change of attitude toward mental illness.

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Aims

1. Survey of attitudes of various sections of people in society towards mental illness.
2. To study if there are any significant differences in the attitudes of the two groups taken.
   i. Group I, people exposed to mental illness and
   ii. Group II, people not exposed to mental illness.
3. To study the influence of age, gender, education, and place of origin (rural/urban) as attitudes towards mental illness.

MATERIALS & METHODS

Hypotheses

I. People who are exposed to mental illness will have positive attitude when compared to people who are not exposed to mental illness.

II. People who are educated will have a positive attitude towards mental illness when compared to uneducated people.

III. People living in urban areas will have positive attitude when compared to people living in rural areas.

Study sample The sample consisted of two major groups with a total number of 100 subjects: A1- close relatives (care givers) of mentally ill patients. (i.e. people with exposure to mental illness).
A2 - Lay people, people who are totally unexposed to mental illness.

Tools used

Attitudes Towards Mental Illness -Rating Scale (A.T.M.I-R.S.). The items of the scale represent broadly areas of:

1. Knowledge regarding causation, duration and treatment of mental illness.
2. Social distance felt towards mentally ill persons.
3. Expectations of treatment outcome.

The scale consists of 17 items followed by three alternatives-Agree, Not sure, Disagree. Scoring was done on a three point scale (0 for positive, 1 for not sure and 2 for negative).Lowest possible score -zero, highest -thirty four. Scores 0-11 Positive attitude 12-22 Neutral attitude 2234 Negative attitude .The questionnaire possesses face validity as it includes statements simple enough to be under

Since sample consisted of subjects who cannot follow English it was translated into vernacular language i.e.Telugu.It was done under the guidance of Prof.K.Malayavasini, Head of the department of Telugu, Andhra University, Visakhapatnam. Translated version was verified by two psychiatrists for statistical correlation, and was found 0.92 considered high positive correlation.

Operational procedure All the subjects were approached individually and requested to volunteer for the study. Each subject was given a questionnaire and a response sheet. They were instructed to fill the details of their name, age, sex, education, occupation, residence and later the questionnaire. For illiterate's subjects the investigator read out the questionnaire individually and filled the response sheet.

Statistical methods The following statistics were used in this study

1. Descriptive statistics
2. T-test
3. Statistical package for social sciences (SSPS 13)

RESULTS

RESULTS

AGE

AGE	FREQUENCIES	PERCENT
BELOW 35 YEARS	43	43
ABOVE 35 YEARS	57	57
Total	100	100

GENDER

SEX	FREQUENCIES	PERCENT
MALE	50	50
FEMALE	50	50
Total	100	100

EDUCATION

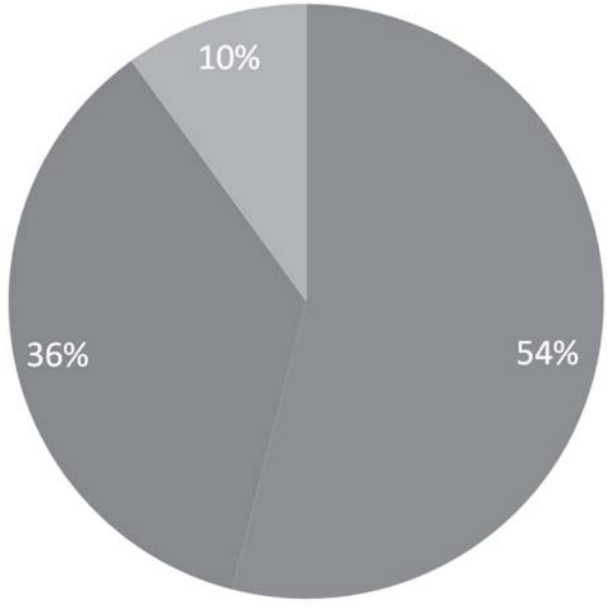
EDUCATION	FREQUENCIES	PERCENT
ILLITERATES	33	33
BELOW 10TH Std	31	31
INTERMEDIATE GRAUATES AND POST GRADUATES	36	36
Total	100	100

RESIDENCE

PLACE	FREQUENCIES	PERCENT
RURAL	50	50
URBAN	50	50
Total	100	100

Fig. Attitude of subjects towards mental illness

Positive attitude - 54 % Neutral attitude - 36 % Negative attitude - 10%



T-TEST AGE

AGE	N	MEAN	S.D	t
BELOW 35 YEARS	49	11.79	7.115	-0.924
ABOVE 35 YEARS	57	13.05	6.269	

T-TEST GENDER

GENDER	N	MEAN	S.D	t
MALE	50	13.76	7.238	1.907
FEMALE	50	11.26	5.788	

T-TEST **RESIDENCE**

PLACE	N	MEAN	S.D	t
RURAL	50	16.88	5.910	8731
URBAN	50	8.14	3.897	

<0.05

T-TEST **EDUCATION**

LITERACY	N	MEAN	S.D	t
ILITERATES	33	17.09	5714	5714
LITERATES	67	10.25	5.886	

<0.05

DISCUSSION

A more or less positive to neutral trend in the sample was observed, with only 10 % of the sample showing a negative attitude towards people with mental illness. Negative attitude was seen mostly in rural & subjects, and in those who were unexposed to mental illness.

Group with exposure have more positive attitude. This may be because of following reasons:

1. Emotional attachment between the patient and relative.
2. Hope that the patient will recover and reintegrate into the family.
3. Greater degree of awareness among relatives regarding mental illness.

Urban group have more positive attitude. This may be because of following reasons:

1) Misconceptions and myths in the rural group.
2) Better access to information among the urbanites.

Literate group have more positive attitude. This may be because of following reasons:
Education increases awareness, improves knowledge, initiates thinking, changes perception, develops discrimination, leading to development of a new way of looking at things.

CONCLUSIONS It was found from the study by comparison of exposed and unexposed groups that, exposed groups have a more positive attitude. Also literates & rural population had a more positive attitude.

Limitations i) The questionnaire/scale used have 70 % agreement of the judges as to its positive or negative nature.ii) only two groups of population were taken to consider population with exposure and unexposed to mental illness.

Implications: Knowledge of the prevailing attitudes of people helps in adopting methods to make these attitudes more positive and thus help in i) early patient detection ii) better patient care and cooperation iii) planning of supportive after care and iv) relapse prevention.

ACKNOWLEDGEMENTS Nil

REFERENCES

1. Abelson, RP. Script processing in attitude formation and decision-making. In: Carroll JS, Payne JW, editors. Cognition and social behavior. Hillsdale, NJ; 1976. pp. 33-45.
2. Ajzen I and Fishbein M. Attitude-behavior relationships: a theoretical analysis and review of empirical research. Psychological Bulletin 1977; 84: 888-918.

Source of Support : Nil, **Conflict of Interest** : None declared

ORIGINAL ARTICLE

Study of psychological morbidity & coping mechanisms in family members of persons with mental illnesses

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ABSTRACT

Background: The psychological morbidity of family members of mentally ill is generally overlooked. This study focuses on the psychological morbidity in family members.

Aim : To study psychological morbidity and coping mechanisms used by the family members of mentally ill admitted in psychiatric hospital.

Methods: A sample of 45 family members of mentally ill admitted in The Institute of Mental Health, Hyderabad was taken. Severity of illness in patients and psychological morbidity and coping mechanisms used by the family members were assessed.

Results : There is no significant psychological morbidity among the family members

Conclusions Acceptance is the most common coping mechanism used by family members of persons with mental illness.

Key words: Coping mechanisms, Family members, Mental illnesses

INTRODUCTION:

In any medical illness family members of the patients have psychological morbidity and psychiatric illness is no exception. Chronic course of the illness, emotional lability of the patient, social stigma and functional impairment which makes the patient financially dependent and socially isolated in his productive life adds to the burden of the family members. The importance of family members is more now days where de-institutionalization of psychiatry is encouraged.

Earlier studies have found that there is variable degree of psychological morbidity among the care givers.(1,2) In the study of socio-cultural perspectives of care givers in burden coping behavior in bipolar behavior and schizophrenia Ganguly et al have reported different coping mechanisms adopted by the care givers of mentally ill patients to overcome stressors.(3)

AIMS

The current study is done to know :

1. The psychological morbidity in family members of persons with mentally illness.
2. The most common coping mechanism among them
3. The co-relation between the duration of illness of the patient and severity of psychological morbidity among family members
4. The co-relation between the severity of illness of the patient and severity of psychological morbidity among family members

MATERIALS & METHODS:

Selection of subjects

A sample of 45 family members of persons with mental illness admitted in the Institute of Mental Health, Hyderabad in the period between July1, 2010 to July15, 2010 were included in the study after consent. The family members were randomly selected.

The family members of recently admitted (within 1 week) mentally ill patients were included in the study. The family members were interviewed (irrespective of the patient's diagnosis) according to IC.D-10.

General health questionnaire (Goldberg DP et al, 1970)

In family members this scale identifies psychiatric morbidity. It is a self administered questionnaire referring to recent symptoms. This provides information about the recent mental status, thus identifying the presence of possible psychiatric disturbances. The reliability and validity of GHQ has been well established. The GHQ

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administered, was the 30 item version and a score of more than 50% indicates the presence of psychiatric morbidity.

Coping Checklist (Loukissa DA, 1995)

Coping refers to constantly changing thoughts and behaviors that people use in order to manage stressful situations. (4) Coping checklist was administered to the family members. It consists of 70 items with 7 subscales of coping mechanisms.

1. Problem focused - Problem Solving
2. Emotion Focused -
   a. Positive distraction
   b. Negative distraction
   c. Acceptance
   d. Denial
   e. Religion
3. Both problem & emotion focused -Social support

Clinical Global Impression - Severity of Illness Scale (Guy, W., 1976).

CGI-S was used to measure the severity of mental illness in the patient, at the time of assessment.

Statistical analysis

Pearson's Product Moment Correlation Test was used to see the correlation between Duration & Severity of Psychiatric illness in patient and Severity of Psychological Morbidity in family members.

RESULTS

The total study sample was 45.

In the sample of 45 family members of mentally ill patients, 17 scored above 45 with mean value of GHQ 41.7.

Table 1: Mean scores on Coping Check List

S.No	Subclass of CCL	Mean value	S.d
1	Acceptance	6.15	2.37
2	Problem solving	4.87	1.95
3	Denial	4.62	1.92
4	Religion	4.20	1.95
5	Social support	4.09	1.38
6	Positive Distraction	3.96	2.93
7	Negative Distraction	1.91	1.72

Legend : CCL : Coping Check List ,S. D : Standard Deviation

The correlation between duration of illness of patients & severity of Psychological Morbidity in family members was -0.01, where as the correlation between severity of illness of the patient & Severity of Psychological morbidity among family members was +0.04.

DISCUSSION

In the study there was no significant psychological morbidity in the family members of mentally ill patients irrespective of i) Diagnosis of patient's illness.ii) Duration of illness of the patient.iii) Severity of illness of patient. Acceptance is the most common coping mechanism used as seen in table 1.

CONCLUSIONS

There is no significant psychological morbidity among the family members of persons with mental illness. Acceptance is the most common coping mechanism used. Limitations: i) Course of the illness of the patient & other stressors in family members were not taken into consideration. Ii) Although the study considered admissions within a week, most of the patients were suffering from long duration of the illness.

ACKNOWLEDGEMENTS Nil

REFERENCES

1. Aggarwal M, Avasthi A, Kumar S, and Grover S. Experience of caregiving in schizophrenia: A study from India. Int J Soc Psychiatry. 2009
2. Schulz, R (ed) Handbook of Dementia Caregiving: Evidence-based Interventions in Family Caregiving. NY: Springer, 2000.
3. Ganguly KK, Chadda RK, & Singh TB. A study of socio cultural perspectives of care givers in burden coping behavior in bipolar disorder and schizophrenia cases. Int J Psychosocial Rehabilitation. 2009. Vol 13(2): 93-103.
4. Loukissa DA. Family burden in chronic mental illness: a review of research studies. Journal of Advanced Nursing. 1995. Vol 21 (2): 248-55.
5. Baronet AM.. Factors associated with caregiver burden in mental illness: A critical review of the research literature. Clinical Psychology Review, 1999. 19(7): 819-841.
6. Johnson ED. Differences among families coping with serious mental illness: A qualitative analysis. Am J Orthopsychiatry. 2000. Vol 70 (1): 126-34.

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CASE REPORT

Compulsive masturbation treated with fluvoxamine-a case study

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ABSTRACT

Masturbation is a normal part of psychosexual development. It becomes troublesome when it becomes ego-dystonic & compulsive in nature. The present article reviews the literature available on compulsive masturbation and provides a case report of a middle aged male who presented with compulsive masturbation and was treated successfully with fluvoxamine.

Key words: Fluvoxamine, Compulsive Masturbation.

INTRODUCTION:

Masturbation is stated to be an inevitable part of normal psychosexual development. It is a normal precursor of object related sexual behaviour. Masturbation becomes a psychopathological symptom when it goes beyond a person's wilful control, thus causing emotional disturbance due to its compulsive nature.

Kafka MP has proposed the term "paraphilia-related disorders" to describe non-paraphilic sexual disorders, since this term does not implicitly characterize the form of these disorders (e.g., as impulsive, compulsive, or addictive). Paraphilia-related disorders are sexual disorders that, like paraphilias, are repetitive, intrusive, persist at least 6 months, and are accompanied by psychosocial distress and impairment. The predominant paraphilia-related disorders are ego-dystonic compulsive masturbation, protracted promiscuity, and dependence on pornography. Less prevalent forms include phone sex dependence, severe sexual desire incompatibility, and dependence on sexual accessories such as objects (e.g., dildos) or drugs (e.g., amyl nitrate, cocaine). [1]

Compulsive masturbation (CM) has been defined as a non paraphilic sexual disorder. [2] The DSM-IIIR has classified it as sexual addiction and puts it under the category sexual disorders- not otherwise specified, while ICD-10 puts it in the category of excessive sexual desire. There is a scarcity of data on the clinical characteristics of such populations. The disorder is rare and though most patients coming for treatment are male, female cases also have been reported. Cases studied report that 75% have major depression as a com-morbid diagnosis. [3] The phenomenon may also be seen in schizophrenia. [4] It is reported to be seen even in normal adolescence, as a part of infantile autism & as part of the clinical profile of sexual offenders. [5, 6, 7, 8, 9] It may be seen even in certain epilepsies or as a manifestation in absence status. [10]

However, approaching the CM as obsessive-compulsive-related has started to get some attention. [11] Konopacki has reported a case in which sexual behaviour was conceptualized as obsessive compulsive in nature (as opposed to deviant). [12] Another report describes two patients who had unwanted erections in parallel with ego-dystonic, obsessive fears of displaying inappropriate sexual behaviour, but they did not exhibit, masturbate, or in any other way act on their obsessions. [13] Paraphiliacs, in few case reports have been shown to respond to the specific serotonin selective reuptake inhibitor (SSRI) fluoxetine. [14] Zohar J has reported the successful use of another specific SSRI, fluvoxamine, in a case of compulsive exhibitionism and masturbation. [15]

The present case report mentions about a middle aged man who presented with compulsive masturbation and secondary major depressive features and responded well to fluvoxamine.

CASE REPORT

Mr MA was a 45 year old married business man who presented (along with his wife) with a history of excessive uncontrollable frequency of masturbation since 10 yrs. He wanted to quit the habit. He had a lot of guilt associated with the habit. He considered his acts reprehensible, and

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his fantasies were accompanied by anxiety and shame Repeated masturbation had affected his work performance & he used to remain preoccupied with sexual thoughts most of the day. He also had symptoms suggestive of major depressive disorder. He attributed all his symptoms to his masturbation. His distress was great as he thought of getting himself castrated, vasectomized or undergoing a penile amputation to help him get rid of the habit. Initially his frequency of masturbation was once or twice a day. The frequency of masturbation gradually increased to 5-6 times per day (though without ejaculation). He used to spend 23 hours a day in the act. He was father of 3 children. His wife was aware of his problem & was greatly distressed about her husband's behaviour. Their marriage was on the verge of collapse.

There were no other symptoms of obsessive compulsive (OCD) / impulse control disorder. He was never treated in past. During the interview he was anxious, agitated, distressed, and despondent. His sexual thoughts were persistent, intrusive, and ego-dystonic, with temporary relief of anxiety that appeared to follow his yielding to them. This seemed to be reminiscent of obsessive compulsive disorder no less than of paraphilia. On the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) he had a score of 37 (extreme) out of a possible 40 and a Clinical Global Impresion-Severity score of 7 out of 7(among the most extremely ill patients).

Mr. MA was started on the SSRI fluvoxamine, up to 300 mg/day. Tab Clonazepam 0.5 mg/day was added (tapered off over next 3 weeks). At the end of 4 weeks, his masturbatory frequency decreased by 25% compared to baseline. At the end of 6 weeks he was 60% better (YBOC'S score 16, i.e. moderate illness & CGI-Improvement score 2 out of 7, i.e. much improved), which persisted upto 9 weeks, but the patient was unfortunately lost to follow up after that.

DISCUSSION

The serotonergic agent fluvoxamine (along with supportive psychotherapy for both patient & his wife) was effective in this case of undesired sexual behaviour. While Mr. MA is an acknowledged case of CM, i.e., fits the criteria for paraphilia-related disorder, atleast some part of his behaviour can be interpreted as related to OCD because he showed certain traits of OC symptomatology. His sexual impulses were persistent, intrusive, and frequently egodystonic. Also he enjoyed sexual relations with his wife.

Response to serotonergic agents does not of itself amount to a diagnosis of OCD, but association with OC features, are in line with the hypothesis that this patient might represent an example of someone with an obsessive-compulsive-related disorder that presents as paraphilia-related disorder.

There may be an alternative explanation for why fluvoxamine may have been useful. This reaction is a general serotonergic effect in other species; however, direct evidence for such an effect in man has yet to be proved. The common agents for reducing sexual desire in sexual offences are antiandrogens like medroxyprogesterone acetate and cyproterone acetate. These don't have any influence on the abnormal nature of the sexual impulse, and they adversely affect all aspects of libido, and medroxyprogesterone has not been approved by the FDA for this purpose. However, had this drive reduction been the mechanism of action of fluvoxamine in the present case report, a general lessening of sexual desire would have been expected. Yet his desire for his wife was not affected, only his pathological sexual behaviour. [15]

No controlled trials of drugs are available in the management of CM though anecdotal case reports exist. The SSRIs have been used with a fair degree of success. Reports of the use of Fluoxetine, Fluvoxamine and Citalopram exist. There is also mention of cases that have responded well separately to Naltrexone and Mirtazapine. [16] Other therapies like cognitive behavior therapy, covert sensitization and systematic desensitization also have been to be useful.

CONCLUSIONS

A single case study has its associated limitations. But such studies do give some useful insights into the nature of disorders. Thus the possibility exists that some paraphilia-related disorders, eg. CM might in fact be OC-related disorder, and might respond to serotonergic medications.

ACKNOWLEDGEMENTS Nil

REFERENCES

1. Kafka, MP & Prentky, RA. Compulsive sexual behavior characteristics. Am J Psychiatry. 1997;154: 1632
2. Albertini G, Polito E, Sara M, Di Gennaro G, Onorati P. Compulsive masturbation in infantile autism treated with mirtazapine. Ped Neurol 2006; 51: 683-8.
3. Gold SN, Heffner CL. Sexual Addictions - many conceptions, minimal data. Clin Psychol Rev 1998; 18: 367-81.
4. Jacome DE, Risko MS. Absence status manifested by compulsive masturbation. Arch Neurol 1983; 40 : 523-4.
5. Kafka MP, Prentky RA. Preliminary observations of the DSM-IIIR axis I comorbidity in men with paraphilias and paraphilia related disorders. J Clin Psychiatry 1994; 53: 481-7.
6. Kafka MP, Hennen J. The paraphila related disorders - an empirical investigation of non paraphilic hypersexuality disorders in outpatient males. J Sex Marital Ther 1999; 25: 305-19.
7. Kornreich C, Den Dulk A, Verbanck P, Pelc I. Fluoxetine treatment of compulsive masturbation in a schizophrenic patient. J Clin Psychiatry 1995; 56: 334.
8. McCarthy BW. Sexually compulsive men and inhibited sexual desire. J Sex Marital Ther 1994; 20: 200-9.

9. Nishimura H, Suzuki M, Kasahara H, Ushijima S. Efficacy of lithium carbonate in public and compulsive masturbation - a female case with mild mental disability. Psych Clin Neurosci 1994; 51: 411-3.
10. Raymond NC, Grant JE, Kim SW, Coleman E. Treatment of compulsive sexual behavior with Naltrexone - 2 case studies. Int Clin Psychopharm 2002; 17: 201-5.
11. Kafka MP, Prentky R. Fluoxetine treatment of nonparaphilic sexual addictions and paraphilias in men. I Clin Psychiatry 1992; 53:351-358
12. Konopacki wp, Oci TP. Interruption in the maintenance of compulsive disorder: two case studies. Arch Sex Behav 1988; 17:41 1419
13. Warwick HMC, Salkovskis PM. Unwanted erections in obsessive compulsive disorder. Br I Psychiatry l990; 157:910-921
14. Perustein RD, Lipper S. Friedman U. Three cases of paraphilias responsive to fluoxetine treatment. J Clin Psychiatry 1991; 52:169-170
15. Zohar J, Kaplan Z and Benjamin J. Compulsive Exhibitionism Successfully Treated With Fluvoxamine: A Controlled Case Study. J Clin Psychiatry 1994; 55:86-88.
16. Avinash De Sousa. Compulsive masturbation treated with combined naltrexone and mirtazapine: Case report and review. Journal of Pakistan Psychiatric Society. 2007 Vol.(2): 110.

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THE STALWARTS

Abraham Maslow (1908 - 1970)

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ABSTRCT

Abraham Maslow was a humanistic theorist who did exemplary work in the field of mental health. His thinking was surprisingly original - most psychologists before him had been concerned with the abnormal and the ill. He wanted to know what constituted positive mental health He proposed hierarchy of needs which is relevant even today. The present paper presents a brief overview of his life & his work.

Abraham Maslow was a Psychologist who worked on Humanistic theory. He was born on April 1, 1908 to uneducated Russian Jewish immigrants in Brooklyn, New York. He was a victim of the combined effect of prejudice, discrimination and financial insecurity. He spent most of his time in library with books. He graduated in Psychology. He got PhD from University of Wisconsin & was the first to earn this under Harry Harlow's direction. In 1935 he returned to New York. He met, worked with, and influenced Psychoanalysts such as Alfred Adler, Kurt Goldstein, Henry Murray, and Erich Fromm. Max Wertheimer, the Father of Gestalt psychology, and Ruth Benedict, the first great female anthropologist & Margaret Mead's teacher; both were model for Maslow.

Maslow said, "Becoming a father changed my whole life, it taught me as it by revelation". "Our first baby changed me as a Psychologist, it made Behaviorism I had been so enthusiastic about look so foolish I could not stomach it anymore".

He published 'Motivation & Personality'. He wrote extensively on concepts of Hierarchy of needs, Meta needs, Meta motivation, self actualizing persons, and peak experiences. He interpreted personality in motivational terms, individual's whole life, his or her perceptions, value, strivings and goals. He focused on satisfaction of set of needs. According to Maslow, needs are arranged in following hierarchy:

1. Physiological needs like food, water, sex & sleep.
2. Safety needs like protection & security.
3. Love & belongingness.
4. Self esteem & respect from others.
5. Higher needs for beauty, truth, justice, & self-actualization.

He described self-actualizers as those who 'are more accurate, of good judgment; accept themselves; are spontaneous; focus major portion of their life's energy on some problem outside them; are self sufficient; feel very deeply & strongly; are democratic, strongly ethical & creative'.

Peak experiences according to Maslow are 'profound movements of love, understanding, & happiness during which a person feels more whole, alive, self-sufficient and yet a part of the world; more aware of truth, justice, harmony, goodness and so on'.

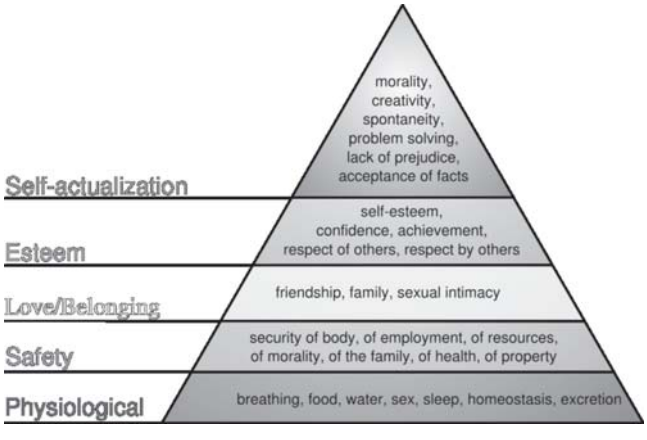

Fig. Maslow's Hierarchy of needs

He explained two ways of 'Knowing': i) D-cognition, which is an ordinary kind of knowing ii) B- cognition, which is a more passive, receptive & appreciative kind of knowing; not an active, prodding or interfering kind.

Maslow died on June 8, 1970 (aged 62yrs) at Menlo Park, California with Heart attack. In 2006, Sommers & Satel

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said that because lack of empirical support for his ideas, Maslow's ideas are "no longer taken seriously in the world of academic psychology."However, his work has influenced leaders of the positive psychology movement such as Martin Seligman.

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References

1. Costa PT and Mc Crae RR. Approaches derived from philosophy and psychology. In comprehensive text book of psychiatry. 2009: 9th Edn, vol 1, 874- 875. Eds : Sadock BJ, Sadock VA and Ruiz P. Lippincott Williams & Wilkins.
2. Scroggs JR. Abraham Maslow. In key ideas in personality theory. 1985:270-293. West publishing company.
3. Abraham Maslow. Wikipedia. Available from: http://en.wikipedia.org/wiki/Abraham_Maslow. (last assessed on 2010 Dec 1).

Source of Support : Nil, **Conflict of Interest** : None declared

A POEM

Mr Cool (Residual Schizophrenia)

I am Mr Cool

You cannot record my coolness by any meter
Certain scales may place me under some shade
Never try to underestimate me
Try to understand me

I am a king of my own world
With a great ancestral history

My name and fame are matchless
My family society and researchers are worried

I have a medal in social and financial burden

I don't earn livelihood but
I am a source of livelihood to many Ists (psychiatrists, psychologists)

If you can establish rapport with me
You have a passport to enter my cool world

There are no emotional thunders or irritable lightnings

Don't get confused
I have lost my fuse

You may have many questions but
Less ink in my mind

Why are you concerned?
I have no concern

Don't laugh at me
I am aloof

I am a simple man

I burn less calories as such don't waste food
I don't even waste water as I don't maintain good hygiene

Your expressed emotions are
My suppressed emotions
I have a good sight but no insight

Do not try to be emotional towards me
You may miss your promotion as a professional

Bhagavad Gita says "do your work don't get attached to it"
My say is half in its way "don't work as such no chance of attachment"

Neither terrorism nor communal-ism
Can affect my behaviorism

I am Mr cool

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Articles in Books and Other Monographs

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- Editor(S) compiler(S) as author: Norman IJ, Redfern SJ,editors. Mental Health Care for elderly people. New York: Churchill Livingstone:1996.

- Chapter in a book: Phillips SJ Whisnant JP. Hypertension and stroke . In :Laragh JH Brenner BM,editor. Hypertension: Pathlphysiology, diagnosis, and management.2 nd ed. New York: Raven press: 1995.pp465-78

Electronic Sources as reference

- Journal articles on the Internet: Abood S. Quality improvement initiative in nursing homes: the ANA acts in an advisory role. Am J Nurs (serial on the internet).2002 jun (cited 2002 Aug 12): 102(6) (6) : (about 3 p) .Viable from: http:// www.nursingworld .org/AJN/2002/June/Wawatch.htm

- Monograph on the Internet: Foley KM,Gelband H,Editors. Improving palliative care for cancer (monograph on the Internet)Washington: National Academy press:2001 (cited 2002 jul 9).Available from :http:/www.nap.edu/books/0309074029/ html/.

- Homepage/web site: Cancer -Pain.org(homepage on the Internet).New York : Association of Cancer Online Resources,Inc:c200-01(updated 2002 May 16: cited 2002 jul 9).Evadible from http:// www.cancer-pain.org/.

- Part of a homepage/Web site American Medical Association(homepage on the Internet). Chicago : The Association:c1995-2002(update 2001 Aug 23:cited 2002 Aug 12). AMA Office of Group Practice Liaison9about 2 screens).Available from : http://www.ama-assn.org/ama/pub/category/ 1736,html

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