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Mental disorders: Financial burden and family

For all individuals, mental, physical and social health is vital and interwoven strands of life. As our understanding of this relationship grows, it becomes ever more apparent that mental health is crucial to the overall well-being of individuals, societies and countries. Mental health is more than the mere lack of mental disorders and not merely the absence of disease or infirmity. Indeed, mental health can be defined as a state of physical, mental and social well-being enabling individuals to realize their abilities, cope with the normal stresses of life, work productively and fruitfully, and make contribution to their communities. Unfortunately, in India, mental health and mental disorders are not accorded anywhere near the same degree of importance as physical health. Rather, they have been ignored or neglected.

Given the prevalence of mental health problems in children and adults, it is not surprising that there is an enormous emotional as well as financial burden on individuals, their families and society as a whole. The

economic impacts of mental health affect personal income, the ability of persons with psychological problems-and often their caregivers-to work, productivity in the workplace and contributions to the national economy, as well as the utilization of treatment and support services. However, mental disorders cost national economies several crores of Rupees, both in terms of expenditures incurred and loss of productivity. The average annual costs, including medical, pharmaceutical and disability costs, for employee having a member with mental and behavioural disorder may be 4 times higher than those incurred by a typical beneficiary. Further, the cost of treatment is often completely offset by a reduction in the numbers of days of absenteeism and productivity lost while at work. According to Census 2011, there were 2.68 Crore persons with disabilities in India who constituted 2.22 per cent of the total population. This includes persons with visual, hearing, speech, loco-motor, mental retardation, and other disabilities.

Number of Persons with Disabilities as per Census, 2011

TYPE OF DISABILITY	POPULATION (in Crore)	PERCENTAGE (%)
Locomotor	0.55	20
Visual	0.50	19
Hearing	0.51	19
Speech	0.20	07
Mentally Retarded	0.15	06
Mentally ill	0.07	03
Multiple	0.21	08
Other Disabilities	0.49	18
Total	2.68	100

Source: Schemes of Pre-Matric and Post Matric Scholarships for Students with Disabilities, Ministry of Social Justice and Empowerment, India.

Family burden cannot be ignored:

Family members are often the primary caregivers of people with mental disability. They provide psychological support, and often have to bear the financial expenses associated with mental health treatment and care. It is estimated that one in four families has at least one member currently suffering from a mental or behavioral disorder. In addition to obvious distress of seeing a loved-one disabled family members are also exposed to the stigma and discrimination associated with mental disability. Rejection by friends, relatives, neighbours and the community as a whole can increase the family's sense of isolation resulting in restricted social activities, and the denial of equal participation in normal social networks. Informal caregivers need more support. Expenses for management of mental and behavioral disorders are often borne by the family.

Family members may need to set aside a significant amount of their time to care for a person with mental disorder. Unfortunately, the lack of understanding on the part of most employers, and the lack of special employment schemes to address this issue, sometimes render it difficult for family members to gain employment or to hold on to an existing job, or they may suffer a loss of earnings due to days taken off from work or forgo a promotion which means relocation of the family where there might not be any rehabilitation centres. This compounds the financial costs associated with treating and caring for someone with mental disorder.

Comorbidity:

Comorbidity, which signifies the simultaneous

occurrence of two or more disorders, is a topic of considerable and growing interest in the context of health care.

Research supports the view that a number of chronic physical conditions have greater probability of developing mental disorders such as depression (for e.g., a person with mental retardation can have depression, anxiety). Rates of sense of hopelessness and worthlessness are higher among people with physical disorders. Patients with comorbid condition are less likely to adhere to medical treatment and less cooperative for psychotherapeutic relationship.

The magnitude and burden of mental and behavioral disorder:

According to WHO's global burden of disease 2001, 33% of the years lived with disability (DALY) are due to neuropsychiatric disorders. The number of individuals with disorders is likely to increase further in view of the ageing of population, worsening social problems and civil unrest. The growing burden amounts to a huge cost in terms of human misery, disability and economic loss.

Alleviating the problem: prevention, promotion and management programmes

A combination of well-targeted and prevention programs in the field of mental health, within overall public strategies, could avoid years lived with disability and deaths, reduce the stigma attached to mental disorders, increase considerably the social capital, help reduce poverty and promote a country's development. Investing in mental health today can generate enormous returns in terms of reducing disability and preventing premature death. The priorities are well known and the vision is clear and possible. It is our responsibility to turn the possibilities to reality.

Early life trauma: Neurobiological Implications

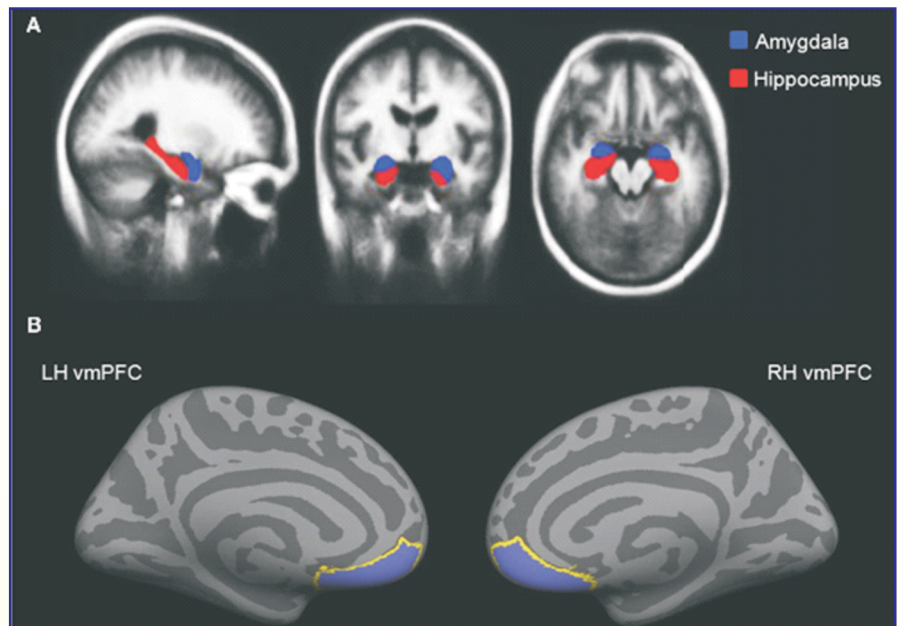
Early life trauma (ELT) experienced during childhood and adolescence plays a critical role in the physical and mental development of an individual. Previous research has shown that exposure to traumatic stressors in early life has neurobiological implications. The brain regions affected due to these adversities are the same found to be implicated in several psychiatric illnesses including depression and anxiety disorders.

The developmental brain maturation changes until young adolescence, followed by an age-related slow decline in cortical volume and thickness during young-middle adulthood and an accelerated decline thereafter.

Particularly during childhood to young adulthood an early heterochronicity in grey matter maturation trajectories between individual sub-regions has been observed, with the timing and sequence of development shown to follow that of cognitive function. At a cellular level, this variation in cortical maturation is likely to be due to a combination of myelination and synaptic pruning. This period of neuro development where the human brain is changing dynamically is also the key risk period for onset of mental disorders - half of all lifetime cases starting at the age of 14 years and almost three-fourths of those by 24 years. Specifically, anxiety

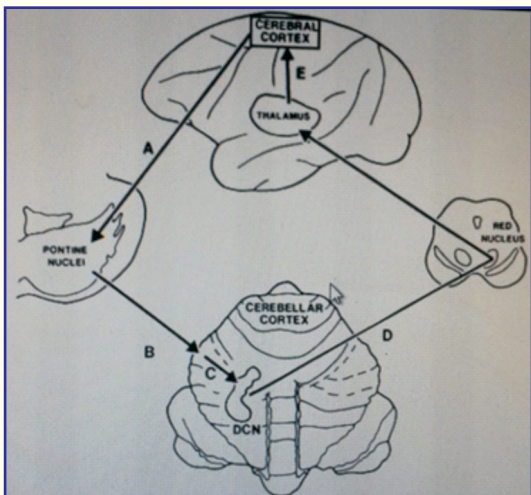
disorders have a median age-onset as early as 11years while depressive disorders at 30years. These regions mainly include the emotional brain circuitry comprising of the anterior cingulate cortex and the hippocampus-amygdala limbic regions. An early impairment in these brain structures during brain development may affect the functioning of the hypothalamic-pituitary-adrenal axis later in life, altering cortical feedback-regulation and thus leading to increased vulnerability for stress-related psychiatric disorders. Impacts on grey matter volume due to ELT were evident for the amygdala. Previous research has demonstrated volume reductions in the hippocampus and the amygdala associated with ELT. Hippocampal findings in depression have shown to be highly variable across studies and mainly related to length and number of depressive episodes. Negative life stressors have also shown to predict longitudinal hippocampal volume change.

Further, previous work using functional MRI have also shown that resting state connectivity of the posterior cingulate with the amygdala is altered in patients with



PTSD related to ELT. Reductions in cortical thickness due to ELT exposure were in the rostral portion of the Anterior Cingulate Cortex. Amygdala dysfunction in adults with childhood maltreatment has also been previously reported. Additionally, there is clear evidence that negative life stressors have an immediate neurobiological impact on both these regions.

Cerebellum and its function in cognition



Schmahmann, 1994

Latest studies reveal that cerebellum is not limited only to motor control but involves in cognitive processing and emotional control in addition to its role in motor coordination. Anatomy and physiological studies report that there is a primary sensorimotor region of the cerebellum in the anterior lobe, and a secondary sensorimotor region in medial aspect of the posterior lobe. In contrast, cerebral association areas that subserve higher order behavior are linked preferentially with the lateral hemispheres of the cerebellar posterior lobe--in feedforward loops via the nuclei of the basis pontis, and in feedback loops from deep cerebellar nuclei(DCN) via the thalamus. There are also reciprocal connections between the cerebellum and hypothalamus. These pathways facilitate cerebellar incorporation into the distributed neural circuits governing intellect, emotions and autonomic function in addition to sensorimotor control. Sensorimotor tasks activate primary (anterior lobe) and secondary sensorimotor regions. Cognitive task activate discrete regions of the cerebellar posterior lobes. Lesions in the hemispheric

regions of the cerebellar posterior lobes (remember that they are highly connected to cerebral hemispheres) effect executive function (Planning, set shifting, verbal fluency, abstract reasoning, working memory) spatial cognition (visual spatial organization and memory) and linguistic processing (agrammatism and dysprosodia). Patients experience dysregulation of affect when lesions are upon the vermis. Other impairments like: asynergia—Loss of coordination of motor movements; dysmetria—inability to judge distance and when to stop; adiadochokinesia—inability to perform rapid alternative movements; intention tremors—shaking of the body when trying to perform a voluntary movements; ataxic gait—wide based walking; tendency towards falling; hypotonia—weak muscles; ataxic dysarthria—slurred speech, and nystagmus—rapid eyeball movements.

Competency Certificate Course on Behaviour Modification

at NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED, SECUNDERABAD

(Ministry of Social Justice & Empowerment, Government of India)

Manovikasnagar, PO., Secunderabad - 500 009 Ph: 040-27751741 -45. www.nimhindia.org

Behaviour Modification technology has contributed immensely to the training of persons with Mental Retardation irrespective of their age, sex, severity or type of setting. The role of Behaviour Modification is also important in the rehabilitation of other types of disabilities which includes autism and learning disabilities. Presence of problem behaviour in persons with Mental Retardation leads to a great amount of stress for parents, significant family members and teachers. Due to the presence of problem behaviour often children with mental retardation find it difficult to get admission in schools. Retaining a job & adjusting to the work setting becomes difficult if these problem behaviour persist. It may also create embarrassment to the family members since these behaviours are socially unacceptable. About sixty percent of Persons with mental Retardation are reported to have problem behaviour. These problems behaviours could be due to deficit in adaptive behaviour, cognitive skills or problem solving skills. Application of behaviour modification strategies has substantially improved the quality of life of persons with Mental Retardation by focusing on strengthening adaptive behaviour and decreasing the maladaptive behaviour.

The total number of persons with Mental Retardation in India is about fifteen lakh and the number of qualified clinical and rehabilitation psychologist is about five thousand.

Keeping in view the wide gap between number of service providers (clinical and rehabilitation psychologist) and number of persons with mental retardation and effectiveness of behaviour modification techniques to improve the quality of life of persons with mental retardation a need is felt to create man power with expertise in behaviour modification to deliver services. Hence a Competency Certificate on Behaviour Modification for a period of three months is envisaged.

■ OBJECTIVES

The major objective of the course is to impart hands on training to psychologist in behaviour modification.

The specific objectives of the course will be:

1. To impart training to identify and analyze problem behaviour present in persons with mental retardation.
2. To provide skills in developing behavioural package programme.
3. To equip the trainees with recent techniques of behavioural management.

■ OUTCOME OF THE COURSE

After completion of the course the trainees will be able to identify behaviour problems and make an effective behaviour management programme. They also will be equipped with various techniques of behaviour modification.

■ ELIGIBILITY:

- M.A / M.Sc in Psychology from recognized university with 50% marks.
- Minimum 3 years of work experience in the field of disability rehabilitation.
- Candidates should be registered under RCI.

■ INTAKE CAPACITY

Intake capacity of the course will be ten

■ DURATION

Duration of the course will be three months.

■ COURSE FEES

- (a) Rupees 22,500 for non local candidates which includes accommodation food and course materials.
- (b) Rupees 11,250 for local candidates which includes lunch and course materials.

■ MINIMUM ATTENDANCE REQUIRED:

As this is a competency course the trainees should pursue the course of the study continuously. A minimum attendance of 80% is necessary before taking the competency certificate examination.

■ EVALUATION

The trainees have to submit five worked out cases of behaviour modification with minimum twenty follow ups for each of the case. The trainees have to prepare a monograph on behaviour modification which will include five assignments on different topics.

At the end of the course the trainees have to appear for a competency test which will include theory as well as practical examination. The minimum pass mark will be 60% both in theory & practical examination. After successful completion of course the trainees will be given competency certificate by NIMH.

Important Dates: First Batch Commences from 05th Jan to 3rd April, 2015

Application forms to be given on or before 10th of December, 2014

For further details Please contact : Ph: 040 - 27757718.

Note: Should you have write-ups or voice your concern, please correspond to:

E-mail: rehabilitation.psychologist@gmail.com or The Rehabilitation Psychologist, 3-5-314, Shri Lakshminenikateshwara Nilayam, Vittalwadi, Narayanaguda, Hyderabad - 500 029.