Metro-Urbam Mental Health in Developing countries: From Origin to Outcome: An Indian Experience

Amresh Srivastava, University of Western Ontario
Metro-Urban Mental health in developing countries: from origins to outcome: an Indian experience

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Considering this, development of mental health services has been linked with general health services and primary health care. Training opportunities for various kinds of mental health personnel are gradually increasing in various academic institutions in the country and recently, there has been a major initiative in the growth of private psychiatric services to fill a vacuum that the public mental health services have been slow to address.
Mukesh Ambani today became the richest man in the world. Thanks to the bulls running amok in the stock market, he is now the richest man surpassing the wealth of the likes of Carlos Slim, Warren Buffet and Bill Gates.

I spent most of my childhood with my uncle and grandfather both deeply involved in business. I have overheard them talking about how hard it is to topple Bill Gates from the top several years back. I was shocked when Carlos Slim toppled Gates. It was almost like "an atheist meeting god"(Quote courtesy Digital Fortress.) Today, the impossible has been revalidated once again. I never even thought in my dreams that this man would be so rich. He has come out of his father's shadow and made a name for himself. Tomorrow, the markets might crash and the place lost but it will forever be written that an Indian was once the richest in the world. This is a fitting example to show that nothing is impossible. I was also surprised to see him so calm and also modest about his achievements. He said that he found it funny that other people calculated his wealth for him. Rich or poor, Reliance or no Reliance, this man is somebody who will be remembered for a long time.

The five richest people in the world with their net worth

1. Mukesh Ambani ($63.2 billion)
2. Carlos Slim Helu ($62.2993 billion)
3. William (Bill) Gates ($62.29 billion)
4. Warren Buffet ($55.9 billion)
5. Lakshmi Mittal ($50.9 billion)
Danny Boyle’s film, which combines joie de vivre with gritty realism, tells the story of Jamal Malik, a Muslim boy raised amidst the poverty of Mumbai.
Victoria Terminus now Chhatrapathi Shivaji Terminus, Bombay in 1908 (exactly 100 years back)
When cities are urbanizing...

- Growth
- Overcrowding
- Loneliness
- Insecurity
- Migration
- Disconnectedness
- Poor hygiene
- Poor nutrition
- Child labour
How life has changed in Mumbai

- Lost neighborhood
- Declining social interaction
- Decreasing support system
- Increasing paranoia
What does Urbanization comes with ...??

- migration,
- urban poverty,
- unemployment,
- discrimination,
- stigma,
- poor awareness,
- homelessness,
- deprivation,
- slum dwellers,
- improvishment,
- housing,
- loneliness,
- loss of social connectivity and
- increasing suspiciousness,
Complexity of mental health in Mumbai

- Prevalence
- Causation of illness
- Service utilization
- Clinical settings
- Stigma
- Response & outcome
• Stress
• Effects of trauma, violence
• Suicide
• Psychosomatic illness
• Child mental health
• School mental health
• Elderly
How treatments were done in India?

- Stigma and ‘beliefs’ drives patients to ‘alternative therapies’
- People often understand mental illness as coming from ‘outside forces’

1979

- MH is low priority
- Facilities only in cities
- Both ECT & Drugs are preferred by patients and doctors
- 80% patients depend upon non-medical healers.

Treatment of mental disorders in India.

Bagadia VN, Shah LP, Pradhan PV, Gada MT.
Department of Psychiatry, KEM Hospital, Bombay, India.

1. Mental health gets a low priority all over the world but much more so in developing countries. 2. In India, modern psychiatric facilities are available only in the cities. Mental hospitals are becoming modernized but the backbone of psychiatry is the psychiatric department in the General Hospital where treatment is out-patient and family based except short admissions for crisis intervention. 3. Psychotropic drugs are preferred both by psychiatrists and patients, next being electroconvulsive therapy (ECT) and other physical treatments followed by psychotherapies. 4. In view of paucity of facilities, 80% of the population has to depend on indigenous treatments consisting of Ayurvedic and Unani systems of medicine, religious treatments consisting of prayers, fasting, etc. and various witchcraft and magical rituals.

PMID: 401334 [PubMed - indexed for MEDLINE]
Changes in MH spectrum

Ecological influence of metro-culture

Enhanced mental health challenges

Variety of clinical syndromes

Changes the way people utilize services

Need for change in education and awareness

Demands innovative services
Changes the way people utilize services

<table>
<thead>
<tr>
<th>1983</th>
<th>Commonest diagnosis was ‘Neurotic disorder’ now called CMD</th>
</tr>
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<tbody>
<tr>
<td>Pattern of psychiatric morbidity in ER of a general Teaching Hospital (KEM). 2000 Bed Multispecialty – referral centre + Basic health care</td>
<td>Majority of psychiatric emergencies reported between 8 PM to 2 AM</td>
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<tr>
<td>100 Consecutive referrals from ER Physician</td>
<td>Non-emergent illness were also perceived as ‘emergency’</td>
</tr>
<tr>
<td></td>
<td>Recommended Psychiatric social worker/Crisis worker stationed in ER</td>
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</tbody>
</table>

Shrivastava A, shah L.P. Pattern of Psychiatric Referrals in Emergency room of a general teaching Hospital, MD Dissertation, University of Mumbai, 1983
Psychiatric referrals determines service development


**Psychiatric referrals in two general hospitals.**

**Doongaji DR, Nadkarni RP, Bhatawdekar ML.**

A prospective study was undertaken to compare the patterns of psychiatric referrals in two general hospitals in Bombay viz. the King Edward Memorial Hospital (64 cases) and the Jaslok Hospital and Research Centre (62 cases). It was observed that depressive symptoms were the most common presenting symptoms in these patients attending either of the hospitals. Similarly, the commonest diagnoses were depression and organic mental disorder. Attempted suicide with organophosphorous compounds was the commonest reason for hospitalization at K.E.M. Hospital (p less than 0.001). A significant number of these patients were females (p less than 0.05). The psychiatric referrals at Jaslok had been hospitalized mainly for suspected medical or neurological illness (p less than 0.001). These patients belonged to higher economic strata and hence had a better paying capacity compared to patients at KEM hospital, a significant number of whom were unemployed (p less than 0.001). The duration of pre-referred illness of patients and their stay at Jaslok hospital were longer as compared to those at KEM Hospital (p less than 0.01). The number of non-relevant special investigations carried out on patients in Jaslok was more (p less than 0.01). Further analysis of diagnoses revealed that a significant number of patients at KEM Hospital were admitted as primary psychiatric illness (p less than 0.05).


**A psychiatric evaluation of referred cancer and medical patients: a comparative study.**

**Chakravorty SG, De Souza CJ, Doongaji DR.**

Department of Psycho-Oncology, Tata Memorial Hospital, Parel, Bombay.

We evaluated the psychiatric status of referred cancer patients (N = 39) and referred medical patients at two other institutions (N = 64, N = 62). Depression, anxiety, psychosis, delirium occurred with comparable frequency in both groups. Cancer patients presented with somatic complaints more frequently. However the average number of referrals of cancer patients to the psychiatric service was very low (3/months) compared to referral of medically ill patients (32/month, 10/month). The data suggests that a comparable level of psychological distress exists in cancer patients, and psychiatric referral may help in its early recognition and alleviation.
Variety of clinical syndromes

Diabetes mellitus (a psychosomatic study of 147 cases).

Bagadia VN, Havaldar PP, Gada MT, Pradhan PV, Shah LP, Dhirawani MK.

PMID: 1177163 [PubMed - indexed for MEDLINE]
Ecology and psychiatry in Bombay--India.

Bagadia VN, Pradhan PV, Shah LP.

PMID: 4455661 [PubMed - indexed for MEDLINE]
Measurement of psycho-social stress in relationship to an illness (a controlled study of 100 cases of malignancy).

Doongaji DR, Apte JS, Dutt MR, Thatte S, Rao M, Pradhan M.

PMID: 4057117 [PubMed - indexed for MEDLINE]
Stress-induced disorders, environment & Psychosomatic illnesses became main focus for research & services ...1974
Culture can influence biology in Mental disorder.

Cross-cultural study of a biochemical abnormality in paranoid schizophrenia.


We studied 24-hour urinary excretion of phenylethylamine (PEA) and creatinine in 50 schizophrenic (39 paranoid and 11 nonparanoid) and 19 nonpsychiatric patients from Bombay, India. Methods for diagnosis, clinical assessment, and 24-hour urine collection were identical to those used in an earlier study done in a Washington, D.C. hospital. Clinical evaluations were done in Bombay, while urinary PEA and creatinine estimations were performed at NIMH, Washington, without knowledge of the subjects' identify. Paranoid schizophrenic patients had significantly greater 24-hour urinary excretion of PEA than both nonparanoid schizophrenic patients and nonpsychiatric controls. The mean amount of PEA per g creatinine in urine was also highest of paranoid schizophrenic patients. Our findings provide cross-cultural support to the possibility of abnormal PEA metabolism in at least

• Newer treatments focused on stress-management & psychophysiology found place in mainstream psychiatry. Yoga

Psychophysiologic therapy based on the concepts of Patanjali. A new approach to the treatment of neurotic and psychosomatic disorders.

Vahia NS, Doongaji DR, Jeste DV, Ravindranath S, Kapoor SN, Ardhapurkar I.

PMID: 4761011 [PubMed - indexed for MEDLINE]
Suicide behavior is a window to mental health

Gender, suicide, and the sociocultural context of deliberate self-harm in an urban general hospital in Mumbai, India.

Parkar SR, Dawani V, Weiss MG.
Department of Psychiatry, KEM Hospital and Seth GS Medical College, Mumbai, India.

Recognizing the complementary effects of social contexts and psychiatric disorders, this study clarifies the role of gender in suicidal behavior in urban Mumbai by considering psychiatric diagnoses and patient-identified sociocultural features. The cultural epidemiological approach suggests the critical impact of situational sociocultural factors that complement the customary psychopathological accounts for those who harm or kill themselves. The cultural epidemiology of deliberate self-harm (DSH), it is argued, is critical to planning for suicide prevention, community mental health and psychiatric practice. This study, based on a cultural epidemiological framework, compares male and female admissions for DSH, evaluating conditions with SCID-I and EMIC interviews. We assessed features and narratives of suicidal behavior, patient-identified underlying problems, their perceived causes and triggers. The study included 92 women and 104 men. A diagnosis of depressive disorder was made for 48.9 percent of women and 39.4 percent of men. Many patients (50.0 percent of women and 41.3 percent of men) did not fulfill the criteria for any diagnosis, or did so only for an adjustment disorder or a V-code. Men typically explained DSH with reference to work problems, financial problems and problem drinking. Women typically discussed domestic problems, in-law relations and victimization. Problem drinking affected women living with men who drank. Social and situational factors appear to play a relatively greater role than psychiatric illness in self-harm and suicide in Mumbai, as in other Asian studies, compared with Europe and North America.

Clinical diagnostic and sociocultural dimensions of deliberate self-harm in Mumbai, India.

Parkar SR, Dawani V, Weiss MG.
Department of Psychiatry, KEM Hospital and Seth GS Medical College, Mumbai, India.

Patients' accounts complement psychiatric assessment of deliberate self-harm (DSH). In this study we examined psychiatric disorders, and sociocultural and cross-cultural features of DSH. SCID diagnostic interviews and a locally adapted EMIC interview were used to study 196 patients after DSH at a general hospital in Mumbai, India. Major depression was the most common diagnosis (38.8%), followed by substance use disorders (16.8%), but 44.4% of patients did not meet criteria for an enduring Axis-I disorder (no diagnosis, V-code, or adjustment disorder). Psychache arising from patient-identified sociocultural contexts and stressors complements, but does not necessarily fulfill, criteria for explanatory psychiatric disorders.

PMID: 16704326 [PubMed - indexed for MEDLINE]
12-year-old boy commits suicide
17 Sep 2008, 06:22 hrs IST, Rajiv Sharma, TNN

MUMBAI: A 12-year old boy from Malad (east) hanged himself to death from the ceiling fan in his house on Monday. The police are trying to find out the motive behind the suicide.
How Good is ‘Good Outcome’ Schizophrenia in Long-term in Developing countries.

Amresh Shrivastava 1, Meghan Thakar 2, Nilesh Shah 3, Larry Stitt 4

1. Department of Psychiatry, University of Western Ontario, Canada. 
   & Director, PRERANA Psychiatric Services & Silver Mind Hospital, Mumbai, India

2. Clinical psychologist, Silver Mind Hospital, Mumbai, India

3. Professor & Head of Psychiatry, LTMG Hospital, Mumbai, India

4. Department of Biostatistics & Epidemiology, University of Western Ontario, London, Ontario, Canada

Outcome in Schizophrenia at 10 Years

- CGIS, N=107
- 13 Criteria N=67
- 13 Criteria, N=107

Outcome

- 62
- 55
- 32
Living in Long term facility: 12%

Living in Community: 88%
Persistent Psychopathology despite ten year’s continuous treatment

% 

Persistent PS: 40%  
Persistent NS: 42%  
Persistent EPS: 33%  
Range of suicidality: 29%
Why does schizophrenia show ‘poor’ outcome in developing Countries as well.

- Changing culture
- Treatment response
- Changing phenomenology: Needs studies
- Changing families
- Late intervention
- Treatment design, Lack of continuity
- Lack of support system, resource, accessibility
- Stigma
- Poor advocacy and awareness
Suicide Helpline—An urban community experience

- Amresh Shrivastava M.D., D.P.M.
- Varsha S. Dawani D.N.B., D.P.M.
- Meghana Thakkar
- Sunita Iyyer
- Gopa Sakhel
- Prerana Psychiatric Services, Mumbai
- E Mail: minds100@hotmail.com
- http://www.preranatrust.org &
- www.mentalhealth-india.com
Help lines Provide opportunity to talk: ‘someone to talk to’ in a society which has growing disconnectedness
A Hotline to Help!

Chinu Sreedharan in Bombay

There! There it goes again!

This was the eighth time the phone was ringing in the one hour he had been waiting outside. He was sure; he had counted it.

Seated here, out on the verandah of the counselling centre Prerana -- a charitable organisation -- on one of those plastic chairs which he hated so much, he could see the notices on the opposite wall. Think Before You Think Of Suicide, screamed one in bold black. It's A Myth That People Who Talk Suicide Won't Do It announced another while a third, more subdued than the others, revealed more about suicide -- that it increases with age, that it is the fourth common cause of death in the 15 to 34 age group, that 50 per cent more males succeed in their attempts than females...

There were also a couple of newspaper clippings about Prerana's Round The Clock Suicide Prevention Hotline which, since its inception on July 20, 1996, had attracted over 4,000 crisis calls.
Usage of Crisis help line Counseling in Mumbai

- No. of clients calling suicide helpline in 5 years: 2341
- No. of clients visiting the center following the call: 718 (15.43%)
- No. of clients visiting with suicidal ideation: 770 (4.67%)

Bar chart showing the usage of crisis help line counseling in Mumbai, categorized by gender:
- All: 1391 (718 clients calling, 770 clients visiting with suicidal ideation)
- Male: 1440 (770 clients visiting with suicidal ideation, 430 clients visiting for assessment)
- Female: 901 (621 clients visiting for assessment, 288 clients calling with suicidal ideation)

Crisis help line usage data for Mumbai includes clients calling with suicidal ideation, visiting OPD following the call, and visiting for assessment with suicidal ideation.
Stigma and discrimination in Schizophrenia

Schizophrenia Support Mumbai Initiative

Amresh Shrivastava
Executive Director Mental Health Foundation Of India
(overseas affiliate: PRERANA Psychiatric Society)

Nature of stigma seen in Schizophrenia

<table>
<thead>
<tr>
<th></th>
<th>Yes (%)</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Familial</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Occupational</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Marital</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Any other</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Can stigma be effectively removed?
Consequences of stigma & discrimination

- Unaccepted in family: 31%
- Avoid disclosure: 38%
- Turned down for job: 27%

- Yes: 23%
- Social exploitation: 27%
- Sexual harrassment: 27%
- Pushed in unacceptable living: 4%
- Living alone: 27%
Measures to reduce Stigma

- Rehabilitation
- Social integration
- Improving productivity
- Reducing complications like suicide, violence
- Early identification

Bar chart showing percentages:
- Relapse Prevention: 88%
- Treatment provisions: 85%
- Complete Treatment: 81%
- Educating community: 81%
What do the experiments, services & research in Mental health of Mumbai indicate

1. Services & systems to provide earliest possible intervention
2. Interventions to address ‘causes’ & Consequences’
Maximize Intervention opportunities:
Psychiatric illness presenting as medical illness and Co morbidity
GHPU programs

• ER
• C-L
• Child & adolescent
• Neuropsychology
• Clinical Psychology
• Behavioral Psychology
• Movement disorders
• Organic mental disorder & neuropsychiatry
• Perinatal psychiatry
• Addictions
• Trauma
• Suicide prevention
• Psychophysiological therapies
Develop a model for services which is feasible, accessible, affordable & effective

- Better outcome
- Minimum stigma
- Easy accessibility
- Minimum disability

- Opportunity for dealing with comorbidity
- Integrated family system
- Living in the community
Need for Comprehensive, innovative, new experiments

- Education
- Psychiatric input in Medicine
- Focus on Life-style

Social care
Medical care
Psychology-Psychiatry
‘We need to develop services where people live, where problems arise’

In United Nations Assembly, 1970