District Mental Health Care/ System Assessment
Kolar - Karnataka

INDIA

KARNATAKA
KOLAR DISTRICT

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FINDING SOLUTIONS TOGETHER
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<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ANM</td>
<td>Auxiliary Nurse Midwife</td>
</tr>
<tr>
<td>ART</td>
<td>Anti-retroviral Therapy</td>
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<tr>
<td>ASHA</td>
<td>Accredited Social Health Activist</td>
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<tr>
<td>AYUSH</td>
<td>Ayurveda Yoga Unani Siddha and Homeopathy</td>
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<tr>
<td>BCC</td>
<td>Behaviour Change Communication</td>
</tr>
<tr>
<td>BPL</td>
<td>Below Poverty Line</td>
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<tr>
<td>CBO</td>
<td>Community Based Organization</td>
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<tr>
<td>CHC</td>
<td>Community Health Centre</td>
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<tr>
<td>CPH</td>
<td>Centre for Public Health</td>
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<tr>
<td>DHO</td>
<td>District Health Officer</td>
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<tr>
<td>DMHP</td>
<td>District Mental Health Programme</td>
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<tr>
<td>DPN</td>
<td>Diploma in Psychiatric Nursing</td>
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<tr>
<td>HIV – AIDS</td>
<td>Human Immunodeficiency Virus - Acquired Immune Deficiency Syndrome</td>
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<tr>
<td>ICD</td>
<td>International Classification of Disease</td>
</tr>
<tr>
<td>ICPS</td>
<td>Integrated Child Protection Scheme</td>
</tr>
<tr>
<td>ICTC</td>
<td>Integrated counselling and Testing centre</td>
</tr>
<tr>
<td>IEC</td>
<td>Information Education and Communication</td>
</tr>
<tr>
<td>IERT</td>
<td>Inclusive Education Resource Teachers</td>
</tr>
<tr>
<td>INR</td>
<td>Indian Rupee</td>
</tr>
<tr>
<td>KGF</td>
<td>Kolar Gold Fields</td>
</tr>
<tr>
<td>MBBS</td>
<td>Bachelor of Medicine and Bachelor of Surgery</td>
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<tr>
<td>mhGAP</td>
<td>Mental Health Global Action Plan</td>
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<tr>
<td>MNS disorder</td>
<td>Mental Neurological and Substance Use disorder</td>
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<tr>
<td>NACP</td>
<td>National AIDS Control Programme</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>NMHP</td>
<td>National Mental Health Programme</td>
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<tr>
<td>NPCDCS</td>
<td>National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke</td>
</tr>
<tr>
<td>NPHCE</td>
<td>National Programme for the Health Care of the Elderly</td>
</tr>
<tr>
<td>NRHM</td>
<td>National Rural Health Mission</td>
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<tr>
<td>OP/IP services</td>
<td>Outpatient/ Inpatient Services</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Centre</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>PSW</td>
<td>Psychiatric Social Worker</td>
</tr>
<tr>
<td>SDUMC</td>
<td>Sri Devraj Urs Medical College</td>
</tr>
<tr>
<td>SSI-K</td>
<td>Spastics Society of India, Karnataka branch</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually Transmitted Diseases</td>
</tr>
<tr>
<td>WCD</td>
<td>Department of Women and Child Development</td>
</tr>
<tr>
<td>WHO-AIMS</td>
<td>World Health Organization - Assessment Instrument for Mental Health Systems</td>
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</tbody>
</table>
The District of Kolar, with a population of more than 1.5 million, known as the land of silk, milk and gold, is in the South Indian state of Karnataka and located close to the capital city of Bangalore. The district is not under the centrally sponsored scheme under the DMHP programme. The present review examined mental health systems by adapting the WHO-AIMS instrument and comprehensively documented the facilities and services for mental health and assessed the functioning of the systems for mental health.

In all, there are 231 primary care settings (61 in public sector and 175 in private sector) and 46 secondary care and above facilities (8 hospitals in public sector, 37 nursing homes and 1 medical college) with a total bed strength of ~3000. The total number of health care personnel (including 650 doctors of the modern systems of medicine and 72 belonging to the AYUSH systems) within the district is ~1250 apart from 846 ASHA workers. Thus the number of formal health care personnel per lakh population is 81 as against the desired 250; the number increases to 136, if ASHA workers are also included.

The total mental health human resources are about 50 including 4 psychiatrists (1 government and 3 private) and 10 psychologists. Training regarding mental health, especially within the public sector has not been undertaken in the past 5 years. Psychiatric outpatient services are available only in 4 settings (1 each in public and private health care institutions and 2 in the NGO sector). Inpatient psychiatric services does not exist in the public sector, but are available in 4 settings (1 in the medical college and 3 in the NGO sector). In addition, counseling and de-addiction services are available in a limited manner. There are 3 NGOs working for rehabilitation services in mental health, and the services are inadequate for the district.

There is no separate budget head for mental health activities at the district level. Existing General Health Information System within the public sector also serves to document the disease burden for mental and neurological disorders. All institutions do not report mental health problems and available data shows that the predominant case load is from persons with epilepsy. There are no formal information systems for mental health within the private sector. While NGOs are mandated to report their activities, there are no formal mechanisms to collate their activities at the district level.

In the public sector, psychotropic medication like anti-depressants, anti-epileptic drugs and anxiolytics are available free of charge. The referral / follow up services which would ensure continuity of care are an exception rather than a rule. Elements of mental health related activities predominantly counseling could be identified within the ongoing programs / activities of health and other than health sectors (For ex in the former HIV –AIDS control programme and SNEHA clinics; in the latter in the women and child welfare and education sectors). There are no set mechanisms or guidelines for inter-sectoral action. Though NGOs are actively involved in de-addiction programmes and care of those with intelligence deficiency, the role of civil society and other professional organizations were minimal. Monitoring and evaluation and research activities were conspicuous by their absence.
**Recommendations**

Based on the analysis, we have identified the needed focus and outlined the possible set of activities that are needed in the district of Kolar. As a beginning there is a need to prioritize the top 5 areas and integrate actions for their implementation from the below given list. A multi-stakeholder group needs to deliberate, discuss and define the set of activities that would be undertaken in the district.

1. A designated mental health programme officer with independent charge of activities is required for coordinating and implementing all activities.

2. Develop a District Mental Health Action Plan and constitute/designate the district mental health committee that is multi-sectoral in nature.

3. Create a budget head and allocate specifically for mental health activities/programmes in the district.

4. Strengthen out patient, inpatient, mobile, rehabilitation and referral services in a comprehensive manner. On a priority, inpatient services should be available in public sector health settings in the district.

5. Specific guidelines and activity profiles need to be delineated for different categories of health human resources with specific focus on mental, neurological and substance use disorders.

6. A systematic action plan with defined timelines for training need to be developed and all doctors and paramedical outreach workers should receive training.

7. The drug logistics system needs to be streamlined to ensure uninterrupted and continuous supply.

8. Specific guidelines and manuals need to be developed for implementing the different service and legislative measures.

9. There is a need to develop a simple patient record with clear reporting formats/guidelines which are implementable and sustainable. Use of electronic methods should be explored.

10. There is a need to activate and support the district IEC committee and enable them to include IEC related to mental health.

11. Strengthen inter-sectoral approaches and encourage broader health promotion endeavors with the involvement of education, social welfare, women and child welfare to develop programmes in educational institutions, work places and others.

12. Develop a comprehensive database of beneficiaries and strengthen systems for ensuring that benefits reach the intended beneficiaries.

13. Undertake mental health advocacy more frequently and also involve all sectors and different stakeholders: police, education, social welfare, professional bodies and members of civil society.

14. Establish a simple monitoring mechanism that is undertaken regularly.

15. Develop operational research themes to improve services and deliver programmes effectively and efficiently.

**Next steps**

The CPH in Kolar district will focus on developing and strengthening service delivery and other activities during 2013-15. Prioritized problems identified include common mental disorders, alcohol abuse, suicide, epilepsy and rehabilitation. However, CPH will not just focus on a disease specific approach but will strengthen systems in the areas of advocacy, capacity building, training, human resources, financing, integrating mental Health in NPCDCS and NCPHE along with monitoring and evaluation. Essentially, public health approaches need to be incorporated and integrated into existing systems. Major focus in 2013-15 will be on training, integrating programs, developing information systems, undertaking IEC/BCC activities, mental health promotion and monitoring.
1. BACKGROUND

1.1 Health systems

A health system is ‘the combination of resources, organization, financing and management that culminate in the delivery of health services to the population’ and its ‘primary purpose is to promote, restore, and maintain health’. The many parts of the health system include ministries of health, health providers, health services organizations, pharmaceutical companies, health financing bodies, patients, families, communities and others. These links interconnect and play many different roles ranging from policy making issues to delivery of care at the door-steps. A good health system delivers quality services to all people, when and where they need them.

1.2 Mental health systems and its assessment

All activities whose primary purpose is to promote, restore, rehabilitate or maintain mental health is the mental health system. This includes all organizations and resources focused on improving mental health. Evaluating the mental health system facilitates improvement in mental health services. The key benefits of this assessment include developing information-based mental health plans, setting targets/goals for service delivery, monitoring progress in implementation, providing services in mental health promotion, prevention, care, rehabilitation, and also underscore the need for involving consumers, families, and other stakeholders.

Towards this end, WHO has developed the Assessment Instrument for Mental health Systems referred to as WHO-AIMS to assess key components of a mental health system. The tool collects essential information on the mental health system of a country or region and facilitates strengthening of mental health systems over time. Based on the WHO strategy to provide information-based mental health assistance to countries within the Mental Health Global Action Plan (mhGAP), WHO-AIMS identifies major strengths and weaknesses in the mental health systems in order to have essential information for relevant public mental health action.

It is estimated that nearly 100 to 125 million Indians require care for mental, neurological and substance use problems in India. Responding to this growing need, National Mental Health Programme (NMHP) was launched in 1982. The major objective of NMHP is to ensure availability and accessibility of minimum mental health care for all, particularly to the most vulnerable and underprivileged sections of population. The District Mental Health Programme (DMHP), based on the experience of the Bellary model for mental health services was identified as a key strategy to implement NMHP. Over the years several other components like strengthening of mental hospitals, enhancing human resources development, school mental health programme and others were identified and included. DMHP continues to be the critical anchorage and system for delivery of mental health care in the country and presently 123 districts are covered under the centrally sponsored programme (Policy Group report on NMHP, 2012). Several reviews particularly in the last decade have studied the working of the DMHP and also included non-DMHP districts for comparison. However, there have been no systematic efforts to review the performance of the programme that is integral to the health care delivery system in a district. Thus, there is a need to assess a mental health delivery system with a public health perspective in a district.

2 WHO, 2000
6 http://mhpolicy.wordpress.com/resources-materials
2. GOALS AND OBJECTIVES

The Centre for Public Health has been established at NIMHANS to provide strong inputs for strengthening public health components in formulating policies and development of programs focusing on problems, priorities, challenges and solutions and strengthen the public health response to MNS disorders, injuries and other NCDs (http://nimhans.kar.nic.in/cph/index.html).

Each district within the country is the fundamental unit for implementing different national health programmes and the health systems within the district play a critical role in effective delivery of the health care services. In this context, we planned and undertook an assessment of the mental health system in a non-DMHP district in India adapting the WHO-AIMS instrument. The key objectives of the endeavour were:

1. To comprehensively document the facilities and services for mental health in the district of Kolar
2. To assess the functioning of the systems for mental health with respect to oversight, health service provision, financing and resources.

3. METHODOLOGY

3.1 Development of the study instrument

Preliminary interactions with State Mental Health Authority, Government of Karnataka revealed that the WHO-AIMS instrument needed to be suitably adapted to assess a district setting within the Indian context. However the 6 domains (policy and legislative framework, mental health services, mental health in primary health care, human resources, public education and links with other sectors, monitoring and research) formed a good framework for undertaking the assessment. The facets and the different items under each facet were critically reviewed. The different facets and items under each facet that were immediately applicable to a district setting were listed separately in consultation with the in-charge Kolar District Programme Officer for mental health.

The applicability of this list was reviewed and it was observed that:

i) Issues like existence of policies and legislations which are undertaken at the national level will be implemented defacto all over the country.

ii) Decisions for activities related to mental health promotion and IEC were taken at the state or central level.

iii) Expressing human resources as rates to the population posed difficulties either because of possible double counting and/or difficulty in ascertaining population coverage especially in the private sector.

iv) Need for collating information from sectors like education, social welfare, etc., particularly regarding human resources for possible mental health activities.

v) Information in a readymade format are not available for many items (ICD classification wise and age-gender wise patient care services, availability of screening/ OP/ IP services, etc.) and needed to be specifically collected and collated from different sources.

In light of the above, it was decided to adapt the assessment tool with suitable modifications that would enable collection of primary/ secondary information from different sources and also permit easy collation. This version of the assessment tool was vetted by a large group which included apart from the District Program Officer for mental health, public health practitioners and consultant psychiatrists.

The final assessment tool (available upon request) included the following: quantum and distribution of health facilities (public, private), availability of services in psychiatry, neurology, substance use disorders, type of human resource (doctors/ specialists/ nurses/ specialist nurses/ counselors/ psychologist etc); collaboration of mental health with other sectors, activities (IEC etc.,) being carried out with respect to MNS disorders, financing, nature of services, advocacy, IEC, management, monitoring and HMIS.

3.2 Process of data collection

The assessment was carried out by the team from Centre for Public Health, NIMHANS during the months of March to July 2013. Multiple methodologies were adopted to obtain
a comprehensive view and included both qualitative and quantitative methods. Apart from discussion with key stakeholders of the programme within and outside the district, key informant interviews, walk through study and records review was undertaken. Information available from the ongoing studies at the Centre for Public Health regarding resources inventory, IEC and health promotion activities and Health Management Information Systems were used as complimentary sources.

Available data has been collated and also analyzed using descriptive statistical methods.

4. RESULTS

4.1 Profile of Kolar District

Kolar district is situated in the south-eastern part of the South Indian state of Karnataka and shares its border with two states: Tamil Nadu on its south eastern side and Andhra Pradesh on its north eastern side. With an approximate geographical area of 3969 sq. km, it has a population of 1,540,231 as per census 2011 and a population density of 384 persons per square km. The decadal growth rate was 15.3% and 31% of its population reside in urban areas. The sex ratio of 967 females per 1000 males in the district is above the national average and 51% of the population are males. The literacy rate for men was 74.7% and 53.4% for women. While majority of the population are Hindus (86%), 12% are Muslims and 1% Christians. Kannada is the predominant language along with Telugu and Tamil. There are 1798 villages and 6 towns in the district. Select details of the individual talukas of the district are noted below.

<table>
<thead>
<tr>
<th>Name of the Taluka</th>
<th>Population (2011)</th>
<th>Sex ratio (per 1000 males, 2001)</th>
<th>Total Literacy rate, 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangarpete</td>
<td>460,621</td>
<td>982</td>
<td>71.9</td>
</tr>
<tr>
<td>Kolar</td>
<td>378,179</td>
<td>970</td>
<td>68.8</td>
</tr>
<tr>
<td>Malur</td>
<td>218,985</td>
<td>971</td>
<td>61.1</td>
</tr>
<tr>
<td>Mulbagal</td>
<td>251,962</td>
<td>986</td>
<td>58.9</td>
</tr>
<tr>
<td>Srinivasapura</td>
<td>198,858</td>
<td>973</td>
<td>60.3</td>
</tr>
</tbody>
</table>

The major sources of employment are agriculture, dairy, sericulture and floriculture; hence the district is popularly known as “the land of Silk, Milk and Gold”. Farmers in Kolar are totally dependent upon borewell water for irrigation and drinking. The gold mines in Kolar Gold Fields closed in 2003 due to reducing gold deposits and increasing costs of production is now being re-opened adopting newer technologies of better extraction.

4.2 General Health Care

4.2.1 Health indicators

Kolar has a Crude Birth Rate of 15/ 1000 population and Crude Death Rate of 4/ 1000 population. The average life expectancy is about 62 years.

4.2.2 Health settings

The public sector health facilities in the district includes the 300 bedded Sri Narasimha Raja district hospital, 200 bedded sub-district civil hospital at KGF, 4 taluk hospitals (with a total of 400 beds), 2 community health centres, 61 primary health centres and 265 sub-centres. One Primary Health Centre is being run on a PPP model. There are 2 mobile medical units in the district running on PPP model currently used for providing general care.

The district has a private medical college (Sri Devaraj Urs Medical College) along with its multispecialty tertiary care R. L. Jalappa Hospital and Research Centre with 875 beds. Other private sector health facilities include 175 clinics, 37 nursing homes, 11 day care centers, 62 Ayurveda centers and 8 registered laboratories in Kolar district with a total of 982 beds.

4.2.3 Health Human resources

In the government sector, there are 146 doctors (47 specialists, 82 MBBS doctors, 6 contract doctors under NRHM and NPCDCS), 18 AyUSH doctors, 162 staff nurses, 90 pharmacists, 238 ANMs (including 24 urban ANMs), 72 male health workers, 92 lab technicians and 1046 ASHA workers.

In the private sector, the total number of doctors providing clinical services are approximately 354. These numbers do not exclude doctors who work in more than one setting (hospitals, clinics, etc.). There are 61 Ayurveda practitioners, 1 Homeopathy specialist, and 10 alternate medicine practitioners providing clinical services in the district. In addition, there are 12 physiotherapists in the district. In all, about 270 nurses are reportedly working in the private sector. There is no database regarding other types of health personnel in the private sector within the district.

Sri Devaraj Urs Medical College which offers undergraduate medical course, and post graduate courses in 15 subjects and several post graduate
diploma courses has a total staff strength of 736 which includes 142 doctors and 248 nurses.

4.2.4 Disease Burden and National Health Programmes

All National Health programmes are implemented in the district. Being a district with tanks and lakes, a major component of the disease burden is from vector borne diseases. There are several hotspots for malaria and a heavy burden of malaria, dengue and chikungunya is reported within the district (Table 1). It is one of the districts implementing the Japanese Encephalitis vaccination programme. The routine monthly reports collated for the different health programmes are periodically sent to the state health directorate.

Table 1: Number of Vector borne disease cases reported in Kolar

<table>
<thead>
<tr>
<th>Year</th>
<th>Malaria</th>
<th>Dengue</th>
<th>Chikungunya</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>111</td>
<td>247</td>
<td>12</td>
</tr>
<tr>
<td>2011</td>
<td>115</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>2010</td>
<td>739</td>
<td>139</td>
<td>86</td>
</tr>
</tbody>
</table>

4.3 Mental health systems and resources

4.3.1 Mental health programme in the district

Kolar district is not included under the centrally sponsored District Mental Health Programme and hence classified as a non-DMHP district within the state. However, the state government has created specific posts within the district health set-up to give fillip to manage the mental health problems.

Accordingly, the District Family Welfare Officer is also designated as the Mental Health Programme Officer for the district who also holds the post for the I/C district HIV/AIDS programme. One post of district psychiatrist has been created in the district hospital and filled up.

4.3.2 Mental Health Policies

All central and state policies/ legislations are implemented by default in the district. However, the details and extent of the implementation of such legislation is not completely known. Standard procedures as laid down under the different legislations (Mental Health Act, Persons with Disabilities Act, Juvenile Justice Act, Prisons Act, National Trust Act and Protection of Women from Domestic Violence Act) are reportedly followed.

Specific rules as applicable to the state of Karnataka under the Mental Health Act, 1987 have been recently formulated and gazetted and the same is being implemented in the district. The District Magistrate / Deputy Commissioner is the licensing authority under the Mental Health Act. The District Psychiatrist and the District Surgeon are the inspecting authorities for setting up institutions under the Mental Health Act and their recommendations are routed through the District Health Officer to the District Magistrate for implementation.

Despite this arrangement, there is no District Mental Health Action Plan and/ or a committee to oversee the functioning of mental health activities within the district.

4.3.3 Funding for Mental Health

There is no separate budget head at the district level for activities related to mental health. Allocations are sought and obtained as and when needed. The state government has made provision for the annual and periodic supply of standard medicine packages to individual health facilities in the entire district.

4.3.4 Mental health services / facilities

4.3.4.1 OP services:

As per the directives of the state government, by default, OP services are available at all public sector health facilities (PHCs, CHCs, and Taluka hospitals) for MNS disorders. Consultation liaison psychiatric services are available at the district hospital, the medical college hospital and in 2 other private institutions (Sri Sai Hospital and Life care hospital).

4.3.4.2 Inpatient services:

Psychiatric in-patient services are available only in the medical college and 3 private institutions (Sri Sai Hospital, Life care hospital and Sree Ramanashree Trust for disabled persons). There are no inpatient services for mental health in the public sector health care institutions.

4.3.4.3 Counseling services:

Counseling services are available in both public sector (SNR district hospital, 5 taluk hospitals and 2 CHCs) and in the private sector.

4.3.4.4 De-addiction services:

The district has 3 de-addiction centers for managing alcohol dependent patients in the private sector, apart from the OP services available at the district hospital and medical college hospital.

4.3.4.5 Rehabilitation services:

Among the 7 health related NGOs, 3 NGOs are
working in the area of mental health. They provide vocational rehabilitation training to their patients. The SDUMC has started a neuro-developmental problems rehabilitation unit in their urban health centre in Kolar, in collaboration with Spastics Society of India, Karnataka branch (SSI-K) as part of its urban health services. During the weekly clinic, rehabilitation experts from SSI – K and health centre staff sensitize and orient the parents of children with cerebral palsy, autism, etc., for improving domiciliary care-giving. In addition, a monthly tele-consultation is held at SDUMC with domain experts being drawn from pediatrics and neurology along with the developmental paediatrician from SSI-K.

Within the district, there are no sheltered workshops, half way homes or quarter way homes for management of persons with chronic mental illness.

4.3.4.6 Other psychiatric services:

The nearest alternate psychiatric facility for the district is PES Institute of Medical Sciences and Research, Kuppam, Chittoor District, Andhra Pradesh which is about 65 kms from Kolar. However, the preference is for the National Institute of Mental Health and Neuro Sciences, Bangalore which is located at a distance of 70 kms.

4.3.5 Human Resources for Mental Health

<table>
<thead>
<tr>
<th>Mental Health Human Resources</th>
<th>In government sector</th>
<th>In private sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrists</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Trained Psychologists</td>
<td>5 in WCD</td>
<td>5*</td>
</tr>
<tr>
<td>Psychiatric Social workers</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Nurses (DPN)</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Counselors</td>
<td>20+6 in WCD</td>
<td>9**</td>
</tr>
<tr>
<td>Occupational therapists</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Rehabilitation workers</td>
<td>2 in NPHCE***</td>
<td>Nil</td>
</tr>
<tr>
<td>Special education teachers</td>
<td>20 IERTs</td>
<td>17 in NGOs</td>
</tr>
<tr>
<td>Doctors trained in mental health</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Nurses trained in Mental health</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

*Includes 4 psychologists in NGOs; ** includes 5 in NGOs+ 4 in Jalappa hospital; *** 150 Village rehabilitation workers under Taluka Panchayat

WCD-Department of Women and Child Development; DPN- Diploma in Nursing; NPHCE- National programme for the Health Care of the Elderly IERT- Inclusive Education Resource Teachers; NGO- Non-governmental organization

4.3.5.1 Government health sector:

In the government health sector, there is only one psychiatrist available for the whole district and there are no psychologists/ psychiatric social workers. There are 20 trained counselors working under NPCDCS, NPHCE and NACP programme in Kolar district (Table 2). Under the school health programme, 1 doctor and 2 counselors have been appointed in each taluka. There are 2 rehabilitation workers at CHC level under NPHCE.

4.3.5.2 Private health sector:

There are 5 psychologists in private sector in the Kolar district including the 4 full time psychiatrists at the R L Jalappa Hospital. Apart from the 2 qualified clinical psychologists, 9 counselors are present in private sector (5 working with NGOs and 4 at Jalappa Hospital) (Table 2).

4.3.5.3 Sectors other than health including NGOs

The Department of Women and Child Development utilizes the services of 5 trained psychologists for the ‘Santwana Kendras’ where in women, who are victims of various atrocities such as dowry, rape, sexual harassment, domestic violence etc, and subjected to physical and mental torture besides having to face social and financial problems are consoled and rehabilitated. The taluk panchayat employs 150 rehabilitation workers, while, 20 Inclusive Education Resource Teachers (IERTs) are under Department of Public Instruction. In addition, NGOs working in mental health have 17 special education teachers. The extent of possible involvement of these non-health sector mental health human resources needs to be assessed in detail.

4.3.5.4 Training in Mental health care

In the last 3 years, there has been no training/ sensitization/ refresher training regarding any of the mental health activities including identification of MNS disorders, management, counseling and rehabilitation of MNS disorders or human rights for any of the medical personnel or paramedical staff.

4.3.5.5 AYUSH / Complementary and alternate systems of Medicine

There is no specific documentation of the scope and role of AYUSH practitioners in management of MNS disorders within the district.

4.3.5.6 Faith healers / Traditional health practitioners

During the discussions, it was reported that a traditional healer at a mosque offers treatment for mental problems in Kolar. However, there is no list of individuals/ organizations providing such services.

4.3.6 District Mental Health burden and management

4.3.6.1 Disease burden

The office of the DHO maintains a simplified
list from the ICD classification of mental illness. Accordingly, cases are classified as Psychoses (corresponding to F20–F29), Neuroses (corresponding to F30 – F48), Epilepsy (corresponding to G40) and Mental Retardation (corresponding to F70 – F79). The total exact number registered/ on treatment regarding substance use problems is not known. Available data shows that in the district, during 2012, a total of 1495 patients have received care for mental and neurological diseases of whom 80% are on treatment; majority are those with epilepsy (Graph 1).

Graph 1: Patients with Mental and Neurological conditions in the Kolar district

4.3.6.2 Psychotropic and other medicines

Select drugs are routinely made available free of cost within the public sector health care institutions from the PHC level to district hospital (Table 3). However, the overall drugs logistics is not routinely streamlined. While, drug stockouts are reported at district hospital, other hospitals have varying degrees of excess/ shortage.

Table 3: List of drugs available in the public health sector at Kolar

<table>
<thead>
<tr>
<th>Psychotropic drugs</th>
<th>Anti-depressants</th>
<th>Anti-epileptic drugs</th>
<th>Anxiolytics and others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tab Chlorpromazine</td>
<td>Tab Amitriptyline</td>
<td>Tab Phenytoin</td>
<td></td>
</tr>
<tr>
<td>Inj. Fluphenazine</td>
<td>Tab Imipramine</td>
<td>Tab Phenobarbitalone</td>
<td>Tab Alprazolam</td>
</tr>
<tr>
<td>Tab Resprimdone</td>
<td>Tab Fluoxetine</td>
<td>Tab Carbamazepine</td>
<td>Tab Diazepam</td>
</tr>
<tr>
<td>Tab Haloperidol</td>
<td>Tab Lithium</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the listed medicines (Table 3) are available in private pharmacies and are also sold based on prescriptions. The range of the costs of these medicines varies as per brand and strength.

4.3.6.3 Referral / Follow-up services

There are no standard case assessment protocols or treatment/ management protocols or referral protocols available for the management of patients with MNS disorders. There are no formal systems for ensuring continuity of care but there is a referral system in the government health sector. Patients diagnosed with mental health problems either at tertiary centres or at the district hospital seek the pharmacy services in the different public sector facilities within the district and whenever possible the public health staff follow-up diagnosed cases during their routine visits (reportedly ~75%). The drop out was reported to be 20% after the first contact.

4.3.6.4 Social security / welfare measures

Even though there is no structured social insurance scheme or other social security measures for mental and neurological disorders, management of stroke is included under Vajpayee Aarogyashree, a health insurance to families living below the poverty (BPL) through an identified network of health care providers for tertiary medical care for treatment of identified diseases involving hospitalization, surgery and therapies. In addition, those having disability certificates issued by the district psychiatrist are entitled to a monthly pension of INR 400 (<75% disability) or INR 1000 (≥75% disability). There are measures in place for social security to elderly and widowers under the National Social Assistance Programme.

4.3.7 Inter-sectoral collaboration

Table 4: Inter-sectoral collaboration of mental health with health and non-health sectors/ programs

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Nature of activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV/AIDS</td>
<td>Counseling for the patients on treatment-ICTC, ART, STD clinics</td>
</tr>
<tr>
<td>School health</td>
<td>SNEHA clinic-Health Assistant, Staff nurse do the counseling</td>
</tr>
<tr>
<td>Women and child</td>
<td>Village level survey format used in Integrated Child Protection Scheme has provision for collecting information on number of children with mental retardation, leprosy, HIV-AIDS, orphans, children from broken families etc</td>
</tr>
<tr>
<td>Education</td>
<td>Life skill education sessions have been planned</td>
</tr>
<tr>
<td>Social welfare</td>
<td>Regular visits by the Psychiatrist to destitute homes</td>
</tr>
<tr>
<td>Disability</td>
<td>Disability assessment and certification</td>
</tr>
<tr>
<td>Judicial</td>
<td>Awareness programme on mental problems conducted by BAR association</td>
</tr>
<tr>
<td>Prison</td>
<td>Regular visits by the Psychiatrist and PSW to prison</td>
</tr>
</tbody>
</table>

Several collaborative activities are reported to exist within health programmes and between health and health-related sectors (Table 4). However, mental health does not feature as a major focus in any of the initiatives except under the National AIDS Control Programme. Psycho-social counseling services are provided for patients with
HIV/AIDS under NACP. The specific mechanisms and guidelines for monitoring and review of inter-sectoral activities is glaringly absent.

In the last 3 years, there have been no formal orientation / sensitization regarding any of the mental health issues / concerns including screening for MNS disorders, counseling and rehabilitation of MNS disorders or human rights for judges and lawyers, police or teachers. An awareness programme was conducted under the aegis of Kolar Bar Association during the year 2012-13.

4.3.8 IEC / Health promotion
The following IEC activities have been carried out in the district in the last 12 months under the guidance of district mental health programme officer.

- Two awareness programmes in 2012-13 focused on general mental disorders and epilepsy
- Posters on tobacco were displayed as part of district level exhibition
- Lecture on mental health organized for lawyers, judges and health officials at district and taluk level on the occasion of world mental health day
- Of the 40 folk media programmes held last year, 2 focused on epilepsy and mental health

IEC materials like posters on tobacco, one poster on stress management displayed at district training centre. SNEHA clinic posters with a mention of the word ‘mental health’ are available in local language for use in the district. However the supply of mental health IEC is irregular.

From the discussions it was clear that IEC/ health promotion activities were limited as materials in local language were not available and no budgetary outlay was provided. The district IEC cell is yet to be functional. The district had a specific budget for IEC of Rs 1, 00, 000/- (rupees one lakh only) in mental health for 2012-13 under Zilla Panchayat funds. However this budget was not utilized due to the absence of any defined programmes.

4.3.9 Involvement and participation of professional bodies, NGOs, CBOs
4.3.9.1 Professional bodies
The local branch of the Indian Medical Association is actively involved in the continuing professional education and service delivery activities within the district.

4.3.9.2 NGOs / CBOs
There are 7 NGOs working in Kolar and the areas of work include special education and vocational training for those with intelligent deficiency, women in distress, counseling for marital problems, de-addiction services, etc.,

4.3.9.3 Civil society involvement
The members of civil society are not formally involved in planning or implementation of programmes/ services regarding MNS disorders. The involvement is infrequent and on an adhoc basis.

4.3.10 Monitoring and evaluation
There is no formal routine monitoring of the programmes as related to MNS disorders. The monthly collated statistics of the number who receive medication for psychoses, neuroses and epilepsy, apart from Mental retardation is sent to Directorate of Health Services, Bangalore.

4.3.11 Mental Health Research within the District
There is no database regarding research undertaken within Kolar district in the last 5 years regarding mental health. However, hospital based studies have been undertaken in the medical college.

5. CONCLUSION
The present review examined mental health systems in the district of Kolar (popn: approx 1.5 million), a non-DMHP (District Mental Health Programme) district by adapting the WHO-AIMS instrument and comprehensively documented the facilities and services for the functioning of the mental health systems. The number of formal health care personnel per lakh population is 81 as against the minimum desired of 250 (http://www.who.int/hrh/documents/JLi_hrh_report.pdf). In all there are 231 primary care settings and 46 secondary care and above facilities with a total bed strength of ~3000 for all the health problems in the district.

The mental health programme is being run as a subsidiary/ additional activity in the district and the mental health services are selective in type, limited in scope (predominantly psychiatric outpatient services with sparse counseling, de-addiction services) and grossly deficient in quantum (counseling, referral/ follow up, de-addiction and rehabilitation services).
There are no inpatient services for mental health in the public sector within the district. The needed medicines for mental and neurological problems are available, however, there are several instances of drug stock outs in various health care settings.

The existing manpower have not been either trained or sensitized for mental health care services during the past 5 years. Majority of mental health human resources are in the private health sector. While human resources are deficient, they are as yet unrecognized and under-utilized mental health human resources. A key lacunae is absence of a specific list of activities and defined roles and responsibilities of the different stakeholders (individuals and organizations).

With no dedicated budget head for mental health activities, deficiencies compound effective and efficient implementation of mental health services. The Information, Education Communication activities is more in its absence. Even the meager budget available remained unutilized for lack of guidelines. Health and Management Information System particularly for mental health has neither been delineated nor comprehensively defined. Though the different welfare and social security schemes of both state and central government are being implemented, there is no information regarding the total number of beneficiaries/potential beneficiaries in the district. The potential for inter-sectoral action has not been utilized and presently is a restricted activity undertaken at infrequent intervals with limited involvement of civil society and other professional organizations. Monitoring - evaluation and research activities are conspicuous by their absence.

The above paragraphs highlight the areas for intervention to improve mental health care in the district of Kolar. A set of 15 recommendations / possible set of activities have been mentioned in the beginning of this document. To start with, there is a need to identify the top 5 priority areas and integrate actions for their implementation. A multi-stakeholder group needs to deliberate, discuss and define the set of the activities that would be undertaken in the district.

6. NEXT STEPS

The CPH in Kolar district will focus on developing and strengthening service delivery and other activities during 2013-15. The major activities will be regarding identifying and managing depression, alcohol abuse, suicide prevention, epilepsy and facilitating rehabilitation services. However, CPH will not just focus on a disease specific approach but will strengthen systems in the areas of advocacy, capacity building, human resources, financing, integrating mental health in NPCDCS and NCPHE along with monitoring and evaluation. Essentially, public health approaches need to be incorporated and integrated into existing systems. Major focus in 2013-15 will be on training, integrating programs, developing information systems, undertaking IEC/ BCC activities and monitoring.

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