

Widening horizons: Adding quality (Strengthening Geriatric Mental Health Research and Services in India)

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ABSTRACT

Background: Ageing is inevitable and unavoidable. It brings various challenges with it. An aged person faces physical, mental and social problems. India crossed the mark of 7% aged population above 60 years, putting in the club of few countries which have such a big proportion of population in this age group. Various specialities were created based on gender or age group. Geriatric Medicine and Gerontology were the specialties, which laid down the foundation of health and medical care in the elderly. Various approaches were developed to take care of health of the older persons.

Summary: With the advent of technology and newer medical interventions, focus increased on various narrow domains of human body. Obviously, mental health became an important area of care, as numbers of older persons are increasing and their mental health domains are affected due to physical, physiological, pathological and social factors. Multi-pronged approach is required to manage mental health in older persons. The landscaping of pharmacological, immunological and technological interventions changed with time. Newer policies were developed and infra-structure created. India also saw paradigm shift in vision for the care of its older populations.

Key message: The psychological research facilities were created in few of the universities and colleges. Biological or molecular interventions were next areas of focus.

Next came the specialties of Geriatric Medicine and Geriatric Mental Health or Gero-Psychiatry. Many medical colleges started courses in Geriatric Medicine. From 2005 geriatric mental health became major area of action. Many more medical colleges and NIMHANS followed this trend and created Gero-Psychiatric or Geriatric mental Health facilities. Quite a large number of technologies have been identified and developed for older persons to support their mental health. Present paper looks into the various technologies, which may be very helpful in helping older persons to lead healthier and active lives.

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Introduction

Ageing is natural process which affects every system and organ in body. Among different kinds of health problems, mental health problems are more debilitating, disabling and stigmatised. The causes and outcome vary from person to person. Gender, education, poverty, financial security/resources etc. play a very crucial role in the maintaining mental health of the elderly. Imbalance among these factors can lead on to troubled lives. To create balance among risk factors is the challenge for the individuals, family & community members, service providers and planners. This requires multi-pronged and multi-disciplinary strategies. The present paper looks at the current demographic scenario, availability of resources and strategies for management of mental health problems among aged in near future.

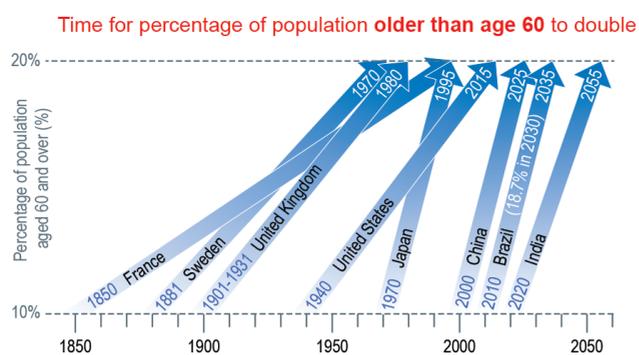
The older persons are different physically, physiologically, mentally, socially and economically from other age

groups. Researchers have proposed various mechanisms at genetic and epigenetic level, which damage or kill cells and lead on to ageing (1). Such mechanisms make them vulnerable to various health problems, especially mental health problems. Management of the health problems require different treatment modalities, family and social support and health infra-structure. Majority of older persons in age group of 60–75 years may not require any support from peer group, family members or medical professionals. They are healthy, productive, and contribute to the social wealth. However, the pyramid of health services or requirements changes with age or kind of problems they are suffering. India does not have the resources to take care of such conditions requiring constant services from medical or nursing professionals. However, the technologies can help such older persons in many ways with very less investment.



Demographic window

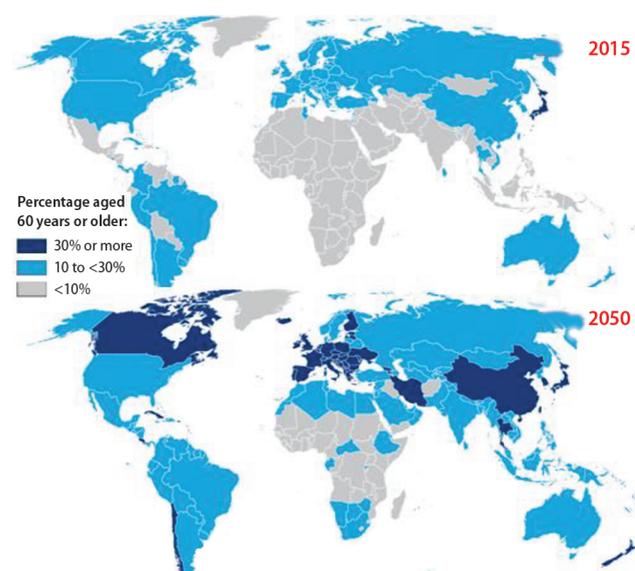
There is need to understand what is happening with facilities and provisions by governments as populations getting older is a recent phenomenon. As per WHO estimates, the number of older persons, 60 years or above will increase from 900 million in year 2015 to 2 billion by year 2050 (moving from 12% to 22% of the total global population) (1). In developing countries, current rate of population, ageing is faster when compared with the past. While the population of older persons doubled in a big span of 150 years in France, the pace of increase in older population in India, Brazil & China is much faster as they will face doubling of their older populations in just over 25 years and very little time to adjust and create appropriate facilities. It has been estimated that the population of older persons will cross children population by 2030. This will give us a 15 years 'Window of Opportunity' to adjust our health, economic and social policies to take care of our older persons. Population ageing happens primarily due to two key drivers. The first driver is decreased fertility rates, and the second driver is increased lifespan of people. Both these factors were supported by the improved health interventions and social security systems. The planners, policy makers and administrators need to plan how to use extra 20 years expected to be added in the life expectancy in next twenty years (2).



Source: WHO – Ageing and health report

Burden of mental health problems in elderly

Indian Council of Medical Research (ICMR) carried out two largest epidemiological studies in the urban and rural areas of Lucknow in North India using a sound methodology, which revealed that 17.3% urban and 23.6% rural older persons aged 60 years and above suffer from syndromal mental health problems and burden of sub-syndromal mental health problems was 4.2% in urban and 2.5% in rural areas. The average prevalence of mental health problems in both rural and urban communities was 20.5%. The current population of the older persons aged 60 years and above is estimated at 83.58 millions, out of which 17.13 million older adults are suffering from one or the other diagnosable mental health problems in India as per the past prevalence rate calculated under ICMR studies (3). The NIMHANS recently conducted National Mental Health Survey (NMHS-2016), which projected that mental health problems among elderly are of serious concern. Other notable finding of the NMHS-2016 was that Depression among elderly population was reported to be higher at 3.5% (4).



Source: WHO – Ageing and health report

Advancements in the gero-psychiatry in india

In India, there are very few organisations/institutes working in the area of geriatric mental health or Gero-psychiatry. First Department of Geriatric Mental Health was established at King George's Medical University, Lucknow. It started functioning on August 20, 2005. It was started with goals to provide specialty tertiary level clinical services to the older persons, to impart academic knowledge through advanced courses related to geriatric mental health care and carry out state-of-the-art research in the speciality of geriatric mental health. The Department

has been well recognised among the geriatricians, clinicians, researchers and mental health professionals. The Department is running community outreach programme to reduce the burden of care providers caring for the geriatric patients. Emergency and intensive care services are also available in the department. The department has also developed capabilities for capacity building of medical and paramedical professionals working for geriatric patients with mental health problems.

The vision of the department has fulfilled long felt need of psychiatric services for older persons. The creation of geriatric mental health department has led to cascade of clinical activities in India. The Centre for Advance Research, Training and Services (CARTS) in the department is a milestone in the

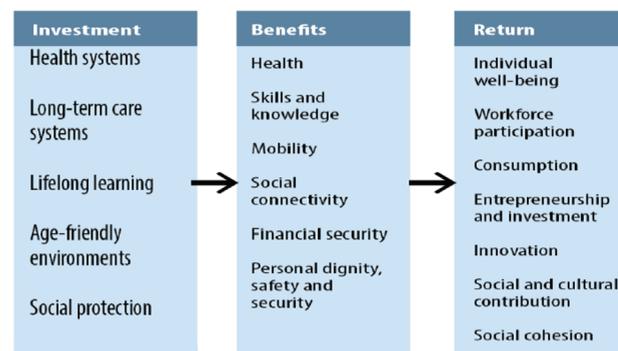


Source: WHO – Ageing and health report

field of Geriatric Mental Health Research in India. The data collected under Indian Council of Medical Research (ICMR) supported research projects was instrumental in designing health care services for older persons in the other state of our country. The professionals and researchers trained by this department are now serving in the different states of the country for the welfare of the older persons. In recent times, southern part of India, many initiatives have been taken like having day care centres, old age residential homes, memory clinics, telephone help-lines, counselling and recreational facilities but all of these are urban based and concentrated mainly in big cities (6). Due to increased number of patients from old age group in private sector, some of the psychiatrists have started practising as gero-psychiatrists (7). Similarly, the Department of Psychiatry, Govind Ballabh Pant Hospital, New Delhi started providing tertiary health care services to older persons who are coming from Northern part of India. In addition to general psychiatric care services, it provides specialised clinical services in child psychiatry, adolescent psychiatry, gero-psychiatric disorders, substance use disorders, obsessive-compulsive disorders and psychosexual disorders (8).

Managing mental health in old age

Risk factors responsible for the disturbed mental health of the elderly people are many, but gender, education, poverty, financial security/resources etc. play a very crucial role. The challenge for the service providers is to look at these risk factors holistically. This requires multi-pronged and multi-disciplinary strategies. Increased years in the life of an individual brings various new opportunities, not only for older person and their families, but also for communities as a whole. The experience accumulated over the years can be utilised for the betterment of our communities and societies. Added years provide the opportunity to pursue their long pending hobbies. The older persons, especially those between age group of 60-75 are relatively active and can explore newer business areas. They can teach values to younger generations as well as specialised courses also. Older persons can contribute to their families and communities in many ways. The extent of these opportunities and contributions depends heavily on their health. Healthy Ageing is an investment and any effort to achieve this should not be considered as burden. In reality, older people make many positive contributions to society; and health and social care expenditures for older people are an investment. These investments bring benefits to older people and returns for society as a whole. Inadequate nutrition makes older persons vulnerable to diseases, prolong recovery from illnesses and reduce quality of life. The reasons for this may be multi-pronged and should be targeted using different routes. There is strong link between diets and mental health, which has been established in various research studies conducted across the globe. Dietary interventions by developing diets with locally available cheap foods can help older persons in a big way. As evident from the diagram, the investments in health systems improve health and ultimately well being of individuals. Long-term care systems improve skills and knowledge, leading to workforce participation and saving precious resources from getting wasted. Lifelong learning improves mobility, social connectivity and increase investments in the areas of concern. Age-friendly environments provide financial security, supporting innovations. Such



Source: WHO – Ageing and health report

environments also help in creating personal dignity, safety and security of the older persons.

Priority areas for action

Comprehensive action is urgently required for the older persons based on public-health approaches. Although knowledge gaps are evident and visible, but there is sufficient evidence to act and plan strategies for the care of older persons. Every country can take certain steps irrespective of their current situation or level of development.

The researchers have identified four priority areas for action i.e. (i) re-orienting health systems to the felt needs of older persons; (ii) creating systems for providing long-term care; (iii) creating age-friendly environments which are accessible, equitable, inclusive, safe, secure and supportive; and (iv) improving identification or measurement of gravity of health problems, monitoring the services and understanding the action or activities which need modifications. Re-orienting means health systems should be geared up either by putting new strategies, policies and then implementing them through existing systems. There is also need for creation of new systems, which provide long-term care in form of hospitals, hospices or half-way homes. Overall social environments are required to be created where older persons are able to move around freely. The leisure and recreation spaces should be accessible by ramps, escalators or elevators. Transport systems should have easy accessibility with universal designs. These simple measures are expected to create better environments for the mental health of older persons.

Technologies are important tools to empower older persons. There are known barriers to the adequate use of technologies. Access to the internet is crucial as it provides easy availability of information. There is reduced awareness about the benefits of technology. The technologies useful for the older persons get inadequate marketing due to perception that they are not profit making. Assistive technologies have inappropriate or ill-fitting design, which lead to the under-utilization. Older persons have certain fears and anxieties regarding technology (5).

Geriatric care components need to be included in teaching curriculum of all the disciplines to like general physicians, psychiatrists, psychologists, psychiatric nursing and psychiatric social work. Government and private sectors do not have adequate secondary and tertiary health care services for the older persons, which should be strengthened. The post-graduate seats in geriatric medicine speciality and geriatric psychiatry super-speciality courses are absent in majority of medical colleges. Newer programmes should be started for sensitising general physicians and health workers, who can help in screening and appropriate referral services. An Indian Council of Medical Research (ICMR) task force project "Health Care of the Rural Aged", conducted in the Primary Health Centre area near Madurai documented that the training of medical officers was very helpful in managing mental health and other problems of the older persons (6). This model should be implemented across all health services in government sector.

Tele-health (Telephone, Video-conferencing, Video-phone, web based) has great potential for delivering education and sensitising caregivers. It can help in providing consultation to patients and caregivers. Tele-health services are useful for psychosocial/cognitive behaviour therapy, social support, data collection, monitoring, social support as well as clinical services. There is need to develop educational packages. The components of education packages may include Professional Guide (the details of management strategies). These packages may also display Educational Videos. The patients and caregivers should have options to use Online Chat Sessions with professionals, nursing staff and counsellors. Knowledge, resources, communication channels and social support should be imparted to the patients and caregivers through email and Message Boards, and a Resource Room to answer their queries and relieve their distress. Online psychosocial therapy can improve caregiving skills. Therapeutic sessions can be delivered via telephone or internet/intranet. Psychosocial therapy can be provided to the patients and their caregivers through problem-solving training. Caregivers should be empowered to cope with problems and make better decisions with problem-solving training. Technologies like videoconferencing and telephone can be used to deliver problem-solving strategies. Tele-health can be used to create online communities, which can help caregivers to exchange experiences with other caregivers. Regular interactive meetings can be organised via video- or tele-conferencing for sharing caregiving experience. Data collection can be done using audio-visual facilities. Dementia is most burdening condition for the caregivers. This condition can be monitored using technology, if the older person with dementia is living alone. PC-based video-conferencing is very useful method to extend Auditory-Verbal Therapy programme for older persons with hearing loss/presbycusis.

Assistive technologies (ATs)

Ageing process is associated with limitations of various bodily functions. They face decreased cognitive and communication capacities. WHO has published the list of various assistive technologies, which can help maintain their mental faculties. Mobile phones, tablets and voice enabled devices are of great help as we grow old. Specially designed gaming devices can maintain their memories, cognition and work as reminders. They help in maintaining the physical activity, which leads to further improvement in all other mental functions. India is heading towards a system, where the assistive technologies would be made available through health care settings. Various ministries and departments are collaborating in designing the systems and policies for this purpose. Ministry of Social Justice & Empowerment and Ministry of Health & Family Welfare initiated various legislative and supportive programmes like Integrated Programme for Older Persons, National Programme for Health Care of Elderly etc. Some schemes like ADIP under MoSJE envisioned provision of Assistive Technologies to the older persons. Research Scheme called "Technology Interventions for Disability and Elderly (TIDE)" under Department of Science & Technology promotes

applied/translational research and innovations in the development of assistive technologies for older persons and persons with disabilities (PwDs). Ministry of Electronics & Information Technology supports research in IT based devices for older persons. Digital India Corporation has developed few technologies for the older persons. Ministry of Social Justice & Empowerment has also launched "Accessible India" campaign to develop accessible buildings and environments. Indian Council of Medical Research has proposed a policy for assistive technologies, AT innovation centre and a list of assistive technologies, which can be provided to older persons within the health systems. The systems for provision and service providers will also be developed as per prevailing international policies and standards. Currently, professionals like Psychiatrists work under health, while therapists like orthotists, prosthetists, psychologists, speech therapists and occupational therapists work under Minister of Social Justice & Empowerment. This division creates confusion in the management of mental health problems using assistive technologies.

Way forward

Some milestones have been achieved, while still a lot more is needed to make the lives of elderly people more comfortable, enjoyable and happy. The actions are required in clinical, surgical, pharmacological, technological and financial sectors. General health care services should be integrated with specialised geriatric and mental health services, for effective use of the professionals working in cross-cutting areas. Door-step services for every health need of the elderly people and quality life should be the target of everybody working in this area. In the clinical field, pharmacological or surgical services/skills need to be adapted/modified for the care of elderly people. Psychological factors play most crucial role in the quality of life. Very simple techniques targeting psychological health of the elderly persons are very effective. Social networking through web, phone, schools, colleges or clubs can uplift the spirits of elderly people.

Innovative ideas can empower the economic status of the elderly people. Technological advances in every field has very positive role in the mental health of elderly people. Through tele-health (Telephone, Video-conferencing, Video-phone, web based), we can provide education, consultation, psychological therapy, social support, collection of data, and/or clinical care. Distance coaching becomes much wider and easier through telephone enabled modules. Therapeutic sessions can be delivered via telephone. Taking care of patients with altered/diminished memory requires specific care-giving skills. Different challenges are faced by the Caregivers during decision-making to take care of patients. Problem-solving training equips caregivers on how to cope with problems and quickly take better decisions. Caregiving puts lots of pressure in dealing with patients who require care on long-term basis. "We need to create societies with a social protection system

that allows people to contribute during their working life and have a pension at the end of that life. If we don't have that, it doesn't matter what type of family support you have."

India being the second largest country in the world with respect to its population it has huge potential of development of intervention modules. Some of the opportunities for research on caregivers include densely located large population with scope of easy availability of research universe, scope for newer intervention if identified at earlier stages, change which can be incorporated in their lifestyles for positive health, and diverse and varied morbidity profile (including nutritional and lifestyle) for different intervention strategies (8).

Some of the future areas of interest for the researchers could be "role of Gut Bacteria or Smokeless Tobacco in imbalancing mental health of elderly people". Researches done by researchers at top institutes have shown that ageing cause imbalance in the gut micro-flora. This leads to disruption in the processing of foods leading to certain deficiencies and metabolic disorders. Network diagrams developed within ICMR Data Management Lab have shown correlation of consumption of Smokeless Tobacco with various chronic diseases including severe mental disorders like schizophrenia (9).

Inter-departmental and inter-ministerial cooperation is required for optimum use of the resources. The schemes by one department are not known to other government departments. Research schemes also duplicate fundings, leading to unavoidable overuse of financial resources. A common platform for all research schemes can solve this problem. Just awareness and health education can make marked changes in the lives of older persons, as those who are aware can take evidence based decisions to create better environments.

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