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Population trends and public awareness of healthy and pathological ageing in India: A brief overview

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ABSTRACT

India is poised to experience dramatic shifts in the age and makeup of its population. Specifically, projections havehighlighted an increase in both the percentage of the elderly and those suffering from dementia-related disorders.Previous studies have examined the demographics of aging, its impact on the healthcare infrastructure and recommended policies to better cater to the elderly. This article focuses on a summary of these findings in relation to key stakeholders in the care of the elderly including mental health professionals, family caregivers, and public health officials. We broadly conclude that there exists a general shallow level of understanding of what constitutes pathological aging (i.e. dementia) across all stakeholders, and this creates a cascade of effects including delays in treatment seeking and barriers in conducting and having accurate demographic studies. Moreover, addressing this knowledge gap can help enhance communication between these three stakeholders in the hopes of the following: (a) increased education and awareness, (b) faster seeking of care, and (c) earlier diagnoses leading to better opportunities to collect accurate demographics of those suffering from dementia-related disorders.

1. General introduction

Globally, the number of older adults is expected to increase in the coming years (United Nations. Department of Economic and Social Affairs, 2007). The World Health Organization (WHO), in its *World Report on Ageing and Health*, reported that low-and-middle income countries (LAMICs) will experience an increasing burden from communicable and non-communicable diseases given the number of people reaching advanced ages (World Health Organization, 2015). Supporting this assertion, current forecasts indicate an increase in the proportions of the elderly in China, India and Latin America (World Health Organization, 2012). Moreover, the number of individuals suffering from dementia is projected to almost double every 20 years with the greatest proportion of those occurring in low and middle income countries (World Health Organization, 2012) (See Table 1 Refs: Wimo et al., 2013; World Health Organization, 2011). In particular, India, the focus of the present article, is estimated to have 3.7 million people over 60 years suffering from dementia (Shaji et al., 2010). In short, these projections highlight the potential impact India's growing elderly population will have on its existing and future healthcare infrastructure. The present article attempts to provide a succinct overview of our current demographic understanding of the older adult population in India, the extent to which this population segment and relevant stakeholder groups are aware of the differences between healthy and pathological ageing (defined here as dementia or Alzheimer's disease and related disorders), and a discussion of current gaps in the healthcare delivery and services to this growing population segment.

2. Nation-wide mental health profile

2.1. Ageing demographics in India

The Longitudinal Ageing Study in India was designed to comprehensively understand the economic, social, psychological and health aspects of ageing. Early results from this unpublished study suggest that the elderly in India are subject to a wide array of health, financial and social inequalities (Arokiasamy et al., 2011). Specifically, it is estimated that in 2021, 9.9% (133.32 million) of the Indian population will be aged above 60 years with this percentage projected to rise to 17.3% (300.96 million) in 2051. In the same year (2021), it is projected that 0.8% (10.75 million) will be aged 80 years and above with this number rising to 1.8% (31.98 million) in 2051 (Rajan et al., 2003). The increase

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Table 1
Percentage of population aged 60 and above, percentage of population with dementia, and the financial burden incurred from dementia care in the WHO's Southeast Asia Regional Office (SEARO) countries.

	% of population aged 60 and above*	Dementia rates/ population (in millions)**	Direct costs for dementia care (millions US$)**
Bangladesh	6	0.320	372.7
Bhutan	7	0.001	3.6
Democratic People's Republic of Korea	14	0.109	81.4
India	7	3.165	6094.6
Indonesia	9	0.703	1890.3
Maldives	6	0.0005	2.2
Myanmar	8	0.173	281.3
Nepal	6	0.058	59.8
Sri Lanka	12	0.098	309.1
Thailand	11	0.294	1197.2
Timor-Leste	5	0.001	1.5
China	12	6.692	23638.2

* World Health Organization (2011).
** Wimo et al. (2013).

in the overall percentage of the older adult population is also coupled with influences of other factors such as reliance of older adults on other family members for daily life activities, the reduction in the resources available for the elderly and burden of caregivers to support their ageing family members (Subaiya and Bansod, 2011). In the coming decades, India will experience an increase in the number of older persons, underscoring the need to enact policies to address this burgeoning segment of the population.

2.2. Burden of dementia

Paralleling a projected increase in the percentage of older adults is an expected increase in the percentage of adults diagnosed with dementia. A 98% increase in the number of individuals with dementia in developed countries is projected between the years 2001–2040; with this number ballooning to more than 300% among India and South-Asian countries (Ferri et al., 2005). It is estimated that between 2000 and 2050 the number living with dementia will be about 14.3 million (Shaji et al., 2010). Moreover, a number of epidemiological studies in India estimate the prevalence of dementia from 0.6–10.6% in rural areas and 0.9–7.5% in urban areas with a higher prevalence in women than in men (Shaji et al., 2010). One of the primary determinants for this variation was that caregivers in India were less likely to report cognitive decline or social impairments (10/66 Dementia Research Group, 2000). The 10/66 Dementia Research Group also examined these differences in epidemiological studies among the elderly in developing countries and mentioned that the use of the more restrictive DSM IV criteria may be responsible for the variations.

2.3. Mental health literacy levels

Mental health literacy- one's general knowledge and beliefs about mental illnesses, which assists in the prevention, detection, recognition and treatment/management of these illnesses (Jorm et al., 1997) is poor in India. Several obstacles prevent access to mental health services in India including the relatively small number of providers, fragmented systems of healthcare (Gater et al., 1991; Patel, 2009; Saraceno et al., 2007; World Health Organization, 2007, 2008) and poor awareness/ knowledge of mental illness (Kermode et al., 2010; Kermode et al., 2009; Thara & Srinivasan, 2000). Unfortunately, efforts to increase mental health literacy remain insufficient in India. The Indian Council of Market Research evaluated the District Mental Health Program and highlighted a need for robust and effective means for increasing awareness and reducing stigma (ICMR, 2009). The report, however, voiced that increasing awareness about mental illness necessitated substantial networking, co-ordination among various stakeholders and making good use of available funds. Loganathan and Kreuter (Loganathan and Kreuter, 2014) suggest disaggregating a heterogeneous population into more homogenous groups and then targeting these distinct sub-groups in the population, as an effective and cost-effective strategy for mental health literacy interventions in India. Consequently, it was recommended that scaling up mental health services should be accompanied by concomitant efforts to boost mental health literacy (Jacob et al., 2007; Trivedi et al., 2007). These facts are pertinent to awareness levels regarding mental health problems of the elderly too, and not just about general mental health literacy levels. The boost in the budgetary allocation of the new five-year plan could pave the way for better implementation of mental health programs and policy in India and indeed, better utilization of resources. As part of the program, a cost-effective way of increasing awareness related to mental health problems of the elderly could be to identify segments and sub-segments among this population for targeted communication (Loganathan and Kreuter, 2014) (see Table 2).

3. What do key stakeholders know about healthy ageing?

3.1. The general population

While evidence is limited, some have suggested that Indian health-care professionals possess a poor understanding of the ageing process (Gangadharan, 2003). From available evidence however, it is reasonable to assume a similar level of understanding amongst the general population who have not acquired medical expertise. To our knowledge, no study has examined the general population's awareness of healthy ageing. However, there is consistent evidence that the general population treats severe declines in cognitive function, specifically with reference to dementia, as a natural component of the ageing process rather than a deviation from healthy ageing. This is interpreted as resulting from insufficient levels of knowledge of the clinical profile of

Table 2
Key stakeholders and their expected target behaviors.

Key Stakeholder	Healthy Ageing	Dementia
Elderly Individuals	Healthy lifestyles practices, having peer groups, knowledge about the common diseases of the elderly	Awareness about dementia in general and role of modifiable risk factors in prevention of dementia
Health Care Professionals (Physician/ Nurse/Health worker)	Early detection and management of modifiable risk factors (hypertension, diabetes, smoking, hypercholesterolemia)	Identification and assessment of dementia; management and/or referral to appropriate higher centers
Caregiver	Awareness about old-age health problems, old-age pensions, health schemes for elderly, skills and attitude towards elderly	Empowerment with information, skills and attitudes for a deeper understanding about dementia
Policy Makers	Provide preventive, curative and rehabilitative services at national level (Implementation of NPHCE)*	Delineate legislation in consonance with UNCRPD**, provision of subsidized cholinesterase inhibitors, legal support for those with impaired mental capacity

* National Program for Health Care of the Elderly (NPHCE, 2011).
** UNCRPD (2007).