

### Elderly Mental Health in Developing Countries

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#### ABSTRACT

Geriatric Psychiatry deals with specific issues and challenges that arise in the assessment and management of mental health problems in elderly. As a specialty it has not received much attention in developing countries until recently. Elderly will soon be major consumers of mental health care in developing countries. Common psycho-social issues among the elderly and their impact on the mental health in the developing regions of the world and the complex interplay between physical health and mental health in the elderly are described. Dementia and depression are described in some detail focussing on relevant research to highlight the challenges in developing countries. Potential solutions to address the challenges of elderly mental health in developing countries are discussed.

**Key words:** Geriatric, elderly, mental health, developing countries, dementia, depression

#### INTRODUCTION

Geriatric Psychiatry is a relatively new sub-specialty that addresses the special needs of elderly with mental health problems. Significant differences exist between the general adult population and the elderly in the bio-psycho-social aspects of understanding mental health problems and their management. The complex interplay between the physiological and psycho-social aspects of normal ageing, the pathological changes due to disease processes, drug interactions, and the changes in the pharmacokinetics and pharmacodynamics of drugs in the elderly requires special understanding and training.

As a species we are living longer. For the first time ever in the recorded history of humans there will be more persons aged 60 and above than those under 16, by the year 2050.<sup>1</sup> It is expected that by 2050, persons over the age of 60 will constitute 22% of the total world population.<sup>2</sup> At present a large majority of persons (62%) aged 60 and above live in the developing world and it is expected that this proportion will rise to nearly 80% by 2050.<sup>3</sup> In India, the number of persons over the age of 60 years has tripled in the last 50 years and will continue to rise.<sup>4</sup>

The number of those aged 80 and above, termed 'oldest old' is also on the rise. At present around 66 million 'oldest old' live in the developing world and this is expected almost to double by 2030.<sup>5,1</sup>

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Our aim in this article is to highlight the issues specific to geriatric psychiatry in developing countries. We first provide a brief synopsis of special psycho-social issues commonly seen in the developing world that have a

bearing on the mental health of the elderly. We then discuss the nature of complex relationship between general medical conditions and mental disorders in elderly. We then focus on two common mental health problems of public health importance – dementia and depression – faced by the elderly in these regions. We conclude by suggesting potential solutions to address the needs of elders with mental health problems in developing regions of the world.

#### Psychosocial issues

The impact of migration and rapid urbanisation in developing countries is significant on the elderly. Changing attitudes towards elderly in these societies has to be understood to explain the context of emerging mental health problems and their care. The veneration and respect towards elderly has been reported to be on the wane in India<sup>6</sup> and more symbolic with negative stereotypes in East Asia.<sup>7</sup> Social isolation, disintegration of the joint family system, increased levels of dependency and elder abuse are important psychosocial issues that have a huge impact on the wellbeing of the elderly in developing countries.

Social isolation in elderly is often associated with adverse mental and general health outcomes. The "empty nest syndrome" though not peculiar to the developing world has a significant impact on the general health and mental wellbeing of the elderly parents. Miltiades<sup>8</sup> reported that the elderly parents of emigrants to the USA living in India were largely supported by paid help and that the extended family offered some support. Wang, Hu, Xiao and Zhou<sup>9</sup> in a community based study in rural China found that loneliness and depression were more severe in the empty-nest elderly. Evandrou, Falkingham, Qin and Vlachantoni<sup>10</sup> in their study in China found that the migration of adult sons increased the risk for chronic stomach and digestive diseases in elderly 'left-behind' by their sons.

The joint family system that has been the essence of social security for elderly since time immemorial in India and other agrarian developing countries has been disintegrating due to industrialisation, migration and urbanisation. This has a large implication on the life of elderly.<sup>11</sup>

The economic and social isolation has also resulted in the increased levels of dependency in elderly, especially among women. This could be due to longer life expectancy in women and also due to the fact that women are married at younger age compared to men resulting in a large portion of them being widowed.<sup>4,12,13</sup>

About 50% of elderly in India have experienced abuse personally, women (53%) slightly more than men (48%).<sup>14</sup> The sons and daughters-in-law are the main perpetrators of abuse in elderly in India. Increased dependency on others, lack of awareness about redressal mechanisms, fear of further abuse if their abuse is reported and sense of shame in the community are important reasons for elder abuse being under-reported.<sup>15</sup>

### General Medical Problems

General medical conditions are common in elderly. Certain illnesses like tuberculosis, type 2 diabetes mellitus and ischaemic heart diseases are increasingly common in developing countries. Many of these conditions are often associated with mental health problems. The association is often complex<sup>16, 17</sup> as described in the figure 1 below.

**Fig 1**

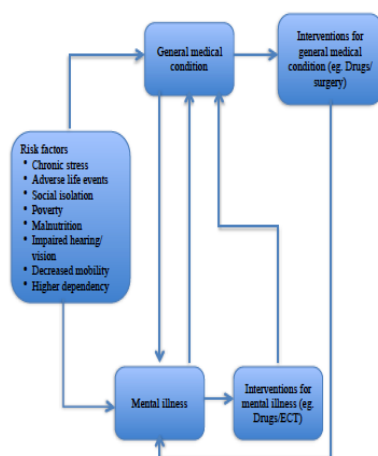


Figure 1: Association between general medical condition and mental illness in elderly

### Common mental health problems in the elderly in developing countries

#### Dementia

Prevalence of dementia is predicted to increase at an alarming rate in the developing regions of the world over the next few decades. At present about 63% of 50 million persons with dementia in the world live in the developing countries. As the rate of population ageing

is fastest in the low and middle income countries, most increase in the prevalence of dementia will occur in these regions. For the period 2015-2050, the number of persons with dementia will increase by three times in Asia and four times in Latin America and Africa. Compared to this during the same time frame, the numbers will increase by less than 2 times in Europe and about 2 times in North America.<sup>18</sup>

The treatment gap for dementia in India is estimated to be about 90%.<sup>19</sup> The situation may not be any better in other developing countries as well. The main reasons for such high levels of treatment gap are lack of awareness among general public and negligible availability of resources including human resource capacity.<sup>20,21</sup>

Dementia is a leading cause for disability and dependence in elderly across the world. The estimated cost for caring for a person with dementia in India is about INR 50,000 per year.<sup>22</sup> As dementia is a chronic degenerative condition, the care needs for persons with dementia will increase over time. Many persons with dementia will require social support and care such as day care facilities and supported residences with advancing illness. Unfortunately due<sup>3</sup> to lack of such specialised services in the developing world, more than 60% of cost of care for persons with dementia in these countries is spent in informal care provided by the families (includes direct care and opportunity costs due to loss of pay for the carers) and about 25% of cost of care is on direct medical treatments with less than 15% of the costs being spent on direct social care.<sup>18</sup> This places a considerable burden on the families caring for persons with dementia in developing countries.

#### Depression

Globally depression accounts for one-sixth of Disability Adjusted Life Years (DALY) in elderly.<sup>23</sup> There are many prevalence studies of depression in elderly in developing countries with relatively small sample sizes and considerable heterogeneity. In a large study Alvarado et al<sup>24</sup> found the prevalence of depression identified by Geriatric Depression Scale to be 16.5% to 30.1% in elderly women and 11.8% to 19.6% in elderly men in 6 cities in Latin America. Another large cross cultural study across Asia, Africa and Latin America interviewed more than 17000 community living elderly participants.<sup>25</sup> The prevalence of EURO-D depression varied between 1% in rural China and 38.6% in rural India. The prevalence of ICD-10 depressive episode ranged between 0.3% in rural China and 13.8% in Dominican Republic. The pooled prevalence estimate obtained by meta-analysis of data showed ICD-10 depressive episode to be 4.7% and EURO-D depression to be 18.2%.

Female gender,<sup>25,26,27</sup> not being included in major decisions by their families,<sup>26,28</sup> presence of multiple and chronic co-morbidities<sup>28</sup> lack of hobbies or work and decreased social connectivity<sup>29</sup> and recent bereavement of a close family member increase risk for depression in elderly.<sup>30</sup>

## **Recommendations to meet the needs of the elderly in developing countries with mental health problems**

Establishing comprehensive geriatric psychiatry services in all the regions in developing countries can be a challenge as this is resource intensive. Given the rising numbers of elders in developing countries and the expected increase in those with mental health problems, every country should be prepared to meet the challenges. If they do not make adequate preparations now, they will be overwhelmed in the near future. Some centres in the developing countries should aspire to establish training programmes to train specialists in geriatric mental health to manage more severe or challenging problems. These centres should remain as the “hubs” or “centres of excellence” to provide expert training and advice to other non-specialists. They should be involved in high quality research to understand the geriatric mental illnesses in their local regions and develop evidence base for interventions for local use. They should also guide the policy makers and ensure appropriate resources are allocated to implement policies.

The mh-GAP<sup>31</sup> (mental health Gap Action Programme) provides guidance on interventions for dementia, depression and other common problems in resource poor settings. Most of these services can be provided by existing health care professionals with some additional training. All stake-holders including private health care providers, non-government organisations (NGOs), non-for-profit organisations (such as Help Age or Alzheimer Societies), other action groups, residential care providers, home-care services, alternative health care providers, spiritual groups and any organisation involved in the care of elderly should be trained to sensitise them to common geriatric mental illnesses. Technology such as video-conferencing, electronic medical records and mobile phones can be used to train, supervise, support and monitor management of elderly with mental health issues in remote and rural regions of the developing world.

Developing countries also have the advantage of possessing a young workforce. This workforce should be prepared by skills development to cater to the needs of the growing elderly population. Training programmes in elderly care including basic personal care, mental health support and counselling, basic dementia care and advanced dementia care should be developed and run. Workforce planning, recruitment and retainment should be monitored closely. Monetary compensation for those working with the elderly should be attractive enough for them to join and stay.

In India, it is recommended that provisions for geriatric mental health services should be integrated with the ongoing National Mental Health Programme (NMHP).

<sup>32</sup> A successful community based Pain and Palliative Care Support programme is being run in Kerala, India.

<sup>33</sup> Shaji<sup>34</sup> has suggested that dementia care could be modelled along similar lines. As most care for elderly in developing countries is delivered by families, the focus should be on home based interventions and support for family caregivers. A study in Goa, India, that

used such home based interventions for caregivers of persons with dementia using primary care health workers showed promising results.<sup>35</sup>

Implementing interventions and programmes in resource restricted settings in developing countries needs special skills and innovative techniques. A national strategy providing policy and guidance is mandatory. Leadership, understanding of local cultural milieu, political acumen, engaging stake holders including the service users, recognising work force issues, knowledge mobilisation, employing collaborative strategies and using technology are important ingredients for successful implementation.

Many developing countries do not have a national strategy to address the needs of elderly with mental health problems. For example, in India the National Mental Health Programme<sup>36</sup> and the National Mental Health Policy<sup>37</sup> have minimal provisions for the elderly. The National Programme for Health Care of Elderly<sup>38</sup> does not focus on the mental health needs. The mental health needs of elderly appear to fall between two stools.

The Kyoto Declaration<sup>39</sup> suggests actions for the countries of the world to implement to improve care for persons with dementia. Of all the developing countries, only Cuba, Mexico and Indonesia have national dementia plans in place at present and about 20 other developing countries are expected to follow suit in the near future.<sup>40</sup> Any comprehensive national strategy should plan for current and future needs of the population to improve their quality of life and advocate human rights. It should promote awareness with an emphasis on prevention and early identification. It should also guide establishment and provision of clinical as well as support services at primary and specialist secondary care levels. This should include training of human resource. The strategy should also facilitate local research on dementia.

In summary, geriatric mental illnesses are on the rise in developing countries due to rapid ageing and other socio-economic changes. However, lack of adequate resources including human potential, limit establishment of specialist geriatric psychiatry services across the region. With limited resources, a few such specialist centres should be established which should train specialist work force and also guide policy development, knowledge mobilisation, research, implementation and monitoring. These centres should train and support non-specialists, use technology to deliver most of the services in the region and provide direct services only to those who need further specialist input. National strategies and policies should be developed to guide services. Local research should guide interventions and scientific principles should guide implementation and evaluation of such interventions. With adequate planning, allocation of necessary resources, effective implementation and monitoring the developing countries can pave the way for excellence in care for elderly mentally ill. After all, one thing we can all be certain of is that we will all age with time and some of us living in the developing regions of the world may be in need of these services in time!

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