

## Dementia and creative ageing health care policy

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Dementia and memory loss have a close association with diseases like Alzheimer's characterized by short term memory loss and repetitive questions whereas long term memory remains intact<sup>1</sup>. In developing societies like Pakistan Dementia associated with Alzheimer's and aging is considered a stigma. According to World Health Organization (WHO) there are 47 million suffering from dementia and the number is anticipated to cross the 75 million by the year 2030<sup>2</sup>. Increase in life expectancy (longevity dividend) due to improved healthcare is projected to increase the fiscal load on an overburdened healthcare system on account of dementia<sup>2</sup>. With the projected increase in global dementia population to 75 million in 2030, especially due to increase in ageing population in the developing low and middle income countries<sup>3</sup>, the estimated global cost on account of dementia will be two trillion US dollars<sup>4</sup>. According to Wimo et al, with a dementia prevalence of 38% in developed countries, resulting in consumption of 92% of costs for dementia, this has assumed importance as expected increase in life expectancy in developing countries will become a challenge<sup>2</sup>. Even more exacerbating is the fact that 50 % of dementia cases are being diagnosed in higher income countries while only approximately 10% receive diagnosis in low and middle income countries (LMIC's)<sup>5</sup>.

Engaging in mentally stimulating exercise, maintaining social contact, managing weight and heart ailments, exercising and seeking professional help for depression counter the deleterious onset of early dementia<sup>6</sup>. Physical activity induces positive changes in structure and function of the brain<sup>7</sup>. According to Lynette et al, though research indicates a relationship between depression and physical activity, however mechanisms are not clear with different hypothesis proposed by different authors like thermogenic, monoamine, endorphin, distraction and self-efficacy enhancement hypothesis<sup>8</sup>. However according to Delezie et al, a number of factors derived by muscles including an important mediator of central effect of exercise being BDNF which modulates transmission at the synapses, neurogenesis and memory function<sup>9</sup>. High levels of cortisol has been linked to brain shrinkage in regions that are important for memory. Research suggests that vascular disease damaging blood vessels has been witnessed in individuals suffering from depression and dementia and long term oxidative anxiety and inflammation are contributors to these disorders<sup>10</sup>. Generally speaking dementia is progressive yet timely detection and treatment including some drug and non-drug therapies for cognitive stimulation can improve an individual's quality of life (QoL)<sup>11</sup>. Addressing and managing dementia is not commonly done by the caregivers despite exhortations by the health experts as culturally visible attention is considered an obligation. Any shift of healthcare responsibility to the formal costly sector is expected to increase burden on community and state resources. Though dementia is progressive its timely diagnosis and management can improve quality of life as well managing fiscal load. Mobilizing the elderly and geriatric population beyond retirement to manage their financial needs is required and can also help counter onset of dementia.

The burden of longevity may make retirement unaffordable<sup>12</sup>. Employers fret about the encumbrance of overseeing an expanding number of older workers who cannot afford to retire when they want to, are less physically accomplished to take on certain tasks than younger colleagues, and are perceived as less adaptable to changes in work. With raising concerns about the affordability of retirees meeting their basic health needs Di Gessa et al in a study suggested that those who continue with paid work after their retirement age were more likely to have better health<sup>13</sup>.

A perception in Pakistani population is that dementia is a normal aspect of ageing resulting in delay in diagnosis. Memory loss is closely associated with dementia and a symptom that strikes one's mind when considering the diseases like Alzheimer's. However physicians now know that memory loss doesn't always occur in precisely the same way and difficulty in comprehending and producing language may be due to aphasia frequently seen in stroke victims.

Improved access to healthcare services and awareness of QoL practices has also resulted in "longevity dividend" in Pakistan<sup>14</sup>. The rise in the geriatric population is increasing the fiscal load on an overburdened health care system in Pakistan. Despite taboos on discussing health costs of the elderly a campaign is needed to stress that those past the retirement age be mobilized to manage their own financial needs and remain productive members of Pakistan's community. The first in the line of casualty of persons with the onset of aging and dementia is the job prospect<sup>15</sup>.

In Pakistan coming generations will be liable to support a rising number of retirees whether through taxation measures or increased pension contributions unless retirement ages are raised by adopting the retirement age prevailing in EU where it averages at 63 years raising additional concerns that younger people will face bleak prospects of employment<sup>16</sup>. Japan confronted with a longevity dividend launched Silver Human Resource Centers (SHRC) with a multi-generational approach to enable retraining of older workers, redesigning their work and fostering intergenerational harmony depicting increased wellbeing in male workers working at SHRC'S<sup>17</sup>. Pakistan can take a lead and formulate a legal and regulatory framework and environment to ensure older employees output and productivity is optimized. In Pakistan the retirement age varies markedly in public sector and no credible reason has been ascribed to this divergence. In order to prevent ageing inequality as embodied in OECD countries, Pakistan should formulate a Creative Ageing Health Care Policy blending the silver economy with a creative economy which will ultimately enable the sizable elderly and geriatric population of Pakistan to meet its healthcare requirements to a considerable extent.

The geriatric and ageing population is increasing in both developed and developing countries. There is a dire need at government level to formulate and implement through legislation or otherwise regulatory framework and Creative Ageing Health Care Policy in an enabling and conducive environment to ensure that the output and productivity of such a population is optimized to meet their healthcare requirements.

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