

Reflections on the Decade of Healthy Ageing (2021-2030) — are we ready ?

— Nandini Chatterjee

MD, FRCP (Glasgow), FICP

Professor, Department of Medicine,

IPGME&R and SSKM Hospital, Kolkata 700020 and

Hony Editor, JIMA

October 1st is being observed as the **International Day For Older Persons** since 1990, for about three decades. In this time frame, the elderly population of the globe has expanded exponentially. While in 2021, 1 in 10 people worldwide were aged 65 or above, in 2050, this age group is projected to be 1 in 6 people globally. There were nearly 138 million elderly persons in India in 2021 (67 million males and 71 million females) which is projected to increase by around 56 million elderly persons in 2031.

Population transformation is a reality in virtually every country in the world with increase in both the size and the proportion of older persons in the population. This is mainly due to the increase in life expectancy at birth that was reported to be 71.7 years on average in 2022, 25 years longer than that in 1950. Between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%. While this population ageing – started in high-income countries like Japan, it has now involved the lower resourced countries and by 2050, 80% of older people will be living in low- and middle-income countries.

Thus it is important that we introspect - how far are we successful in “Fulfilling the Promises of the Universal Declaration of Human Rights for Older Persons” which is the UN theme of 2023 .

Are we building an age friendly and inclusive society? Do the elderly have independence, participation, self - fulfillment, care and dignity?

The answer to this question is a dismal NO in most socioeconomic strata and population subsets. **Social awareness is the need of the hour** – which includes the younger generations most importantly as well as the physician community.

In order to realize the significance of protecting the health and wellbeing of the elderly population, it is imperative that we understand the changing physiology of the older persons and tailor our services as physicians according to their specific needs.

Geriatric Physiology :

Physiological changes occur in all organ systems with the passage of time.

Arteriosclerosis progresses while blood pressure increases and cardiac output diminishes.

The lungs show impaired gas exchange and a decrease in vital capacity.

The creatinine clearance decreases with age and so does the eGFR.

Altered hepatic drug metabolism and GI dysmotility are common in the elderly leading to altered bowel habits. Impaired glucose regulation occurs with age due to multifactorial pathophysiology and osteoporosis is a natural accompaniment caused by decline in bone mass.

The epidermis of the skin atrophies with loss of tone and elasticity, loss of muscle mass leads to frailty. Degenerative changes occur in many joints and this, combined with the loss of muscle mass, hampers the mobility and functional status of the older person.

These age related changes have significant bearing on Activities of daily living (ADLs) that are needed for basic self-care. Instrumental ADL (IADLs) are tasks that are physically and cognitively more difficult than self-care tasks and are necessary for independent living in the community. ADLs and IADLs are measures of disability and limitations of an elderly person in functioning in family and society.

Geriatric Morbidity Pattern :

Apart from the physiological alterations, elderly are prone to develop chronic diseases which often coexist and are interrelated – a phenomenon called multimorbidity. The list of common conditions i.e. Hypertension, heart disease, arthritis, cancer, chronic Kidney Disease, Chronic Obstructive Pulmonary Disease, Dementia, Alzheimer's Disease, diabetes, Osteoporosis and Stroke may occur in any permutation and combination and inevitably lead to polypharmacy and its inherent risks of drug related adverse events and interactions. Heart disease is by far the most common cause of death, followed by cancer. The five leading causes of death in the elderly - heart disease, cancer, stroke, chronic lower respiratory tract disease, and Alzheimer's disease - account for 69.5% of all deaths.

Geriatric Assessment :

In order to provide holistic patient care, a meticulous evaluation of the patient is necessary. However, comprehensive Geriatric assessment is a distinct field of its own that needs awareness and training on the part of the physician. This aids in the diagnosis, development of treatment and follow-up strategies as also management of long-term care needs.

The geriatric assessment differs from a standard medical evaluation by including nonmedical domains like functional capacity, quality of life and psychosocial issues.

It requires a multidisciplinary team to assess specific elements of physical health including nutrition, vision, hearing, cognition, fecal and urinary continence, and balance.

Well-validated tools and survey instruments for evaluating activities of daily living are available for comprehensive assessment – but it requires patience and commitment of the

assessor as well as consent and co operation from the patient or caregiver.

Geriatric Treatment Strategies :

The management protocols for elderly patients should also take into account of the fact that metabolism is altered which changes the pharmacokinetic and pharmacodynamic equations of commonly used drugs.

Drug dosages need to be individualized according to comorbidities present and a high degree of clinical suspicion is to be kept for detection of adverse drug reactions to avoid prescribing cascades.

Rational preventive programs of **diet, exercise and vaccinations** too are to be integrated with pharmacotherapy.

To conclude,

All older persons are not Super Agers, a term coined in recent years to designate healthy agers who in their 70s and 80s have the mental or physical capability of their much younger counterparts.

They are to be nurtured with dignity utilizing improved and targeted approaches that incorporate long-term and holistic care. Supportive empathetic environments induce elderly individuals to function better and maintain their independence as they age.

Older persons have the wisdom and experience that can contribute towards building up of a productive, peaceful and cohesive society. We must ensure their physical and mental wellbeing, active participation, and effective contributions to their environment through medical, social and workplace policies addressing geriatric issues.

FURTHER READINGS

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