Masala

THE INTERSECTION OF FALLS AND FRACTURES AND POOR VISION

Not falling and fracturing are an important part of ageing healthily. Falls prevention involves three main pillars—physical activity and exercise, management of vision, hearing and polypharmacy and lastly, management of the environment (home, office, etc.)

Intuitively, it is obvious that poor vision can cause falls and fractures, but the data have been inconsistent. A paper in *JAMA Ophthalmol*¹ has helped cement this association. Jung Yin Tsang and colleagues looked at 576 275 persons with either cataract, advanced macular degeneration (AMD) or glaucoma and matched them 1:5 with similar people without these vision problems. They found an increased risk of falls with cataracts (hazardratio [HR] 1.36), AMD (HR 1.25) and glaucoma (HR 1.38) with a similar increase in the risk of fractures.

Not only is this an individual problem, it is also a major public health problem. Shobhit Srivastava and colleagues in their paper in *BMC Ophthalmol*² found that 33.8% of men and 40% of women >45 years old within the Longitudinal Ageing Study in India (LASI) cohort had poor visual acuity, with worse numbers in the socioeconomically disadvantaged population. These high numbers underscore the challenges that older people are likely to face in India.

If you tie these two issues together, then in India, as people live longer and the population of those over 60 years keeps increasing, it will become increasingly important to adopt measures to prevent falls. Detecting and treating visual problems, many of which can be treated or controlled, unlike many other preventive measures, especially cancer-related, which have suspect utility, will become crucial.

THE INTERSECTION OF ORAL HYGIENE AND STROKE, CORONARY HEART DISEASE AND DEATH

On similar lines, Souvik Sen and colleagues³ looked at the relationship between those with dental caries and the risk of stroke, coronary heart disease (CHD) and death. They assessed the dental cohort of the Atherosclerosis Risk in Communities (ARIC) study and found that those with more than one dental caries had increased risk of stroke (HR 1.40) and death (HR 1.13), but not CHD events (HR 1.13) with a higher association in African Americans and an increasing risk with increase in the number of carious teeth. They also found that the use of regular dental care reduced the chance of caries.

Correlation does not imply causation and it is possible that those with poor health, which would have anyway increased risk of death, also had poor oral hygiene. Nevertheless, the paper does highlight the need for improved oral hygiene at a personal and population level.

If we look at the burden of poor oral hygiene in India, the looming public health problem seems unsurmountable. A study based on the LASI cohort⁴ showed that at least 77% of people above the age of 45 years have at least one oral morbidity (tooth loss, tooth pain, periodontitis or caries), with those above the age of 60 having a 3-fold increase in the incidence of oral disease

compared to those 45-59 years of age, while those above 75 years of age have a 6-fold increase.

It is imperative that people of all ages, but specifically older adults get regular dental checks done, to identify dental illnesses that can be cured, with the assumption that good oral hygiene is associated with good overall health. Hence the adage, 'your mouth is a mirror to your health'.

CLIMBING STAIRS

If there is one 'magic pill' in preventive medicine, it is physical activity in any form, at any time.

Climbing stairs is one such activity that can be incorporated into the daily routine, without the special effort that is needed to go for walks or runs or to the gymnasium.

Andrea Raisi and colleagues⁵ published an article on climbing stairs and the risk of major chronic diseases, using data from the UK Biobank. Of the 442 027 persons with data on climbing stairs, they found that those who climbed 15 flights of stairs (10 steps per stair) per day or more had a significant reduction in all-cause mortality as well as the incidence of multiple diseases such as heart failure, dementia and type 2 diabetes, compared to those who did not climb stairs.

This is the 2023 version of one of the first studies on the relationship between physical activity and increased healthspan and lifespan that Morris and colleagues⁶ described way back in 1953, 70 years ago. They showed a 90% less incidence of early mortality from coronary artery disease in bus conductors compared to bus drivers. Since London had double decker buses, conductors had to keep climbing up and down multiple times a day as part of their job, compared to bus drivers, whose job was sedentary. This study could have been replicated in Mumbai, but then we are like that only...little and poor research if at all, pretty much all over India.

It is important that all of us incorporate some form of physical activity into our lives, whether it is just being active within our daily routine or adding a dedicated activity routine. The least we can do is take the stairs instead of the lift as much as possible.

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