

Multimorbidity and Its Followers

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With the passage of time, there is a demographic shift toward an expanded elderly population. The combination of diminishing fertility rates and increased life expectancies has led to faster growth in the strata of older individuals. The United Nations Population Division has projected the proportion of older people over 60 years to be estimated to reach 21% by 2050.

Hand in hand with aging comes chronic noncommunicable diseases (NCD) that have common risk factors and genetic predisposition. The NCDs are characterized by slow progression and long duration. The most important chronic diseases include ischemic cardiovascular disease, cerebrovascular disease, chronic obstructive pulmonary disease, diabetes, and cancer, and they account for 74% of all deaths globally. It is also significant that there is a coexistence of several chronic disorders in the same individual leading to multimorbidity. The prevalence is around 43.6% and higher among women.

Multimorbidity leads to consultations with multiple physicians, each prescribing according to the guidelines for specific disorders. The end result is polypharmacy, which is commonly described as the concurrent use of multiple medications (>5 medications) in an individual, which may constitute a combination of prescription drugs, over-the-counter drugs as well as traditional medicines like ayurveda and homeopathy. However, it should be borne in mind that all polypharmacy is not undesirable. Appropriate drugs, which are indicated by evidence-based guidelines, are to be incorporated into a prescription for better patient outcomes and potentially inappropriate medications are to be deprescribed. The perils of polypharmacy in the aged may be cognitive impairment with the propensity for falls, urinary incontinence, and poor functional status. Various literature has revealed a higher risk of hospitalization and death in the elderly on polypharmacy.

The way out of this untoward set of iatrogenic consequences is a planned and supervised process of dose reduction or stopping of inappropriate medications called deprescribing, which is aimed at improving patient outcomes.

But this process is riddled with some inherent uncertainties and requires informed patient consent and mutual discussion with the patient or caregiver regarding the pro and cons. A meticulous review of the previous prescriptions looking for drugs to be avoided or given without indication as well as detecting adverse drug reactions or interactions is the first step. It is often found that the actual or potential harm of a drug clearly outweighs any potential benefit or it is a part of a prescribing cascade. At times drugs impose an unacceptable anticholinergic burden, which is linked to arrhythmias and mortality.

There are several tools for risk assessment, algorithms, and guidelines for deprescribing, which are extremely helpful for the

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implementation and modification of the regimen. However, this should be a gradual process with reassurance, close monitoring, and follow-up. Support, both psychological and pharmacological, is of vital importance.

Multimorbidity and polypharmacy are the biggest challenges of modern-day clinical practice. Lifestyle patterns, stress, and increased life expectancy will continue to enhance the risk of chronic afflictions as communicable diseases take a back seat. Logical, well-planned, and deprescribing seems to be the key to good health, but the determination of its benefits in terms of mortality and morbidity will require large randomized controlled trials. Awareness and motivation of physicians are also needed to convince the patient or caregiver. This is a two-way process where consent, reliance, and cooperation from patients are vital and are to be coupled with a patient and compassionate standard of care.

FURTHER READING

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