Geriatric medicine is a multidisciplinary subspecialty of family medicine and internal medicine that focuses exclusively on the healthcare and well being of senior citizens. In most industrialized, western countries, the proportion of elderly people has been rapidly increasing while birth rates have been stagnant or in decline. In the United States, 12% of the population is older than 65, and by some projections, this segment of the population will likely exceed 20% of the population by the year 2020. Additionally, there will be 80 million new retirees over the next 20 years as more members of the baby boomer generation reach retirement age. As medical treatments and technologies continue to improve, life expectancy will continue to rise. Over the last century alone, median survival for both males and females in the United States has increased by approximately 30 years.

With longer life expectancy, the odds increase of being diagnosed with complex medical conditions requiring more medications and doctors to manage these conditions. Also, as longevity increases, the risk of developing debilitating diseases such as cancers or kidney failure requiring dialysis increases. Additionally, many commonly prescribed medicines, though contraindicated in the elderly, are still routinely prescribed. Thus, the risk of developing severe and debilitating adverse medical outcomes in this fragile and vulnerable population is very high, and this partly explains why such a large proportion of healthcare resources are spent on the elderly.

Physiologic function of organ systems also declines with age, and this leads to decreased capacity of individual organs to fulfill their function, but organ system decline also leads to decreased functional reserve. Diminished functional reserve means that aged organ systems are not as capable of overcoming stress as are young organ systems. Over time, acute and chronic illnesses will further diminish functional reserve. Decreased functional reserve of the elderly is a very important cause of frailty. This is one of the reasons that most primary care doctors recommend yearly vaccinations. For example, if a frail elderly patient with poor heart, kidney, and lung function/reserve is infected with the influenza virus, the clinical consequences can be devastating, if not deadly. A healthy young person, on the other hand, who gets infected with influenza will recover relatively quickly, and usually without clinical consequences.

The combination of increased medical complexity and frailty usually leads to the addition of more medications, which in turn leads to an increased risk of adverse drug-drug reactions. Not only does the risk of adverse drug reactions increase, but many physicians tend to prescribe even more medications in a futile attempt to treat symptoms that are a result of too many inappropriate medications in the first place. A vicious cycle, also known as a prescribing cascade, is commonly created that becomes very difficult to break. Before long, medically complex elderly patients become even more vulnerable to developing further impairments, such as gait instability, falls, fractures, decreased mobility, skin ulcers, infections, cognitive impairment, delirium, depression, and ultimately, increased mortality.

Geriatricians are trained to treat medically complicated elderly patients using a global approach that encompasses aggressive disease prevention and addressing the social aspects of illness. The role of the geriatrician, therefore, is to coordinate and guide a team of professionals not only for the clinical management of acute and chronic disease, but also to optimize and maintain functional status, in a concerted effort to keep the patient out of the hospital and living independently and safely at home for as long as possible.

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