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Silver Stewardship

Humankind has been able, over the past century, to double its life expectancy¹. This has increased not only our total population, but also the proportion of elderly persons in the population. Increasing longevity exposes individuals to the degenerative diseases of old age. These impact quality of life, and may lead to disability as well as dysfunction².

This situation calls for enhanced focus on geriatric care. While geriatric medicine offers preventive and curative services to elderly persons, longevity and antiaging medicine (LAM) works to promote and preserve health. Emphasizing both esthetic and functional youthfulness, LAM complements and supports geriatric medicine by aiming to reduce the need for secondary and tertiary geriatric care services. LAM may also be viewed as a primary and secondary prevention strategy, designed to promote health and prevent complications of aging³.

The word stewardship has been used in multiple ways in medicine and health. Antibiotic stewardship, steroid stewardship, and insulin stewardship are notable examples⁴⁻⁶. The word silver, which alludes to ‘silver-haired’, denotes the elderly age group.

We use the term ‘Silver Stewardship’ to describe the practices and behaviors that help protect and promote health of elderly persons, while pre-empting and preventing disease and disability. Though there is no consensus on the age cut-off for geriatric and elderly persons, a threshold of 65 years is accepted by most researchers⁷. The physiological changes of aging, and their impact on health and function, however, begin much earlier. Silver stewardship, therefore, can be taken to mean care of all persons above the age of 40 years.

Silver stewardship is a multidimensional construct, which includes all aspects of health and happiness.

These are listed in Table 1. The table also lists a few of the commonly encountered diseases that are the focus of silver stewardship.

Table 1. Domains of Silver Stewardship

Domain	Description	Common conditions
Musculoskeletal	Maintenance of bone, muscle, joint health	Osteoarthritis, osteoporosis, sarcopenia
Metabolic and endocrine	Management of metabolic/endocrine dysfunction	Diabetes, dyslipidemia, hypertension, obesity
Medical and surgical	Management of comorbid illness	Heart disease, kidney disease, urinary complaints
Mirror-related	Optimization of dermatologic health, including hair nails, and esthetics	Hairloss, skin aging
Macho/maiden health	Optimization of genital gonadal and sexual health	Late-onset hypogonadism in men, menopause in women
Mitogenic	Early detection, management and prevention of cancer	Common cancers
Mental	Mental emotional and cognitive health	Depression, dementia
Multi-personal (social health)	Ensurance and strengthening of social connections	Social withdrawal
Monetary	Financial autonomy and stewardship	Financial ill health

As the world's population ages, the need for silver stewardship is bound to increase. A multifaceted concept, silver stewardship should be practiced by policymakers and planners, physicians and paramedical staff, pharmaceutical researchers, and members of the public alike. Within the medical fraternity, geriatric medicine, along with longevity and antiaging medicine, as well as endocrinology and metabolism, should take the lead in strengthening and supporting silver stewardship.

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Hypothyroidism Gestational and Pregnancy Outcomes

Hypothyroidism during pregnancy poses significant risks to pregnancy outcomes and is influenced by various factors such as maternal age, parity, gravidity, and thyroid hormone levels, suggests a case-control study from China published in the journal *Endocrine Practice*¹.

Our study revealed that the clinical features of patients with gestational hypothyroidism included age, gestational diabetes, gestational hypertension, gravidity, parity, spontaneous abortion, history of gestation, thyroid-stimulating hormone (TSH) levels, free triiodothyronine levels, thyroid peroxidase antibody (TPO-Ab) status, and free thyroxine levels. This study enrolled 298 hospitalized patients who had been diagnosed with gestational hypothyroidism between February 2021 and March 2023 as the study group. A group of 312 pregnant women without gestational hypothyroidism were randomly selected as controls. The clinical characteristics of the patients and risk factors associated with pregnancy outcomes were compared between the two groups.

The study found that several parameters differed significantly between the two groups of pregnant women, those with gestational hypothyroidism and those without. These parameters included age (≥ 30 years), gravidity (≥ 3), parity, spontaneous abortion, history of gestation (multiparity), gestational diabetes, gestational hypertension, thyroid hormones, TSH, and TPO-Ab.

Additionally, there were significant differences between the two groups in terms of pregnancy outcomes such as preterm delivery, premature rupture of membranes, placental abruption, postpartum hemorrhage, and pre-eclampsia.

Multivariate logistic regression analysis identified factors that had an impact on pregnancy outcomes in patients with gestational hypothyroidism. These were: Age (≥ 30 years), gestational diabetes, gestational hypertension, gravidity (≥ 3 times), spontaneous abortion, parity, history of gestation (multiparity), and positive TPO-Ab.

These findings highlight the importance of early detection and effective management of hypothyroidism in pregnancy. Regular monitoring and appropriate treatment based on thyroid function tests can mitigate the risks of adverse outcomes and ensure better health outcomes for both the mother and child.

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