Clinical Advances in Geriatric Psychiatry

A Focus on Prevention of Mood and Cognitive Disorders

Harris Eyre, MBBS[a,b], Bernhard Baune, MD, PhD[a], Helen Lavretsky, MD, MS[c,*]

KEYWORDS

• Late life • Psychiatry • Cognitive decline • Mood disorder • Depression • Prevention • Treatment

KEY POINTS

- World population aging in the twenty-first century is unprecedented in human history, and will place substantial pressure on health systems across the world with concurrent rises in chronic diseases, particularly cognitive disorders and late-life affective disorders.
- Prevention of mood and cognitive disorders is of utmost importance to reduce morbidity and mortality and the high costs of health care for both patients and society.
- Recent data and innovative preventive interventions involving lifestyle, resilience building, and complementary, alternative, and integrative medicine for treatment and prevention of geriatric mood and cognitive disorders are discussed.
- Current clinical challenges and future directions for research are addressed.

INTRODUCTION

The world's population is aging in the twenty-first century at a rate unprecedented in human history, and this will place substantial pressure on health systems across the world along with concurrent rises in chronic diseases. In particular, rates of cognitive disorders and late-life affective disorders are expected to increase. A recent global report[1] suggests that the proportion of older people (aged ≥60 years) increased

[a] Discipline of Psychiatry, University of Adelaide, 55 Frome Road, Adelaide, South Australia 5005, Australia; [b] Semel Institute for Neuroscience, University of California, Los Angeles, 760 Westwood Boulevard, Los Angeles, CA 90095, USA; [c] Late Life Mood Stress and Wellness Research Program, Semel Institute for Neuroscience, University of California, Los Angeles, 760 Westwood Plaza, Room 37-465, Los Angeles, CA 90077, USA
* Corresponding author.
E-mail address: hlavretsky@mednet.ucla.edu

Psychiatr Clin N Am 38 (2015) 495–514
http://dx.doi.org/10.1016/j.psc.2015.05.002 **psych.theclinics.com**
0193-953X/15/$ – see front matter

from 9.2% in 1990% to 11.7% in 2013, and will continue to grow as a proportion of the world population, reaching 21.1% by 2050. In tandem with aging, there are robust predictions suggesting that rates of age-related cognitive decline, dementia, and geriatric depression will increase, with serious consequences. As of 2013, there were an estimated 44.4 million people worldwide with dementia.[2] This number will increase to an estimated 75.6 million in 2030 and 135.5 million in 2050. The most recent data on geriatric depression[3] identified depressive disorders as a leading cause of burden internationally, and suggested major depressive disorder was also a contributor of burden allocated to suicide and ischemic heart disease. Depressive disorders were the second leading cause of years lived with disability in 2010.[3]

These large burdens of disease are met by modest efficacies of current therapies and poor access for many. Unfortunately for those with Alzheimer disease (AD), pharmacological agents temporarily treat symptoms without having an effect on the underlying pathophysiology of the disease.[4] In geriatric depression, a recent meta-analysis of clinical trials suggests a response rate of 48% and a remission rate of 33.7%, both very similar to response and remission rates found in adult patients.[5] Clearly innovative prevention and treatment strategies are needed.

Throughout health care, everything clinicians do should be aimed toward prevention. This approach ranges from preventing the onset of disease in those who are well, through preventing chronicity, disability, and other consequences of disease, to preventing relapses in those in recovery. When conceptualizing approaches in prevention science, the most commonly used models are those of the Institute of Medicine (IOM)[6] and the World Health Organization (WHO) framework of levels of prevention (ie, primary, secondary, and tertiary prevention).[7] A report from the IOM[6] suggests prevention may be directed toward the whole population (universal prevention), high-risk groups (selective prevention), or those with subsyndromal symptoms (indicated prevention). The WHO prevention framework[7] suggests primary prevention involves strategies aimed at preventing the development of disease; secondary prevention involves strategies to diagnose and treat existent disease in early stages before significant morbidity occurs; and tertiary prevention involves strategies to reduce the negative impact of existent disease by restoring function and reducing disease-related complications.

Fortunately, there are several innovative prevention and treatment strategies being developed. This article focuses on several key strategies that include preventive and treatment strategies coming from resilience-building interventions, and complementary, alternative and integrative therapies. Platforms such as telepsychiatry and Internet-based interventions are also promising mechanisms to enhance access to therapies. The latest clinical advances in geriatric psychiatry for the prevention and treatment of mood disorders and cognitive decline are outlined, followed by an exploration of clinically relevant scientific advances under way at present.

CLINICAL ADVANCES IN GERIATRIC DEPRESSION

Preventive Interventions for Geriatric Depression

This review focuses on the IOM framework of prevention comprising universal, selective, and indicated prevention.[6] A critique of prevention in geriatric psychiatry should focus on (1) feasibility, (2) effectiveness, and (3) ethical and economic considerations.[8] **Table 1** outlines these conceptual frameworks of preventive science, and gives clinical examples for the fields of geriatric psychiatry.

With respect to universal prevention, any universal preventive action for geriatric depression should be a “light” intervention in terms of cost, effort for patients, and