A United Nations report indicates that there will be an increase in the number of older adults during this century compared with the last century [1]. It is postulated that by 2050, the number of older persons in the world will exceed the number of younger adults for the first time in history. The percentage of older adults in the world will double to almost 21% over the next 40 years. Worldwide, the number of people who are aged 65 years and older will increase from 500 million to 1.5 billion over the next three decades.

**Growth of the elderly population with mental illnesses**

Current estimates indicate that one in five older adults experience some type of mental health concern [1]. In the USA alone, it is projected that the number of older adults with mental illness will reach 15 million by the year 2030 [2]. The most common psychiatric conditions seen in the elderly are anxiety and mood disorders [3]. The US National Comorbidity Survey found that among older adults, the 12-month prevalence was 7.0% for anxiety disorder and 2.6% for a mood disorder [3]. The lifetime prevalence of psychiatric disorders was almost 21% among older adults, with women being approximately 1.5-times more likely to have a psychiatric disorder as compared with men; 24.0 versus 16.7%, respectively. The prevalence of dementia is 5–7% in those over the age of 60 years [4]. There are an estimated 35.6 million people with dementia worldwide and their number is expected to nearly double every 20 years to 65.7 million in 2030 and 115.4 million by 2050 [4].

It has been projected that the number of older adults with substance use disorder will more than double from 2.8 million per year in 2006 to 5.7 million per year by 2020 [5]. The 2005 and 2006 US National Surveys on Drug Use and Health showed that among older adults, approximately 60% of subjects had used alcohol during the past year with 2.6% using marijuana and 0.41% using cocaine [6]. Among community-dwelling older adults in Canada, 3.3% of women and 0.8% of men met the DSM-IV criteria for benzodiazepine dependence within the past year [7].

Available data indicate that older adults with mental illness are living longer [8]. These older adults have significantly higher rates of medical emergency department...
visits and significantly longer lengths of medical hospitalization. They also have higher rates of comorbidities, including reported falls, and diagnoses of substance abuse and alcoholism. These differences remain significant even after adjusting for the comorbidity levels, lifestyle factors and attendance at primary care clinics.

Despite growing evidence that mental illness is common in older adults, these disorders are often under-recognized and undertreated in the aging population [9]. In one study only approximately 50% of older adults who had a diagnosable mental health disorder received appropriate treatment [10]. In older adults, untreated mental illness is associated with cognitive and functional decline, poorer general health, greater disability, poorer quality of life and increased mortality [9]. These older adults also have greater use of healthcare resources, increased placement in nursing homes and higher annual healthcare costs [11–13].

Evidence for using multidisciplinary teams in the continuum of care

On a review of evidence-based practices in geriatric mental health, Bartels et al. found a growing evidence base for the treatment of mental health disorders in late life [14]. However, when the investigators examined the data for the effectiveness of various models for service delivery they found that the body of literature was limited. In an excellent review on the effectiveness of mental health services for older adults, Draper found significant data in support for community-based, multidisciplinary, geriatric mental health treatment teams [15]. There were also promising data for the effectiveness of hospital-based geriatric mental health consultation liaison services [15]. However, there were no randomized controlled studies that examined the effectiveness of inpatient units or day hospital programs. The data for effectiveness of mental health services in nursing homes was inconclusive [15].

A systematic review of psychiatric outreach services that provide mental health assessment and treatment for older adults in their homes or communities indicated that there are limited data to support the effectiveness of outreach services [9]. A systematic literature review indicated that controlled data for the effectiveness of acute hospital treatment of older people with mental disorders are limited, but lower quality data were consistently positive for the effectiveness of such services [16]. A review by Bartels et al. indicated that only a few studies have examined the outcomes of mental health services in nursing homes [17]. Although the data were not controlled, the outcome studies indicated that optimal services are those that are interdisciplinary and multidimensional, and the most effective interventions combine innovative approaches with provision for education, training, consultation and feedback on clinical practices.

A review by Moak indicates that among the innovative models that have been studied for improving healthcare delivery to older adults with mental health issues, collaborative care is a promising model [18]. Collaborative care involves the colocation of mental health services within primary care settings and active interactions between primary care clinicians and the mental health providers. Collaborative care has demonstrated effectiveness in the treatment of depression, anxiety, suicidal ideation, at-risk drinking, and also behavioral and psychological symptoms of dementia in older adults. This model of care has been well accepted by older adults and appears to be cost effective.

The data for the use of multidisciplinary teams in the care of older adults are growing. In a study by Collighan et al., the investigators found that the accuracy of psychiatric diagnoses made by community psychogeriatric teams operating a multidisciplinary assessment procedure was as good as those made by a research psychiatrist [19]. A prospective interventional study indicated that using a multidisciplinary team in an acute care hospital was helpful in reducing the number of potentially inappropriate medications and prescription omissions in older adults who were admitted to the facility [20]. A recent randomized multicenter nursing home trial indicated that a multidisciplinary care program was helpful in reducing the prevalence of depression in nondemented nursing home residents [21].

Continuum of care is achieved by bridging different elements in the healthcare pathway, for example, across different episodes of illness, interventions provided by different providers or changes in the status of the illness [22]. Continuum of care involves three basic elements: informational, management and relational. The importance of each type of continuity differs according to the providers and the context of care. Continuum of care is expected to maintain patient values, sustain relationships and maintain plans of care. For the continuum of care to exist, the care must be experienced as being connected and coherent.
It is postulated that the use of multidisciplinary mental health teams in the continuum of care allows for professionals from different disciplines to practice together within the framework of their respective scopes of practice while encouraging both independent and cooperative decision-making [23]. There is some evidence that collaborative services appear to provide more integrated patterns of working, especially with managerial arrangements and in the location of staff [24]. However, there was no evidence of its impact on integration, assessments, and referral and medical screening outcomes [24]. A survey indicated that the formal multidisciplinary team continues to be the favored organizational model in the care of older adults with mental illness [25]. However, it is unclear if the nature of the multidisciplinary team is changing where there is blurring of traditional professional boundaries. There is also the difficulty in delineating the optimal balance between specialist and generic roles in such a highly skilled and complex service area. A recent systematic review also indicated that there is limited evidence for the effectiveness of many of the core attributes for multidisciplinary teams [26].

**Future planning**

The population of older adults with mental illness is growing rapidly. There is evidence that the lack of appropriate diagnosis and treatments can lead to significant morbidity and mortality in this population. As the rates of medical and psychiatric comorbidities are high and the healthcare outcome poorer in this population, an integral part of their care package should be the integration of multidisciplinary teams throughout the continuum of care. Available data indicate that there is limited, although emerging, evidence for the use of multidisciplinary teams in the continuum of care for the treatment of older adults with mental illness. The completion of larger, well-designed studies that evaluate the effectiveness of different healthcare delivery models for the elderly with mental illness will enable us to optimize the use of precious healthcare resources and provide much needed services for these vulnerable individuals.

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**Website**