CSWE COUNCIL ON SOCIAL WORK EDUCATION

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GERIATRIC SOCIAL WORK INITIATIVE • *Funded by The John A. Hartford Foundation*

MENTAL HEALTH AND OLDER ADULTS

CHAPTER 4: SCHIZOPHRENIA IN OLDER ADULTS

Stanley G. McCracken and Zvi D. Gellis*

Profile

- Purpose: To teach master's-level direct practice social work students about schizophrenia in older adults.
- Audience: Masters-level social work students.
- Audience Size: Maximum 40.

Content

- Core Values
  - To recognize and treat older adults as people first.
  - To understand that older adults have goals and desires just like younger people, which may include independent living, meaningful and enjoyable activities, and mature relationships, and that they also have the capacity to learn, grow, and achieve these goals.
  - To foster and promote the understanding that older adults deserve courtesy, respect, and dignity in all interactions.
  - To provide a safe, caring environment in which to live.
  - To advocate for evidence-based interventions and services that are sensitive to diversity.
  - To attempt to change the environment to meet the resident's needs.
  - To make every effort to support attempts to build and maintain skills and promote independence.
- Informational Competencies
  At the end of this module, students will know:
  - That the prevalence of schizophrenia varies greatly according to setting.
  - That psychotic symptoms can be produced by a number of different conditions.

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- The differences between early, late, and very late onset schizophrenia.
- That early onset schizophrenia has a number of different patterns for the course of the illness over time.
- That antipsychotic medication is effective in treating schizophrenia, but that no one drug or category of medication has proven more effective than any other.
- That conventional and atypical antipsychotic drugs have different profiles of side effects and risks.
- That there is less research on non-pharmacological treatments for schizophrenia than there is for pharmacological interventions.
- That most non-pharmacological interventions used in treatment of older adults with schizophrenia are extensions of practices used in younger individuals.
- That cognitive behavioral therapy, social skills training, and individual placement and support all have some evidence supporting their effectiveness with older adults with schizophrenia.

Time Needed:

45-80 minutes, depending on class size and time spent on exercise.

Training Format:

Didactic lecture, exercises.

Equipment

Chalkboard, flipchart, or dry erase board with markers.
LCD projector & laptop computer.

Slides

PowerPoint slides (see separate file).

Literature Review

Review of the literature (see separate file).

[Note about language: In this module we will use the language recommended by the International Late-Onset Schizophrenia Group (Howard, Rabins, Seeman, Jeste, & the International Late Onset Schizophrenia Group, 2000) in referring to the age of onset of symptoms of schizophrenia: Earlier Onset Schizophrenia (EOS), prior to age 40; Late Onset Schizophrenia (LOS), onset

from 40 to 60; Very Late Onset Schizophrenia (or Schizophrenia-like Psychosis, VLOS), onset after age 60.]

Epidemiology of Psychotic Symptoms in Older Adults

- The prevalence of psychotic disorders, specifically schizophrenia and schizophreniform disorder, is low among adults over 65. However, the prevalence of psychotic symptoms is high.

The prevalence of psychotic disorders among the elderly ranges from 0.2% to 4.75% in community samples, to 8% to 10% in geropsychiatry units and nursing homes (Zayas & Grossberg, 1998). The epidemiologic catchment area (ECA) study data showed a 0.2% point prevalence and 0.3% lifetime prevalence among adults over 65 (Keith, Regier, & Rae, 1991). Note that the ECA study did not include individuals with onset of symptoms after 45. More recent estimates place the true prevalence of schizophrenia at about 1% among older adults; stated another way, apparently 13.6% of people with schizophrenia are 65 or older (Cohen, 2003). However, the prevalence of psychotic symptoms varies among different populations and settings. Ostling and Skoog (2002) found that 10.1% of their sample of community-dwelling non-demented adults over 85 experienced psychotic symptoms, most of which were associated with depression, disability in daily life, and visual deficits. Psychotic symptoms among individuals with dementias can be over 60% (Zayas & Grossberg, 1998).

- Psychotic symptoms in the elderly are more often associated with the presence and treatment of medical conditions, dementia, and other organic changes, and mood disorders than with psychotic disorders.

Psychotic symptoms also can be produced by a number of different medical conditions and their treatment: e.g., delirium; sensory impairments; drugs and medications; medical and surgical procedures; and neurological, infectious, metabolic, and endocrine disorders (Desai & Grossberg, 2003). Even in a specialty geropsychiatry clinic, the majority of older adults presenting with psychotic symptoms are diagnosed with dementia, major depression, delirium, and organic psychoses related to medical conditions and treatment (Holroyd & Laurie, 1999).

- When an older adult experiences psychotic symptoms, perform a differential diagnosis to identify the reason for symptoms and to rule out/identify medical and pharmacological precipitants of these symptoms.
- Determining the etiology of psychotic symptoms in elderly individuals (see decision tree below). A number of the steps involve medical determinations that must involve a physician to determine etiology of the psychotic symptoms.

- Take a thorough history to determine whether the individual has experienced psychotic or other psychiatric symptoms, has had a current or prior psychiatric diagnosis or treatment, or has a family history of psychiatric problems (e.g., psychotic or mood disorders, suicide, dementia). Take history from the individual and one other person who is quite familiar with him or her.
  - The initial purpose of assessment: determine nature of symptoms, when they started and relationship with any stressors, and the degree of impairment and distress that they are causing.
  - Gather information on use of prescribed medications, alcohol and other non-medical drugs, over-the-counter drugs, and herbal preparations.

Cognitive impairment is associated with schizophrenia; however, the progression of cognitive decline in an aging individual with schizophrenia parallels the decline seen in normal aging. Significant cognitive decline should raise the index of suspicion about the presence of dementia, which may be comorbid with another psychiatric disorder. Recent changes in orientation, awareness of the environment, or ability to attend indicates the possibility of delirium (Desai & Grossberg, 2003).

Older Adults with Early Onset Schizophrenia

- Two conflicting historical views of EOS: 1) schizophrenia has a course that is chronic and, if not deteriorating, is stable and usually nonremitting; 2) positive symptoms (such as hallucinations and delusions) "burn out" over time and are replaced by increasing negative symptoms (such as reduced affective experience and expression and reduced verbal output).
- Research has found a wide variety of outcomes among individuals with EOS:
  - A substantial proportion of individuals recover over time.

Harding (2003) reviewed 10 long-term (>20 years) longitudinal studies looking at recovery from schizophrenia over time. From the methods reported in these studies, it appears likely that the majority of the subjects in the studies would meet DSM-IV criteria for schizophrenia. The rate of recovery or significantly improvement ranged from 46 to 84% for clinical recovery and 21 to 77% for social recovery; thus, there is considerable variability in the rate of recovery, particularly for social/functional recovery. Findings from these 10 long-term follow-up studies challenge the notion that schizophrenia has a chronic, deteriorating course with little hope of recovery.

- There is a wide variety of symptom patterns among individuals with EOS, much of which depends on whether the sample was from the community or institutional settings.
- Data suggest that positive symptoms either decrease or remain steady over time and that negative symptoms may increase over time.
- Symptoms of verbal disconnections (disorganized speech) decrease over time, while symptoms of verbal underproductivity (alogia) increase over time. This implies that positive symptoms do not necessarily decrease over time—individuals just may no longer talk about these symptoms.

Studies of individuals with chronic symptoms or who require hospitalization due to exacerbation of symptoms have shown that positive symptoms of schizophrenia continue throughout life (Davidson et al., 1995; Harvey et al., 1998). Davidson and colleagues (1995) found a linear decrease in severity of positive symptoms from ages 25 to 95, but individuals over 65 years old continued to experience significant psychotic symptoms. The researchers also found an age-related increase in severity of negative symptoms and cognitive impairment, and a positive correlation between negative symptoms and cognitive impairment. Harvey et al. (1998) found that cognitive impairment was a stronger predictor of adaptive functioning than either positive or negative symptoms across individuals from nursing homes, long-term hospital settings, and the community; and this was true across all levels of severity of the illness. Data from community-dwelling older adults with schizophrenia suggest that there are a number of individuals who have significant levels of positive symptoms that are stable over time (Harvey, 2005).

- Cognitive impairment. Some studies show abnormal cognitive decline, whereas others show rates of decline associated with normal aging. Impaired social functioning and adaptive functioning are strongly associated with cognitive impairment, weakly associated with negative symptoms, and not associated with positive symptoms.

Studies showing cognitive decline have mostly been conducted in individuals over 65 with a chronic course of institutionalization and living in hospitals or nursing homes at the time of the investigations. Data indicating less evidence of cognitive decline (i.e., no more than would be associated with benign aging) have typically included younger, community-dwelling individuals with no evidence of chronic institutional stays and a better lifetime course of the illness (Harvey, 2005; Kurtz, 2005). Deficits in social and adaptive functioning are most strongly associated with cognitive deficits, only weakly associated with negative symptoms, and not associated with positive symptoms; furthermore, functional deficits tend to be preceded by deficits in cognition (Friedman et al., 2002; Harvey, 2005).

- One should expect a large cohort effects among older adults with schizophrenia. Each successive 10-year age cohort is more likely than their predecessor to have been treated with antipsychotic medication early in the course of their illness and more likely to have received atypical antipsychotic medication. The effect of this remains to be seen.

Late Onset and Very Late Onset Schizophrenia

- Research in this area is limited by the fact that, in the absence of treatment records, it is difficult to reliably determine the age of onset of symptoms of schizophrenia. Common unawareness of the illness along with memory impairments make retrospective judgments about the timing of symptom onset suspect.
- There also are a number of terminology problems when examining the literature.

The DSM-III prohibited a diagnosis of schizophrenia if the onset of symptoms was after age 45, and DSM-III-R provided a specifier to be used for onset after 44 (American Psychiatric Association [APA], 1980, 1987). Estimates are that 15-20% of individuals with schizophrenia have onset after age 44 (Folsom et al., 2006). Thus, the vast majority of older adult clients with schizophrenia will be among those with EOS. The term paraphrenia (experiencing hallucinations and delusions in the absence of functional deterioration or disturbance of affective response, and showing abnormal pre-morbid personality and social functioning; predominantly found in women) was included in the ninth edition of the International Classification of Diseases (ICD-9, 1980) (Howard et al., 2000). Neither the current edition of the ICD (ICD-10) nor that of the DSM (DSM-IV-TR) provides a separate code for late onset schizophrenia (World Health Organization [WHO], 1992; APA, 2000).

- Compared with EOS, later onset is characterized by:
  - Greater prevalence of visual, tactile, and olfactory hallucinations; persecutory, partition, reference, control, and grandiose ability delusions; and third-person, running commentary and accusatory or abusive auditory hallucinations.
  - Lower prevalence of formal thought disorder and affective flattening or blunting.
  - Risk factors: lower familial prevalence, female gender, cognitive impairment, and possibly sensory impairment.

Later onset is characterized by greater prevalence of visual, tactile, and olfactory hallucinations; persecutory, partition (belief that people, animals, materials or radiation

can pass through a structure that would normally constitute a barrier), reference, control, and grandiose ability delusions; and third-person, running commentary and accusatory or abusive auditory hallucinations. There also is a lower prevalence of formal thought disorder and affective flattening or blunting. Both formal thought disorder and negative symptoms are very rare in onset after 60 (Almeida, Howard, Levy, & David, 1995; Howard, 2001; Howard, et al., 2000; Palmer, McClure, & Jeste, 2001). Individuals with LOS and particularly VLOS appear to have a reduced prevalence of schizophrenia among family members, compared with individuals with EOS (Howard, 2001). Other risk factors for later onset schizophrenia include female gender, cognitive impairment, and possibly sensory impairment (Wynn Owen, & Castle, 1999).

Treatment of Schizophrenia in Older Adults

Pharmacological Treatment

- Overall, the literature suggests the following:
  - Antipsychotic medication is effective in reducing psychotic symptoms in older adults with schizophrenia.
  - Apparently, no drug or category of drugs is any more effective than any other.
  - Adverse effects differ between the typical and atypical medications with typical medication having increased extrapyramidal symptoms (EPS), particularly tardive dyskinesia in older adults, and atypical medication having increased risk of elevated glucose and tri-glycerides; however, risk of death is not higher for users of atypical antipsychotic medications than for users of ones.
  - Doses may need to be lower among older adults, particularly among individuals with later onset of the disorder, and should be increased gradually.
  - Medication management of older adults should be individualized due to differences in how drugs are metabolized and to the potential of concurrent medical conditions to cause or exacerbate harmful effects and the potential of drug interactions with medications used to treat these concurrent conditions.

A review of 14 studies suggests that both typical and atypical antipsychotic drugs are effective in relieving symptoms of schizophrenia in older adults. Some studies found that atypical antipsychotic drugs were slightly more effective than typical drugs at reducing positive, negative, and affective symptoms, and that they had reduced parkinsonism, EPS, and other side. Other studies did not find differences between

atypical and typical antipsychotic drugs; and Van Citters and colleagues noted methodological limitations in the studies that did find a difference between atypical and typical antipsychotic drugs (Van Citters, Pratt, Bartels, & Jeste, 2005).

Gareri and colleagues (2006) examined adverse effects of nine atypical antipsychotic medications (including a number that are not available in the U.S.) in older adults with dementia or psychotic disorders. Although they noted a reduction in EPS, compared with typical antipsychotic medications, they also noted increased plasma glucose levels in individuals with or without a history of diabetes, elevated triglycerides, and increased risk of death with some of the atypical antipsychotic drugs. Jeste and associates (2005) also reviewed the literature on use of atypical antipsychotic drugs in older adults with dementia or schizophrenia. They reported that while trials involving older adults with schizophrenia have found that atypical antipsychotics are associated with improvements in psychopathology, it is not clear whether differences in efficacy exit among the different medications (Jeste, Dolder, Nayak, & Salzman, 2005). The Agency for Healthcare Research and Quality (AHRQ) released a report looking at the comparative safety of typical and atypical antipsychotic medications based on data gathered in British Columbia (Schneeweis, Setoguchi, Brookhart, Dormuth, & Wang, 2007). Among a mixed group of older adults (including individuals with dementia, mood disorders, psychotic disorders, and comorbid medical conditions), use of atypical antipsychotic medications was not associated with a higher a mortality rate compared with use of typical or conventional antipsychotic medications.

Psychosocial Treatments

- Far fewer studies have examined the effectiveness of non-pharmacologic treatments of schizophrenia in older adults, compared to pharmacological treatments.
- Cognitive behavioral treatment (CBT), social skills training (SST), and a combined skills training and health management interventions:
  - are well tolerated,
  - have low dropout rates,
  - are associated with positive outcomes, such as reductions in positive symptoms and depression; improved social and community functioning, cognitive insight, and independent living skills.
- Social skills training targeting instrumental skills, such as riding public transportation, improves everyday living skills among Latino older adults.

- Individual placement and support (IPS) is effective in producing paid and volunteer work among middle-aged and older adult veterans with schizophrenia.

Van Citters and colleagues (2005) reviewed five studies that investigated three manualized, psychosocial interventions developed for older adults with psychotic symptoms and disorders. These included a combined skills training and cognitive behavioral intervention (Cognitive Behavioral Social Skills Training, CBSST), a social skills training program (Functional Adaptation Skills Training, FAST), and a combined skills training and health management intervention for community-dwelling older adults with serious mental illnesses (ST+HM). These interventions were well tolerated by the participants, had low dropout rates, and were associated with positive outcomes such as reductions in positive symptoms and depression; and improvements in social and community functioning, cognitive insight (insight about delusional beliefs), and independent living skills (Van Citters et al., 2005). CBSST and FAST are listed in SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP, http://www.nrepp.samhsa.gov/).

The FAST program was used as the basis for a group intervention targeting areas, such as public transportation, that had been identified as being problematic for middle-aged and older Latinos (Programa de Entrenamiento para Desarrollo de Aptitudes para Latinos, PEDAL). Individuals treated with PEDAL performed better on measures of everyday living skills at post-treatment and at 6- and 12-month follow-up sessions, but there was no change in their psychopathology (Patterson et al., 2005).

To evaluate the success of providing work for persons with schizophrenia, Twamley and colleagues (2005) compared data from three groups of middle-aged and older veterans with schizophrenia: participants in a VA Wellness and Vocational Enrichment Clinic (WAVE), participants in Department of Rehabilitation/Education Services (DOR), and participants in Individual Placement and Support (IPS). The researchers found the following rates of paid or volunteer work among the groups: IPS, 81%; WAVE, 44%; and DOR, 29%. IPS clearly performed significantly better than WAVE and DOR, but the difference between the latter two approaches was not significant.

- A review of the behavioral and cognitive behavioral literature that includes older adults with severe mental illnesses (including but not limited to schizophrenia) suggests the following principles (Liberman, 2003):

- Biological and psychological interventions should be integrated, personally relevant goals and quality of life should be seen as more important than syndromal definitions of the disorder, and multimodal treatments should be provided to attain multidimensional improvements in the individual..
- Older adults with schizophrenia can learn to control their symptoms and manage medications, and learn and generalize social and independent living skills for community adaptation.
- Environmental supports need to be "wrapped around" to ensure that the needs of older adults with schizophrenia are being met, because it is not unreasonable to expect that these persons will need to learn or relearn the full range of skills needed to live autonomously in the community.
- Older adults with treatment refractory psychotic symptoms appear to benefit from cognitive therapy.
- Social learning and token economy procedures are effective for individuals with schizophrenia regardless of age.
- Behavior therapy appears to protect against stress-related relapse when effective in promoting coping skills and may reduce the amount of medication necessary for symptom stabilization and relapse prevention.

Notably, with the exceptions listed above, little research has been undertaken on schizophrenia in minority older adults—this includes research on either the experience or the treatment of schizophrenia.

[Final note. Although there do not appear to be any studies evaluating the effectiveness of family approaches with older adults with schizophrenia, such as those developed by Carol Anderson, Ian Faloon, or William McFarlane, social workers should consider whether these models might be appropriate for older adult clients with schizophrenia and other severe mental illnesses (SMIs) who are living with family members. These family approaches were primarily designed for parents and siblings of individuals with schizophrenia (and other SMIs). Family caretakers of older adults with an SMI include very old parents (primarily mothers), siblings, and sometimes spouses or children (Lefley, 2003).]

References

Almeida, O. P., Howard, R. J., Levy, R., & David, A. S. (1995). Psychotic states arising in late life (late paraphrenia): Psychopathology and nosology. *The British Journal of Psychiatry, 166(2),* 205-214.

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.

American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., revised). Washington, DC: Author.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.

Cohen, C. I. (Ed.). (2003). *Schizophrenia into later life: Treatment, research, and policy*. Washington, DC: American Psychiatric Publishing, Inc.

Davidson, M., Harvey, P. D., Powchik, P., Parrella, M., White, L., Knobler, H. Y., et al. (1995). Severity of symptoms in chronically institutionalized geriatric schizophrenic patients. *American Journal of Psychiatry, 152*, 197-207.

Desai, A. K., & Grossberg, G. T. (2003). Differential diagnosis of psychotic disorders in the elderly. In Cohen, C. I. (Ed.), *Schizophrenia into later life: Treatment, research, and policy* (pp. 19-41). Washington, DC: American Psychiatric Publishing, Inc.

Folsom, D. P., Lebowitz, B. D., Lindamer, L. A., Palmer, B. W., Patterson, T. L., & Jeste, D. V. (2006). Schizophrenia in late life: Emerging issues. *Dialogues in Clinical Neuroscience, 8*, 45-52.

Friedman, J. I., Harvey, P. D., McGurk, S. R., White, L., Parrella, M., Raykov T., et al. (2002). Correlates of change in functional status of institutionalized geriatric schizophrenic patients: Focus on medical co-morbidity. *American Journal of Psychiatry, 159,* 1388-1394.

Gareri, P., De Fazio, P., De Fazio, S., Marigliano, N., Ibbadu, G. F., & De Sarro, G. (2006). Adverse effects of atypical antipsychotics in the elderly: A Review. *Drugs & Aging, 23*, 937-956.

Harding, C. M. (2003). Changes in schizophrenia across time: Paradoxes, patterns, and predictors. In C. I. Cohen (Ed.), *Schizophrenia into later life: Treatment, research, and policy* (pp. 19-41). Washington, DC: American Psychiatric Publishing.

Harvey, P. D. (2005). *Schizophrenia in late life: Aging effects on symptoms and course of illness.* Washington, DC: American Psychological Association.

Harvey, P. D., Howanitz, E., Parrella, M., White, L., Davidson, M., Mohs, R. C., et al. (1998). Symptoms, cognitive functioning, and adaptive skills in geriatric patients with lifelong schizophrenia: A comparison across treatment sites. *American Journal of Psychiatry, 155,* 1080-1086.

Holroyd, S., & Laurie, S. (1999). Correlates of psychotic symptoms among elderly outpatients. *International Journal of Geriatric Psychiatry, 14*, 379-384.

Howard, R. (2001). Late-onset schizophrenia and very late-onset schizophrenia. *Reviews in Clinical Gerontology, 11*, 337-352.

Howard, R., Rabins, P. V., Seeman, M. V., Jeste, D. V., & the International Late Onset Schizophrenia Group. (2000). Late-onset schizophrenia and very-late-onset schizophrenia-like psychosis: An international consensus. *American Journal of Psychiatry, 157,* 172-178.

Jeste, D. V., Blazer, D. G., & First, M. (2005). Aging-related diagnostic variations: Need for diagnostic criteria appropriate for elderly psychiatric patients. *Journal of Biological Psychiatry, 58,* 265-271.

Jeste, D. V., Dolder, C. R., Nayak, G. V., & Salzman, C. (2005). Atypical antipsychotics in elderly patients with dementia or schizophrenia: Review of recent literature. *Harvard Review of Psychiatry*, *13*, 340-351.

Keith, S. J., Regier, D. A., & Rae, D. S. (1991). Schizophrenic disorders. In: L. N. Robins & D. A. Regier (Eds.), *Psychiatric disorders in America: The epidemiologic catchment area study* (pp. 33-52). New York: Free Press.

Kurtz, M. M. (2005). Neurocognitive impairment across the lifespan in schizophrenia: An update, *Schizophrenia Research*, *74(1),* 15-26.

Lefley, H. P. (2003). Changing caregiver needs as persons with schizophrenia grow older. In C. I. Cohen (Ed.), *Schizophrenia into later life: Treatment, research, and policy* (pp. 251-268). Washington, DC: American Psychiatric Publishing.

Liberman, R. P. (2003). Biobehavioral treatment and rehabilitation for older adults with schizophrenia. In Cohen, C. I. (Ed.), *Schizophrenia into later life: Treatment, research, and policy* (pp. 223-250). Washington, DC: American Psychiatric Publishing.

Ostling, S., & Skoog, I. (2002). Psychotic symptoms and paranoid ideation in a nondemented population-based sample of the very old. *Archives of General Psychiatry*, *59*, 53-59.

Palmer, B. W., McClure, F. S., & Jeste, D. V. (2001). Schizophrenia in late life: Findings challenge traditional concepts. *Harvard Review of Psychiatry, 9,* 51-58.

Patterson, T. L., Bucardo, J., McKibbin, C. L., Mausbach, B. T., Moore, D., Barrio, C., et al. (2005). Development and pilot testing of a new psychosocial intervention for older Latinos with chronic psychosis. *Schizophrenia Bulletin*, *31*, 922-930.

Twamley, E., Padin, D. S., Bayne, K. S., Narvaez, J. M., Williams, R. E., & Jeste, D. V. (2005). Work Rehabilitation for middle-aged and older people with schizophrenia: A comparison of three approaches. *Journal of Nervous and Mental Disease, 193*(9), 596-601.

Van Citters, A. D., Pratt, S. I., Bartels, S. J., & Jeste, D. V. (2005). Evidence-based review of pharmacologic and nonpharmacologic treatments for older adults with schizophrenia. *Psychiatric Clinics of North America, 28*(4), 913-939.

White, L., Friedman, J. I., Bowie, C. R., Evers, M., Harvey, P. D., Parrella, M., et al. (2006). Long-term outcomes in chronically hospitalized geriatric patients with schizophrenia: Retrospective comparison of first generation and second generation antipsychotics. *Schizophrenia Research*, *88*(1-3), 127-134.

World Health Organization. (1992). *ICD-10, Classification of mental and behavioral disorders*. Geneva: Author.

Wynn Owen, P. A., & Castle, D. J. (1999). Late-onset schizophrenia: Epidemiology, diagnosis, management and outcomes. *Drugs & Aging*, *15*, 81-89.

Zayas, E. M., & Grossberg, G. T. (1998). The treatment of psychosis in late life. *Journal of Clinical Psychiatry*, *59*(suppl 1), 5-10.

Curriculum Resources

Suggested Readings:

- Folsom, D. P., Lebowitz, B. D., Lindamer, L. A., Palmer, B. W., Patterson, T. L., & Jeste, D. V. (2006). Schizophrenia in late life: Emerging issues. *Dialogues in Clinical Neuroscience, 8*, 45-52.

Provides a good, brief, overview of several major areas of research and clinical care that are particularly relevant to older adults with schizophrenia. Includes a discussion of the public health challenges and cost of care, course of the illness, cognition, medical care and comorbidity, and treatment concerns related to use of atypical antipsychotic drugs.

- Palmer, B. W., McClure, F. S., & Jeste, D. V. (2001). Schizophrenia in late life: Findings challenge traditional concepts. *Harvard Review of Psychiatry, 9*, 51-58.

Excellent overview and discussion of research on both EOS and LOS. More detailed discussion of research than that in Folsom et al., particularly research on cognitive functioning and neuropsychology, family history, and clinical characteristics.

- Van Citters, A. D., Pratt, S. I., Bartels, S. J., & Jeste, D. V. (2005). Evidence-based review of pharmacologic and nonpharmacologic treatments for older adults with schizophrenia. *Psychiatric Clinics of North America, 28*, 913-939.

Excellent systematic review of the treatment of schizophrenia in older adults. Even though this review was published in 2005, little has been published since that would change the findings. The research is limited for both pharmacologic and nonpharmacologic interventions—particularly the latter.

Additional readings for students who would like to explore this issue in more detail.

- Cohen, C. I. (Ed.). (2003). *Schizophrenia into later life: Treatment, research, and policy.* Washington, DC: American Psychiatric Publishing.
- Harvey, P. D. (2005). *Schizophrenia in late life: Aging effects on symptoms and course of illness.* Washington, DC: American Psychological Association.

Both of these books are thoughtful, well-written, and provide a comprehensive discussion of EOS, LOS, and VLOS. Both discuss clinical characteristics, comorbidity, psychosocial issues, medication treatment, and psychosocial treatment. Both are well referenced. The Cohen book, though older, has chapters written by many of the major scholars in the field.

Case Study: Mrs. W.

Rose W. is a 69-year-old retired, African American woman who lives independently in her own apartment. Her 48-year-old son lives in the same apartment building as she does, but on a different floor; he sees her several times a week. Mrs. (not Ms.) W. married her son's father when she was 19 and divorced him 5 years later. She has not been married or had a significant romantic relationship since then. She retired from work cleaning houses and cooking about 5 years ago, and she receives Social Security and Medicare. Mrs. W. has hypertension, arthritis, and Type II diabetes, all of which are being controlled by medications. She had been receiving care in a neighborhood clinic for a number of years, until the clinic closed. She came to the attention of the social worker when she was seen for an initial appointment by a primary care resident (PCR) in the ambulatory care clinic of a large metropolitan teaching hospital. Her PCR referred her because he was concerned about what he thought were psychotic symptoms. Interviews with Mrs. W. and her son revealed the following information:

- Mrs. W. hears people whispering or, rarely, talking, particularly if she is not busy or is not listening to the radio or TV. As near as we can ascertain, she has had these experiences since she was a young woman. When asked about the possibility that these experiences might be a misinterpretation of sounds coming from her radiator, the radio or another appliance, or from other apartments, her son said that he had been with her sometimes when this occurred and that there seemed to be no external trigger, and that as far as he knew she had always been like that.
- Ms. W. also said that she felt that "the two homosexuals next door" were watching her, and she stated at one point in the interview that she thought that perhaps the PCR and social worker "might be together." When asked about this, she didn't want to say more but seemed suspicious when we were both in the room with her at the same time. Her son also said that she had had these kinds of ideas for as long as he knew and that her family had always thought that she was odd that way. That is, she would, for no apparent reason, become suspicious of other people around her. He said that he and the family members used to try to "talk some sense into her," but no one had ever had any luck with this approach. He said that people had learned that the best thing to do was to just ignore these kinds of things, and these ideas would usually go away, except for her ideas about her neighbors who were always very kind to her. He said that she often was suspicious of people that she had just met and believed either that they were lovers or that they were watching her. "Normally, once she gets used to you, she's fine, but not at first."
- Her son said that neither the auditory hallucinations nor the delusions/over-valued ideas had ever interfered with her ability to work, go to church, or function in other ways. He said that, as far as he knew, she had never been referred to a mental health professional nor received treatment for these problems. He also said that there had been no changes in either of these conditions in the past months.
- Mrs. W. says that she spends most of her days watching TV, listening to the radio, reading the Bible, or doing errands. She goes to church every Sunday and to prayer

meeting Wednesday nights. She participates in church social activities a couple times a month, has a couple friends that she sees about once every week or two, and has extended family that she sees at about the same frequency, though she sees her son at least once a week.

- Mrs. W. did not want to discuss her family history, but her son said that he thought that an uncle (Mrs. W's brother) had been in a local psychiatric hospital for drug abuse and "nerves." It sounded like he may have had PTSD subsequent to service in the Korean conflict. Another family member had a nervous breakdown, but no one ever talked about the details.

Activity #1. Class Discussion

Ask your students to discuss this case.

- Do the students believe that these are psychotic symptoms, normal and expected occurrences in someone living alone, or is she just odd? What additional information would they want to gather, if any, to decide what sort of experiences she is having?
- Given the above information what might they recommend to the PCR? Why? What additional information, if any would they want to gather before making a recommendation to the PCR?
- In the unlikely event that the class has difficulty with coming up with possibilities, some of the options might include:
    1) Suggest that the PCR refer Mrs. W. to a psychiatrist for evaluation and possible treatment of the psychosis. Continue to follow and treat her medical condition as appropriate with visits to the primary care clinic every 3 months as in the past. (Referral option)
    2) Suggest that the PCR prescribe an appropriate antipsychotic (or other) medication to Mrs. W. Medication monitoring as appropriate with frequent follow-up visits while she is being stabilized on the medication, then tapering the visits to a less frequent schedule. Continue to observe and treat her medical condition as appropriate with visits to the primary care clinic every 3 months as in the past. (Medication option)
    3) Suggest that the PCR not take any action on the psychotic symptoms at the present time. Instead continue to observe and treat her medical condition as appropriate, but with more frequent (monthly) visits to the primary care clinic in order to build a relationship with her and to monitor her psychotic symptoms and functioning. (Watchful monitoring option)
    4) Suggest that the PCR pay no attention to the psychotic symptoms unless they become severe or she needs hospitalization. Continue to follow and treat her medical condition as appropriate with visits to the primary care clinic every 3 months as in the past. (Do nothing now option)
    5) Suggest that the PCR ask her son to keep close tabs on his mother, systematically monitoring her symptoms on a frequent (every day or two) basis. Continue to observe her and to treat her medical condition as appropriate with visits to the primary care clinic every 3 months as in the past. (Family observation option.)

Activity #2. Role play

Ask the students to divide into groups consisting of the following: Mrs. W., her son, the PCR, and the social worker. Ask each group to pick an option from above and role play the social worker conversations with the PCR, Mrs. W., and her son. If they ask whether the conversations should be conducted with each individually or with groups (e.g., Mrs. W. and her son together), suggest that is up to the group, but they should be able to explain the rationale behind their decision.

Activity #3. Class Discussion

Have the class read and discuss the social worker's reasoning for the action that he took in this case (see below). List the advantages and risks of this approach. Are there other options that would be better?

The social worker in this case chose Option #3-Watchful monitoring. His reasoning was that it is very likely that Mrs. W. would not accept or follow through with a referral to a psychiatrist. Nor would she be likely to accept or take antipsychotic medications, particularly if she clearly understood what the medications were for. He thought that those two were likely given her suspiciousness of new people and given both her and the family's reluctance to discuss mental health issues in family members. Furthermore, he was concerned that there was a very good chance that such a referral or prescription might result in her dropping out of treatment at the primary care clinic and might impede her developing a (relatively) trusting relationship with her new PCR. He felt that it was important for her to develop a relationship with the PCR and with other staff at the primary care clinic. Since she had been living with and functioning independently despite having these symptoms for her entire adult life, the social worker recommended that the PCR keep an eye on her at present, hold off more aggressive treatment of the symptoms, and monitor the symptoms periodically in case her situation changed or the symptoms worsened. Then at that time, they could revisit a referral or treatment that would be based on a better, and hopefully, more trusting relationship. He also recommended that Mrs. W.'s son continue seeing her at about the same frequency as he had been but to notify the PCR or the social worker if he noticed any changes in Mrs. W.'s behavior, her suspiciousness and hallucinations, or her living situation. He suggested that, as they got to know Mrs. W. and her son better, they should consider providing some psychoeducation on psychotic symptoms to him or to Mrs. W. and him together.

Web Resources:

- Assessment Instruments.
  - Mini-International Neuropsychiatric Interview (MINI). Register and download paper and pencil version free at:
    https://www.medical-outcomes.com/indexSSL.htm.
    The MINI is available in several languages. The MINI includes both a two-page screen and a full differential diagnostic interview for the most important DSM-IV-TR Axis I disorders. The MINI is similar in structure to the *Structured Clinical Interview for DSM-IV* or SCID, in that it has probe questions, skips, and a format for noting responses.
  - John A. Hartford Institute for Geriatric Nursing *Try This*. *Try This: Best Practices in Nursing Care to Older Adults* is a series of assessment tools to provide knowledge of best practices in the care of older adults. Includes a general assessment tool (SPICES), the Katz Index of Independence in Activities of Daily Living; Mental Status Assessment of Older Adults (Mini-Cog), and the Geriatric Depression Scale (GDS) in English or Spanish.
    http://www.hartfordign.org/resources/education/tryThis.html
  - Neurotransmitter.net Psychiatric Rating Scales Index. This link takes you to a list of conditions. Selecting one of these conditions takes you to a list of assessment instruments, many of which can be downloaded and used in your practice, others take you to a link to contact the instrument developer about use. (Includes scales for Anxiety, Depression, Parkinson's Disease, Alzheimer's Disease and Dementia, **Schizophrenia**, among others.)
    http://www.neurotransmitter.net/ratingscales.html
- Information, Self-help, web-links.
  - American Geriatric Society (AGS) ***Psychoses***. The AGS discussion of psychosis is written for the consumer or family member. It provides a discussion of psychotic symptoms including information about schizophrenia, delusional disorder, and other possible causes of psychotic symptoms, including links to delirium and dementia. There also is a table listing some of the medications used to relieve psychotic symptoms. (The font size and color may make it difficult to read for older adults.)
    http://www.healthinaging.org/agingintheknow/chapters_ch_trial.asp?ch=34
  - Medline Plus **Schizophrenia**. Medline Plus is a service of the National Library of Medicine and the National Institutes of Health. This site lists a number of resources on schizophrenia including articles, directories, glossaries, links to associations, and both disorder-specific and population-specific information. http://www.nlm.nih.gov/medlineplus/schizophrenia.html
  - AARP Ageline Database. AgeLine abstracts the literature of social gerontology as well as aging-related research from psychology, sociology, social work, economics, public policy, and the health sciences. It covers aging-related issues for professionals in aging services, health, business, law, and mental health. AgeLine also includes selected consumer content. AgeLine summarizes journal articles, books and chapters, research reports, dissertations, gray literature, and educational videos from many publishers and organizations, including AARP. Links to full text or ordering options are included wherever possible. http://www.aarp.org/research/ageline/

- National Alliance on Mental Illness (NAMI). NAMI is nation's largest grassroots organization for people with mental illness and their families. Founded in 1979, NAMI has affiliates in every state and in more than 1,100 local communities across the country. NAMI is dedicated to the eradication of mental illnesses and to the improvement of the quality of life for persons of all ages who are affected by mental illnesses. This site provides information on schizophrenia, antipsychotic medications, and links to other resources including discussion groups, treatment recommendations, and support. http://www.nami.org/Template.cfm?Section=By_Illness&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=54&ContentID=23036&lstid=327