Mortality and Medical Comorbidity in Older Adults with Schizophrenia: A Literature Review

**PRESENTER:**
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**BACKGROUND:**
- By 2025, the population of adults with schizophrenia over the age of 55 will reach 1.1 million.
- Few studies have examined the physical comorbidities and mortality of Older Adults with Schizophrenia (OAS).
- Recent national register studies have begun to yield compelling data on the medical issues facing this emerging demographic.

**METHODS:**
Recent national register studies in the Netherlands, Denmark, Finland, United Kingdom, Sweden, Manitoba, Canada and Indiana, United States were reviewed in detail. The search term "Older Adults with Schizophrenia" was searched on PsycInfo, Google Scholar, Psychiatry Online with the following terms added: "mortality," "cancer," "cardiovascular disease," "diabetes," "respiratory disease," "healthcare utilization," "antipsychotics." Approximately 112 journal articles, book chapters were selected for this review, prioritizing register studies, large population studies and journal articles focused on schizophrenic patients above the age of 55. After removing redundant selections, approximately 93 articles were determined to be appropriate for this review.

**CONCLUSION:**
- This review evidences an increase in all-cause mortality for OAS patients compared to healthy age peers and this increase in mortality may extend to respiratory and cardiovascular diseases.
- OAS patients appear to have improved mortality rates for all-cause, respiratory disease, cardiovascular disease and suicide risk when compared to younger peers with schizophrenia; however, further study to understand what modifiable risk factors are influencing the mortality data is needed.

Recent register studies across nations and health care systems have demonstrated an approximate 2.0 to 2.5 increase in all-cause mortality in Older Adults with Schizophrenia (OAS) compared to age peers.

**Table 1. Mortality Data in Recent Register Studies**

<table>
<thead>
<tr>
<th>Study</th>
<th>Region</th>
<th>OAS&gt;55yr/total population studied</th>
<th>Mortality</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talalahti et al, 2012 *</td>
<td>Finland</td>
<td>9461</td>
<td>2.69 SMR</td>
<td>Nationwide Register study</td>
</tr>
<tr>
<td>Hendrie et al, 2014</td>
<td>Indiana, USA</td>
<td>1635/31,588</td>
<td>1.25 RR</td>
<td>Register study</td>
</tr>
<tr>
<td>Meesters et al, 2016</td>
<td>Netherlands</td>
<td>157</td>
<td>1.89 SMR</td>
<td>Cohort study</td>
</tr>
<tr>
<td>Almeida et al, 2014</td>
<td>Australia</td>
<td>444/37892</td>
<td>2.0 AAMH</td>
<td>Cohort study</td>
</tr>
<tr>
<td>Kredentser et al, 2012</td>
<td>Manitoba, Canada</td>
<td>2,373/978,128</td>
<td>1.42 RR</td>
<td>Lower all-cause mortality compared to younger schizophrenia patients. Descending RR for suicide with increasing age.</td>
</tr>
<tr>
<td>Chang et al, 2010</td>
<td>London, United Kingdom</td>
<td>646/31719</td>
<td>1.61:3.27</td>
<td>Cohort: 3.27 SMR in 45-64 yr cohort. Descending SMR compared to younger patients with schizophrenia.</td>
</tr>
</tbody>
</table>

**Chronic Diseases In OAS**
- Suicidality: Lower mortality and risk than younger peers with schizophrenia. Female OAS patients appear to have a higher suicide risk than males. OAS patients are still at significant risk of suicide compared to age peers without schizophrenia.
- Respiratory disease: Among OAS there is increased mortality for respiratory disease compared to the general population, but reduced compared to younger persons with schizophrenia.
- Cardiovascular Disease: descending mortality from cardiovascular disease as they age compared to their younger counterparts, but still elevated compared to their age peers. Survival bias cannot be ruled out.
- Cancer: Paradoxical-cancer incidence among persons with schizophrenia appears to be the same or lower than their age peers, but mortality rate is higher; indeed, a screening and treatment gap exists and may account for this discrepancy.

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*References attached