Introduction

Starting from the coining of the term schizophrenia in the early twentieth century, it has been understood that the disease should be divided into subtypes according to age at onset. An important aspect of this debate is that whereas early-onset schizophrenia can easily be conceptualized as a neurodevelopmental condition (1), this is more difficult to grasp for patients who have apparently been functioning “schizophrenia free” for the first half of their adult lives. The first step in answering this question is to look at the differences in clinical symptomatology, in particular negative symptomatology. So far studies have yielded conflicting results. A number of studies reported less affective flattening (2,4,6) while one study in addition reported less social withdrawal in LOS patients (6). Other studies reported no differences in negative symptomatology between LOS and EOS (5,7).

Methods

We compared negative symptoms between EOS and LOS in a cohort of older, community dwelling Dutch schizophrenia patients. Demographic characteristics are shown in Table 1. EOS and LOS patients did not differ in age and male-female ratio. As expected EOS patients had a significantly longer duration of illness than the LOS patients.

Results

Results are shown in Table 1. We observed no differences between EOS and LOS patients for total PANSS scores, total negative PANSS scores or separate negative PANSS items. These results are in line with results by Vahia et al., but differ from other studies demonstrating less prominent negative symptoms in late-onset schizophrenia (Pearson et al., 1989; Howard et al., 1993; Jeste et al., 1997; Bailey et al., 2005). As sensitivity analyses we performed linear regression analyses with age at onset as continuous variable, introduced into the model either alone or together with disease duration. Also these analyses did not support the hypothesis that patients with later age at onset have lower scores on negative PANSS items. We found positive associations between disease duration and two negative PANSS items: difficulty in abstract thinking and stereotyped thinking. Based on clinical symptomatology it therefore appears that EOS and LOS can be considered as one disease entity. A strength of our study is that we studied only patients aged 60 years and older. There were no age differences between EOS and LOS patients. In our opinion this is an important difference between our study and earlier studies, where EOS and LOS patients studied had different age ranges. Also, as the shortest disease duration in our patients was 5 years, this precludes the presence of LOS patients with a recent onset of schizophrenia, which could bias clinical symptomatology. Our study also had some limitations. In comparison to Vahia, our study numbers were relatively small, which can be attributed mainly to the size of our catchment area. Second, as this is a cross-sectional analysis the relative effects of disease duration and age at onset per se are difficult to determine. Our results trigger a number of further research questions. As we studied community dwelling patients, it would be interesting to study institutionalized EOS and LOS patients. Also, future studies should determine if EOS and LOS patients differ in other clinical as well as basal characteristics, including neuropsychological variables. This should lead to further elaboration of the rationale of the subdivision into early-onset versus late-onset schizophrenia.

Discussion

We observed no differences between EOS and LOS patients for total PANSS scores, total negative PANSS scores or separate negative PANSS items. These results are in line with results by Vahia et al., but differ from other studies demonstrating less prominent negative symptoms in late-onset schizophrenia (Pearson et al., 1989; Howard et al., 1993; Jeste et al., 1997; Bailey et al., 2005). As sensitivity analyses we performed linear regression analyses with age at onset as continuous variable, introduced into the model either alone or together with disease duration. Also these analyses did not support the hypothesis that patients with later age at onset have lower scores on negative PANSS items. We found positive associations between disease duration and two negative PANSS items: difficulty in abstract thinking and stereotyped thinking. Based on clinical symptomatology it therefore appears that EOS and LOS can be considered as one disease entity. A strength of our study is that we studied only patients aged 60 years and older. There were no age differences between EOS and LOS patients. In our opinion this is an important difference between our study and earlier studies, where EOS and LOS patients studied had different age ranges. Also, as the shortest disease duration in our patients was 5 years, this precludes the presence of LOS patients with a recent onset of schizophrenia, which could bias clinical symptomatology. Our study also had some limitations. In comparison to Vahia, our study numbers were relatively small, which can be attributed mainly to the size of our catchment area. Second, as this is a cross-sectional analysis the relative effects of disease duration and age at onset per se are difficult to determine. Our results trigger a number of further research questions. As we studied community dwelling patients, it would be interesting to study institutionalized EOS and LOS patients. Also, future studies should determine if EOS and LOS patients differ in other clinical as well as basal characteristics, including neuropsychological variables. This should lead to further elaboration of the rationale of the subdivision into early-onset versus late-onset schizophrenia.

References