

# Health-related Quality of Life, Comorbidities, Productivity Loss and Resource Utilization Associated with Providing Care for Adults with Schizophrenia in Spain

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## Objectives

This study examined health-related quality of life (HRQoL), stress-related comorbidities, productivity loss and resource utilization of schizophrenia caregivers compared with non-caregivers and caregivers of adults with other conditions (e.g. conditions such as Alzheimer's disease) in Spain.

## Background

- Schizophrenia is a mental condition that impacts the patients' capability to engage in daily activities, which increases the patients' dependence on caregivers to assist with daily routine<sup>(1)</sup>.
- A previous study in Spain reported that greater levels of dependency are positively associated with more hours of caregiving<sup>(2)</sup>.
- Another study reports that activities of daily living and psychiatric disorders are negatively impacted among Spanish patients with schizophrenia<sup>(3)</sup>.
- Very few studies are available that describe caregiver burden for adults in Spain who provide care to patients with schizophrenia. The current study uses a representative sample of adults in Spain.

## Methods

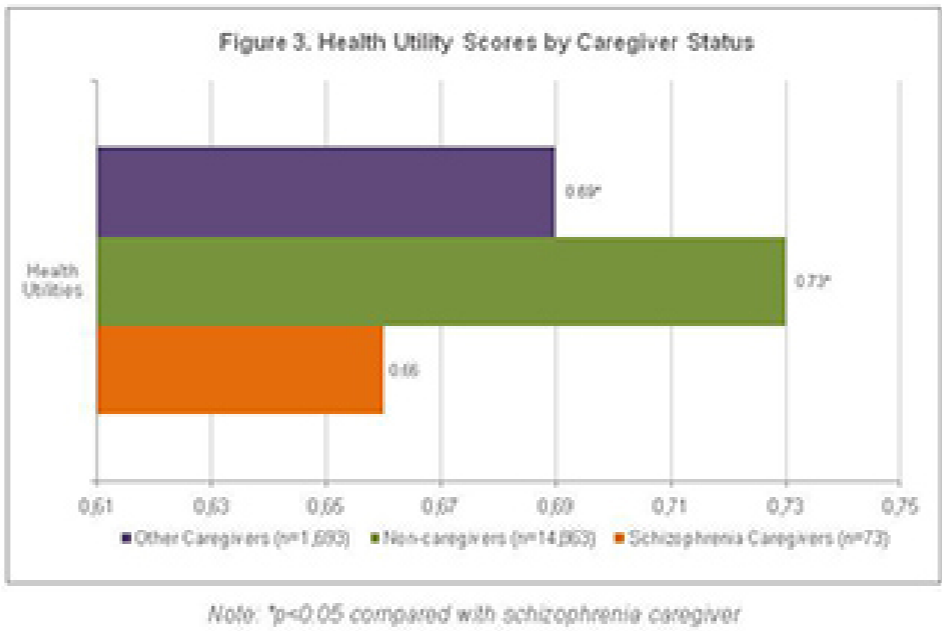
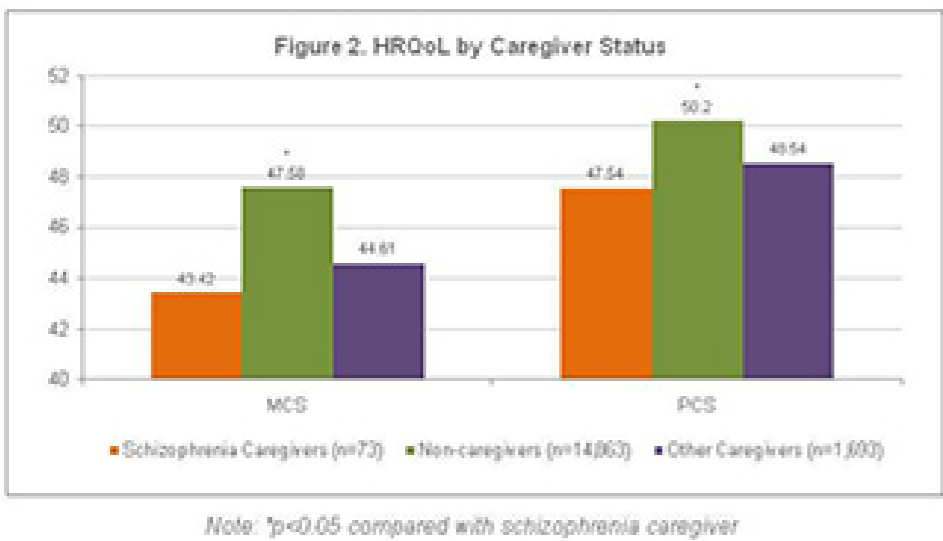
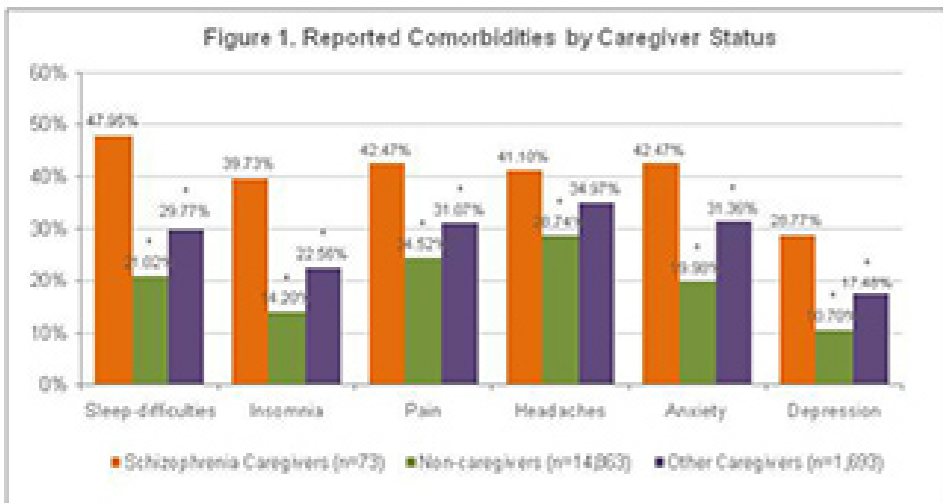
Data were obtained from the 2010-2011 and 2013 National Health and Wellness Survey, an online questionnaire that's representative of the total adult population. Outcomes included HRQoL (SF-36v2: mental and physical component summary (MCS, PCS) and SF-6D (health utility) scores), comorbidities (sleep-difficulties, insomnia, pain, headaches, anxiety, depression) experienced in the past 12 months, Work Productivity and Activity Impairment questionnaire-based scores, and healthcare-utilization (within the past 6 months). Chi-square tests and t-tests were used to compare schizophrenia caregivers vs. non-caregivers and other caregivers (e.g., cancer, Alzheimer's).

## Results

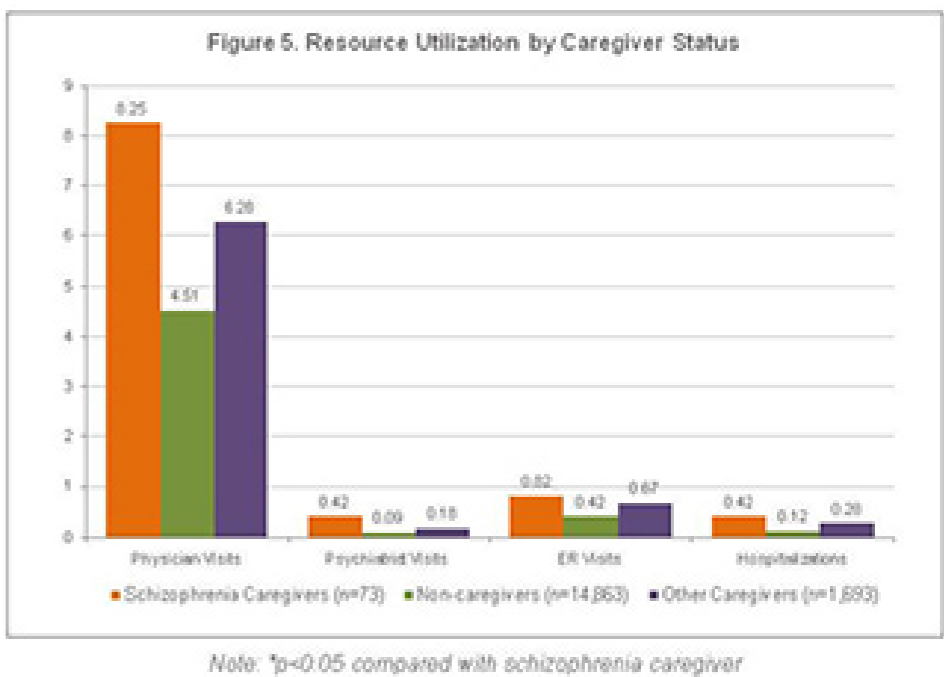
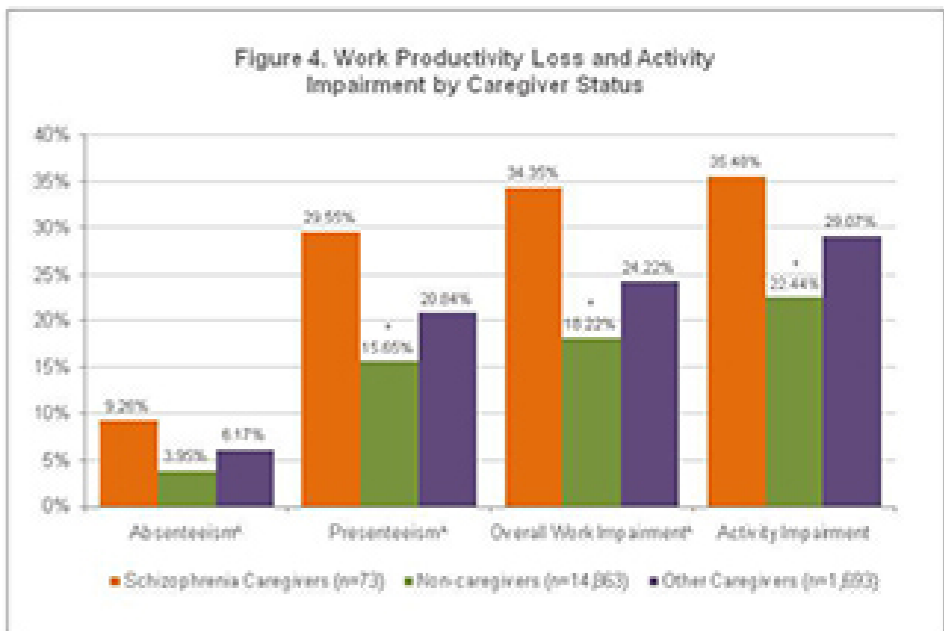
- Among the 17,000 respondents, 0.4% (n=73) were **schizophrenia caregivers**, 87.4% **non-caregivers**, and 10.0% **other caregivers** (2.2% declined to answer caregiving status and were excluded from the study).
- The average age of **schizophrenia caregivers** was 47.0 years (SD=16.2), 71.2% were female and 75.3% reported having less than a college/university degree.
- Schizophrenia caregivers** experienced more sleep-difficulties, insomnia, pain, headaches, anxiety and depression in the past 12 months than **non-caregivers**, all p<0.05.
- Compared to **other caregivers**, **schizophrenia caregivers** experienced more sleep-difficulties, insomnia, pain, anxiety and depression in the past 12 months, all p<0.05 (see Figure 1).

- Schizophrenia caregivers** reported significantly lower MCS (mean=43.4 vs. 47.6) and PCS (mean=47.5 vs. 50.2) than **non-caregivers**, both p<0.01.
- No significant differences on MCS, and PCS were found between **schizophrenia caregivers** and **other caregivers** (see Figure 2).
- Schizophrenia caregivers** reported significantly lower health utilities compared with **non-caregivers** (mean=0.66 vs. 0.73, p<0.001) and compared with **other caregivers** (mean=0.66 vs. 0.69, p=0.045) (see Figure 3).

- Schizophrenia caregivers** reported a greater number of physician visits, psychiatrist visits, emergency room visits and hospitalizations than **non-caregivers** (see Figure 5).



- Among full-time employed respondents, **schizophrenia caregivers** reported greater presenteeism (mean=29.6% vs. 15.7%, p=0.006) and overall work impairment (34.4% vs. 18.2%; p=0.004) than **non-caregivers**. Among all respondents, **schizophrenia caregivers** also reported greater activity impairment (mean=35.8% vs. 22.4%, p<0.001) than **non-caregivers**.
- No differences on work-related productivity loss and activity impairment were found between **schizophrenia caregivers** and **other caregivers**, probably due to the small sample of full-time respondents in both groups (see Figure 4).



## Conclusions

- Schizophrenia caregivers** reported poorer HRQoL, more comorbidities (particularly psychiatric comorbidities), and greater resource utilization than **non-caregivers**.
- Schizophrenia caregivers** experienced more comorbidities than **other caregivers**. They also reported worse health utilities and a greater number of doctor visits than **other caregivers**.
- Therefore, overall caregiver burden was greater for **schizophrenia caregivers** than **non-caregiver** and **other caregivers** in Spain, with a large impact on schizophrenia caregivers' mental health.
- Providing **schizophrenia caregivers** with support services to better manage patients effectively may reduce caregiver's burden.

## References

1. Awad AG, Voruganti LN: The burden of schizophrenia on caregivers: a review. *PharmacoEconomics* 2008; 26(2):149-162; 2. Aranda-Reneo I, Oliva-Moreno J, Vilaplana-Prieto C, Hidalgo-Vega A, González-Domínguez A. Informal care of patients with schizophrenia. *J Ment Health Policy Econ*. 2013; 16(3):99-108; 3. Fe Bravo-Ortiz M, Gutiérrez-Casares JR, Rodríguez-Morales A, García MA, Hidalgo-Borja R. Influence of type of treatment on the well-being of Spanish patients with schizophrenia and their caregivers. *Int J Psychiatry Clin Pract*. 2011; 15(4):286-95; 4. Charlson ME, Pompei P, Ales KL, MacKenzie CR. A new method of classifying prognostic comorbidity in longitudinal studies: development and validation. *J Chronic Dis*. 1987; 40(5):373-383; 5. Ware JE Jr, Sherbourne CD. The MOS 36-item short-form health survey (SF-36). I. Conceptual framework and item selection. *Med Care*. 1992; 30(6):473-483; 6. Brazier J, Roberts J, Deverill M: The estimation of a preference-based measure of health from the SF-36. *Journal of health economics*. 2002; 21(2):271-292; 7. Reilly MC, Zbrozek AS, Dukes EM. The validity and reproducibility.