Economic burden in schizophrenia: a literature review

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Background
• Schizophrenia places a heavy burden on individuals and their caregivers, with the potential of placing a large demand on the healthcare system and its resources.
• In the World Health Report (2001), schizophrenia is listed as the 8th leading cause of disability-adjusted life years worldwide in the age group 15-44.
• Despite the creation of a diagnostic tool like the DSM-IV to harmonize and define schizophrenia with fixed boundaries, a high level of heterogeneity amongst schizophrenic patients still exists.

Objectives
• To understand the cost burden imposed by the treatment of schizophrenia in the literature
• To identify the key drivers of cost of treatment where found in the literature

Methods
• Literature searches were implemented using EMBASE & Medline.
• No geographical restrictions were set. Searches were restricted to English-only articles.
• The search focused on reviews and recent individual articles published during 2011.
• All types of economic studies were considered in the search.
• Screening of titles and abstracts was carried out by a reviewer who included or excluded articles based on preset criteria.
• Individual articles in included reviews were reviewed to ensure that relevant references were included where the main search failed to capture them.
• Appropriate data were extracted from articles and entered into a specially designed extraction grid.

Results
• The PIRSMA flowchart (Figure 1) outlines the number of selected publications for each source during the selection of articles.

Table 1. Cost burden associated with schizophrenia in the literature

| Author | Year | Country | Burden Measured | Burden Scale | Population | Cost | Cost/| |
|--------|------|---------|-----------------|--------------|------------|------|-----|
| Davies et al. (1994) | 1994 | UK | Total societal cost | House | £1204 | £1,065 |
| Leung et al. (2011). Comparison of Short | 2015 | Canada | Annual societal cost | Annual | £25,000 | £26,000 |
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Cost drivers
• Patient costs include a combination of cost of treatment, costs due to patients personal suffering, productivity and costs associated with premature mortality.
• Family costs are driven by costs not borne by family members, including costs related to family burden.
• Comorbidities have been considered as an important factor influencing health care costs.

CONCLUSIONS
• The burden of schizophrenia is significant regardless of the country.
• Variable estimates of the burden are available in literature due mainly to the treatment regimens used and the approaches to schizophrenia care (e.g. hospital based versus community-based).
• The different duration of visits to outpatient services and the summary care practices that exist in different countries generate different unit costs. E.g. in Germany contacts with psychiatrists are shorter compared with the UK.
• Direct costs are driven by a combination of clinical and socio-demographic factors that surrounds the patients and include the treatment of side effects.
• Presently, there is a need for a standard method of quantitatively assessing and aggregating the various aspects of the cost of schizophrenia.
• International comparisons of the burden of the disease is challenging as serious heterogeneity exists in the treatment pathways and processes. These affect the inputs into cost assessments.

References