

# Direct and indirect cost of schizophrenia in outpatients treated in a tertiary care psychiatry unit

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## Abstract

**Objective** To estimate the direct and indirect cost of care incurred by patients with schizophrenia attending a tertiary care psychiatry unit in Colombo.

**Methods** Study was carried out at the National Hospital of Sri Lanka. Systematic sampling selected every second patient with an ICD-10 clinical diagnosis of schizophrenia presenting to the clinic during a two month period. Investigator administered semi-structured questionnaire was used for data collection.

**Results** Sample consisted of 91 patients. Direct cost was defined as cost incurred by the patient (out of pocket expenditure) for outpatient care. Mean cost of a clinic visit was Rs. 500. Of the clinic visit cost, highest proportions were travel cost (39.8%) and medication (26.4%). Sixty four (70.3%) had received informal care. The mean cost of informal care during the entire course of the illness was Rs. 33, 540. Mean indirect cost was Rs. 150,190.

**Conclusions** Despite low direct cost of care, indirect cost and cost of informal treatment results in substantial economic impact on patients and their families. It is recommended that economic support should be provided for patients with disabling illnesses such as schizophrenia, especially when patients are unable to engage in full time employment. There is a need to educate the public regarding higher cost of care by traditional healers and other informal modes of treatment compared to Western medical care.

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## Introduction

Even though in Sri Lanka public health care is free at the point of delivery, illness results in financial cost to patients. Among the poor, illness can worsen poverty. Schizophrenia is a chronic illness which results in significant cost to the patient, family and health care services.

The economic cost of illness can be broadly divided into direct and indirect costs. Direct costs are those for

which payments are made [1, 2]. A portion of direct cost is borne by health care services while patients and their carers or health insurance payments finance the rest. Cost of medicines constitutes a substantial portion of direct costs. In Sri Lanka it was estimated that medicines accounted for a third of direct costs across all types of illness [3, 4]. In India almost three quarters of out of pocket expenditure was spent on purchasing medication [5]. Transport costs, cost of nutritious food for the ill person, food and accommodation costs for accompanying person are other types of direct costs borne by patients [6]. Indirect costs are defined as the cost of productive time loss resulting from illness [1]. This includes the cost of lost productivity in the patient as well in care givers.

Household out of pocket expenditure has a significant effect on poverty in low and middle income countries with many poor resorting to borrowing and selling of assets to finance this cost [5]. In India it is estimated that 2.2% of the population fall into poverty because of out of pocket expenditure.

Most studies estimating the economic cost of schizophrenia have been carried out in high income countries [1]. Although schizophrenia is a chronic illness with great cost to the individual and society, there is little data available about the economic cost of schizophrenia in Sri Lanka. The objective of this study was to estimate the direct and indirect cost of care incurred by patients with schizophrenia attending a tertiary care psychiatry unit in Colombo.

## Methods

The study was carried out at the out patient psychiatry clinic of the National Hospital of Sri Lanka. Systematic sampling selected every second patient with an ICD-10 clinical diagnosis of schizophrenia presenting to the clinic during a two month period. Patients over 60 years of age were excluded as older patients are more likely to have co-morbid illness which increase illness related expenses. Patients too ill to participate and patients refusing consent were also excluded. Data were collected using an investigator-administered, semi-structured questionnaire, from both the patient and at least one other family member for cross validation.

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