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Effective implementation of a structured psychoeducation programme among caregivers of patients with schizophrenia in the community

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ABSTRACT

Background: Psychoeducation has shown promising benefits in managing patients with schizophrenia. In Malaysia, the use of psychoeducation is rather limited and its impact indeterminate.
Aims: To assess the effectiveness of a structured psychoeducation programme for the community in improving caregiver knowledge, decreasing caregivers' burden, reducing patients' readmission and defaulter follow up rates.
Method: In a controlled interventional study, 109 caregivers were included, 54 and 55 in the intervention and control groups respectively. Caregivers were assessed at baseline, 3 and 6 months post-intervention for knowledge and burden. Patients were monitored for relapse and defaulting follow up in the clinic.
Results: Caregivers in the intervention group showed significant improvement in knowledge, reduction in burden in assistance in daily living (severity) and a reduced defaulter rate was seen in the patients' follow up.
Conclusion: The findings shows that structured psychoeducation programme among caregivers has the potential to improve outcome of care for patients with schizophrenia.

1. Introduction

Worldwide, mental illness accounts for 11.5% of the global burden of diseases, a figure expected to rise to 15% by 2020 (WHO, 2004). In Malaysia, for the total burden of diseases, mental illness is second after cardiovascular disease (Benjamin Chan, 2005). Apart from pharmacological treatment, psychoeducation for patient and family has shown great promise in the management of schizophrenia (Dixon et al., 2000; Lehman and Steinwachs, 1998; Penn and Muesser, 1996). The aim of treating such disorders is not only to control the symptoms, but also to prevent relapses, ensure patients' compliance with the prescribed treatment plan, restore social and working function and provide better quality of life. Psychoeducational approaches have been developed to increase patients' and their carers' knowledge and insight into their illness and treatment.

In a Cochrane analysis, psychoeducation resulted in a higher level of compliance, lower rate of relapse, and improved psychopathological status (Pekala and Merinder, 2002). Patients and their families who attended a psychoeducational programme consisting of eight sessions showed reduced patient rehospitalization rates over a period of 2 years (Pitschel-Walz et al., 2006). According to the American Psychiatric Association, psychoeducational intervention is part of standard therapy in both acute and post-acute phases of patients with schizophrenia (APA, 2004).

In Asian setting, participants in a psychoeducation group showed reduction in the burden of care and the number and length of patients' rehospitalization over the 12-month follow up period, compared with the standard care group (Chien et al., 2006; Chien and Wong, 2007). In Malaysia, application of a structured family psychoeducation programme has been rather limited and was only implemented in 2004 (Ghaus, 2006) in a few selected hospitals and institutions. However, the effectiveness of the programme was never assessed.

Therefore, the aim of this study was to assess the effectiveness of a structured psychoeducation programme in improving knowledge of caregivers, decreasing the caregivers' burden and reducing patient readmission rates as well as the rate of default to follow up.

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1.1. Methodology

This was an interventional study. At baseline, the caregivers were given a demographic survey, pretest questionnaire and the Family Burden Interview Schedule–Short Form (FBIS/SF) (Richard and Gail, 2000). Caregivers in the interventional group were then given structured psychoeducation [psychoeducation programme PET-HBUK (Ghaus, 2006)] in addition to standard care. Caregivers in the control group received standard treatment that consisted of history taking for symptoms of relapse, noting concomitant complaints, prescribing medication and giving appointment for patients. No additional formal psychoeducation was given for either patient or family in this group. For the interventional group the post-test questionnaire was done immediately after the completion of the modules. For the post-interventional phase, the knowledge questionnaire and FBIS/SF were further administered after 3 months and 6 months for both groups. Upon completion of the 6-month study period, the patients' treatment card was screened to (trace) determine follow up defaulter or readmission rate. Patients in both groups were given appointment dates but did not receive any reminder for follow up psychoeducation [psychoeducation programme PET-HBUK (Ghaus, 2006)].

1.2. Participants and sampling

Respondents were selected from six community psychiatric clinics in urban or semi urban setting in Malaysia by convenient sampling. Caregivers who were eligible to participate in this study cared for a patient who at recruitment had a primary diagnosis of schizophrenia according to Diagnostic and Statistical Manual of Mental Disorders, 4th edition (APA, 1994). These patients were well enough to be on follow up in the community for long term antipsychotic therapy. The caregivers also understood either the Malay or English language.

Those excluded were caregivers of patients who had co-morbidity of substance abuse or having uncontrolled or unstable medical illness requiring admission and those who had already undergone a structured psychoeducation programme. Setting the significance level at 0.05 with a power of 90% and assuming a change in knowledge level from 55% to 85%, the minimum sample required in each arm is at least 46. This figure was derived using Epical 2000 software.

Clinics were assigned to the intervention or control group allocation at the onset (three clinics each), and subjects were recruited in each clinic by convenient sampling. No randomization was done within each clinic as researchers felt contamination bias could not be adequately addressed if both intervention and control subjects were recruited from the same clinic. Intervention clinic was chosen based on geographical accessibility to researchers.

1.3. Intervention

Health staff (staff nurses or medical assistants) who were involved in the care of patients with schizophrenia in the intervention group were trained in the use of the five module-structured psychoeducation programme (Ghaus, 2006). The training consisted of a workshop by psychiatrists and trained psychoeducation team members where the module was delivered to ensure understanding and consistency, and the staff were certified at the end of the training. The structured psychoeducation included modules on understanding the illness, treatment, prevention of relapse, handling crisis and healthy lifestyle – diet and exercise. The trained staff then delivered the modules of five lectures, each meant to be about an hour in duration, to caregivers over a period of 2 weeks using audio visual aids such as power point presentations, charts or booklets. Caregivers were encouraged to participate actively and clarification of any uncertainty was done.

1.4. Outcome measure

Change in knowledge of caregivers was measured by the pretest and post-test knowledge scores (scores 0–20). The questionnaire consisted of 20 questions covering all five components of the psychoeducation module, and has not been validated. Change in caregivers' burden was measured by the corresponding FBIS scores. In FBIS, there are five sections i.e. Section A: assistance in daily living, severity (scores 7–35) and burden (scores 7–28), Section B: supervision module, severity (scores 5–25) and burden (5–20), Section C: financial expenditures module, severe debt and financial burden (scores 1–5), Section D: impact on daily routines module for past 1 month (scores 4–20) and Section E: worry (scores 7–35). Lower scores in Sections A, B and D show reduced burden and severity whereas higher scores in Sections C and E show reduced severity and burden. Readmission was defined as any admission to a psychiatric ward for relapse. Defaulters were defined as those who did not turn up within a month of their scheduled appointments. Assessments were conducted by staff in the clinics, and hence not blinded to the group allocation status.

1.5. Statistical analysis

Data entry and statistical analysis was done using statistical software SPSS Version 15.0, PC. Statistical analysis was done using the Chi square, z and t-test. Analysis of the knowledge test score was done using the mean score of the respondent which ranged from 0 to 20. Further analysis of the FBIS rating questionnaire was done using the composite mean score of each section.

1.6. Ethical considerations

Ethical approval to conduct the study was obtained from the regional health director. Verbal consent was obtained from the caregiver prior to interview. Respondents were ensured of confidentiality of information provided.

2. Results

There were a total of 109 respondents, with 54 caregivers in the intervention group and 55 caregivers in the control group. There were five dropouts: two were dropped due to pretest inadvertently missed in the recruitment period, one patient passed away due to dengue fever midway through the study, one caregiver developed stroke and was unable to care for the patient and one caregiver was unable to complete the study questionnaire as he was untraceable.

2.1. Comparison of socio-demography of caregivers and patients

There were statistically significant differences between the intervention and the control group for caregivers' gender, caregivers' household income and duration as a caregiver (see Table 1).

As the intervention and control group differed significantly in gender, household income and duration as a caregiver, all subsequent analysis was done within each group and not between groups.

2.2. Knowledge of caregivers about schizophrenia

In the intervention group, the baseline knowledge score of the caregivers improved significantly after psychoeducation. Assessment after 3 months compared to immediate post-test showed further improvement. Assessment at 6 months compared to 3 months also showed improvement but was not statistically