

ABSTRAK

Latar Belakang : Insiden skizofrenia di negara-negara industri adalah 10-70 kasus baru per 100.000 populasi per tahun. Pasien skizofrenia memiliki kualitas hidup keseluruhan yang lebih rendah dibandingkan dengan populasi umum dan disfungsi ereksi dikaitkan dengan penurunan kualitas hidup pasien skizofrenia. Farmakoterapi dengan antipsikotik atipikal menunjukkan kejadian disfungsi ereksi yang lebih rendah dibandingkan antipsikotik tipikal namun memerlukan biaya lebih besar. Penelitian ini bertujuan untuk menganalisis *cost utility* penggunaan obat antipsikotik atipikal (aripiprazol kombinasi) dan tipikal (haloperidol) kombinasi pada pasien skizofrenia terutama dalam hal *outcome* klinis berupa disfungsi ereksi.

Metode : Penelitian observasional analitik dengan rancangan kohor prospektif untuk mengkaji efek samping, kualitas hidup dan biaya langsung medis menggunakan data primer. Evaluasi ekonomi dilakukan dengan *cost utility analysis* (CUA) menggunakan pendekatan *real world data* dengan prospektif *provider*. Pada penelitian ini *outcome* dinyatakan dengan QALY (*Quality Adjusted Life Years*) dan biaya yang dinilai adalah biaya medik langsung. Sampel penelitian ini adalah pasien skizofrenia yang datang berobat ke RSJ Grhasia Yogyakarta dan RSJ Prof Soerojo Magelang dan mendapatkan terapi aripiprazol atau haloperidol yang dikombinasikan dengan klopazepam dan triheksipenidil (THP). Luaran disfungsi ereksi dievaluasi menggunakan manekin penis. Perubahan kualitas hidup dan utilitas pasien dinilai menggunakan instrumen EQ-5D -5L (*European Quality of Life- 5 Dimension- 5 Level*). Efek samping ekstrapiramidal dinilai menggunakan kuesioner ESRS (*Extrapyramidal Symptom Rating Scale*).

Hasil : Kejadian disfungsi ereksi lebih banyak ditemukan pada kelompok haloperidol kombinasi (37,5%) dibandingkan kelompok aripiprazol kombinasi (7,5%) dan bermakna secara statistik ($p = 0,003$). Biaya medis langsung kelompok aripiprazol kombinasi lebih besar dibandingkan kelompok haloperidol kombinasi (Rp.5.157.742 vs Rp.718.812; $p = 0,000$). Peningkatan indeks massa tubuh secara bermakna didapatkan pada kelompok aripiprazol kombinasi ($p = 0,027$) dan peningkatan persentase kejadian efek samping ekstrapiramidal ditemukan pada kedua kelompok ($p < 0,05$). Nilai *utility* pasien dengan luaran disfungsi ereksi lebih rendah ($0,787 \pm 0,082$) dibandingkan nilai *utility* pasien dengan luaran non disfungsi ereksi ($0,975 \pm 0,051$) dan bermakna secara statistik ($p = 0,004$). Terdapat perbedaan biaya terapi ($p = 0,000$) dan QALY ($p = 0,004$) antara kedua kelompok. *Incremental* QALY sebesar 0,0279 dengan biaya *incremental* (*incremental cost*) sebesar Rp. 4.438.930,00 didapatkan nilai ICUR sebesar Rp.159.101.434,00/QALY.

Kesimpulan : Terapi antipsikotik atipikal (aripiprazol kombinasi) pada pasien skizofrenia dengan disfungsi ereksi lebih *cost effective* dibandingkan terapi antipsikotik tipikal (haloperidol kombinasi)

Kata Kunci : *Aripiprazol, Cost Utility Analysis, Disfungsi Ereksi, Haloperidol, ICUR, QALY*

ABSTRACT

Background : The incidence of schizophrenia in industrialized countries is 10-70 new cases per 100,000 population per year. Schizophrenia patients have a lower overall quality of life compared to the general population and erectile dysfunction is associated with a decrease in the quality of life of schizophrenia patients. Pharmacotherapy with atypical antipsychotics showed a lower incidence of erectile dysfunction than typical antipsychotics but cost more. The study aimed to analyze the cost utility of atypical antipsychotic (aripiprazole combinations) and typical antipsychotic (haloperidol combinations) in schizophrenia patients especially in terms of clinical outcomes in the form of erectile dysfunction.

Method: Analytical observational research with prospective cohort design to examine side effects, quality of life and direct medical costs using primary data. Economic evaluation is carried out with cost utility analysis (CUA) using a real world data approach with prospective providers. In this study the outcome was stated with QALY (Quality Adjusted Life Years) and the assessed cost was direct medical costs. The sample of this study was a schizophrenic patient who came for treatment to Grhasia Mental Hospital, Yogyakarta and Prof. Soerojo Mental Hospital, Magelang. Samples received aripiprazole or haloperidol therapy combined with clozapine and trihexyphenidyl (THP). Erectile dysfunction outcome evaluated using a penile mannequin. Changes in the quality of life and utility of patients were assessed using the EQ-5D-5L (European Quality of Life-5 Dimension-5 Level) instrument. Extrapyramidal side effects assessed using ESRS questionnaire (Extrapyramidal Symptom Rating Scale).

Results: The incidence of erectile dysfunction was more common in the haloperidol combination group (37.5%) than aripiprazole combination group (7.5%) and was statistically significant ($p = 0.003$). The direct medical costs of the aripiprazole combined group were greater than haloperidol combined group (IDR 5,157,742 vs. IDR 718,812; $p = 0.000$). A significant increase in body mass index was found in the aripiprazole combination group ($p = 0.027$) and an increased percentage of extrapyramidal side effects was found in both groups ($p < 0.05$). The utility value of patients with erectile dysfunction was lower (0.787 ± 0.082) than the utility value of patients with non-erectile dysfunction (0.975 ± 0.051) and statistically significant ($p = 0.004$). There was a difference in the cost of therapy ($p = 0.000$) and QALY ($p = 0.004$) between the two groups. Incremental QALY amounted to 0.0279 with incremental cost of IDR 4,438,930.00 obtained ICUR value of IDR 159,101,434.00/QALY.

Conclusion: Atypical antipsychotic therapy (aripiprazole combination) in schizophrenia patients with erectile dysfunction is more cost effective than typical antipsychotic therapy (haloperidol combination)

Keywords: *Aripiprazole, Cost Utility Analysis, Erectile Dysfunction, Haloperidol, ICUR, QALY*