

## SERVICE COSTS AND COST FACTORS OF CHILD AND ADOLESCENT PSYCHIATRIC PATIENTS TREATED WITH ANTIPSYCHOTICS IN TAIWAN

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**Objectives:** With the widespread of atypical antipsychotics used among children and adolescents, the treatment effectiveness has been of great interest alongside with the efficacy and safety in this population. The study was designed to assess whether second-generation antipsychotics (SGAs) are associated with lower service costs in the real world. Factors associated with service costs were also examined.

**Methods:** The claim data (PIMC) of 1996-2008 from the National Insurance Plan of Taiwan was used. Patients aged less than 20 with an incident use of antipsychotics and last for 12 months during this period were included for analysis. Comparisons were made between 8 SGAs and 2 first-generation antipsychotics (FGAs). Changes in service costs were examined with 95% confidence interval. Multivariate regressions with propensity scores adjustment were performed to explore factors associated with psychiatric service costs.

**Results:** A total of 343 treatment encounters were included and results showed no difference in psychiatric services costs in the SGAs group as the total service costs were offset to high antipsychotics costs of SGAs, though antiparkinsonian costs were not different between two groups. Factor positively associated with service costs were relapse (RR=4.0,  $p < 0.0001$ ) and EPS incidence (RR=1.6,  $p < 0.008$ ), while types of antipsychotics and diagnoses were not significant factors after adjusting for covariates.

**Conclusions:** Service costs were not different between FGAs and SGAs groups and medication costs were significantly higher in the SGAs group. Relapse and EPS incidence were factors of high costs among children and adolescents psychiatric patients treated with antipsychotics in Taiwan.