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INTRODUCTION

Co-medications and polypharmacy are a common concern among individuals with schizophrenia, including the concomitant use of antipsychotics with other medications and the concurrent use of multiple antipsychotics. However, no systematic investigation has been conducted among this population in Hong Kong.

OBJECTIVE

To investigate the patterns of co-medication use and prevalence of polypharmacy among people with schizophrenia in Hong Kong.

METHOD

- Data source:** The Clinical Data Analysis and Report System (CDARS) in Hong Kong
- Study population:** People diagnosed with schizophrenia between January 1, 1993 and December 31, 2019 in Hong Kong.
- Cumulative duration of medication use** = Sum of the prescription periods for each patient
- Co-medication** = Simultaneous use of at least two medications on the same day
- Polypharmacy** = Simultaneous use of at least five medications on the same day

RESULTS

- Cohort: **70,396 patients with schizophrenia**
- 52.8% of female**, 47.2% of male, mean [SD] age: 44.2 [15.8] years
- Duration of medication use during the observation period:
 - ❖ **Polypharmacy:** 15.89%
 - ❖ **Antipsychotics:**
 - Antipsychotic monotherapy: 54.11%
 - Concurrent use of multiple antipsychotics: 19.95%
 - ❖ **Co-medication of antipsychotics and other medications:** 64.64%
 - Antiparkinson drugs: 43.31%
 - Antidepressants: 13.91%
 - Antiepileptic drugs: 13.62%
 - Beta-adrenoceptor blocking drugs: 12.89%
 - Anxiolytics: 11.80%

Table 1. Number of medication use among people with schizophrenia

No. of medication types	Duration of medication use, Person-years (%)	No. of patients (%)*
0	151,522.10 (18.88%)	51,850 (73.65%)
1	106,907.33 (13.32%)	48,890 (69.45%)
2	185,433.65 (23.10%)	58,715 (83.41%)
3	140,373.88 (17.49%)	58,636 (83.29%)
4	91,021.56 (11.34%)	53,482 (75.97%)
≥5	127,408.30 (15.89%)	45,050 (64.00%)

Table 2. Use of antipsychotic monotherapy and polypharmacy among people with schizophrenia

No of antipsychotics	Duration of medication use, Person-years (%)	No. of patients (%)*
0	188,405.31 (23.47%)	60,443 (85.86%)
1	434,290.42 (54.11%)	62,916 (89.37%)
2	160,095.64 (19.95%)	45,931 (65.25%)
≥3	18,862.81 (2.48%)	20,881 (29.66%)

Table 3. Patterns of polypharmacy among people with schizophrenia

Medications	Person-years (%)	No. of patients (%)*
Antipsychotics only	95,422.68 (11.89%)	37,586 (53.39%)
Antipsychotics + other medications	518,838.83 (64.64%)	63,963 (90.86%)
Antiparkinson drugs	347,623.85 (43.31%)	48,594 (69.03%)
Antidepressants	111,689.40 (13.91%)	23,245 (33.02%)
Antiepileptic drugs	109,359.06 (13.62%)	21,905 (31.12%)
Beta-adrenoceptor blocking drugs	103,463.64 (12.89%)	26,280 (37.33%)
Anxiolytics	94,706.00 (11.80%)	35,557 (50.51%)
Other medications (without the use of antipsychotics)	36,883.21 (4.60%)	40,974 (58.21%)

CONCLUSIONS

- Polypharmacy remained a common practice among people with schizophrenia.
- The concurrent use of other medications during antipsychotic treatment was primarily related to managing the side effects of antipsychotics and addressing psychiatric comorbidities among individuals with schizophrenia.

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