



**Service Priorities and Programmes**  
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**Evaluation of Pharmacy Medication Education and Counseling in Mitigating Risks of Medication Use**

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**Introduction**

Medication education and counseling have been proven to minimize risks of medication errors and non-compliance of medications. The Ruttonjee Hospital Pharmacy Patient Experience and Satisfaction Survey (RHPPESS) revealed a suboptimal counseling service in terms of its duration and sufficiency of time for patients to ask questions in 2016. In response to this finding, staff education was strengthened over the past year. The survey was repeated in 2017 and has been expanded to cover the overall medication education provided by pharmacy.

**Objectives**

To assess the effectiveness of improvement strategies in response to findings from RHPPESS 2016 by evaluating the satisfaction of patients and/or their caretakers to the pharmacy medication education and counseling

**Methodology**

RHPPESS 2017 was a prospective questionnaire survey recruiting patients, or their caretakers, who have completed the medication collection process. Eight statements regarding medication education and counseling were included in the questionnaire. These statements were presented to interviewees and they were asked to rate their level of agreement to each statement from 1 to 5. The mean scores were compared to results in 2016 by one-sample t-test. A score of 4 or 5 was defined as 'agreed' to the statement and the percentage of agreement to each statement were presented in descriptive statistics.

**Result**

The survey was conducted in July 2017 and 223 responses were collected. Compared with 2016, significant improvements were noted in the appropriateness of the counseling duration (87.0%; change in mean score = +0.32,  $p < 0.05$ ) and the sufficiency of time for patients to ask questions (79.8%; change in mean score = +0.27,  $p < 0.05$ ). Over 90% of interviewees agreed that the instructions on the medication labels are clear (92.8%; change in mean score = +0.41,  $p < 0.05$ ). Statements on medication education, which were not included in 2016, demonstrated the

improvement of medication understanding and compliance in 52.0% and 64.6% of interviewees respectively, and the minimization of adverse drug reactions in 41.3% of interviewees. However, only 57.0% of interviewees believed that pharmacy has provided sufficient education to patients.

The added values brought by medication education have been recognized by patients and/or their caretakers. Strategies such as enhancing education on the managements of possible adverse drug reactions during counselling and distributing medication summary could be implemented to improve medication understanding and compliance and, in turn, enhance medication safety.