

00194 Sociodemographic, Clinical, and Treatment-related Factors Associated With Complications, Early Termination and Readmission Amongst Recipients of Outpatient Parenteral Antibiotic Therapy in a Singapore Tertiary Hospital From 2014-2017

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Aims: Appropriate patient selection for outpatient parenteral antibiotic therapy (OPAT) is necessary to reduce potential complications and early termination.

Methodology: From 2014 to 2017, we conducted a prospective cohort study of all patients referred to SGH's OPAT service. We evaluated the following: complications on OPAT; early termination requiring readmission during OPAT; all-cause readmission 30 days after OPAT completion. We also assessed preference for OPAT (vs. inpatient therapy) and return to work while on OPAT. We used chi-square for univariate analysis and cox regression for multivariate analysis.

Result: From 2014 to Oct 2017, a total of 1213 patients received OPAT at our centre. Of those, 13.2% (160/1213) developed complications. About 10% (132/1213) of patients were readmitted while on OPAT and OPAT was terminated early. Amongst patients who completed OPAT (N=1081), about 3.6% (39/1081) were readmitted within 30 days. The majority who completed OPAT (87.0%, 941/1081) preferred OPAT, and about half (50.8%, 278/547) returned to work while on OPAT. On multivariate analysis, patients who had cancer, on vancomycin, or >1 month of OPAT were more likely to experience complications, while those with perfect health-related quality-of-life (HRQoL) and those with pyelonephritis were less likely to experience complications ($p < 0.05$). Being male, having mood/anxiety problems, intrabdominal abscesses, using vancomycin, and on >1 month of OPAT was associated with higher risk of early termination; while employment and having perfect HRQoL was associated with lower risk ($p < 0.05$). Individuals with pain were more likely to readmit within 30 days of OPAT. Those employed were more likely to prefer OPAT; and those having perfect HRQoL were more likely to prefer OPAT and return to work.

Conclusion: OPAT was preferred over inpatient therapy, with working individuals preferring OPAT. Baseline HRQoL was significantly associated with lower complications and early termination, as well as higher preference for OPAT and return to work while on OPAT.