

Correlation between Target INR Goal and Patients Understanding on Warfarin Therapy in Medication Therapy Adherence Clinic at Hospital Tengku Ampuan Rahimah

Ahmad Farhan Abdullah, May Florence Dela-Cruz Bacayo, Nor Aziah Abdullah,

Jiyauddin Khan, Zainun Kasim and Mohd Fadli Asmani

School of Pharmacy, Management & Science University

Abstract

Background: Warfarin which has been most broadly prescribed as oral anticoagulant needs consistent monitoring of the international normalized ratio (INR). Patients' concurrent compliance and education of therapy play an important role in controlling the adverse events. Insufficient warfarin knowledge shows a tendency for a nonadherence therapy, which also plays important role in controlling INR level. **Method:** An analytical, prospective study design and methodology were used in warfarin Medication Therapy Adherence Clinic (MTAC), Hospital Tengku Ampuan Rahimah, Klang from April 2016 until June 2016. 243 patients prescribed with warfarin were identified. Patients were interviewed using Perception of Anticoagulant Therapy Questionnaires (PACTQ). Medical records were reviewed for INR levels and other clinical data. Data were analyzed and represented using table and Spearman correlation analysis was used. Significant was defined as $P < 0.05$. **Results:** A total of 97 were eligible and accepted to complete the questionnaires. Among all study participants, one third of subjects ($n = 36$) had a secondary level of education and 50% were employed or retired. About half of the races ($n = 44$) participated in this study were Malay. The majority of patients (64.9%) were aged ranging from 45 to 64 years old. Most patients (43.3%) have been used warfarin for more than 5 years ($n = 42$). The mean score of PACTQ test among all participants was 66.2 ± 5.4 . While for INR control, poor understanding patients dominate the most about 86.1 ± 17.3 , which account highest among the three groups. The other two have the result of 78.2 ± 19.5 and 74.9 ± 22.6 respectively. Significant differences found in the level of understanding among different gender ($P < 0.05$). No significant differences ($P > 0.05$) were found among the other variables such as ages, occupation,

knowledge, duration of therapy, race and INR % (TTR). No significant relationship between PACTQ categories and INR control categories (Fisher's exact= 2.098, P= 0.808). There was a very weak negative association between patients' anticoagulant therapy perception and the time spent with the therapeutic range (TTR %) ($r = -0.036$; $P=0.727$). **Conclusion:** In contrast to previous research, this study found that no significant relationship exists between patient's understanding and INR control. A likely explanation is that patients might have different perception about INR therapy and their anticoagulant control depends solely on their lifestyle and their compliance.

