**Assessment of patients’ knowledge on the sick day rule and potential complications of SGLT-2 inhibitors in Bunbury Regional Hospital, and its effect on medication adherence**

Abstract

Aim: This study aimed to assess patients’ knowledge on the indication, potential complications of Sodium-Glucose Co-Transporter (SGLT-2) inhibitor, and its effect on medication adherence and readmission to hospital due to side effect of the medication.

Method: A cross-sectional study was conducted at a regional hospital in Bunbury, Western Australia. All adult patients who were admitted in the hospital (medical, subacute and surgical ward) from 6 January 2025 to 21 January 2025 were recruited. Inclusion criteria includes adult of more than 18 years old, cognitively well to consent and participate in the survey. Two research assistants were trained to collect data using an adapted questionnaire to assess patients’ understanding of SGLT2 inhibitors , duration of them taking medication and the frequency of admission to hospital. Data were analysed to generate descriptive statistics.

Results: 14 patients were enrolled with age ranges from 61 to 82 years old (3 females and 11 males). The indication of SGLT2 inhibitors include 57.1% for heart failure, 42.9% for type 2 diabetes mellitus and 7% for chronic kidney disease. 64.3% of patients could recall that they are taking SGLT2-inhibitor and were aware of the indication of the medication. There are 21.4% of patients that are given information about this medication prior to initiation. 92.8% of patients are adherent to taking the medication (missed less than once per week). Only 21.4% of patients are aware of the sick day rule, 28.6% are aware of risk of hypoglycaemia, 21.4% are aware about genital infection and dehydration and 7% are aware of the risk of euglycemic ketoacidosis.

Conclusion: SGLT-2 inhibitors have been widely used for multiple indications due to its good evidence profile. However, it is evident that patients did not receive enough information before initiation of medication. As health care professionals, it is important to educate our patients before starting SGLT-2 inhibitors to ensure patient’s safety.