



Service Priorities and Programmes Electronic Presentations

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Nursing Management of Hypoglycaemia in the Ambulatory Care Setting

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Introduction

Hypoglycaemia is a common acute complication in people with type 1 or type 2 diabetes. However, the management of hypoglycaemia could be varying according to different Diabetes Mellitus (DM) centers and General Out-patient Clinics (GOPCs). A continuous quality improvement project was conducted on this topic from October 2015 to February 2016.

Objectives

- 1) Align nursing management of hypoglycemia in KEC
- 2) Evaluate the glucose elevation after 15g fast acting carbohydrate
- 3) Empower patients about hypoglycaemia management

Methodology

An evaluation of a standardised hypoglycaemia management protocol was conducted. The standardised protocol was to give 150ml apple juice to the patient, then checking the capillary blood glucose (CBG) 15 minutes after that (repeat 150ml apple juice if CBG fell below 4 mmol/L). Then, it was followed by an intake of 15 -20g long acting carbohydrate. The evaluation included the treatment details, CBG levels at hypoglycaemic attack and 15 minutes after fasting acting carbohydrate, as well as possible cause of hypoglycaemia. Patients answered the self-management of hypoglycaemia that happened within the most recent one month on the hypoglycaemic attack day and then again 3 months after the incident.

Result

79 patients with hypoglycaemic attack were recruited in 2 DM centers and 5 RAMP DM clinics including 90.7% type 2 and 9.3% type 1 diabetes. The mean age was 59.7 ± 7.2 and the mean duration of DM was 11.5 ± 8.6 years. All patients received 150ml apple juice immediately after hypoglycaemia attack without delay. The mean

CBG elevation after 15g fast acting carbohydrate was 1.76 ± 0.7 mmol/L. Hypoglycaemic attack experience at the latest one month was reduced from 63% to 20%. CBG checking was increased from 74% to 90% and correct hypoglycaemia treatment from 28% to 68%. The most common cause of hypoglycaemia was taking medication with reduced energy intake while attending consultation.

conclusion

Nursing management of hypoglycaemia was aligned in DM centers and GOPCs without delay treatment. The elevation of CBG after 15 g fast acting glucose was proved to be safe and effective to all patients recruited. Patients had improved their hypoglycaemia self-management.