DEVELOPMENT AND VALIDATION OF A PHARMACIST TOOL KIT ON GLUCAGON USE

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INTRODUCTION
Lack of education and confidence on the appropriate use and administration of glucagon by non-trained carers can lead to medication errors and untreated hypoglycaemic episodes.

AIMS
To validate the usefulness of a specifically developed educational tool kit intended for education of pharmacists on timely and appropriate use of glucagon.

METHOD
A Glucagon Tool Kit was created and validated by a panel of experts prior to distribution to all pharmacists.

Informative Chart
Snap Shots from video to aid use of glucagon kit

Information Sheet
Briefly highlights issues related to glucagon, such as storage, steps to reconstitute and dosage regimen

Online Video
• In Maltese and English; 1.5 minutes long
• Explains how to reconstitute and administer Glucagon
• http://vimeo.com/glucagon/1 for English version
• http://vimeo.com.glucagon/2 for Maltese version

A questionnaire was compiled to assess the knowledge and confidence of glucagon use by pharmacists. The questionnaire was run twice, prior to distribution of the Glucagon Tool Kit and again immediately after the distribution of the Glucagon Tool Kit.

RESULTS
A total of 135 pharmacists completed the questionnaire out of whom 44% were community pharmacists.

The knowledge of pharmacists on the use of glucagon increased when a Likert Scale was used to measure knowledge (1 least, 5 most knowledgeable). Mean knowledge before was 2.165 which increased to 4.327 (Wilcoxon Sign Test p<0.001) following the distribution of the educational Glucagon Tool Kit. (Figure 1)

The pharmacists’ confidence on the use of glucagon increased when a Likert Scale was used to measure confidence (1 least, 5 most confident). Mean confidence before was 1.99 which increased to 3.98 (Wilcoxon Sign test p<0.001) following the use of the educational Glucagon Tool Kit. (Figure 2)

The majority of respondents (95%) found the video is sufficiently concise, 91% thought that the Tool kit was very useful and 95% rated it as informative.

CONCLUSION
The educational material developed had a significant impact on the knowledge and confidence the pharmacist has on the use and reconstitution of glucagon. Improving the knowledge and confidence of pharmacists on the appropriate use of glucagon will empower them to support patients and carers in the use of glucagon in emergencies.