



Service Priorities and Programmes
Electronic Presentations

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Promotion of Medication Safety – Safe Use of Insulin Pen Devices in In-patient Settings

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Introduction

Both National Health Service (NHS) in England and Institute for Safe Medication Practices (ISMP) in America published safety alert and consensus guidelines on safety issues on using insulin pen devices in late 2016 and 2017 respectively. Potential patient safety issues involving staff using insulin syringes (U-100) to extract insulin from pen devices or refill cartridges, and sharing of insulin pens among multiple patients were raised and addressed. The former practice is not uncommon in our ward environment when patients on insulin therapy did not bring back pens or pen needles on hospital admission. With the introduction of insulin preparations with higher concentration (e.g. 300U/ml) across HA hospitals, the potential risk for insulin overdose is imminent and should be prevented.

Objectives

(1) Increase the awareness of healthcare professionals on the potential risk of extracting insulin from pen devices using insulin syringe (U-100); (2) Suggest alternative measures to frontline doctors and nurses on safe administration of insulin; (3) Promote safe clinical practices in using insulin pen devices to healthcare professionals.

Methodology

(1) An updated table on insulin preparations available in the hospital was prepared and distributed to all wards to remind ward staff on our available concentrated insulin (300U/ml) and insulin vial alternatives

(2) Suggestions made to medication safety committee on safe insulin practices:

- Do not withdraw insulin from prefilled pens using insulin syringe; always use with pen needles
- Use safety pen needles to protect against needlestick injury if available
- Use vial preparations instead of penfill cartridges or prefilled pens if pen or pen needle is not available
- One prefilled pen for one patient

(3) A promotional poster was designed for posting in wards for promotion and education

(4) Safety Forum was organized in November 2017 by Central Nursing Department inviting a consultant, nursing consultant and clinical pharmacist to share safety tips to all nursing staff in HKWC

Result

With the collaborative efforts of various stakeholders, including doctors, nurses and clinical pharmacists, safe practices in using insulin pen devices in wards can be implemented which safeguard not only our patients but also our nurses who administer the insulin. Multi-disciplinary approach is important in leading the changes to uphold medication safety in the hospitals.