Knowledge base and attitudes of senior medical staff on insulin therapy in children with diabetes

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**Background\Objectives**

- In Wales, children with diabetes are more likely to be admitted to hospital than their peers
- Knowledge on Multiple Daily Injections (MDI) and Continuous Subcutaneous Insulin Infusion (CSII) regimen impacts on the out-of-hours advice given to families of children with diabetes.
- We aimed to assess confidence levels of middle grade doctors to provide advice on insulin regimens.

**Methods**

We conducted a questionnaire based survey to assess knowledge base and followed it up with training sessions delivered by the diabetic team. A Survey Monkey based questionnaire was circulated to all middle grades and consultants in the paediatric department. Questions included

- Calculation based scenarios
- Confidence levels at managing DKA
- Trouble shooting insulin pump queries
- Future training sessions content

Free text option for responses was provided

**Results**

- For newly diagnosed type 1 diabetes, how confident are you on starting multiple daily insulin injections
- During out of hours, I am able to provide appropriate advice over the phone on ‘sick day rules’ to families
- Regarding insulin pumps, would you be confident to give advice over the phone on patient with type 1 diabetes on CSII
- In cases of pump failure, I would be able to give advice to change from CSII to MDI regimen (converting from TDD to MDI)

- 3 consultants, 5 middle grades (ST4-8) and 2 associate specialist doctors responded
- 27% were not confident on starting MDI for newly diagnosed cases
- Majority were confident of managing DKA and providing advice over ‘sick day rules’
- 57% were unable to advise change from CSII to MDI regimen
- 85% were not confident on providing advice over the phone regarding pump use

**Conclusion**

- The project lacked in numbers, post teaching survey responses were minimal.
- There is a significant lack in knowledge base regarding insulin pump therapy. There is scope for guideline development and training on different pumps used in CSII.
- It may be argued that OOH diabetes advice should be provided by the specialist team, not general paediatrics.

**References**

Key words – Multiple Daily Injections MDI, Continuous Subcutaneous Insulin Infusion CSII, insulin pumps