



Service Priorities and Programmes
Electronic Presentations

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Submitting author: Ms S Y HUNG

Post title: Advanced Practice Nurse, PYNEH, HKEC

Do we know that our patients are doing insulin injection correctly?

Hung SY, Cheung YH, Wong MY

Family Medicine and Primary Health Care (FM & PHC), HKEC

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Introduction

For diabetes(DM)management, good injection technique can improve glucose control. A pan-European study showed that many people with diabetes did not remember receiving any education on particular topics relating to injection technique (Strauss et al, 2002). Health care workers usually focussed on patients' blood glucose level and dosage adjustment. We spent little time on improving injection technique.

In Chai Wan General Out Patient Clinic (CW GOPC), around 8.8 % of Diabetes patients need insulin therapy (data from Cdars 2017). For patients who need to start insulin injection, nurse will provide individual teaching. But there were some patients who did not remember the steps being taught.

Objectives

- 1.To review the prevalence of injection technique problem of DM patients who had follow ups in CW GOPC
- 2.To review the injection technique of patients
- 3.To correct the injection technique and improve DM control

Methodology

From Apr 2016 to Jun 2017, patients who followed up in Risk Assessment and Management doctor clinic with insulin therapy were recruited by convenience sampling.

A checklist was used to check patients' injection technique.

For those who had injection problem, education would be provided by nurse and patients also needed to do the return demonstration. An injection step leaflet was given to patients for their reference.

In the next follow up, nurse would review the injection technique again.

Result

From Apr 2016 to Jun 2017, 100 patients were recruited.

It was found that 18% had injection problems, some of them had more than 1 problems:

55.5% did not hold for at least 10 second after injection and had insulin leakage

22.2% failed to re-suspend their cloudy insulin adequately

16.7% did not follow site rotation rules & titrate the insulin by self

11.1% did not clean the pen tip before putting the needle on the insulin pen and injected at the wrong time

11.1 % (2 patients) never injected the insulin to their body: 1 patient did not remove the cap of the insulin pen for injection. 1 patient did not push the plunger to inject the dose, he just rolled the plunger from the prescribed dose to zero

5.6% used the alcohol swab to disinfect the sterile needle, reused needle, pinched up the skin fold by using 4mm needle

After education, 87% of patients improved the injection techniques.

Health care workers should check patients' injection technique regularly. We should not assume that patients who learnt injection were doing it correctly either from the start or a period of time.