

Monitoring and surveillance of Incretin drugs for type 2 diabetes in private health care in Abu Dhabi. Clinical audit with literature review.

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Background:-

The prevalence of type 2 diabetes, is increasing at an alarming rate, with only half of patients achieving the recommended HbA1c target. This study tends to focus on incretin based treatment for type 2 diabetes, and their utility in clinical practice specifically in private clinical practice in Abu Dhabi.

Incretin drug group, stimulates insulin secretion and inhibit glucagon production, they also improve beta-cell health, slow gastric emptying, promote early satiety and reduce food intake (Nyenwe EA 2011)

This study is a clinical audit supported by literature review to show the effect of new drugs for diabetes management and if incretin drugs reach the target of diabetes control. And to look for gaps in our clinical practice, especially primary care level.

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Aim:-

To critically evaluate healthcare practice based on a literature background, and to suggest real practice improvement.

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Results:-

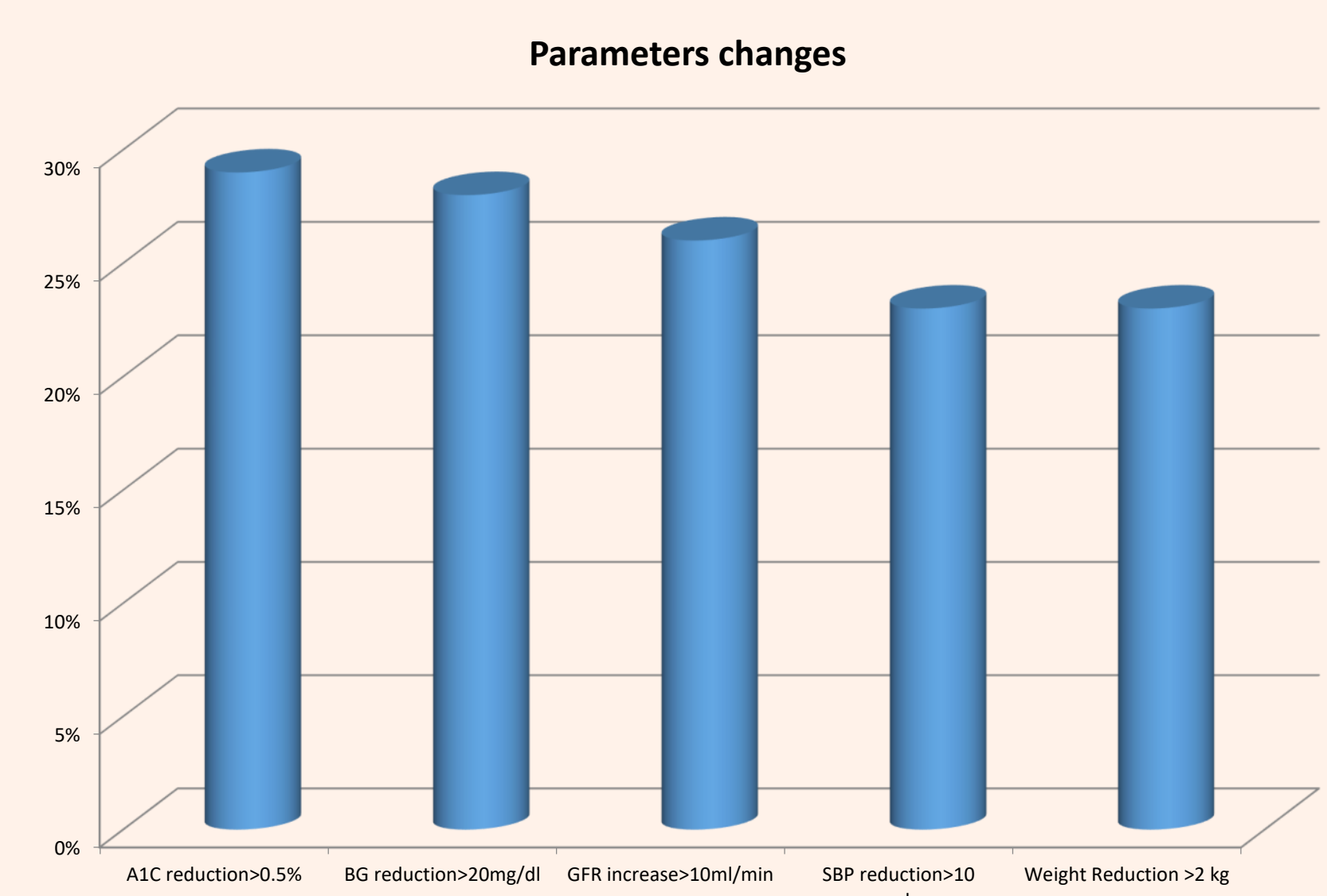
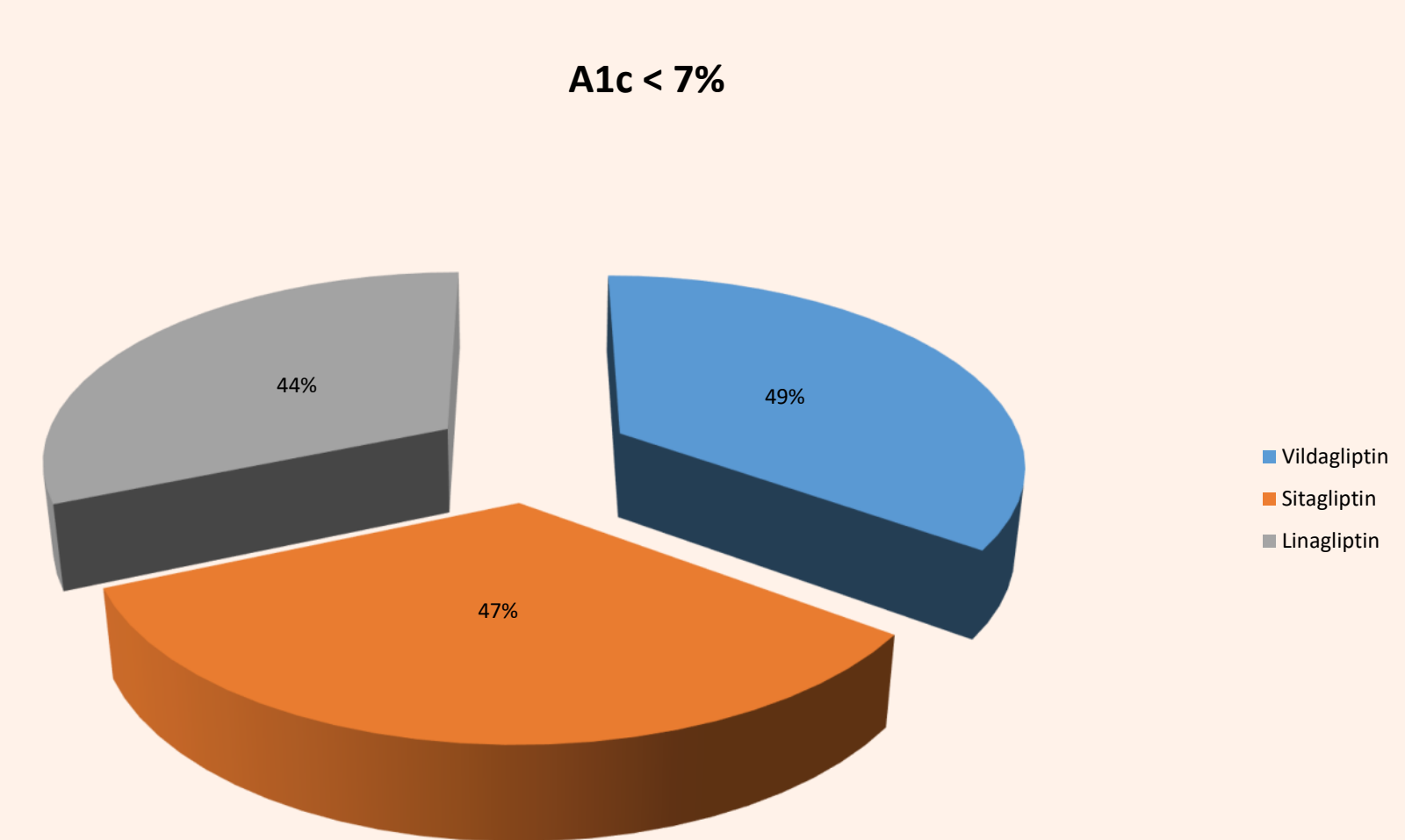
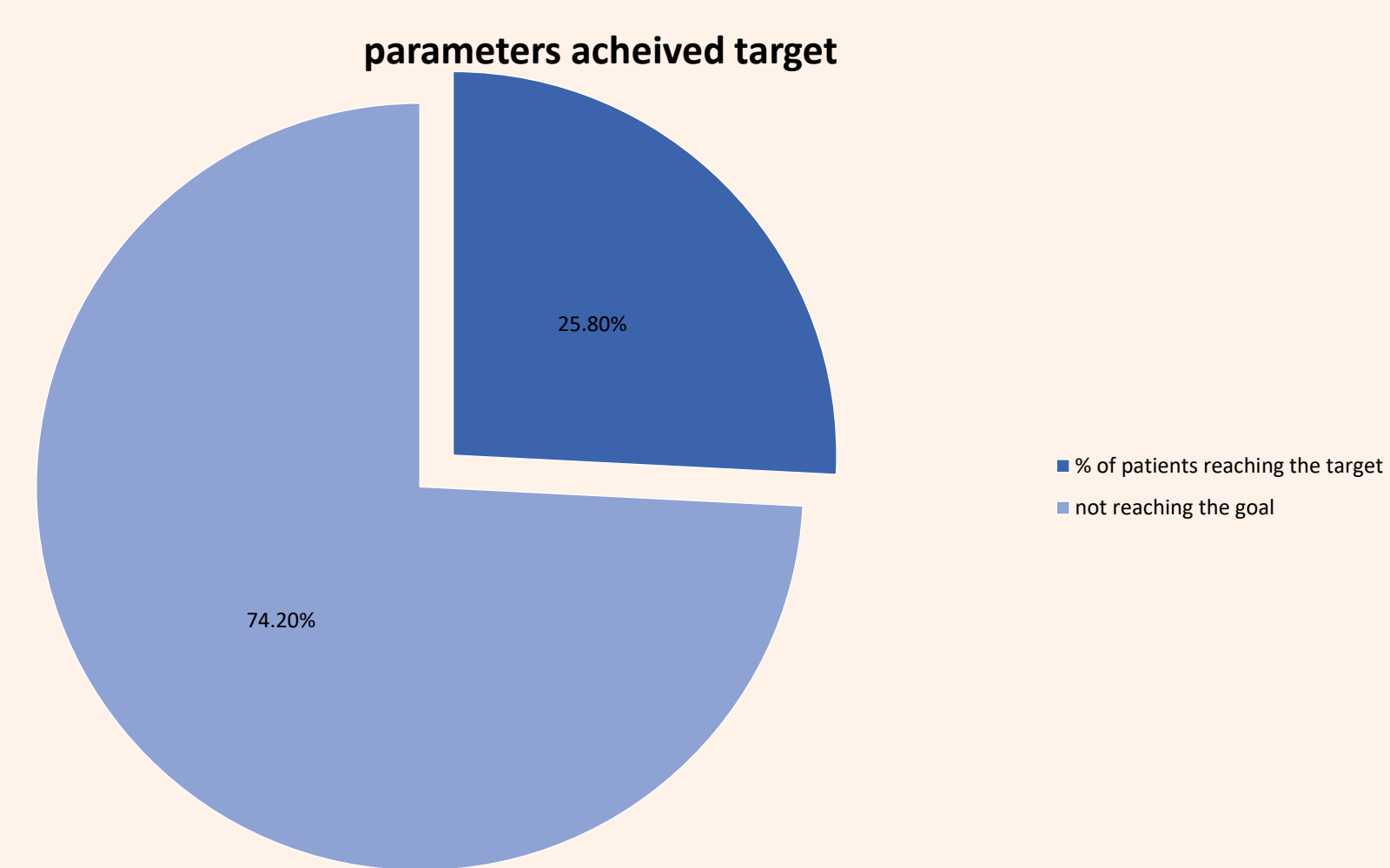
On average only 25.8 % of patients have reached the goal of treatment by A1C reduction >5%, BG reduction > 20mg/dl, eGFR increase >10, systolic blood pressure reduction >10 mm hg, and body weight reduction around 5-10%

26% of patients have an A1C>8%, considered as uncontrolled cases depending on our hospital guidelines, And 51% of patients has A1C > 7% (uncontrolled as Nice Guidelines).so only 49% of patients has A1C < 7% which is less than worldwide results if compared with published data.

Vildagliptin shows the highest percentage , 49% of patients with A1C < 7%, then sitagliptin shows 8/17=47% of patients with A1C < 7%, while linagliptin shows the lowest

Two of the GLP-1RA patients were controlled (A1C < 7%) while the last Third was not.

- regarding parameters changes:
- 29% of patients have shown reduction in A1bc > 0.5%
- 28% of patients have shown BG reduction > 20 mg/dl
- 26% of patients have shown an increase in GFR > 10 ml/min
- 23% of patients have shown systolic blood pressure reduction >10 mm hg
- 23% of patients have shown weight reduction > 2 kg



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Discussion :-

The purpose of my project is to create knowledge of current clinical practice, measure current practice against a standard, act on findings to improve practice in our hospital in the area evaluated, to raise awareness about agreed standards of care.

My findings reveal, less than expected prevalence of incretin drugs use, only 9.2% of our patients with type 2 diabetes are taking this group of medication, I think the main cause is that the cost of this group of medication is high comparing with metformin and SUs, which is still more relevant for all.

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Methods:-

Design:-

Audit on Incretin drugs for diabetes management

Sample:-

150 patients with type 2 DM who are taking Incretin drugs with or without other diabetic medication.

Setting:

UAE, Abu Dhabi, Al Noor hospital, Al Bateen and musaffah branches, for 3-6 months between September and December 2016.

Variables :

HBA1c, BG, BP, BW, and eGFR.

Drugs studied:

GLP-1RA: Liraglutide, Dulaglutide, Exenatide
DPP-4 Inhibitors: Sitagliptin, Linagliptin, Vildagliptin

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Conclusion:-

regarding parameters changes only 25.8% of patients reached the target during 3-6 months of treatment. Which is less than expected (worldwide studies shows that 54.2% of patients with type 2 diabetes reaching the target by A1C < 7%) (Lipska et al., 2016). Achievement was poor in adherence to management plan, and quality of services.

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Actions and Recommendations

