

Analysing the Growth of Sitagliptin Market in the UAE



*Under the guidance of Dr Rahul
Sharma.*

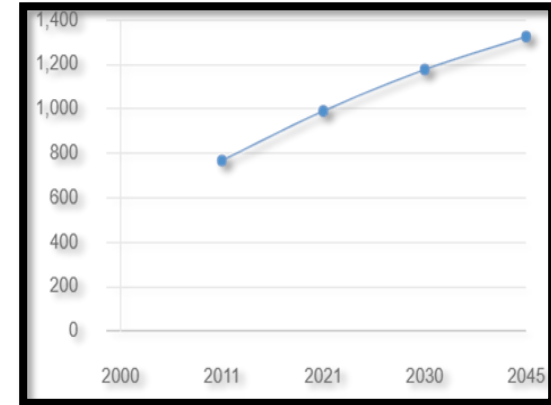
*Assistant Professor, School of
Pharmaceutical Managemement ,
IIHMR university, Jaipur*

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INTRODUCTION

- It is a well known fact that one of the largest global crisis in the 20th century is diabetes.
- The increase of diabetes and associated consequences in the UAE's multi-ethnic population has matched economic expansion.
- The global diabetes burden is rising, particularly in developing countries that are industrializing and adopting sedentary lifestyles, poorer eating habits, and less physical activity
- Diabetes has a prevalence of 24% among nationals and 17.4% among expatriates in the gulf particularly in the UAE.
- The UAE had the world's second highest diabetes prevalence (19.5%) in 2007, with a predicted prevalence of 21.9% by 2025. To combat this condition, the emirates established a National Diabetes Care Continuum program.



Growth of diabetes over the years in UAE

ABOUT DIABETES MELLITUS AND ITS CLASSIFICATION

Diabetes is a chronic, progressive metabolic illness or health condition that affects blood sugar balance. The pancreas, which is in charge of insulin production, either fails to create insulin or our bodies are unable to utilise the insulin that is produced adequately.

CLASSIFICATION

Type 1 or diabetes Insipidus:

It is commonly known as juvenile onset diabetes, occurs when our pancreas is unable to generate enough insulin. As a result, insulin must be supplied from outside the body.

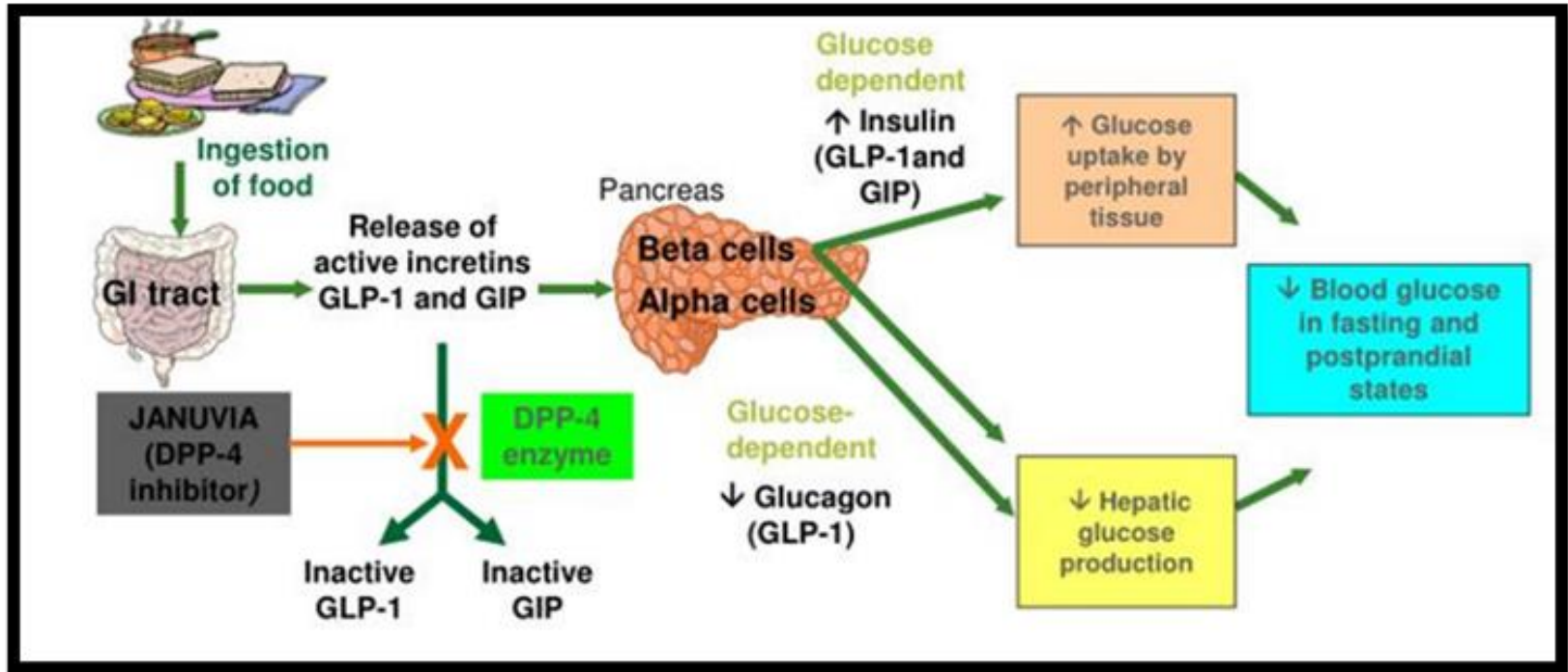
Type 2 or Diabetes Mellitus:

It is often known as maturity-onset diabetes. It is a condition where the cells become resistive to taking in glucose and the body produces insulin in uneven amounts.

Type 3 or Gestational Diabetes:

Diabetes that occurs during pregnancy. In certain situations, physiologic stressors during pregnancy may cause diabetes to develop

PHARMACODYNAMICS AND PHARMACOKINETICS OF SITAGLIPTIN



DIRECT COMPETITORS OF JANUVIA

Some of the direct competitors of Januvia are as follows :-

- 1) Pioglitazone (Actos)
- 2) Glimiperide(Amryl)
- 3) Metformin(Glucophage)
- 4) Dapagliflozin(Forxiga)
- 5) Canagliflozin(Invokana)



RESEARCH METHODOLOGY AND OBJECTIVES

OBJECTIVES OF THE STUDY

- 1) To find out the preferred brand of sitagliptin used for diabetes mellitus-
- 2) To find out the most prescribed dose of sitagliptin.
- 3) Most combination therapies used of sitagliptin.
- 4) To find out the different brands of sitagliptin possessed by chemists.

METHODOLOGY

Study design:

A design was used to validate the data of patients and clinicians on insulin delivery which was cross sectional in nature. The information was gathered from pharmacies and doctors in Dubai and Sharjah.

Method:

A standardized questionnaire was administered to doctors and pharmacists in order to analyze their perceptions of sitagliptin and was performed in Sharjah and Dubai using Google Forms. The investigation was carried out using a pre-designed questionnaire. To facilitate this study and enhance the results, the form was translated into English during the doctor and chemist interviews.

Study tool:

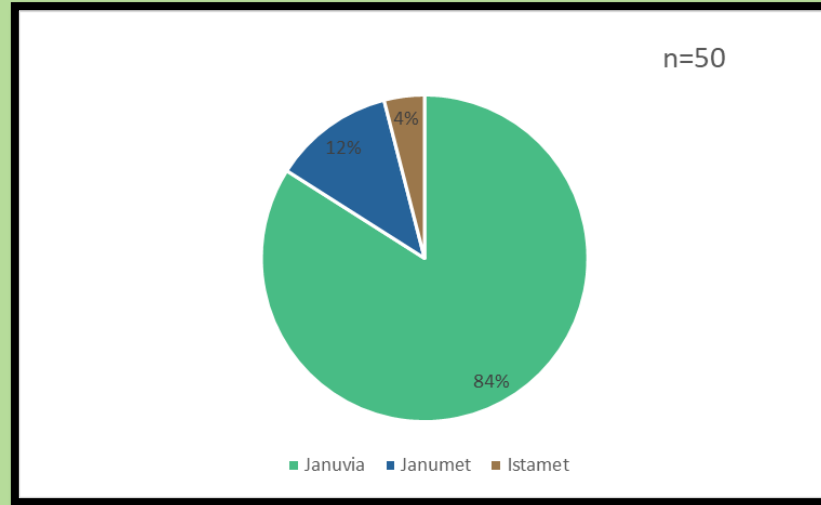
For the purpose of the study, a pre-designed form with many questions on the usage of sitagliptin for doctors and pharmacists was produced.

Study Sample and setting:

The sample size for this study was 100 (50 chemists and 50 doctors). Data was gathered online using Google forms, and participants were given a permission form to ensure the confidentiality of their responses.

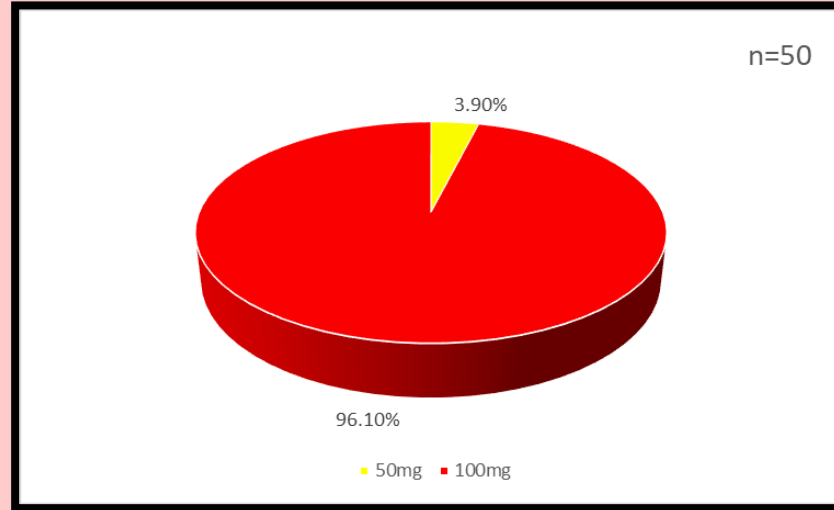
DATA ANALYSIS

1) Preferred brand for sitagliptin that you would use for the treatment of T2DM ?



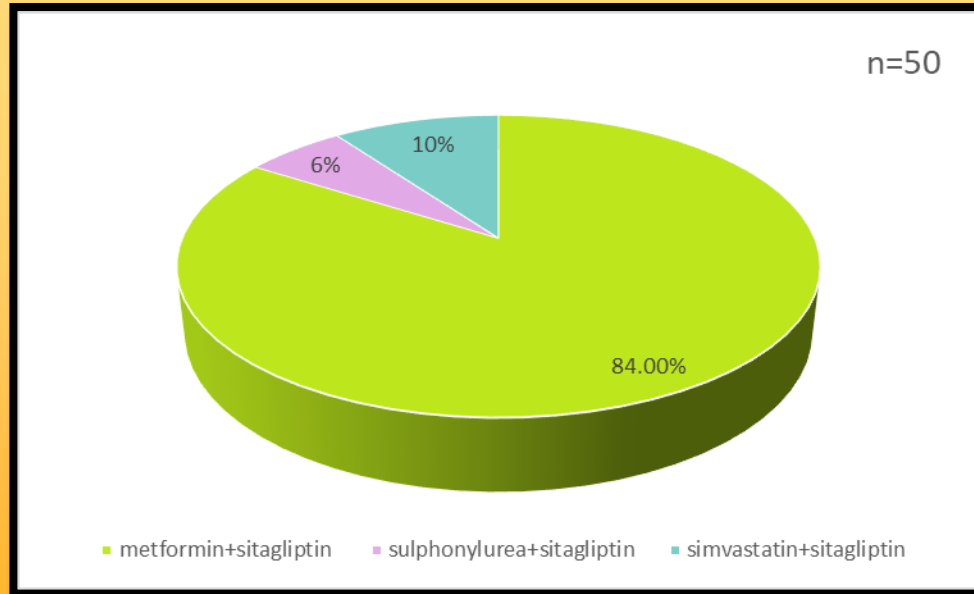
In the treatment of T-2 DM, over 84% of doctors preferred Januvia, whereas 12% preferred Janumet and only 4% preferred Istamet.

2) What is the strength of sitagliptin(januvia) prescribed ?



It can be shown that 96% of the pharmacists indicated using 100mg sitagliptin, whereas just 3.9% suggested using 50mg sitagliptin

3) What combination of sitagliptin is majorly prescribed by your shop ?



It has been observed that 84% people in UAE trade metformin+ sitagliptin combination while only 6% trade sulphonylurea and 10% trade simvastatin as shown

4) What brands of sitagliptin do you have ?

It was discovered that 76.5% of the chemists use Januvia, 13.7% use Janumet XRCP, 7.8% use Istamet, and 19.6% use all three brands of sitagliptin.

SITAGLIPTIN BRANDS	% RESPONSE
Januvia	76.5%
Janumet XRCP	13.7%
Istamet	7.8%
All 3 types of brands	19.6%

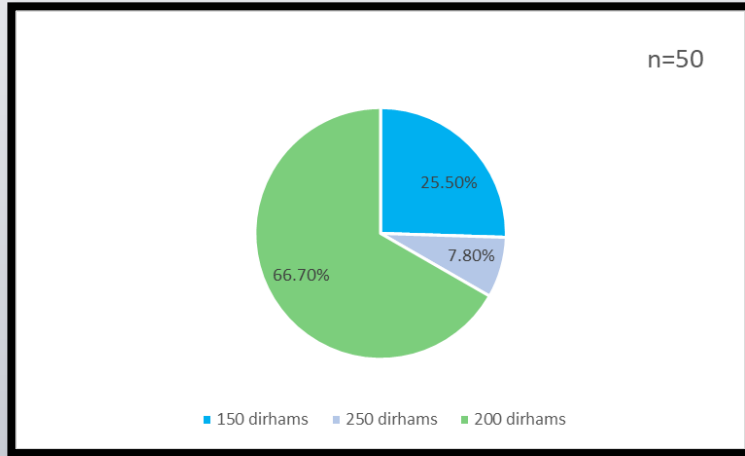


Figure showing the price of sitagliptin in shops

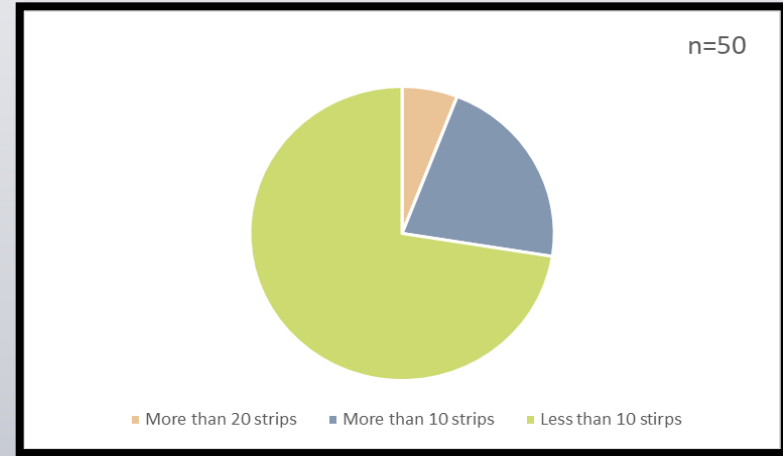


Figure representing the quantity of Januvia sold in a week

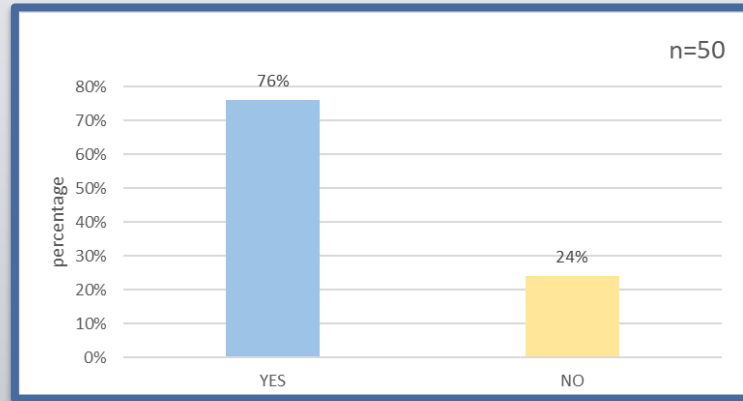


Figure showing whether combination therapy is preferred or not

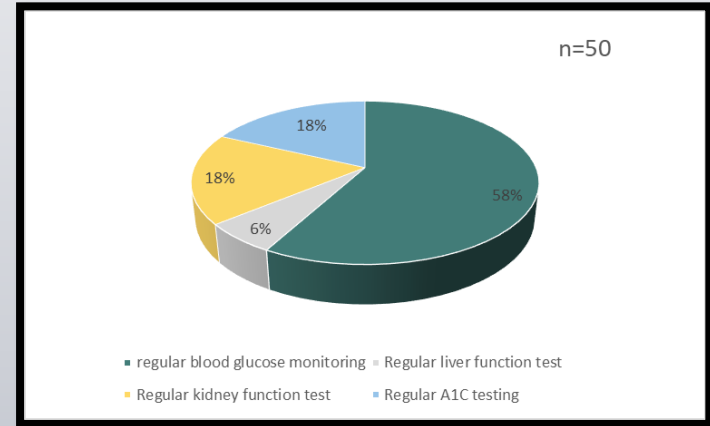


Figure showing different methods of monitoring blood glucose levels

CONCLUSION

As we can see in today's world, diabetes is becoming more prevalent, and this is also true in the UAE. At the same time, altering a lifestyle with chronic conditions has exacerbated the situation, and those who already have inherited disorders are in greater danger than the general population. Many variables contribute to the problem, including financial situation, age, stress, severity of difficulties, and so on.

Compared to other combination drugs, the utilization of metformin and sitagliptin is greatest at 84%. This then demonstrates how the drug is effective in the treatment of TYPE-2DM. We can also observe that Januvia was more popular at 76.5% than Janumet and Istamet.

Sitagliptin's cost in Dubai and Sharjah came out to be 200 dirhams which came out to be 66.7% which may be costly for some members of the sample group due to its high cost. As a result, cost utilisation approaches might be employed to cut costs while increasing benefits.

It can also be seen from the data that 96% of the times 100mg of sitagliptin was prescribed as a dose which shows that this was the most frequently used dosage for the treatment of type-2 DM.

Januvia is a promising medication according to data for the management of the disease. Furthermore, combination molecules are preferred over individual molecules due to improved pharmacodynamics within the body.

In terms of reliability, efficacy, and therapy, sitagliptin is the highest quality DPP-4 inhibitor.

As a result, we can conclude that the Sitagliptin market has grown over time and will continue to expand in the near future.

REFERENCES AND BIBLIOGRAPHY

- 1) [Hamoudi, R., Saheb Sharif-Askari, N., Saheb Sharif-Askari, F., Abusnana, S., Aljaibeji, H., Taneera, J., & Sulaiman, N. \(2019\). Prediabetes and diabetes prevalence and risk factors comparison between ethnic groups in the United Arab Emirates. *Scientific Reports*, 9\(1\), 1–7. <https://doi.org/10.1038/s41598-019-53505-7>](#)
- 2) *Number of Population Estimated by Nationality-Emirate of Dubai*. (2015b).
https://www.dsc.gov.ae/Report/DSC_SYB_2017_01%20_%2003.pdf
- 3) Sreedharan, J., Muttappallymyalil, J., al Sharbatti, S., Hassoun, S., Safadi, R., Abderahman, I., Hameed, W. A., Ibrahim, A. M., Takana, M. T., & Fouda, A. M. (2015). Incidence of Type 2 Diabetes Mellitus among Emirati Residents in Ajman, United Arab Emirates. *Korean Journal of Family Medicine*, 36(5), 253. <https://doi.org/10.4082/kjfm.2015.36.5.253>
- 4) [Delavari, A., Forouzanfar, M. H., Alikhani, S., Sharifian, A., & Kelishadi, R. \(2009\). First nationwide study of the prevalence of the metabolic syndrome and optimal cutoff points of waist circumference in the Middle East: the national survey of risk factors for noncommunicable diseases of Iran. *Diabetes Care*, 32\(6\), 1092–1097. <https://doi.org/10.2337/dc08-1800>](#)

THANK YOU

*Presented by
Ritik Tatia
MBA=PM 13 School Of Pharmaceutical
Management , Jaipur*