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Original Research Article.

Assessment of Knowledge and Awareness of Diabetic Patients About Diabetes and It's Medical and Surgical Complications in Tabouk, Saudi Arabia

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ABSTRACT

Objectives: Since Kingdom of Saudi Arabia is among countries with the highest prevalence of Diabetes maladies. According to International Diabetes Federation, in this study we aimed to assess life style pattern regarding diet, exercise, medication adherents, foot care and prevalence of Diabetes maladies complication.

Methods: A cross sectional Hospital-based descriptive design study was conducted among 120 diabetic patients attending the diabetes center at King Fahad Specialist Hospital via a structured questionnaire.

Results: 98.3% of our participants were diagnosed with type 2 DM, most of them on insulin regiment, only 27.5% practice a healthy dietary habits, 69.1% are smoker, 25.8% doing regular exercise, 57.5% they aware about the complication of diabetic foot, 67.5% they did regular foot examination and 93.3% of them use a diabetic shoes.

Conclusion: Steps such as education about importance of dietary control and healthy life style are required to improve the heath states of the patients and to decrease diabetes complication.

Keywords: Diabetes Maladies, Diabetic Foot, Tabuk, Saudi Arabia.

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INTRODUCTION

Diabetes mellitus is a global health burden; the number is increasing at an alarming rate. Currently, 285 million are affected by this lifelong morbid metabolic disorder. The number is projected to reach 438 million by the year 2030, the Kingdom of Saudi Arabia is among countries with the highest prevalence. According to International Diabetes Federation.[1,2]

Foot problems are an important cause of morbidity in patients with diabetes mellitus. The lifetime risk of a foot ulcer for diabetic patients (type 1 or 2) may be as high as 25 percent.[3] A potentially preventable initiating event, most often minor trauma that causes cutaneous injury, can often be identified. Foot amputations, many of which are preventable with early recognition and therapy, may be required.[4]

These observations illustrate the importance of frequent evaluation of the feet in patients with diabetes to identify those at risk for foot ulceration.[5] If the above risks for foot problems are ignored in people with diabetes, amputation could be the last resort. People with diabetes are far more likely to have a foot or leg amputated than other people. Many people with diabetes have peripheral arterial disease, which reduces blood flow to the feet. Another common factor is nerve disease, which reduces sensation. Both of these problems make it easy for infections to occur and may lead to amputation. The great news is that most amputations are preventable with regular care and proper footwear. Thus we proposed this research to study the pattern of diabetes septic foot among patients with diabetes in Tabuk City.

METHODOLOGY

A cross sectional Hospital-based descriptive design study was conducted among 120 diabetic patients attending the diabetes center at King Fahad Specialist Hospital. A structured questionnaire sheet was designed for data collection by the researcher based up on review of literature. It includes the socio-demographic data of the study subjects, data about awareness, knowledge, and practice.

Ethical Consideration

The study proposal was sanctioned by the ethical committee of the college.

Study was explained to participants and informed consent was taken from the participants.

Statistical Analysis

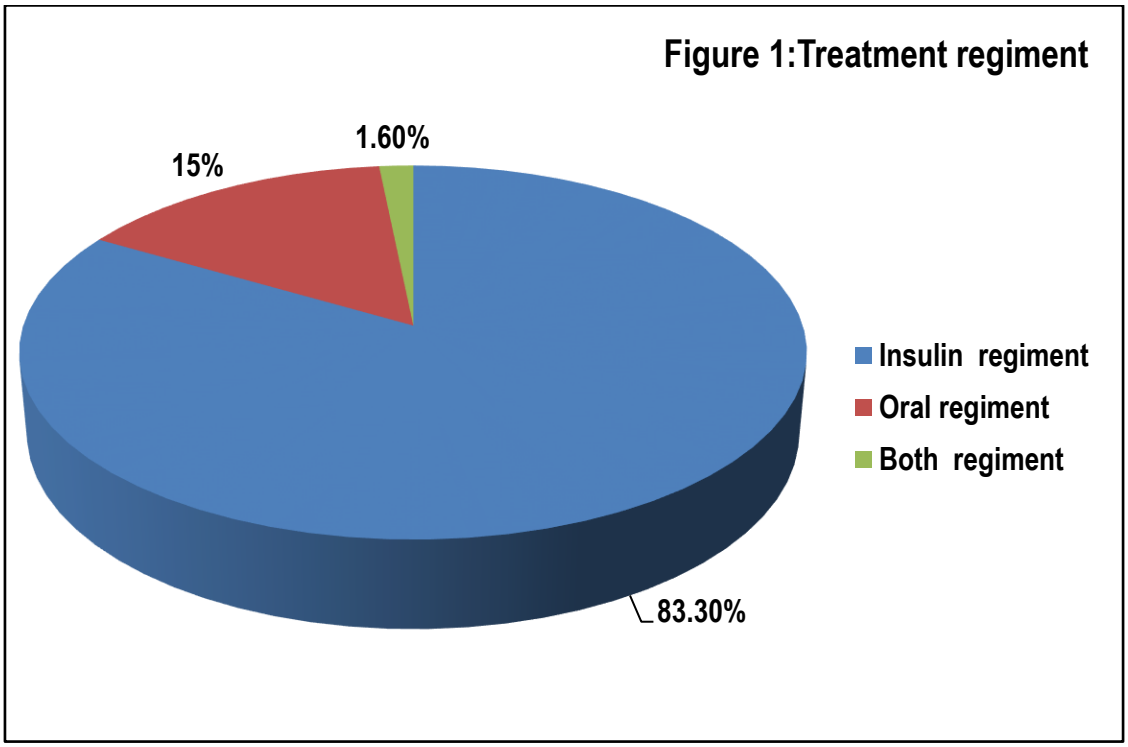
The collected Data were entered and analyzed using the Statistical Package for Social Sciences (SPSS) statistical program version 19.

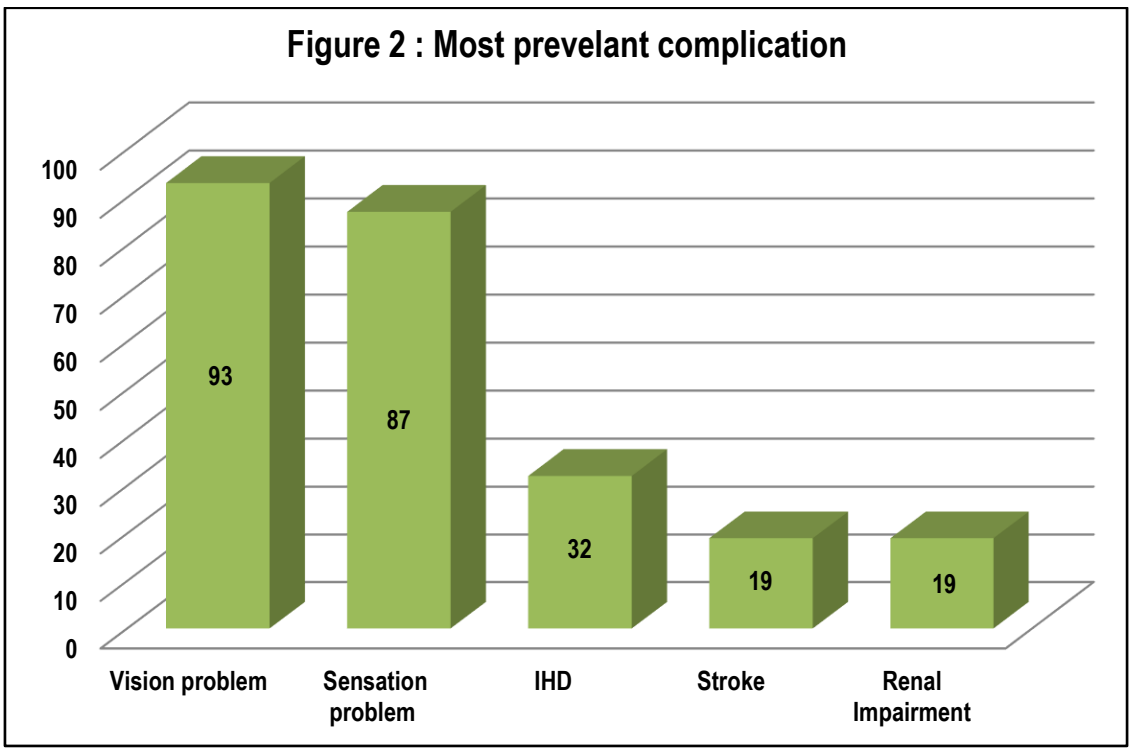
RESULTS

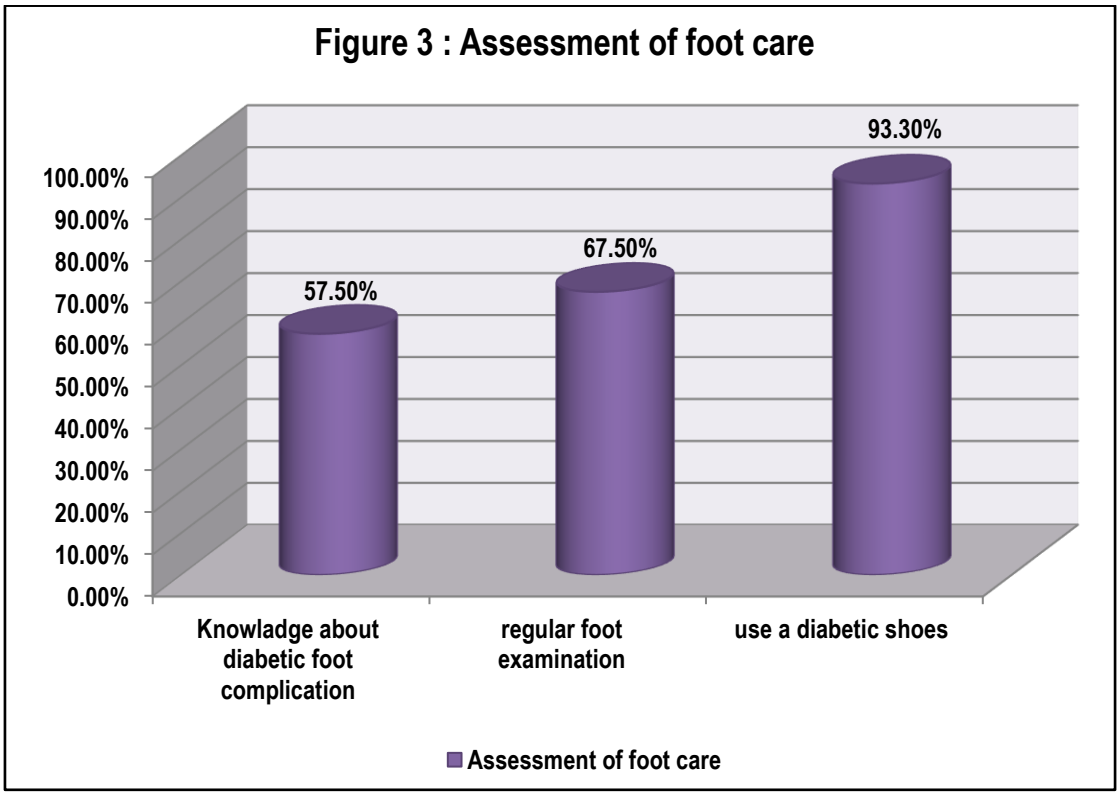
The study sample consist of 120 diabetic patient , their age ranging from 9 to 95 years old with average age of 61 years; 98.3% of them were diagnosed with type 2 DM with average 19 years since diagnosis, the average of latest HbA1c measurement is 8.2. Out of 120 patients; 83.3% of them used Insulin regiment while 15% used oral hypoglycemic medication and 1.6% used combination of both regiment. (Figure 1)

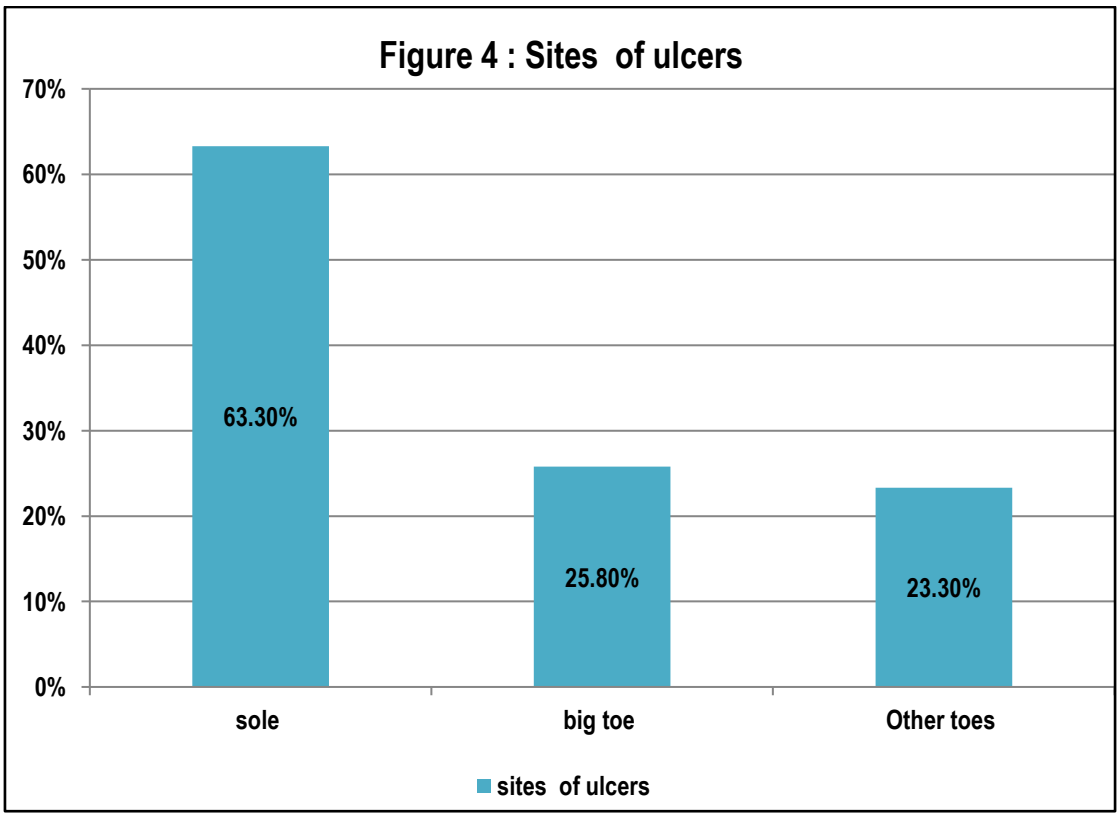
Regarding life style of our participants; we found that 79 out of 120 adherent to their medication, only 33 out of 120 practice a healthy dietary habits, 83 out of 120 are smoker and 31 out of 120 doing regular exercise.

The most prevalent complication among our participant are: vision problem, sensation problem, ischemic heart disease, stroke and renal impairment. (Figure 2)









During assessment of Knowledge and attitude regarding foot care; we found that 57.5% are aware about the complication of diabetic foot, 67.5% did regular foot examination and 93.3% of them use diabetic shoes. (Figure 3)

The most prevalent sites of ulcers indicated by the participants are sole of the foot, followed by big toe. The average size of ulcer is 26.9 cm. 55% of ulcers caused by trauma and 38.3% due to unknown cause, 17.5 % did amputation operation. (Figure 4)

DISCUSSION

Educating patients at risk for diabetic foot ulceration have been shown to be beneficial in several study, Malone et al (1989)[6] assessed the effectiveness of diabetic foot education and they found that a lower incidence of foot ulcers in the group that received an hour of foot care education in our study we found that about two-thirds of study participant will aware about diabetic foot complication and did foot examination at regular bases on the

other hand bad life style were reported by a lot of participant in form of unhealthy dietary habits, smoking and Inactivity.

CONCLUSION

The knowledge level of diabetic patient in Tabouk about diabetes and diabetes complication need to be improved. Steps such as education about importance of dietary control and healthy life style are required to improve the heath states of the patients and to decrease diabetes complication.

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