



A SURVEY ON RISK ASSESSMENT AMONG DIABETIC POPULATIONS IN GUNTUR REGION OF ANDHRA PRADESH

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ABSTRACT

Key Words

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Diabetes mellitus (DM) has evolved as a major public health concern worldwide, as its prevalence is increasing exponentially. Therefore, finding an effective way to identify individuals at risk of developing diabetes is necessary. The objective of this study is to review the problems and risk limitations facing by the existing diabetic population to assess the need for further development in their drug therapy and life style. Obesity and diabetes are major causes of morbidity and mortality as evidences from several studies indicates that these obesity and weight gain are associated with an increased risk of diabetes. There is however considerable new knowledge regarding the etiology of different forms of diabetes as well as more information on different blood glucose values for the complications of diabetes. Along with these, many other factors like age, sex, life style, physical exercise, family history, diabetic education, drug therapy and follow up etc., plays a major role in the risks and other limitations in diabetic patients. Predictions, risk assessment and risk profiling are among the various decision support techniques that this survey increasingly rely on to provide early diagnose in patients with elevated risks and to slow down the rapid increase in prevalence of chronic diseases.

INTRODUCTION:

The recent studies estimates by the International Diabetes Federation (IDF) showed that the number of adults affected by the disease in 2011 was 366 million which was projected to increase to 552 million by 2030. Nearly 80% of the affected people live in middle- and low-income countries. Type 2 diabetes mellitus, which constitutes more than 95% of all the diabetic populations, has an insidious onset with a long, latent, asymptomatic phase. Among the top 10

Countries/territories with the largest number of diabetic adults, five are in Asia. China tops the list with 90.0 million followed by India which has 61.3 million persons affected by diabetes. The numbers are estimated to rise to 129.7 million and 101.2 million, respectively by 2030. Predictions, risk assessment and risk profiling are among the various decision support techniques that this survey increasingly rely on to provide early diagnose in patients with elevated risks and to slow down the rapid increase in prevalence of chronic diseases.

Fig 1: The pie chart obtained in step 1 regarding diabetic risk assessment is compared with the pie chart in step 2 (Population with positive awareness) regarding diabetic risk assessment.

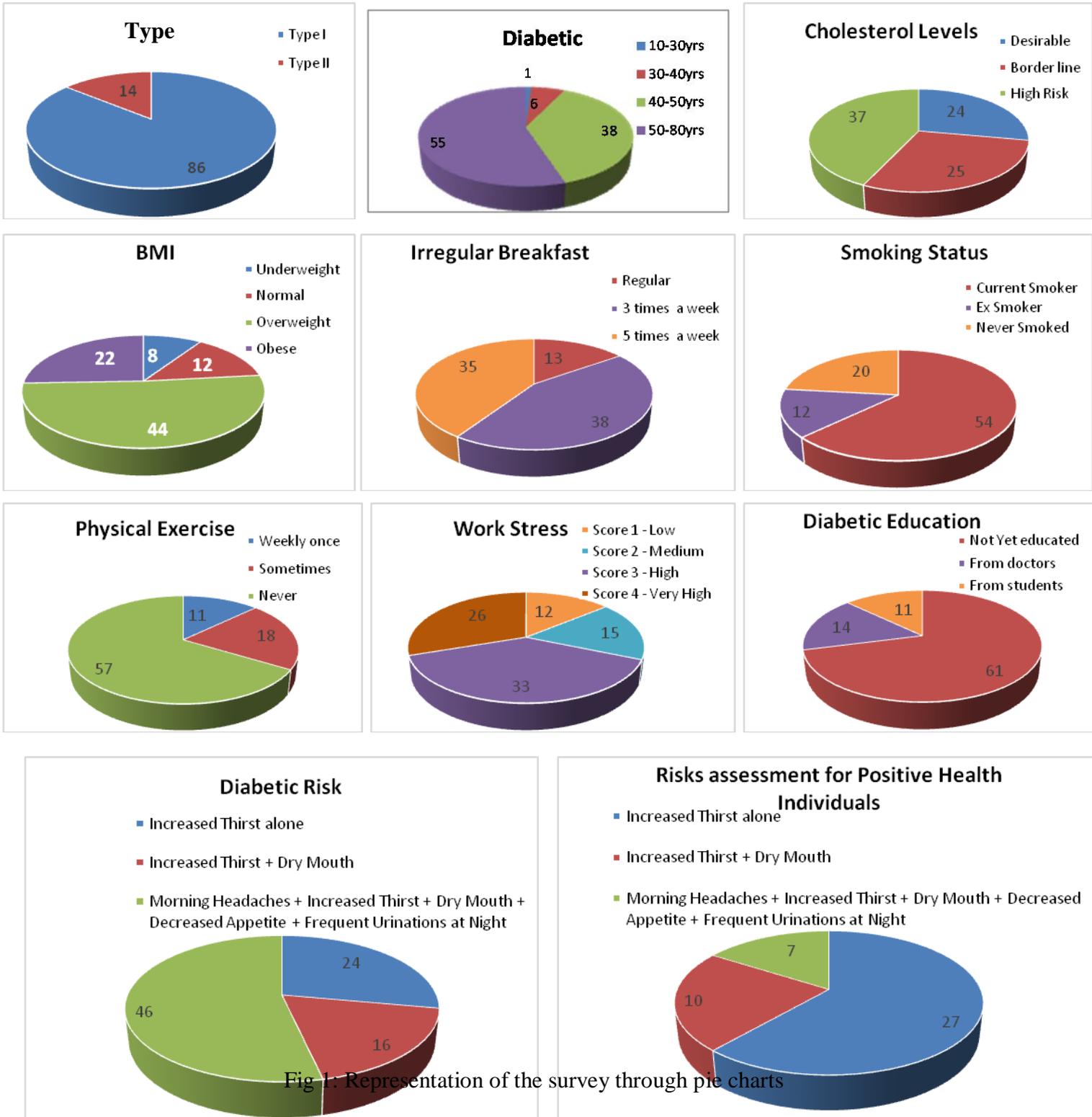


Fig 1: Representation of the survey through pie charts

MATERIALS AND METHODS

A survey proforma was prepared including the present and past medical history related to diabetes and other diseases, complications, social habits, life style, health education etc.

INCLUSION CRITERIA

- Residents of Guntur region who are diabetic and without any bar of age, sex, caste and religion.
- Standard criteria of National Diabetes data group and WHO for DM was adopted as follows: Symptoms of Diabetes + Random blood glucose ≥ 200 mg/dl.

EXCLUSION CRITERIA

- Patients outside guntur region.
- Patients with known case of TB, Severe HTN and other malignancies.

SELECTION OF PATIENTS

- Patients with symptoms of Diabetes to their knowledge are selected.
- Patients with frequent morning headaches, increased thirst, dry mouth, decreased appetite, frequent urinations at night are selected.

SUBJECTIVE CRITERIA

Demographic profile

Data from the patient's fulfilling the diagnostic criteria was collected including demographic profile.

Clinical profile

The observations of clinical examination and laboratory investigations were filled in the proforma.

Laboratory Investigations

1. Hematological examinations
2. Cholesterol level
3. Other biochemical and urinary investigations

OBSERVATIONS AND RESULTS

Present survey was conducted in 100 patients with DM. Out of 100 patients, the population with Type 2 were selected. As the Type 2 patients are 86, the major research regarding the survey focussed on those 86 patients in the 1st step. The

following are the various parameters checked in those 86 patients.

- Body Mass Index (BMI)
- Cholesterol levels
- Irregular Breakfast
- Smoking status
- Physical Exercise
- Work stress
- Diabetic Education
- Diabetic risk

All the given parameters were analyzed and the diabetic population with positive awareness on the same parameters was considered in step 2. The number remained in step 2 with positive awareness on the same parameters are 44.

CONCLUSION

The diabetic risk is more prone to the people who are socially not aware regarding the different parameters mentioned above and the risk is very less to the population those who possess good life style. You can't do anything about your age or your genetic predisposition. On the other hand, the rest of the factors predisposing to diabetes, such as overweightness, abdominal obesity, sedentary lifestyle, eating habits and smoking, are up to you. Your lifestyle choices can completely prevent diabetes or at least delay its onset until a much greater age. You should also pay attention to your diet: take care to eat plenty of fiber-rich cereal products and vegetables every day. Omit excess hard facts from your diet and favour soft vegetable fats.

REFERENCES

1. Type 2 diabetes in India: Challenges and possible solutions by A.Ramachandran.
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3920109/>
3. www.diabetesindia.com/diabetes/epidemiology
4. <http://www.who.int/mediacentre/factsheets/fs138/en/>
5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3751743/>

6. <https://link.springer.com/article/10.1007/s001250100627>
7. https://www.researchgate.net/publication/11366388_Public_Awareness_of_Diabetes_Mellitus_in_Singapore
8. Sharma rohit et.al.,prevalence of diabetes mellitus in saurashtra region of gujarat;International Journal of Research in Ayurveda and Pharmacy: 3(2), March-april 2012.
9. Faye A Luscombe, Health related quality of life measurement in Type 2 Diabetes, Value in health: 2000 Vol- 3(1). Pg 15-28.
10. Stin J M Niessen et al., The Big pet diabetes survey: perceived frequency and triggers for euthanasia, Vet. Sci. 2017, 4, 27; doi: 10.3390/vetsci4020027.