



Epidemiological Transition vs Knowledge Transition in Rural India

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Abstract

A trend of increasing burden of non-communicable diseases (NCDs), specifically type 2 diabetes, has been seen in not only urban but also in rural areas of India. However, the awareness about Non communicable diseases is not increasing parallel to their increasing prevalence. Epidemiological transition exceeds the pace of improvement in knowledge about the non-communicable diseases which is referred here as 'Knowledge Transition'. This commentary mentions four major factors which commonly act as barriers in 'knowledge transition' in rural India specifically for type 2 Diabetes:

- Knowledge about pre diabetes stage.
- Knowledge about co-morbidities, complications and self-care practices.
- Attitude towards Treatment and Non adherence.
- Awareness about risk factors.

There is a need to assess and increase the knowledge about non communicable diseases in India. Qualitative methods can help in identifying various behavioral and cultural aspects in rural areas. IEC (Information, Education and Communication) and BCC (Behavioural Change Communication) strategies are equally important as pharmacological management of Type 2 Diabetes.

Keywords: Epidemiological Transition; Non-Communicable Diseases; Type 2 Diabetes; Health Education; Health Communication

Abbreviations: IEC: Information, Education and Communication; BCC: Behavioural Change Communication; NCD: Non-Communicable Diseases.

Introduction

Nearly 51 million people in India are living with Diabetes and this is expected to increase to 87 million by 2030, accounting for 20% of the world's population of Diabetes patients [1,2]. According to prevalence estimates by IDF, the diabetes burden is growing faster in low- and middle-income countries (367.8 million) than in high-income countries (95.2 million) [3]. India has been experiencing rapid structural changes in disease patterns within the short span of the last three decades. Advances in mortality and morbidity transition to

later stages point toward an upheaval in epidemiological transition [4]. Apart from the rising prevalence of diabetes in India, the incidence of diabetes is also rising steadily, with a fast transition from euglycemia to prediabetes and diabetes. The rising rates of prediabetes, diabetes, and associated complications in urban as well as in rural areas and among the young in India are of great concern [5].

Commentary

In the past, Diabetes was not a common disease in Indian villages. A trend of increasing burden of non-communicable diseases (NCDs), specifically type 2 diabetes, has been observed not only in urban but also in rural areas of India. However, the awareness about Non communicable diseases

is not improving as it is needed, with respect to their increasing prevalence. 'Knowledge transition' in this article means the increase in knowledge for NCDs parallel to the epidemiological transition. Considering the epidemiological transition in India, the knowledge regarding chronic lifestyle diseases is lagging behind drastically in rural areas. In other words, Epidemiological transition exceeds the pace of improvement in knowledge about the non-communicable diseases which is referred here as 'Knowledge Transition'.

This article addresses major gaps or lacunae which commonly act as barriers in 'knowledge transition' in rural India specifically for type 2 Diabetes:

Knowledge about Pre Diabetes Stage: This is one of the most important factors that can bring a huge impact in preventing the disease. However, awareness about Pre-diabetes in the Indian population is scarce. Halting the progress of disease in this stage only in the majority of the population contains the potential of changing the scenario entirely. If proper knowledge is provided, people shall themselves be cautious and try to do various preventive measures to control it at this stage only.

Knowledge about Co-morbidities, Complications and Self-care Practices Regarding Type 2 Diabetes: Once glycemic control is achieved, prevention of development of complications becomes the mainstay of type 2 diabetes management. Patients have a limited knowledge of the importance as well as frequency of screening for complications [6-8]. Self-Care practices [9] need to be patient specific, considering the daily routine, overall diabetes profile and occupation. One on one counseling for lifestyle modifications can bring more clarity in patients.

Attitude towards Treatment and Non Adherence:

- It is still believed, especially in rural populations, that non communicable diseases are just like acute communicable diseases which mean that they can be managed like any acute short term disease.
- There is a culture of doing home remedies for diabetes. Patients sometimes switch between home remedies and allopathic medications and Indian Ayurvedic treatments.
- During the course of treatment, if their blood sugar is controlled, many patients believe that they have been treated for diabetes permanently. This creates a huge gap in the continuum of care.
- The knowledge about the importance of HbA1c and insulin treatment [10] is extremely limited.

Awareness about Risk Factors: People have different kinds of cultural beliefs regarding non communicable diseases in general. First, they have less understanding of a disease being called 'a lifestyle disease'. Second, knowledge on risk

factors [11] in rural areas is also very limited (as compared to urban areas) and there are several misconceptions regarding type 2 diabetes. For example, it is believed that if a person doesn't eat too many sweets or sugary foods, then there is no possibility of diabetes in that person. So, even in old age sometimes, they don't go for random sugar check-up which leads to an increase in undiagnosed cases contributing to the hidden burden of diabetes. In addition, people do not take diabetes as a serious disease in its initial stage as initial symptoms, many a times, are generic.

Conclusion

In conclusion, there is a need to assess and increase the knowledge about non communicable diseases in India. Qualitative studies can play a crucial role in understanding the perceptions, beliefs and attitude of the population towards diabetes and in identifying specific cultural issues in a specific geographical area. It shall be cost effective to invest in intense IEC (Information, Education and Communication) and BCC (Behavioural Change Communication) strategies to initiate a 'knowledge transition' which can then play a significant role in slowing down the epidemiological transition in India.

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