



DIABETES MELLITUS: CURRENT CHALLENGES AND BARRIERS IN THE DELIVERY AND UTILIZATION OF HEALTH CARE IN A COASTAL DISTRICT OF KARNATAKA

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ABSTRACT

Introduction: Barriers and challenges in the provision of essential services for diabetes mellitus often result in high rates of complications. Early diagnosis of diabetes has many clinical advantages, such as early and prompt initiation of treatment and thus avoiding occurrence of vascular complications in many people. The study was conducted to identify barriers and challenges in health care delivery and utilization of service for the prevention and control of Diabetes Mellitus.

Methodology: Total 12 FGDs was conducted with healthcare providers and care seekers from the community each. The FGDs was also being record using a voice recorder. Transcriptions from the audio recordings were the empirical basis for the content analysis.

Observation:- Health care providers related barriers reported are Lack of training, Lack of motivation, Lack of consultation time due to high patient load, Lack of adequate staff. Patients related barriers reported are socio- economic constraints, Cultural constraints, difficulty in diet restriction, and difficulty in changing behavioural Lack of skills in self care.

Conclusion: Lack of adequate staff leads to high patient load causing lack of adequate time for health care delivery. Health care system related barriers like Non availability of drugs, Doctor patient communication gap are few of the barriers and challenges for utilization of health care service.

Key Words: Diabetes Mellitus, FDG, Challenges, Barriers, Public Health System.

INTRODUCTION

India leads the world with largest number of diabetic subjects earning the dubious distinction of being termed the "diabetes capital of the world"¹. Due to the asymptomatic nature of diabetes mellitus and also due to the low disease awareness among the population, diagnosis of the disease is delayed by several years. As a result, many subjects already have vascular com-

plications at the time of diagnosis of diabetes. Barriers and challenges in the provision of essential services for diabetes mellitus often result in high rates of complications. Early diagnosis of diabetes has many clinical advantages, such as early and prompt initiation of treatment and thus avoiding occurrence of vascular complications in many people². Early intervention could also help to preserve the beta cell function. Overall, these benefits will improve personal health,

reduce economic and physiological burden at societal level.

Awareness about diabetes mellitus its causes and long-term morbidity associated with diabetes is not recognized by the public, especially those who have low education levels^{3,4}. Several barriers exist in achieving the goals of diabetic management. They include patient barriers, social barriers, barriers related to healthy system and also related to medical professionals⁵. The health care system has to address these barriers, to formulate effective health care strategies. This study was conducted to identify barriers and challenges in health care delivery and utilization of service for the prevention and control of Diabetes Mellitus in Mangalore taluk.

METHODOLOGY

The administrative limit of Mangalore Taluk of Dakshina Kannada District belonging to the state of Karnataka, India was chosen for the study. Mangalore Taluk is a taluk (sub district) in the Dakshina Kannada district, Karnataka on the western coast of India. Mangalore is the administrative headquarters of the taluk. The health system in the public sector of Mangalore taluk comprises of district hospital situated at Mangalore city, 2 Community Health Centers and 21 Primary Health centers.

It is a Cross sectional study;an operational research. A total of 12 FGDs were conducted among health care providers and health care seekers with the opinion of adjusting the number should information saturation be arrived at with less or more to identify barriers and challenges in health care delivery and service utilization for prevention and control diabetes mellitus The health care professionals in FGDs for identifying the gaps, barriers and challenges in health care delivery were selected using simple random sampling wherein 9PHCs, 2 CHCs and the district hospital were selected. Health Care seekers (population of any age, sex with DM diagnosis or at risk for DM) were selected from the community residing in filed practice area of respective PHCs, CHCs through purposive sampling.

Focus Group Discussions were undertaken to explore the barriers and challenges in the health care delivery and utilization of the health care services. 12 FGDs were conducted with healthcare providers and 12 FGDs were conducted with care seekers with a DM diagnosis or at risk for DM after obtaining written informed

consent from them. The FGDs were facilitated by the investigator in the local language Kannada and using structured guidelines as per the FGD guide and a note taker recorded it. The FGDs were also recorded using a voice recorder. There were 8-12 purposively selected participants in each FGDs, who were willing to participate and talk freely. The health care professionals were selected by the investigator and informed consent was obtained. FGDs for the health care providers were conducted at the health care facility. A trained local social worker identified the participants from the community (care seekers with a DM diagnosis or at risk for DM), obtained their consent and scheduled the meeting at the day and time convenient to them. FGDs for the care seekers were conducted at the Village Gram panchayath building where all the members would not hesitate to come. FGD participants were selected from different socio-economic strata. Other criteria considered in the selection were sex, age category and disability status. The duration for each FGD was approximately one hour. Facilitators arranged refreshments for the participants at the end of the meeting and incentives were also provided for the participants from the community which covered their travel and other expenses.

The written notes were typed and compared with the audiotape. Transcriptions from the audio recordings formed the empirical basis for the content analysis. FGD data was transcribed in English, manually coded and analyzed. The data were entered into a word processor. Transcripts were first read several times to get an overall picture and then recurring themes were identified. Quotations that epitomised central themes were identified. Several codes were identified and relevant text segments were kept under each code while reading the data. Inferences were drawn collectively by careful reading of the coded text. The data were read and re-read to check the appropriateness of the inferences drawn.

RESULTS:

Barriers and challenges reported by Health care Providers are as follows:

Capability: Health care Providers reported the Lack of training for the prevention and control of diabetes mellitus as a barrier.

".....We have not received any training in the prevention and control of diabetes mellitus.Even our ANMs should be trained regarding

Hypertension and Diabetes Mellitus, so that they can educate the population regarding lifestyle modifications as these diseases are nothing but lifestyle diseases....."

Belief and attitudes: Providers reported that there is poor inter-sectoral co-ordination with the general practitioners of that locality.

".....we have very poor co-ordination with the private practitioner; even they don't communicate with us. If we have good co-ordination we can easily do risk factor surveys and other kinds of surveys"

Providers reported Negative perceptions regarding the efficacy of generic drugs

".....I personally have doubt regarding the efficacy of drugs which we are provided with"

".....Patients usually tell us to prescribe drugs which are available elsewhere in private pharmacies because they feel the drugs which we provide do not work....."

Providers reported that they give Priorities towards communicable diseases like malaria, dengue and acute diseases. Problems with Priority setting may sometimes prevent better diabetes mellitus prevention and control making it harder to prioritize diabetes care

".....I think the problem is with Priority setting which will sometimes prevent better diabetes control. For example, malaria, dengue cases we have to give more priorities even the government insists upon that."

Motivation: Providers reported lack of motivation as one of the barriers

".....We are not here for just providing service, we need to be provided with sufficient benefits according to the work we perform so that we get motivated ..."

Time: Providers reported that lack of consultation time which may impair the ability to examine thoroughly and counsel the patient which in turn results in poor prevention and control

"..... I have seen one patient in less than 5mins I don't get enough time to examine completely example I have even missed foot examination in diabetic patients"

Health care system: Providers reported that shortage of manpower, Poor management of drug logistics, weak referral system and the absence of national guidelines were health care system related barriers

"..The main problem is shortage of staff, if there is adequate staffs 80% of the problem will be solved "

".....Another issue as far as drug supply is concerned is continuity or sustainability as the current drug supply is irregular...."

".....All PHC medical officers will send all the patients to CHC for referral even when they don't require. I feel they should also do some amount of work like screening and management of the diseaseSome of the doctors are not regular so patients come here..... government should make a proper referral system"

"Clear guidelines have to be provided (like RNTCP) regarding treatment, so that there will be uniformity of treatment regardless of the facility & location...."

Patient related factors: Providers reported Non adherence to drugs and follow up as patient related barriers. Providers also reported patient's resistance to change to a healthier lifestyle.

"For Follow up, the patient usually comes once in a month, but sometimes they send some others to get the tabs and we are forced to provide...."

"The concept of a healthy lifestyle is non-existent among our community. They go for a walk and have their breakfast at taj mahal hotel....."

".....If we inform the patients regarding diet and lifestyle modification it is difficult to implement as we do not know whether they follow the same once they go home"

Barriers and challenges reported by health care seekers:

Capability:- Patients were not familiar with blood pressure & blood glucose readings and their meanings. Gaps in understanding risk factors and consequences of diabetes were reported and Lack of knowledge regarding risk factors, treatment and complications were also reported.

"..We know very little about diabetes..... We can't understand the meaning of blood pressure and even blood glucose reading which they write on a paper....."

"....I have no idea about what diabetes are capable of, I mean to say what complications will come from this and their dangers in future "

Lack of skills in self care like foot care, checking blood glucose levels and others were reported by most of the patients

".....Doctor will say that we have to take care of ourselves, and lot of other things. but it's not feasible for me to do all those things and more over I am not an expert to take care of myself.."

Socio-economic factors :- Most of the patients reported economic constraints like Loss of wages, transportation costs etc.

“If we visit a health centre our whole day will go there only. We will lose that particular days wages and due to this our family has to starve. So we don’t visit the health care facilities unless it’s very serious ...”

“...Government health centres are very far from my house .I have to spend money on travelling to go till there instead I prefer to visit a nearby private clinic and the advantage is that I can go at almost any time after finishing my work so i will not lose my wages “

Few patients especially the elderly reported Lack of support from family and friends

“I have to go to the health centre alone that to at this age, I am 70 yrs old & no one will accompany me. So I have stopped going to the primary health centre.”

Cultural factors: Cultural constraints & difficulty in diet restriction has been reported by some patients

“The most difficult thing is that you have to stop eating sweet things...in our community, eating sweets is very common because there is always one festival or the other”

Belief and attitude: - Lack of trust in the public health care system

“I don’t have trust in the government health care system because their drugs will not work properly so I prefer private clinics.”

Difficulty in changing behaviour

“I have always been this way. The doctor will ask me to do this and that. Don’t eat this, start walking and what not. My wife will tell me so many things. I have to spend my life listening to advices. It’s not possible for me to change. One day all of us have to die anyway!”

Some of them reported Denial of the diseases and their risk factors

“I know so many people who have smoked into their nineties and nothing has happened to them. They are living happily. Many of them eat and drink at their wish and will too. If we cannot do whatever we want with our life then what is the point. Eat, drink and make merry!”

Some of them reported that they require immediate benefits

“We want medicines which have immediate effects; we don’t want to take medications life long...”

Table 1:- Summary of Barriers and challenges in health care delivery and service utilization reported by health care providers

Theme	Barriers and challenges
Capability	-Lack of training for the prevention and control of Hypertension and diabetes
Belief and attitudes	-poor co-ordination with general practices -Negative perceptions of the efficacy of generic drugs - Priorities given to communicable and acute diseases
Motivation	-Lack of motivation -stress or burn-out due to high workloads
Time	Lack of consultation time due to high patient load
Health care system	Lack of adequate staff No national guidelines Poor management of drug logistics Weak referral system
Patient factors	Non adherence to drugs and follow up Difficulty to change to a healthier life-style

Table 2:-Summary of Barriers and challenges in health care delivery and service utilization reported by health care seekers

THEME	Barriers and challenges
Capability	-Lack of knowledge regarding risk factor, treatment and complications. -Lack of skills in self care
Socio-economic factors	-Loss of wages, transportation cost. -Lack of family and friends support (especially in elderly)
Cultural factors	-Cultural constraints , difficulty in diet restriction
Belief and attitude	-Lack of trust in public health care system -Difficulty in changing behaviour -Denying the diseases and its risk factor -Immediate benefits are expected
Medication related	-Drug adherence -Drug related side effects -Self adjustment
Motivation	-Lack of motivation in undertaking physical activity , diet restriction and change in life style
Health care system	-Non availability of drugs Doctor patient communication gap

Motivation:- Lack of motivation in undertaking physical activity, diet restriction and change in life style

“ we can’t follow the life style changes advised by the doctor ... it affect s my day to day life and even i won’t

have strong motivation to do it so, I prefer leading it my way....."

Medication related: - Some stopped their treatment because they faced adverse Reactions.

"The doctor found that I have blood pressure. The pill caused heartburn so I stopped taking it."

Self-adjustment by patients that is, some patients modulate their doctor's orders. They believe they "know their bodies" and hence have a better ability to better control their blood pressure. They tend to overestimate the effect stress carries on blood pressure:

"I learned to control stress and according to that I lower the dosage of my pills or increase it"

Health care system:- Most of the patients reported Non availability of drugs in public health care system when they visit

"Sometimes drugs are not available at the health facility; they simply write a prescription and ask us to buy medicines from pharmacy shop. But everybody is not in a position to spend money to buy medicines... If free medicines are not given, what is the purpose of standing in long queues at government hospital ?....."

Some of the patients reported Doctor patient communication gap

"I feel embarrassed and have reservations while communicating with doctor..."

DISCUSSION

This study was conducted with the objectives to identify barriers and challenges in health care delivery and utilization of service for the prevention and control of Diabetes Mellitus. In this present study all the health care providers reported that shortage of manpower has a major issue in health care delivery and utilization of service. Some of the providers discussed in FGD that Poor management of drug logistics and weak referral system as health system related barriers. Previously done studies have reported barriers relating to Availability of health care resources including Lack of space, equipment, and shortage of staff were reported⁶. In this present study almost all the health Providers reported that they give Priorities towards communicable diseases like malaria, dengue and acute diseases. Problems with Priority setting may sometimes prevent better NCDs (hypertension and diabetes) prevention and control. Some of the Providers reported that lack of consultation time which

may impair the ability to examine thoroughly and counsel the patient which in-turn results in poor health care delivery. In this present study Most of the providers reported that Non adherence to drugs and follow up and patient's resistance to change to a healthier lifestyle as patient related barriers. In previously done studies health care Providers reported patient's resistance to change to a healthier lifestyle, as well as patient stress and co morbidities as a barrier⁷. In this present study most of the care seekers (patients) reported capability barriers like Lack of knowledge regarding risk factors, treatment and complications DM, Lack of skills in self care like foot care, checking blood glucose levels and others. In a previously done study, participants suggested that sessions aimed at increasing health awareness should include groups of patients and be social in terms of utilizing health care services and screening⁸. In this present study most of the patients reported economic constraints like Loss of wages, transportation costs etc. Few patients especially the elderly reported Lack of support from family and friends. Cultural constraints & difficulty in diet restriction have also been reported by some patients. In this present study Belief and attitude related barriers reported by patients were- Difficulty in changing their behavior and their life style due to lack of motivation in undertaking physical activity, diet restriction and change in life style. Some of them reported Denial of the diseases and their risk factors. Lack of trust in the public health care system and Doctor patient communication gap were reported by few of the patients. In a Study done previously Patients reported lack of facilities, bad weather, and safety issues as barriers to physical exercise⁹. In present study medication related barriers like stoppage of their treatment because they faced adverse drug Reactions and Self-adjustment by patients like patients themselves modulating their doctor's orders were reported. Most of the patients reported Non availability of drugs in public health care system when they visited made them not to revisit.

CONCLUSION

From this present study we concluded that the health system in public sector had gaps in all aspects. Shortage of manpower shows a lack of political commitment. All these findings like shortage of manpower, inadequate provision of drugs, lack of diagnostic procedures and non

availability of IEC material has to be addressed for better prevention and control DM. Inadequate staff leads to high patient load causing lack of adequate time for health care delivery. Priorities have been given to communicable and acute diseases more than non communicable. For health care provider other Barriers and challenges were lack of motivation, Poor management of drug logistics and Weak referral system. Lack of knowledge regarding the diseases along with socio-economic and cultural constraints made lifestyle modifications difficult. Health care system related barriers like Non availability of drugs, Doctor patient communication gap are some of the barriers and challenges for utilization of health care service.

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