

Original Research Article

Health Problems, Health Practice and Quality of Life of Clients with Diabetes Mellitus and Hypertension

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Abstract

The present study was undertaken to identify the health problems, health practice and quality of life of clients with diabetes mellitus and hypertension. The study was conducted among five hundred clients with diabetes mellitus and hypertension attending selected health centres of Kottayam district. The tools used for the study were socio personal data sheet, checklist to identify the health problems, rating scale to assess the health practice and WHO QOL-BREF scale to assess the quality of life of clients with diabetes mellitus and hypertension. The results revealed that majority of the clients were in the age group of 46-55 years and 65.4% were females. Regarding the health problems, more than half of the clients had blurring of vision, dyspnea, edema and fatigue. The study revealed that 62% of clients had poor health practice and 63.8% of clients had moderately good quality of life. The study findings also showed that there was a positive correlation between health practice and quality of life among clients with diabetes mellitus and hypertension. A statistically significant association was found for the quality of life among clients with diabetes mellitus and hypertension with their age, education, monthly income, occupation and duration of diabetes mellitus and hypertension.

Key words: Clients, Health problems, Health practice, Quality of Life

1 Introduction

NCDs (Non Communicable Diseases) disproportionately affect people in low and middle income countries where more than three quarters of global NCD deaths occur. Hypertension (HTN) and Diabetes Mellitus (DM) are two of the leading risk factors for atherosclerosis and its complications, including heart attacks and stroke.[1] According to WHO 2002, cardiovascular diseases (CVDs) will be the largest cause of death or disability by 2020. The contributing factors for growing burden of CVDs are increasing prevalence of Hypertension and Diabetes.[2] Challenges in managing both DM and HTN more effectively include factors at the patient, provider, and system levels.

A door-to-door cross-sectional survey was carried out among 6211 people in May 2013 in the Chengamanad Panchayat (Ernakulum, Kerala). The survey was carried out to determine statistically the knowledge, attitude and practice (KAP) scores of the general public and clients with DM and HTN. Among 1538 people known to have DM and HTN, only 619 had good knowledge, 828 had a positive attitude and 886 had good practice patterns. A higher prevalence of diabetes and hypertension could be expected in Kerala, since Kerala has the highest proportion of elderly in India.[3]

The current study aimed at finding out the health problems, health practice and quality of life of clients with diabetes mellitus and hypertension attending selected health Centers of Kottayam district

2 Objectives of the study

1. To identify the health problems of clients with diabetes mellitus and hypertension.
2. To find out the health practice of clients with diabetes mellitus and hypertension.
3. To determine the quality of life of clients with diabetes mellitus and hypertension.
4. To find out the correlation between health practice and quality of life among clients with diabetes mellitus and hypertension.
5. To find out the association of quality of life among clients with diabetes mellitus and hypertension with selected variables.
6. To prepare an information booklet regarding prevention and management of diabetes and hypertension.

3 Hypotheses

H1: There is a significant correlation between health practice and quality of life among clients with diabetes mellitus and

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hypertension.

H2: There is a significant association of quality of life among clients with diabetes mellitus and hypertension with selected variables

4 Materials and Methods Used

Research Design: In order to achieve the objectives of the study, descriptive survey design was used.

Research Approach: A quantitative non experimental research approach was adopted for the study.

Setting of the study: The study was conducted in Kottayam Medical College Health Centre (KMCHC), Ettumanoor and its seven subcenters namely Ettumanoor, Pun-nathra, Kattachira, Thellakam, Peroor, Vallikkad and Klamattom.

Population: The study population comprised of clients diagnosed to have both diabetes mellitus and hypertension attending the Non Communicable Disease (NCD) Clinics of Ettumanoor PHC and its subcentres.

Sample size: The sample comprised of 500 Clients with diabetes mellitus and hypertension attending the NCD clinics of Ettumanoor PHC and its subcentres

Sampling Technique: Samples were selected by non probability purposive sampling technique.

Tool Description: The following tools were selected to collect the data

TOOL 1: Socio personal data sheet: A questionnaire was used for assessing the socio personal data of clients with diabetes mellitus and hypertension. Socio personal data of client comprised of age, gender, religion, education, occupation, monthly income, food pattern and duration of both diabetes mellitus and hypertension.

TOOL 2: Checklist to identify the health problems of clients with diabetes and hypertension: The checklist consists of 37 items to identify the health problems affecting central nervous system, cardiovascular system, respiratory system, genito-urinary system, gastro intestinal system, endocrine system and integumentary system. The clients were expected to answer whether the health problems were present or not for the last four weeks.

TOOL 3: Rating scale to assess the health practice of clients with diabetes mellitus and hypertension: Rating scale for assessing the health practice of clients with diabetes mellitus and hypertension was prepared by the investigator after consulting with experts. It consist of 31 items categorized under diet, exercise, habits, stress management, drug compliance and follow up care. Each item has 3 options like never, occasionally, regularly. The scoring of each item ranges from 0(never) to 2(regularly). Score for positive items were 2, 1, 0 and negative items were 0, 1, 2. The maximum score for the tool is 62. Higher scores indicate good health practice.

48-62: Good health practice

0-47 : Poor health practice

TOOL 4: WHO QOL-BREF scale: WHOQOL-BREF scale is a standardized tool of high reliability. It produces a profile with two individually scored items about an individual's overall perception of quality of life and health. WHO questionnaire consists of 26 items. This rating scale was prepared under 4 domains physical, psychological, social and environmental. It include 26 facets of Quality of Life and which is 5 point scale. Based on the scores QoL was categorized as

Good QoL :	105	- 130
Moderate QoL :	78	-104
Poor QoL :	26	- 77

Information Booklet: An information booklet on the management of diabetes mellitus and hypertension was prepared based on the literature review and suggestions from the experts. It covered a brief description of diabetes and hypertension, etiology, signs and symptoms, diagnostic methods, treatment and prevention of these illnesses.

Data collection: The research study was started after getting ethical clearance and formal permission from institutional ethics committee, Govt. College of Nursing, Kottayam and the medical officers of Ettumanoor PHC and Athirampuzha PHC, Kottayam. The investigator explained the purpose of the study to the participants and obtained informed consent before the commencement of the study. Data was collected by using checklist, rating scale and quality of life assessment scale. The total time taken for the collection of data was 30 minutes. Information booklet regarding prevention and management of diabetes mellitus and hypertension was prepared and given to the participants after data collection procedure.

5 Results and major findings

5.1 Distribution of study participants according to socio demographic variables:

In the present study, majority 46.2% of the clients belonged to the age group of 46-55 years and 65.4% of them were females. Majority of the clients belonged to Hindu religion. Most of the clients 44.8% had education up to high school. House wives constituted 47.4% of the study population. Majority had monthly family income between Rs.5001 to 10,000 and 93.8% of the clients had mixed diet. Majority 52.4% of clients had diabetes mellitus and hypertension for less than 5 years.

5.2 Distribution of health problems in the study participants:

Among total 500 study population the problems affecting central nervous system were more than half i.e. 82% of the clients had blurring of vision and least 58.6% had numbness and tingling sensation in legs. The problems related to cardiovascular system were found to be as , 62.2% had palpitation and 24.2% had syncope. Majority of the problems affecting respiratory system were dyspnea and persistent cough. Among the problems affecting genito urinary system majority 35.8% of the clients had urgency on urination. Among the problems affecting gastrointestinal system, 63.8% had constipation. 73.4% of the problems affecting integumentary system were edema. Among other health problems, 83.6% of the clients had fatigue and least 3.8% had nasal bleeding.

5.3 Health practice of clients with diabetes mellitus and hypertension:

Majority 62% of clients with diabetes mellitus and hypertension had poor health practice.

5.4 Frequency distribution of Quality of life among clients with diabetes mellitus and hypertension

TABLE 1: Quality of life among clients with diabetes mellitus and hypertension N=500

Quality of life	frequency (%)
Good (105-130)	9 (1.8%)
Moderately good (78-104)	315 (63%)
Poor (26-77)	176 (35.2%)

The given table revealed that more than half of the clients with diabetes mellitus and hypertension had moderately good quality of life, very less had good quality of life, while more than one by third of them had very poor quality of life.

5.5 Correlation between health practice and quality of life among clients with diabetes mellitus and hypertension

A positive correlation value of 0.27 indicated a significant correlation between health practice and quality of life among clients with diabetes mellitus and hypertension and hence H1 was accepted.

TABLE 2: Correlation coefficient between health practice and quality of life among study participants

Sample characteristics	Correlation coefficient
Health practice Quality of life	0.27**

**Significant at 0.01 level

5.6 Association between demographic variables and quality of life among clients with diabetes mellitus and hypertension.

The present study found statistically significant association of quality of life with age, education, monthly income, occupation and duration of DM and HTN whereas no association is found with variables such as gender, religion and food pattern. Hence H2 was accepted.

6 Recommendations

- A similar study can be replicated on a larger representative sample, so that the findings can be generalized.
- Interventional studies can be conducted to determine the effectiveness of various treatment strategies in the control and management of DM and HTN.
- Experimental studies can be conducted to assess the effectiveness of teaching programme on the knowledge and practice of clients with DM and HTN.
- Epidemiological studies to identify the reasons for increasing trend of occurrence of DM and HTN in our community.

7 Conclusion

The study findings show light to the need for teaching program and a mass campaign for improving the health practice and quality of life. The enhanced health practice of the clients with diabetes mellitus and hypertension would obviously decrease the health problems which would in turn improve the health and quality of life of these clients. More intensive actions are to be taken to improve the awareness of the community about non communicable diseases and to bring positive changes in the life style practices of people.

References should be in APA style. Examples are below.

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