# PREVALENCE OF HYPERTENSION, DIABETES MELLITUS WITH THEIR HEALTH SEEKING BEHAVIOURS AMONG DOMESTIC WASTE HANDLERS OF VIJAYAPUR CORPORATION 

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DM, Knowledge, domestic waste handlers'STP.


#### Abstract

Background: In 2011, World Health Organization (WHO) member stated to reduce Prevention and Control of Non communicable Diseases in the Global Action Plan for the ${ }^{1}$ which aimed to halt the rise of diabetes by 2025 and reduce the prevalence of hypertension by $25 \%$ between 2010 and 2025. Aim: The present study was aimed to Prevalence of Hypertension, Diabetes Mellitus with their Health Seeking Behaviours Among Domestic Waste Handlers. Methods and Materials: Quantitative, Descriptive Survey Design with present study. 500 Prevalence of Hypertension, Diabetes Mellitus with their Health Seeking Behaviours Among Domestic Waste Handlers were selected by using convenient sampling technique. The knowledge was assessed by using structured knowledge questionnaires. Frequency, percentage, Mean and standard deviation, chi square test and $t$ test was used for statistical analysis. Results: Statistically significant association between demographic variable and patient suffering with high BP Chi square test. $(\mathrm{p}=0.001)$. Statistically significant association between demographic variable and Knowledge of how to reduce Hypertension Chi square test. $(\mathrm{p}=0.001)$. Conclusion: structured Teaching Programme can be a better improve the knowledge of hypertension and diabetes default among domestic waste handlers.


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## INTRODUCTION

The study was aimed to examine care-seeking dynamics among participants diagnosed with diabetes and hypertension across nine counties in rural Kenya in June 2019. A total of 1100 participants were selected by face-to-face interviews using a predesigned structured questionnaire and convenience sampling approach was used. A result reveals that out of 1100 participants ( $72.6 \%$ females) were included in this analysis. Hypertensive patients accounted for $69.8 \%$ of the study population while patients with diabetes accounted for $15.5 \%$, with the remaining $14.7 \%$ having both diabetes and hypertension. The overall mean age of the participants was 64 ( $\mathrm{SD}=$ 15) years, $62.5 \%$ of these were aged above 60 years. This cross sectional study was carried out from June 2018 and continued till January 2019 in one of the blocks of District Budgam of Jammu \& Kashmir. A detailed predesigned health questionnaire was used to record the parameters like age, dwelling, marital status, socio economic status, history of dependencies \& duration, family and personal history of cardiovascular disease (CVD), hypertension, diabetes. behavioral historv including lifestvle dependencies studv
of blood sugar RBS and BMI of participant was recorded. Adults with mean age of $46.8 \pm 54$ in males and $40.3 \pm 16.15$ females with the similar proportion of males and females in different age groups was recorded with $19.8 \%$ populace in the age group of $25-34$ as compared to $4.3 \%$ population in the age group of $75-84$.Smoking was significantly higher in males as compared to females ( $\mathrm{p}<0.001$ ) pointing towards gender predilection. $86.6 \%$ females were living a sedentary life as compared to $72.4 \%$ of males ( $p$ value $<0.001$ ) revealing gender as independent factor for sedentary life as females remain mostly confined to their homes.

Title of the study: Prevalence of Hypertension, Diabetes Mellitus with their Health Seeking Behaviours Among Domestic Waste Handlers of Vijayapur Corporation.

## Objectives

1. To find the Prevalence of Hypertension and Diabetes mellitus among domestic waste handlers.
2. To assess health seeking behavior among domestic waste handlere rearardino humertencion and diahetec mellituc

Diabetes mellitus with their health seeking behavior among domestic waste handlers.
4. To find out the association between prevalence of Hypertension and Diabetes mellitus with their health seeking behavior among domestic waste handlers with their Selected demographic variables.

## MATERIALS AND METHODS

Research Approach: Quantitative research approach
Research Design: Descriptive Survey Design
Hypothesis: Will be tested at 0.05 level of significance
$\mathbf{H}_{1}$; There will be a significant association between Diabetes, Hypertension, with their Health seeking behavior of domestic waste handlers
H2: There will be significant association between Prevalence of Diabetes, Hypertension and their Health seeking behavior among domestic waste handlers with selected demographic variables.

## Assumptions

1. The Domestic waste handlers may have Diabetes, Hypertension, and poor Health seeking behavior.
2. Domestic waste handlers may have poor knowledge about Diabetes, Hypertension, and Health seeking behavior

## Delimitation

## Study is delimited to

> Domestic waste handlers of Vijayapur Corporation.
$>$ Data will be collected as in natural setting only from Domestic waste handlers

## Variable

$>$ Research Variable - Diabetes, Hypertension, and Health seeking behavior
$>$ Demographic Variable: Age, gender, education status etc
$>$ Setting of the study: Vijayapur . Corporation
$>$ Study Population: Domestic waste handlers of Vijayapur
$>$ Sampling Technique: Convenient sampling technique Sample size: 500 workers

## Instrument to be used

Section A Demographic data tool
Section B
Part A Readings of fasting blood sugar level by Glucometer
Part B 2 to 3 Interval Readings of Blood Pressure by sphygmomanometer
Section C Structured Knowledge Questionnaires On health seeking behavior

## Data collection process

1. Prior permission will be taken from concerned authority
2. Purpose of conducting study will be explained to study participants
3. 3.Readings of fasting blood sugar level by Glucometer will be collected
4. 2 to 3 Interval Readings of Blood Pressure will be collected by sphygmomanometer
5. Structures interview Questionnaire will be adopted to collected on health seeking behaviors.

## RESULT

Association between Previous knowledge on Hypertension was found statistically significant by applying Chi square test. ( $p=0.001$ ). Among the subjects those who have previous knowledge of hypertension only $48(32.7 \%)$ have given correct answer that polycystic kidney disease is the main cause of Hypertension. 99 (67.3\%) subjects had previous knowledge on Hypertension, but they did not know the Cause of Hypertension. Association between Age and knowledge about patient suffering with high BP what should be given? was found statistically significant by applying Chi square test. $(\mathfrak{p}=0.001)$. Subjects who knows the correct answer for what should be given to the patient suffering with high BP, Maximum $51(60.0 \%)$ were belong to age of more than 40 years, $34(40.0 \%)$ subjects of age group 30-39 years and no one $0(0 \%)$ know about this were $<30$ years aged. Other participants had given wrong answers (Table 1). Statistically significant association between demographic variable and patient suffering with high BP. Association between Educational status and knowledge about what should be given the patient suffering with high BP was found statistically significant at $\mathrm{p}=0.001$. Surprisingly maximum no. of subjects $51(60.0 \%)$ had primary school education have given correct answer. But only $34(40.0 \%$ ) who had up to High school education given correct answer. It was found highly association between Monthly Income and knowledge about what should be given to patients who suffering with high $\mathrm{BP}(\mathrm{P}=0.001)$. Surprising result found as the subjects those who have monthly Income 200 and $>3000$ did not know correct answer what should be given to patients who suffering with high BP i.e. $0(0 \%)$, where the monthly Income $1000 \mathrm{rs}, 85(100 \%)$ have told correct answer i.e. Less sodium diet. 52 ( $61.2 \%$ ) Nuclear family subjects and 33 ( $38.8 \%$ ) from Joint family subjects gave correct answer regarding knowledge about what should be given to patients who suffering with high. Statistically association was found between Type of family and correct Device of Hypertension ( $\mathrm{P}=0.001$ ).

Those who have vegetarian diet $68(80.0 \%)$ and mixed diet 17 ( $20.0 \%$ ) correct answer regarding knowledge about what should be given to patients. Rest of the subjects of mixed and vegetarian diet did not know the what correct diet should be given to patients when they suffer high BP. Statistically association was found between diet of respondents and know about what correct diet should be given to patients when they suffer from high $\mathrm{BP}(\mathrm{P}=0.001)$. Among the subjects who knows what correct diet should be given to patients when they suffer from high BP, 52 ( $61.2 \%$ ) were married and $33(38.8 \%)$ were Unmarried. Rest of the subjects are not having knowledge of the same. Statistically association was found ( $\mathrm{p}=0.001$ ). Among the subjects who knows correct what correct diet should be given to patients when they suffer from high BP, $69(81.2 \%$ ) were from Urban place and $16(18.8 \%)$ were from Rural. Rest of the subjects are not having knowledge of the same. Statistically association was found ( $\mathrm{p}=0.001$ ). Association between Previous knowledge on Hypertension and what correct diet should be given to patients when they suffer from high BP was found statistically significant by applying Chi square test. $(\mathrm{p}=0.001)$. Among the subjects those who have previous knowledge of hypertension only $35(41.2 \%)$ have given correct answer that is Less sodium diet should be given when patients suffering from high BP. $50(58.8 \%$ ) subjects had previous knowledge on Hypertension, but they did not know the what correct diet should be given to patients when they suffer from high BP (Table 2). Statistically significant association between demographic variable and Knowledge of how to reduce Hypertension. Association between Age and knowledge about how to reduce Hypertension was found statistically significant by applying Chi square test. $(\mathrm{p}=0.001)$. Subjects who knows the correct answer for how to reduce Hypertension, Maximum 118(63.8\%) were belong to age group 30-39 years, $50(27.0 \%)$ subjects of more than 40 years and $17(9.2 \%)$ of $<30$ years know about this. Other participants had given wrong answers. Association between Educational status and knowledge about how to reduce Hypertension was found statistically significant at $p=0.001$. Surprisingly maximum no. of subjects $152(82.2 \%)$ had primary school education have given correct answer.

Table 1. Association between Basic characteristics and patient suffering with High BP

| Association between | PATIENT SUFFERING WITH HIGH BP SHOULD BE GIVEN |  |  |  |  | Chi square test | P Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High Protein diet | Less sodium diet | Less Fiber diet | Less unsaturated fatty acid diet | Total |  |  |
| AGE(YEARS) |  |  |  |  |  |  |  |
| <30 | 0 | 0 | 34 | 0 | 34 | 131.679 | $\mathrm{P}=0.001^{*}$ |
| \% | 0.0\% | 0.0\% | 17.2\% | 0.0\% | 6.8\% |  |  |
| 30-39 | 67 | 34 | 147 | 51 | 299 |  |  |
| \% | 50.8\% | 40.0\% | 74.2\% | 60.0\% | 59.8\% |  |  |
| 40+ | 65 | 51 | 17 | 34 | 167 |  |  |
| \% | 49.2\% | 60.0\% | 8.6\% | 40.0\% | 33.4\% |  |  |
| EDUCATIONAL STATUS |  |  |  |  |  |  |  |
| HS | 33 | 34 | 16 | 17 | 100 | 40.893 | $\mathrm{P}=0.001^{*}$ |
| \% | 25.0\% | 40.0\% | 8.1\% | 20.0\% | 20.0\% |  |  |
| PS | 99 | 51 | 182 | 68 | 400 |  |  |
| \% | 75.0\% | 60.0\% | 91.9\% | 80.0\% | 80.0\% |  |  |
| MONTHLY INCOME |  |  |  |  |  |  |  |
| 10000 | 67 | 0 | 151 | 82 | 300 | 104.923 | $\mathrm{P}=0.001^{*}$ |
| \% | 100.0\% | 0.0\% | 75.9\% | 44.3\% | 60.0\% |  |  |
| 20000 | 0 | 49 | 48 | 68 | 165 |  |  |
| \% | 0.0\% | 100.0\% | 24.1\% | 36.8\% | 33.0\% |  |  |
| 30000 | 0 | 0 | 0 | 35 | 35 |  |  |
| \% | 0.0\% | 0.0\% | 0.0\% | 18.9\% | 7.0\% |  |  |
| FAMILY TYPE |  |  |  |  |  |  |  |
| Joint | 98 | 33 | 49 | 51 | 231 | 86.796 | $\mathrm{P}=0.001^{*}$ |
| \% | 74.2\% | 38.8\% | 24.7\% | 60.0\% | 46.2\% |  |  |
| Nuclear | 34 | 52 | 149 | 34 | 269 |  |  |
| \% | 25.8\% | 61.2\% | 75.3\% | 40.0\% | 53.8\% |  |  |
| DIET |  |  |  |  |  |  |  |
| Mixed | 67 | 17 | 100 | 33 | 217 | 26.650 | $\mathrm{P}=0.001^{*}$ |
| \% | 50.8\% | 20.0\% | 50.5\% | 38.8\% | 43.4\% |  |  |
| Vegetarian | 65 | 68 | 98 | 52 | 283 |  |  |
| \% | 49.2\% | 80.0\% | 49.5\% | 61.2\% | 56.6\% |  |  |
| HABITAT |  |  |  |  |  |  |  |
| Rural | 81 | 16 | 35 | 33 | 165 | 78.087 | $\mathrm{P}=0.001^{*}$ |
| \% | 61.4\% | 18.8\% | 17.7\% | 38.8\% | 33.0\% |  |  |
| Urban | 51 | 69 | 163 | 52 | 335 |  |  |
| \% | 38.6\% | 81.2\% | 82.3\% | 61.2\% | 67.0\% |  |  |
| MARRITAL STATUS |  |  |  |  |  |  |  |
| Married | 116 | 52 | 182 | 67 | 417 | 43.901 | $\mathrm{P}=0.001^{*}$ |
| \% | 87.9\% | 61.2\% | 91.9\% | 78.8\% | 83.4\% |  |  |
| Unmarried | 16 | 33 | 16 | 18 | 83 |  |  |
| \% | 12.1\% | 38.8\% | 8.1\% | 21.2\% | 16.6\% |  |  |
| PREVIOUS KNOWLEDGE ON HYPER/DM |  |  |  |  |  |  |  |
| No | 83 | 50 | 165 | 51 | 349 | 28.934 | $\mathrm{P}=0.001^{*}$ |
| \% | 62.9\% | 58.8\% | 83.3\% | 60.0\% | 69.8\% |  |  |
| Yes | 49 | 35 | 33 | 34 | 151 |  |  |
| \% | 37.1\% | 41.2\% | 16.7\% | 40.0\% | 30.2\% |  |  |
| Total | 132 | 85 | 198 | 85 | 500 |  |  |
| \% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  |  |
| *: Statistically significant |  |  |  |  |  |  |  |

But only $33(17.8 \%)$ who had up to High school education given correct answer. It was found highly association between Monthly Income and knowledge about how to reduce hypertension ( $\mathrm{P}=0.001$ ). Surprising result found as the subjects those who have monthly Income 1000 know the correct answer i.e. 82 ( $44.3 \%$ ), where the monthly Income 2000 rs , $68(36.8 \%)$ have told correct answer i.e. Weight loss, avoiding smoking and Exercise are the measures to reduce the Hypertension. 101(54.6\%) Joint family subjects and $84(45.4 \%)$ from Nuclear family subjects gave correct answer regarding knowledge about how to reduce the Hypertension. Statistically association was found between Type of family and how to reduce the Hypertension ( $\mathrm{P}=0.001$ ). Those who have vegetarian diet $85(45.9 \%$ ) and mixed diet $100(54.1 \%)$ correct answer regarding knowledge about how to reduce the Hypertension. Rest of the subjects of mixed and vegetarian diet did not know the correct measures to be taken reduce the Hypertension. Statistically association was found between diet of respondents and know about measures to be taken reduce the Hypertension ( $\mathrm{P}=0.001$ ).

Among the subjects who knows what correct measures should be taken to reduce Hypertension, $151(81.6 \%)$ were married and $34(18.4 \%)$ were Unmarried. Rest of the subjects are not having knowledge of the same. Statistically association was found ( $\mathrm{p}=0.001$ ). Among the subjects who knows correct what correct measures should be taken to reduce Hypertension, 65(35.1\%) were from Rural place and 120(64.9\%) were from Urban. Rest of the subjects are not having knowledge of the same. Statistically association was found ( $\mathrm{p}=0.001$ ). Association between Previous knowledge on Hypertension and what correct measures should be taken to reduce Hypertension was found statistically significant by applying Chi square test. ( $\mathrm{p}=0.001$ ). Among the subjects those who have previous knowledge of hypertension only $84(45.4 \%$ ) have given correct answer that is Weight loss, avoiding smoking and Exercise are the measures to reduce the Hypertension. 101(54.6\%) subjects had previous knowledge on Hypertension, but they did not know the what correct measures should be taken to reduce Hypertension.

Table 2. Association between Basic characteristics and how to reduce Hypertension

| Association between | HOW TO REDUCE HYPERTENSION |  |  |  |  | Chi square test | $P$ Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weight loss | Avoid smoking | Exercise | All of the above | Total |  |  |
| AGE(YEARS) |  |  |  |  |  |  |  |
| <30 | 0 | 0 | 17 | 17 | 34 | 20.966 | $\mathrm{P}=0.001^{*}$ |
| \% | 0.0\% | 0.0\% | 8.5\% | 9.2\% | 6.8\% |  |  |
| 30-39 | 33 | 33 | 115 | 118 | 299 |  |  |
| \% | 49.3\% | 67.3\% | 57.8\% | 63.8\% | 59.8\% |  |  |
| 40+ | 34 | 16 | 67 | 50 | 167 |  |  |
| \% | 50.7\% | 32.7\% | 33.7\% | 27.0\% | 33.4\% |  |  |
| EDUCATIONAL STATUS |  |  |  |  |  |  |  |
| HS | 0 | 0 | 67 | 33 | 100 | 52.777 | $\mathrm{P}=0.001$ * |
| \% | 0.0\% | 0.0\% | 33.7\% | 17.8\% | 20.0\% |  |  |
| PS | 67 | 49 | 132 | 152 | 400 |  |  |
| \% | 100.0\% | 100.0\% | 66.3\% | 82.2\% | 80.0\% |  |  |
| MONTHLY INCOME |  |  |  |  |  |  |  |
| < $=20000$ | 67 | 0 | 151 | 82 | 300 | 64.980 | $\mathrm{P}=0.001^{*}$ |
| \% | 100.0\% | 0.0\% | 75.9\% | 44.3\% | 60.0\% |  |  |
| 20001+ | 0 | 49 | 48 | 68 | 165 |  |  |
| \% | 0.0\% | 100.0\% | 24.1\% | 36.8\% | 33.0\% |  |  |
|  | 0 | 0 | 0 | 35 | 35 |  |  |
|  | 0.0\% | 0.0\% | 0.0\% | 18.9\% | 7.0\% |  |  |
| FAMILY TYPE |  |  |  |  |  |  |  |
| Joint | 32 | 16 | 82 | 101 | 231 | 10.925 | $\mathrm{P}=0.012^{*}$ |
| \% | 47.8\% | 32.7\% | 41.2\% | 54.6\% | 46.2\% |  |  |
| Nuclear | 35 | 33 | 117 | 84 | 269 |  |  |
| \% | 52.2\% | 67.3\% | 58.8\% | 45.4\% | 53.8\% |  |  |
| DIET |  |  |  |  |  |  |  |
| Mixed | 0 | 16 | 101 | 100 | 217 | 66.608 | $\mathrm{P}=0.001$ * |
| \% | 0.0\% | 32.7\% | 50.8\% | 54.1\% | 43.4\% |  |  |
| Vegetarian | 67 | 33 | 98 | 85 | 283 |  |  |
| \% | 100.0\% | 67.3\% | 49.2\% | 45.9\% | 56.6\% |  |  |
| HABITAT |  |  |  |  |  |  |  |
| Rural | 16 | 16 | 68 | 65 | 165 | 3.038 | $\mathrm{P}=0.387$ |
| \% | 23.9\% | 32.7\% | 34.2\% | 35.1\% | 33.0\% |  |  |
| Urban | 51 | 33 | 131 | 120 | 335 |  |  |
| \% | 76.1\% | 67.3\% | 65.8\% | 64.9\% | 67.0\% |  |  |
| MARRITAL STATUS |  |  |  |  |  |  |  |
| Married | 51 | 49 | 166 | 151 | 417 | 12.741 | $\mathrm{P}=0.00{ }^{*}$ |
| \% | 76.1\% | 100.0\% | 83.4\% | 81.6\% | 83.4\% |  |  |
| Unmarried | 16 | 0 | 33 | 34 | 83 |  |  |
| \% | 23.9\% | 0.0\% | 16.6\% | 18.4\% | 16.6\% |  |  |
| PREVIOUS KNOWLEDGE ON HYPER/DM |  |  |  |  |  |  |  |
| No | 33 | 49 | 166 | 101 | 349 | 723144 | $\mathrm{P}=0.001$ * |
| \% | 49.3\% | 100.0\% | 83.4\% | 54.6\% | 69.8\% |  |  |
| Yes | 34 | 0 | 33 | 84 | 151 |  |  |
| \% | 50.7\% | 0.0\% | 16.6\% | 45.4\% | 30.2\% |  |  |
| Total | 67 | 49 | 199 | 185 | 500 |  |  |
| \% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  |  |
| *: Statistically significant |  |  |  |  |  |  |  |

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