# A Study to Assess the Perception Level of General Population Regarding Preventive Healthcare, with Special Reference to Vadodara District

Subhasish Chatterjee<sup>1</sup>, Ritu Manwani<sup>1</sup>, Ranjita Banerjee<sup>2</sup>, Rahul Sharma<sup>1</sup>

## ABSTRACT

Introduction to Preventive Health Care: The goal of preventative care is to lower disease burden and risk factors. To slow down the ageing process, preventive measures can be used at any stage of life or disease. Chronic diseases are generally known to be the leading causes of death and disability worldwide. As part of community health, preventative care is promoted, which includes clinical and screening services. One method for reducing consumption and improving health is to identify and prevent downstream concerns. **Research Objectives:** The researchers attempted to determine the general public's perception of preventative healthcare, with a focus on Vadodara district. The study also assessed the people's perception level towards preventive healthcare with reference to the Vadodara district. **Research Methodology and Research Design:** The present study is a cross-sectional survey. The respondents were determined via convenience sampling, utilizing the non-probability component, based on the sample size, from Vadodara District. **Results and Findings:** The study concluded that some people believe preventive healthcare to be vital, yet they do nothing about it. Only 41.1% of the respondents had health insurance, and the rest do not have any health insurance coverage. Respondents' age and gender had no bearing on their perception level. **Scope of Future Study:** All of the characteristics used to determine the population's perception level have been shown to be useful and can be used in future research. **Acknowledgement:** My thanks and appreciation goes to my co-authors in developing the academic research project.

Keywords: Perception, Preventive healthcare, Age group and gender Asian Pac. J. Nurs. Health Sci., (2022); DOI: 10.21276/apjhs.2022.9.2.24

## INTRODUCTION

Preventive healthcares' center of attention is on averting sickness to reduce disease burden and related risk factors. To avoid additional decline over time, preventive measures can be used at every stage of life and along the disease spectrum. Chronic diseases are the main causes of death and disability around the world, and they're also tied to rising health-care expenses. Preventative care not only concerned with.

Preventative treatments, but also concerned with screening, are also promoted as part of a population health approach. One technique for lowering use and improving health outcomes is to identify and avoid possible problems downstream.

The most fundamental level of prevention is a public health approach characterized by efforts made to prevent future health hazards and reduce those factors known to enhance disease risks. Rather than focusing on specific risk factors, the broad determinants of health are addressed. Improving sanitation, supporting healthy lives in children, and developing green energy sources are all examples of foundational preventative activities.

Primary prevention averts the onset of chronic disease by lowering the risk variables that lead to the disease's onset. Reducing hazards through changes in behavior or exposure is one method of primary prevention. Reducing cardiovascular risk through lifestyle changes such as good eating and quitting smoking are two examples. Boosting resistance to disease exposure by immunizations is another kind of primary prevention (e.g., influenza and pneumonia vaccines, along with childhood vaccines). Some of these preventative measures are active, requiring person involvement, while others are passive. The focus of primary prevention is usually on individual risk factors for certain diseases. <sup>1</sup>Department of Management, Sumandeep Vidyapeeth-Deemed to be University, Piparia, Gujarat, India

<sup>2</sup>CKSV Institute of Management (Affiliated to GTU, Approved by AICTE), Vadodara, Gujarat, India

**Corresponding Author:** Subhasish Chatterjee, Principal, Department of Management, Sumandeep Vidyapeeth-Deemed to be University, Piparia, Gujarat, India. E-mail: subhasish19@gmail.com

**How to cite this article:** Chatterjee S, Manwani R, Banerjee R, Sharma R. A Study to Assess the Perception Level of General Population Regarding Preventive Healthcare, with Special Reference to Vadodara District. Asian Pac. J. Nurs. Health Sci., 2022;9(2):117-124.

Source of support: Nil.

Conflicts of interest: None.

Received: 05/07/2021 Revised: 28/09/2021 Accepted: 30/10/2021

The detection and treatment of pre-clinical alterations is part of secondary prevention. Screening procedures are frequently used as the first stage, resulting in more timely and cost-effective interventions. The screening process is a collaborative effort between the individual and their healthcare providers, with a focus on patient participation.

The clinical domain is primarily responsible for tertiary prevention, which focuses on reversing, halting, or delaying disease. It aids in reducing the disease's overall burden on the patient's life. In various positions and situations, the patient has more contact with the healthcare system and care providers.

Slow onset symptoms make diagnosis challenging. Hence, even if one believes their body is in good shape, he may be oblivious to the risks.

Regular doctor checkups may prevent numerous issues. One can get enough information from a 6-month blood test. The

<sup>©2022</sup> The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/ licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

clinic can also assess blood sugar and cholesterol levels. Taking basic precautions and caring for one's physique will help remove many dangerous factors. Simple lifestyle adjustments can improve health.

#### **Objectives of the Study**

To assess the knowledge and insight of people regarding preventive healthcare.

- 1. To know the importance of preventive healthcare in the eyes of general public.
- 2. To see if the attitude of population changes after knowing the significance of preventive healthcare.

## Hypothesis of the Study

A research hypothesis is the statement created by researchers when they speculate on the outcome of the research. In this study, the research hypothesis is created as follow.

- Null hypothesis (Ho1) = There is no significant relation between the age group and the different perceptions of people regarding preventive healthcare.
- Alternative hypothesis (H<sub>1</sub>1) = There is a significant relation between the age group and the different perceptions of people regarding preventive healthcare.
- Null Hypothesis (Ho2) = There is no significant relation between gender and the different perceptions of people regarding preventive healthcare.
- Alternative hypothesis (H<sub>1</sub>2) = There is a significant relation between gender and the different perceptions of people regarding preventive healthcare.

#### **Review of Literature**

A tiered wedge implementation trial to assess the effectiveness of an intervention in promoting community-based clinician implementation of various parts of recommended preventive care for four risk behaviors was conducted. Leadership and consensus procedures, enabling systems, educational meetings and training, audit and feedback, practice change support and information and resources were all part of the intervention. The implemented intervention improved client risk assessment but not client risk reduction measures such as brief advice and referral. The intervention had no effect in increasing physical activity. More study is needed to identify preventive care barriers and the effectiveness of practice modification interventions.<sup>[1]</sup> Study on the effectiveness of embedding a specialist preventive care clinician in an outpatient community mental health service in increasing preventive care provision: A randomized controlled trial. It was tested in an Australian community mental health agency. Blinded interviewers assessed client-reported receipt of preventive care (assessment, advice, and referral) for four key risk behaviors (smoking, poor nutrition, alcohol consumption, and physical inactivity), acceptance of referrals, and satisfaction with preventive care received at baseline and 1-month follow-up. Participants were quite pleased with their preventive care. The intervention had a strong impact on the majority of suggested preventive care items. More study is required to enhance its impact, especially increasing customer acceptance.<sup>[2]</sup> Obesity prevention and the role of hospital and community-based health services: a scoping study aims to map the evidence and identify

gaps in existing studies. It is clear from the data that health practitioners should be screening all patients for obesity and referring them to suitable intervention options. Implementation is hampered by health professionals' perspectives on the causes of obesity and questions about the benefits of intervention once someone is obese. Prejudices regarding who might benefit from prevention and doubts about its efficiency also hamper implementation of practice guidelines. To summaries, while a public health strategy is critical to addressing obesity, it is also critical that health services include obesity prevention through screening and referral.<sup>[3]</sup> A study on salutogenesis is conducted in the creation of tailored and preventative healthcare. This review aimed to explain how a salutogenetic approach that considers the human being as a physical, psychological, and spiritual entity may help healthcare systems. The choice of medical intervention must take biomedical breakthroughs into consideration while also meeting the patient's physical, psychological, and spiritual demands. Person-centered medicine strives to reinforce Antonovsky's ideas of resilience and coherence with each treatment intervention to help patients recover from illness and improve their overall health in the long-term. Appropriate evaluation parameters must be established and made available in a person-centered; salutogenetic system.<sup>[4]</sup> This study investigates socially-assigned race, healthcare discrimination, and preventive healthcare services. Researchers used a cross-sectional analysis of the 2004 Behavioral Risk Factor Surveillance System "Reactions to Race" module. Vaccination and cancer screening rates were among the measures of healthcare discrimination reported. Minority racial and ethnic minorities were more likely to report healthcare discrimination than whites. The M/M and M/W groups received similar numbers of cancer screenings. Overall, white people are more likely to receive preventive vaccinations and less likely to report healthcare discrimination than minorities. More research is needed to better understand how socially-assigned race and ethnicity influence health outcomes.<sup>[5]</sup> Model of preventive healthcare for users that is, a widespread, user-cantered, and preventative healthcare model. Ongoing monitoring systems must be pervasive, continuous, and dependable, and must be patient-centric. Pervasive technology has been identified as a significant asset in the pursuit of the user-centered preventive healthcare vision described above. To make this vision a reality, new strategies for technology design, development, and evaluation had to find common ground and interoperate. Pervasive, user-centered, and preventive overall lifestyle health management will enable a paradigm shift from the established centralized healthcare model.<sup>[6]</sup> Another study's goal was to identify a portfolio of risk factors for preventive healthcare. Physical activity, fruit and vegetable consumption, and income were found to be negatively associated with chronic conditions, while soda, alcohol, and smoking were positively associated. The study concluded that novel integrative approaches were urgently needed. Chronic diseases like type 2 diabetes and atherosclerosis have a "pathophysiological" inflammation component. That is, the inflammation is both physiological and pathological (involving the mind).<sup>[7]</sup> After analyzing 2014 data from Bihar, India, to understand differences in health care utilization by child sex, a cross-sectional analysis of non-blinded maternal and child health survey data was performed. With less wealth and more siblings, there was more gender inequality in care seeking. Immunization and frontline worker visits did not differ by gender. It is apparent that the fact

118

that girls in Bihar were less likely than boys to get facility-based curative and preventative care explains the persistent sex ratio imbalance and the excess female mortality. Home visits by frontline workers may help better support girls' care.<sup>[8]</sup> The study focused on men aged 40 to 60 who were enrolled in the HMO and POS products of a large southeastern insurance company. Men were assigned to receive various preventive care reminders. An increase in men receiving preventive healthcare screenings was seen after personalized communications that included men's health education and a patient-specific reminder system for providers. Communication with the man's loved ones at home and a patientspecific reminder system for provider's improved preventive healthcare screenings.<sup>[9]</sup> It provides ideal suppression, mitigation, and pharmacological intervention strategies. It concluded that addressing global preparedness gaps for a second wave of COVID-19 is urgent but time-sensitive. Medical countermeasures will not be available for general public use for at least 1-2 years. Until then, non-pharmacological measures are crucial in preventing COVID-19 waves. Societal peace, political instability, economic slowdown, poverty, other viral outbreaks, and food scarcity may all require simultaneous attention.<sup>[10]</sup> A cross-sectional study using a convenient sampling method was carried out with the goal of determining how the general public perceives COVID-19 and how it might be prevented. All the necessary statistical tests were run on the collected data. A total of 97% of respondents believed that elderly people were more likely to have complications. The majority of participants said that wearing a face mask, washing hands, avoiding direct contact with ill people, and not touching the face with dirty hands should all be considered preventative measures. The majority of people were aware of the disease's most common symptoms. The participants showed a high level of knowledge regarding the pandemic, but certain myths are also prevalent.<sup>[11]</sup> Patients' perceptions of community healthcareseeking behavior for acute and preventive physical and psychosocial health concerns by sex, age, and primary care setting were evaluated (as a proxy for affordability of healthcare). A complex survey design was used to adjust the multivariable logistic regression. Patients at public clinics rated community healthcare-seeking behavior for acute and preventive physical and mental health concerns higher than those at private clinics. The findings demonstrated that there were disparities in perceived community healthcare-seeking behavior toward primary care services sex/gender and healthcare affordability. Moreover, perceived psychological health-seeking behavior was consistently lower than physical health-seeking behavior.<sup>[12]</sup> An analytic crosssectional design was used here, and 232 professionals from Delta State University Teaching Hospital were sampled stratified. The sampling frame includes healthcare workers who have worked in a hospital for 6 months or more. The information was gathered through the use of a self-administered questionnaire. The most significant results were those related to self-perception and selfcare practice. Males had never been tested more than females for all of the tests detailed in this study. In the preceding year, more than four-fifths of male and female respondents had their blood pressure and weight checked that found <10th of female respondents had not. They had good perception but inadequate preventative behavior, starting management after disease onset. This may mean trouble for the trade. Immediate health promotion is necessary to protect productivity. A multi-center study's extensive data will help solve the problem.<sup>[13]</sup> The goal of another

iii.

study was to assess college students' knowledge of the COVID-19 outbreak in Libya, as well as their preventive behavior and risk perception regarding the outbreak. The research was carried out between April 20th and April 30th of 2020. Libyan students studying in medical and non-medical fields were among those who took part in the competition. The students' knowledge scores are varied greatly by age, academic year, and financial status. College students exhibited extensive knowledge, preventive behavior, and a positive attitude toward Covid. It suggests that government programs should educate people from other walks of life to help contain and control the pandemic.<sup>[14]</sup> Another study was carried out with the goal of determining whether or not four types of organizational policies and practises are associated with individual workers' use of preventive health care in their workplace. In this study, secondary data were used, and multilevel models were applied to the data. When worker characteristics were taken into account, higher individual-level views of workplace flexibility were linked to higher preventive care utilization. Preventive care consumption was linked to higher average unit-level assessments of people-oriented culture, ergonomic procedures, and flexibility. Overall, workplace policies and practices that encourage flexibility, ergonomics, and a people-oriented culture were linked to positive preventive care-seeking behavior among workers, with certain policies and practices functioning at the individual and group levels. Improving the working environment may have an impact on businesses' health-care costs and boost employee morale.[15]

## **Research Methodology**

The study assesses the general population's perception level of preventive healthcare with reference to the Vadodara district; hence, it is a cross-sectional survey. A closed-ended questionnaire is used to capture the primary data. The respondents were determined via convenience sampling utilizing the non-probability component, based on the sample size. The information was gathered utilizing an online electronic questionnaire. Participants provided sociodemographic information, health status, importance level, and attitude toward preventative healthcare. Both primary and secondary sources of data were used for the study. The secondary sources included inputs from journals, thesis, books, website and the like.

#### **Analytical Procedures**

The collected data through Google form is coded and analyzed using SPSS version 23. A pilot study on 40 respondents was conducted. The questionnaire was found reliable and valid to be adopted for main study. There are two descriptive types of tests applied i. Descriptive Statistics ii. Chi Square Test of Association

#### **Descriptive Statistics**

- i. The frequency distribution of respondents according to age group shows that the majority (328) of the respondents are aged between 18 and 30.
- So far as gender distribution is concerned, the majority, that ii. is, 210 (54.5%) of respondents are female.
- The frequency distribution of the highest level of education completed shows that the majority of respondents are graduates (185, or 48.1%), followed by 23.1% having completed graduation and 15.3% having completed postgraduates, respectively.

- iv. According to the frequency distribution of respondents based on their annual income, the majority (50.9%) of employees earns <\$10,000, 24.7% earn between \$10,000 and \$30,000, 12.2% earn between \$10,000 and \$50,000, and more than \$50,000.
- v. 230 (59.7%) respondents said that they had no health problems in the last 12 months, but 154 (40%) said "Yes."
- vi. Only 159 (41.1%) employees have health insurance, and the rest of the employees do not have any health insurance coverage.
- vii. Only 33, that is, 8.6%, of employees have done a cholesterol test during the past 12 months.
- viii. 370 (96.1%) respondents are not accustomed to smoking or chewing tobacco.
- ix. The majority, that is, 357 (92.7%) of employees, believe that "prevention is better than cure."
- x. The majority of employees (330) are aware of preventive healthcare.
- xi. 271 (70.4%) of those polled said they have access to health care for routine check-ups.
- xii. But out of 385 respondents, 186 respondents answered that preventive healthcare is expensive.
- xiii. The majority (271) of the respondents follow a lifestyle consisting of preventive health measures.
- xiv. 371 respondents know the significance of preventive health care.

#### **Cross Tabulation and Hypotheses Interpretation**

The P < 0.05; as a result, the null hypothesis (Ho1) is rejected. Table 1 show that there is a relationship between age group and respondents' health status.

Table 1.1 indicates that there is an association between gender and respondents' health status, as the null hypothesis (Ho2) is rejected because P < 0.05.

According to the results of the above Table 2, there is an association between the respondents' age group and the health problems they experienced during the previous 12 months, because P < 0.05 and accordingly null hypothesis is rejected.

Table 2.1 reveals that there is no association between gender and health problems experienced by respondents in the previous 12 months because the null hypothesis fails to reject.

|   |             | Total       |                |       |
|---|-------------|-------------|----------------|-------|
|   | 18–30 years | 30–45 years | Above 45 years |       |
| In general, would you say your health is_ |             |             |                |       |
| Excellent                                 | 68          | 7           | 1              | 76    |
| Good                                      | 237         | 35          | 5              | 277   |
| Fair                                      | 23          | 5           | 4              | 32    |
| Total                                     | 328         | 47          | 10             | 385   |
| P-value                                   |             |             |                | 0.005 |

Table 1.1: Crosstab between Gender and Health Status

|   | Geno   | der  | Total |  |  |
|---|--------|------|-------|--|--|
|   | Female | Male |       |  |  |
| In general, would you say your health is_ |        |      |       |  |  |
| Excellent                                 | 33     | 43   | 76    |  |  |
| Good                                      | 154    | 123  | 277   |  |  |
| Fair                                      | 23     | 9    | 32    |  |  |
| Total                                     | 210    | 175  | 385   |  |  |
| <i>P</i> -value                           |        |      | 0.020 |  |  |

| Table 2: Crosstab between Age-group and Health problems |           |         |             | ems    |
|---|-----------|---------|-------------|--------|
|   | Age Group |         |             | Total  |
|   | 18–30     | 30–45   | Above 45    |        |
|   | years     | years   | years       |        |
| During the past 12 months have                          | ou had    | any hea | Ith probler | ns or  |
| illnesses?  |           |         |             |        |
| Anemia  | 2         | 0       | 0           | 2      |
| Asthma  | 4         | 2       | 1           | 7      |
| Corona  | 3         | 0       | 0           | 3      |
| Cough   | 2         | 0       | 0           | 2      |
| Coved   | 1         | 2       | 0           | 3      |
| Covid   | 6         | 3       | 0           | 9      |
| Covid 19  | 4         | 0       | 0           | 4      |
| Covid-Positive  | 1         | 0       | 0           | 1      |
| Covid-19  | 1         | 0       | 0           | 1      |
| Covid-19  | 3         | 0       | 0           | 3      |
| Covid-19 and Stomach infection                          | 1         | 0       | 0           | 1      |
| Dengue  | 1         | 0       | 0           | 1      |
| Diabetes  | 0         | 6       | 4           | 10     |
| Heart Trouble   | 1         | 0       | 0           | 1      |
| High Blood Pressure                                     | 6         | 8       | 1           | 15     |
| Hyperthyroid  | 0         | 1       | 0           | 1      |
| Intestinal problems                                     | 2         | 0       | 0           | 2      |
| Jaundice  | 4         | 0       | 0           | 4      |
| No illness  | 3         | 0       | 0           | 3      |
| None  | 2         | 0       | 0           | 2      |
| None  | 274       | 24      | 3           | 301    |
| Ortho   | 0         | 1       | 0           | 1      |
| Stomach problem   | 1         | 0       | 0           | 1      |
| Stroke  | 2         | 0       | 0           | 2      |
| T.B.  | 2         | 0       | 0           | 2      |
| Thyroid   | 0         | 0       | 1           | 1      |
| Typhoid   | 2         | 0       | 0           | 2      |
| Total   | 328       | 47      | 10          | 385    |
| <i>P</i> -value   |           |         |             | <0.001 |

|  | Table 2.1: Crosstab | between Gende | r and Health | Problems |
|--|---------------------|---------------|--------------|----------|
|--|---------------------|---------------|--------------|----------|

|                                      | Gender       |            | Total |
|--------------------------------------|--------------|------------|-------|
|                                      | Female       | Male       |       |
| During the past 12 months have you h | nad any heal | th problen | ns or |
| illnesses?                           |              |            |       |
| Anemia                               | 2            | 0          | 2     |
| Asthma                               | 1            | 6          | 7     |
| Corona                               | 1            | 2          | 3     |
| Cough                                | 0            | 2          | 2     |
| Covid                                | 1            | 2          | 3     |
| Covid                                | 5            | 4          | 9     |
| Covid 19                             | 4            | 0          | 4     |
| Covid-Positive                       | 0            | 1          | 1     |
| covid-19                             | 0            | 1          | 1     |
| Covid-19                             | 3            | 0          | 3     |
| Covid-19 and Stomach infection       | 1            | 0          | 1     |
| Dengue                               | 0            | 1          | 1     |
| Diabetes                             | 5            | 5          | 10    |
| Heart Trouble                        | 0            | 1          | 1     |
| High Blood Pressure                  | 9            | 6          | 15    |
| Hyperthyroid                         | 1            | 0          | 1     |
| Intestinal problems                  | 2            | 0          | 2     |
| Jaundice                             | 3            | 1          | 4     |
| No illness                           | 3            | 0          | 3     |
| None                                 | 2            | 0          | 2     |
| None                                 | 159          | 142        | 301   |
| Ortho                                | 1            | 0          | 1     |
| Stomach problem                      | 1            | 0          | 1     |
| Stroke                               | 2            | 0          | 2     |
| T.B.                                 | 1            | 1          | 2     |
| Thyroid                              | 1            | 0          | 1     |
| Typhoid                              | 2            | 0          | 2     |
| Total                                | 210          | 175        | 385   |
| <i>P</i> -value                      |              |            | 0.111 |

120

After analyzing Table 3, it is found that there is an association between the age group and the respondents having health insurance coverage, as because P < 0.05 and accordingly the null hypothesis (Ho1) is rejected.

Table 3.1 shows that as the p value are more than 0.05, so it could be ensured that there is no association between gender and the respondent's health insurance coverage.

Table 4 shows that as the p value is more than 0.05 so, there is no association between the age group and the respondents who have done cholesterol test during the last 12 months.

Table 3: Crosstab between Age-group and Health Insurance

| Coverage  |             |             |                |         |  |
|---|-------------|-------------|----------------|---------|--|
|   | Age Group   |             |                |         |  |
|   | 18–30 years | 30–45 years | Above 45 years |         |  |
| Do you have any kind of health insurance that pays all or part of |             |             |                |         |  |
| your doctor and hospital bills?                                   |             |             |                |         |  |
| Yes   | 119         | 34          | 6              | 159     |  |
| No  | 209         | 13          | 4              | 226     |  |
| Total   | 328         | 47          | 10             | 385     |  |
| P-value   |             |             |                | < 0.001 |  |

 Table 3.1: Crosstab between Gender and Health Insurance Coverage

 Count

|   | Gender       |      | Total |  |  |
|---|--------------|------|-------|--|--|
|   | Female       | Male |       |  |  |
| Do you have any kind of health insurance that pays all or part of |              |      |       |  |  |
| your doctor and hosp  | oital bills? |      |       |  |  |
| Yes   | 78           | 81   | 159   |  |  |
| No  | 132          | 94   | 226   |  |  |
| Total   | 210          | 175  | 385   |  |  |
| <i>P</i> -value   |              |      | 0.070 |  |  |

| Table 4: Crosstab between Age-group and Cholesterol test          |             |             |                |       |  |
|---|-------------|-------------|----------------|-------|--|
| Age Group   |             |             |                | Total |  |
|   | 18–30 years | 30–45 years | Above 45 years |       |  |
| Have you had a cholesterol (fat in the blood) test in the past 12 |             |             |                |       |  |
| months?   |             |             |                |       |  |
| Yes   | 25          | 7           | 1              | 33    |  |
| No  | 303         | 40          | 9              | 352   |  |
| P-value   |             |             |                | 0.247 |  |

Table 5: Crosstab between Age-group and Smoking or Chewing

|   | Тс     | obacco |        |  |  |
|---|--------|--------|--------|--|--|
|   | 0      | Gender | Total  |  |  |
|   | Female | Male   |        |  |  |
| Have you had a cholesterol (fat in the blood) test in the past 12 |        |        |        |  |  |
| months?   |        |        |        |  |  |
| Yes   | 27     | 6      | 33     |  |  |
| No  | 183    | 169    | 352    |  |  |
| Total   | 210    | 175    | 385    |  |  |
| <i>P</i> -value   |        |        | <0.001 |  |  |

Table 5.1: Crosstab between Gender and Smoking or Chewing

|                                      |             | Tobacco     |                |       |
|--------------------------------------|-------------|-------------|----------------|-------|
|                                      |             | Age Group   |                | Total |
|                                      | 18–30 years | 30–45 years | Above 45 years |       |
| Do you smoke or use chewing tobacco? |             |             |                |       |
| Yes                                  | 12          | 3           | 0              | 15    |
| No                                   | 316         | 44          | 10             | 370   |
| Total                                | 328         | 47          | 10             | 385   |
| P-value                              |             |             |                | 0.540 |

Table 5 shows that there is an association between gender and the respondents who have conducted cholesterol test during the past 12 months because the P < 0.05 and accordingly the null hypothesis (Ho2) is rejected.

Here, the P > 0.05, that is, null hypothesis is rejected; hence, there is no association between the age group and the respondents who smoke and use chewing tobacco.

Table 5.1 shows that there is no association between gender and the respondents who smoke and use chewing tobacco, as its P > 0.05. Hence, the null hypothesis (Ho2) fails to reject.

Table 6 shows that there is an association between the age group and the respondents who believe that prevention is better than cure, as its P < 0.05. Hence, the null hypothesis (Ho1) is rejected.

Table 6.1 shows that there is no association between gender and the respondents who believe that prevention is better than cure, as its P > 0.05. Hence, the null hypothesis (Ho2) fails to reject.

Table 7 shows that there is no association between the age group and the respondents who are aware about preventive healthcare, as its P > 0.05. Hence, the null hypothesis (Ho1) fails to reject.

Table 7.1 shows that there is no association between gender and the respondents who are aware about preventive healthcare, as its P > 0.05. Hence, the null hypothesis (Ho2) fails to reject.

Table 6: Crosstab between Age-group and Preventive Health-care

|                 | Gen                 | Gender |       |
|-----------------|---------------------|--------|-------|
|                 | Female              | Male   |       |
| Do you smoke or | use chewing tobacco | ?      |       |
| Yes             | 7                   | 8      | 15    |
| No              | 203                 | 167    | 370   |
| Total           | 210                 | 175    | 385   |
| P-value         |                     |        | 0.532 |

**Table 6.1:** Crosstab between Gender and Preventive Health-care

|   | Age Group   |             |                | Total |
|---|-------------|-------------|----------------|-------|
|   | 18–30 years | 30–45 years | Above 45 years |       |
| Do you believe that "Prevention is better than cure"? |             |             |                |       |
| Yes   | 306         | 44          | 7              | 357   |
| No  | 22          | 3           | 3              | 28    |
| Total   | 328         | 47          | 10             | 385   |
| P-value   |             |             |                | 0.020 |

Table 7: Crosstab between Age-group and Knowledge of Preventive

|            |                  | Healthcare      |                |       |
|------------|------------------|-----------------|----------------|-------|
|            |                  | Age Group       |                | Total |
|            | 18–30 years      | 30–45 years     | Above 45 years |       |
| Do you kno | w, what is preve | entive healthca | re?            |       |
| Yes        | 279              | 44              | 7              | 330   |
| No         | 49               | 3               | 3              | 55    |
| Total      | 328              | 47              | 10             | 385   |
| P-value    |                  |                 |                | 0.104 |

Table 7.1: Crosstab between Gender and Knowledge of Preventive

|                 | Healthcare              |       |       |
|-----------------|-------------------------|-------|-------|
|                 | Geno                    | der   | Total |
|                 | Female                  | Male  |       |
| Do you know, wh | at is preventive health | care? |       |
| Yes             | 179                     | 151   | 330   |
| No              | 31                      | 24    | 55    |
| Total           | 210                     | 175   | 385   |
| P-value         |                         |       | 0.770 |

Table 8 shows that there is no association between the age group and the respondents who have a healthcare service provider for regular checkups, as its P > 0.05. Hence, the null hypothesis (Ho1) fails to reject.

Table 8.1 shows that there is no association between genders with respect to respondents who have a healthcare service provider for regular checkups, as its P > 0.05. Hence, the null hypothesis (Ho2) fails to reject.

Table 9 shows that there is no association between age group with respect to respondents who follow a lifestyle consisting of preventive health measures, as its P > 0.05. Hence, the null hypothesis (Ho1) fails to reject.

Table 9.1 shows that there is an association between genders with respect to respondents who follow a lifestyle consisting of preventive health measures, as its P < 0.05. Hence, the null hypothesis (Ho2) is rejected.

Table 10 shows that there is an association between the age group and the respondents who think that preventive healthcare is expensive, as its P < 0.05. Hence, the null hypothesis (Ho1) is rejected.

Table 10.1 shows that there is no association between gender and the respondents who think that preventive healthcare is expensive, as its P > 0.05. Hence, the null hypothesis (Ho2) fails to reject.

Table 8: Crosstab between Age-group and Particular Medical Doctor

|   | Age Group      |             |                | Total |
|---|----------------|-------------|----------------|-------|
|   | 18–30 years    | 30–45 years | Above 45 years |       |
| Is there a particular medical doctor, physician's assistant, or nurse |                |             |                |       |
| practitioner  | that you usual | ly, see?    |                |       |
| Yes   | 232            | 33          | 6              | 271   |
| No  | 96             | 14          | 4              | 114   |
| Total   | 328            | 47          | 10             | 385   |
| P-value   |                |             |                | 0.765 |

| Table 8.1: Crosstab between Gender and Particular Medical Doctor |   |      |       |  |  |
|--|---|------|-------|--|--|
|  | Gene  | der  | Total |  |  |
|  | Female  | Male |       |  |  |
| Is there a particula   | Is there a particular medical doctor, physician's assistant, or nurse |      |       |  |  |
| practitioner that yo   | ou usually, see?  |      |       |  |  |
| Yes  | 151   | 120  | 271   |  |  |
| No   | 59  | 55   | 114   |  |  |
| Total  | 210   | 175  | 385   |  |  |
| P-value  |   |      | 0.476 |  |  |

| Table 9: Crossta | between Age-group and Lifestyle |
|------------------|---------------------------------|
|------------------|---------------------------------|

|               | Age Group       |                    |                | Total |
|---------------|-----------------|--------------------|----------------|-------|
|               | 18–30 years     | 30–45 years        | Above 45 years |       |
| Is preventive | e healthcare, a | part of your lifes | style?         |       |
| Total         | 235             | 32                 | 4              | 271   |
| P-value       | 93              | 15                 | 6              | 114   |
| Total         | 328             | 47                 | 10             | 385   |
| P-value       |                 |                    |                | 0.091 |

Table 9.1: Crosstab between Gender and Lifestyle

|               | Gen                   | Gender          |         |
|---------------|-----------------------|-----------------|---------|
|               | Female                | Male            |         |
| Is preventive | healthcare, a part of | your lifestyle? |         |
| Yes           | 171                   | 100             | 271     |
| No            | 39                    | 75              | 114     |
| Total         | 210                   | 175             | 385     |
| P-value       |                       |                 | < 0.001 |

Table 11 shows that there is no association between the age group and the respondents who think that preventive healthcare is important, as its P > 0.05. Hence, the null hypothesis (Ho1) fails to reject.

Table 11.1 shows that there is no association between gender and the respondents who think that preventive healthcare is important, as its P > 0.05. Hence, the null hypothesis (Ho2) fails to reject.

#### Major Findings are as Follows

The current health condition of the respondents has a significant relation with age and gender of the respondents.

The association between age, gender and the different perceptions of the respondents toward preventive healthcare is significant in some of the cross tabulations and not significant in other cross tabulations. The null hypotheses (Ho1 and Ho2) are rejected in only few cases. Meanwhile, the alternative hypotheses (H1 and H2) are accepted in less number.

The *P* value for the age group and health of the respondents is <0.05. Hence, the null hypothesis (Ho1) fails. The *P* value for the gender and health of the respondents is <0.05. Hence, the null hypothesis (Ho2) fails.

The age group and the respondents' health problems in the recent year have a P < 0.05. So the null hypothesis (Ho1) fails.

| Table 10: Crosstab between Age-group and Cost    |             |             |                |         |
|--|-------------|-------------|----------------|---------|
|  |             | Age Group   |                | Total   |
|  | 18–30 years | 30–45 years | Above 45 years |         |
| Do you think preventive healthcare is expensive? |             |             |                |         |
| Yes  | 148         | 28          | 10             | 186     |
| No   | 177         | 19          | 0              | 196     |
| Total  | 325         | 47          | 10             | 382     |
| P-value  |             |             |                | < 0.001 |

Table 10.1: Crosstab between Gender and Cost

|                       | Gender |      | Total |
|-----------------------|--------|------|-------|
|                       | Female | Male |       |
| Do you think that pre | nt?    |      |       |
| Yes                   | 92     | 92   | 186   |
| No                    | 115    | 115  | 196   |
| Total                 | 207    | 207  | 382   |
| <i>P</i> -value       |        |      | 0.071 |

Table 11: Crosstab between Age-group and Importance of Preventive

|                 |                  | Healthcare         |                |       |
|-----------------|------------------|--------------------|----------------|-------|
|                 | Age Group        |                    |                | Total |
|                 | 18–30 years      | 30–45 years        | Above 45 years |       |
| Do you thir     | ik that preventi | ve healthcare is i | important?     |       |
| Yes             | 315              | 46                 | 10             | 371   |
| No              | 13               | 1                  | 0              | 14    |
| Total           | 328              | 47                 | 10             | 385   |
| <i>P</i> -value |                  |                    |                | 0.676 |

Table 11.1: Crosstab between Gender and Importance of Preventive

|                   | Healthcare             | 2               |       |
|-------------------|------------------------|-----------------|-------|
|                   | Gena                   | ler             | Total |
|                   | Female                 | Male            |       |
| Do you think that | t preventive healthcar | e is important? |       |
| Yes               | 203                    | 168             | 371   |
| No                | 7                      | 7               | 14    |
| Total             | 210                    | 175             | 385   |
| P-value           |                        |                 | 0.728 |

There is no correlation between gender and recent health issues, as the P > 0.05. As a result, Ho2 is rejected. The age group and respondents' health insurance coverage have a P < 0.05. Hence, the null hypothesis (Ho1) fails. The P value for the gender and health insurance coverage is >0.05. As a result, Ho2 is rejected. The P value for the age group and those who had a cholesterol test in the recent year is >0.05. So the null hypothesis (Ho1) holds.

There is a P < 0.05 between gender and responders who have had a cholesterol test in the recent year. Hence, Ho2 is rejected. The age group does not correlate with those who smoke or chew tobacco (P > 0.05). Hence, the null hypothesis (Ho1) holds. Smokers and chewers had a P > 0.05, meaning there is no gender correlation. Hence, the null hypothesis (Ho2) holds. There is a P < 0.05 between age group and responders who say prevention is better than cure. Hence, Ho1 gets rejected. Because there is no gender difference in those who feel prevention is better than cure, and their P > 0.05, Hence, the null hypothesis (Ho2) holds.

The *P* value of the respondents who are aware of preventative healthcare is >0.05. Hence, Ho1 fails to reject it.

As a result, the *P* value for the gender and awareness of preventive healthcare is >0.05. Hence, the null hypothesis (Ho2) holds.

The *P* value for the age group and having a healthcare provider for frequent checkups is >0.05. Hence, the null hypothesis (Ho1) holds.

There is no gender difference in respondents who have regular visits with their healthcare practitioner, as the *P* value is better than 0.05. Hence, the null hypothesis (Ho2) holds.

The *P* value for responders who live a healthy lifestyle is >0.05, suggesting there is no age group correlation. Hence, the null hypothesis (Ho1) holds.

There is a P < 0.05 between gender and regard for responders who live a healthy lifestyle. Hence, the null hypothesis (Ho2) fails.

This table reveals a P < 0.05 between age and respondents who think preventive healthcare is expensive. Hence, Ho1 is rejected. The *P* value for the respondents who think preventive healthcare is expensive is >0.05. Hence, the null hypothesis (Ho2) holds.

The *P* value for those who believe that preventative healthcare is vital is >0.05. Hence, the null hypothesis (Ho1) holds.

Because the P > 0.05, there is no gender correlation among responders who value preventive healthcare. Hence, the null hypothesis (Ho2) holds.

## CONCLUSION

- Overall, it might be claimed that the public's opinion of preventative healthcare is complex and warrants greater investigation.
- Some people believe it is essential, but they do nothing to make it a priority.
- All of the elements taken into account when assessing the general public's degree of perception have shown to be helpful and can be used in future study.
- Despite the fact that the discussion is clearly one sided, it does highlight the need of preventive health.
- The age and gender of the respondents did not appear to have any effects on their perception level.
- People are inclined to take preventive precautions in the face of the current pandemic and to keep them up over the long haul.

## Recommendations

The general public of Vadodara has the following suggestions and remarks regarding preventative healthcare: Preventive health care is the first step toward avoiding significant disease or illness in the future. Daily activity and preventive therapy can prevent heart attacks and organ failure. We can protect ourselves from serious diseases by knowing their symptoms and by boosting our immune systems. Health, food, and lifestyle choices have been made easier with preventive healthcare. Thus, we can prevent problems from occurring at the first place. Mental and physical healths are intertwined. Preventative healthcare is vital in today's world. Preventive healthcare involves healthy eating and exercising and moving away from a sedentary life-style. With deskbound and inactive lifestyles taking over, people are not immune enough to protect themselves from new diseases that are constantly emerging, so preventive checkups from time to time are critical. Genetic testing can also help to screen for mutations which can prevent from certain genetic disorders or certain types of cancer as well. The cost implications for the same also have to be assessed; however, over the long-term, it lowers direct and indirect costs and helps to improve the health index.

Small changes can make a huge difference, such as quitting smoking, exercising frequently, eating a balanced and nutritious diet, avoiding alcoholic beverages, consuming less sugary drinks, and keeping a healthy weight.

Even so, such minor adjustments can improve a person's deteriorating health and protect them from dying too soon.

As a result, it is entirely up to the individual to make the best health decisions possible. Consumption of harmful things should be avoided to live a happy and healthy life.

### REFERENCES

- Wiggers J, McElwaine K, Freund M, Campbell L, Bowman J, Wye P, *et al.* Increasing the provision of preventive care by community healthcare services: A stepped wedge implementation trial. Implement Sci 2017;12:105.
- Fehily CM, Bartlem KM, Wiggers JH, Wye PM, Clancy RV, Castle DJ, et al. Effectiveness of embedding a specialist preventive care clinician in a community mental health service in increasing preventive care provision: A randomised controlled trial. Aust N Z J Psychiatry 2020;54:620-32.
- Pearce C, Rychetnik L, Wutzke S, Wilson A. Obesity prevention and the role of hospital and community-based health services: A scoping review. BMC Health Serv Res 2019;19:453.
- Alivia M, Guadagni P, di Sarsina PR. Towards salutogenesis in the development of personalised and preventive healthcare. EPMA J 2011;2:381-4.
- MacIntosh T, Desai MM, Lewis TT, Jones BA, Nunez-Smith M. Sociallyassigned race, healthcare discrimination and preventive healthcare services. PLoS One 2013;8:e64522.
- Arnrich B, Mayora O, Bardram J, Tröster G. Pervasive healthcare: Paving the way for a pervasive, user-centered and preventive healthcare model. Methods Inf Med 2009;49:67-73.
- Raghupathi V, Raghupathi W. Preventive healthcare: A neural network analysis of behavioral habits and chronic diseases. Healthcare 2017;5:8.
- Vilms RJ, McDougal L, Atmavilas Y, Hay K, Triplett DP, Silverman J, et al. Gender inequities in curative and preventive health care use among infants in Bihar, India. J Glob Health 2017;7:020402.
- Holland DJ, Bradley DW, Khoury JM. Sending men the message about preventive care: An evaluation of communication strategies. Int J Mens Health 2005;4:97-114.

- Sahu KK, Kumar R. Preventive and treatment strategies of COVID-19: From community to clinical trials. J Family Med Prim Care 2020;9:2149-57.
- 11. Mirza T, Ali R, Khan H. The knowledge and perception of COVID-19 and its preventive measures, in public of Pakistan. PAFMJ 2020;70: 338-45.
- 12. Lim MT, Lim Y, Tong SF, Sivasampu S. Age, sex and primary care setting differences in patients' perception of community healthcare-seeking behavior towards health services. PLoS One 2019;14:e0224260.
- 13. Obiebi IP, Moeteke NS, Eze GU, Umuago IJ. How mindful of their

own health are healthcare professionals? Perception and practice of personnel in a tertiary hospital in Nigeria. Ghana Med J 2020;54:215-24.

- Elhadi M, Msherghi A, Alsoufi A, Buzreg A, Bouhuwaish A, Khaled A, et al. Knowledge, preventive behavior and risk perception regarding COVID-19: A self-reported study on college students. Pan Afr Med J 2020;35 Suppl 2:75.
- Sabbath EL, Sparer EH, Boden LI, Wagner GR, Hashimoto DM, Hopcia K, et al. Preventive care utilization: Association with individualand workgroup-level policy and practice perceptions. Prev Med 2018;111:235-40.