

Assessment Diabetes Screening Camp Among Adults in Village Bhaganki, Panchgaon, Gurugram

Abstract

Health screening camps are essential in identifying and preventing chronic conditions like diabetes and hypertension. On World Diabetes Day 2024, Amity College of Nursing organized a Diabetes Screening Camp under the theme “Breaking Barriers, Bridging Gaps” in Bhaganki village, Panchgaon, Gurugram. The camp provided free health check-ups, including Body Mass Index (BMI) assessment, blood pressure measurement, blood sugar testing, and educational sessions on diabetes prevention. A total of 88 adults participated (36 males, 52 females), with 22 individuals reporting a family history of diabetes. Among them, 18 were prediabetic, 7 had diabetes, and 10 exhibited hypertension-related concerns. The initiative successfully promoted early diagnosis, preventive healthcare, and community awareness regarding diabetes management.

Keywords

Diabetes Screening, Preventive Health, Body Mass Index, Community Healthcare, Health Education

1. Introduction

Diabetes is a chronic, metabolic disease characterized by elevated levels of blood glucose (or blood sugar), which leads over time to serious damage to the heart, blood vessels, eyes, kidneys and nerves. The most common is type 2 diabetes, usually in adults, which occurs when the body becomes resistant to insulin or doesn't make enough insulin. In the past 3 decades the prevalence of type 2 diabetes has risen dramatically in countries of all income levels. Type 1 diabetes, once known as juvenile diabetes or insulin-dependent diabetes, is a chronic condition in which the pancreas produces little or no insulin by itself. For people living with diabetes, access to affordable treatment, including insulin, is critical to their survival. There is a globally agreed target to halt the rise in diabetes and obesity by 2025.

About 830 million people worldwide have diabetes, the majority living in low-and middle-income countries. More than half of people living with diabetes are not receiving treatment. Both the number of people with diabetes and the number of people with untreated diabetes have been steadily increasing over the past decades.

2. Methodology

2.1 Camp Organization

Diabetes mellitus is a global health challenge, impacting millions of individuals. Early detection and intervention play a critical role in reducing complications and improving patient outcomes.

World Diabetes Day, observed annually on November 14, aims to raise awareness about diabetes prevention and access to essential healthcare. In response, Amity College of Nursing conducted a community diabetes screening camp in Bhaganki village, providing free health assessments and promoting lifestyle modifications to manage diabetes effectively.

The screening camp was held on November 14, 2024, from 10:00 AM – 1:00 PM, facilitated by faculty and students of Amity College of Nursing. Residents of Bhaganki village were invited for free screenings and awareness sessions to address diabetes and hypertension risks.

2.2 Health Assessments Conducted

The following screenings were performed:

- Body Mass Index (BMI) Calculation to assess weight-related health risks.
- Blood Pressure Monitoring for hypertension detection.
- Random Blood Sugar (RBS) Testing to evaluate diabetes risk.
- Health Education Sessions focusing on diabetes prevention, healthy eating, exercise routines, and medication adherence.

3. Results and Findings

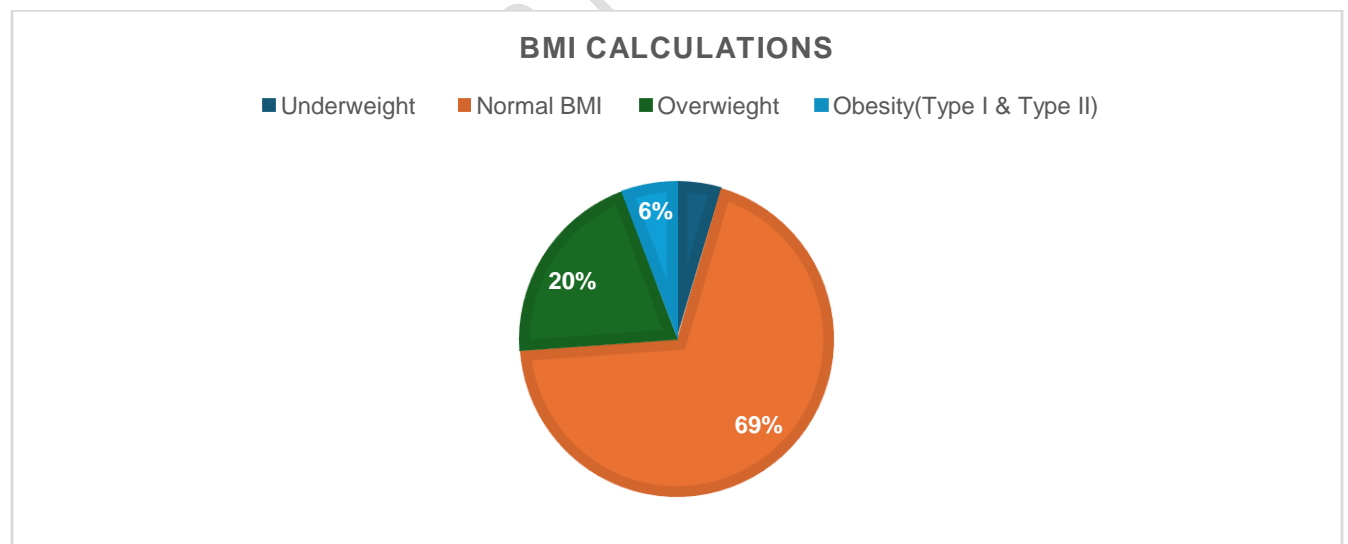
3.1 Participant Demographics

The screening camp had 88 participants, including 36 males and 52 females. Out of these, 22 individuals had a family history of diabetes, increasing their risk of developing the condition.

3.2 BMI Assessment

BMI calculations categorized participants as follows:

- **04 individuals** were underweight.
- **61 individuals** had a normal BMI.
- **18 individuals** were overweight.
- **05 individuals** had obesity (Type I & II).



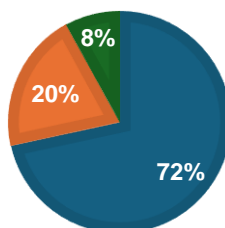
3.3 Diabetes Screening (Random Blood Sugar Levels)

The blood sugar tests revealed:

- **63 participants** had normal blood sugar levels (**70–140 mg/dL**).
- **18 participants** were identified as **prediabetic** (**140–200 mg/dL**).
- **07 participants** were diagnosed with **diabetes** (**>200 mg/dL**).

DIABETES SCREENING (RANDOM BLOOD SUGAR LEVELS)

- Normal blood sugar levels (70–140 mg/dL)
- Prediabetic (140–200 mg/dL).
- Diagnosed with diabetes (>200 mg/dL).



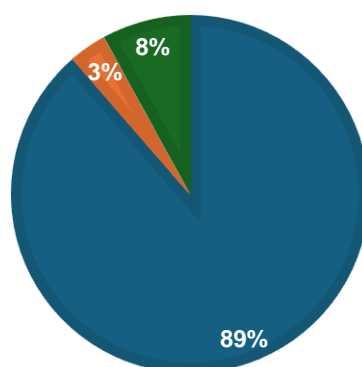
3.4 Hypertension Screening

Blood pressure readings categorized individuals into:

- **78 participants** with normal blood pressure levels.
- **03 individuals** diagnosed with **Type I Hypertension**.
- **07 individuals** diagnosed with **Type II Hypertension**.

HYPERTENSION SCREENING

- Normal blood pressure levels
- Diagnosed with Type I Hypertension
- Diagnosed with Type II Hypertension.



4. Discussion

The screening results emphasized the urgent need for preventive healthcare interventions in the community. Among the 88 participants, 18 were prediabetic and 7 had diabetes, highlighting the necessity for lifestyle modifications and medical supervision. BMI assessments also identified 23 individuals with overweight or obesity, reinforcing the importance of dietary regulation and physical activity programs. Additionally, the 10 hypertension cases suggest that heart health awareness and monitoring should be integrated into future healthcare initiatives.

5. Conclusion

The Diabetes Screening Camp 2024 effectively contributed to early diagnosis, preventive education, and awareness programs for adults in Bhaganki village. By providing free screenings and structured health sessions, the initiative empowered individuals with knowledge and strategies to manage diabetes and hypertension. Future programs should prioritize follow-up screenings, personalized healthcare plans, and sustainable community health initiatives to enhance overall well-being.

6. Recommendations

1. **Regular follow-up screening camps** to monitor prediabetic and hypertensive individuals.
2. **Community-based nutrition workshops** promoting healthy dietary habits.
3. **Physical activity awareness programs** targeting overweight and hypertensive participants.
4. **Integration of telehealth services** for continuous diabetes management.
5. **Collaboration with local healthcare providers** to ensure treatment accessibility.

7. References

1. Atkinson MA, McGill DE, Dassau E, Laffel L (2020). "Type 1 diabetes mellitus". *Williams Textbook of Endocrinology*. Elsevier. p. 1403.
2. *National Institute of Diabetes and Digestive and Kidney Diseases, US National Institutes of Health*. 2024.