

COMMUNITY SERVICE PROJECT

Basic Details of the Team and Project

Project Title:

Incidence of Diabetes and other chronic diseases

Location:

Jonnada, Vizianagaram

Institute Name:

Raghu Institute of Technology

Team members:

R Doondi Gangadhar - 223j1a44f9

P Chaitanya - 223j1a44e0



U Sanjeev - 223j1a44i0

V Praneeth - 223j1a44i8









SURVEY: Initial Research



Week 1 – Consultation with Medical Professionals

Objective: To gain foundational knowledge of diabetes and chronic diseases.

Details: As non-medical students, we consulted with a doctor to understand the basics before engaging with the community survey.

Understanding Diabetes

Diabetes is a chronic condition where the body either does not produce enough insulin (Type 1) or cannot effectively use the insulin it produces (Type 2). This leads to elevated blood sugar levels.

Stages of Diabetes:

Pre-Diabetes: Higher than normal blood sugar levels, but not high enough to be classified as diabetes.

Diabetes (Type 1 & Type 2): Consistently high blood sugar that needs regular monitoring and management.

Gestational Diabetes: Occurs during pregnancy and may resolve after delivery.

Fasting Blood Sugar Range

Age Group	Male (mg/dL)	Female (mg/dL)
Below 40 years	Normal: <100 Diabetes: ≥126	Normal: <100 Diabetes: ≥126
40-60 years	Normal: <110 Diabetes: ≥131	Normal: <110 Diabetes: ≥121
Above 60 years	Normal: <120 Diabetes: ≥141	Normal: <120 Diabetes: ≥131

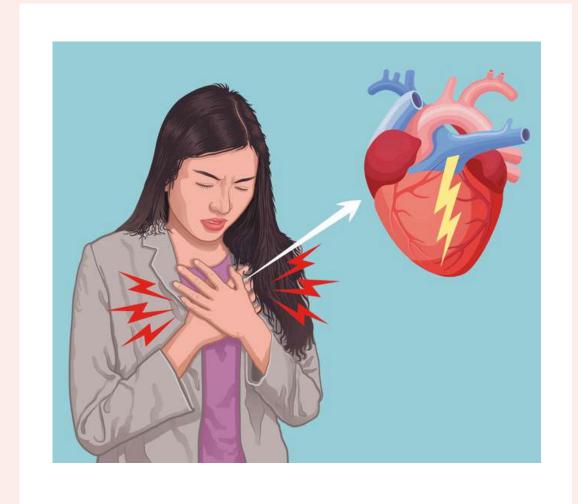
Understanding Chronic Diseases

Chronic diseases are *long-term medical conditions that are generally progressive*. Examples include heart disease, diabetes, and arthritis.

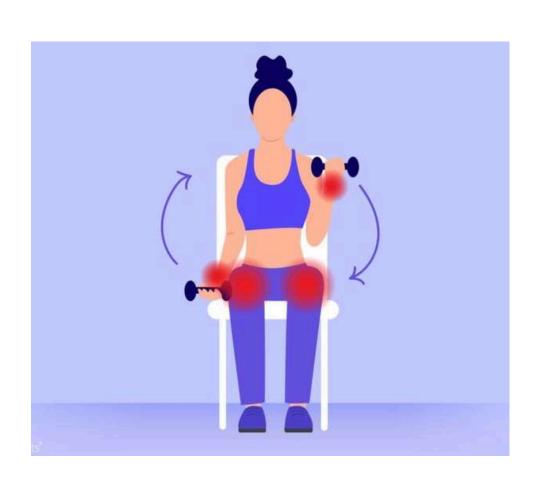
Heart disease

Diabetes

Arthritis







SURVEY: Visit to Jonnada Village

Week 2





Location: Jonnada is a rural village, 13 km from Vizianagaram, covering 87.41 hectares.

Demographics: The **population is 3,360** with **903 households**. **Women** make up **51.5**% of the population, and the overall **literacy rate is 49.8**% (*female literacy is 21.9*%).

Health Infrastructure: The village has limited healthcare with 1 Primary Health Sub-Centre and 1 RMP doctor.

SURVEY: Health Examination in Jonnada



Week 3 – Blood Sampling and Preliminary Health Check

Action: Blood samples were taken under the supervision of medical professionals to check for diabetes prevalence among villagers.

SURVEY: Health Examination in Jonnada



Week 3 – Blood Sampling and Preliminary Health Check

Methodology: Conducted surveys and health assessments to categorize villagers based on their diabetes stages.

SURVEY: Discovery of Chronic Diseases



Week 4 – Arthritis in Jonnada

Our survey found a significant *presence of arthritis* among the villagers, another prevalent chronic disease in addition to diabetes.

SURVEY: Analyzing the Results



Week 5 – Lab Results for Diabetes

Results: Significant cases of diabetes were found in men and women over 40 years of age.

SURVEY: Major Causes of Diabetes

Week 5 – Identifying Diabetes Risk Factors

Poor Diet:

Women: Leftover food consumption, leading to high-calorie intake.

Youth: Excessive junk food, sugary drinks, smoking, and drugs leading to pre-diabetes.

Villagers: Consuming cheap salt, cheap food (unauthorized), alcohol consumption.

Lack of Awareness:

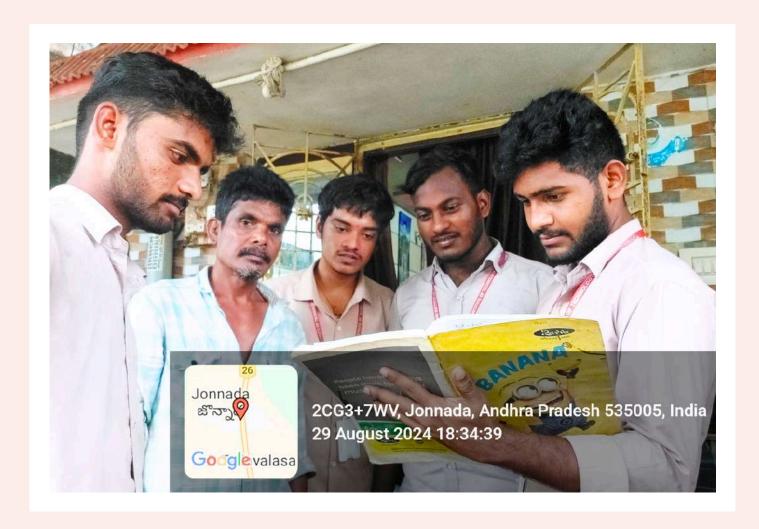
Less awareness of smoking, poor hydration, and arthritis management.

Stress & Smoking:

Common among villagers, contributing to higher risk.

SURVEY: Verifying Causes with Villagers

Week 6 - Verifying Survey Findings with Villagers



Action: Conducted follow-up surveys to validate the identified risk factors by discussing habits and lifestyle choices with villagers.

Outcome: Most *villagers confirmed* the identified risk factors.

SURVEY: Expert Consultation

Week 7 – Medical Feedback and Insights

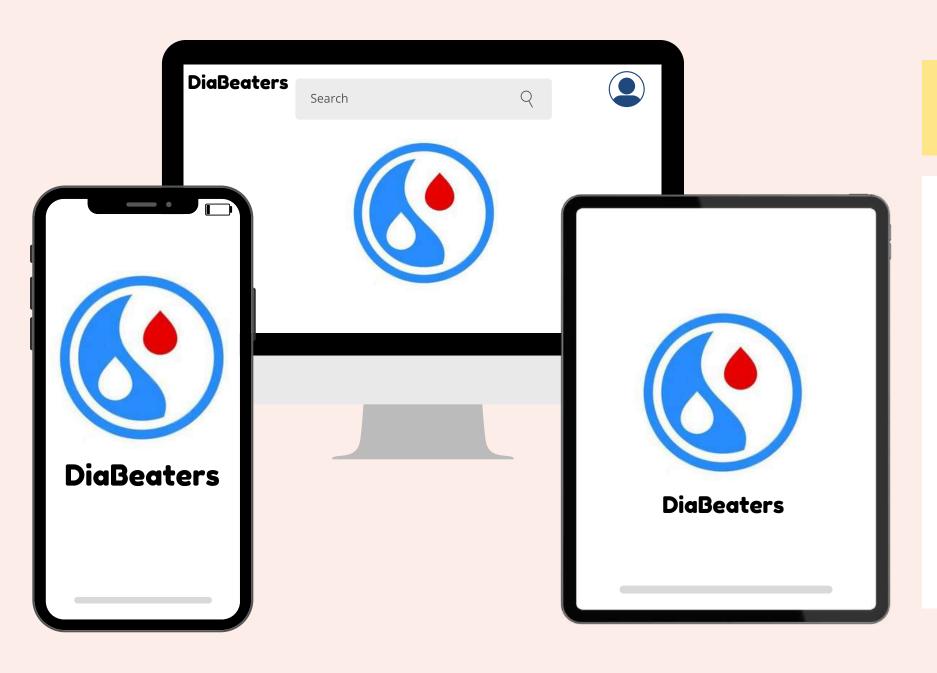


Objective: Presented our findings to a local doctor for *insights on improving health outcomes* in the village.

Suggestions: The doctor emphasized dietary control, regular exercise, and awareness programs.

Development of Diabeaters App

Week 7 - Creation of "Diabeaters" App



Features:

- Monitors user's food and exercise intake.
- Provides real-time feedback on health status (safe, danger, or normal).
- Tracks user habits and provides personalized health suggestions.

SURVEY: Awareness Campaign

Week 8 - Community Awareness Program



Activity: Launched the "Diabeaters" app and conducted an awareness campaign via *local WhatsApp groups* and *social media*.

Goal: To educate villagers about diabetes prevention and health management.





Scan this QR Code to use our application online.

FINAL SURVEY:

Week 8 - Collecting User Feedback



Activity: Collected *feedback* from villagers about the "Diabeaters" app and any issues or improvement suggestions.

Outcome: Positive response with suggestions for more user-friendly features.

