

HEALTH CARE MANAGEMENT IN RURAL AREAS

COMMUNITY SERVICE PROJECT REPORT

Submitted in partial fulfillment of the
requirement for the award of

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING

UNDER THE ESTEEMED GUIDANCE OF

Mr. A.Satish, M.Tech
Associate Professor, Department of CSE

SUBMITTED BY

KATREDDI SAI SRINIVAS	(21A21A0583)
MEESALA DHANUSH KUMAR	(21A21A05C0)
MALLIDI CHINNA RAMA CHANDRA REDDY	(21A21A05A9)
MARANANI PAVAN KUMAR	(21A21A05B4)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

Accredited by NAAC with an 'A' Grade
Approved by A.I.C.T.E & Permanently affiliated to JNTU,
Kakinada Seetharampuram, Narsapur – 534 280, West
Godavari Dt., A.P 2021-2025

PROGRAM BOOK FOR
COMMUNITY SERVICE PROJECT

Name of the Students: KATREDDI SAI SRINIVAS
MEESALA DHANUSH KUMAR
MALLIDI CHINNA RAMA CHANDRA REDDY
MARANANI PAVAN KUMAR

Name of the Project: HEALTH CARE MANAGEMENT IN RURAL AREAS

Registration Number: 21A21A0583
21A21A05C0
21A21A05A9
21A21A05B4

Period of CSP:

8 WEEKS: From: 05-07-2023
To: 01-09-2023

Name and Address of the Community/Habitation:

SEREPALAM, MOGALTHUR MANDAL, WEST GODAVARI, ANDHRA
PRADESH, 534281.

University

YEAR

Instructions to Students for Community Service Project

Please read the detailed Guidelines on Community Service Project hosted on the website of AP State Council of Higher Education <https://apsche.ap.gov.in>

Link: <https://apsche.ap.gov.in/Pdf/Guidelines%20for%20the%20OJT%20Internship%20Community%20Service%20Project.pdf>

1. It is mandatory for all the students to complete 2 months (180 hours) of Community Service Project as a part of the 10-month mandatory internship/on the job training.
2. Consider yourself a committed volunteer in the community, you work with.
3. Every student should identify the village/community/habitation for Community Service Project (CSP) in consultation with the College Principal/the authorized person nominated by the Principal.
4. Report to the community/habitation as per the schedule given by the College. You must make your own arrangements for transportation to reach the community/habitation.
5. You will be assigned a Faculty Guide from your College. He/She will be creating a WhatsApp group with your fellow volunteers. Post your daily activity done and/or any difficulty you encounter during the programme.
6. You should maintain punctuality in attending the CSP. Daily attendance is compulsory.
7. You are expected to learn about the community/habitation and their problems.
8. Know the leaders and the officials of the community/habitation.
9. While in the project, always wear your College Identity Card.
10. If your College has a prescribed dress as uniform, wear the uniform daily.
11. Identify at least five learning objectives in consultation with your Faculty Guide. These learning objectives can address:
 - Information about the community, including the realities and problems of the society.
 - Need for creating awareness on socially relevant aspects/programs.
 - Acquiring specific Life Skills.
 - Learning areas of application of knowledge and technologies related to your

discipline.

- Identifying developmental needs of the community/habitation.

12. Practice professional communication skills with team members, and with the leaders and officials of the community. This includes expressing thoughts and ideas effectively through oral, written, and non-verbal communication, and utilizing listening skills.

13. Be regular in filling up your Program Book. It shall be filled up in your own handwriting. Add additional sheets wherever necessary.

14. At the end of Community Service Project, you shall be evaluated by the person in-charge of the community/habitation to whom you report to.

15. There shall also be an evaluation at the end of the community service by the Faculty Guide and the Principal.

16. Do not indulge in any political activities.

17. Ensure that you do not cause any disturbance to the inhabitants or households during your interaction or collection of data.

18. Be cordial but not too intimate with the people you come across during your service activities.

19. You should understand that during this activity, you are the ambassador of your College, and your behavior during the community service programme is of utmost importance.

20. If you are involved in any discipline related issues, you will be withdrawn from the programme immediately and disciplinary action shall be initiated.

21. Do not forget to keep up your family pride and prestige of your College.

22. Remember that you are rendering valuable service to the society and your role in the community development will become part of the history of the community.

Community Service Project Report

*Submitted in accordance with the requirement for the degree of B.Tech
Computer Science And Technology*

Name of the College: Swarnandhra College Of Engineering And Technology

Department: Computer Science And Engineering

Name of the Faculty Guide: Mr. A.Satish, M. Tech

Duration of the CSP: From: 05/07/2023 To: 01/09/2023

Name of the Student: Katreddi Sai Srinivas
Meesala Dhanush Kumar
Mallidi Rama Chandra Reddy
Maranani Pavan Kumar

Programme of Study: B.Tech

Year of Study: III year

Register Number: 21A21A0583
21A21A05C0
21A21A05A9
21A21A05B4

Date of Submission:

Student's Declaration

I, _____, a student of _____ Program,
Reg. No. _____ of the Department of _____,
_____ College do hereby declare that I have completed
the mandatory community service from _____ to _____ in
_____ (*Name of the Community/Habitation*) under the Faculty Guideship of
_____, (*Name of the Faculty Guide*), Department of _____
in _____ College

(*Signature and Date*)

Endorsements

Faculty Guide

Head of the Department

Principal

Student's Declaration

I, _____, a student of _____ Program,
Reg. No. _____ of the Department of _____,
_____ College do hereby declare that I have completed
the mandatory community service from _____ to _____ in
_____ (*Name of the Community/Habitation*) under the Faculty Guideship of
_____, (*Name of the Faculty Guide*), Department of _____
in _____ College

(*Signature and Date*)

Endorsements

Faculty Guide

Head of the Department

Principal

Student's Declaration

I, _____, a student of _____ Program,
Reg. No. _____ of the Department of _____,
_____ College do hereby declare that I have completed
the mandatory community service from _____ to _____ in
_____ (*Name of the Community/Habitation*) under the Faculty Guideship of
_____, (*Name of the Faculty Guide*), Department of _____
in _____ College

(*Signature and Date*)

Endorsements

Faculty Guide

Head of the Department

Principal

Student's Declaration

I, _____, a student of _____ Program,
Reg. No. _____ of the Department of _____,
_____ College do hereby declare that I have completed
the mandatory community service from _____ to _____ in
_____ (*Name of the Community/Habitation*) under the Faculty Guideship of
_____, (*Name of the Faculty Guide*), Department of _____
in _____ College

(*Signature and Date*)

Endorsements

Faculty Guide

Head of the Department

Principal



SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

Approved by AICTE, New Delhi • Accredited by NAAC with "A" Grade

Recognised by UGC Under Sections 2(f) & 12(B) of UGC Act 1956

Permanenet Affiliation to J N T U K, Kakinada

Seetharampuram, NARSAPUR - 534 280, W.G.Dist., Andhra Pradesh

Date : 15-06-2023

To

The Village Revenue Officer (VRO)/Sachivalayam,
Serepalem (V)
MOGALTHUR (M) – 534 281,
West Godavari District, A.P

Respected Sir,

Sub: Request for permission to our students for CS project-Reg.

The following bonafide Students are studying III year B.Tech in our Swarnandhra College of Engineering and Technology. As a part of curriculum, they have to do Community Service project during their B.Tech. Course. We request you to allow and permit the four students (04), which are grouped as a batch for the community Service project to do the Project in your village. We also request you to cooperate and Support them in the project which is very helpful for their career.

S. No	Registered Number	Name of the Student	Course & Year
1	21A21A0583	KATREDDI SRINIVAS	B.TECH III YEAR
2	21A21A05C0	MEESALA DHANUSH KUMAR	B.TECH III YEAR
3	21A21A05A9	MALLIDI CHINA RAMA CHANDRA REDY	B.TECH III YEAR
4	21A21A05B4	MARANANI PAVAN KUMAR	B.TECH III YEAR

Thanking you.



కుమార్ సుశ్రీ
గ్రామ రవేన్నా సెక్రటరీ
సెర్విసోలెం విలేజ్
సైంగిల్స్ రూములు, ప్రార్థనల్ జెల్లు

Yours sincerely

Dr. S. Suresh Kumar

PRINCIPAL

Swarnandhra College of

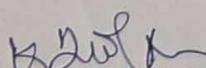
Engineering & Technology

SEETHARAMPURAM

NARSAPUR - 534 280, W.G.

Certificate from Official of the Community

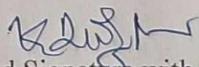
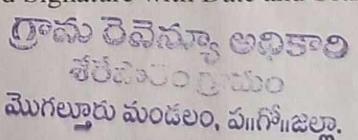
This is to certify that Katreddi Sai Srinivas (name of the community service volunteer) Reg.no 21A21A0583 of SWARNANDHRA COLLEGE OF ENGINEERING AND TECHNOLOGY (Name of the College) underwent community service in HEALTH CARE MANAGEMENT IN RURAL AREAS, SEREPALAM (Name of the Community) from 05-07-2023 to 01-09-2023. The overall performance of the community service volunteer during his/her community service is found to be _____ (Satisfactory/Good).


Authorized Signature with Date and Seal

రాష్ట్ర రెవెన్యూ అధికారి
సెర్కెర్చరీ
ముగల్కూరు మండలం, వాగింజులు,

Certificate from Official of the Community

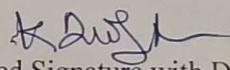
This is to certify that MARANANI PAVAN KUMAR (name of the community service volunteer) Reg.no 21A21A05B4 of SWARNANDHRA COLLEGE OF ENGINEERING AND TECHNOLOGY (Name of the College) underwent community service in HEALTH CARE MANAGEMENT IN RURAL AREAS, SEREPALAM (Name of the Community) from 05-07-2023 to 01-09-2023. The overall performance of the community service volunteer during his/her community service is found to be _____
(Satisfactory/Good).


Authorized Signature with Date and Seal


Certificate from Official of the Community

This is to certify that MEESALA DHANUSH KUMAR (name of the community service volunteer) Reg.no 21A21A05C0 of SWARNANDHRA COLLEGE OF ENGINEERING AND TECHNOLOGY (Name of the College) underwent community service in HEALTH CARE MANAGEMENT IN RURAL AREAS,SEREPALAM (Name of the Community) from 05-07-2023 to 01-09-2023 The overall performance of the community service volunteer during his/her community service is found to be _____

(Satisfactory/Good).

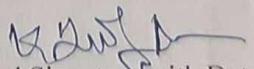

Authorized Signature with Date and Seal

ర్హాషు రెడ్డిపూర్ అధికారి
సేరింగ్ టెం ర్హాషుం
ముగల్లూరు మండలం, వాగిజల్లా.

Certificate from Official of the Community

This is to certify that MALLIDI CHINA RAMA CHANDRA REDDY (name of the community service volunteer) Reg.no 21A21A05A9 of SWARNANDHRA COLLEGE OF ENGINEERING AND TECHNOLOGY (Name of the College) underwent community service in HEALTH CARE MANAGEMENT IN RURAL AREAS,SEREPALAM (Name of the Community) from 05-07-2023 to 01-09-2023. The overall performance of the community service volunteer during his/her community service is found to be _____

(Satisfactory/Good).


Authorized Signature with Date and Seal

రూపు రెవెన్యూ అధికారి
సేరేపాలం రూపుం
ముగల్కురు మండలం, విశాఖపట్టణమ.

Acknowledgements

I extend our heartfelt gratitude to the almighty with profound gratitude, respect, and pride, I express our sincere thanks to the Management of Swarnandhra College of Engineering and Technology Sri K.V. Satyanarayana, Chairman, Sri K. V. Swamy, Treasurer, and Sri A. Sri Hari, Director for providing necessary arrangements to carry out this project work.

I wish to express my gratitude to Dr. S. Suresh Kumar, Principal of Swarnandhra College of Engineering and Technology, Seetharampuram, for his timely suggestions and for permitting us to carry out the project.

I also extend my heartfelt respect to Dr. P. Srinivasulu, Professor & Head of the Department of CSE for offering his sincere support throughout the Project work.

I sincerely thank the people of Serepalam village and TANUKULA MUNESWAROA , president, Serepalam,mogalthur mandal, West Godavari , Andhra Pradesh , 534281. for their continuous support to complete this community project successfully.

My deep gratitude to our internal guide , Associate Professor, for his guidance and keen interest at every stage of the project.

I would like to extend thanks to all the other staff members, both teaching and non-Teaching staff of our department for their constant support and encouragement to us throughout this project work.

Finally, the constant support from our lovable Parents and Friends is untold and immeasurable.

KATREDDI SAISRINIVAS
MEESALADHANUSH KUMAR
MALLIDI CHINNA RAMA CHANDRA REDDY
MARANANIPAVAN KUMAR

CONTENT

CHAPTER	TOPIC	PAGENO.
	ABSTRACT_____	18
1.0	EXECUTIVE SUMMARY-----	19
2.0	OVERVIEW OF THE COMMUNITY-----	23
3.0	COMMUNITY SERVICE PART-----	26
4.0	ACTIVITY LOG & WEEEKLY REPORT	30
	4.1 ACTIVITY LOG FOR THE FIRST WEEK-----	30
	4.2 WEEKLY REPORT FOR THE FIRST WEEK-----	31
	4.3 ACTIVITY LOG FOR THE SECOND WEEK-----	32
	4.4 WEEKLY REPORT FOR THE SECOND WEEK-----	33
	4.5 ACTIVITY LOG FOR THE THIRD WEEK-----	34
	4.6 WEEKLY REPORT FOR THE THIRD WEEK-----	35
	4.7 ACTIVITY LOG FOR THE FOURTH WEEK-----	36
	4.8 WEEKLY REPORT FOR THE FOURTH WEEK-----	37
	4.9 ACTIVITY LOG FOR THE FIFTH WEEK-----	38
	4.10 WEEKLY REPORT FOR THE FIFTH WEEK-----	39
	4.11 ACTIVITY LOG FOR THE SIXTH WEEK-----	40
	4.12 WEEKLY REPORT FOR THE SIXTH WEEK-----	41
	4.13 ACTIVITY LOG FOR THE SEVENTH WEEK-----	42
	4.14 WEEKLY REPORT FOR THE SEVENTH WEEK-----	43
	4.15 ACTIVITY LOG FOR THE EIGHTH WEEK-----	44
	4.16 WEEKLY REPORT FOR THE EIGHTH WEEK-----	45
5.0	OUTCOMES DESCRIPTION-----	46
6.0	RESULT AND CONCLUSIONS OF THE MINIPROJECT-----	53

ABSTRACT

Improving access to healthcare services in rural areas like Serepalam is paramount to ensuring the well-being of its residents. Rural areas often lack adequate healthcare infrastructure, including hospitals, clinics, and trained medical professionals. Establishing healthcare facilities or mobile clinics equipped with essential medical supplies and personnel can significantly bridge the gap in healthcare access. These facilities play a vital role in providing primary care services, including preventive screenings, vaccinations, and treatment for common illnesses.

Promoting preventive healthcare practices is essential for reducing the burden of diseases and improving overall health outcomes in rural communities like Serepalam. Education and awareness campaigns play a pivotal role in empowering individuals to adopt healthier lifestyles and take proactive measures to safeguard their health. Workshops focusing on hygiene, nutrition, and disease prevention provide valuable knowledge and skills to community members, enabling them to make informed decisions about their health.

Preventive healthcare extends beyond individual behavior to encompass community-wide initiatives aimed at promoting public health and well-being. Collaborating with local authorities and healthcare organizations can facilitate the implementation of targeted interventions, such as vaccination drives, disease screening programs, and environmental health initiatives. By addressing underlying factors contributing to poor health outcomes, such as inadequate sanitation or limited access to clean water, preventive healthcare efforts can create sustainable improvements in community health.

Leveraging telemedicine solutions is a promising approach to overcoming geographical barriers and expanding access to healthcare services in rural areas like Serepalam. Telemedicine involves the use of telecommunications technology to deliver healthcare services remotely, allowing patients to consult with healthcare providers without the need for in-person visits.

Telemedicine offers a wide range of services, including remote diagnosis, prescription refills, and health advice, through telehealth platforms. By facilitating timely access to medical care, telemedicine can help prevent disease progression, improve treatment outcomes, and reduce the need for unnecessary hospitalizations or emergency room visits.

Implementing health monitoring systems is essential for continuously tracking vital health parameters and monitoring disease prevalence within rural communities like Serepalam. IoT-based health monitoring systems leverage interconnected devices and sensors to collect real-time data on various health metrics, such as heart rate, blood pressure, and blood glucose levels. By integrating these systems into wearable devices or home monitoring kits, individuals can monitor their health status proactively and detect potential health issues early on. This proactive approach to health management empowers individuals to take control of their health and make informed decisions about their lifestyle and medical care.

In conclusion, the Serepalam Village Community Service Project adopts a holistic approach to healthcare management in rural areas by integrating first aid training, preventive measures, telemedicine services, and health monitoring systems. By empowering the community with knowledge and skills and leveraging technological innovations, this project aims to bridge the gap between rural and urban healthcare services, ultimately contributing to the well-being and improved health outcomes of Serepalam villagers. Through collaborative efforts and sustained initiatives, rural communities can achieve greater healthcare accessibility and equity, ensuring that no one is left behind in the journey towards better health and wellness.

Chapter 1: EXECUTIVE SUMMARY

The community service report shall have only a one-page executive summary. It shall include a brief description of the Community and summary of all the activities done by the student in CSP and five or more learning objectives and outcomes.

I completed this community service project in the village SEREPALAM, West Godavari in the period of 05-07-2023 to 01-09-2023 which means 8 weeks, in the period of 8 weeks I interact with so many young minds, village head and asking questions to them and collect all the details and issues from them.

I got very much experience in the community project time and I also learn so many things from officials, which means how to approach and how to ask how to take permissions like these things. The reason behind why we choose health care as a topic for our community project is the major issue that we had observed in the serepalam village is lack health facilities , so we took health care management as a CSP.

1.1 BRIEF DESCRIPTION ABOUT COMMUNITY SERVICE PROJECT

1. Improving Healthcare Infrastructure:

Enhancing healthcare infrastructure involves upgrading existing facilities and establishing new ones to meet the healthcare needs of rural populations. This includes constructing hospitals, clinics, and primary care centers equipped with modern medical equipment and facilities. Additionally, mobile health clinics can be deployed to remote areas to provide essential healthcare services. By investing in infrastructure, rural communities can ensure access to quality healthcare services closer to home .

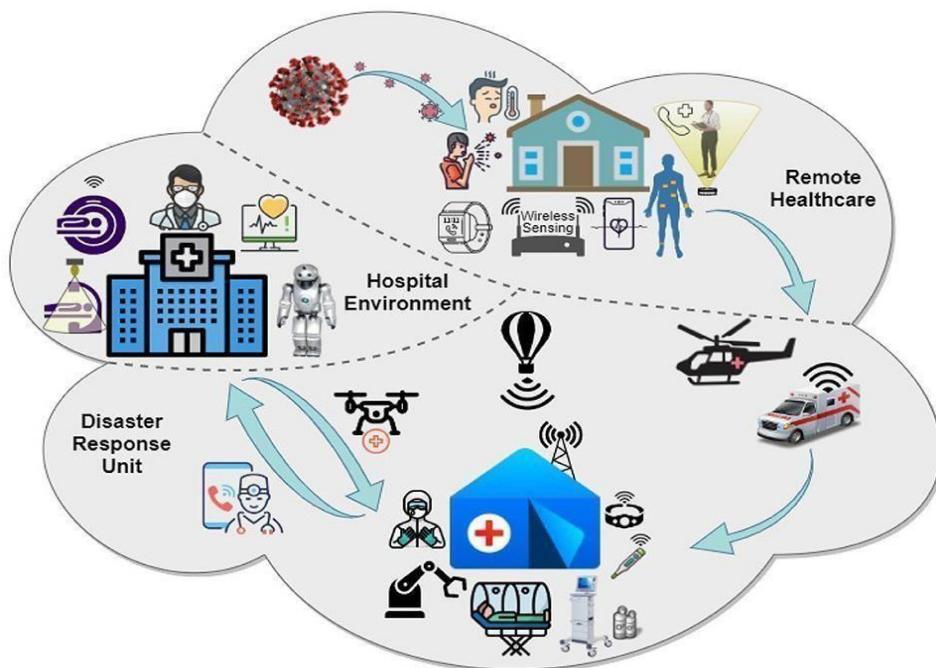
2. Establishing Health Care Facilities:

Setting up healthcare facilities like community health centers, rural hospitals, and primary health clinics brings healthcare services closer to rural residents. These facilities offer a range of services, including preventive care, maternal and child health services, chronic disease management, and emergency care. Mobile health units equipped with medical professionals and essential equipment can reach remote areas, ensuring even the most isolated communities have access to healthcare .

3. Telemedicine and Telehealth:

Telemedicine and telehealth technologies enable remote consultations, diagnosis, and

monitoring, overcoming geographical barriers in rural areas. Through telemedicine, patients can consult specialists located in urban centers without the need to travel long distances. Remote monitoring of chronic conditions and telepsychiatry services improve access to specialized care, enhancing healthcare outcomes for rural residents.



4. Community Health Workers (CHWs):

Community health workers (CHWs) play a vital role in bridging the gap between healthcare services and rural communities. These trained professionals provide health education, preventive care, and assistance with navigating the healthcare system. By building trust and rapport within the community, CHWs empower residents to make informed decisions about their health and well-being.

5. Collaborative Partnerships:

Collaborating with various stakeholders, including non-profit organizations, academic institutions, and government agencies, can amplify efforts to improve rural healthcare. These partnerships leverage diverse expertise and resources to implement comprehensive healthcare solutions tailored to the specific needs of rural communities. By pooling resources and knowledge, collaborative initiatives can address healthcare challenges more effectively and sustainably.

1.2 SUMMARY OF ACTIVITIES DONE DURING PROJECT

Rural Healthcare Barriers: Rural areas face multifaceted challenges in accessing healthcare, stemming from geographical isolation, inadequate infrastructure, and a dearth of healthcare professionals. Addressing these hurdles necessitates a holistic approach involving investments in infrastructure, recruitment of healthcare workers, and innovative service delivery models tailored to rural contexts. Additionally, fostering community engagement and empowerment can amplify the effectiveness of interventions.

Community-Based Models: Cultivating community-centric healthcare models rooted in indigenous medical traditions fosters trust and acceptance among rural populations. By integrating traditional healing practices with modern medicine, these models not only enhance accessibility but also honor cultural diversity and indigenous knowledge systems. Such initiatives promote health equity and empower communities to actively participate in their own well-being .

Telehealth Solutions: Telehealth emerges as a transformative solution to bridge the geographical divide and address the shortage of healthcare providers in remote areas. Through virtual consultations, telemonitoring, and health education programs, telehealth extends the reach of medical expertise to underserved rural communities, enabling timely interventions and continuity of care. Moreover, leveraging telehealth technologies can enhance healthcare efficiency, reduce costs, and improve health outcomes in rural settings .

Importance of Rural Hospitals: Small rural hospitals serve as vital lifelines, offering essential healthcare services and critical support to rural populations. Beyond providing medical care, these facilities contribute to local economies, employment opportunities, and community resilience. Ensuring the sustainability of rural hospitals requires strategic investments, policy support, and innovative approaches to address the unique challenges they face .

Challenges Facing Rural Healthcare: Rural healthcare systems grapple with persistent challenges, including financial constraints, workforce shortages, and limited access to specialized care. Overcoming these obstacles demands collaborative efforts from people.



1.3 Learning Objectives & Outcomes:

1. Understanding Rural Health Context:

- Objective: Develop an understanding of the unique challenges and opportunities in providing health care services in rural communities.
- Outcome: Increased awareness of rural health disparities and specific needs.

2. Community Needs Assessment:

- Objective: Conduct a comprehensive needs assessment to identify health priorities and gaps in rural areas.
- Outcome: A well-informed assessment report highlighting key health issues.

3. Stakeholder Engagement:

- Objective: Engage local community members, health workers, and leaders in project planning and decision-making.
- Outcome: Active participation and ownership from community stakeholders.

4. Health Infrastructure Improvement:

- Objective: Collaborate with local health facilities to enhance infrastructure, including clinics, telemedicine, and emergency services.
- Outcome: Strengthened health care delivery systems.

5. Capacity Building for Health Workers:

- Objective: Provide training and skill development for local health workers (e.g., nurses, community health workers).
- Outcome: Enhanced capacity to deliver quality health service.



Chapter 2: OVERVIEW OF THE COMMUNITY

Here is the Community/Village/Habitation including historical profile of the community / habitation, community diversity, traditions, ethics and values. Brief noteon Socio- Economic conditions of the Community/Habitation.



Figure 1: Serepalam

SEREPALAM is a Village in Mogalthur Mandal in West Godavari District of Andhra Pradesh State, India. It belongs to Andhra region . It is located 70 KM towards East from District head quarters Eluru. 405 KM from Hyderabad

Seripalem Pin code is 534281 and postal head office is Mogalturu .Seripalem is surrounded by Narsapur Mandal towards East , Bhimavaram Mandal towards North , Kruttivennu Mandal towards

west , Veeravasaram Mandal towards North .Mogalthur , Narasapur , Bhimavaram , Palacole are the near by Cities to Seripalem.

This Place is in the border of the West Godavari District and East Godavari District. East Godavari District Sakhinetipalle is East towards this place . It is near to bay of bengal. There is a chance of humidity in the weather.

2.1 HISTORICAL PROFILE OF THE COMMUNITY

Origin: Seripalam, situated in Mogalthur Mandal of West Godavari District, Andhra Pradesh, has a rich historical background dating back several centuries. The village's history is intertwined with the broader history of the region, which has seen the rise and fall of various kingdoms and cultures over time.

Socio-Economic Conditions: The socio-economic landscape of Seripalam reflects both challenges and opportunities. While agriculture remains a primary source of livelihood, the village is also witnessing gradual modernization and economic diversification. Efforts are being made to improve infrastructure, education, and healthcare to enhance the quality of life for residents.

Geographical Significance: Seripalam's location near the Bay of Bengal has influenced its climate and economy. The proximity to water bodies has historically facilitated trade and commerce, contributing to the village's prosperity.

Interdistrict Dynamics: Being situated on the border of West Godavari and East Godavari districts, Seripalam has unique dynamics influenced by the cultural and economic exchange between the two regions. This geographical position has shaped the village's identity and interactions with neighboring communities.

Resilience and Adaptability: Throughout its history, Seripalam has demonstrated resilience in the face of challenges, adapting to changing circumstances while preserving its cultural heritage. This ability to evolve while staying rooted in tradition is a hallmark of the community's identity.

Serepalem 2011 Census Details: Serepalem Local Language is Telugu. Serepalem Village Total population is 4445 and number of houses are 1257. Female Population is 49.2%. Village literacy rate is 65.8% and the Female Literacy rate is 31.1%.

Census Parameter	Census Data
Total Population	4445
Total No of Houses	1257
Female Population %	49.2 % (2185)
Total Literacy rate %	65.8 % (2927)
Female Literacy rate	31.1 % (1382)
Scheduled Tribes Population %	0.2 % (8)
Scheduled Caste Population %	20.0 % (889)
Working Population %	43.9 %
Child(0 -6) Population by 2011	407
Girl Child(0 -6) Population % by 2011	46.7 % (190)

DEMOGRAPHICS OF SEREPALAM: Serepalem is located at 16.411206°N 81.604863°E. It has an average elevation of 2 meter (12 feet). NH 214A passes through the village. Telugu is the Local Language here.

2.2 COMMUNITY DIVERSITY , TRADITIONS,ETHICS AND VALUES

1. Community Diversity

Seripalam, nestled in the heart of Mogalthur Mandal in the West Godavari District of Andhra Pradesh, epitomizes community diversity. Its population represents a mosaic of cultures, languages, and traditions, creating a vibrant and inclusive environment. People from various socio-economic backgrounds coexist harmoniously, contributing to the rich tapestry of the village. This diversity fosters cross-cultural exchange and understanding, enriching the social fabric of Seripalam. From farmers tending to their fields to artisans practicing traditional crafts, each member of the community brings a unique perspective and skill set, enhancing the village's collective identity .

2. Traditions

In Seripalam, traditions are deeply ingrained in daily life, serving as pillars of cultural continuity and identity. From birth ceremonies to harvest festivals, every occasion is marked by age-old customs and rituals passed down through generations. These traditions reflect the village's historical roots and cultural heritage, connecting its residents to their ancestors and the land they inhabit. Whether it's the vibrant colors of religious processions or the rhythmic beats of traditional music, Seripalam pulsates with the essence of its age-old customs. Through these rituals, the community celebrates its shared history and values, reinforcing bonds of kinship and solidarity .

3. Ethics and Values

At the heart of Seripalam's community lie traditional ethics and values that shape interpersonal relationships and societal norms. Respect for elders, hospitality towards guests, and cooperation in times of need are cherished virtues upheld by the villagers. These ethical principles guide interactions within the community, fostering a sense of belonging and mutual support. Honesty, integrity, and compassion form the moral compass that steers individuals towards virtuous conduct and social responsibility. Seripalam stands as a testament to the enduring strength of traditional values in shaping cohesive and resilient communities.

2.3 SOCIAL ECONOMIC CONDITIONS IN THE COMMUNITY

In Education, serepalam has the School cluster in serepalam block of West Godavari District in Andhra Pradesh which is having 3 schools in it. This cluster includes Govt and Private Schools of this area.

Seripalem is a village situated in Mogalthur mandal of West Godavari district in Andhra Pradesh. As per the Population Census 2011, there are a total of 1,257 families residing in the village Serepalem. The **total population of**

Serepalem is 4,445 out of which 2,260 are males and 2,185 are females

As per the Census 2011, the **literacy rate of Serepalem is 72.5%**. Thus Serepalem village has a higher literacy rate compared to 67.4% of West Godavari district. The male literacy rate is 75.62% and the female literacy rate is 69.27% in Serepalem village.

Chaper 3: COMMUNITY SERVICE PART

3.1 Activities conducted:

In our community project, a critical observation emerged regarding the inadequate healthcare facilities in Serepalam Village, directly impacting residents, particularly during emergencies. To address this, further surveys were conducted, revealing the absence of regular access to medical professionals and a lack of awareness regarding primary healthcare among villagers. These findings underscore the urgent need for comprehensive healthcare interventions, including the establishment of regular medical services and initiatives to raise awareness about basic health practices within the community. Through collaborative efforts and targeted programs, we aim to improve healthcare accessibility and knowledge in Serepalam Village, ultimately enhancing the well-being and resilience of its residents.

Awareness on Healthcare Management in Rural Areas:

To enhance healthcare management in rural areas like Serepalam Village, it's essential to promote awareness among villagers regarding:

1. First Aid Training : Provide education and training on basic first aid techniques to enable villagers to respond effectively to medical emergencies and provide immediate assistance before professional help arrives.



2. Telemedicine Services : Raise awareness about telemedicine options, including video consultations with healthcare professionals, to improve access to medical advice and consultations, especially in areas with limited healthcare facilities .

3. Health Monitoring and Preventive Care : Educate villagers about the importance of regular health monitoring, such as blood pressure checks and glucose monitoring, to detect health issues early and prevent complications .

4. Medication Management : Provide guidance on proper medication usage, adherence to treatment plans, and the importance of completing prescribed courses of medication to ensure effective management of chronic conditions and prevent medication errors



5. Community Health Workshops : Organize workshops and community gatherings to discuss healthcare topics, including disease prevention, maternal and child health, nutrition, and hygiene practices, to empower villagers with essential health knowledge .

By fostering awareness on these aspects of healthcare management, villagers can become more proactive in managing their health, accessing available healthcare services, and ultimately improving health outcomes in the rural community.

3.2 Skills acquired:

By doing this project we have gained much of knowledge regarding Health care management and we also develop my skills like

1. Interpersonal Communication
2. Time management
3. Team work
4. Problem solving
5. Project management
6. Learn and Aware people regarding First-Aid

Interpersonal Communication: In rural healthcare management, effective communication is vital for building trust and understanding among healthcare providers, patients, and community members. This skill involves not only verbal communication but also active listening and empathy. Communicating clearly about healthcare services, treatment options, and preventive measures helps bridge gaps in access to healthcare in rural areas. Additionally, interpersonal communication plays a crucial role in establishing rapport with patients, understanding their needs, and addressing concerns .

Time Management: Rural healthcare facilities often face resource constraints, including limited staff and equipment. Efficient time management ensures that healthcare professionals can prioritize tasks effectively, minimize wait times for patients, and optimize the use of available resources. Time management skills also involve scheduling appointments, coordinating patient care, and managing administrative tasks efficiently to enhance overall healthcare delivery in rural areas .

Teamwork: Collaboration among healthcare professionals, community members, and organizations is essential for addressing healthcare challenges in rural areas. Teamwork facilitates the sharing of expertise, resources, and responsibilities, leading to more comprehensive and sustainable healthcare solutions. By fostering a culture of teamwork, rural healthcare managers can strengthen community engagement, improve patient outcomes, and overcome barriers to healthcare access .



Problem Solving: Rural healthcare management often requires innovative problem-solving skills to address unique challenges such as limited infrastructure, geographic isolation, and socioeconomic disparities. Effective problem-solving involves identifying root causes, brainstorming solutions, and implementing strategies tailored to the needs of the rural population. Whether it's developing telemedicine programs or organizing mobile clinics, healthcare managers must be adept at finding creative solutions to improve healthcare delivery in underserved rural areas .

Project Management: Implementing healthcare initiatives in rural areas demands strong project management skills to plan, execute, and evaluate programs effectively. From organizing vaccination drives to establishing community health centers, healthcare managers must oversee various projects while balancing budgetary constraints and stakeholder expectations. Effective project management ensures that resources are allocated efficiently, timelines are met, and objectives are achieved, ultimately enhancing the quality and accessibility of healthcare services in rural communities .

First-Aid Awareness: Educating rural communities about first-aid practices is crucial for promoting health literacy and emergency preparedness. Healthcare managers play a pivotal role in raising awareness about basic first-aid techniques, such as wound care, CPR, and handling medical emergencies. By conducting training sessions, distributing educational materials, and collaborating with local authorities, healthcare managers empower individuals to respond effectively to medical emergencies, potentially saving lives in rural areas

Chapter 4: ACTIVITY LOG & WEEKLY REPORT

ACTIVITY LOG FOR THE FIRST WEEK

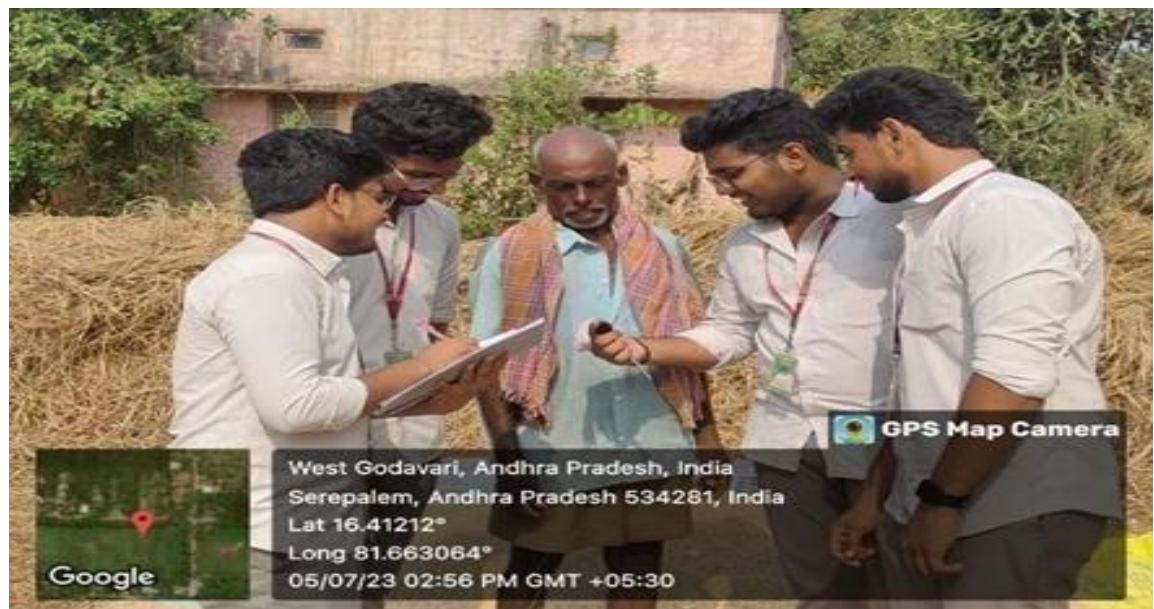
Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1			
Day - 2			
Day – 3			
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

WEEK – 1(From _____ to _____)

Objective of the Activity Done:

Detailed Report:



ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1			
Day - 2			
Day – 3			
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

WEEK – 2(From _____ to _____)

Objective of the Activity Done:

Detailed Report:



ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1			
Day - 2			
Day – 3			
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

WEEK – 3(From _____ to _____)

Objective of the Activity Done:

Detailed Report:



ACTIVITY LOG FOR THE FOURTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1			
Day - 2			
Day – 3			
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

WEEK – 4 (From

to

)

Objective of the Activity Done:

Detailed Report:



ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1			
Day - 2			
Day – 3			
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

WEEK – 5(From _____ to _____)

Objective of the Activity Done:

Detailed Report:



ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1			
Day - 2			
Day – 3			
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

WEEK – 6(From _____ to _____)

Objective of the Activity Done:

Detailed Report:



ACTIVITY LOG FOR THE SEVENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1			
Day - 2			
Day – 3			
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

WEEK – 7(From _____ to _____)

Objective of the Activity Done:

Detailed Report:



ACTIVITY LOG FOR THE EIGHTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1			
Day - 2			
Day – 3			
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

WEEK – 8(From _____ to _____)

Objective of the Activity Done:

Detailed Report:



CHAPTER 5: OUTCOMES DESCRIPTION

Details of the Socio Economic survey of the Village :

1. What are the most health issue that you are identify in the village, in your opinion?

Answer: Limited knowledge about preventive measures, symptoms, and available healthcare services hinders timely intervention and disease management. Inadequate healthcare infrastructure, including hospitals, clinics, and diagnostic centers, reduces access to essential medical services. Insufficient healthcare professionals, particularly doctors, leads to delays in diagnosis, treatment, and follow-up care. These identified issues, including lack of awareness, poor medical facilities, and shortage of qualified doctors, contribute to the healthcare challenges faced by villagers in areas like Serepalam.

2. How do you aware people regarding healthcare?

Answer: Promoting Health by Good Governance, Improving Health Literacy, Conduct surveys or focus group discussions to understand prevalent health conditions and misconceptions, Organize workshops, seminars, and health fairs to engage the community, Create informative videos, infographics, and podcasts to reach a wider audience. In these we aware the community on healthcare

3. What solutions are you suggested?

Answer: Promote the adoption of telemedicine to enhance access to healthcare services, especially in rural areas where there may be limited medical facilities. Educate communities about first-aid treatment and basic healthcare practices to empower individuals to address minor health issues independently. Implement systems for monitoring healthcare delivery and outcomes to identify areas for improvement and ensure quality care. Develop strategic plans for rural healthcare delivery systems that balance access to care and operational efficiency. Advocate for policies that support the expansion and sustainability of telehealth services in rural areas.

4. How do you understand rural health context?

Answer: Rural health involves addressing healthcare challenges in areas with low population density. It encompasses various factors such as geography, economics, and access to healthcare services. Training healthcare workers for rural practice is crucial due to ongoing shortages. Achieving primary health care goals in rural areas often involves community development projects like Healthy Village Projects. Organizations play a vital role in ensuring essential healthcare services are available in rural communities.

5. How do you improve the health infrastructure?

Answer: Improve access to healthcare by enhancing transportation infrastructure to connect rural areas with medical. Implement telemedicine and digital health solutions to provide remote healthcare services and consultations. Upgrade existing healthcare facilities and construct new ones to ensure adequate resources and capacity. Involve local communities in healthcare planning and decision-making to ensure services meet their needs.

Describe the problems you have identified in the community:

When we have conducted survey among the community. We had identified someproblems in the community like

- Limited Access to Healthcare Facilities
- Shortage of Healthcare Professionals
- Limited Medical Supplies and Equipment
- Poor Transportation Infrastructure
- Low Health Literacy
- Cultural and Social Barriers
- Lack of Preventive Healthcare Programs
- Poor Sanitation and Hygiene Practices

These are the problems identified in the village which can be solved in short termas well as long term period of time.

1. Limited Access to Healthcare Facilities: Many rural communities face challenges in accessing healthcare facilities due to geographical remoteness and inadequate infrastructure. Residents often have to travel long distances to reach the nearest healthcare center, which can result in delays in receiving essential medical care. Moreover, the scarcity of healthcare facilities in rural areas contributes to overcrowding and long waiting times, further exacerbating access issues .

2. Shortage of Healthcare Professionals: Rural areas often experience a shortage of healthcare professionals, including doctors, nurses, and specialists. This scarcity stems from various factors such as lower salaries, limited career advancement opportunities, and the preference of healthcare professionals for urban settings. The lack of healthcare providers in rural communities leads to gaps in primary care services, delays in treatment, and increased reliance on understaffed facilities

3. Limited Medical Supplies and Equipment: Rural healthcare facilities frequently encounter challenges in procuring adequate medical supplies and equipment. Factors such as budget constraints, supply chain disruptions, and limited storage facilities contribute to shortages of essential medical resources. Insufficient medical supplies and equipment hinder healthcare providers from delivering quality care and conducting diagnostic tests and treatments effectively, compromising patient outcomes .

4. Poor Transportation Infrastructure: In rural areas, inadequate transportation infrastructure impedes residents' ability to access healthcare services promptly. Poor road conditions, lack of public transportation options, and limited availability of ambulance services make it difficult for individuals to travel to healthcare facilities, especially during emergencies. The absence of reliable transportation options exacerbates existing barriers to healthcare access in rural communities.

5. Low Health Literacy: Many residents in rural communities have limited health literacy, which affects their understanding of healthcare information, treatment options, and preventive measures. Language barriers, cultural differences, and educational disparities contribute to low health literacy levels. As a result, individuals may struggle to navigate the healthcare system, adhere to treatment plans, and adopt healthy lifestyle practices, leading to poorer health outcomes .

6. Cultural and Social Barriers: Cultural beliefs, traditions, and social norms can influence healthcare-seeking behaviors and attitudes towards medical care in rural communities. Stigma surrounding certain health conditions, distrust of healthcare providers, and reliance on traditional healers may deter individuals from seeking timely medical attention. Addressing cultural and social barriers requires culturally sensitive approaches that respect community values and beliefs .

7. Lack of Preventive Healthcare Programs: Rural communities often lack comprehensive preventive healthcare programs aimed at promoting wellness and disease prevention. Limited access to preventive services such as screenings, vaccinations, and health education initiatives contributes to higher rates of preventable diseases and chronic conditions. Investing in preventive healthcare programs can help mitigate the burden of illness and improve overall population health in rural areas .

8. Poor Sanitation and Hygiene Practices: Inadequate sanitation infrastructure and poor hygiene practices pose significant health risks in rural communities. Limited access to clean water, sanitation facilities, and hygiene education increases the vulnerability to waterborne diseases, diarrheal illnesses, and infections. Improving sanitation infrastructure, promoting handwashing practices, and raising awareness about hygiene are essential for preventing the spread of diseases and improving public health outcomes in rural areas .

Healthcare access in rural communities remains a critical issue worldwide, characterized by various challenges such as limited availability of healthcare facilities, shortage of healthcare professionals, inadequate infrastructure, low health literacy, and cultural barriers. These challenges contribute to disparities in healthcare outcomes between rural and urban populations, impacting overall health and well-being.

Efforts to improve rural healthcare should focus on enhancing healthcare infrastructure, increasing the number of healthcare professionals, implementing innovative solutions for transportation and telehealth, promoting health education and literacy programs, addressing cultural sensitivities, and advocating for policy reforms to allocate resources effectively .

In conclusion, addressing the multifaceted challenges of rural healthcare requires a comprehensive and collaborative approach involving stakeholders from healthcare, government, community organizations, and academia to ensure equitable access to quality healthcare services for rural populations.

Short-term and long-term action plan for possible solutions for the problems identified and that could be recommended to the concerned authorities for implementation.

Short-term Action Plan:

- **Deploy Mobile Healthcare Units:** Initiate the deployment of mobile healthcare units equipped with basic medical supplies and staffed with healthcare professionals to provide immediate healthcare services in rural villages.
- **Telemedicine Pilot Programs:** Establish telemedicine pilot programs in select rural areas to provide remote consultations with doctors and specialists, leveraging existing internet connectivity and mobile technology.
- **Health Education Workshops:** Conduct health education workshops in villages to raise awareness about preventive measures, hygiene practices, and available healthcare services, engaging community leaders and local healthcare workers.

Long-term Action Plan:

- **Infrastructure Development:** Invest in building and upgrading healthcare infrastructure in rural areas, including hospitals, clinics, and primary healthcare centers, to improve access to comprehensive healthcare services.
- **Telemedicine Expansion:** Scale up telemedicine services nationwide, integrating teleconsultations, remote patient monitoring, and electronic health records
- to provide continuous and accessible healthcare to rural populations.
- **Healthcare Workforce Training:** Implement training programs to increase the number of healthcare professionals, especially in rural areas, focusing on primary care providers, nurses, and community health workers.
- **Public-Private Partnerships:** Foster partnerships between government agencies, non-profit organizations, and private sector entities to improve healthcare delivery, leverage resources, and promote innovation in rural healthcare management.
- **Community Empowerment:** Empower local communities to take ownership of their healthcare through participatory decision-making, health education, and
- the establishment of community health committees to address local health needs

Description of the Community awareness programs / conducted w.r.t the problems and their outcomes.

The main aim of our batch members is to raise awareness about healthcare within the community and improve healthcare facilities in rural areas to match those in urban areas, thereby enhancing effectiveness.

Health Awareness Campaigns: Community-based health awareness campaigns were conducted in rural areas to address healthcare issues such as preventive measures, disease management, and the importance of seeking timely medical attention. These campaigns utilized various channels such as workshops, seminars, and awareness camps to disseminate information and engage with the local population.

Community Health Education: Conducting community health education programs to raise awareness about nutrition, maternal and child health, and family planning. The outcomes include improved health-seeking behaviors, reduced maternal and child mortality rates, and better family planning practices.

Telemedicine and Digital Health Initiatives: Implementing telemedicine and digital health programs to provide remote consultations and healthcare information. These initiatives enhance access to healthcare services, especially in remote areas, and empower individuals to manage their health proactively.

Palliative Care Awareness Programs: Specific health awareness programs focused on palliative care were implemented to improve understanding and acceptance of palliative care services in rural communities. These programs aimed to increase awareness, change attitudes, and enhance the perception of palliative care among community members.

Outcome: The health awareness campaigns and palliative care programs led to increased awareness and knowledge among rural residents about various health issues and available healthcare services. They also contributed to positive changes in attitudes towards seeking medical care, improved understanding of preventive measures, and enhanced acceptance of palliative care as an integral part of healthcare.

Community Participation: Engaging community members in implementing health programs resulted in positive outcomes at organizational, social, and individual levels. Community participation fostered a sense of ownership, increased social cohesion, and facilitated the adoption of healthier behaviors, ultimately contributing to improved health outcomes in rural areas.

Report of the mini-project work done in the related subject w.r.t the habition/village:

INTRODUCTION:

Healthcare management in rural areas, exemplified by a community like Serepalam, presents unique challenges due to limited access to medical facilities and healthcare professionals. In addressing these challenges, the integration of IoT devices, such as the SMART Patient Health Monitoring System using IoT, emerges as a transformative solution. These IoT devices, including wearables and remote monitoring systems, facilitate real-time health tracking and data collection, enabling proactive healthcare interventions.

The primary goal of this project is to develop a smart patient health monitoring system in such a way that we can get all the necessary and detailed information of the disease. The proposed system measures the body temperature, pulse rate and ECG data.

Health is always a major concern in every growth the human race is advancing in terms of technology. Like the recent corona virus attack that has ruined the economy of China to an extent is an example how health care has become of major importance. In such areas where the epidemic is spread, it is always a better idea to monitor these patients using remote health monitoring technology. Remote Patient Monitoring arrangement empowers observation of patients outside of customary clinical settings (e.g. at home), which expands access to human services offices at bring down expenses. The fundamental element of people's needs is health

. Humans face a haul of surprising death and plenty of diseases because of varied diseases that are a result of lack of treatment to the patients at right time.

By deploying IoT-based monitoring systems, rural healthcare providers can remotely monitor vital signs and physiological parameters of patients, ensuring early detection of health issues and timely interventions. Moreover, IoT devices empower individuals to take charge of their health by providing access to personalized health data and actionable insights, thereby fostering health awareness and preventive care practices within rural communities. This innovative approach not only enhances healthcare delivery in remote areas but also bridges the gap between rural populations and healthcare services, ultimately leading to improved health outcomes and quality of life.

However, successful implementation requires addressing infrastructural limitations, ensuring affordability, and providing adequate training to healthcare personnel and community members to maximize the benefits of IoT-enabled healthcare solutions. By leveraging IoT technologies, healthcare management in rural areas like Serepalam can transition towards a more proactive, efficient, and patient-centric model, laying the foundation for a healthier and more resilient rural population.

OBJECTIVES :

- 1. Enhanced Access to Healthcare Services:** Improve accessibility by establishing mobile health clinics, telemedicine facilities, and community health centers to ensure that rural residents have timely access to medical care and essential healthcare resources.
- 2. Health Awareness and Education:** Conduct health education programs to increase awareness about preventive measures, disease management, sanitation, hygiene practices, and nutrition, empowering rural communities to make informed decisions regarding their health and well-being.
- 3. Developing a Reliable Patient Health Monitoring System:** Our primary goal is to create a robust and efficient system for continuous monitoring of patient health in real-time, ensuring timely detection of any abnormalities or health concerns.
- 3. Measuring Body Temperature, Heartbeat Rate, and ECG:** We aim to integrate advanced sensors into the monitoring system to accurately measure vital signs such as body temperature, heartbeat rate, and electrocardiogram (ECG), providing comprehensive insights into the patient's cardiovascular health.
- 4. Designing a System to Store Patient Data:** Our objective is to establish a secure and centralized database system capable of efficiently storing and managing patient data, ensuring accessibility to authorized healthcare professionals for informed decision-making and continuity of care.
- 5. Analyzing Collected Data of Sensors:** We seek to implement sophisticated data analysis algorithms to process and interpret the vast amount of data collected from sensors, enabling us to identify patterns, trends, and potential health risks, thereby facilitating proactive interventions and personalized healthcare strategies.
- 6. Presenting Health-Related Information in Understandable Format:** Our aim is to develop user-friendly interfaces and visualization tools that present health-related information in a clear, concise, and easily understandable format, empowering both healthcare providers and patients to make informed decisions and take proactive measures towards improving health outcomes.

CHAPTER 6: RESULT AND CONCLUSIONS OF THE MINIPROJECT

PROBLEM STATEMENT

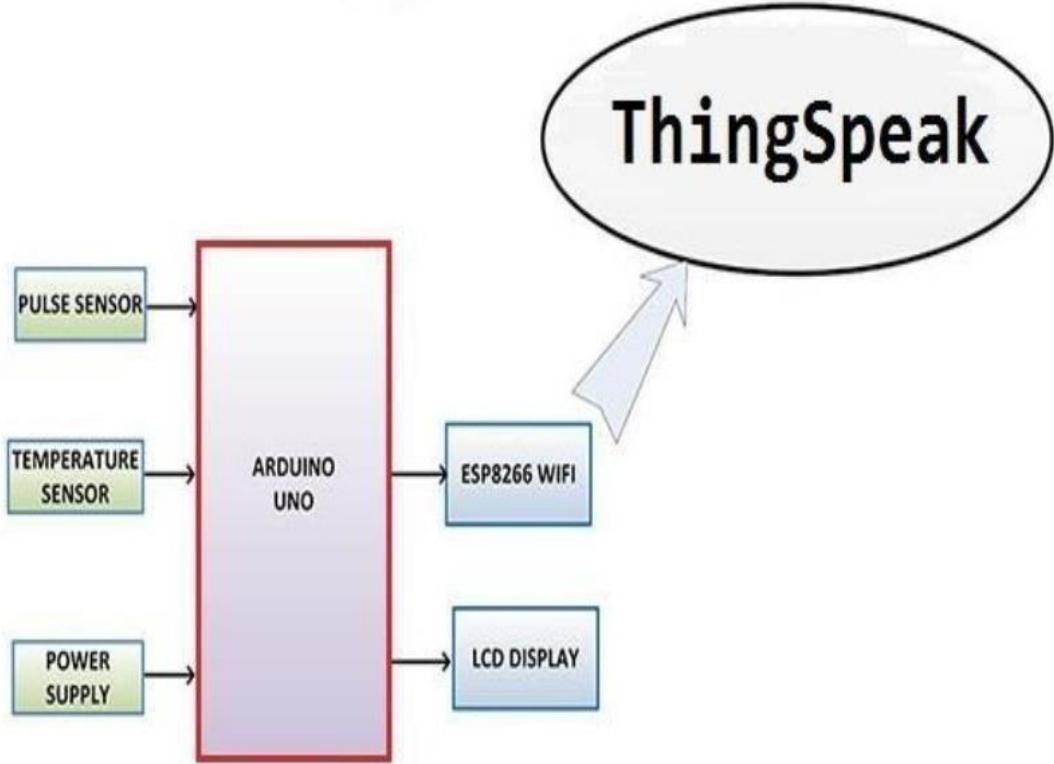
- In rural hospitals, the facilities for health caring are limited. The poor quality of health management enables issues in health care system.
- In developing countries there is lack of resources and management to reach out the problems of individuals.
- A common man cannot afford the expensive and daily check up for his health.

OBJECTIVES

- To develop a reliable patient health monitoring system.
- To measure the body temperature, heartbeat rate and ecg.
- To design a system to store patient data.
- To do analysis of collected data of sensors.

PROPOSED SYSTEM

- In our proposed system, we are using the Arduino Uno, Temperature Sensor, Pulse Sensor, ThingSpeak IoT platform, wifi Module, Powersupply.
- An Smart patient health Monitoring System will not only help in maintaining health but also reducing the work of doctors and saving the time of patients.
- The proposed method of patient monitoring system monitors patient's health parameters using Arduino Uno. After connecting internet to the Arduino uno, it is connected to cloud database system which acts as a server. Then the server automatically sends data to the receiver system. Hence, it enables continuous monitoring of the patient's health parameters by the doctor. Any abrupt increase or decrease in these parameter values can be detected at the earliest and hence necessary medications can be implemented by the doctor immediately.
- Various varieties of sensors are interfaced with the microcontroller Arduino Uno to create the system smart. The info will display on both LCD and in their webpage.
- The most ideal of the system is to transmit the knowledge through the webpage to continuous monitoring of the patient over the internet. Such a system would constantly detect the important body parameters like temperature, vital signs and would compare it against a predetermined range set and if these values cross the particular limit, it will immediately alert the doctor, during this system, a microcontroller is employed to transmit the info.
- The doctor will simply access the patients health anytime from anyplace. An LCD is additionally connected to the microcontroller for the patients to look at their health status live.



BLOCK DIAGRAM

Project Implementation:

The system is implemented using the combination of hardware components. The smart patient health monitoring system will have sensors to detect body temperature, pulse rate and ECG data. The health monitoring sensors are used to collect health related data i.e. for data acquisition. Communication can be done by controller for sending data on internet wirelessly. Data processing has been done at server. All data collected and aggregated at server point. To get health related information in understandable format it can be shown on web page using Thing Speak IOT. All these data will be accessible in real time scenario for continuous monitoring. Health monitoring is the major problem in today's world.

Due to lack of proper health monitoring, patient suffer from serious health issues. There are lots of IoT devices now days to monitor the health of patient over internet. Health experts are also taking advantage of these smart devices to keep an eye on their patients. With tons of new healthcare technology start-ups, IoT is rapidly revolutionizing the healthcare industry.

Here in this project, we will make an IoT based Health Monitoring System which records the patient heart beat rate and body temperature and also send an email/SMS alert whenever those readings goes beyond critical values. Pulse rate and body temperature readings are recorded over ThingSpeak and Google sheets so that patient health can be monitored from anywhere in the world over internet. A panic will also be attached so that patient can press it on emergency to send email/sms to their relatives.

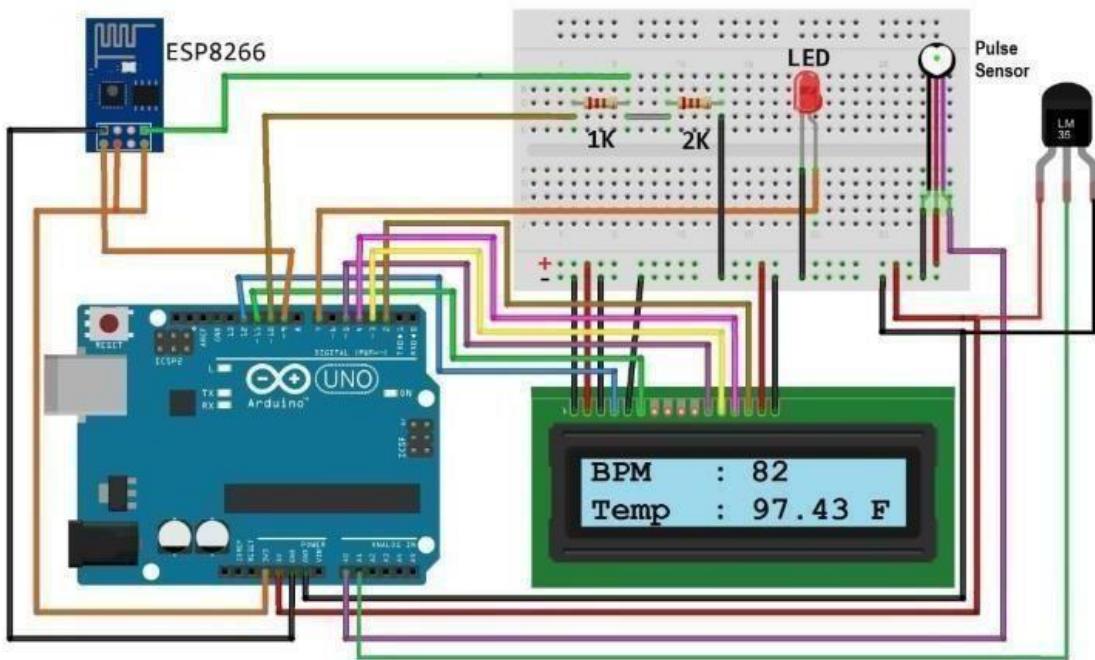


FIG-3.6 CIRCUIT DIAGRAM

HARDWARE REQUIREMENTS

- Arduino
- Temperature Sensor
- Pulse Sensor
- WiFi Module
- IOT Module
- Power Supply
- Connecting Cable

SOFTWARE REQUIREMENTS

- Arduino IDE
- Language: C
- ThingSpeak (IOT Cloud Server)

Real Time Application :

The Voltmi Dr. Senor Smart Health Monitoring Watch is a cutting-edge wearable device designed to track vital health metrics like body temperature and blood pressure in real-time (<https://www.amazon.in/Voltmi-Monitoring-Temperature-Pressure-Replacement/dp/B08R1WC61R>).

Its advanced sensors continuously monitor these parameters, providing users with valuable insights into their health status throughout the day. With its sleek design and rose gold finish, it combines style with functionality, making it a popular choice for individuals who prioritize both health and aesthetics.

This smartwatch offers users the convenience of wearable health monitoring, allowing them to stay informed about their well-being effortlessly. By leveraging technology to track essential health indicators, it empowers individuals to take proactive steps towards

maintaining or improving their overall health. Whether it's tracking daily activities or monitoring vital signs during workouts, the Voltmi Dr. Senor provides comprehensive health insights at your fingertips.

Wearable health monitoring devices like the Voltmi Dr. Senor Smart Health Monitoring Watch offer a glimpse into the future of personal healthcare, where individuals have access to real-time data about their health status . By harnessing the power of technology, these devicesenable users to take charge of their well-being, fostering a proactive approach to health management. With continuous advancements in wearable technology, the possibilities for enhancing health monitoring and promoting overall wellness are endless.

The advertisement features a Voltmi Dr. Senor smartwatch with a white strap and a black face, centered against a dark blue background with glowing blue lines. At the top, the text "YOUR COMPLETE HEALTHCARE" is displayed in large, bold, white capital letters. Below the watch, four icons represent different health metrics: a heart for Blood Pressure, a blood oxygen level icon for Blood Oxygen Level, a shield with a star for Immunity Level, and a thermometer for Body temperature. To the right of these icons, the names of the metrics are listed. At the bottom left, the text "HEALTH CHECK-UP ON THE GO!" is written in white capital letters. The overall theme is futuristic and emphasizes convenience and comprehensive health monitoring.

YOUR COMPLETE HEALTHCARE

Blood Pressure

Blood Oxygen Level

Immunity Level

Body temperature

Ambient temperature

Find phone

ECG

HEALTH CHECK-UP ON THE GO!

Measure Body Temperature

Body temperature is one of the main health vital signs that must be tracked to ensure safe and effective care. By understanding body temperature and noticing the changes, that might indicate an infection and taking immediate measures to prevent spreading it to others and help family, friends, and coworkers stay safe, healthy, and productive.

Blood Pressure Tracking

Get a picture of your overall cardiovascular health to prevent heart disease and strokes. Monitoring blood pressure helps to manage or treat a certain health condition. Tres Care App keeps a records of the measurements which help you know where you stand and notify before risk.

Blood Oxygen Saturation

SpO₂ (blood oxygen saturation) essential element to monitor your respiratory issues and check how well your heart is pumping oxygen through your body. Drop in oxygen levels can be life-threatening. Tres Care Band help you to monitor Blood Oxygen Saturation to know the drop in oxygen levels in advance.

Heart Rate Monitoring

Heart rate monitoring system allows patients to be mobile in the surrounding environment. It is simple and user friendly system that would capture heart Rates on real time and process them on a smartphone

Blood-oxygen Level Measurement

When feeling unwell, under mental stress, or engaged in intensive workouts such as marathons and gym sessions, you can immediately measure your blood-oxygen saturation and understand your physical state.

Health Assessment System

Health evaluation system that uses algorithms to transform complex information such as heartrate data, activity duration, and other health data into numerical values, and presents this data to users.

Smart Health Monitoring Watch

Receive only notification to See Calls & Messages on Your Wrist: Receive/Rejection call, wether,, SMS and SNS (Facebook, WhatsApp, LinkedIn, Instagram, and Twitter notifications on display, fitness tracker band let you never miss the messages that matter.

Conclusions:-

The Internet of Things is considered now as one of the feasible solutions for any remote value tracking especially in the field of health monitoring. It facilitates that the individual prosperity parameter data is secured inside the cloud, stays in the hospital are reduced for conventional routine examinations and most important that the health can be monitored and disease diagnosed by any doctor at any distance. In this paper, an IoT based health monitoring system was developed. The system monitored body temperature, pulse rate and room humidity and temperature using sensors, which are also displayed on a LCD.

These sensor values are then sent to a medical server using wireless communication. These data are then received in an authorized person's smart phone with IoT platform. With the values received the doctor then diagnose the disease and the state of health of the patient. The main objective of the experiment was successfully achieved. All the individual modules like Heartbeat detection module, fall detection module etc. and remote viewing module gave out the intended results.

The designed system modules can further be optimized and produced to a final single circuit. More important fact that came up during project design is that all the circuit components used in the remote health detection system are available easily. In this paper, we found the importance and fruitful benefits of implementation of IoT in remote health monitoring systems. The compact sensors with IoT will make a huge impact on every patient's life, that even though they are away from home and physician, this helps them to reduce the fear of danger.

The sensory data can be acquired in home or work environments. Also, the challenges in sensing, analytics and prediction of the disease are also highlighted and those can be addressed to provide a seamless integration. The fundamental element of people's needs is health. Humans face a haul of surprising death and plenty of diseases because of varied diseases that are a result of lack of treatment to the patients at right time.

These data, collected by sensors and displayed on an LCD, are transmitted wirelessly to a medical server and then to authorized personnel's smartphones for analysis. The successful implementation of this system demonstrates its potential to revolutionize healthcare delivery by providing real-time monitoring and diagnosis, even from a distance. Additionally, the availability of easily accessible circuit components underscores the practicality of IoT in remote health monitoring systems.

The main objective of this project is to develop a reliable sensible patient health observance system victimization IoT so the attention professionals will monitor their patients. The sensors will be either worn or be embedded into the body of the patients, to unendingly monitor their health. the knowledge collected in such a fashion will behold on, analyzed, and well-mined to try and do the first prediction of diseases.

PHOTOS & VIDEO LINKS

Week-1:



Week-2:



Week-3:



Website that we build to Aware people regarding health care:

[HEALTH CARE MANAGEMENT IN RURAL AREAS \(canva.site\)](http://canva.site)

Week-4:



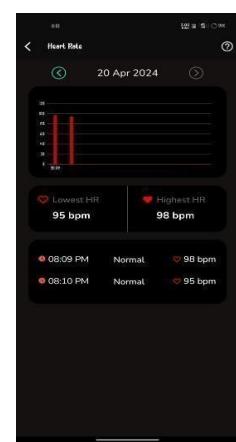
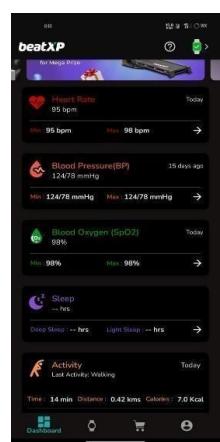
Week-5:



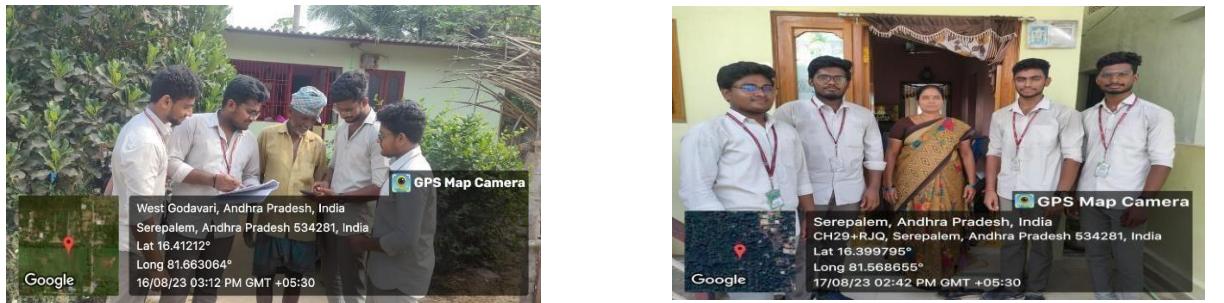
Week-6:



We Explain about “Health monitoring watch”



Week-7:



Week-8:



We Explain about “E-sanjeevani”

The image displays a sequence of five screenshots illustrating the eSanjeevani service. The first two screenshots show the homepage with the logo, a map of India, and language selection options. The next three screenshots show the 'Create Case' process, including patient information entry, chief complaints input, and a search bar for symptoms.

Page 1 (7:22):

- Ministry of Health and Family Welfare Government of India
- eSanjeevani National Telemedicine Service
- Designed & Developed by Centre for Development of Advanced Computing (C-DAC) © 2024

Page 2 (7:22):

- eSanjeevani National Telemedicine Service
- Patient
- Change language

Page 3 (7:26):

Create Case

mallidi Chenna Ramachandradreddy (22 Yrs/M)
Mobile: 6302789723
Patient ID: 2082370283448170
Address: marleru, Penamraju, Andhra Pradesh

Add Chief Complaints

Since how long do you have a cough?
Every seasonal change
What is the coughing like?
Early Morning Evening Night Whole Day

Completion Score: 30.0%

Is it a follow-up consultation? Yes No

Page 4 (7:26):

Create Case

mallidi Chenna Ramachandradreddy (22 Yrs/M)
Mobile: 6302789723
Patient ID: 2082370283448170
Address: marleru, Penamraju, Andhra Pradesh

Page 5 (7:26):

Create Case

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Patient ID: 2082370283448170
Address: marleru, Penamraju, Andhra Pradesh

Add Chief Complaints

Type here for search

Fever Cough Acidity Diabetes Headache Joint Pain Common Cold Stomach Pain Period Problems

Save & Next >

EVALUTIONS

Student Self-Evaluation for the Community Service Project

Student Name:

Registration No:

Period of CSP: From: To:

Date of Evaluation:

Please rate your performance in the following areas:

Rating Scale: **Letter grade of CGPA calculation to be provided**

1	Oral communication	1	2	3	4	5
2	Written communication	1	2	3	4	5
3	Proactiveness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	OVERALL PERFORMANCE	1	2	3	4	5

Date:

Signature of the Student

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EVALUTIONS

Evaluation by the Person in-charge in the Community / Habitation

Student Name:

Registration No:

Period of CSP: From: To:

Date of Evaluation:

Name of the Person in-charge:

Address with mobile number:

Please rate the student's performance in the following areas:

Please note that your evaluation shall be done independent of the Student's self-evaluation

Rating Scale: 1 is lowest and 5 is highest rank

1	Oral communication	1	2	3	4	5
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EVALUTIONS

MARKS STATEMENT
(TO BE USED BY EXAMINARS)

INTERNAL ASSESSMENT

STATEMENT

Name of the students :

Programme of study :

Year of Study :

Group :

Register No/H.T No :

Name of the college :

University :

SI.NO	EVALUTION CRITETION	MAXIMUM MARKS	MARKS AWARDED
1	Activity log	20	
2	Community Service project implementation	30	
3	Mini Project Work	25	
4	Oral Presentation	25	
	GRAND TOTAL	100	

DATE:

Signature of the Faculty

GUIDE:

DATE:

Certified by
Signature of the Head of the
Department/Principal

SEAL:

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