



**Client Perspectives on
Satisfaction and Acceptance of
eSanjeevani Telemedicine
Services in Odisha**

OCTOBER 2024

Acknowledgements

We extend our sincere gratitude to all those who contributed to the successful completion of this report, "Client Perspective on Satisfaction and Acceptance of eSanjeevani Telemedicine Services in Odisha" Our deepest thanks go to the healthcare providers, facility administrators, and government officials across Odisha who generously shared their time, insights, and experiences. Their valuable inputs have provided us with a deeper understanding of the challenges and opportunities within the eSanjeevani implementation.

We would like to express our appreciation to the Department of Health and Family Welfare, Government of Odisha, and particularly to Ms. Aswathy S (IAS), Commissioner cum Secretary - Health; Dr. Brundha D (IAS), Mission Director – NHM Odisha; Dr. Jeetendra Mohan Bebortha, Special Secretary – Public Health; Dr. Bijay Kumar Mohapatra, Special Secretary (MS) cum Director of Health Services; Dr. Nilakantha Mishra, Director Public Health; Dr. Susanta Kumar Swain, Additional Director of Health Services (NCD); Dr. Sanjulata Satpathy, Joint Director Medical Technology, Mr. Lalit Mohan Sahu, State Consultant – NCD & eSanjeevani; and the members of the state ethical committee for their support and guidance throughout this assessment. Their cooperation and commitment to enhancing telemedicine services have been instrumental in shaping the direction and scope of this report. We also acknowledge the support of the National Health Mission (NHM) Odisha, whose collaboration has been pivotal in ensuring the comprehensiveness and accuracy of the findings.

Lastly, we are grateful to the research team, data analysts, and Intellehealth's field team in Odisha whose dedication and hard work made this assessment possible. Special thanks to our funding partners for their unwavering support and belief in the transformative potential of telemedicine. We hope that this report will serve as a useful resource for all stakeholders working towards strengthening the eSanjeevani platform and advancing equitable access to healthcare in Odisha.

Contents

Acknowledgements	1
Message	3
Preface	4
Message	5
Message	6
Message	7
List of Contributors	8
Abbreviations and Acronyms	9
Factsheet	10
Introduction	13
Methods	14
Study design	14
Tools	15
Ethics Approval	16
Results	17
Client's Socio-Demographic and Economic Status	17
Client's Acceptability and Satisfaction for eSanjeevani AB-AAM	19
Post-Visit Teleconsultation Experience at eSanjeevani AB-AAM	19
Post-visit Client Satisfaction with Teleconsultation at HWCs	23
Satisfaction with Quality of Services During the Delivery of eSanjeevani Consultation at HWCs	24
Client's Recommendation of the Platform and their Intention of Future Use	26
Conclusion	27
Recommendations	27
References	29



Dr. Brundha D, IAS
Mission Director,
National Health Mission,
Odisha, Bhubaneswar



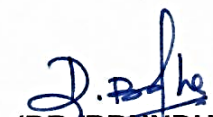
MESSAGE

It is my pleasure to introduce this report on the Patient Satisfaction Study conducted by Intelhealth, as part of our joint initiative to enhance the eSanjeevani National Telemedicine Services in Odisha. This study provides valuable insights into the effectiveness of telemedicine services and the experiences of patients who have utilized this platform for accessing healthcare.

Telemedicine has revolutionized the way we deliver healthcare in Odisha, particularly in remote and underserved areas. The findings from this study highlight the positive reception from patients, with many expressing satisfaction with the convenience and accessibility that eSanjeevani offers. Patients have reported reduced travel times, lower out-of-pocket expenses, and timely consultations with healthcare providers. Importantly, the study also shows high levels of trust in the quality of care provided through telemedicine, underscoring the platform's role in addressing healthcare gaps.

The success of eSanjeevani telemedicine services is a testament to the commitment of our healthcare workers, the adaptability of the platform, and the vision of providing equitable healthcare to every citizen, regardless of their location. This study will guide us in refining our approach, ensuring that patient feedback informs future enhancements, and that the platform remains responsive to the needs of Odisha's population.

I extend my sincere appreciation to Intelhealth for their dedicated efforts in conducting this study and for their continued support in strengthening telemedicine services in the state. I also thank our healthcare providers and patients who have embraced this transformative solution, helping us realize our vision of accessible healthcare for all.


(DR. BRUNDHA D)



Dr. Bijay Kumar Mohapatra
Special Secretary (MS) cum Director of
Health Services
Government of Odisha



Preface

It is with great pride that I present this report on the Patient Satisfaction Study conducted by Intelhealth, which forms an integral part of our efforts to strengthen the eSanjeevani National Telemedicine Services in Odisha. This study highlights the patient experience and provides crucial insights into how telemedicine is transforming healthcare access in the state, especially in rural and remote areas.

Telemedicine has become a cornerstone of our healthcare delivery strategy, ensuring that quality care is accessible to every citizen. The results of this study show a high level of satisfaction among patients using the eSanjeevani platform, particularly appreciating the convenience of receiving medical care without the need for long-distance travel. Furthermore, patients have reported positive experiences with the quality of medical consultations and treatment received through the platform, contributing to improved healthcare outcomes.

These findings reinforce the importance of telemedicine in Odisha's healthcare ecosystem and serve as a valuable tool in understanding the needs of our patients. They will help us make informed decisions to further enhance the eSanjeevani services and ensure that we continue to provide accessible, patient-centered care.

I would like to express my heartfelt gratitude to Intelhealth for their unwavering support in conducting this study and contributing to the improvement of telemedicine services in Odisha. I also thank the healthcare providers and patients who have embraced this innovative solution, helping us bring healthcare closer to the people who need it most.

(Dr. Bijay Kumar Mohapatra)



Dr. Nilakanth Mishra
Director – Public Health
Directorate of Health Services
Government of Odisha



Message

It is a privilege to introduce this report on the Patient Satisfaction Study conducted by Intelhealth as part of the ongoing efforts to strengthen the eSanjeevani National Telemedicine Services in Odisha. This study provides vital insights into patient experiences, offering an understanding of how telemedicine is enhancing healthcare accessibility and quality across the state.

The eSanjeevani platform has emerged as a powerful tool in reaching underserved populations, ensuring that even the most remote communities can access timely and affordable healthcare. The study's findings reveal a high level of patient satisfaction, with users highlighting the ease of accessing healthcare services without the challenges of traveling long distances. Additionally, patients have expressed confidence in the quality of care provided through the platform, emphasizing its role in improving health outcomes across the state.

These insights will guide us in further enhancing telemedicine services, ensuring they remain patient-centric and accessible to all. I am confident that eSanjeevani will continue to play a crucial role in Odisha's healthcare landscape, bridging gaps and delivering quality healthcare where it is needed most.

I extend my sincere thanks to Intelhealth for their valuable contributions to this initiative and to our healthcare providers for their commitment to making telemedicine a success. Together, we are making significant strides toward achieving universal health coverage in Odi:

(Dr. Nilakantha Mishra)



Dr. Susant Kumar Swain
Additional Director – NCD
Directorate of Health Services
Government of Odisha



Message

I am pleased to share the findings of the Patient Satisfaction Study Report on the e-Sanjeevani programme in Odisha. This report reflects the remarkable progress we have made in strengthening digital health services across the state. The study highlights substantial improvements in infrastructure readiness, provider capacity, and patient satisfaction since the inception of the platform.

Key outcomes point to increased accessibility to critical equipment and internet connectivity, enhanced provider confidence in delivering teleconsultations, and encouragingly high levels of patient satisfaction. These achievements are a testament to the dedication and collaboration of all stakeholders involved. At the same time, the report draws attention to areas that warrant continued focus—such as sustaining usage of teleconsultation services, ensuring adequate private spaces for consultations, and further engaging communities to promote the benefits of telehealth.

I sincerely thank Intelhealth for their meaningful contributions to this initiative, and express my deep appreciation to our healthcare providers for their unwavering dedication to the success of telemedicine. As we move forward, these insights will guide our efforts to refine and expand the reach of the e-Sanjeevani programme, ensuring that quality healthcare remains accessible and equitable for every citizen of Odisha.

Let us continue to work together to build a stronger, more inclusive digital health ecosystem.

Dr Susant Kumar Swain



Dr. Sanjulata Satpathy
State Nodal Officer, Telemedicine
Directorate of Health Services
Government of Odisha



Message

It is with great pride and optimism that I present this publication on Patient Satisfaction under the e-Sanjeevani Program. This comprehensive work reflects our unwavering commitment to providing equitable, accessible, and patient-centric healthcare services across the state.

In recent years, Odisha has witnessed a digital revolution that is empowering every citizen and bridging gaps across sectors. e-Sanjeevani stands as a shining example of this transformation in the field of healthcare. By harnessing the power of technology, it has made quality medical consultation accessible to people even in the remotest corners of the state. This is a true embodiment of the vision of Digital Odisha—where technology serves as a tool for inclusion and progress.

This publication highlights the progress made and the insights gained. It reflects the dedication of countless public health professionals and frontline workers who have embraced digital tools to serve with compassion and efficiency to achieve the patient's satisfaction to the fullest.

I sincerely thank the National Health Mission, Odisha, the Telehealth Innovation Foundation (Intelhealth), and all stakeholders whose efforts have made this milestone possible. Together, we remain committed to making telemedicine a key pillar in our journey toward equitable and accessible healthcare for everyone.

Sanjulata Satpathy
Dr Sanjulata Satpathy

List of Contributors

- ❖ Dr. Brundha D (IAS) – Mission Director, National Health Mission, Govt. of Odisha
- ❖ Dr. Vijay Kumar Mohapatra – Director of Health Services, DHS, Govt. of Odisha
- ❖ Dr. Niranjana Mishra – Ex. Director of Public Health, DHS, Govt. of Odisha
- ❖ Dr. Nilkantha Mishra – Director of Public Health, DHS, Govt. of Odisha
- ❖ Dr. Susanta Kumar Swain – Addl. Director – Health Services (NDC), DoHFW, Govt. of Odisha
- ❖ Mr. Adait Kumar Pradhan- State Programme Manager, NHM, Govt. of Odisha
- ❖ Mr. Pranaya Kumar Mohapatra, Senior Consultant (PHP), NHM, Govt. of Odisha
- ❖ Mr. Lalit Mohan Sahu – State Consultant (NCD & eSanjeevani), DHS Office, Govt. of Odisha
- ❖ Dr. Neha Verma – Chief Executive Officer, Intellehealth
- ❖ Dr. Shekhar Waikar – Chief Program Officer, Intellehealth
- ❖ Mr. Aditya Naskar- Director - (MLE), Intellehealth
- ❖ Dr. Shrabanti Sen – Ex-Senior Director (MLE & Policy Advocacy), Intellehealth
- ❖ Dr. Suchandrima Chakraborty – Ex-Director (MLE), Intellehealth
- ❖ Mr. Nitin Kumar Solanki – Director (Programs), Intellehealth
- ❖ Mr. Mahesh Shete – Manager (MLE), Intellehealth
- ❖ Ms. Rashmita Samal – Senior Program Manager – Odisha, Intellehealth
- ❖ Mr. Ranjan Kumar Sethi – Senior Project Manager – Odisha, Intellehealth
- ❖ Ms. Dikshya Priyadarshini – Project Manager – Odisha, Intellehealth
- ❖ Ms. Pujya Ghosh – Project Manager – Odisha, Intellehealth
- ❖ Mr. Mayank Sharma- Ex-Senior Manager (MLE), Intellehealth
- ❖ Ms. Elakeya Udhaya Subramaniam- Executive (MLE), Intellehealth

Third-Party Agency conducted Evaluation Study

- ❖ SSF Professionals Pvt. Ltd. 18/243 Ring Road, Indira Nagar, Lucknow, Uttar Pradesh

Abbreviations and Acronyms

AB-AAMs	Ayushman Bharat - Ayushman Arogya Mandirs
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
BAMS	Bachelor of Ayurvedic Medicine and Surgery
BCC	Behaviour Change Communication
BDS	Bachelor of Dental Surgery
CHO	Community Health Officers
DH	District Hospitals
EHR	Electronic Health Records
GOI	Government of India
HWCs	Health & Wellness Centres
MBBS	Bachelor of Medicine and Bachelor of Surgery
MC	Medical Colleges
MO	Medical Officer
MOHFW	Ministry of Health and Family Welfare
MPHW	Multipurpose Health Worker
NCDs	Non-communicable Diseases
OPD	Outpatient Department
PHCs	Primary Health Centres
SARA	Services Availability and Readiness Assessment
SDH	Sub-District Hospitals
SCs	Sub-centres
SRS	Stratified Random Sampling
TAM	Telemedicine Acceptance Model
WHO	World Health Organization

Factsheet

Clients Acceptability and Satisfaction Assessment-Key Indicators	
Indicators	Apr-Jun, 2024
Overall Clients Surveyed	178
Clients by Gender	
Female (%)	60%
Male (%)	40%
Annual Household Income (INR)	
INR 0-30,000 (%)	8%
INR 30,001-50,000 (%)	21%
INR 50,001-100,000 (%)	56%
INR 100,001-250,000 (%)	14%
More than INR 250,000 (%)	1%
Post-Visit Teleconsultation Experience	
Most Common Symptoms for the Clients Visited at HWCs	
Weakness (n)	28
Body Pain (n)	26
Fever (n)	25
Headache (n)	19
Gastric Issues (n)	14
ENT issues (n)	10
Gyneacological Problem (n)	9
Cough/Cold (n)	8
Chest Pain (n)	7
Dermatology Issues (n)	6
Dental Issues (n)	5
Blood Pressure (n)	5
Vomiting (n)	4
Diabetes (n)	3
Eye Problem (n)	3
Urinary Tract Pain (n)	3
Injury (n)	2
Feeling low (n)	1
Client Treatment Experience Post Teleconsultation at HWCs.	
Screening was done during teleconsultation (%)	69%
Teleconsultation with doctor (%)	91%

Clients Acceptability and Satisfaction Assessment-Key Indicators	
Indicators	Apr-Jun, 2024
Video consultations (%)	87%
Audio consultations (%)	40%
Diagnosis received from doctor (%)	72%
Medical advice given by the doctor (%)	81%
Any diagnostic test prescribed by the doctor (%)	20%
Prescription provided after teleconsultation (%)	78%
Medications received at HWC (%)	79%
Mean duration of teleconsultation (minutes)	6
Post-Visit Client Satisfaction of Teleconsultation at HWCs (5-point scale; 1: Poor and 5: Excellent)	Mean Score
The length of time to get an appointment for teleconsultation	3.9
The ease of getting the consultation/visit	4.0
The length of time waiting for a consultation/visit	3.8
The length of time with the telemedicine doctor and CHO you consulted	3.9
The explanation of your condition given by the provider (telemedicine doctor and CHO)	4.1
The explanation of your treatment given by the provider (telemedicine doctor and CHO)	4.0
The thoroughness, carefulness, and skillfulness of the provider (telemedicine doctor and CHO) you saw	4.0
The courtesy, respect, sensitivity, and friendliness of the provider (telemedicine doctor and CHO) during the consultation you saw	4.0
Privacy was respected during teleconsultation	4.1
Resolution of your questions and doubts	4.0
The telemedicine doctor and CHO treated you with respect and dignity	4.2
Your overall treatment experiences with this current eSanjeevani consultation	4.0
Satisfaction with Quality of Services During the Delivery of eSanjeevani Consultation at HWCs (7-point scale; 1: strongly disagree and 7: strongly agree)	Mean Score
Ease in talking to CHO	6.0
Can hear CHO and Doctor clearly?	5.9
CHO and Doctors are able to understand healthcare condition	5.9
Can see the Doctor as if met in-person?	5.9
Feel comfortable communicating with CHO and Doctor	5.9
Doctor via telemedicine is consistent	5.9
Obtain better access to healthcare services by use of telemedicine	6.0
Telemedicine saves time travelling to a hospital or a specialist clinic	6.1

Clients Acceptability and Satisfaction Assessment-Key Indicators	
Indicators	Apr-Jun, 2024
Receive adequate attention from CHO and Doctor	5.9
Telemedicine provides healthcare need	6.0
Met the Doctor more frequently via telemedicine	5.8
Telemedicine is an acceptable way to receive healthcare services	6.0
Will use telemedicine services again	6.1
Overall Satisfaction with Quality of Service	6.0
Recommendation and Future Use (On a scale of 1-5, 1: Very unlikely and 5: Very likely)	Mean Score
Likelihood of using eSanjeevani telemedicine services again in the future	4.3
Likelihood of recommending the use of eSanjeevani telemedicine services to friends and family	4.3

Introduction

Ensuring equitable healthcare remains a key objective of India's national health system; however, the country faces persistent challenges, including inadequate infrastructure, rural-urban access disparities, shortages of trained medical personnel, and high out-of-pocket healthcare costs, as documented in numerous studies on India's healthcare system. India, the world's second most populous country, has a low doctor-to-population ratio of 0.62 per 1,000 people (1), falling short of the World Health Organization's recommended ratio of 1 per 1,000 (2). Healthcare services are concentrated in urban centers, where 75% of doctors serve 31% of the population living in cities, while the remaining 69% of rural residents have limited access to medical services (3).

The rural health infrastructure operates on a three-tier system: Sub-Centers and Primary Health Centers (PHCs) at the first tier, Community Health Centers (CHCs) at the second, and District Hospitals and Medical Colleges at the third. Each level faces challenges, including limited population coverage, insufficient staffing of Community Health Officers (CHOs) and doctors, significant distances from remote villages, and inadequate transport infrastructure. As of March 2018, there were notable shortages across tiers: 18% at Sub-Centers, 22% at PHCs, and 30% at CHCs (4). Additionally, CHCs experience an 81.9% deficit in specialist positions, with gaps in surgeons, obstetricians, gynecologists, physicians, and pediatricians (5). The quality and availability of healthcare in rural areas suffer due to this lack of professionals, compounded by the demands of non-communicable diseases, maternal and child health needs, and infectious diseases (6,7,8). Rural health systems are also affected by infrastructure deficiencies, absenteeism, and substandard care delivery (9,10).

Healthcare expenses in India are a major contributor to poverty, as high out-of-pocket costs drive many households into financial hardship. While public facilities provide low-cost or free services, they are often regarded as unreliable, leading many—especially those in rural areas—to seek care in the private sector. This reliance on private healthcare further intensifies the financial strain on both rural and urban low-income populations. The rural health system in India remains underdeveloped, grappling with significant workforce shortages, inadequate infrastructure, and quality-of-care issues. Addressing these challenges will be essential to improve health outcomes and advance equitable healthcare access nationwide.

Telemedicine enables healthcare delivery without requiring patients and providers to be in the same physical location, using various technologies to support timely communication between them. This approach reduces the need for clinic visits, increases cost-efficiency, and enhances access to care and medical information, thus improving service quality and patient satisfaction (11,12,13,14). The Ministry of Health and Family Welfare (MoHFW) launched eSanjeevani, a nationwide telemedicine service, now operational across 28 states and 8 union territories. This cloud-based, real-time platform provides two primary services: health worker-to-doctor teleconsultations (eSanjeevani AB-AAM) and direct patient-to-provider consultations (eSanjeevaniOPD). The eSanjeevani AB-AAM model, specifically, links Health and Wellness Centres (HWCs) with secondary and tertiary hospitals, including medical colleges, in

a hub-and-spoke format, where HWCs and Primary Health Centers (PHCs) act as spokes and higher-level facilities serve as hubs.

Studies show that patients experience improved health outcomes, favor telemedicine's ease of use, appreciate its cost-effectiveness, and benefit from reduced travel times, all of which motivate ongoing telemedicine use (15,16,17). Telemedicine advantages extend across all stakeholders—healthcare providers, patients, and the healthcare system. It is delivered through multiple electronic means, including phone calls, video consultations, and chat platforms, adapting continually with advancing technologies to meet changing healthcare needs (14,18). By bridging the gap between providers and patients, especially in remote and underserved areas, eSanjeevani contributes significantly to improving healthcare delivery throughout Odisha and beyond.

In Odisha, the eSanjeevani platform was introduced in March 2021, utilizing a hub-sub-hub-and-spoke model to extend its reach across the state. Health and Wellness Centres (HWCs) have been equipped to support teleconsultations, with frontline health workers—such as Auxiliary Nurse Midwives (ANMs) and Community Health Officers (CHOs)—playing a central role in service delivery. This initiative seeks to make telemedicine more accessible and effective, particularly for rural populations who encounter considerable barriers to traditional healthcare access.

In partnership with the State government, Inteliehealth conducted a baseline study to gauge client satisfaction with the facilities and services provided through eSanjeevani. The study specifically focused on evaluating client satisfaction at Odisha's HWCs with respect to telemedicine service quality, aiming to assess the platform's acceptability and enhance healthcare accessibility for clients across the region.

Study Objectives

The primary objective of this baseline evaluation is to assess the **acceptability** and **satisfaction** of the eSanjeevani platform among clients. The evaluation will focus on understanding how clients perceive and engage with the platform, their comfort level with using telemedicine services, and how well the platform meets their healthcare needs. By gathering client feedback on various aspects such as ease of use, consultation quality, and overall satisfaction, the evaluation aims to provide insights into the platform's effectiveness in delivering healthcare services.

Methods

Study design

A mixed-methods approach was carried out, integrating both quantitative and qualitative data collection and analysis. To estimate the acceptability and satisfaction of the eSanjeevani telemedicine service among clients, we employed a probability proportional to size (PPS) sampling technique across the 405 facilities where the Facility Readiness Assessment (FRA) was conducted. This approach was chosen to

ensure that our sample was representative and balanced across key demographic and geographic factors. By using PPS, we aimed to minimize bias and ensure that our findings would be accurate and generalizable to the broader population. Ultimately, 178 clients from 64 facilities were interviewed, based on the daily footfall observed during the data collection period. Given the low footfall at most Health and Wellness Centers (HWCs), all clients present during the scheduled data collection period were included. Repeated rounds of PPS were conducted to achieve a sizable sample.

Tools

Client's Exit Interview Questionnaire Information:

Demographic information such as age, gender, education, state, district, religion, caste, primary source of income, and household income was collected. This data provided a comprehensive understanding of the user population and allowed for the assessment of the impact of telemedicine services across diverse demographic groups.

Telemedicine Usage and Experience:

Information regarding telemedicine usage patterns including frequency of use, symptom relief, recovery time, current health status, follow-up consultations, prescriptions, and medication provision was obtained. This data enabled an assessment of the effectiveness of telemedicine in addressing clients' healthcare needs and improving their overall health outcomes.

User Satisfaction Ratings:

To gather user satisfaction ratings, clients were asked to rate various aspects of their teleconsultation experience, including appointment scheduling, consultation ease, waiting time, provider's explanation of the condition and treatment, provider's thoroughness and courtesy, as well as privacy and respect. These ratings provided valuable insights into the quality of service and user satisfaction levels.

Likelihood Ratings:

Clients were also asked to rate their likelihood of using telemedicine services in the future and their likelihood of recommending these services to friends and family. These ratings indicated the user's acceptance and confidence in the telemedicine platform.

Ethics Approval

This study titled “**Impact Evaluation of eSanjeevani Telemedicine Services at Odisha**” received ethical clearance from both a Sigma institutional review board and the State Ethical Committee as detailed below.

1. Sigma Institutional Review Board (IRB), India

- **Principal Investigator (PI):** Dr. Neha Verma – Chief Executive Officer, Intelehealth
- **IRB Number:** 10091/IRB/23-24
- **Date of IRB Meeting:** 27 January 2024
- **Date of IRB Approval:** 23 February 2024
- **Approval Valid Through:** 22 February 2025

The Sigma IRB, an independent ethics committee, reviewed the study protocol, informed consent process, data protection procedures, and risk-minimization strategies.

2. State Ethics Committee, Directorate of Health Services, Odisha

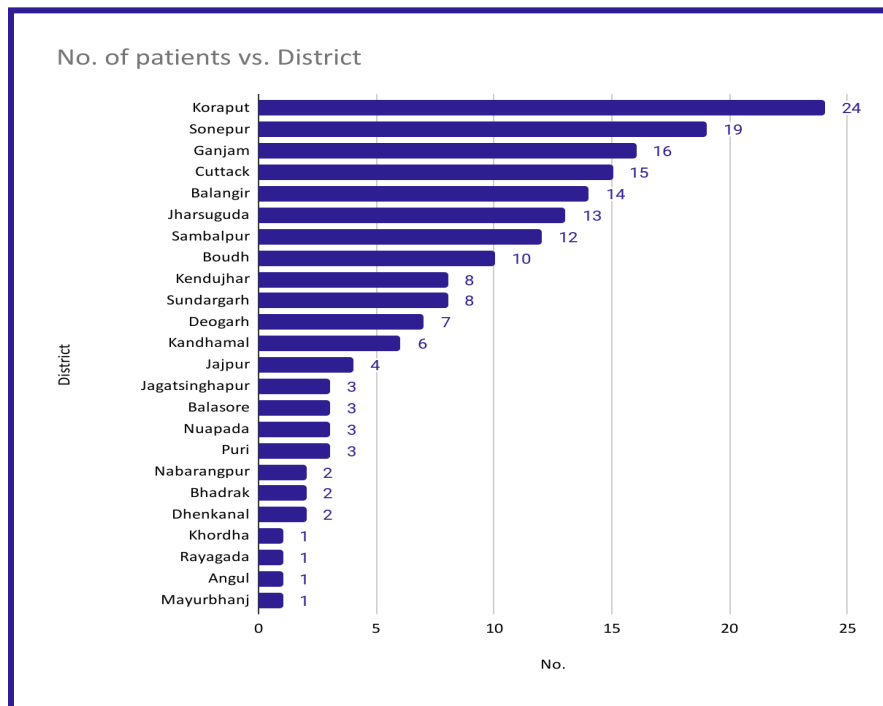
- **Chair:** Commissioner-cum-Secretary, Health & Family Welfare Department, Government of Odisha
- **Date of IRB Meeting:** 13 March 2024
- **Letter No.:** 10225/MS-2-IV-02/2022
- **Date of Approval:** 6 April 2024

The State Ethics Committee reviewed the proposal and associated documents. Approval was granted under the above letter number, affirming that all ethical considerations—participant information, consent procedures, and confidentiality safeguards—conform with national guidelines.

Note: All study procedures were conducted in accordance with the national ethical guidelines for biomedical and health research involving human participants. Informed consent (written or verbal as approved) was obtained from every participant before any data collection activity commenced.

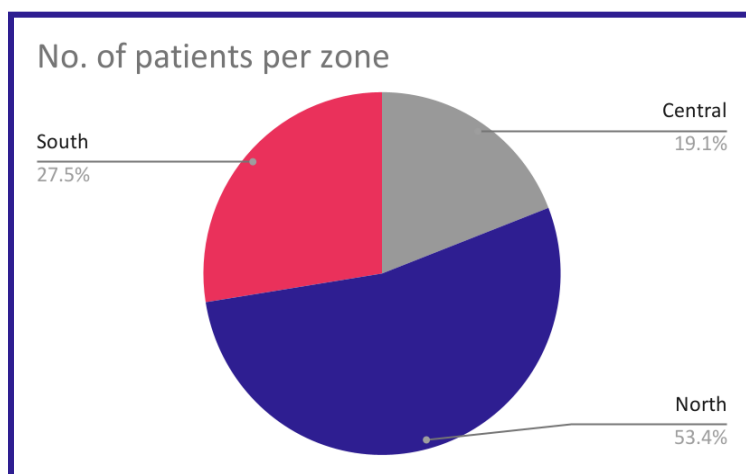
Results

Client's Socio-Demographic and Economic Status

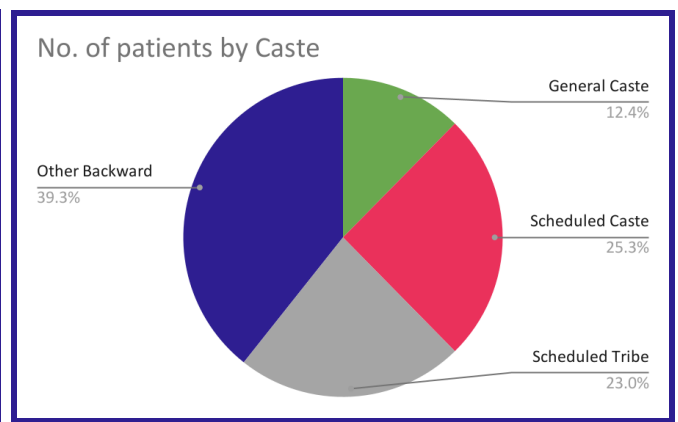
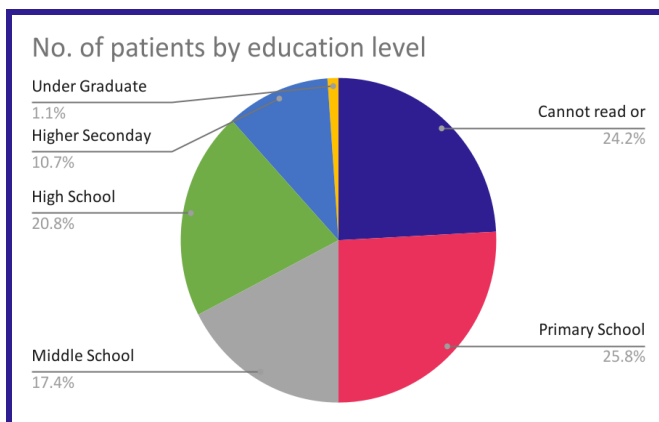
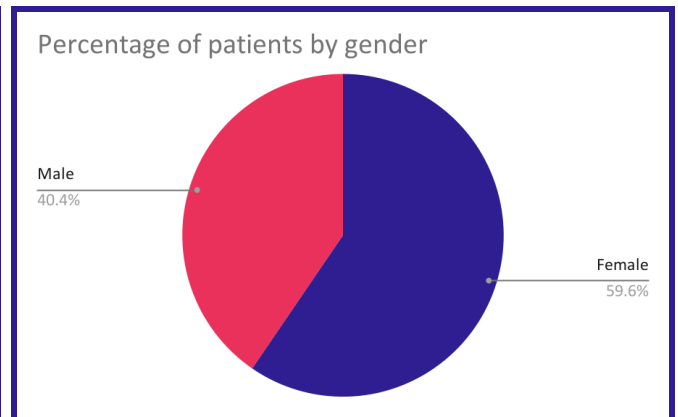
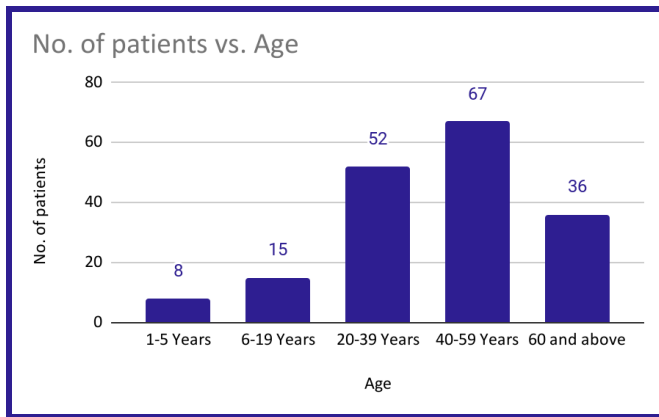


The sample is distributed across three zones of Odisha. 53% of clients were from the North zone, 28% from the South, and 19% from the Central zone.

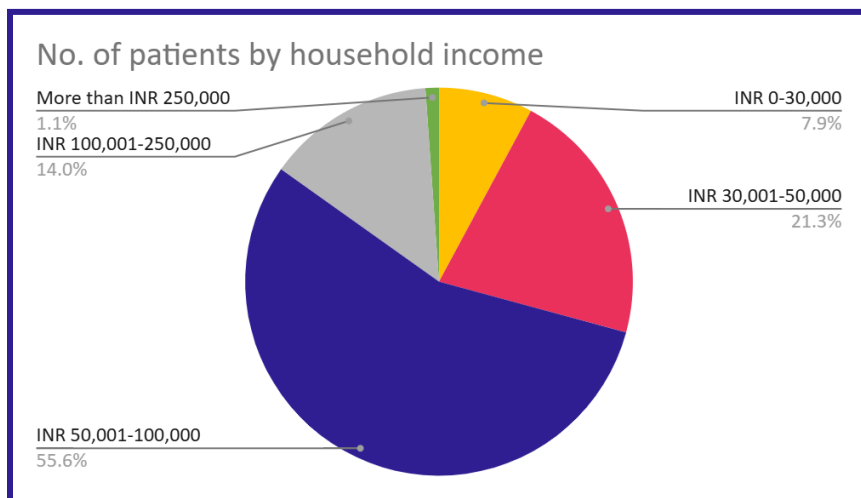
Most clients are from the North (95), followed by the South (49) and Central (34). The majority of clients are between 40-59 years old (67), followed by those aged 20-39 (52). Of the total respondents, 106 were females and 72 males. Most clients belong to Other Backward Castes (70), followed by Scheduled Castes (45). 43 clients cannot read or write; only 2 have undergraduate or higher education. 99 households have an income between INR 50,001-100,000. The most common sources are agricultural/seasonal labour (41) and sale of cereal/animal products (45).



Most clients belong to Other Backward Castes (70), followed by Scheduled Castes (45). 43 clients cannot read or write; only 2 have undergraduate or higher education. 99 households have an income between INR 50,001-100,000. The most common sources are agricultural/seasonal labour (41) and sale of cereal/animal products (45).



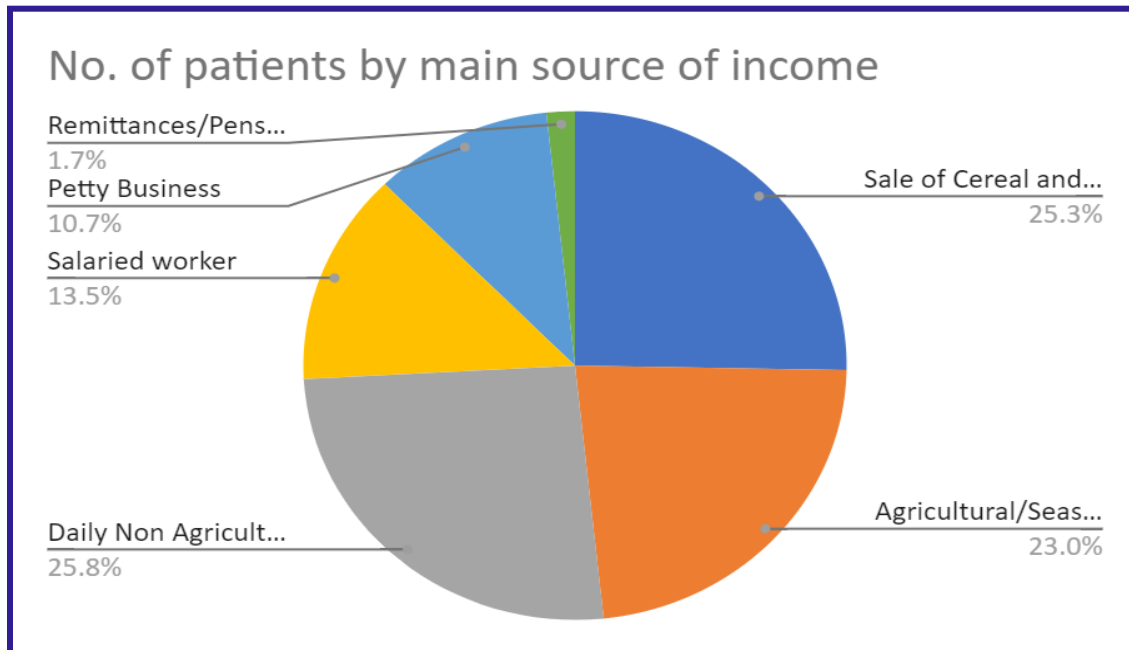
38% of clients were aged 40-59 years, while 5% were aged 1-5 years. 59% of clients were female, and 41% were male. 39% were Other Backward Castes, 25% Scheduled Castes, 23% Scheduled Tribes, and 12% General Caste. 26% of clients had primary school education, while only 1% had undergraduate or higher education.

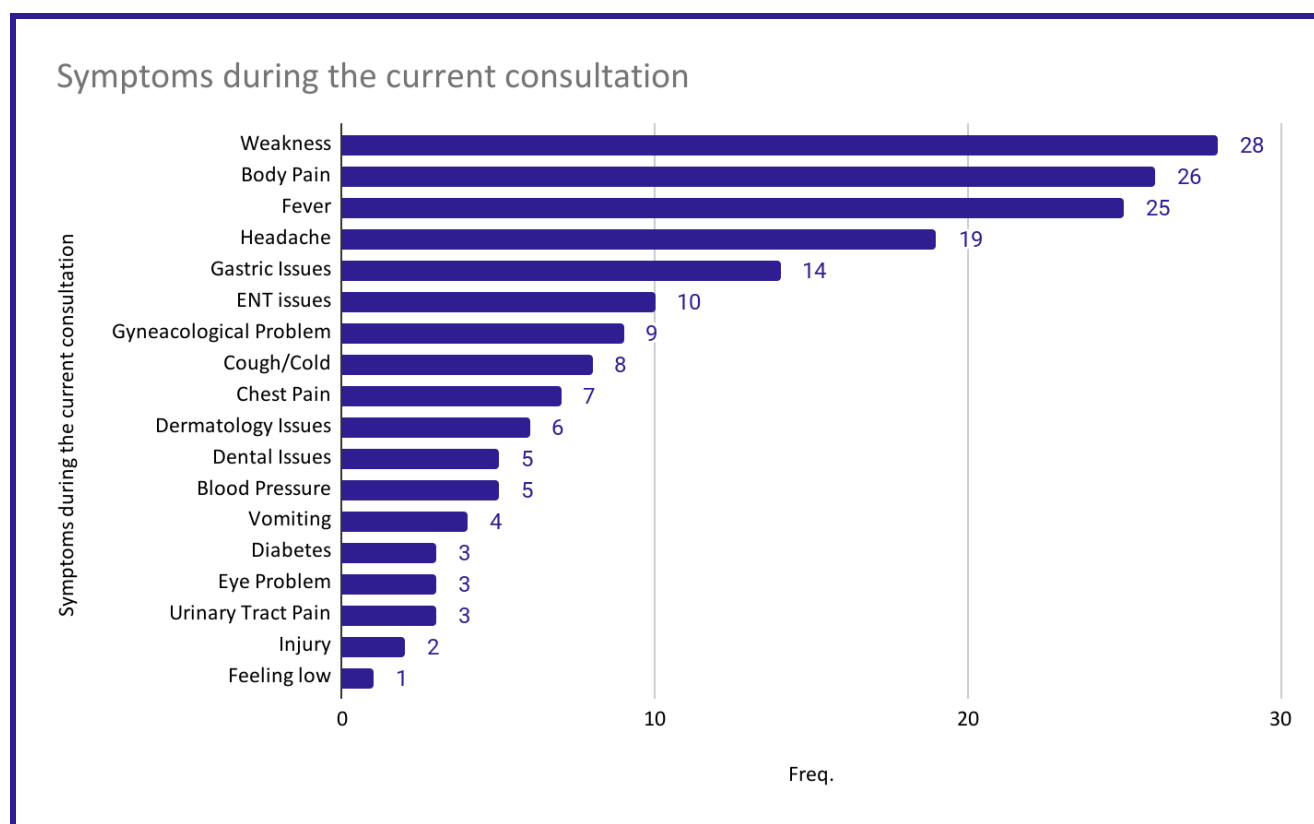


56% of clients reported an annual household income between INR 50,001-100,000, while 1% reported more than INR 250,000. 26% of clients relied on daily non-agricultural labour, and 25% on the sale of cereal and animal products.

Client's Acceptability and Satisfaction for eSanjeevani AB-AAM

Post-Visit Teleconsultation Experience at eSanjeevani AB-AAM





This table lists symptoms reported during consultations, with weakness (28 cases), body pain (26 cases), and fever (25 cases) being the most common. Other notable symptoms include headache (19 cases), gastric issues (14 cases), and ENT problems (10 cases). Additionally, gynaecological problems (9 cases), cough/cold (8 cases), and chest pain (7 cases) were also frequently reported. Less common symptoms include dermatology issues, dental problems, blood pressure, vomiting, diabetes, eye issues, and urinary tract pain, with only a few cases each.

The qualitative findings show improved access to healthcare using teleconsultation for clients.

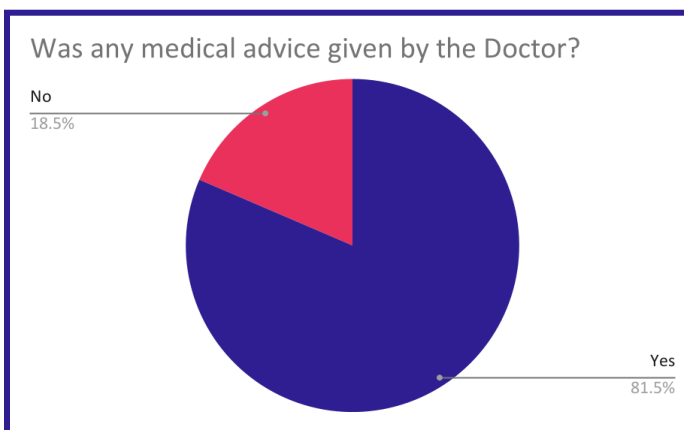
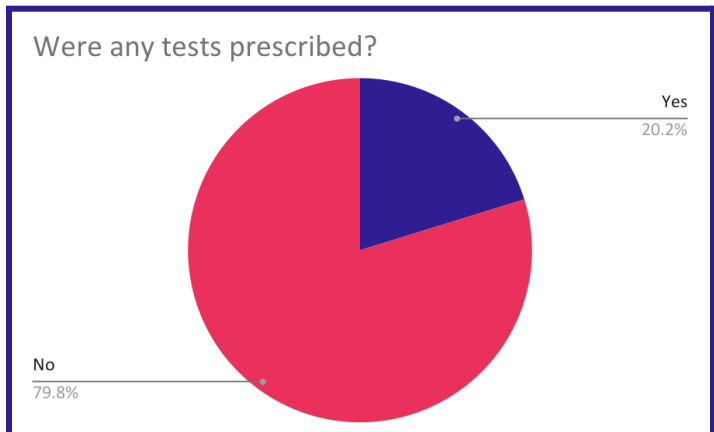
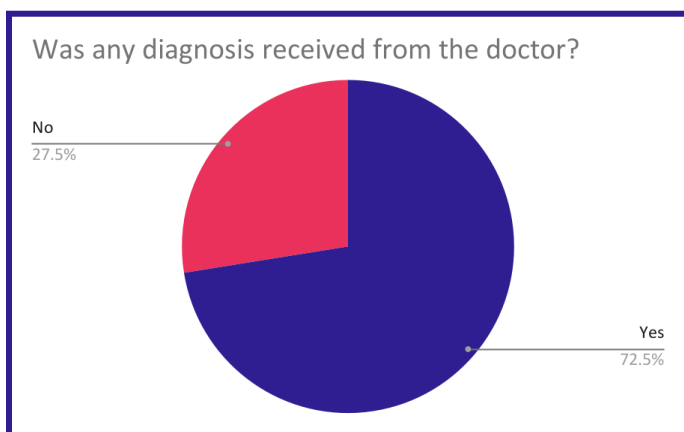
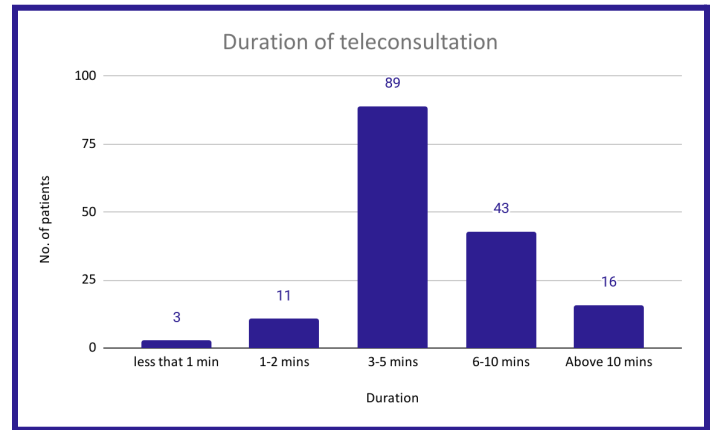
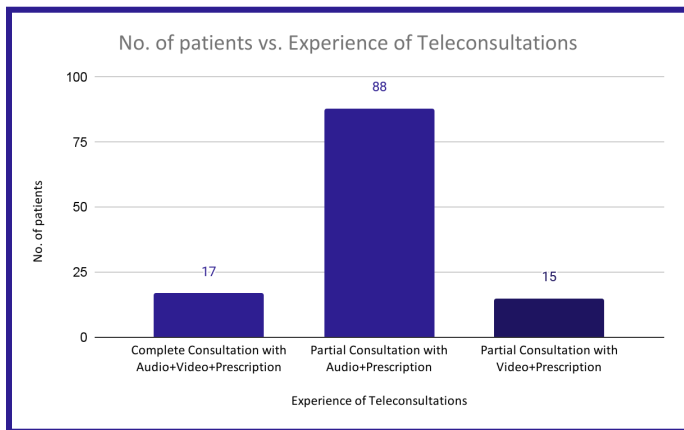
When I have some complications such as joint pains, I visit here. She arranges teleconsultation with doctors and gives me medicines as prescribed by the doctor. Most of the time the issue gets resolved here, however at times we are referred to higher hospitals in the city. It becomes difficult to visit there for people like us as neither we have enough money to get treated there nor any person who can accompany us there.

- Client at HWC-SC at Nuapatna in Cuttack District

For our facility, we are getting benefits here, and hence we have chosen the eSanjeevani service. Even small children of 8 to 10 years also come here and take the medicine, a small child cannot go to a faraway hospital but he can come here easily. Client at HWC-SC at Kunjabihariapur in Nayagarh District
When I catch a cold, or the weather is cold, I sweat extremely, and get tired and this problem flares up. The cold goes and so does this problem as well. There is no such timing or frequency of the issues being flaring up. It depends wholly on the weather and my body catching cold. In such times I visit here at the

HWC, get required medicines and take them as prescribed because of which the issue gets settled. CHOs got me consulted with specialist doctors through teleconsultations. As per the doctor's prescription, I got some of the medicines from here as well.

- Client at HWC-SC at Nuapatna in Cuttack District



Most consultations lasted between 3-5 minutes (89 clients). A diagnosis was provided to 129 clients, and medical advice was given to 145.

The qualitative findings underscore the importance of teleconsultation for clients.

“Earlier we were going to far off places to show the doctor but now due to this eSanjeevani we can consult with specialists through video conferencing, we don’t have to go anywhere, it is nearby to our house.”

- Client at HWC-SC-Koduabereni in Khurdha District

CHO checks my BP, weight and understands my medical history and gives medication as per my symptoms and her diagnosis based on the conversation on symptoms. Then she advised me on the medication and hence we developed a mother-daughter kind of relationship. The conversation is what usually takes a lot of stress away and the medication becomes successful. Also, she gives ORS etc. as well.

-Clients in HWC-SC at Nuapatna, in Cuttack District

However, only 36 clients were prescribed tests. Prescriptions were provided to 139 clients, and 140 received medications from the HWC. Among the various teleconsultation experiences of the clients. Of the 178 clients, 17 cases received complete consultations with video, audio and prescription, while 88 cases got a prescription post an audio consultation.

The clients share their challenges faced during teleconsultation in their qualitative findings.

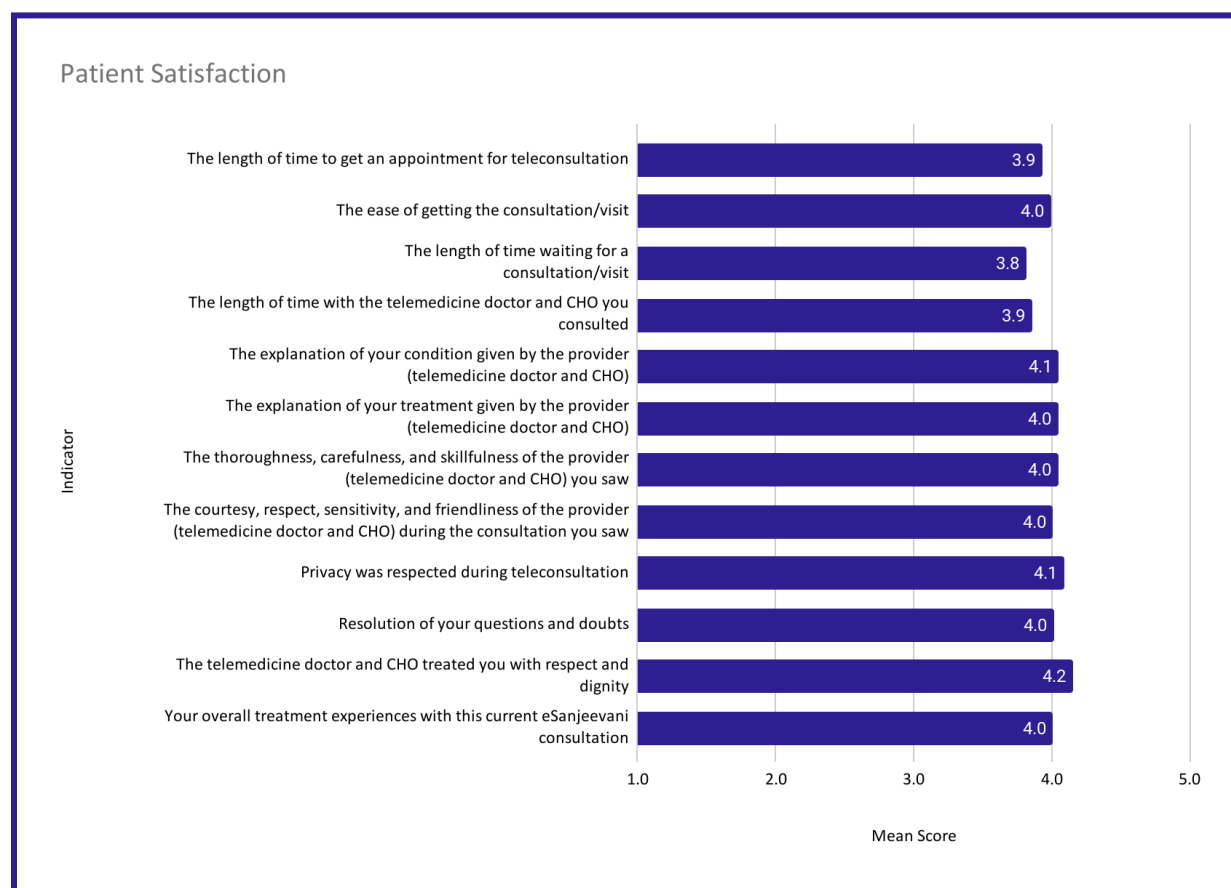
The problem means the phone used to be disconnected in the middle, due to network problems, and video calls are not happening properly.

- Client at HWC-SC-Ankorada in Ganjam District

A connectivity issue was there for which the waiting time was a little more. Besides, video conferencing was not efficient as the visuals were not clear.

- Client at HWC-PHC-Pandiripada at Ganjam District

Post-visit Client Satisfaction with Teleconsultation at HWCs



(5-point scale; 1: Poor and 5: Excellent)

The overall mean satisfaction score for teleconsultation services was 4.0, reflecting high client satisfaction. Clients rated scheduling efficiency at 3.6, showing some room for improvement, while ease of access scored 3.9. Waiting times and time spent with healthcare providers both averaged 3.8. Explanations of conditions and treatments, as well as provider professionalism, courtesy, and privacy, were rated highly, with scores around 4.1. Overall, clients were satisfied with their experience using the eSanjeevani platform, as indicated by the mean score of 4.1 for the total treatment experience.

The clients share their experience of teleconsultation in their qualitative findings.

The first doctor here checked and used a computer to connect with a specialist doctor. Through video conferencing, we consulted with the doctor. We had a conversation for 5-10 minutes where I could share all my problems.

-Client ant HWC-PHC in Pandiripada at Ganjam District

Yes, their behaviour was good, and they were doing good checkups also. They explain all the things in detail, eSanjeevani is a good thing.

- Client at HWC-SC in Ankorada at Ganjam District

It is near home and not much waiting time, they have friendly behaviour with the health service providers and I am happy that they do teleconsultations for the cases here which the CHOs cannot handle on their own.

- Client at HWC-SC at Jarada in Ganjam District

CHO madam asks about all our symptoms that we feel then explains the issue and also advises us on further course of treatment starting from medication to healthy eating habits.

- Client at HWC-SC in Alikanta at Jagatsinghpur District

Earlier we were going to Khandapada Medical Facility, they used to write outside medicine and we had to buy those medicines. But from the day this eSanjeevani medical service started here, whatever health issues we are facing, we have been informing CHO madam and she is consulting with the doctors and giving us medicine and by Taking that we are becoming ok. I had talked about my ear to her, and she did something for it, then now for my this leg, as the wound has spread but madam gave me an ointment post consultation and I am using that and it is cleared till here now.

- Client at HWC-SC-Kunjabiharipur for Nayagarh District

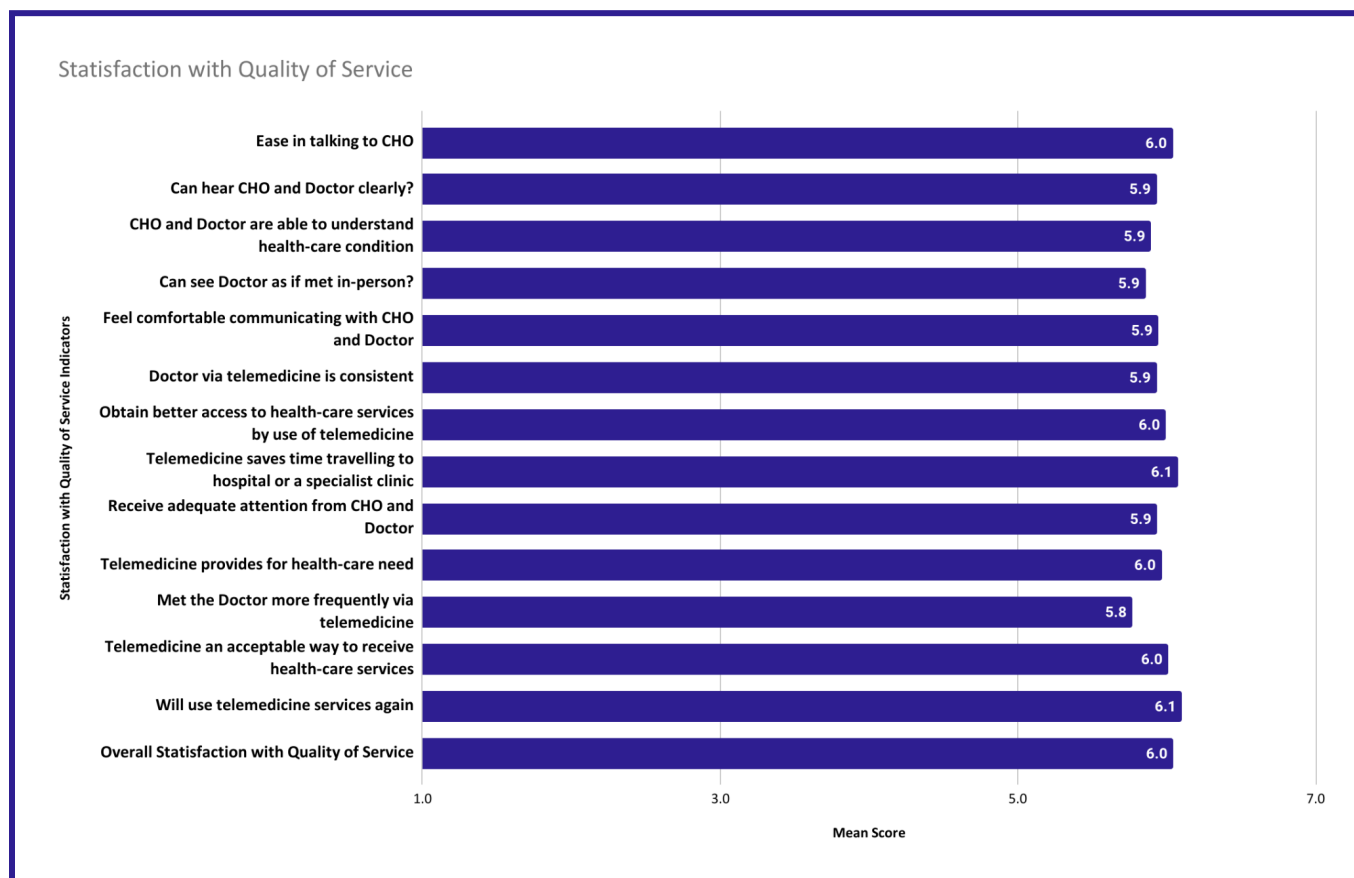
Satisfaction with Quality of Services During the Delivery of eSanjeevani Consultation at HWCs

The satisfaction levels with various aspects of telemedicine services for previous teleconsultation services were we have evaluated ease of communication with healthcare officers (CHO), clarity of audio and visual during consultations, comfort in discussing health conditions, and overall satisfaction. The average rating for most aspects is between 5.8 and 6.1 out of 7, indicating generally high satisfaction. Telemedicine is appreciated for providing better access to healthcare, saving travel time, and being an acceptable alternative to in-person visits. The overall satisfaction with the quality of service is 6.2.

The clients share their satisfaction with the quality of the teleconsultation through their qualitative findings.

It was problematic to get treated earlier in person, as here we had to spend money on transportation and a great amount of time used to get consumed. Since this HWC facility with eSanjeevani has been established here, all such problems have been resolved. Here a good quality treatment is easy to avail and I can go as many times as I want as I can come here walking anytime

- Client at HWC-SC at Nuapatna in Cuttack District



(7-point scale; 1: strongly disagree and 7: strongly agree)

The waiting time is not much, only the 15-20 minutes wait. Moreover, the consultation was detailed, and very clear and the audio-visual connection during the consultation was also clear.

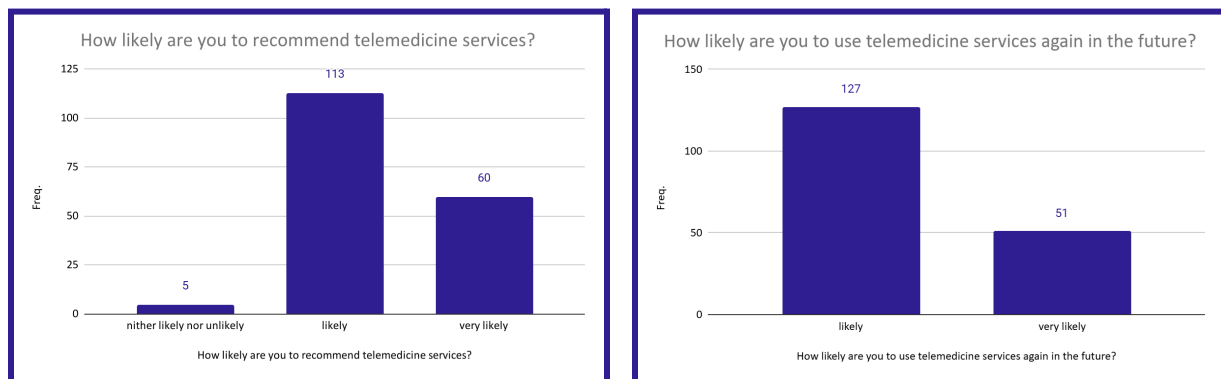
- Client at HWC-SC in Jarada in Ganjam District.

eSanjeevani telemedicine service is good. The main reason for coming to the HWC is that, it is nearby to our house and we come here and take our medicine. We don't have to go far away places to consult the doctor.

- Client at HWC-SC in Koduabereni in Khurdha District

Client's Recommendation of the Platform and their Intention of Future Use

Recommendation and Future Use (On a scale of 1-5, 1: Very unlikely and 5: Very likely)



Most clients indicated a strong likelihood of using eSanjeevani telemedicine services again in the future (mean score: 4.3/5). They were equally likely to recommend the service to friends and family (mean score: 4.3/5).

The clients share their experience of recommending teleconsultation services in their qualitative findings.

I advise others that there is a good HWC near us where everyone who needs healthcare should go for teleconsultations. The waiting time is less, and you get good health service and visiting hospitals is mostly not needed thereafter. Most importantly services are of good quality, it is free and the medicines are given as well.

- Client from HWC-PHC at Dihasahi in Jagatsinghpur District

Conclusion

This report provides an overview of client's satisfaction with the platform, highlighting its accessibility and the convenience of receiving teleconsultation services.

The evaluation showed that the most common duration of teleconsultations was 3-5 minute consultations and most clients received diagnoses and medical advice. However, only a small number have a complete consultation with audio and video consultations and prescriptions, which needs further attention. Some clients also shared some challenges, such as network connectivity issues and internet quality in their qualitative feedback.

Clients appreciated the quality, efficiency, and reduced travel time compared to in-person visits. Clients appreciated the convenience, and ease of access to healthcare through the platform, as expressed in qualitative findings. Their overall satisfaction was high, with clients rating the services between 5.8 and 6.1 out of 7. Clients emphasized the importance of the platform in addressing healthcare needs, especially in rural areas where accessing healthcare facilities is difficult. Telemedicine has allowed for better quality care, and shorter waiting times, and has reduced the need for long-distance travel to hospitals. Many clients reported that they would recommend the platform to others due to its effectiveness, convenience, and the free services provided, including medication.

Recommendations

Based on the key findings of the study Client perspectives on satisfaction and acceptance of eSanjeevani National Telemedicine Services in Odisha, the following recommendations are suggested to further improve the platform's impact and reach:

1. **Enhance Connectivity and Infrastructure Support:** A significant challenge highlighted by clients is the issue of network connectivity and internet quality, which can disrupt the teleconsultation experience. To address this, efforts should be made to improve the digital infrastructure, particularly in rural areas. This could involve collaborating with local telecommunications providers to boost internet access and reduce connection issues.
2. **Increase Comprehensive Consultations (Audio, Video, and Prescriptions):** While the majority of clients were satisfied with the teleconsultations, there is a clear need to improve the rate of complete consultations, which include video and audio interactions along with prescriptions. Enhancing training for healthcare providers and ensuring stable internet connections may help increase the number of fully comprehensive teleconsultations.
3. **Strengthen Follow-up Mechanisms:** Clients receiving diagnoses and medical advice but not completing full consultations might benefit from improved follow-up mechanisms. This can

ensure that the clients have access to the necessary prescriptions and additional consultations as required, promoting continuity of care and reducing the risk of incomplete treatment.

4. **Raise Awareness on the Benefits of Telemedicine:** Although client satisfaction is high, there is room to expand awareness campaigns in underserved and rural areas. Emphasizing the ease of use, time efficiency, and cost-saving benefits of telemedicine services can attract more clients and ensure broader adoption of the platform.
5. **Optimize User Experience:** User feedback suggests that ease of access is one of the platform's strong points. However, to maintain this advantage, continuous improvements should be made to the platform's user interface, including simpler navigation and multilingual support to cater to clients with different literacy levels and languages.
6. **Expand Service Offerings:** Based on qualitative feedback, the platform should aim to expand its range of services to include specialities that are currently underserved. Telemedicine services can be broadened to include mental health counselling, specialized care for chronic diseases, and post-consultation support services to further meet the diverse healthcare needs of clients.
7. **Continuous Training for Healthcare Providers:** To ensure high-quality consultations, it is recommended that healthcare providers on the platform receive continuous training on the latest telemedicine clinical guidelines, effective communication practices, and the use of telemedicine technologies. This would improve consultation quality and client satisfaction.
8. **Encourage Feedback and Address Concerns:** Regular client feedback should be actively solicited, and a mechanism should be in place to address concerns and suggestions for improvement. Addressing issues promptly will further improve trust and satisfaction with the services.

By addressing these recommendations, the eSanjeevani platform can continue to deliver high-quality, accessible healthcare to clients across Odisha, making a lasting impact on rural healthcare delivery and satisfaction.

References

1. World Health Organization. (n.d.). Density of physicians. https://www.who.int/gho/health_workforce/physicians_density/en/
2. Ministry of Health and Family Welfare, Government of India. (2018). Doctor patient ratio in India. <http://164.100.47.190/loksabhaquestions/annex/12/AS86.pdf>
3. Registrar General & Census Commissioner, India. (2011). Rural Urban Distribution of Population. http://censusindia.gov.in/2011-prov-results/paper2/data_files/india/Rural_Urban_2011.pdf
4. Ministry of Health & Family Welfare. (n.d.). Rural health statistics. <https://data.gov.in/catalog/rural-health-statistics>
5. Health Management Information System, Government of India. (n.d.). Highlights.
6. Kasthuri, A. (2018). Challenges to healthcare in India - The five A's. *Indian Journal of Community Medicine*, 43(3), 141-143. https://doi.org/10.4103/ijcm.IJCM_194_18
7. Narain, J. P. (2016). Public health challenges in India: Seizing the opportunities. *Indian Journal of Community Medicine*, 41(2), 85-88. <https://doi.org/10.4103/0970-0218.177507>
8. Rao, K. D., & Peters, D. H. (n.d.). Urban health in India: Many challenges, few solutions. *The Lancet Global Health*.
9. Editorial. (2008). Combating emerging infectious diseases in India: Orchestrating a symphony. *Journal of Biosciences*, 33(4).
10. Planning Commission of India. (2010). Healthcare in India - Vision 2020: Issues & prospects.
11. Cassoobhoy, A. (2020). What is telemedicine? How does telehealth work? *WebMD*. Retrieved from <https://www.webmd.com/lung/how-does-telemedicine-work>
12. Al-Samarraie, H., Ghazal, S., Alzahrani, A. I., & Moody, L. (2020). Telemedicine in Middle Eastern countries: Progress, barriers, and policy recommendations. *International Journal of Medical Informatics*, 141, 104232. <https://doi.org/10.1016/j.ijmedinf.2020.104232>
13. Abdel Nasser, A., Mohammed Alzahrani, R., Aziz Fellah, C., Muwafak Jreash, D., Talea, A., Almuwallad, N., et al. (2021). Measuring the patients' satisfaction about telemedicine used in Saudi Arabia during COVID-19 pandemic. *Cureus*, 13(2), e13382. <https://doi.org/10.7759/cureus.13382>
14. Abdulwahab, S., & Zedan, H. (2021). Factors affecting patient perceptions and satisfaction with telemedicine in outpatient clinics. *Journal of Patient Experience*, 8. <https://doi.org/10.1177/23743735211063780>
15. Kruse, C. S., Krowski, N., Rodriguez, B., Tran, L., Vela, J., & Brooks, M. (2017). Telehealth and patient satisfaction: A systematic review and narrative analysis. *BMJ Open*, 7(8), e016242. <https://doi.org/10.1136/bmjopen-2017-016242>
16. Nanda, M., & Sharma, R. (2021). A review of patient satisfaction and experience with telemedicine: A virtual solution during and beyond COVID-19 pandemic. *Telemedicine and e-Health*, 27(12), 1325-1331. <https://doi.org/10.1089/tmj.2020.0570>

17. Noceda, A. V. G., Acierto, L. M. M., Bertiz, M., & et al. (2023). Patient satisfaction with telemedicine in the Philippines during the COVID-19 pandemic: A mixed methods study. *BMC Health Services Research*, 23, 277. <https://doi.org/10.1186/s12913-023-09127-x>
18. Alshammari, F., & Hasan, S. (2019). Perceptions, preferences and experiences of telemedicine among users of information and communication technology in Saudi Arabia. *Journal of Health Informatics in Developing Countries*, 201(1), 13. Retrieved from <https://jhdc.org/index.php/jhdc/article/view/240>

contact@intelehealth.org
www.intelehealth.org
www.twitter.com/IntelehealthOrg
www.linkedin.com/company/intelehealth-inc

© Intelehealth, 2024. All rights reserved.