

**ASSESSING THE IMPACT INITIATIVE ON NQAS CERTIFICATION IN
URBAN PRIMARY HEALTH CENTRES, RAJASTHAN**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

By

Muskan

Under the Supervision and Guidance of

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Dated: 5/7/24

CERTIFICATE

This is to certify that **Ms. Muskan Kaushik**, student of MBA, Indian Institute of Health Management Research (IIHMR University, Jaipur) has successfully completed her Dissertation & Internship at National Health Mission, Rajasthan from 20/03/2024 to 18/06/2024. She has worked on the project-

**ASSESSING THE IMPACT INITIATIVE ON NQAS
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RAJASTHAN**

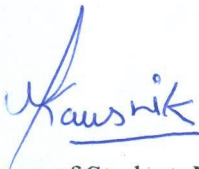
Her performance was found satisfactory. We extend her good wishes for a bright and successful career ahead.

(Dr Jitendra Kumar Soni)
Mission Director, NHM

Special Secretary
Medical Health & Family Welfare

DECLARATION BY STUDENT

I hereby declare that this dissertation "*ASSESSING THE IMPACT INITIATIVE ON NQASCERTIFICATION IN URBAN PRIMARY HEALTH CENTERS, RAJASTHAN*" is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

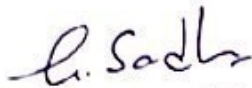


Name of Student: Muskan

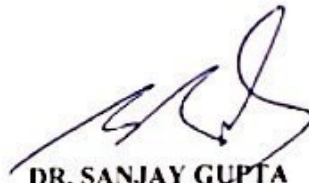
Date: 4/7/2027

IIHMR UNIVERSITY CERTIFICATE

This is to certify that the dissertation *ASSESSING THE IMPACT INITIATIVE ON NQAS CERTIFICATION IN URBAN PRIMARY HEALTH CENTERS, RAJASTHAN* is a record of the research work undertaken by Muskan in partial of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.



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ABSTRACT

Introduction: Quality healthcare services are critical for public health and community well-being, particularly in a diverse healthcare landscape like India. Urban areas demand substantial healthcare services. National initiatives such as the National Accreditation Board for Hospital and Healthcare Providers (NABH) and the National Quality Assurance Standards (NQAS) have significantly contributed to improving healthcare quality. The Kayakalp initiative, launched in 2015 under the “Swachh Bharat Abhiyan”, aims to enhance cleanliness, hygiene and overall quality in public healthcare facilities. Kayakalp has set a benchmark for quality assurance in healthcare.

Research Objective: How does the implementation of the Kayakalp initiative influence the attainment of NQAS certification in Urban Primary Health Centers (UPHCs) in Rajasthan

Methods: This study constitutes a mixed-method approach of both qualitative and quantitative data analysis. The study will use a mixed-method approach with predefined checklists, Designed questionnaires and interview guides. Qualitative interviews will be conducted in adherence to professional standards and ethical guidelines governing staff conduct. A sample size of 10 UPHCs was determined using random sampling.

Results: The study assessed Urban Primary Health Centers (UPHCs) in Rajasthan, revealing several key insights. 90% of facilities have pest control systems, and 80% rate their performance as excellent. Uniform signage systems are implemented in all facilities, with 90% rating them highly. However, only 30% have functional rainwater harvesting systems. Energy-saving measures are in place in 70% of the centres.

Regarding infrastructure, 90% have separate, clean toilets for males, females, and disabled individuals, and 50% have effective sewage treatment plants. All UPHCs comply with the Biomedical Waste Management Rules of 2016. Hand hygiene practices are universally followed, enhancing infection control. Fire safety protocols are comprehensive in 80% of the facilities, with 20% needing improvement. Additionally, all centres engage local community leaders in hygiene promotion efforts.

Conclusion: The assessment highlights key achievements in UPHCs, such as compliance with biomedical waste management rules and excellent hand hygiene practices. Addressing these gaps will help healthcare facilities meet national quality standards and ensure a safe, sustainable environment. Collaboration with regulatory bodies and local communities is crucial for achieving healthcare excellence.

Key Words- National Quality Assurance Standards (NQAS), Kayakalp, Swachh Bharat Abhiyan

Chapter: 1

Introduction-

Quality in health care is a comprehensive concept that includes several key aspects aimed at achieving the best outcome for patients. The National Health Systems Resource Centre (NHSRC) define quality through multiple dimensions such as effectiveness, efficiency, accessibility, patient-centeredness, equality and safety.(1)



Fig Dimension of Quality Care

Effectiveness measures how well healthcare service achieves desired health outcomes based on the evidence and best practices. Efficiency relates to the optimal use of resources to provide high-quality care without unnecessary waste. Equity ensures that all individuals receive fair healthcare services. Accessibility ensures that healthcare services are available to everyone. Patient-centeredness focuses on respecting needs and values.

History of quality in healthcare in India:(2)

The focus on quality in healthcare in India began to gain momentum with the launch of the Reproductive and Child Health (RCH) program in 1997. The primary objective of this program was to enhance the quality of service provided by public healthcare facilities across the country

The government implemented the 12th Five-Year Plan (2012-2017) to develop healthcare services. Focusing on the quality of healthcare services across both the public and private sectors. The plan emphasized the need for an in-house quality management system in each facility to regularly measure and improve their quality and encourage continuous improvement

In 2005, The National Rural Health Mission (NRHM) was launched to improve the healthcare delivery in rural areas. This mission was later complemented by the National Urban Health Mission (NUHM) in 2013, targeting urban healthcare needs. Around the same time, the Indian Public Standards (IPHC) Guideline was introduced in 2007 and later revised in 2012 for District Hospitals, Community Health Centers (CHCs), Primary Health Centers (PHCs) and Sub centres.

In 2006, the Quality Council of India (QCI) established the National Accreditation Boards for Hospital and Healthcare Providers (NABH) to promote high-quality patient care and safety. NABH introduced an accreditation program that set standards for hospitals, and ensures quality benchmarks.

In 2012, the Ministry of Health & Family Welfare (MOHFW) introduced the National Quality Assurance Standards (NQAS) which provides a framework for quality assessment and improvement in public healthcare facilities.

To address issues of cleanliness, infection control, biomedical waste management and environmental sanitation, the “KAYAKALP Award Scheme” was launched in May 2015

In December 2017, the Labour Room Quality Improvement Initiative (LaQshya) was launched to improve the quality of care around childbirth, focusing on reducing maternal and newborn mortality, Morbidity and complications.

Today, quality in healthcare in India is guided by a combination of national policies, accreditation standards, and continuous improvement initiatives. The government’s ongoing efforts ensure that quality healthcare services are accessible to all sections of society, thereby improving health outcomes and patient satisfaction

Urban Primary Healthcare Centers (UPHCs):(3)

Urban Primary Health centres (UPHCs) frequently serve as the first step for people seeking healthcare services. providing basic medical care, maternal and child health services, family planning, preventive health services like vaccinations, and management of chronic diseases such as diabetes and hypertension. They ensure that urban populations access necessary healthcare services close to their homes, promoting community health and well-being

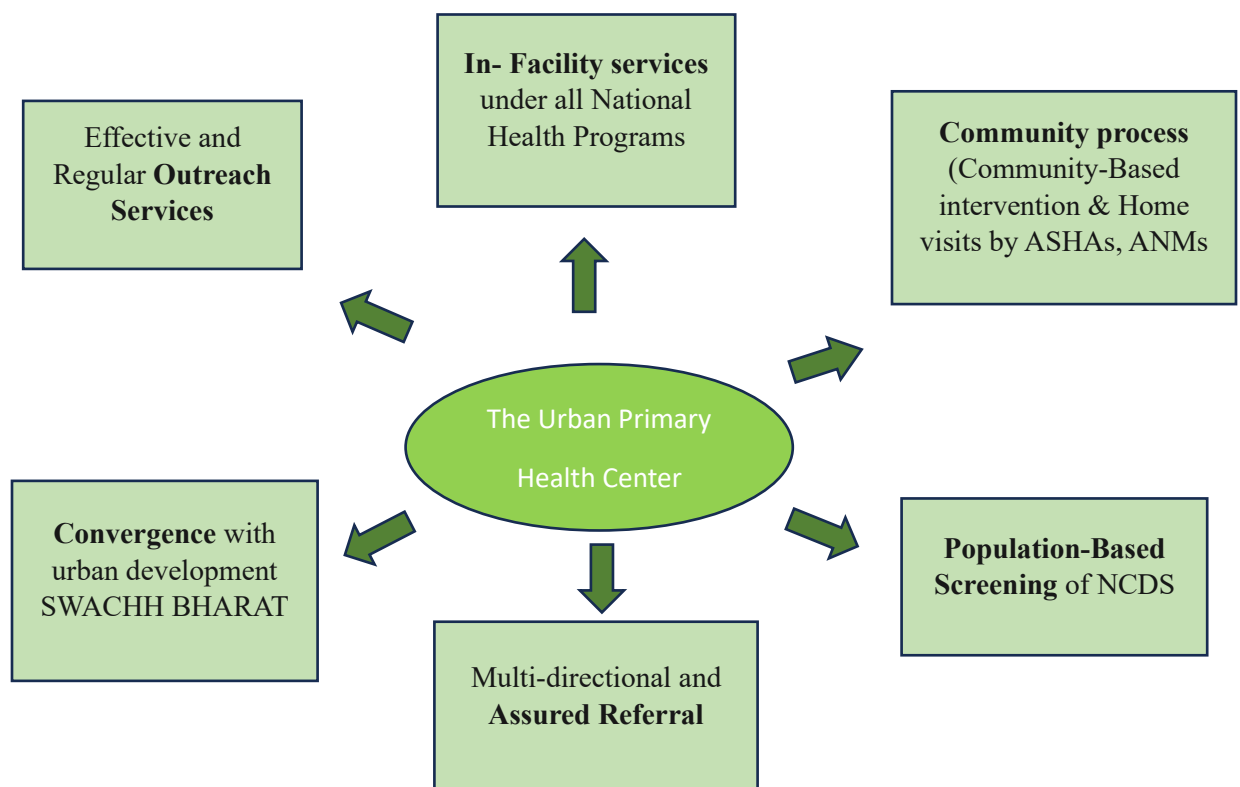


Fig 2: UPHC as the epicentres for Comprehensive Primary Health Centres

In India, the healthcare system faces challenges in maintaining cleanliness and quality standards. To address this Kayakalp initiative was launched by the government of India, and embodies a concerted effort to improve cleanliness, hygiene and overall quality of healthcare facilities across the nation launched in 2015 under the aegis of the “Swachh Bharat Abhiyan”(4). Public

healthcare facilities are a major mechanism of social to meet the healthcare needs of large segments of the population.

The primary goal of Kayakalp is to ensure that healthcare facilities are clean and infection control. To promote cleanliness, hygiene and infection control practices in public healthcare facilities, by incentivizing and recognising such public healthcare facilities that show exemplary performance in adhering to standards protocols of cleanliness and infection control.

In 2019, the award distribution criteria were based on the performance of facilities in seven thematic areas: (5)

- A. Hospital/Healthcare Facility Upkeep
- B. Sanitation & Hygiene
- C. Waste Management
- D. Infection Control
- E. Support Service
- F. Hygiene Promotion
- G. Beyond Hospital Boundary

Kayakalp expanded its thematic area in 2021

- H. Eco-friendly Facility

This addition highlights a broader commitment to sustainability and environmental awareness within healthcare facilities. Urban Primary Centers (UPHCs) play a crucial role as frontline healthcare providers catering to the diverse needs of urban populations. Their significance in ensuring the delivery of accessible and high-quality healthcare services is paramount, given the concentration of health risks and challenges in urban areas.

This study aims to assess the impact of kayakalp certification on the NQAS initiative in urban primary health centres (UPHCs), which are primary healthcare units even in remote areas. These centres frequently serve as the first stop for people seeking healthcare services. The

kaykalp initiative promotes the best practices and protocols, encouraging service improvement.

This study bridges the gap by exploring the Kayakalp impacts on NQAS certification in UPHCs to understand the quality of health care delivery. The necessity for quality assurance in UPHCs is underscored by the unique health challenges faced by urban populations including higher rates for non-communicable diseases and environmental health risk. UPHCs must be well-equipped to effectively address these challenges and ensure that urban residents especially the most vulnerable have access to essential healthcare services.

Thus, the objective of this research study is to examine the impact that Kayakalp has made on the NQAS certification targets of UPHCs. These centres often act as the point of entry to the health system for many communities. The Kayakalp's mainly contribute in improving the healthcare services. This includes evaluating them on measures they undertake on cleanliness and hygiene, waste disposal and infection control and their environmental sustainability measures. Moreover, myself and the facilities under my supervision will analyze and also scrutinize the assessment rating of these firms in order to comprehend the performance of practices under question and their areas of weakness or strength.

Chapter: 2

Review of Literature-

Author	Study Location	Sample Size	Sample Techniques	Salient features
Dr. Apurva Tiwari, Ankit Tiwari	Chhattisgarh	27 District Hospitals	Census sampling (all district hospitals of Chhattisgarh)	1. Objective Evaluation: The study aimed to assess the impact of the Kayakalp scheme on cleanliness, hygiene, and infection control in 27 district hospitals in Chhattisgarh during 2015-16.⁽⁶⁾ 2. Significant Improvements: Notable improvements were observed, with an average hospital performance increase of 18.27%, a 23.25% increase in hygiene ⁽⁶⁾promotion, and a 19.88% enhancement in infection control practices. 3. Recognition of Excellence: Eight district hospitals qualified for external assessment, with Hospital Korba and Hospital Jashpur receiving 1st and 2nd prize certifications for their outstanding performance. 4. Encouragement of Best Practices: The Kayakalp scheme played a crucial role in promoting cleanliness and hygiene, thereby improving overall healthcare outcomes in public health facilities.

Ganju, SuniteA; Gupta, Alka; Ganju, Shriya, Gautam, Neha	Himachal Pradesh	45 public health centres	Observational – cross study	1. Positive Progress in Quality Standards: The study in Himachal Pradesh showed a 20% increase in total hospital scores from internal and external assessments, indicating significant improvements in quality standards in public healthcare facilities.(7) 2. Outstanding Performers: District Hospital 4 advanced to the external assessment stage, and DH Kullu achieved an impressive score of 91%, although it still needs to improve hospital cleaning and sanitation maintenance. 3. Mixed Results in Health Centers: Community Health Centers (CHCs) and Primary Health Centers (PHCs) excelled in infection control and support services, but their scores for Biomedical Waste Management (BMWM) were lower, highlighting areas needing further attention. 4. Ongoing Challenges and Recommendations: The study emphasizes that while the Kayakalp program has significantly improved cleanliness and quality, continued focus on hospital upkeep, waste management, and ongoing training and awareness are crucial for sustaining and further enhancing healthcare standards.
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Agrawal, Arpita; Srivastava, J.N; Priyadarshi, Manish	Haryana, Andhra Pradesh, Gujarat, Panjab	32 quality- certified district hospital	Observational Cross Sectional Study	1. Objective: The study aimed to assess the impact of the Kayakalp initiative on the quality certification of public health facilities under the National Quality Assurance Standards (NQAS).(8) 2. Positive Correlation: A positive correlation coefficient of 0.217 was calculated between the implementation of Kayakalp and quality certification under NQAS, indicating some level of impact, though not substantial.(8) 3. Mixed Effectiveness: While Kayakalp has effectively promoted cleanliness and hygiene, its impact on overall quality certification under NQAS is less pronounced, suggesting the need for better integration and enhancement activities. 4. Need for Improvement: The study highlights the importance of ongoing assessment and evaluation of both Kayakalp and NQAS programs to ensure sustainability and improve healthcare quality, indicating that additional research and potential modifications are necessary to optimize their effectiveness in public health facilities.
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Chaudhary, Ankit; Mahajan, Anjali; Vijay; Gautam, Priyanka; Rattan, Saurabh; Chamotra, Shaina	Northern India State	82 District Hospital	Cross- sectional observational study	1. Focus on Biomedical Waste Management: The study assessed biomedical waste (BMW) management in a district hospital in northern India using the Kayakalp assessment tool, focusing on six key parameters including waste management, sanitation, and hygiene(9). 2. High Overall Score with Areas for Improvement: The hospital scored 82 out of 100 for BMW management, indicating generally effective practices but highlighting areas for improvement, such as sharps management. 3. Importance of Efficient BMW Management: The study underscores the critical role of efficient BMW management for public health and environmental safety, emphasizing the need for adherence to established protocols.(9) 4. Recommendation for Standardized Approach: The findings suggest that adopting a Kayakalp standardized approach can enhance service delivery by encouraging cleanliness, hygiene, and proper BMW management in healthcare facilities.
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Bikash Debbarma, Janani., Soubam Christina, Soram Goutam, Brogen Singh Akoijam	Imphal	103 tertiary care hospital	Cross- sectional study	1. Objective: The Kayakalp initiative, launched by the Government of India in 2015, aims to improve cleanliness, hygiene, and sanitation in public health facilities.(10) 2. Critical Barrier: A study in a tertiary care hospital in Imphal found that despite 63.1% of healthcare workers (HCWs) receiving training on hospital cleanliness, only 8.6% had adequate knowledge about Kayakalp and its guidelines, indicating a significant gap in awareness. 3. Importance of Training: Effective implementation of Kayakalp requires proper knowledge and active participation from HCWs. The study shows that adequate training in infection control and cleaning can significantly enhance hospital services.(10) 4. Enhanced Health Outcomes: The initiative aims to improve health outcomes by promoting a hygienic hospital environment, ensuring infection control, and patient safety. Continuous efforts and targeted training in sanitation and infection control are essential for better awareness and implementation, ultimately leading to higher standards in public health facilities.
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Javeed A. Golandaj, K. G Kallihal	Karnataka, Maharashtra, Chhattisgarh	295 Healthcare staff	Cross sectional	1. Objective: The study aims to assess the perceived impact of National Quality Assurance Standards (NQAS) accreditation on the quality of care in public hospitals in India.(11) 2. Methodology: A cross-sectional survey design was used to collect data from 295 healthcare staff across eight hospitals in Karnataka, Maharashtra, and Chhattisgarh, including three District Hospitals (DHs), one Community Health Center (CHC), and four Primary Health Centers (PHCs). 3. Positive Impact on Performance: The study found that NQAS certification positively impacted hospital performance, with high ratings for quality improvement (mean score 4.48, SD 0.42) and staff involvement (mean score 4.55, SD 0.38). PHCs generally scored the highest.(11) 4. Advantages of NQAS Accreditation: NQAS accreditation is perceived as an effective tool for enhancing the quality of healthcare, making public hospitals comparable to private ones, and improving patient outcome indicators. The majority of respondents were female (64%) and paramedical staff (68%).
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Shivaraj B Mallappa, Parvathy T Somaiah	Kodagu, Karnataka	50 District Hospital	Cross- Sectional Study	1. Objective: The study aims to assess the implementation of Swachh Bharat Abhiyaan's Swachhta guidelines at the Kodagu District Hospital in Madikeri, Karnataka, using the Kayakalp assessment tool(12). 2. Methodology: An observational cross-sectional study design was employed, involving direct observation, staff interviews, and reviewing records and documents. Compliance was categorized as fully compliant (2), partially compliant (1), and noncompliant (0). 3. Assessment Results: The Kodagu District Hospital scored 232 out of 500 (46.4%) in the assessment, revealing significant gaps in hospital upkeep (35%) and hygiene (26%), with moderate scores in sanitation (53%), biomedical waste management (57%), infection control (50%), and support services (48%). The performance was much lower compared to top-performing hospitals like PGIMER in Chandigarh.(12) 4. Recommendations: To improve the hospital's performance, the study suggests several measures, including private partnerships to enhance all evaluated areas. These steps could significantly boost the hospital's scores and overall cleanliness, ultimately providing better care to the public.
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Parvathy T Somaiah, Shivraj B M	Southern India	Government District Hospital	Cross- sectional Observational study	1. Objective: The study focuses on assessing biomedical waste (BMW) management at the District Hospital in Madikeri, Karnataka, using the Kayakalp assessment tool to evaluate compliance and effectiveness(13). 2. Importance of BMW Management: Effective biomedical waste management is crucial to protect healthcare workers, patients, the community, and the environment from the risk of infection and environmental harm. Global management varies, with developed countries managing large amounts of disposable items and developing countries often lacking proper infrastructure. 3. Study Results: The cross-sectional observational study revealed varying compliance levels: segregation (80%), collection and transport (50%), equipment and supplies (60%), statutory compliance (80%), sharps management (90%), storage (50%), disposal (60%), solid waste management (50%), and liquid waste management (60%). The overall score for the hospital was 57%, indicating significant room for improvement.(13) 4. Recommendations: To improve biomedical waste management, the study emphasizes enhancing the knowledge, attitudes, and practices of healthcare workers. The Kayakalp
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				assessment tool is highlighted as valuable for promoting higher standards of cleanliness and waste management in healthcare facilities across India.
Gunjan Patel	Northern India	District Hospital	Observational study	1. Objective: Total Quality Management (TQM) in healthcare aims to deliver high-quality services to patients affordably and efficiently, emphasizing zero-error principles and continuous error prevention.(14) 2. Key Strategies: TQM focuses on training healthcare employees to prevent errors, reduce delays, and respond quickly to patient needs, continuously improving processes to enhance care and achieve higher patient satisfaction. 3. Case Study: A study at a 150-bed tertiary care hospital demonstrated successful TQM application, showing improvements through top management commitment, enhanced employee involvement, and a focus on customer satisfaction. Challenges included reducing employee resistance to change and meeting the increasing demand for high-quality healthcare services.(14) 4. Integration with Six Sigma: Integrating Six Sigma methodologies into TQM practices helps reduce process variability and achieve near-perfect quality assurance, incorporating systematic quality planning, control, and improvement to

				meet specified healthcare standards.
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Ellenkil, Anitta Jose; Bhardwaj, Nitin Dutt; Mishra, Udai Bhasker		126 Health Facilities	Descriptive, Observational, Cross- Sectional Study	1. Objective: The study evaluates the compliance of a Neonatal Intensive Care Unit (NICU) in a tertiary care government teaching hospital with National Quality Assurance Standards (NQAS), focusing on service provision and identifying major gaps.⁽¹⁵⁾ 2. Methodology: The study employs a descriptive, observational, cross-sectional approach, collecting data through observation, staff interviews, and record review to assess NICU compliance. 3. Assessment Results: The NICU scored 65% in service provision with 29% major gaps identified, indicating areas needing improvement in quality management and outcomes.⁽¹⁵⁾ 4. Importance of NICU Quality: The NICU plays a crucial role in newborn care, necessitating a robust safety culture and ongoing quality improvement efforts involving healthcare professionals, researchers, and educators. 5. Use of Standardized Framework: The study underscores the importance of using standardized frameworks like NQAS to assess and improve NICU quality, emphasizing the need to address identified gaps to enhance patient care and overall healthcare facility performance.
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Research Gap-

The implementation of Kayakalp, Under the “Swachh Bharat Abhiyan” has been widely studied for effectiveness in improving cleanliness, infection control and hygiene practices in various healthcare settings across India, including district hospitals and some primary health centres. However, there lack of specific research focusing on its impact specifically within Urban Primary Health Centers (UPHCs) in Rajasthan, particularly concerning the attainment of Nation Quality Assurance Standards (NQAS) certification.

The current research has not sufficiently addressed how the Kayakalp initiative impacts UPHCs to meet NQAS standards. It is essential to understand whether Kayakalp’s focus on cleanliness and hygiene can effectively support UPHCs in achieving quality benchmarks.

UPHCs play an important role in being the first line of healthcare givers in the urban setting. Acts implemented through UPHCs function in specific patterns of urbanism that can affect the efficacy and results of programs such as Kayakalp and NQAS.

This study aims to contribute towards the existing research by describing how kayakalp certification affects the achievement of NQAS standards in UPHCs in Rajasthan. Therefore, by investigating the UPHCSs working in a particular healthcare environment, the study will expand the current theoretical knowledge concerning these organizations as they operate in urban contexts.

Chapter:3

Objective and Methodology

Research Question-

How does the implementation of the Kayakalp initiative influence the attainment of NQAS certification in Urban Primary Health Centers (UPHCs) in Rajasthan

Objective-

- To study the overall framework of Kayakalp and NQAS programme
- To explore the relationship between Kayakalp and NQAS
- To analyse the impact of Kayakalp on NQAS certification

Hypothesis-

Examining the relationship between the Kayakalp initiative on NQAS certification in urban primary health centers.

Null Hypothesis (H0): There is no significant relationship between the KAYAKALP initiative and NQAS certification in Urban Primary Health Centers (UPHCs).

Alternative Hypothesis (H1): There is a significant relationship between the KAYAKALP initiative and NQAS certification in Urban Primary Health Centers (UPHCs).

Assessing the impact of the Kayakalp initiative on NQAS certification attainment.

Null Hypothesis (H0): The KAYAKALP initiative is not significantly helpful in achieving NQAS certification.

Alternative Hypothesis (H1): The KAYAKALP initiatives significantly contributes to the attainment of NQAS certification.

Material and Methods-

1. Study tool-

This study constitutes a mixed-method approach of both qualitative and quantitative data analysis. The study will use a mixed-method approach with predefined checklists, questionnaires and interview guides. Qualitative interviews will be conducted in adherence to professional standards and ethical guidelines governing staff conduct.

2. Sample Size-

The estimated sample size is 10 UPHCs, determined by healthcare professionals' adequate response.

3. Sampling Technique-

A random sampling technique has been used

4. Data Collection Procedure -

The data will be collected through interviews with healthcare professionals.

5. Operational Definition-

- National Quality Assurance Standards (NQAS)- The National Quality Assurance Standards (NQAS) is an initiative in India aimed at enhancing healthcare quality by providing certification to healthcare facilities that meet specific quality criteria.
- Kayakalp- The kayakalp initiative is a government program launched in 2015 that promotes cleanliness, hygiene and infection control in public healthcare facilities. It recognises and incentivises facilities that excel in these areas

6. Ethical Consideration-

Before starting any part of the research, permission was sought from NHM Medical Health and Family Welfare Jaipur, Rajasthan and the UPHCs being visited. Ensuring the necessary paperwork is in order is important to show authorization for the research.

All gathered information will be kept private, and the personal details will not be shared in order to protect the confidentiality of participants.

Every individual encountered during the research will be treated with respect and sensitivity care will be taken to ensure that interactions are conducted in a manner that respects the dignity and comfort of all participants cultural sensitivities will be acknowledged and respected throughout the research paper

Before engaging with anyone or accessing any information, the researcher will ensure that participants understand the purpose of the research and agree to participate voluntarily.

The research aims to gather insights to improve healthcare. Measures will be taken to prevent any harm to participants.

Transparency: - All research activities will be conducted transparently, and any potential biases or limitations will be acknowledged. Findings will be communicated clearly and understandably.

Implications of the research-

- Obtain a list of certified UPHCs from the pertinent authorities.
- Randomly select UPHCs from the compiled list.
- Collect qualitative data utilizing a pre-defined checklist, questionnaires and indicators, along with structured interview analysis.
- Employ thematic analysis to discern key themes and patterns within the qualitative data.
- Secure informed consent from all participants, ensuring comprehension of the study's objectives and procedures.
- Maintain strict confidentiality protocols to safeguard the privacy of collected data throughout the duration of the study.

Chapter: 4

Result

Data Analysis and Interpretation

The data analysis and interpretation show the Kayakalp initiative on attaining NQAS certification in Rajasthan's randomly selected Urban Primary Health Centers (UPHCs). The study involves a mixed-method approach to provide a comprehensive understanding of the relationship and impact of the initiative.

Data collection tool designs are based on the protocols and checklist from kayakalp and NQAS frameworks. These tools are carefully created to gather all necessary data relevant to the study goals. With these protocols, the data collection process is systematic which improves the reliability and validity of the data collection

For the Quantitative data analysis, Excel will filter and the data according to specific questions. The data will be organized and analyzed to calculate the percentage of responses for various aspects such as cleanliness, hygiene practices and infection control. The analysis will be visually represented using pie charts to provide a clear and immediate understanding of the distribution of responses.

Additionally, the self-assessments of the organization use LIKERT SCALE where responses will range from 1 to 10 with 1 indicating “Not helpful” and 10 indicating “Very much helpful” Analysis be visually represented using bar chat of clear understanding of self-assessment how much kayakalp help in achieving in NQAS certification.

Qualitative data from interviews with healthcare professionals be analysed to understand the history and journey of how they achieved kayakalp and NQAS certification. The interview will explore the perceptions of cleanliness, improvements in hygiene practices, and challenges faced while implementing kayakalp. This analysis will provide deeper insights into the experiences and perspectives of healthcare professionals.

The interpretation of the results will focus on assessing whether the Kayakalp initiative significantly contributed to the attainment of NQAS certification in UPHCs in Rajasthan. The data analysis and interpretation ensure evidence-based conclusions on the effectiveness of the kayakalp initiatives in improving healthcare quality standards in Rajasthan UPHCs

Does your Hospital/ Health Facility have a Pest Control System?

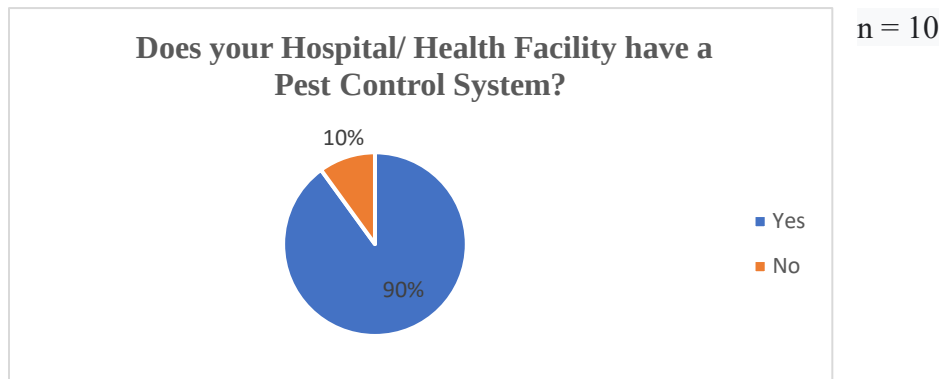


Fig: 2.1

Facility Responses Regarding Contribution to NQAS Certification

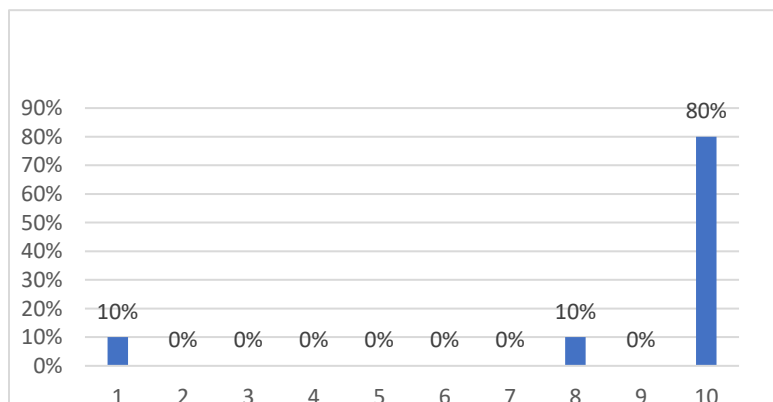


Fig: 2.2

Figure 2.1 illustrates that 90% of Urban Primary Health Centers (UPHCs) have pest control systems, while 10% do not.

Figure 2.2 shows pest control Contribution to NQAS Certification, 80% of UPHCs rated themselves as 10, 10% rated themselves as 8 and the remaining 10% rated themselves as 1.

Does the hospital have a proper uniform signage system in the health facility?

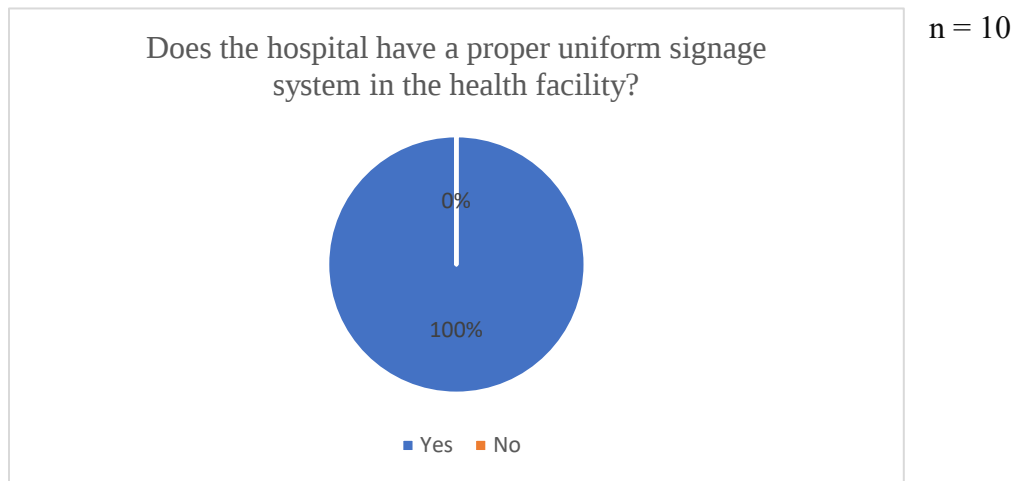


Fig: 3.1

Facility Responses Regarding Contribution to NQAS Certification

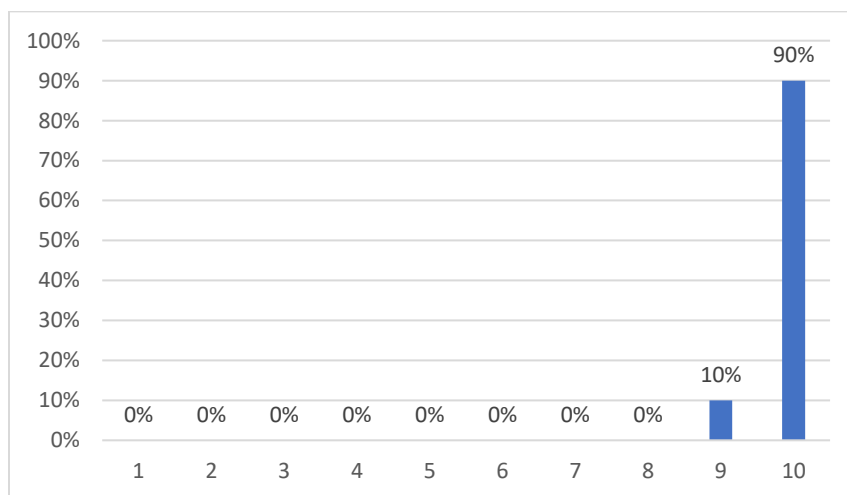


Fig3.2

Figure 3.1 illustrates that 100% of Urban Primary Health Centers (UPHCs) have proper signage.

Figure 3.2 shows the signage system Contribution to NQAS Certification, 90% of UPHCs rated themselves as 10, 10% rated themselves as 9

Is the hospital/ Health facility equipped with a functional rainwater harvesting system?

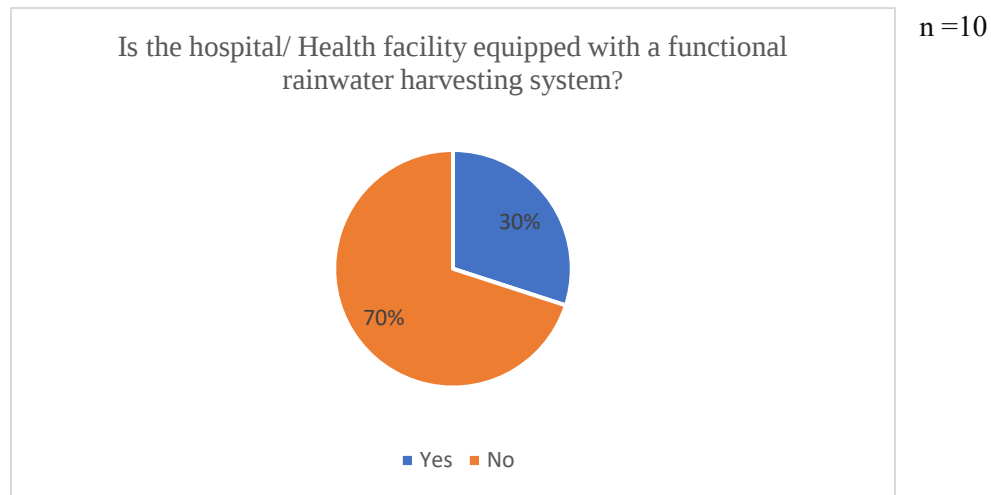


Fig: 4.1

Facility Responses Regarding Contribution to NQAS Certification

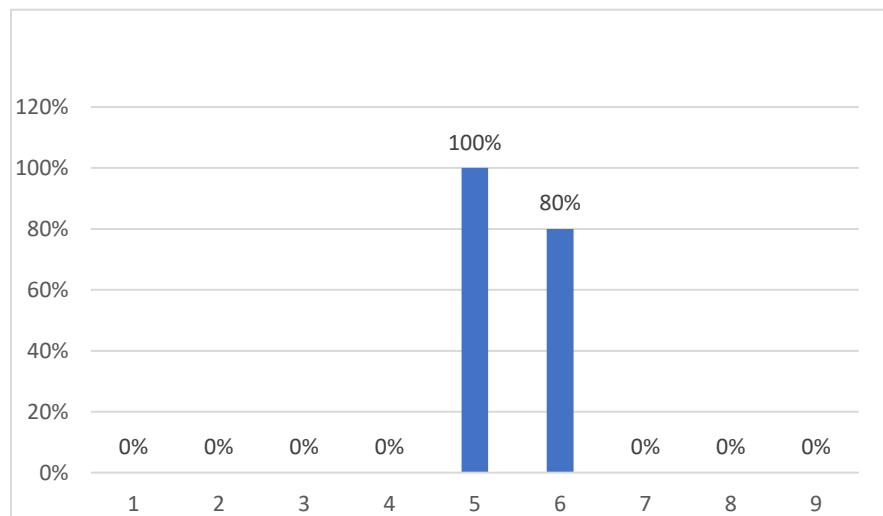


Fig: 4.2

Figure 4.1 shows that 30% of healthcare facilities have a functional rainwater harvesting system, whereas 70 % of healthcare facilities do not have a rainwater harvesting system.

Does the hospital use energy-saving bulbs like CFLs or LEDs and backup lighting for power outages or crises?

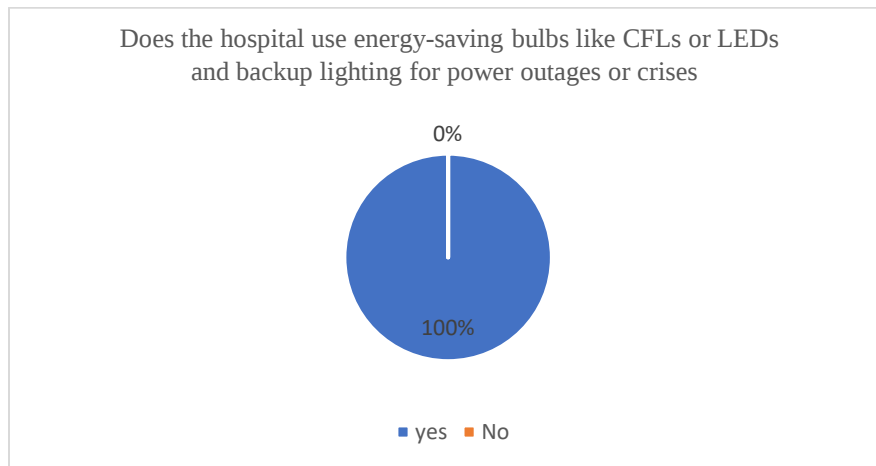


Fig:5.1

Facility Responses Regarding Contribution to NQAS Certification

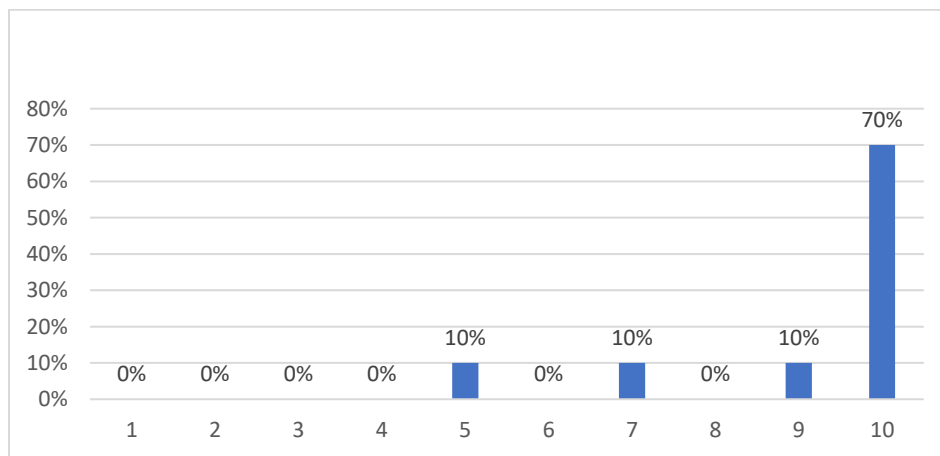


Fig:5.2

Figure 5.1 shows that all healthcare facilities use energy-saving bulbs like CFLs or LEDs and have backup lighting for power outages or crises

Figure 5.2 70% of UPHCs rated themselves as 10, 10% as 9, and 20% as 7 and 5.

Does your hospital or health facility have separate clean toilets for males and females, as well as disabled-friendly toilets equipped with running water?

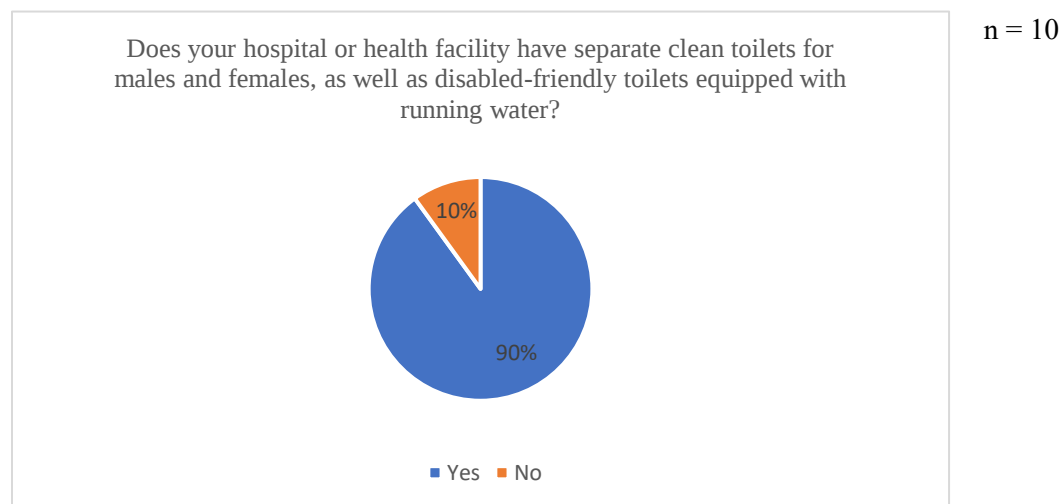


Fig:6.1

Facility Responses Regarding Contribution to NQAS Certification

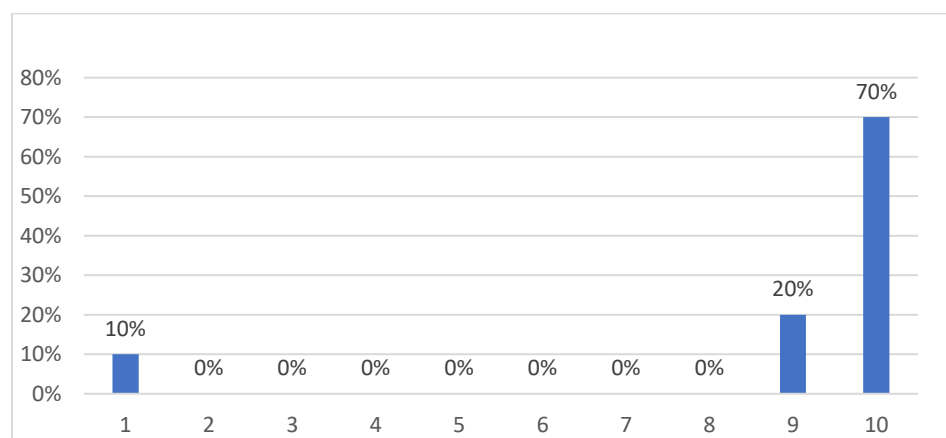


Fig:6.2

Figure 6.1 illustrate that 90% of healthcare facilities have separate clean toilets for males and females, as well as disabled-friendly toilets equipped with running water, while 10% do not meet these standards.

Figure 6.2 shows that 70% of UPHCs rated themselves as 10, 20% rated themselves as 9, and the remaining 10% rated themselves as 1.

Is there a sewage treatment plant (STP) in place at your Hospital/ Health Facility to manage drainage and sewerage effectively?

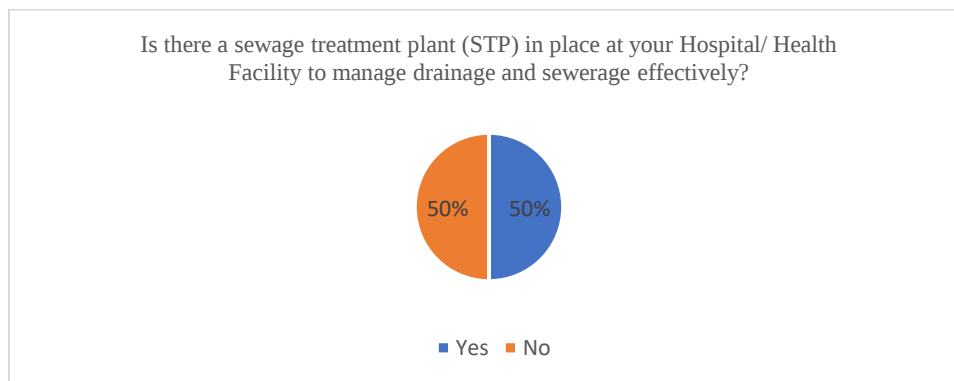


Fig: 7.1

Facility Responses Regarding Contribution to NQAS Certification

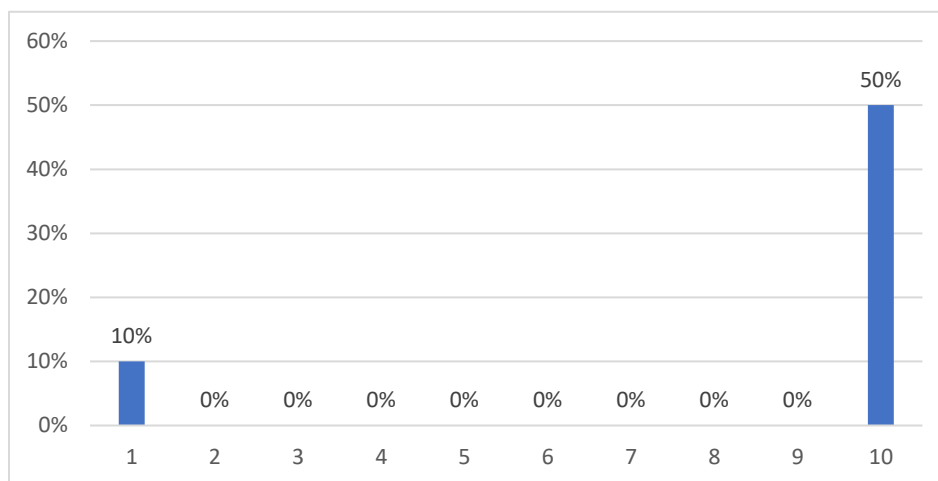


Fig:7.2

Figure 7.1 illustrates that 50% of healthcare facilities have a proper sewage treatment plant (STP) in place to manage drainage and sewerage effectively, while 50% do not have an STP.

Figure 7.2 shows that 50% of UPHCs rated themselves as 10, and 10% rated themselves as 1.

Does your facility provide cleaning solutions for maintaining cleanliness and utilize a three-bucket system for cleaning purposes?

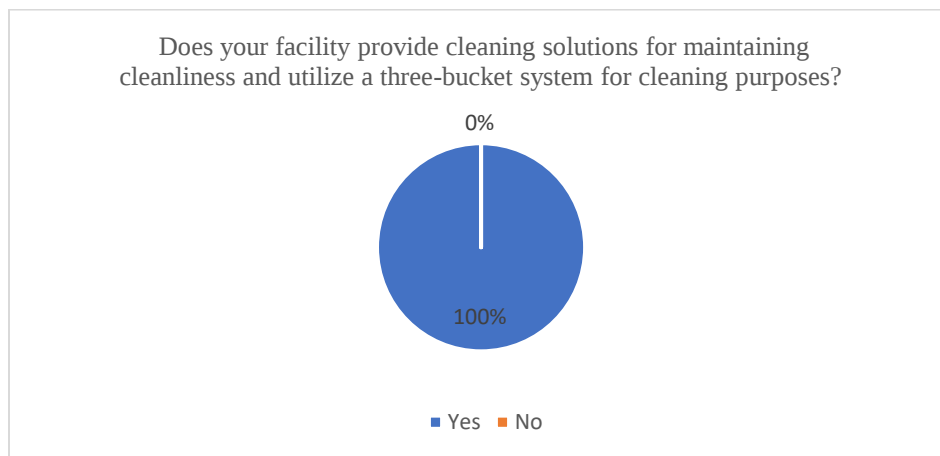


Fig:8.1

Facility Responses Regarding Contribution to NQAS Certification

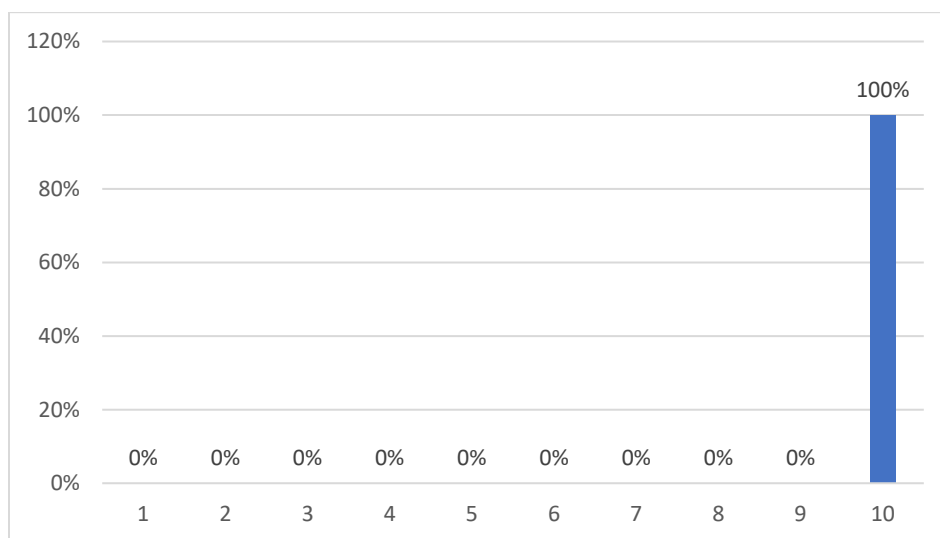


Fig: 8.2

Figure 8.1 illustrates that all healthcare facilities provide cleaning solutions for maintaining cleanliness and utilize a three-bucket system for cleaning purposes,

Figure 8.2 shows that 100% of UPHCs rated themselves as 10.

Has the facility been authorized to adhere to the Biomedical Waste Management Rules of 2016?

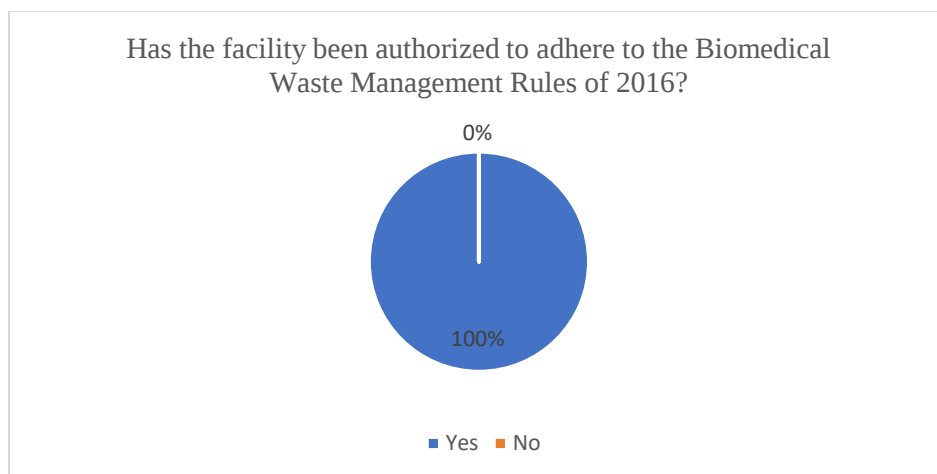


Fig: 9.1

Facility Responses Regarding Contribution to NQAS Certification

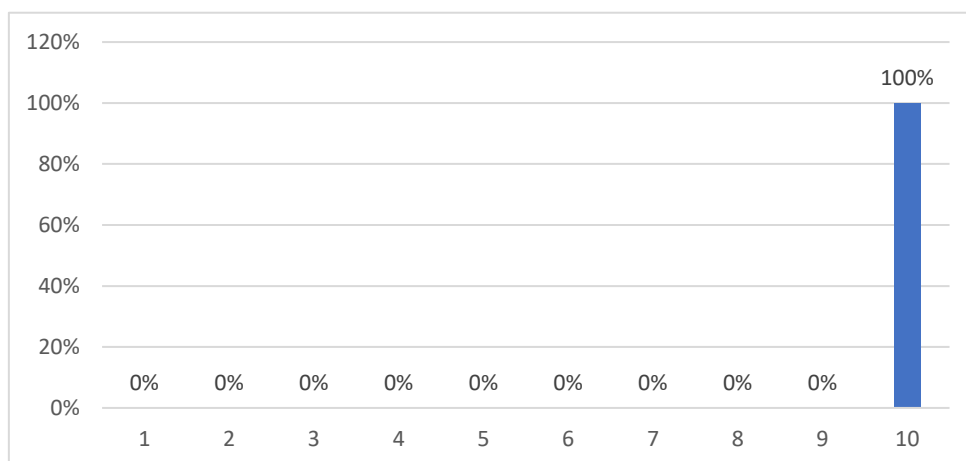


Fig: 9.2

Figure 9.1 illustrates that all healthcare facilities are authorized to adhere to the Biomedical Waste Management Rules of 2016

Figure 9.2 shows that 100% of UPHCs rated themselves as 10.

Does your facility keep records to show it works with a Central Biomedical Waste Treatment Facility (CBWTF) for disposing of waste?

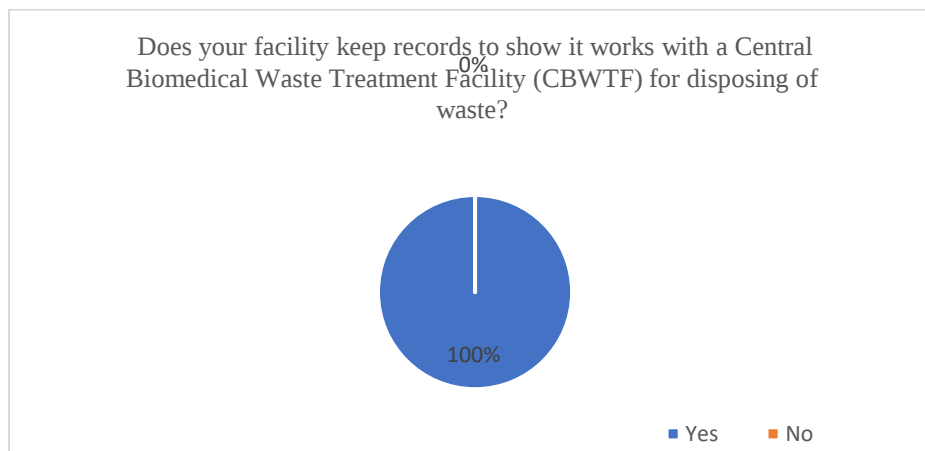


Fig 10.1

Facility Responses Regarding Contribution to NQAS Certification

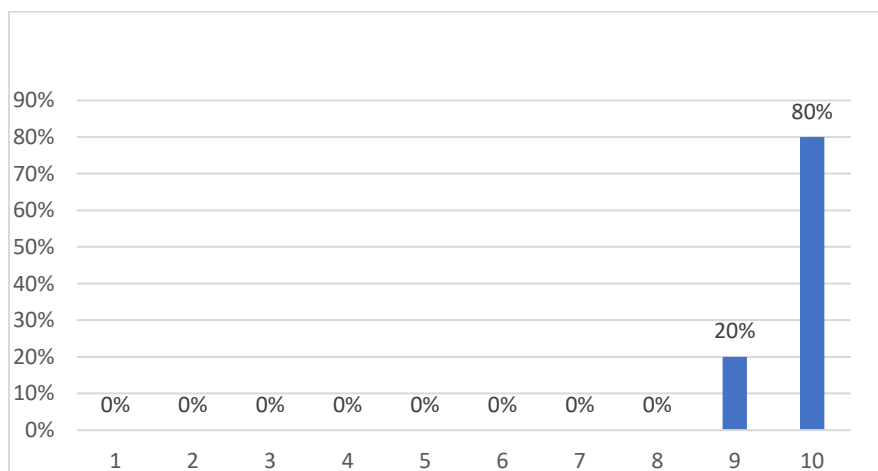


Fig: 10.2

Figure 10.1 illustrates that all healthcare facilities maintain proper records indicating they work with a Central Biomedical Waste Treatment Facility (CBWTF) for waste disposal.

Figure 10.2 shows that 80% of UPHCs rated themselves as 10, and 20% rated themselves as 9.

Do Health facilities use different types of waste bags to contain biomedical waste? (Black (General waste with the same lines, yellow and red bins with the same liners, Blue and White Puncture – proof containers)

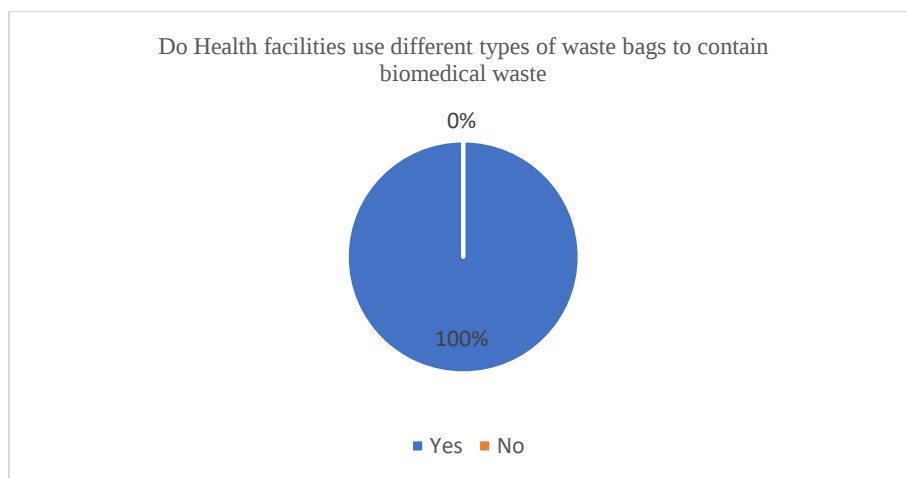


Fig:11.1

Facility Responses Regarding Contribution to NQAS Certification

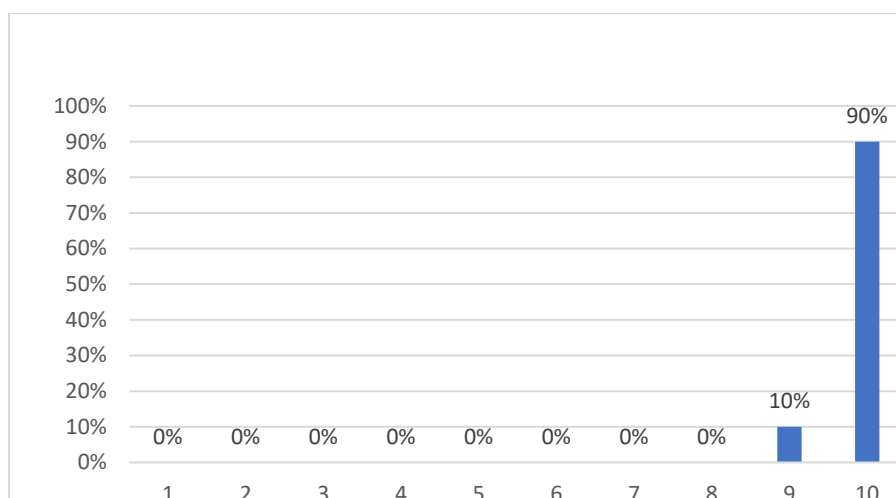


Fig:11.2

Figure 11.1 illustrates that 100% healthcare facilities use different types of waste bags to contain biomedical waste.

Figure 11.2 shows that 90% of UPHCs rated themselves as 10, 10% rated themselves as 9

Does the staff adhere to the 6 steps of hand washing and hand movements?

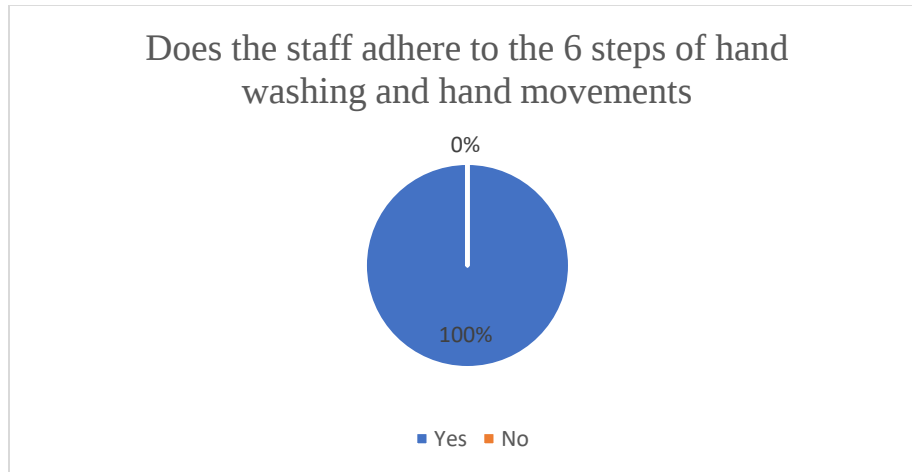


Fig: 12.1

Facility Responses Regarding Contribution to NQAS Certification

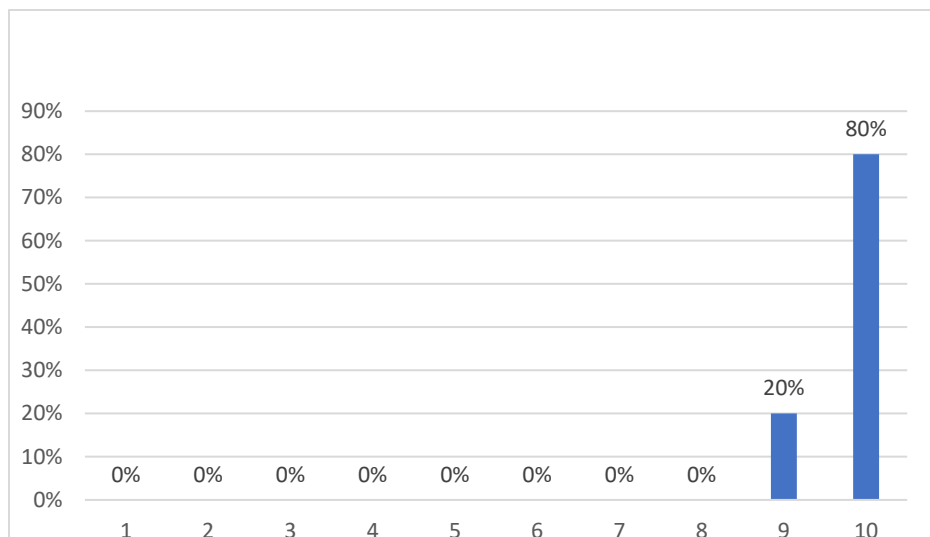


Fig:12.2

Figure 12.1 illustrates that 100% of healthcare staff adhere properly to the 6 steps of hand washing and hand movements.

Figure 12.2 shows that 80% of UPHCs rated themselves as 10, 20% rated themselves as 9

Are staff members trained in preparing cleaning solutions or autoclave machines are available for instruments?

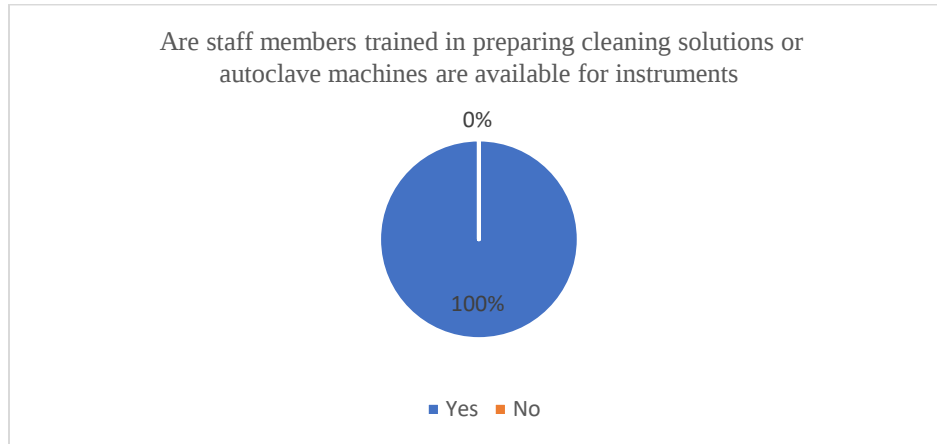


Fig: 13.1

Facility Responses Regarding Contribution to NQAS Certification

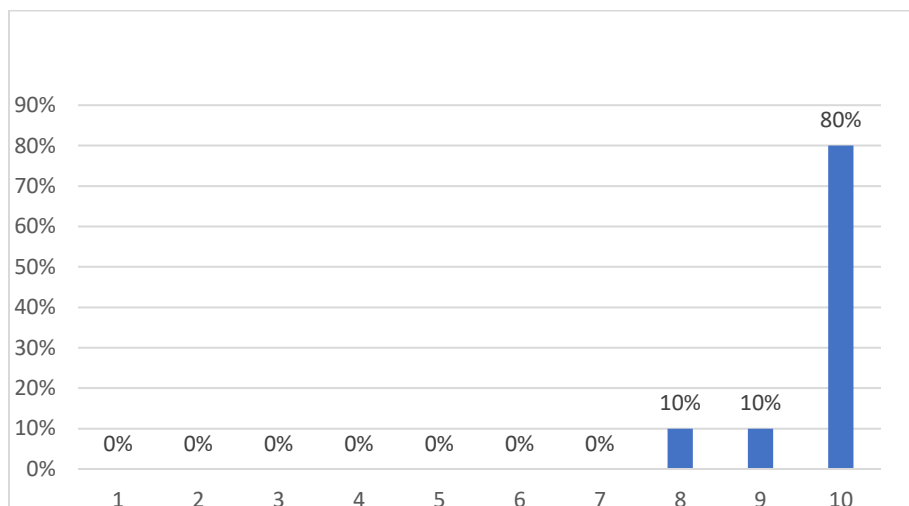


Fig13.2

Figure 13.1 illustrates that 100% of healthcare facilities have proper training for staff in preparing cleaning solutions or have autoclave machines available for instruments.

Figure 13.2 shows that 80% of UPHCs rated themselves as 10, 10% rated themselves as 9, and the remaining 10% rated themselves as 8.

Are staff members aware of the Personal Protective Equipment (PPE) and Post-Exposure Prophylaxis (PEP) protocols in place within the health facility?

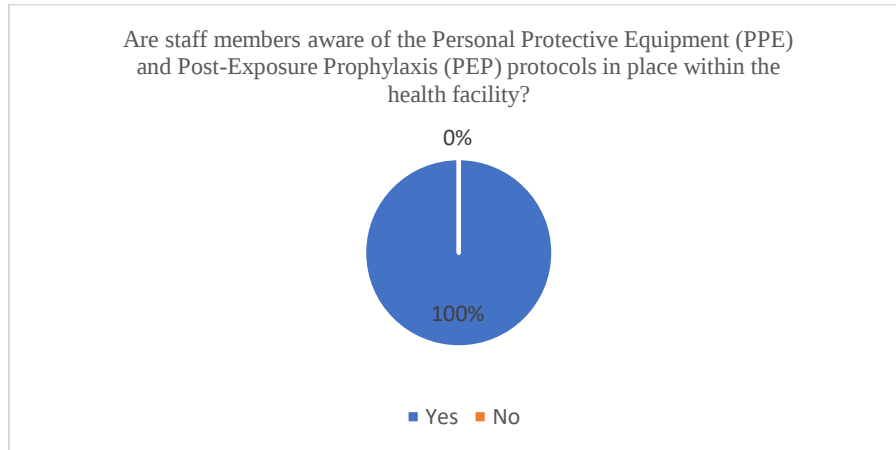


Fig14.1

Facility Responses Regarding Contribution to NQAS Certification

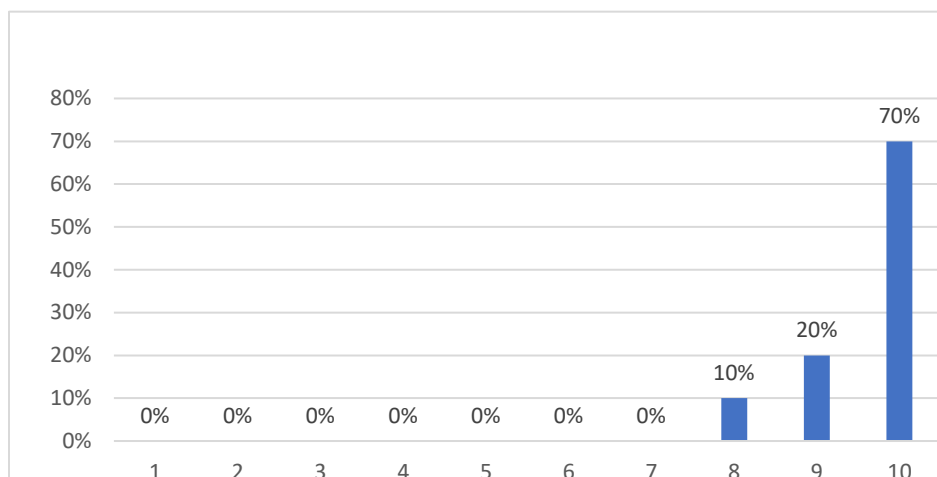


Fig: 14.2

Figure 14.1 illustrates that 100% of staff members know the Personal Protective Equipment (PPE) and Post-Exposure Prophylaxis (PEP) protocols within the health facility.

Figure 14.2 shows that 70% of UPHCs rated themselves as 10, 20% rated themselves as 9, and the remaining 10% rated themselves as 8.

Is there availability of spill management (Blood spill, Mercury spill etc.) kits within the Health facility?

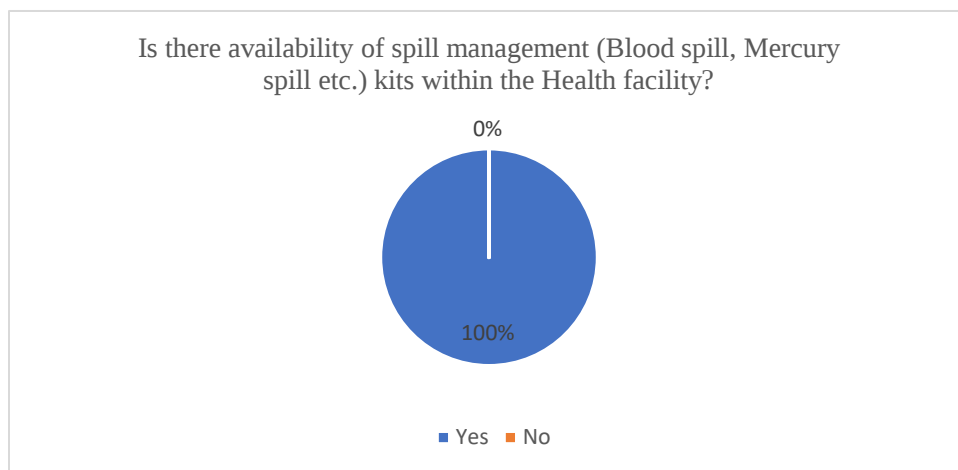


Fig: 15.1

Facility Responses Regarding Contribution to NQAS Certification

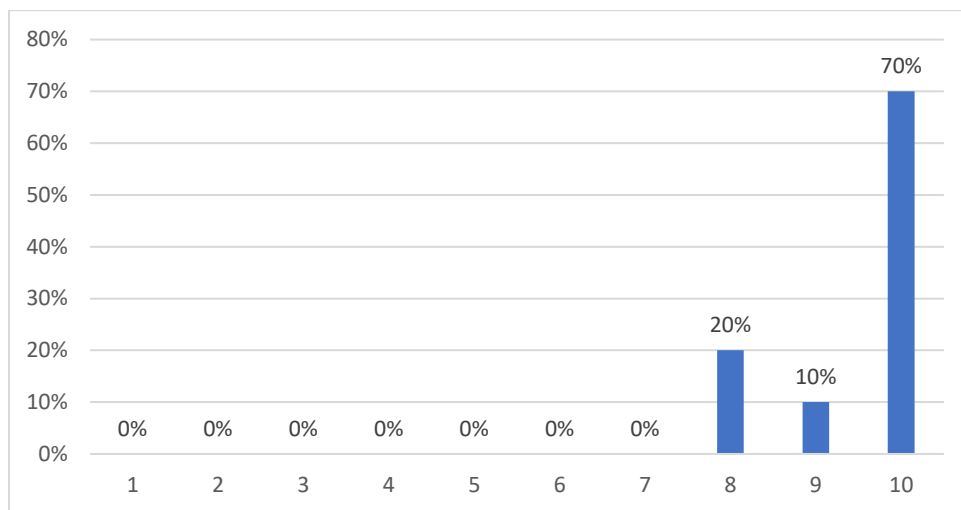


Fig15.2

Figure 15.1 illustrates that 100% of healthcare facilities have proper spill management kits (Blood spill, Mercury spill, etc.) available.

Figure 15.2 shows that 70% of UPHCs rated themselves as 10, 10% rated themselves as 9, and the remaining 20% rated themselves as 8.

How frequently do you conduct inspections to ensure that linens such as bedsheets, tablecloths, curtains, etc., are spotless and clean?

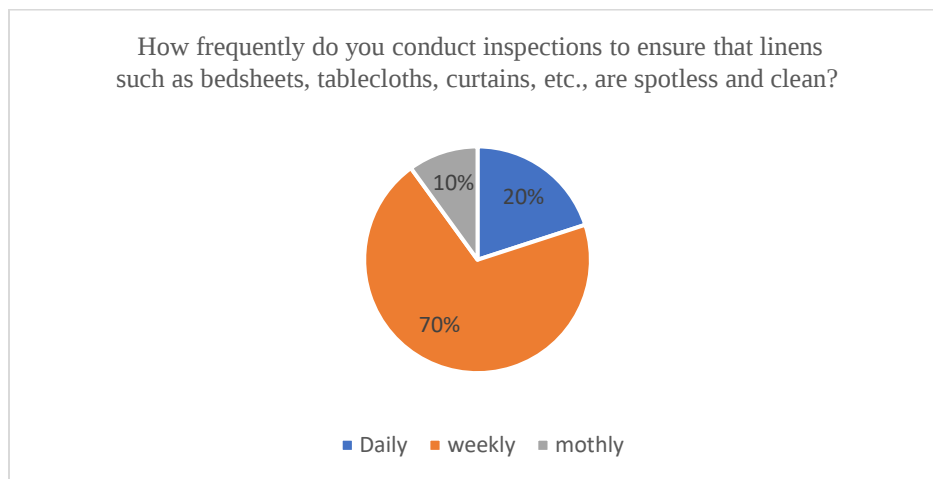


Fig16.1

Facility Responses Regarding Contribution to NQAS Certification

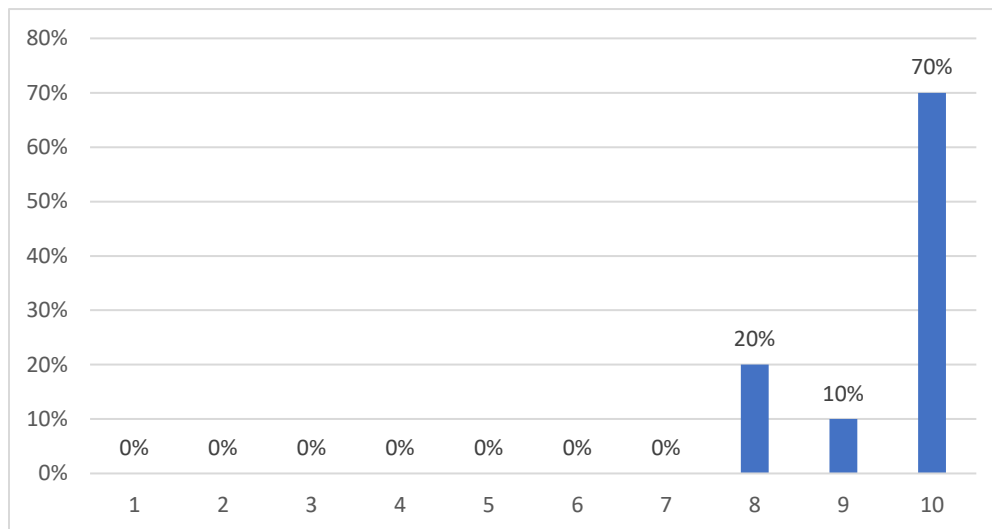


Fig: 16.2

Figure 16.1 illustrates that 70% of facilities conduct regular inspections to ensure that linens such as bedsheets, tablecloths, curtains, etc., are spotless, maintaining high standards of hygiene and 30% of facilities conduct a partial inspection

Figure 16.2 shows that 70% of UPHCs rated themselves as 10, 10% rated themselves as 9, and the remaining 20% rated themselves as 8

Is there a comprehensive fire safety protocol established within the health facility and facility that has fire NOC?

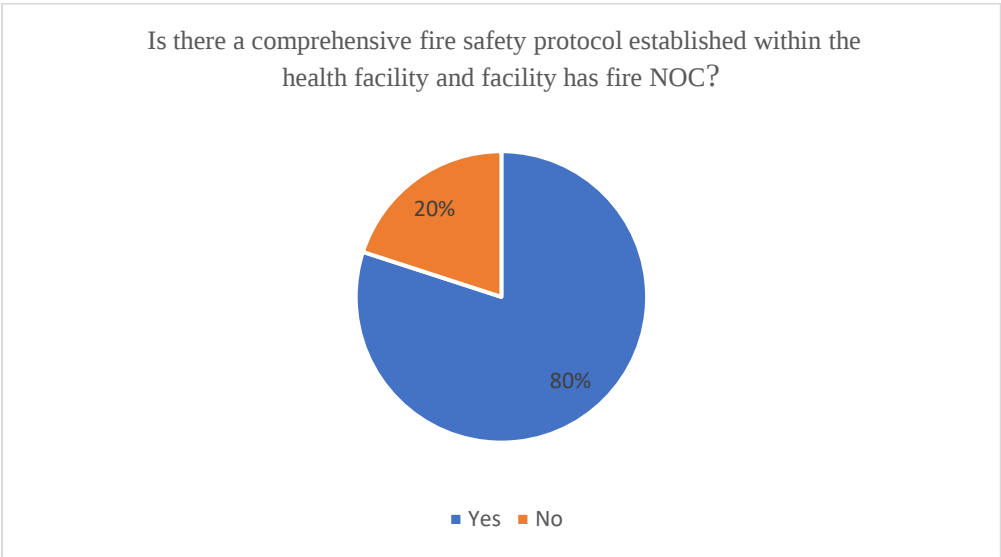


Fig: 17.1

Facility Responses Regarding Contribution to NQAS Certification

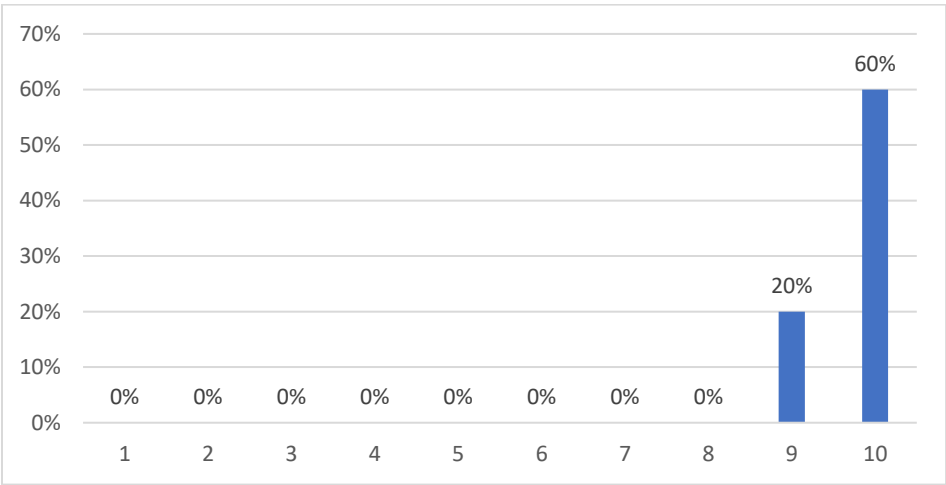


Fig: 17.2

Figure 17.1 illustrates that 80% of facilities have a comprehensive fire safety protocol established and have obtained a fire NOC and 20% of facilities have a partially established fire safety protocol and may not have obtained a fire NOC

Figure 17.2 shows that 60% of UPHCs rated themselves as 10, and 20% rated themselves as 9.

Is there a seismic safety protocol established within the health facility and facility have NOC?

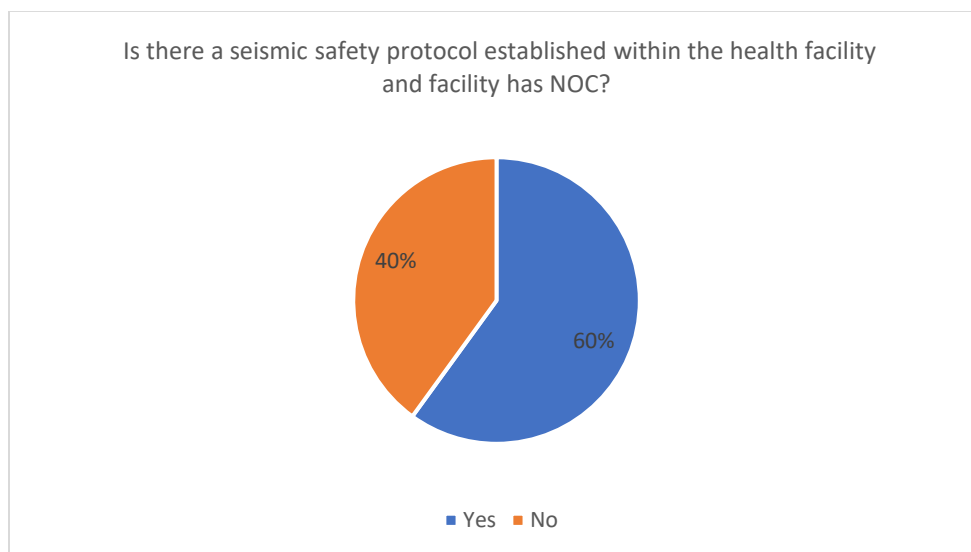


Fig:18.1

Facility Responses Regarding Contribution to NQAS Certification

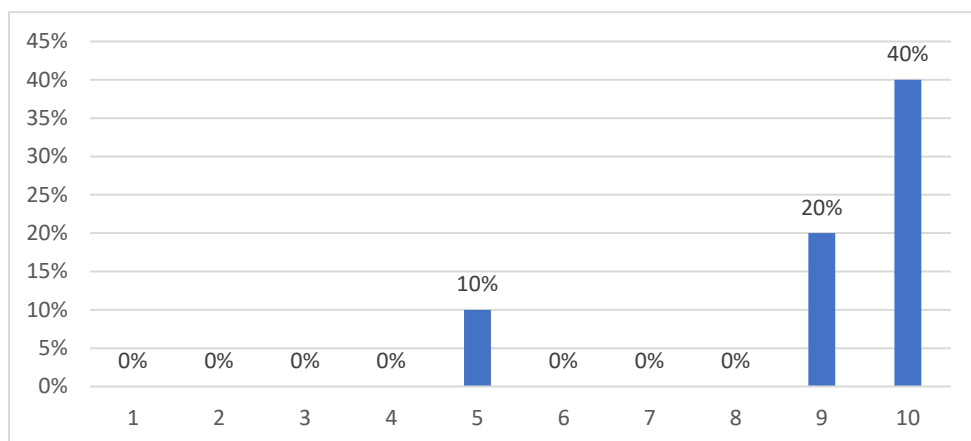


Fig: 18.2

Figure 18.1 illustrates that 60% of health facilities have a proper seismic safety protocol established and have obtained the necessary NOC and 40% of health facilities do not have a seismic safety protocol in place or have not obtained the required NOC 40% of UPHCs rated themselves as 10

Figure 18.2 shows that 20% rated themselves as 9 and 10% rated themselves as 5

Does the healthcare facility involve local community leaders in hygiene promotion efforts?

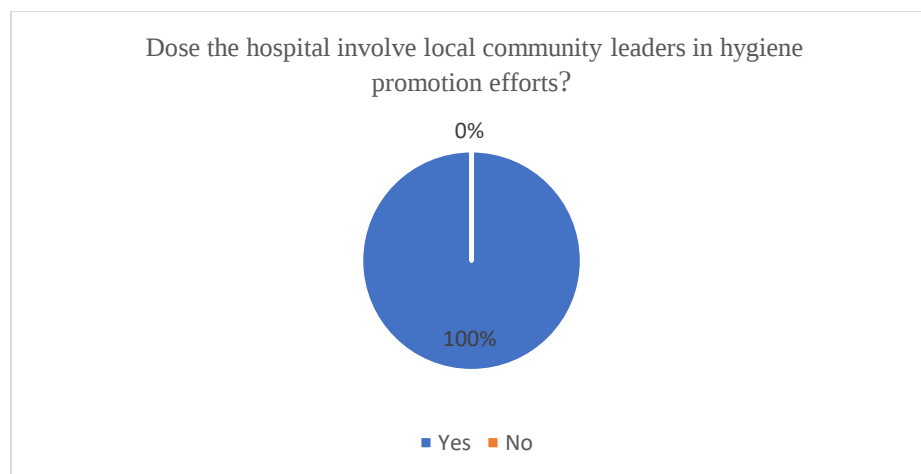


Fig:19.1

Facility Responses Regarding Contribution to NQAS Certification

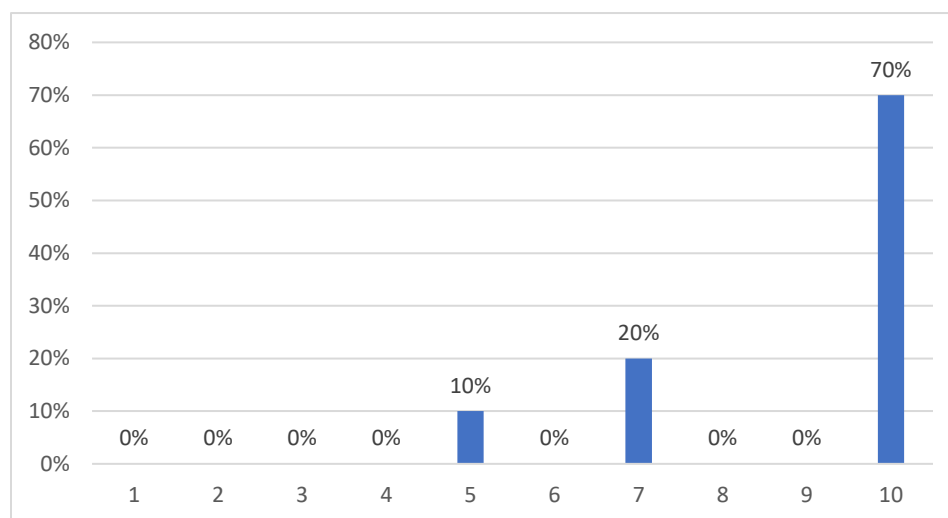


Fig:19.2

Figure 19.1 illustrates 100% of healthcare facilities have proper involvement of local community leaders in hygiene promotion efforts

Figure 19.2 shows 70% of UPHCs rated themselves as 10, 20% rated themselves as 7 and 10% rated themselves as 5

Are patient rights and responsibilities visibly displayed within the health facility, including Information, Education, and Communication (IEC) material specifically addressing their roles and responsibilities?

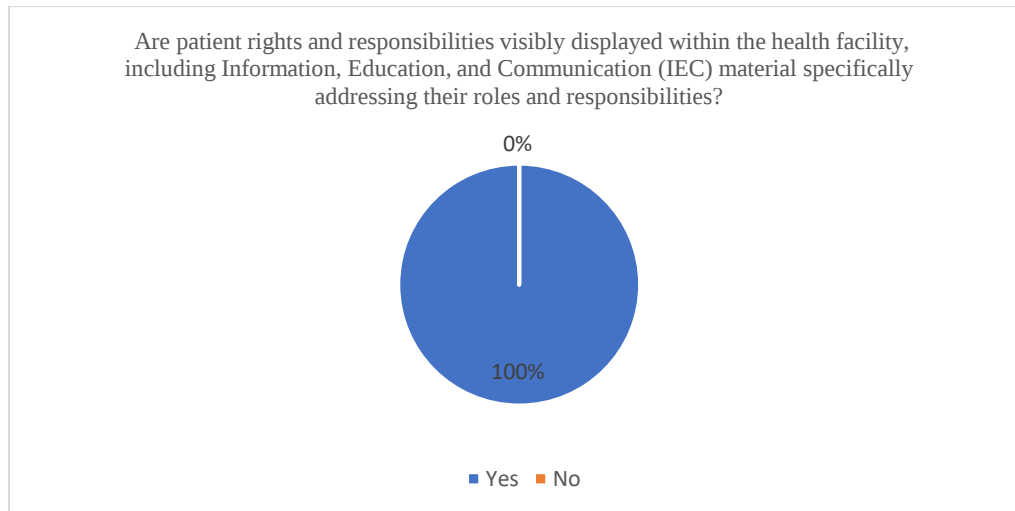


Fig: 20.1

Facility Responses Regarding Contribution to NQAS Certification

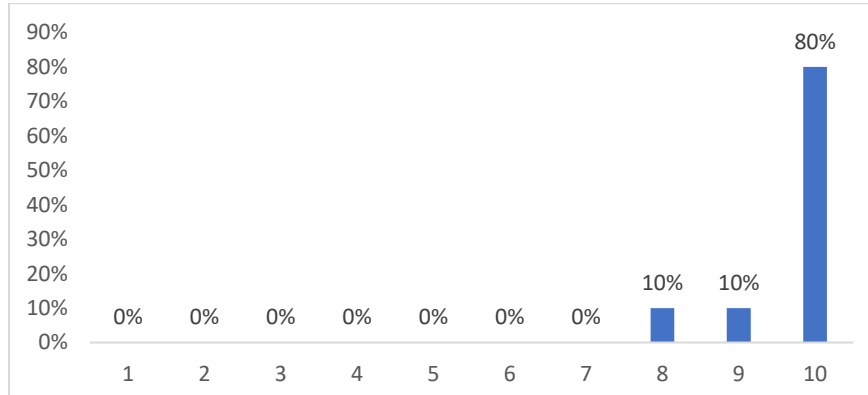


Fig:20.2

Figure 20.1 illustrates that 100% of health facilities have patient rights and responsibilities visibly displayed, including Information, Education, and Communication (IEC) material specifically addressing patients' roles and responsibilities

Figure 20.2 shows 80% of UPHCs rated themselves as 10, 10% rated themselves as 9 and 10% rated themselves as

Does the centre have a dress code policy in place for all cadre of staff, including Mid-Level Healthcare Providers and other health workers?

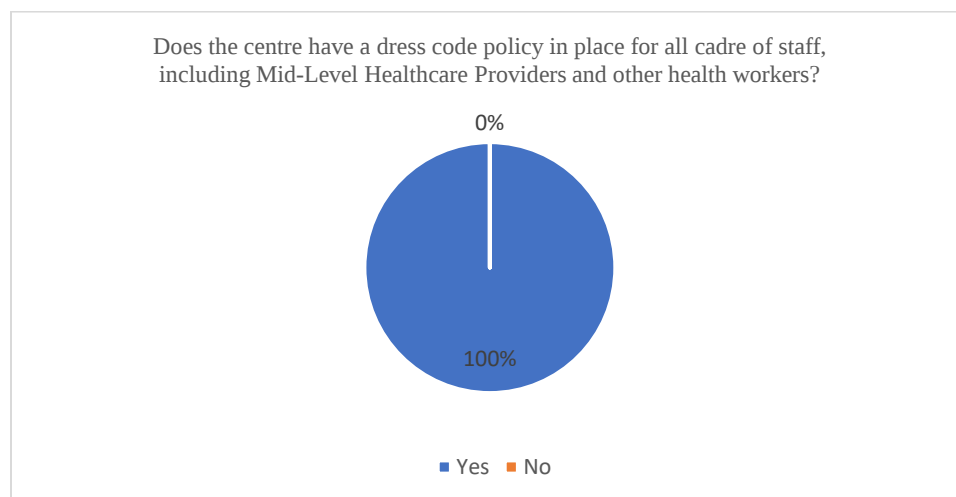


Fig: 21.1

Facility Responses Regarding Contribution to NQAS Certification

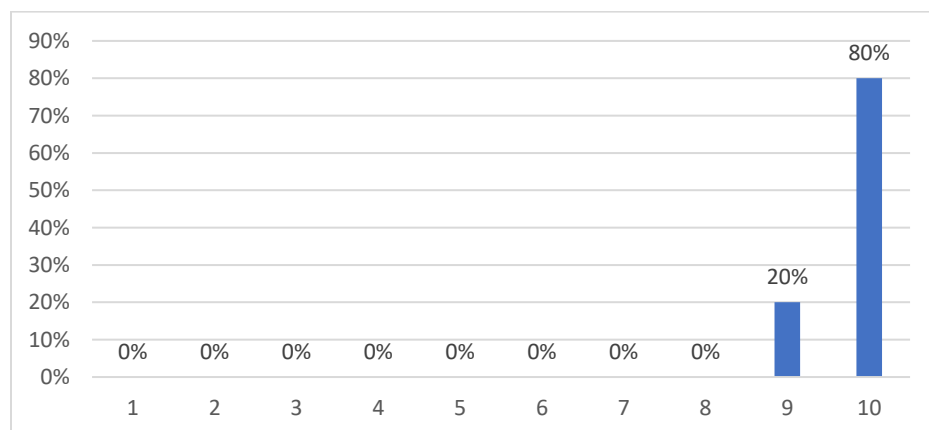


Fig: 21.2

Figure 21.1 illustrates that 100% of health facilities have a dress code policy in place for all cadre of staff, including Mid-Level Healthcare Providers and other health workers

Figure 21.2 shows 80% of UPHCs rated themselves as 10, 20% rated themselves as 9

Does the facility coordinate with the local NGOs and other departments civil, electricity board, Nagar Nigam etc to improve sanitation and hygiene?

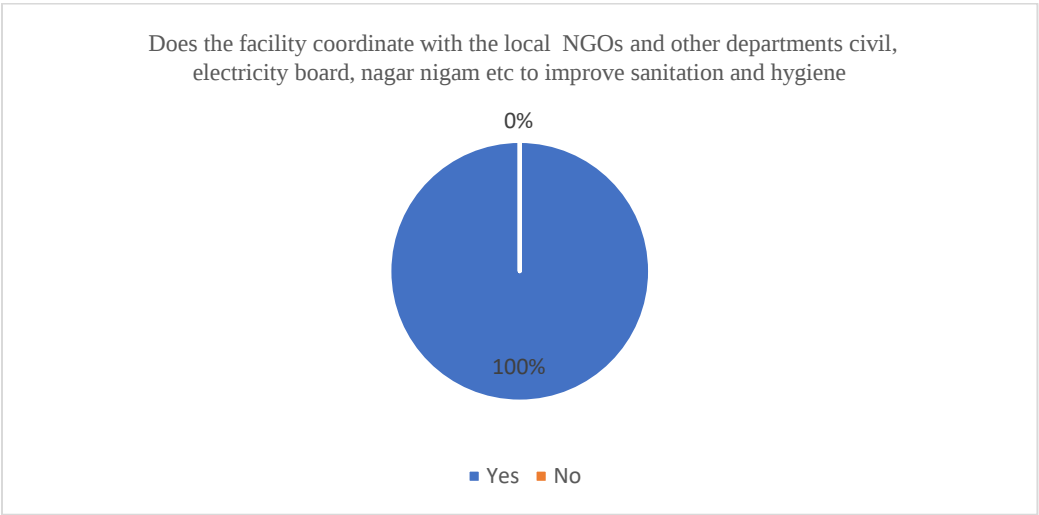


Fig:22.1

Facility Responses Regarding Contribution to NQAS Certification

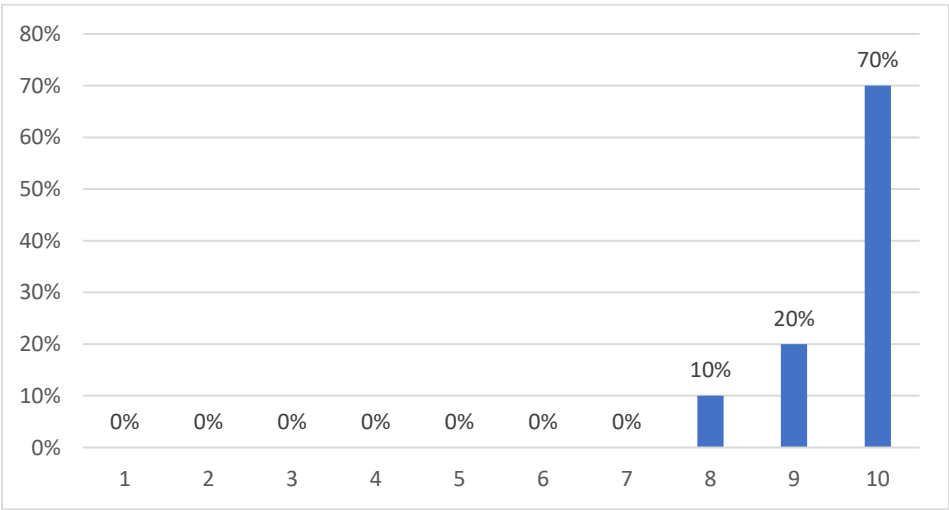


Fig: 22.2

Figure 22.1 illustrates that 100% of facilities coordinate effectively with local NGOs and other departments such as civil, electricity board, Nagar Nigam, etc., to improve sanitation and hygiene practices

Figure 22.2 shows 70% of UPHCs rated themselves as 10, 20% rated themselves as 9 and 10% rated themselves as 8

Are public toilets and general waste bins available in the surrounding area of the hospital or facility?

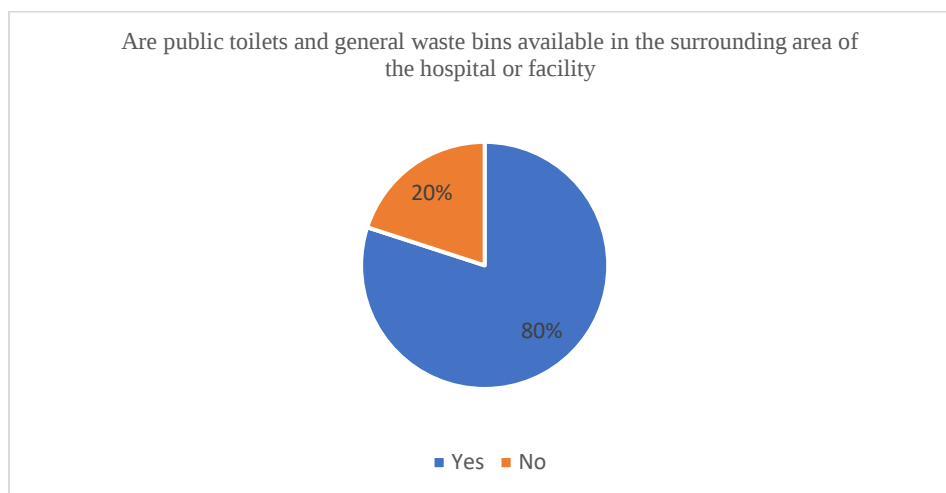


Fig:23.1

Facility Responses Regarding Contribution to NQAS Certification

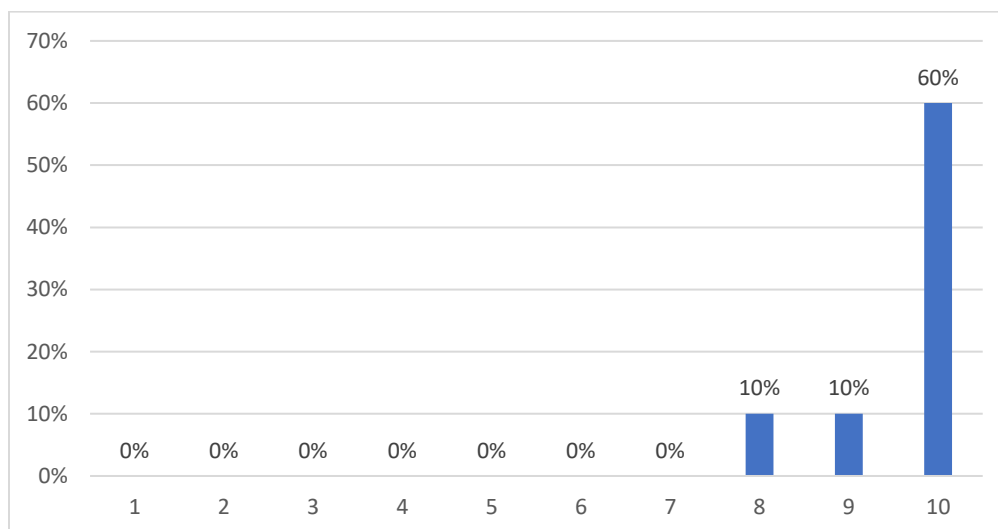


Fig: 23.2

Figure 23.1 illustrates 80% of healthcare facilities have public toilets and general waste bins available in their surrounding areas and 20% of healthcare facilities do not have public toilets and general waste bins in their surrounding areas.

Figure 23.2 shows 60% of UPHCs rated themselves as 10, 10% rated themselves as 9 and 10% rated themselves as 8

Is the health facility strictly adhering to a no-smoking policy by the COTPA Act 2003?

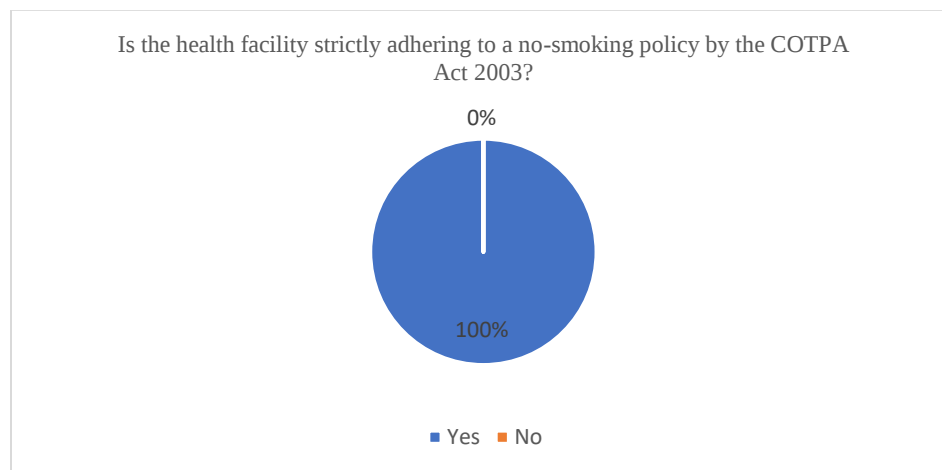


Fig: 24.1

Facility Responses Regarding Contribution to NQAS Certification

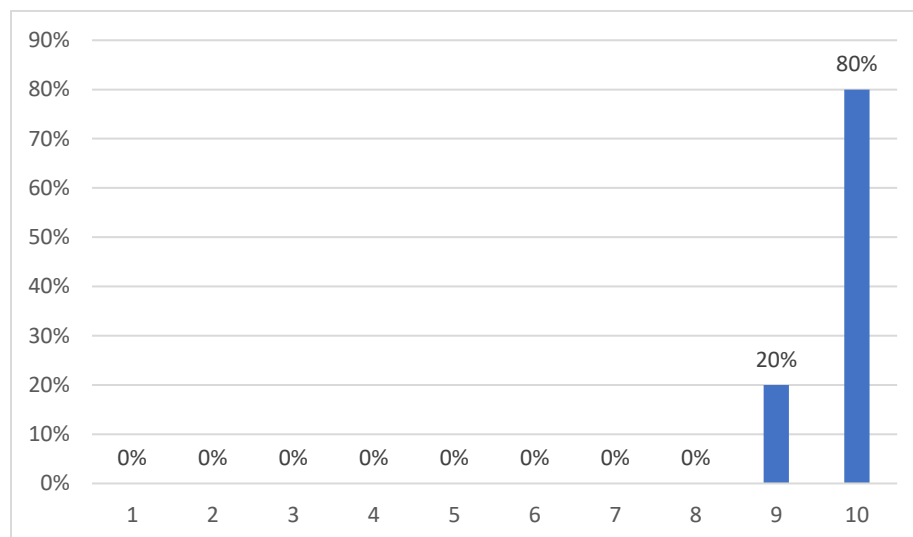


Fig: 24.2

Figure 24.1 illustrates that 100% of health facilities are strictly adhering to the no-smoking policy outlined in the Cigarettes and Other Tobacco Products Act (COTPA) 2003

Figure 24.2 shows that 80% of UPHCs rated themselves as 10, 20% rated themselves as 9

Does the facility prioritize the use of renewable energy sources, such as solar or wind power, to meet its energy needs?

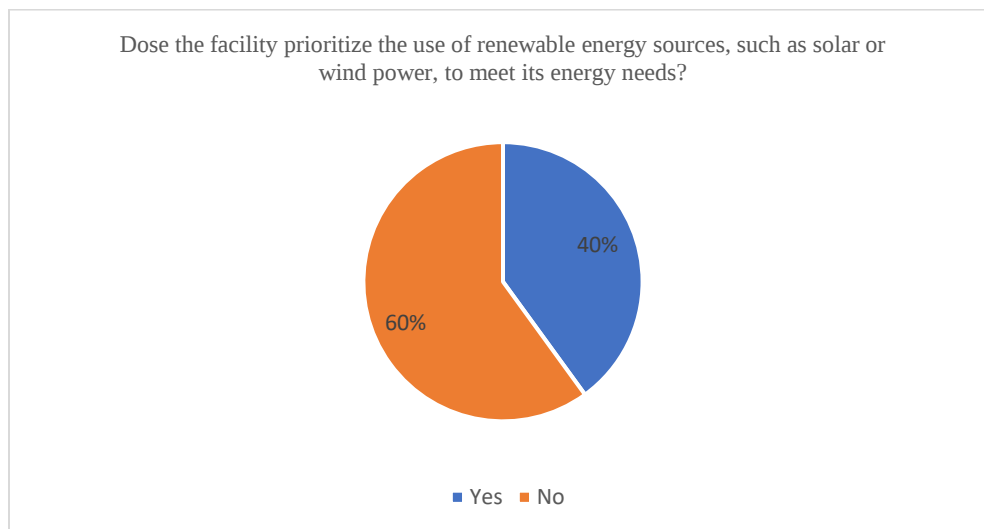


Fig:25.1

Facility Responses Regarding Contribution to NQAS Certification

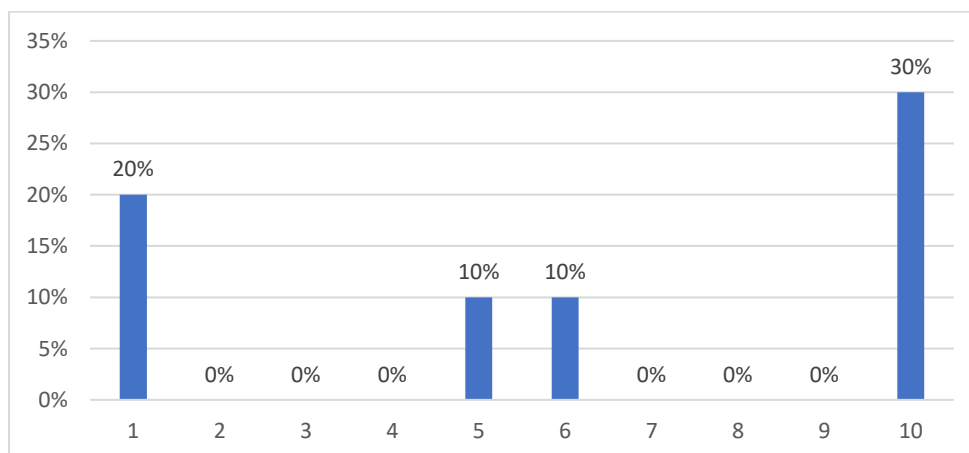


Fig: 25.2

Figure 25.1 illustrates that 60% of health facilities prioritize the use of renewable energy sources, such as solar or wind power, to meet their energy needs and 40% of health facilities do not prioritize the use of renewable energy sources to meet their energy needs.

Figure 25.2 shows that 30% of UPHCs rated themselves as 10, 10% rated themselves as 5 and 10 % as 6 and 20% rated as 1

Does the facility actively implement measures to reduce paper waste?

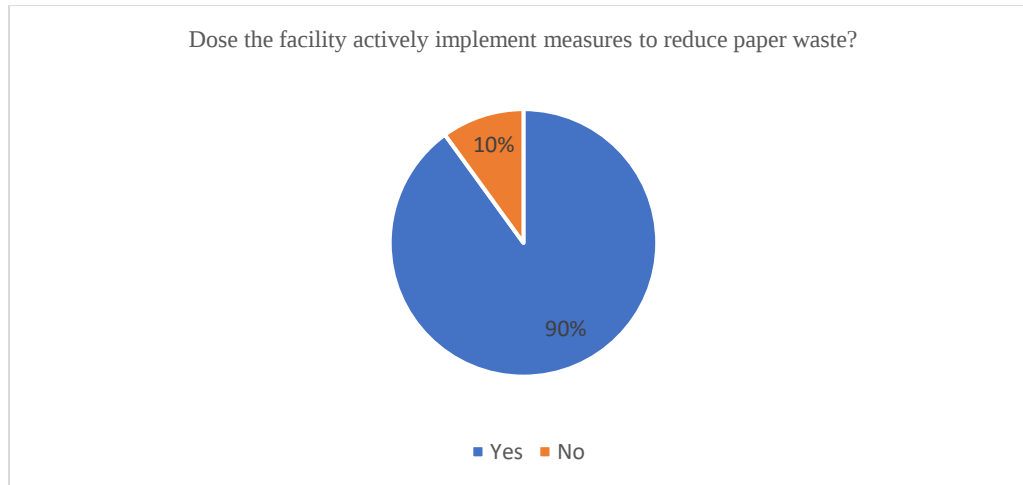


Fig:26.1

Facility Responses Regarding Contribution to NQAS Certification

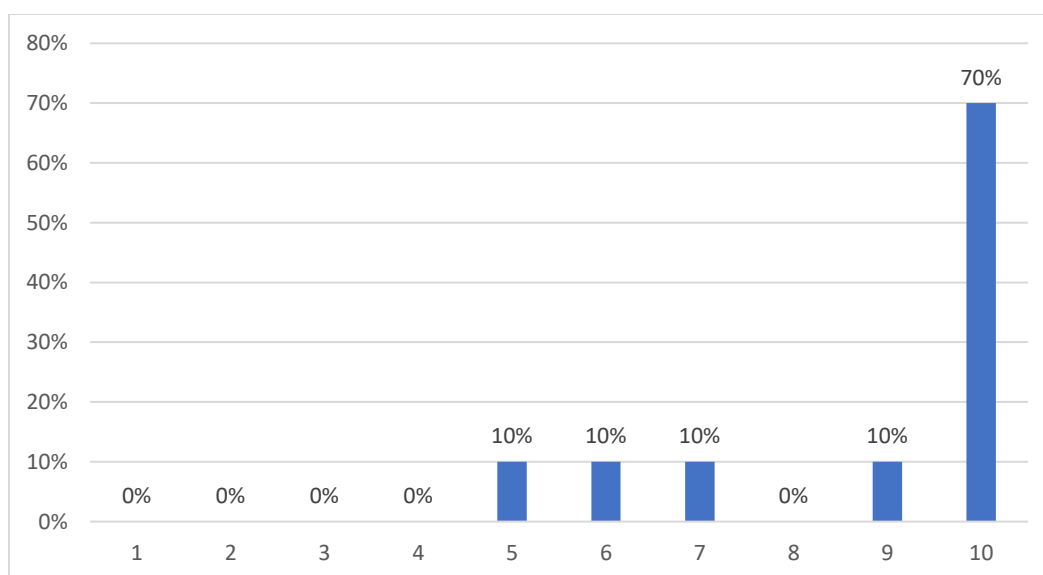


Fig: 26.2

Figure 26.1 illustrates that 90% of health facilities actively implement measures to reduce paper waste 10% of health facilities do not implement measures to reduce paper waste.

Figure 26.2 shows that 70% of UPHCs rated themselves as 10 and the rest 30% UPHCs rated themselves as 5,6,7

Overall Findings-

Pest Control:

- 90% of facilities have pest control systems in place. This majority of facilities indicates a strong awareness towards maintaining hygiene and the environment clean, which is important for patient safety and overall hygiene
- 10% of healthcare facilities do not have pest control systems. This can cause problems such as infestation and spread of diseases. these facilities need to address the issue and ensure a safe environment for patients and staff
- **80% of healthcare facilities rated themselves as a 10** on a performance scale, with the remaining **20% rating themselves as an 8 and 1.**
- This self-assessment highlights the significant role of the Kayakalp initiative in helping these facilities achieve the National Quality Assurance Standards (NQAS) certification

Signage Systems:

- 100% of these health facilities have implemented a proper uniform signage system. This means that most UPHCs effectively provide clear and consistent direction signage that helps patients and staff navigate the facility
- **90 % of healthcare facilities rated themselves as 10** on a performance scale with the remaining **10% rating themselves as a 9.**
- This can cause problems for patients and staff. This can lead to delays in getting care and make visits more frustrating.

Rainwater Harvesting Systems:

- In most healthcare facilities 70% do not have rainwater harvesting systems. Healthcare facilities without rainwater harvesting systems may miss significant benefits such as cost saving, reduced water consumption and environmental sustainability.

- And 30% of healthcare facilities have functional rainwater harvesting systems. this means that facilities with rainwater harvesting systems will likely experience advantages like reducing main water, potential cost savings, and contribution to stormwater management.
- **80% of healthcare facilities rated themselves as a 6**, while the remaining **20% rated themselves as a 5**. This self-assessment underscores the significant role of the Kayakalp initiative in aiding these facilities to achieve the National Quality Assurance Standards (NQAS) certification.

Energy-Saving Measures:

- 70% of healthcare facilities have implemented energy-saving bulbs such as CFLs or LEDs and have backup lighting systems in place of outages or crises. these facilities are effectively reducing their energy consumption and ensuring continuous lighting during emergencies.
- 30% of facilities do not have this system. The lack of such system in this facility could lead to increased energy costs and safety issues during power interruption. These facilities need to improve
- 70% of healthcare facilities rated themselves as a 10 while the remaining 30% rated themselves as 9, 7, or 5. This self-assessment underscores the significant role of the Kayakalp initiative in helping these facilities achieve the National Quality Assurance Standards (NQAS) certification.

Separate Toilets for Males and Females:

- 90% of healthcare facilities have separate clean toilets for males and females and disabled-friendly toilets equipped with running water. These facilities effectively ensure accessibility and hygiene for all patients and staff.
- 10% of healthcare facilities do not have these systems. The lack of such facilities can lead to accessibility issues and decreased hygiene standards. These facilities need improvement to meet basic hygiene and accessibility standards

Sewage treatment plant:

- 50% of healthcare facilities have sewage treatment plants (STP) in place to manage drainage and sewerage effectively these facilities are successfully managing, reducing the environmental impact and maintaining hygiene standards.
- 50% of healthcare facilities do not have STPs which could result in poor waste management and environmental risk. These facilities need to improve their waste management systems

Cleaning Solution:

- 100% of healthcare facilities provide cleaning solutions and use a tree bucket system to maintain cleanliness. This ensures high standards of hygiene and effective infection control across all facilities

Biomedical Waste Management Rules of 2016:

- 100% of healthcare facilities have been authorized to adhere to the Biomedical Waste Management Rule of 2016. This ensures that each facility follows standardized procedures for the safe and effective handling, treatment and disposal of biomedical waste, promoting environmental safety and public health.

Central Biomedical Waste Facility (CBWTF) For disposing of waste:

- 100% of healthcare facilities maintain thorough records to demonstrate their collaboration with a central Biomedical Waste Treatment Facility (CBWTF) to dispose of biomedical waste. This diligent record-keeping ensures transparency and accountability, reflecting their commitment to proper waste management practices.

Segregation of Biomedical Waste:

- All healthcare facilities use different waste bags to contain biomedical waste, ensuring proper segregation and disposal. This includes:
 - Black bags for general waste
 - Yellow and red bins with corresponding liners for specific biomedical waste types

- Blue and white puncture-proof containers
- This comprehensive segregation ensures 100% compliance with waste management protocols, promoting safety and environmental responsibility.

Hand Hygiene Practices:

- 100% of healthcare facility staff adhere to the six steps of hand washing and proper hand movements. This ensures adequate to hand hygiene guidelines, significantly reducing the risk of infection and promoting a safe sanitary environment for both patients and staff.

Training and Equipment for Cleaning Sterilization:

- All staff members at the healthcare centre have received training in creating solutions and autoclave machines are available for sterilizing instruments. This ensures proper cleaning and sterilization protocols, maintaining high standards of hygiene and patient safety

Awareness of PPE and PEP Protocols:

- All staff members are thoroughly educated on the use of Personal Protective Equipment (PPE) and the procedures for Post-Exposure Prophylaxis (PEP) protocols established within their health facility. This ensures 100% adherence to safety measures, Safeguarding both staff and patients from potential hazards and ensuring a safe working environment

Availability of Spill Management Kits:

- All healthcare facilities are fully equipped with spill management kits for handling blood spills, mercury spill and other hazardous material spills. 100% of facilities are prepared to effectively address manage and mitigate spill incidents, maintaining a safe and hygienic environment for the both patients and staff.

The frequency of Linen Inspections:

- 70% of healthcare facilities conduct weekly inspections, routinely checking bedsheets and other linens to maintain adequate cleanliness and hygiene. This regular weekly check allows facilities to maintain a good level of cleanliness and hygiene. Weekly inspections are typically sufficient to identify and address any issues before they affect patient care
- 20% of facilities perform daily inspections providing the highest level of linen hygiene. Daily checks ensure that any issues are immediately resolved. This approach minimizes the risk of infection and enhances patient comfort and safety
- 10% of facilities carry out monthly inspections which may be less frequent than optimal. This schedule might not be sufficient to catch potential issues promptly. While monthly inspections help maintain basic standards, these facilities might need to increase the frequency to ensure higher levels of cleanliness and patient care.

Fire Safety Protocols:

- 80% of healthcare facilities have established comprehensive fire safety protocols. These facilities are well-prepared to handle fire emergencies and ensuring the safety of patients, staff and infrastructure.
- 20% of healthcare facilities do not have comprehensive fire safety protocols. This lack of preparedness can pose significant risks in the event of a fire, highlighting the urgent need for these facilities to develop and implement effective fire safety measures and obtain the necessary certifications.

NOC compliance:

- 60% have established NOC. These facilities prioritise the safety of staff, patients and their infrastructure and they also indicate compliance with regulatory standards, demonstrating their commitment to ensuring preparedness and readiness for seismic events
- 40% do not have established NOC. These facilities indicate a significant portion of healthcare facilities lack essential measures to mitigate risks associated with seismic events. The absence of protocols and certification leaves these facilities vulnerable to potential harm and distribution during seismic events

Local Community Involvement:

- 100% of healthcare facilities involve local community leaders in hygiene promotion efforts. This signifies a proactive approach to community engagement and collaboration in promoting hygiene practices. Community leaders often have a deep understanding of local customs and social norms. Their involvement leads to hygiene promotion and raised awareness, ultimately improving public health outcomes and the prevention of infectious diseases within the community

Patient Rights and Responsibilities Display in Healthcare Facilities:

- **100% of facilities properly display patient rights and responsibilities**, including Information, Education, and Communication (IEC) materials addressing their roles and responsibilities. This indicates a commitment to transparency, accountability, and patient-centred care within healthcare facilities. This comprehensive approach to patient education promotes informed decision-making, patient engagement, and ultimately, better health outcome

Dress Code Policy for all Staff in Healthcare Centers:

- **100% of healthcare centres have a comprehensive dress code policy** for all staff, including Mid-Level Healthcare Providers and other health workers. This uniform policy ensures consistency and professionalism in appearance across all staff members, promoting a positive and hygienic environment within the healthcare facility. It promotes a team-oriented culture and reinforces the importance of professionalism and respect in delivering quality healthcare services to patients.

Coordination with Local NGOs and Departments:

- All healthcare facilities actively collaborate with local NGOs and municipal departments including the civil department, electricity board and Nagar Nigam to enhance sanitation and hygiene standards. This collaboration ensures comprehensive efforts to maintain high cleanliness and public health standards within the facilities.

Availability of Public Toilets and Waste Bins:

- In the surrounding area of healthcare facilities, 80% have public toilets and general waste bins available. This presence ensures better hygiene and convenience for patients, visitors and the community, convenience to a cleaner and healthier environment.
- 20% of the facilities do not provide these essential amenities indicating a need for significant improvements to enhance sanitation and support public health in these regions.

No -Smoking Policy Adherence:

- 100% of healthcare facilities strictly adhere to the No-Smoking policy as stipulated by the COTPA Act of 2003. This ensures a smoke-free environment within the facilities and enhances the overall health and safety of patients, staff and visitors. This complete adherence not only helps prevent smoking-related health problems but also ensures a more comfortable and healthy atmosphere within the facilities.

Use of Renewable Energy Source:

- **40%** of healthcare facilities prioritise the use of renewable energy sources, such as solar or wind power to meet their energy needs. These facilities benefit from reduced energy costs and a smaller carbon footprint, contributing positively to environmental sustainability.
- **60%** of the facilities are not currently use renewable energy sources. These facilities rely on traditional energy sources, missing out on the potential environmental and economic benefits that

renewable energy can provide. These facilities have a great opportunity to explore and adopt renewable energy options to enhance sustainability and reduce operational costs.

Paper Waste Reduction:

- 90% of healthcare facilities actively implement measures to reduce paper waste. These facilities implemented practices that include records management to minimise the use of paper and hence the possible effects on the environment besides the fact that they assist in cutting costs.
- 10% of the facilities do not have proper measures to reduce paper waste. These facilities miss out on the benefits of efficient paper management and its positive effects on the environment and operational cost

STAFF INTERVIEW

Statement by (Interview with) DR. Sonica Sharma, Senior Medical Officer of UPHC Gandhi Nagar Jaipur, Rajasthan

Presently I am the Senior Medical Officer of Urban Primary Healthcare Centers (UPHCs) in Gandhi Nagar Jaipur, Rajasthan. I am proud to share our journey with the Kayakalp initiative and its transformative impact on our healthcare facility.

The adoption of the kayakalp policy marked a turning point for our health facility. We recognized the importance of maintaining high standards of cleanliness and hygiene to provide quality healthcare service to our community. Implementing the policy under the Kayakalp and National Quality Assurance Standards (NQAS) involved elements such as training of our staff, setting of cleaning programs as well as having measures that conformed to the infection control standards. Our primary objective was to enhance the quality of healthcare services provided to our community. Through the dedicated efforts of our enthusiastic staff, we successfully achieved certification under both the Kayakalp initiative and the National Quality Assurance Standards (NQAS). The Implementation of the Kayakalp as a standard, roadmap and guide also helped in its way in achieving the goal in NQAS certification, especially in the aspect of cleanliness and hygiene. Apart from the above effects these guidelines helped in the formulation of our work and the documentation hence originating the success of a healthcare facility.

Before the adoption of Kayakalp, UPHCs Gandhi Nagar faced several challenges that caused big problems in reaching our goals. Chief among these challenges was the management of patient queues, especially in high-traffic areas such as the waiting room. Physical crowding in those areas went not only to the patient's discomfort but also to the higher likelihood of cross-infection. Moreover, it was found that maintaining appropriate disposal of biomedical waste and advocating for pro to hygiene measures among patients remain to be some of the existing concerns. The initiative provided us with clear guidelines and protocols for maintaining cleanliness and hygiene standards, which helped us streamline patient flow and reduce overcrowding in the waiting areas. We also stepped up the measures to ensure adequate clearance of biomedical waste and also once in a while, we undertook public health promotions concerning cleanliness among patients

I am proud to say that our dedicated and enthusiastic staff played a crucial role in the successful implementation of Kayakalp. Their commitment to upholding the highest standards of cleanliness and hygiene has been instrumental in our journey towards achieving NQAS certification. Last four years we have been certified under Kayakalp and got a score of 92 and three years back we got an NQAS score of 90.

The sustainability of the intervention in our organization which is labelled as Kayakalp is not an easy task and it calls for full appreciation and commitment. There are intensifying training meetings and seminars to simplify and update the staff about the current rules and regulations of the healthcare facility.

Chapter:5

Discussion:

The Kayakalp campaign has introduced significant improvement in cleanliness Innovations, infection control and Hygiene program, widely compatible and supporting the directions of National Quality Assurance Standards, NQAS. This paper, based on changes in the NQAS initiative on UPHCs in Rajasthan after acquiring the Kayakalp certification emphasizes the improvement and its consequence. Assessment of the results achieved by the implementation of Kayakalp initiative with respect to cleanliness and hygiene status of the health facilities.

Impact of Kayakalp on Cleanliness and Hygiene

The Swachh Bharat Abhiyan through the launch of the Kayakalp scheme has been historically significant in increasing the standards of cleanliness in the public healthcare facilities. This gest compares different aspects of cleanliness including; waste disposal, cleaning as well as maintaining a clean environment in the health facilities. In this regard, research undertaken by Dr. Apurva Tiwari and Ankit Tiwari in Chhattisgarh in 2016 establishes significant enhancements in the performance of hospitals with a rise of 18%. A much higher 27 % average improvement together with the mean improvement of 23%. The gain at different endline is; 25 percent increase

in hygiene promotion. These results go well with the conclusion of the baseline study that the consciousness sparked by Kayakalp initiative is bearing fruit in improving hygiene standards.

The study conducted by Ganju et al. in the public healthcare facilities of Himachal Pradesh in 2022 also revealed 20% enhancement in the quality parameters due to the introduction of the feature of Kayakalp. These findings stress on how the implementation of the endeavour has helped in restoring and sustaining cleanliness and hygiene in healthcare institutions. The present study done in Rajasthan further supports these observations; it represents the improvement of cleanliness and the implementation of hygienic practices in UPHCs under Kayakalp certification. These accreditations are important in enhancing safety and the environment that consists of patients, clients, visitors as well as healthcare personnel.

Infection Control and Biomedical Waste Management

Infection control is an integrative part of both the current applied strategy called Kayakalp, as well as the NQAS. Infection prevention and control measures have to be implemented in healthcare, to minimize or retard the spread of infections given healthcare facilities. Research shows gains of up to 50% in aspects of infection control once institutions adopt the usage of Kayakash Lakshya Kendra or Kayakalp. For example, the systematic review by Chaudhary et al. published in 2019 discussed the possibilities for the evaluation of biomedical waste disposal, which is one of the key aspects of infection control using the Kayakalp tool.

That is why proper biomedical waste management is critical in reducing the chances of the spread of such diseases in patients, workforce, as well as the general population. The study carried out by Somaiah & Mallappa on ‘Health hazards among dental personnel in Madikeri District Hospital, Karnataka, India’ in 2016 also revealed that implementation of BMWM and their practice need to be going on sharply every time and are needed to identify the modes of infection to prevent infections. This study in Rajasthan fully endorsing these findings reveals the marked improvement in infection control practices of the UPHCs after accreditation by Kayakalp. These improvements are critical for improving the safety of healthcare facilities for the benefactor and other patients.

Correlation with NQAS Certification

Thus, even though the measures introduced with the support of the Kayakalp program aim to raise the standards of cleanliness and prevent infectious diseases, its effect on the fulfillment of the requirements toward the attainment of NQAS status is not that significant. The NQAS presents a clear model for evaluating and enhancing the standard of service delivery in healthcare facilities; this is in excess of literally the state of cleanness and disease transfer. Agrawal et al. in 2019 reported a modest positive correlation of 0.217 between the extent of implementation of Kayakalp process and the level of NQAS certification and the authors stated that although the Kayakalp process Claimed to have focused on improving specific quality dimensions, a comprehensive strategy is necessary to fulfill the larger NQAS objectives.

The present study carried out in Rajasthan affirms such findings that, although the attaining of Kayakalp certification helps to enhance some aspects of quality parameters, the process of attaining NQAS certification demands a strategic intervention. With improvements in the analysis of NQAS standards and adoption of the quality processes set by Kayakalp, it is possible to improve the outcomes of healthcare quality more effectively. This goes surpasses the notion of cleanliness and infection control to incorporate other vital aspects of healthcare quality including safety, clinical, and patient satisfaction aspects.

Challenges and Areas for Improvement

Consequently, the state faces the dilemma of continued deficits in the implementation of the practices related to the recovery of patients with severe diseases, which are realized within the framework of the Kayakalp initiative, and the desire to bring them in line with the criteria of the National Quality Assessment System. As mentioned in this study and evidenced in other research, one of the crucial issues is the overall lack of awareness and violation of standards in this sphere among the healthcare staff. Kayakalp has to be reinforced by periodic faculty development programmes and involvement of all the healthcare staff to make the patients abide by the measures that have to be employed.

Debbarma et al. in 2021 and Somaiah & Mallappa in 2016 have pointed out that closing of these gaps will require enhance of continuing education training programs for growing HCW competence. In particular, a regular training of all the employees in the infection prevention control and cleanliness policies should be performed to assure their compliance with the set norms and achieve sustainable success of both the Kayakalp and NQAS plans.

Another benefit is that in applying the corrective measures, healthcare facilities will be able to have a constant assessment and feedback this will assist in efforts to ensure that better method are identified and implemented.

The results of this study revolve around the facts that demonstrate enhanced levels of cleanliness, infection control, and hygiene due to the given initiative, namely Kayakalp. These have to be implemented in order to make health care facilities safe for patients as well as for the health care providers. However, for the general goals of NQAS certification, which are broader than the protocols under Kayakalp, it is necessary to link all modern NQAS standards to the Kayakalp scheme.

Recommendations:

- *Conduct regular training sessions and workshops for staff to keep them updated on the latest guidelines and best practices.*
- *Adopt digital record-keeping reduce the use of paper and go green through sealing of documents instead of handwriting and other measures to conserve the environment.*
- *Collaborate with local NGOs and municipal departments to maintain sanitation standards*

- *Consider implementing solar or wind Power systems in Healthcare Facilities to Reduce costs and improve environmental sustainability.*
- *Implement rainwater harvesting systems in facilities to save cost and reduce water use.*
- *To raise awareness among patients, visitors and staff make sure that Information Education and Communication (IEC) items are placed throughout your healthcare facility.*

Recommendation from Healthcare Professional

- *The initiative to separate patients with communicable diseases and respiratory infections is highly commendable and crucial for reducing the spread of infections.*
- *Setting SMART (specific, Measurable, Achievable, Relevant and Time-bound) Objectives carrying out ongoing evaluations and routinely assessing are necessary for providing high-quality healthcare Services.*
- *Proper documentation ensures accurate record-keeping, enhances communication among staff*
- *A motivated workforce is essential for maintaining quality, adhering to all protocols, and upholding high standards in quality management within healthcare facilities.*

Chapter: 6

Conclusion

The Research aimed to explore the operational frameworks of the Kayakalp and National Quality Assurance Standards (NQAS) programs, analyze their interrelation, and evaluate the impact of Kayakalp on achieving NQAS certification in Urban Primary Health Centers (UPHCs) throughout Rajasthan. The findings provide meaningful implications for the outcomes of these interventions in raising the qualitative capacity of healthcare facilities and enhancing patient care.

Kayakalp, which was started under Swachh Bharat Abhiyan, is centralized on increasing cleanliness, infection control, and hygiene in healthcare facilities. It gives outlined procedures to facilities regarding how to achieve and maintain high standards the protocols include pest control, signage, rainwater capture, energy efficiency, and many other procedures. Likewise, NQAS defines the comprehensive guidelines for the assessment schemes of the overall measures of health care quality with an intention of providing all round improvement of service delivery to patients and management practice within the facilities.

The study underscores a positive correlation between the implementation of Kayakalp protocols NQAS certification. Facilities adopting Kayakalp guidelines demonstrate significant improvements in meeting NQAS standards, particularly in cleanliness, infection control, waste management, and patient safety. This alignment enhances overall healthcare quality and operational efficiency in UPHCs.

Looking at the conclusion regarding the Kayakalp initiative, it is noticed that the certified centres are much more compliant to the hygiene and safety standards which are essential for NQAS certification. Measures of quality are pest control, proper signs, rainwater harvesting, energy

conservation, separate and disabled toilets in males and females, sewage management, biomedical waste disposal, and proper infection control. Such improvements include not only the modernization of the infrastructure within facilities but also improved quality of patients' condition and satisfaction of employees.

The study highlight that the main duty of Kayakalp in health care settings is to assist the organizations get ready to satisfy and sustain the NQAS certification. Centres that implement all the protocols of Kayakalp are set in a better place to achieve a new competent quality of NQAS which will enhance their capacity, recognition and authenticity in providing quality health care services.

First programmes and initiatives to have a stronger effect on the Kalayakalp's enhancement and convenience of the NQAS certification, monitoring, training, and capacity-building activities are significant for the future. Thus it is recommended that there should be ongoing staff education on hygiene practices, ways of preventing infections, proper ways of disposing wastes, and energy efficiency. The cooperation with the local authorities, non-governmental organizations, and community representatives can be effective for improving sustainability and engaging people in preserving the quality of healthcare.

Moreover, facilities lacking specific infrastructure components, such as rainwater harvesting or energy-efficient systems, should prioritize these upgrades to enhance operational efficiency and environmental sustainability. Regular audits and assessments should identify gaps and prompt corrective actions swiftly.

In conclusion, the integration of Kayakalp with NQAS standards not only improves healthcare service quality but also fosters a healthier and more sustainable healthcare environment across Rajasthan's UPHCs. Therefore, by embracing these national initiatives to adopt the best practices, healthcare facilities are placed in a position to continuously improve to meet present

and future patients'/community needs. The present work serves as a theoretical foundation for subsequent scholarly investigations and developmental initiatives designed to enhance the delivery of health services across the nation involving the population's health enhancement and social welfare.

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