SYNOPSIS:-

1.TITLE

Challenges in Implementation of Quality Management System and Key Performance Indicators at Ayushman Arogya Subcenter under National Quality Assurance Standards.

2.INTRODUCTION

Subcenters (SCs) serve as the first point of contact for communities within the public healthcare system. They play a vital role in delivering essential health services at the grassroots level and act as key enablers in carrying out the Government of India's various public health initiatives. [1] .The government has implemented the National Quality Assurance Standards (NQAS) to provide consistent quality care in public health facilities, including Subcentres (SCs). These standards emphasise the establishment of a strong Quality Management System (QMS) and the regular monitoring of Key Performance Indicators (KPIs).

Subcenters often face criticism for not being able to deliver quality healthcare services. This shortfall is largely due to challenges like shortages of trained health personnel, poor infrastructure, and a limited and inconsistent supply of essential medicines and equipment. These issues hamper their ability to meet the healthcare needs of the communities they serve [2] . Effective quality assurance at this level is critical for fulfilling the Universal Health Coverage and Sustainable Development Goals (SDGs) targets. The purpose of this study is to investigate the implementation gaps and operational challenges observed in seven selected subcenters within Jaipur 1, Rajasthan. The study will use a structured questionnaire based on the NQAS checklist to measure adherence to quality standards, identify critical problems in operationalising QMS components, and assess the effectiveness of KPI monitoring methods.

The study aims to provide insights into the real-world issues experienced by healthcare workers at the subcenter level and propose actionable ideas to improve quality implementation.

Theoretical/Conceptual Framework

This study is guided by the Donabedian Model of Quality in Healthcare, which breaks down quality into three components:

1. Structure – Resources, infrastructure, human resources, policies.
2. Process – Service delivery, adherence to protocols, monitoring systems.
3. Outcome – Patient satisfaction, health outcomes, KPI trends.

Research Gap

While there are implementation studies on NQAS at higher-level facilities such as PHCs and CHCs, very few research look explicitly at the problems of adopting QMS and monitoring KPIs at the subcenter level. This project will bridge the gap by obtaining insights from the public health system's most remote healthcare units.

3.RESEARCH QUESTION

- What is the current compliance status of subcenters with respect to the structure, process, and outcome domains of QMS as defined by NQAS?

- To what extent are key performance indicators (e.g., ANC coverage, immunization, NCD screenings) being monitored and documented at the subcenter level?

- Which specific components of QMS (structure or process) show the most significant gaps in implementation across subcenters?

- Is there a correlation between structure and outcome scores, and between process and outcome scores in the selected subcenters?

- What are the perceived challenges and barriers faced by frontline healthcare workers in implementing QMS and maintaining KPIs?

- What support mechanisms or systemic changes do healthcare workers recommend for strengthening QMS practices at the subcenter level?

4.OBJECTIVES

- To assess the current level of compliance with Quality Management System (QMS) standards in Ayushman Arogya Subcenters under Jaipur 1 block.

- To evaluate the adherence to Key Performance Indicators (KPIs) and outcome tracking at the subcenter level.

- To identify domain-wise (Structure, Process, Outcome) performance gaps in QMS implementation.

- To examine the relationship between QMS domain scores (Structure and Process) and outcome performance (KPI indicators).

- To explore challenges faced by healthcare workers in implementing QMS and monitoring KPIs.

- To suggest actionable recommendations to improve QMS and KPI implementation in Ayushman Arogya Subcenters.

5.HYPOTHESIS

Not applicable – the study is descriptive in nature and exploratory in purpose**.**

6. MATERIALS AND METHODS (METHODOLOGY)

Study Design

The study is descriptive as it seeks to systematically document the current practices, challenges, and gaps in the implementation of QMS and KPIs, without introducing any interventions. It is cross-sectional as data will be collected at a single point in time from sub-centers, providing a snapshot of the existing situation.

Setting

Seven Ayushman Arogya Subcenters under Jaipur 1 Block, Rajasthan

Study Population

Frontline healthcare providers (e.g., ANMs, CHOs, ASHAs) working in selected subcenters

Study Tools

Structured questionnaire based on NQAS checklist to capture data related to QMS and KPIs

Duration of Study

The study is expected to be completed during my dissertation.

Sample Size

Seven Ayushman Arogya Subcenters

Sampling Technique

Seven subcenters were chosen using purposive sampling.

Data Collection Procedure

Data will be gathered through direct virtual interviews, observations, and checklist-based assessments at each selected subcenter. Interviews will be conducted with available staff, and facility records will be reviewed for KPI monitoring data**.**

Operational Definitions

A Quality Management System (QMS) is a structured approach used by organizations to ensure that their services meet consistent standards. It involves setting clear policies, following standard procedures, maintaining proper documentation, regularly monitoring performance, and taking corrective steps whenever needed.

Key Performance Indicators (KPIs): Quantitative measures that reflect the performance and quality of services provided at the subcenter level, as defined by NQAS.

7.DATA ANALYSIS PLAN

The data will be compiled and analysed through Microsoft Excel and NQAS predefined checklist.

Thematic analysis of qualitative responses for few open-ended questions will be done manually from NQAS checklist.

8. ETHICAL CONSIDERATIONS

Permission will be taken from NHM to conduct virtual assessment. Informed consent will be obtained from all study participants. Data will be securely stored and used only for academic purposes.

9. IMPLICATIONS OF RESEARCH

- The findings of this study will enable program managers and policymakers to identify barriers in implementing quality standards at the grassroots level and enhance the delivery of quality improvement initiatives at the sub-center level.
- The insights gained will provide valuable information to support the strengthening of the overall public health system.

10. REFERENCES

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