

CHAPTER: 02

STUDY TO UNDERSTAND ACCEPTABILITY AND USE OF ANMOL APPLICATION AMONG ANMS IN MADHYA PRADESH

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INTRODUCTION

The National Health Mission (NHM) consists of two sub-missions: the National Rural Health Mission (NRHM) and the National Urban Health Mission (NUHM). Its primary program components focus on strengthening health systems in both rural and urban areas, addressing Reproductive-Maternal-Neonatal-Child and Adolescent Health (RMNCH+A), and tackling both Communicable and Non-Communicable diseases. The NHM aims to realize universal access to health services that are equitable, affordable, and of high quality, while being accountable and responsive to the needs of the people.

Considering the challenges confronted by ANMs and with the goal of enhancing the quality of maternal health services and childcare in India, along with the associated data collection, the Ministry of Health and Family Welfare (MoHFW) of the Government of India, in collaboration with UNICEF, has introduced a tablet-based application called ANMOL [1].

An ANM typically serves a population of 3,000-5,000 and is primarily engaged in delivering essential health services related to maternal and child health, family planning, nutrition, and immunization programs. An integral part of their responsibilities is the collection of healthcare data, and ANMs record various indicators concerning the health, nutrition, and immunization of pregnant women, mothers, and newborns in traditional hard-bound paper registers. ANMOL eliminates the tedious tasks for ANMs by transitioning their work to a paperless format. The tablet enables them to input and update the service records of beneficiaries in real-time, ensuring timely and accurate data entry. As a fully digitized process, it upholds the high quality of data and accountability. User acceptance theories presuppose that rational individuals make conscious decisions in their best self-interest [2].

Fishbein and Ajzen's Theory of Reasoned Action (TRA) suggests that acceptance is equivalent to the behavioral intention to use. Davis's Technology Acceptance Model (TAM) is a modified version of the TRA, specifically designed to suit the context of information systems [3]. The

basic TAM comprises two constructs influencing the behavioral intention to use: perceived ease of use and perceived usefulness. It illustrates that, in addition to these two TAM constructs, acceptance is influenced by social influence. Furthermore, the Unified Theory of Acceptance and Use of Technology (UTAUT) indicates that factors in the implementation context can predict use but not necessarily acceptance [4].

RATIONALE

In recent years, the Government of India had significantly emphasized the digitization of various National Health programs, highlighting the increased role of Information Technology (IT) in rapidly enhancing health indicators and streamlining data tracking. The growing reliance on IT plays a crucial role in maintaining data standards and quality, contributing to better patient care and overall health improvements in the country. Despite the abundance of mHealth applications, health workers often discontinue usage shortly after initial adoption, exhibit reluctance, or are unaware of their existence, ultimately reducing their workload. The ANMOL Application emerged as a solution to this issue by enabling daily data updates. Our study aimed to qualitatively analyze the design and content elements of the mobile health application, focusing on aspects that either facilitate or hinder usage based on health workers' knowledge, perception, and experience.

RESEARCH QUESTIONS

1. What elements contribute to or hinder ANMs' perception of the ease of use of the ANMOL Application and were probable determinants of their acceptance and utilization?
2. What elements contribute to or hinder ANMs' perception of the usefulness of the ANMOL Application and were probable determinants of their acceptance and utilization?
3. Do ANMs feel at ease using the ANMOL Application?
4. What elements within the implementation context (infrastructure, organizational) do ANMs in Madhya Pradesh believe might facilitate or hinder their utilization of the ANMOL Application?

RESEARCH OBJECTIVES

1. To assess the understanding of ANMs regarding the ANMOL Application.
2. To examine the viewpoints of ANMs regarding the ANMOL Application.
3. To explore the firsthand encounters of ANMs with the ANMOL Application.
4. To offer suggestions for further enhancements of the ANMOL Application.

RESEARCH METHODOLOGY

A qualitative exploratory method was adopted to address the research queries of the study, aiming to capture the real-life experiences of Auxiliary Nurse Midwives (ANMs) and recognizing the intricate nature of their interactions within the implementation context. The study took place in Bhopal (Phanda block) and Sehore (Shyampur, Ashta block). The sampling approach involved ANMs who were provided with the Anmol Application, with exclusion criteria comprising ANMs stationed at facilities and in urban areas. The sample group included Auxiliary Nurse Midwives, acknowledged as crucial village-level female health workers in India, serving as the primary connection between communities and health services. Their role was pivotal in delivering safe and effective care to rural communities, contributing significantly to the objectives of national health programs. Data collection occurred in the month of May, utilizing eleven focus group discussions as the primary method.

RESULTS & DISCUSSION

A total of 55 ANMs participated in the study, with 15 from Bhopal, 16 from Shyampur block (Sehore), and 24 from Ashta Block (Sehore). Although tablets were provided to 28 ANMs in Bhopal, only 15 were available for the study. Similarly, in Shyampur block, 57 tablets were distributed, but only 16 ANMs participated. In Ashta block, 34

tablets were distributed, and 24 ANMs were present for the study. Nearly all participants received tablets approximately one year prior.

During the Focus Group Discussions (FGD), it was revealed that only a few ANMs were currently working on the ANMOL Application, and approximately 50% had discontinued using it from January 2018. Village mapping problems were common among ANMs, as the number of villages under their jurisdiction was not clearly defined. Many ANMs struggled to locate their villages on the ANMOL Application and faced difficulties in identifying beneficiaries. Additionally, ANMs sharing the same village had challenges accessing details of beneficiaries registered by themselves.

CONCLUSION

This qualitative study, involving participants, builds upon prior research on the difficulties and advantages associated with mobile health applications. The results offer valuable insights for researchers, app developers, and healthcare professionals on how to create and assess mobile health apps, considering the viewpoint of users. The adoption of technology by frontline workers has the potential to enhance the quality and delivery of care. Personal characteristics, particularly literacy and age, play a crucial role in influencing technology adoption and the manner in which users utilize technology in their professional roles. Our preliminary investigation lays the groundwork for informed hypotheses and methodologies for future research.

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