



प्रसव वाच

USER EXPERIENCE OF PRASAV WATCH APPLICATION IN THE RAJASTHAN STATE

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Introduction

- The life of millions of women in the reproductive period group has been a worldwide concern for decades. The period of the labour or first 24 hours after birth is very crucial for maternal health and neonatal health. According a report by UNICEF, near about 46 percent of all maternal deaths and 40 percent of all neonatal deaths occur during the period of labour or the first 24 hours after birth.
- The state of Rajasthan is contributing significantly to India's burden of maternal and neonatal mortality rates. To improve this condition of maternal and neonatal deaths, the Government of Rajasthan had launched an application as intrapartum and postpartum monitoring and decision support tool named Prasav Watch.

Prasav Watch

- It is a digital tool developed by different development partners and was given the name ASMAN and key stakeholders were the Government of Rajasthan and Madhya Pradesh. After the ownership by DMHFW, Rajasthan it was named Prasav Watch.
- It is a tablet-based application to monitor intrapartum and postpartum events and provide decision support which is intended for informed decision-making by the labour room service provider. The users of this application are labour room service providers. This application captures the details of women admitted for delivery in the health facility at various stages from admission to discharge.



Key components of Prasav Watch

Demographic details

Primary assessment

Obstetric & medical history
details

Investigations

General examination,
abdominal examination and
PV examination

Monitoring the progress of
labour thorough e-
photograph

Delivery notes followed by
post-delivery and PNC
monitoring (three days in
case of normal/assisted
delivery and seven days in
case of Caesarean),

Referral and discharge notes

WHO Safe Childbirth
Checklist (SCC).

Literature review

- In the previous study on acceptability of ASMAN application, shows that this application has high general acceptability and perceived usefulness. There was remarkable efforts and investments have been made to ensure the effectiveness, user-friendly and sustainability of ASMAN platform.
- There are few barriers in acceptance of mobile health application reported by the respondents like shortages of staff, time constraints and urgency of patients etc.
- The study on perceived usefulness of the SDA (Safe Delivery App) amongst the healthcare workers is high. The safe delivery app (SDA) helps the healthcare workers to memorize and update their knowledge and skills. Also, the confidence level of the healthcare workers has been improved with this application The safe delivery application improves the health workers ability to manage the complications during childbirth
- A study on comparison of Paper based with Electronic patient records shows that electronic patient record has not yet fully replaced the paper- based record system. Besides, electronic documentation is generally used in addition to paper-based records system There can be generation of inconsistencies in medical record documentation if there is parallel use of electronic and paper-based patient records.
- In a study of evaluating clinicians user experience and acceptability of mHealth application in India depicts that In India, there are a lot of network issues and data usage concerns. So, mHealth applications need to consider this factor for better usage of the application
- A user experience questionnaire provide us the feature to rapidly evaluate the experience of user for the application and each health-related information system

Research Question

What is the user experience of Prasav watch application amongst the Labour room staff of Rajasthan state of India?

Objective

To understand the user experience of Prasav watch application amongst the Labour room staff

To compare the feasibility of paper based filling and digitally filling of case sheet amongst the Labour room staff.

To understand the behaviours, motivations and needs of Labour room staff

Methodology

Study design- It is an observational cross-sectional study.

Study area - It was conducted in all the facilities level like PHC, CHC, SDH and DH of Rajasthan state of India within 6 district of Rajasthan.

Study population - The study population of this study was Labour room service providers

Inclusion criteria: Labour room staffs who are using Prasav Watch application at their facility in Rajasthan

Exclusion criteria: The facilities who are not using Prasav watch application in Rajasthan

Duration of the study - The study duration was from the month of May 2022 to June 2022.

Study approach- The qualitative assessment approach is being used in the study.

Sample Size- This study was done in a total of 7 facilities of Rajasthan state of India. So, based on convenience a total of 60 sample size of labour room service providers was taken who gave consent for the study.

There was some dropout from sample size because of unavailability and not picking up the call. So at last, only 50 samples were interviewed and then analysis was done.

Sampling technique - Purposive sampling technique would be used for this study.

Mode of data collection- A structured qualitative questionnaire was prepared to understand the user experience of Prasav Watch application. This questionnaire was prepared on the google forms and then at 2 facilities personal interviews and at rest facilities telephonic interviews were being conducted.

Statistical method used- In this study for analysis purpose of the data, descriptive statistics and MS Excel was used.

Results

- From the figure 1.1, it is clearly evident that the usability of Prasav Watch application is high
- Figure 1.2, shows that this application helping 80 percent of the respondents in decision making and they can use it as decision support tool while filling the case sheet
- While 20 percent of the respondent doesn't agree with that this application provide them decision support tool.

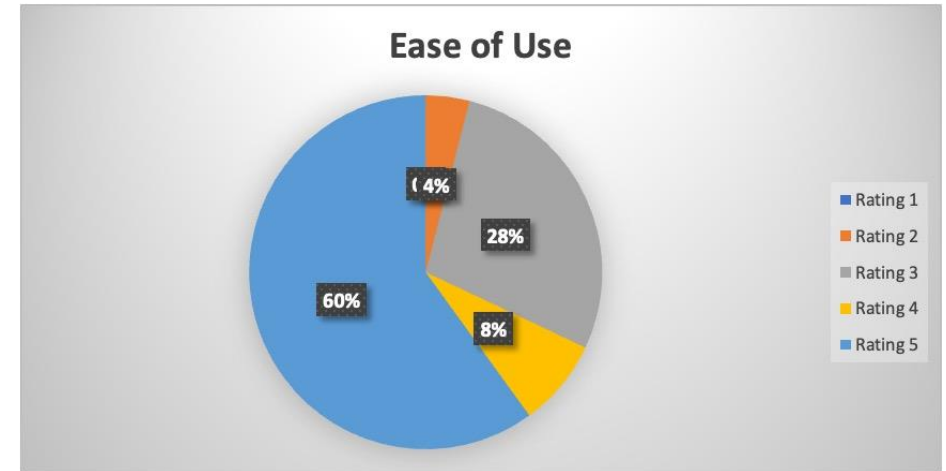


Figure 1.1

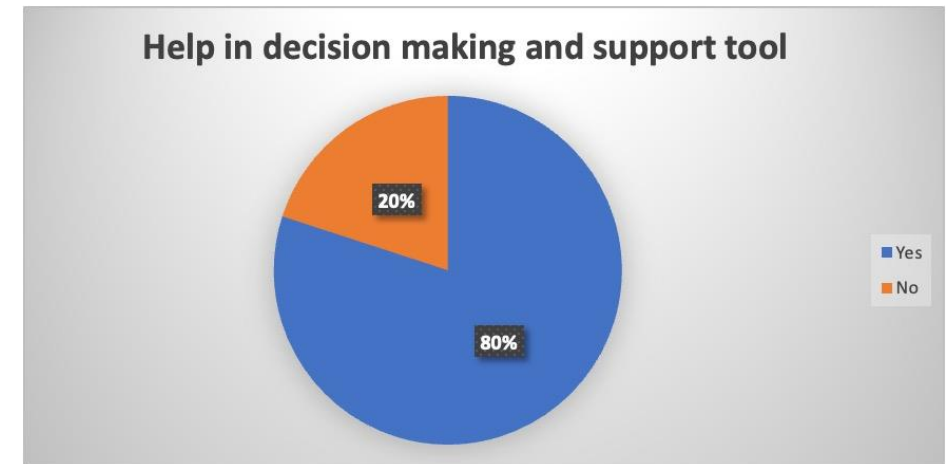


Figure 1.2

Results

- From the figure 1.3, it has been depicted that the 66 percent of the respondents prefer digital filling of case sheet over paper filling of case sheet in labour room while 34 percent of the respondents still prefer conventional paper based filling of JSY sheet in labour room
- From the figure 1.4, the respondents clearly choose digital filling method over paper based filling of case sheet to track record and cases in the labour room

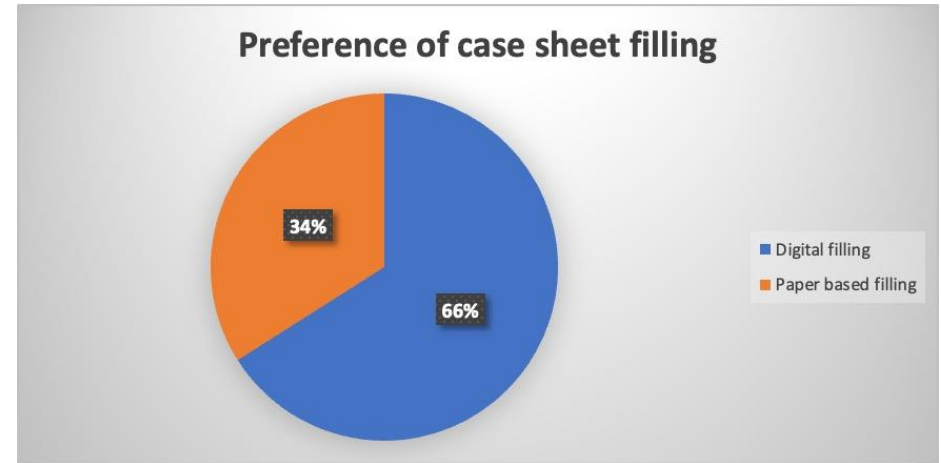


Figure 1.3

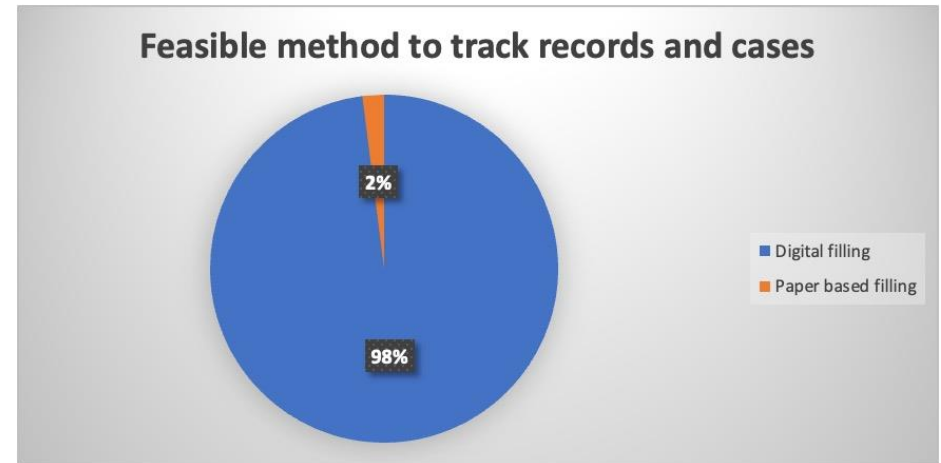


Figure 1.4

Results

- Figure 4.5 shows that the behaviours of the respondents to use Prasav Watch application in terms of time consumption is positive and 78 percent of respondents agreed upon that the time spend using Prasav Watch application in the labour room is acceptable. While 22 percent of the respondents disagree with that. They think that filling the real-time case sheet in the labour room hinders their work and service provision in the labour room.
- Figure 4.6, depicted the need assessment, whether the respondents have received trainings to use this application. 80 percent of the respondents received trainings to use this application while 20 percent of the respondents are using this application without trainings.

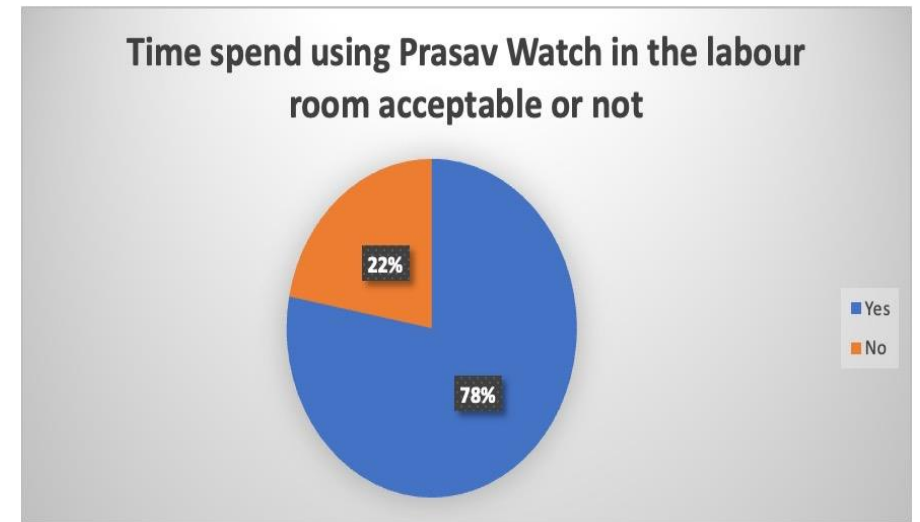


Figure 1.5

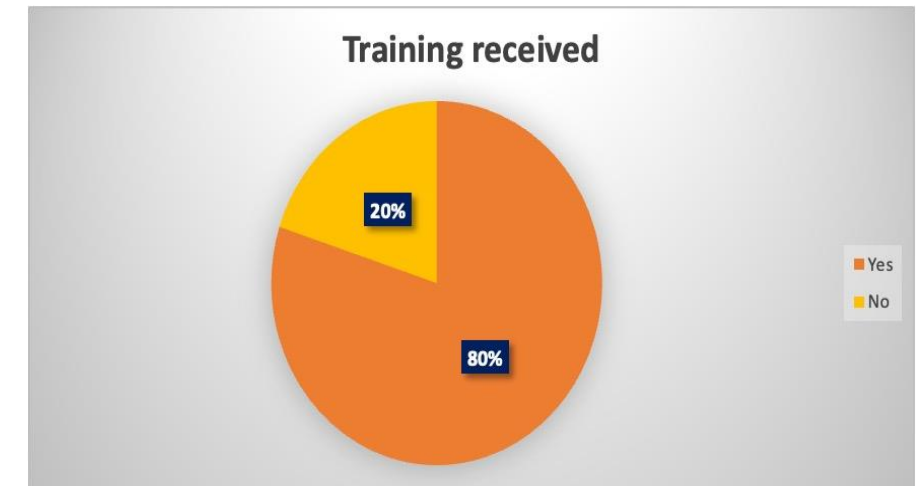


Figure 1.6

Conclusion

The Prasav Watch application has good perceived ease of use. We can say usefulness of Prasav Watch is very high if users starts using it in a systematic way. There are several barriers too in acceptability of this application as reported by the respondents which includes staff shortage, time constraints, patients urgency for the discharge, internet connectivity issues and sometimes technical glitches in the application. The clinical decision support system, notification, alerts and e- partograph are really useful feature of this application. Although e-ticketing need some improvements in terms of response time. This platform collect real-time and high-quality data during peripartum period with improved decision making which consequently affects maternal and neonatal outcomes.

Recommendations

- The staff should be sensitized and motivated about usage of application
- They should be guided about how this application is useful in their decision making while doing the cases only if they fill real time case-sheets.
- Based on the user experience, the applications module need to be revised and their problems of technical glitches need to be resolved
- Improvement need to be done on the ease of use as there are few users who finds it difficult to use this app
- The training should be arranged for the labour room staff who have recently joined the facility
- There should be some inbuilt capacity building modules in the application for the labour room staff
- The feature of the application like gamification and remote support centre need to be activated to provide support to the users
- The labour room staff who are using this application on regular basis and doing the real-time case sheet filling need to be appreciated for their work by DMHFW

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Thank you