Summer Training at
Khushi Baby, Udaipur

Assessment of Quality of Data collected by ANM under the Khushi Baby Initiative

By
Tulika Chakraborty

Under the guidance of
Dr. D.K. Mangal

MBA Hospital & Health Management
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Institute of Health Management Research
The IIHMR University, Jaipur
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INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that **Tulika Chakraborty** has undergone summer training in Khushi Baby,Udaipur from 2rd April to 2th June 2018.

The candidate herself completed the project assigned to her during summer training. Her approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in Hospital and Health management.

I wish her success in all her future endeavors.

Dr. Daya Krishnan Mangal

Dean (Research)

IIHMR University, Jaipur

for **Col.(Dr.)Ashok Kaushik**

Dean(Academic &Student Affairs)

IIHMR University, Jaipur

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur- 302029, Rajasthan, India.
Ph.: 0141- 3924700, 2791431- 32, Fax: 0141 3924738, E-mail: iihmr@iihmr.edu.in, Web.: www.iihmr.edu.in

KhushiBaby

Sr. No. - 06/Internship/KB/2018-19/

June, 02, 2018

To Whomsoever it may concern

This is to be certified that **Miss Tulika Chakraborty** from IHMR University Jaipur has attended the organization for her summer internship from 06/04/2018 to 02/06/2018. He has found satisfactory in delivering tasks in the organization. During the period of her internship program with us he had been exposed to different process.

Wishing the best for her future endeavours .

(Dr. Jitendra Kumar Hayaran)
Internship Coordinator
Khushi Baby, Udaipur

1 Emerson Place Apt, 5N
Boston, MA, 02114, USA
+1 2817258062

www.khushibaby.org

123 Kharol Colony, 1 Floor, Fatehpura,
Udaipur, 313001, INDIA
+91 9001469934

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Contents

Acronyms

AMN: Auxiliary Nurse Midwife

ANC: Ante-natal Care

ASHA: Accredited Social Health Activist

BCMO: Block Chief Medical Officer

BPM: Block Programme Manager

MCHN: Maternal and Child Health & Nutrition

MOIC: Medical Officer In-Charge

LHV: Lady Health Visitor

VHND: Village Health Nutrition Day

Introduction

ANM is the first point of contact between community and health facility. She centrally focuses on improving the health indicators of maternal and child health. Along with the all the responsibilities and duties of ANM, she conducts VHND. She responsible for vaccination of children and provide pregnant women with ante natal care(ANC). She records all these information of children and pregnant women in RCH register. This information helps government to track high risk children and mothers and take correct measures in time so that lives can be saved. It helps government to formulate new policies to bring positive changes in reproductive and child health.

ANM is the primary end user of Khushi Baby System. ANM with the assistance of Khushi Baby fulfills her duties by taking care of maternal and child health. Khushi Baby provided ANM with a tablet in which Khushi Baby App is installed. ANMs who are working with Khushi Baby were given multiple training. The trainings were conducted on block level along with 12-27 ANMs per session. These trainings included lecture-based presentations, group-trainings, one-on-one trainings, ANM interviews, and role-play activities. The Khushi Baby supervisors helped the ANM to backfill the pre-existing record in their RCH register to Khushi Baby system. This helped the ANMs to understand how to operate the Khushi Baby app.

ANM could address the returning child or mother by simply scanning the Khushi Baby pendant and updating any new information available. For new child or mother, a new pendant is created and likewise they were registered to Khushi Baby system.

All the information of children and mothers were recorded into Khushi Baby system and one can access this information through Khushi Baby Dashboard. The dashboard shows the information of high risk mother and children immediately after the information of those beneficiaries is synced or uploaded. This process is quicker than the existing way of getting the information about high risk patients.

Need for study

ANM brings information about mothers and children filled in the RCH register and submit it to respective PHC. A data entry operator updates all that information brought by ANM in Pregnancy, Child Tracking & Health Services Management System (PCTS). By this method government officials can track the high-risk mothers and children. But if the information is incorrect then it won't solve the purpose for which the mothers and children are tracked.

So, Khushi Baby started doing data quality check of the information filled by the ANM in the Khushi Baby application. Khushi Baby used certain indicators to check the quality of the data filled by the ANM. In this report there will be two such indicators which Khushi Baby used for ANM data quality check.

The indicators are as follows

> If an ANM is filling the B.P of 70% of the mothers as 120/80 or 110/70 then we can say that the data is skewed, and then we can say that ANM is not doing her work properly.
>
> If an ANM is filling the urine test of 90% of mother as albumin and sugar not present in the urine then we can say that the data is skewed, then we can say that ANM is not doing her work properly.

Further, we will see whether all the equipment necessary for the check-up of the pregnant women is available or not, and if the equipment is available it is working properly or not. This will help us to understand the quality of the data that ANM are fetching is correct or not.

Khushi Baby provides the information to district head officials (like CMOH) so that they can help the ANM to improve their performance. ANM will be interviewed to find out why the performance of ANM differs from person to person and what can be done to improve the quality of performance of ANM.

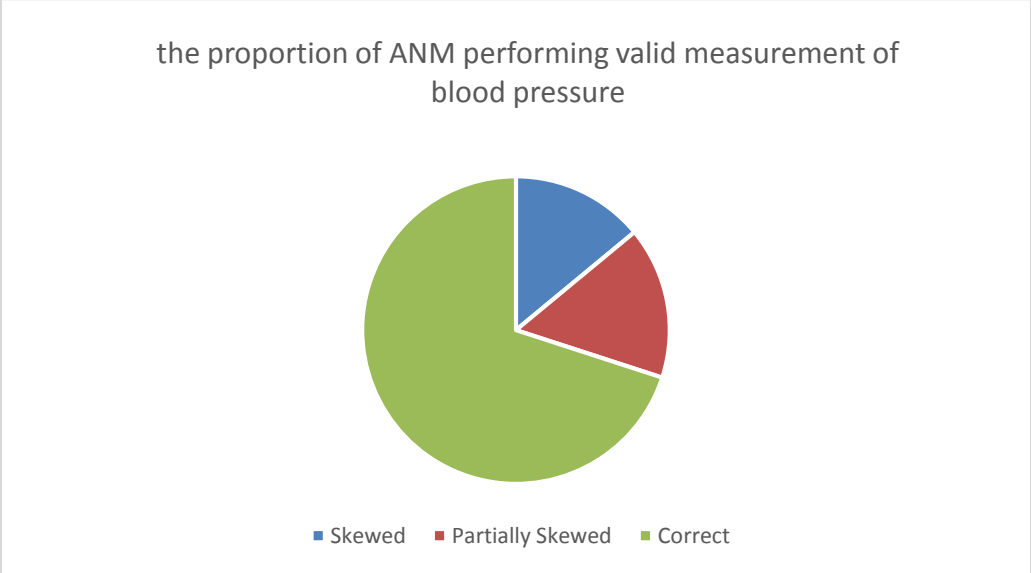
Indicator 1: ANM is filling the B.P of 70% of the mothers as 120/80 or 110/70

It is not possible that almost 70% of mother has their blood pressure ranging from 120/80 or 110/70. If ANM fill this type of data regularly we can say that the data is skewed data. Khushi Baby has a self -generated automated system by which the name of the ANM will be displayed according to their performance. There are three colors indicating the performance of ANM

Skewed: ANM who fill skewed data of B.P for 70% of the mothers. They fill mostly wrong data.

Partially Skewed: ANM who fill blood pressure ranging from 120/80 or 110/70 for 50% or more mothers but less than 70% of the mothers. They are marginal performers.

Correct: ANM who are fair in their job. Less than 50% of mothers has their B.P ranging from 120/80 or 110/70.



Graph 2.1. Pie Chart showing the proportion of ANM performing valid measurement of blood pressure

Indicator 2: ANM is filling urine test of 90% of mother as albumin and sugar not present

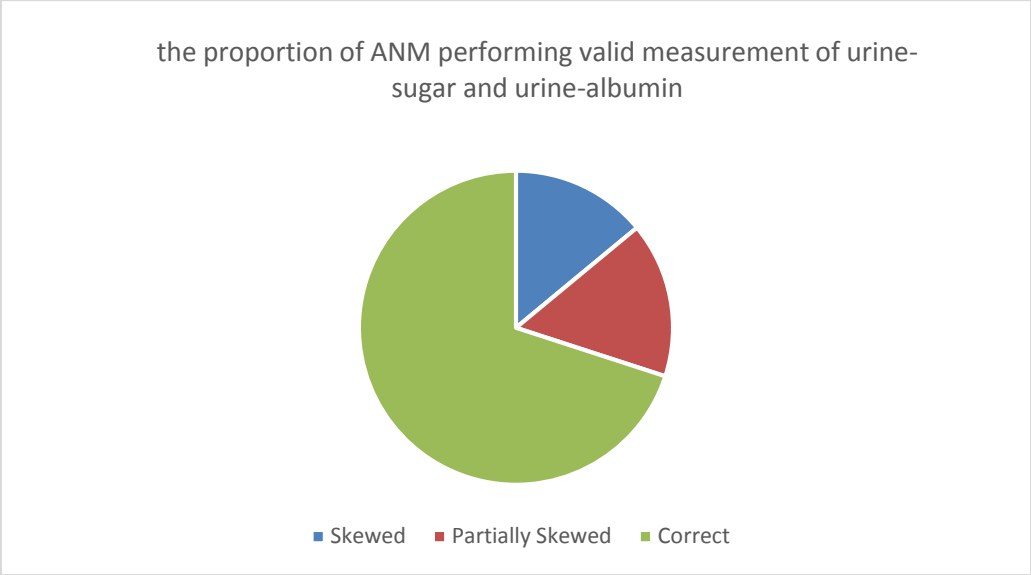
If sugar and/or albumin is absent for 90% or more urine sample collected, then we can say that the data is not accurate. At least for 10% of the data sugar and/or albumin must be present or the ANM must mention that the test was not performed.

There are three colors indicating the performance of ANM

Red: If the ANM assigns more than 90% of the value for sugar urine test and/or albumin urine test as absent, then the name of the ANM is marked red. It is considered that she is not filling accurate value.

Yellow: If the ANM assigns more than 70% and less than 90% of the value for sugar urine test and/or albumin urine test as absent, then the name of the ANM is marked yellow. It is considered data that she is filling is not accurate but moderate.

Green: If the ANM assigns less than 70% of the value for sugar urine test and/or albumin urine test as absent, then the name of the ANM is marked green. It is considered that she is filling accurate value.



Graph 2.2. Pie chart showing the proportion of ANM performing valid measurement of urine-sugar and urine-albumin

Methodology

Study Approach: Qualitative and Quantitative

Study design: Observational cross-sectional study

Study area: 5– blocks of Udaipur (Jhadol, Sarada, Salumbar, Lasadia and Gogunda)

Mode of data collection: Interview of ANM (primary data) and document review (secondary data).

Data collection tool: In-depth interview guide

Sample size: to assess the proportion of ANM performing valid measurement of B.P, urine-albumin and urine-sugar all ANM in 5 blocks in which Khushi baby project was working were included. In-depth interview to identify the issues faced by the ANM in performing diagnostic procedure were conducted till saturation in response was reached. 20 ANM were interviewed

Operational definition for valid measurement of B.P, urine-albumin and urine-sugar -Khushi Baby initiative has laid down criteria for valid measurement of B.P, urine-sugar, urine-albumin. This was followed in the study.

Data Collection

To understand the impact of Khushi Baby on the working of ANM a questionnaire was developed to interview ANM. An open-ended questionnaire was developed to gather the qualitative data. The interview lasted for an average of 15 to 20 minutes. The interviews were audio recorded as well as the responds were written down. The interview was conducted in Hindi and then it was translated in English.

The four-main objective to interview ANM are-

To know whether all equipment is working properly or not

What are the problem they face while they perform B.P, urine sugar and urine albumin test?

What is the impact of Khushi Baby in their job?

What are the improvements that can be done to help them do better in their job?

Analysis

The demographic characteristics of ANM are provided in Table 2. The mean age is 35.7 years (the age ranging between 23 to 58). The majority of the ANM has completed 12^{th} standard level of education. Some of them have even completed graduation. The mean of the

average number of monthly camps conducted by them is approximately 5 (the value ranging in between 1 to 8).

The raw data that we got after interviewing ANM is reviewed by listening and reading the interviews and a summary of each interview was written. The summary was read, and some concept was established.

Concept 1: Equipment& Facilities

It is very essential that equipment necessary for certain check-up to be available during MCHN camp. If the equipment is malfunctioning or not present in the camp, the data taken may be wrong or ANM failed to do certain test even after they got the training of how to do that test.

I know how to test blood sugar, but I don't have glucometer. Since I am a on contract under PPP model I don't get funding, so I can't buy it on my own. [ANM 2]

I know how to do urine test, but I have never done it since I don't have urine stripes. [ANM 3]

My baby weighing scale is not working properly. [ANM 4, ANM 10]

Some ANM said that their equipment was not working properly but they got new equipment. Most of the new sphygmomanometer is digital, if it shows wrong reading it is very difficult for a ANM to recognize the problem unless the reading very noticeable (very high or very low), unlike mercury sphygmomanometer.

Digital sphygmomanometer doesn't show the accurate reading. I even heard the same from others. Mercury sphygmomanometer takes time to measure B.P reading but it shows more accurate data than digital sphygmomanometer. [ANM 3]

I have digital sphygmomanometer it gives erroneous reading when the cell dried out and it is very difficult to understand whether it is showing right reading or not. [ANM 11]

For getting urine sample it is very essential to have a washroom in the Anganwadi Center. But most of the Anganwadi Center don't have washroom.16 out of 20 ANM complain that they face problem in collecting urine sample. Some ANM even said they face problem themselves if they need to use washroom. Few of the Anganwadi Center have washroom but they are not well maintained, and some are on the verge of getting collapse. Anganwadi Center is also not well maintained.

There is no ceiling fan in Anganwadi Center, the children who come to the camp cries a lot due to heat. In rainy season it seems like Anganwadi Center can crumble down anytime. It's very risky. [ANM 5]

Some ANM also said that they take pregnant woman to PHC on 9th of every month under the scheme of Janani Suraksha Yojana (JSY) and does all the required test or check-ups that are needed to be done or pending.

Concept 2: Knowledge about B.P test, Urine sugar and Urine albumin test

Most of the ANM have knowledge about how the tests are done. When it was asked how many times do you measure B.P of women in a camp. It was found that out of 20, 12 of them measure B.P twice of a woman in a camp in a day. Rest of them said that if B.P reading is very extreme then they re-measure B.P of that woman.

If the B.P of any woman is very low or high I check the B.P reading that took previously in previous check-up. In most of the case its almost same. [ANM 7]

I ask the woman to sit for sometimes before measuring B.P. Since they walk a distance before reaching to the camp in this heat so B.P may fluctuate so tell her to sit for some time, if necessary give her water. [ANM 10]

When asked if they know how to test urine sugar and urine albumin all of them said they know how to test. But when it was asked if they know what problem a woman can face if her urine sample contains albumin or sugar only few of them knew what is the aftermath of the presence of albumin and/or in urine. But all of them knew that they must refer this kind of patient have tobe referred to *PHC, CHC* or any district hospital. When asked if they ever came across this kind of patient in last one year only 2 out of 20 ANM said they once received patient with such condition.

Woman from rural areas generally don't face this problem unlike urban women. [ANM 7]

Concept 3: What are the impact that Khushi Baby brought in ANM's job

Khushi Baby track the performance of the ANM and help them to upgrade their performance in many possible ways. Khushi Baby give feedback of ANM's performance to higher authority like BCMO, LHV, etc., they take the required action needed to be taken.

When ANM were asked whether their performance is evaluated more after using Khushi Baby application than before, 14 out of 20 ANM said yes.

I didn't have weight machine Khushi Baby helped me to get a weight machine. [ANM 2]

Best thing about Khushi Baby app is that we get the information about high risk mother and children, which help us in tracking them. [ANM 3]

At first, we don't used to examine fetal heartbeat since it is very difficult to hear it fetal heartbeat. But now we examine fetal heartbeat since it is mandatory in the Khushi Baby app to fill fetal heartbeat. [ANM 7]

LHV or doctor visit ANM more frequently to check the data they are gathering or even to check whether the equipment is working or not. When asked what did LHV or doctor who came to visit them said majority of them to told that they come to review the data that they fill in the camp as well to check the equipment.

Doctor told me to learn how to use this application properly since this will be used in future. [ANM 9]

Concept 4: What can be done to help ANM with their work

Various feedbacks were received when it was asked what can be done to help you in your work. Each of the answer was unique to one another but majority (18 out of 20) of them said that it is essential to have a washroom in each Anganwadi Center. Some of them said that Anganwadi Center needs to be renovated and taken good care of.

Here is some common feedback that were collected

Pregnant woman asked us to hurry but we had fill both Khushi Baby application as well as RCH register. It takes time, but no one understand woman create a chaos in the camp.

Anganwadi workers don't take care of the equipment, most of the time equipment get damaged. We get a fixed amount of fund from government it's not possible for us to buy it every month.

I am working on a contractual basis (PPP model) but I am working as hard as a government appointed ANM, but I get very less salary, and no one appreciate me for what I do.

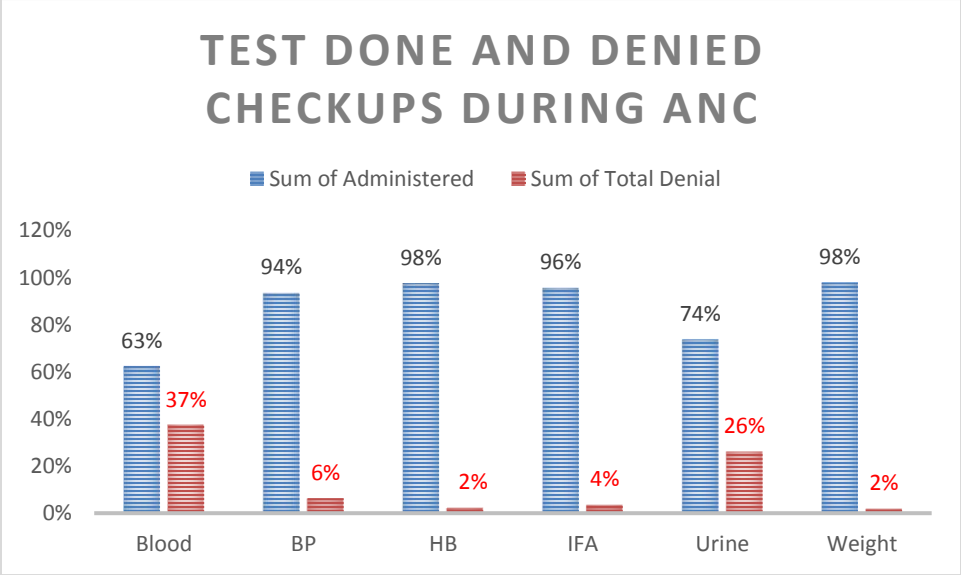
Even if ASHA visit every home the woman doesn't come for check-up. LHV/BCMO ask us to bring more pregnant woman to PHC in JSY camp day every month but they don't come. If Khushi Baby can help us to motivate these women to come to the camp it will be very helpful. It's very difficult to influence tribal woman to come to the camp.

I prefer app more than the pen and paper format but there can be a facility where we can get the list of the patient who came to the camp at a particular day. This will help me to fill line list register later. It is difficult for me to remember each one's name who are visiting the camp.

Discussion

Tracking System of Khushi Baby

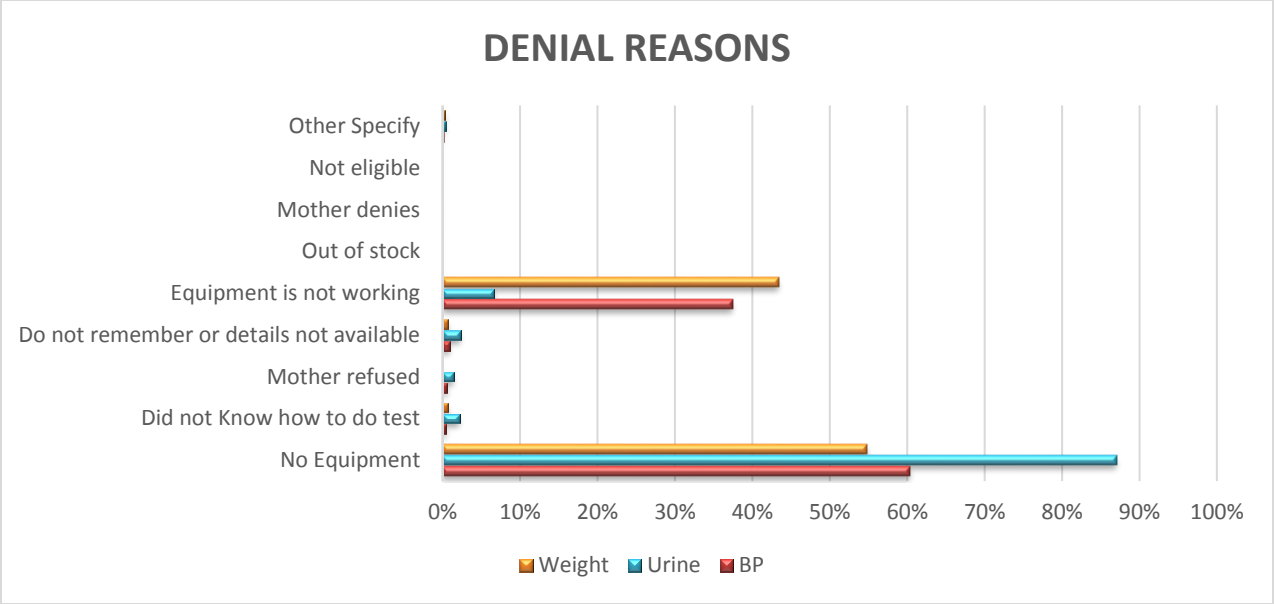
Khushi Baby has administered automated data quality check of ANM on some selected indicators like blood sugar test, blood pressure test etc. It has been done to see whether the ANM is collecting correct data or not. It has also helped Khushi Baby to track the improvement that has been brought over the time after Khushi Baby intervention. These data were taken from Khushi Baby dashboard.



Graph 6.1. Percentage of test administered, and percentage of test denied during ANC in all 5 Blocks

When ANM deny a check-up like B.P test, urine test to the pregnant women who come to the camp for ANC the ANM must put the reasons for the denial of that check-up otherwise the app will not allow her to move next to fill the data of other check-ups. So, the ANM must select an option from pre-defined option in the list to move forward with the check-up. The option that the ANM select is recorded in the dashboard and later it is used to determine the reason for which the check-up has been denied.

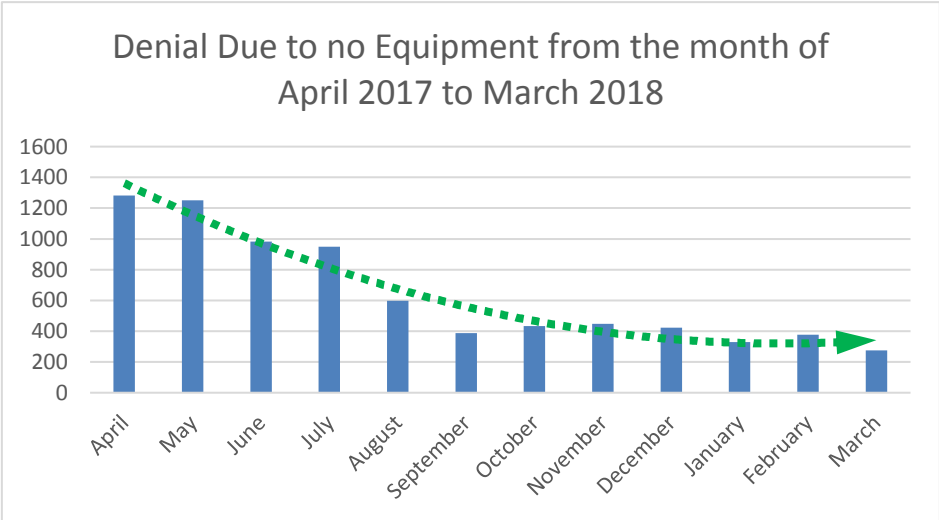
In this chart, we can see the check-ups that are done in the Anganwadi center during ANC in the block of Jhadol, Sarada, Salumbar, Lasadia and Gogunda in Udaipur. The total number of test that were administered are given as well as the total number of test which were denied are also given.



Graph 6.2. Denial Reasons for not examining weight, urine, B.P test

The major reason for the denial of weight, urine and B.P check-up is either no equipment available or equipment not working. Khushi Baby put showed these denial reason to government officials like BCMO, BMO and/or MOIC.

Khushi Baby tried to solve these issues by holding meeting with officials, letting them know about the problem ANM is facing. Khushi Baby address the problem that ANM do not have the equipment needed to do these check-ups to government officials. The government officials provided ANM with equipment needed to these check-ups.



Graph 6.3. Bar Chart showing the denial reason for no equipment from the month of April 2017 to March 2018

From the graph 6.3, Khushi Baby noticed that the denial reason for no equipment is getting less month wise. In month of April and May of 2017 no equipment as denial reason was very high but it got lessen since then. But the equipment not available problem keeps on fluctuating. In some months the problem decreases but there may be a sudden rise in the number in the next month. This problem may arise due to bad quality of the equipment or due to the responsibility of the Anganwadi workers or ASHA if the equipment is kept in the Anganwadi center.

The methods which helped Khushi Baby get this result

Monitoring through Dashboard: Dashboard gives all information of beneficiaries registered under Khushi Baby system. It contains contact number of the beneficiaries. Khushi Baby has automated voice call facilities with the help of which beneficiaries receives a phone call reminding them about the camp in the next day. The call is placed a day before the camp. Dashboard also contains the information of ANM as well as ASHA. It contains the information of how many camps are held on time and not held on time.

It also provides the information of high risk mother and children. All the information that ANM fill is synced in the dashboard. So, dashboard helps Khushi Baby in analyzing the quality of the data that ANM fills in the Khushi Baby application.

Dashboard also contains the denial reason for each check-up of the mother as well as the child. It also contains the information of the mother who are their last of pregnancy (completed 8th month) to track these women and help to have a safe institutional delivery.

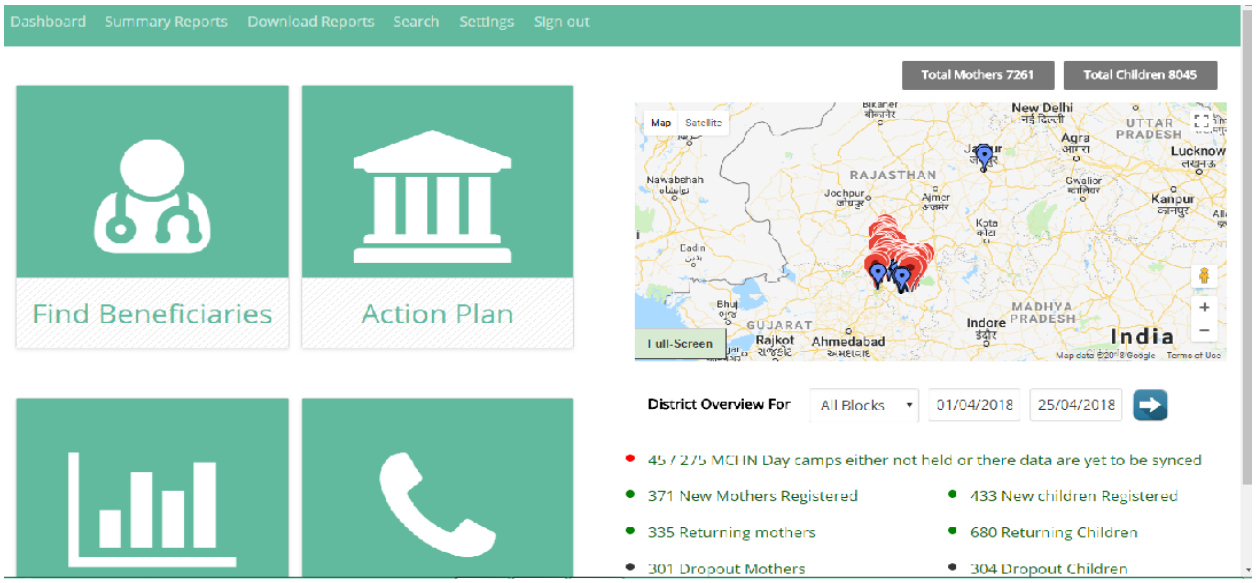


Fig 6.1. Dashboard of Khushi Baby

Engagement of field supervisors: On each block there are some field supervisor who supervise the MCHN camps, visit the house of high risk mothers and children, if after informing RBSK they failed to act supervisor call ambulance for these high- risk patients and take them to hospital. Supervisor again visit the house of high-risk mothers and children for follow-up and bring information about their health status.

Most importantly these supervisors help ANM to operate Khushi Baby application and fixes any glitches that may occur in the camp related to the application.

Fig 6.2. Supervisor taking MUAC of a high- risk child

Meetings: Khushi Baby team attains meetings with RCHO, CHMO, other blocks and PHC meetings to show the data they are fetching from ANM. The discussion of the problem that should be address are shared in these meetings. Any progress that is recorded is also shared in these meetings.

Communication through WhatsApp group: Khushi Baby has created WhatsApp group for 5 different blocks of Jhadol, Sarada, Salumbar, Lasadia and Gogunda. The members of this groups are ANM, BCMO, LHV, BPM, MOIC, and Khushi Baby team. In this group list of high risk patient is shared along with the problem they are facing. If any ANM does a good job she is appreciated for her job to motivate her. The list of the camp that get postponed along with the reason is shared in the group.

ANM provide the health status of the mothers and child. Also, dates and information about the upcoming block meeting is also shared.

Another WhatsApp group is made where all the information about the high -risk patient is shared. When monitor visit the house of these high -risk patients for first time as well as for follow up they share the information about the patient in this group.

A WhatsApp group along with the BCMO as members is also created. In this group was created to share actionable report by Khushi Baby to improve maternal and child health. Khushi Baby team shares information about camps that are held in time and camps which were not held in time. The progress of Khushi Baby also shared in the group from time to time. Khushi Baby also ask for suggestions from the members of the group for improvement. If any ANM is on leave or left the position, then Khushi Baby inform it to the block manager so that immediate action is taken and substitute ANM is send for taking over the ANM or a new ANM is appointed for that post.

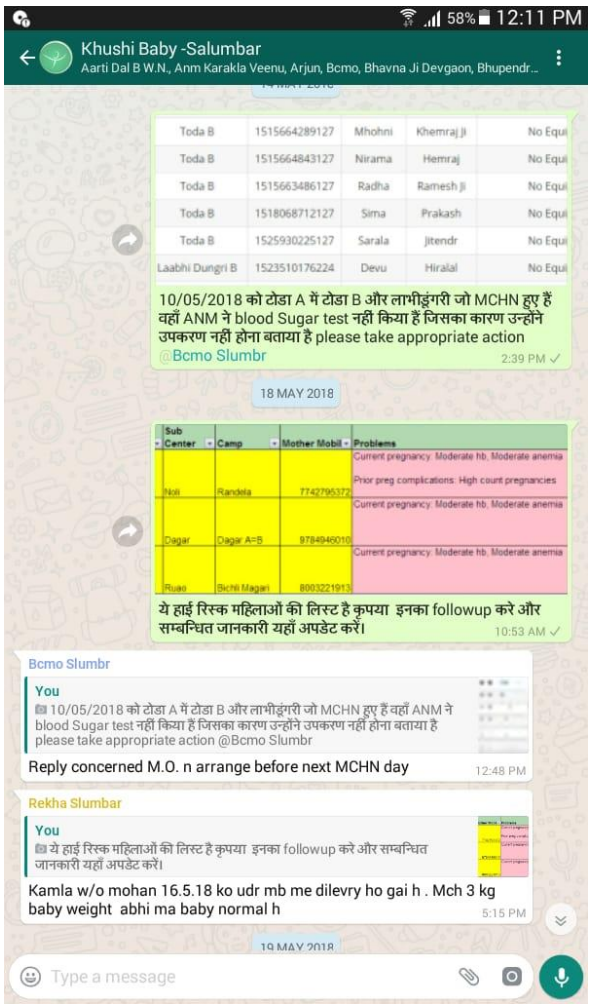


Fig 6.3. WhatsApp group of Khushi Baby Salumbar block

Limitation of the study

1. As it is a cross-sectional study in which all the ANMs were interviewed at one point of time only, the impact of study, whether the ANMs change their attitude towards filling data can't be determined and how it helped to improve the quality of service can't be commented upon.

2. A qualitative non-probability convenience sampling design was used in this report. It was done for ease of availability of the ANM to be interviewed and saving time as well as money for the travel. But it also comes with a drawback of **selection bias**. To minimize that ANM who were interviewed were chosen according to the quality of the data that they fill i.e., ANM who were pretty good in their job (those who were marked green), ANM who are average in their work (those who were marked yellow) and ANM who were not doing their work correctly (those who were marked red). Other than that, ANM were selected from 5 different blocks of Udaipur where Khushi Baby operate so that it could be well documented whether geographic location and temperament of beneficiaries from place to place affect the quality of data ANM fill. Like it was observed that most of the ANM from Gogunda was filling the data correctly rather than the ANM in Lasadia. When observed it was found that beneficiaries of Lasadia was mostly tribal women who were illiterate and socially backward. However, it can't eliminate the selection bias completely.

3. Sample sizes of 20 were taken because of short duration of study & saturation was reached as ANM was repeating the same answer to the question asked during the interview. However more number of samples covering these 5 districts would have helped to validate the results obtained in this study.

4.To validate the outcome of this study, a descriptive case-control study with large sample size & longer study duration, using the study population as their self-control can be done which would testify if the methods of improving the functionality of ANMs mentioned in the conclusion would improve the quality of service.

5.The finding of this study have internal validation only to given setting and sample. The is only applicable for these setting where the study is conducted.

Conclusion

Most of the ANM (70%) fill data for B.P test correctly in the app.

Very few ANM (4%) were performing valid measurement for urine-albumin and urine-sugar

Khushi Baby is helping ANM by solving their problem like providing them equipment as well as reporting government if any equipment is not working properly. This whole process is very swift. The main problem that most of the ANM facing is that Anganwadi Center is not properly maintained. There is a chance for improvement in that aspect, Anganwadi Center must be rejuvenated, and washroom must be constructed in each Anganwadi Center.

How to Improve the quality of work of ANM

Since most of the woman knows how to measure blood pressure without any error there must be two possibilities either the equipment is not working properly, or they do not examine the blood pressure of the pregnant women in the similar way as they described. Khushi Baby team must visit these ANM who are not filling data properly on their camp in their camp day to identify the source of the problem. If any problem is identified ANM should be trained how to do that job properly and should be reevaluated after sometimes.

When asked if they ever came across any pregnant woman in the camp in last 6 months whose urine sample contained albumin and/or sugar, majority of them said that they never came across any such pregnant woman. It may be possible that they are telling the truth and did not came across any such woman whose urine contains sugar and/or albumin but there is also a possibility that they are not examining the urine sample properly. There is also a possibility that equipment is not working properly to provide right result. This problem can only be solved by supervising these ANM in Anganwadi Center on their camp day. If it is found that they are not performing the test correctly then they should be trained, else if the equipment is found faulty then it should be reported to the government officials so that they can take required steps.

Most of the ANM also said that the equipment which is kept in the Anganwadi Center is not taken care of and sometimes ANM also find the equipment broken. Khushi Baby should also involve Anganwadi workers in their plan. Training should be given to these Anganwadi workers about the Khushi Baby app so that they can give feedback about the equipment.

It is well evitable that after intervention of Khushi Baby the data filled by ANM are evaluated more than before. So, it is important to motivate these ANM by rewarding them with an award or giving them some incentives for their good work. It will encourage other ANM to do well. It is also important to motivate beneficiaries to the camp. ASHA can be trained to motivate people to come to the camp. Training of ASHA is important since most of the ASHA is not well informed themselves about the affect for not getting ANC during

pregnancy and not vaccinating children. Role play, and stories can be told in the form of pictures in the Anganwadi Centers on camp days or in the village to motivate pregnant woman and new mothers to come in the camp for vaccination and check-up.

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1. Khushi Baby [Internet]. Khushibaby.org. 2018 [cited 21 June 2018]. Available from: https://www.khushibaby.org/

Annexure

Table 1: The list of questions that were asked during interview

Q1	what is your name?
Q2	On which block do you operate?
Q3	What is your educational status?
Q4	What is your age?
Q5	Do you have mobile? [If no, skip Q6]
Q6	If yes, what is your mobile number?
Q7	How many monthly camps do you conduct regularly?
Q8	What do you examine in patients during a camp?
Q9	Do you carry equipment from sub-center or it is provided to you in the camp?
Q10	Does all the equipment like weight machine, etc. works correctly? [If yes, go to Q15]
Q11	If not, from how long it is not working properly?
Q12	What did you do then?
Q13	If not, why?
Q14	How many times did it stopped working properly?
Q15	With which type of sphygmomanometer do you take B.P measurement? (mercury or digital)
Q16	How many times do you measure B.P of the same patient?
Q17	How do you come to know that B.P machine is showing correct measurement?
Q18	Is your sphygmomanometer showing correct reading now? [If yes, go to Q21]
Q19	If not, for how long it is not showing correct reading?
Q20	What did you do then?
Q21	Does it ever happened before when your B.P machine was not showing correct readings?
Q22	Do you face any other problem while measuring B.P? [if no, go to Q25]
Q23	What are the problem do you face while taking B.P readings?
Q24	What do you think can be done to overcome this problem?
Q25	Do you know how to take albumin and sugar test from urine sample? [If no, skip Q26]
Q26	How do you perform the test?
Q27	Do you examined any women whose urine sample contained albumin or sugar?
Q28	What does the presence of sugar and albumin in urine refers to?
Q29	What do you advise the women who has sugar or/and albumin present in their urine?

Q30	Do you face any problem when you test urine sample? [If no, go to Q33]
Q31	What problem do you face?
Q32	What do you think can be done to overcome this problem?
Q33	Did any LHV/doctor visited you in your camp or sub-center in last 4 months? [If no, go to Q36]
Q34	Why did he/she visit you?
Q35	What did he/she tell you?
Q36	Do you think your performance gets evaluated more than before, after you started using KB app? [If not, skip Q37]
Q37	How do you feel about it?
Q38	Do you get any appreciation for your work? [If no, skip Q39]
Q39	How do you feel about it?
Q40	In your opinion, what can help you to do better job?

ANM Characteristics

I.D	**Block**	**Age**	**Educational Status**	**No. of camps conducted per month**
1	Jhadol	58	10	6
2	Sarada	38	12	2
3	Salumbar	36	11	6
4	Jhadol	30	M.A	8
5	Salumbar	29	Graduate	4
6	Sarada	25	12	1
7	Sarada	40	B. A	5
8	Sarada	58	10	4
9	Lasadia	40	12	4
10	Salumbar	32	B. A	7
11	Gogunda	36	M.A	4
12	Lasadia	34	12	4
13	Lasadia	32	Not Specified	4
14	Gogunda	23	B.A, B.Ed.	8
15	Gogunda	27	10	8
16	Gogunda	28	LLB, B.Ed.	4
17	Gogunda	35	10	4
18	Lasadia	29	B. A	7
19	Salumbar	56	10	5
20	Jhadol	28	12	3