Summer Training at
Khushi Baby Association, Udaipur

Acceptability of Khushibaby Pendant among Beneficiaries in Terms of Wearing

By
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Under the guidance of
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MBA Hospital & Health Management
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2018

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 **Mr. Vinay Kumar Gupta** has undergone summer training at **Kushi Baby Foundation, Udaipur** from 2nd April 2018 to 2nd June 2018.

The candidate himself completed the project assigned to him during summer training. His 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 & Health Management.

I wish him success in all his future endeavors.

03/8/2018

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KhushiBaby

Sr. No. - 02/Internship/KB/2018-19/

June, 02, 2018

To Whomsoever it may concern

This is to be certified that **Mr. Vinay Kumar Gupta** from IHMR University Jaipur has attended the organization for his summer internship from 06/04/2018 to 02/06/2018. He has found proficient in delivering all tasks in efficient manner from Field Operations to the Research and Protocols. His summer training project is well presented and approved on the topic of "*Impact assessment of the Khushi Baby pendent (Personal Electronic Health Record) in the Salumber Block, Udaipur*" During the period of his internship program with us he had been exposed to different process & was found punctual, hardworking and inquisitive.

Wishing the best for his future endeavours .

(Dr. Jitendra Kumar Hayaran)
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2018

TABLE OF CONTENTS

S.No	Contents
1	List of Abbreviations
2	Acknowledgement
3	About the Organization
4	Introduction
5	Tasks done for the organistion
6	Observations from the field
7	Major learning
8	Objectives
9	Rationale
10	Methodology
	1.study design
	2.study area
	3.study population
	4.study period
	5.sampling design
	6.data collection
	7.data preparation
	8.data analysis
11	Results
12	Conclusions
13	Suggestions
14	Annexure
	1. Questionnaire
15	References

LIST OF ABBREVIATIONS

KB	Khushi Baby
ANM	Auxiliary Nurse Midwife
AEFI	Adverse event following immunization
ANC	Ante natal care
ASHA	Accredited social health activist
MCHN	Maternal & child health nutrition
LHV	Lady health visitor
DEO	Data entry operator
PHC	Primary health centre
BCMO	Block chief medical officer
MOHFW	Ministry of health& family welfare
NFC	Near field communication
CMHO	Chief medical health officer
COO	Chief operating officer
CTO	Chief technical officer
RBSK	Rashtriya bal suraksha karayakaram

ACKNOWLEDGEMENT

‘The only way to do great work is to love what you do’

- Steve Jobs

This internship was a milestone in my career; it not only helped to broaden my horizons, but also touched those areas of life which lie miles away from more mainstream. At the onset of my report, I would like to acknowledge my sincere thanks to our institute, Institute of Health Management and Research, Jaipur for providing us platform to gain enough knowledge and skills in different aspects of health management.

I express my gratitude and regards to my mentor **Dr. Mohan Lal Bairwa** for his able guidance and useful suggestions which helped me in completing the project work.

I would like to express my deepest gratitude to **Mohammad Shanawaz**, (COO) and **Dr. Jitendra Hayaran**,(Reasaearch & Policy Manager), Khushi Baby Association who provided me the possibility to complete this report..

I would also like to acknowledge with much appreciation the crucial role of **Dr.Vijendra Banshiwal (**Field Tech Program Manager), **Mr. Pawan Singh** (Research & Data Manager) and **Mr. Hamid Abdullah** (Field Implementation Mananger) of Khushi Baby Association, who provided me with all the required information & guidance I needed to carry out my project.

About the Organization

Khushi Baby Inc.

Khushi Baby is an award winning maternal and child health platform which leverages Near Field Communication technology to provide beneficiaries with a decentralized, digital health record. Since winning the Wearables for Good Challenge, Khushi Baby has been focusing on deployment of its system and field trials in the Udaipur District of Rajasthan, India. In the last year, much was achieved with additional funding support via Arm. This included the following activities:

Launched KB 2.0 platform with 87 frontline nurses
Tracked 15,000 mothers and children across 375 Villages, over 80,000 vaccination events, and over 33,000 mother and child health checkups
Completed over 70,000 voice call reminders to beneficiary families
Surveyed over 1100 mothers as part of their second ongoing randomized controlled trial for Midline results
Grew Team to include 21 full-time and 14 part-time members between India and the US
Raised over 750K in funding for the next two years

Khushi Baby has demonstrated:

Increased engagement in discussion and satisfaction among mothers attending the immunization camp.
Mothers were better able to retain their child's record in the wearable form compared to traditional card.
More Complete Data on the KB pendant vs. paper card and more consistent data between patient health record and backend system than the government equivalent
Decrease in time to obtain data from field to backend from 30 days to 4 hours.
16% increase in immunization coverage and timeliness for vaccines through PENTA3 for beneficiaries receiving our KB Voice Reminder Calls.
40% increase in camps being held on time after tracking feature introduced on Dashboard and WhatsApp Groups
Accredited Social Health Activists (ASHAs) reported time saved, reduced distance travelled, and mobile balance saved because mothers are already reminded via the Voice Call system.

Mission & Goal :-

Khushi Baby mission is to monitor and motivate the health care of mothers and children to the last mile

KB goal is to provide a digital key to connect the last mile to health and social services.

System

About Khushi Baby

KB have integrated mobile health, wearable NFC technology and cloud computing to produce a complete platform to bridge world's maternal and child health gap. By tying tradition with technology, we are putting the beneficiary back at the center of their care.
Khushi Baby appreciates that technology cannot replace human effort. As such its approach is not simply to provide a technology platform.

Instead, Khushi Baby takes an end-to-end perspective from community engagement to design to development to capacity building to deployment to field research to analysis, stakeholder engagement, and partnership building.

It empowered to see the complete process by bringing a multidisciplinary team of public health practitioners, designers, engineers, analysts, social workers, field researchers, physicians in training, and policy analysts - all working together around the same table along with a village of world class partners.

What's Next

Looking forward, Khushi Baby will look to grow it's footprint by making Udaipur a model district for maternal child health for others to scale and replicate. KB has been in talks with consultants for the Rajasthan State MOHFW to build custom analytics solution on maternal child health data quality on the existing State database. This represents an important first step towards generating non-grant revenue and towards integrating into the State infrastructure for scale-up. KB will also
continue to work with the state and central government to design frameworks for integrating multiple data streams from Mother and Child Health with Vaccine Inventory and Cold Chain, High Risk Pregnancy Tracking, and Disease Surveillance. UNICEF Innovation is also working with Khushi Baby to explore further collaborative opportunities with UNICEF Immunization teams for expansion in the field and opportunities for transition to scale in other geographies.

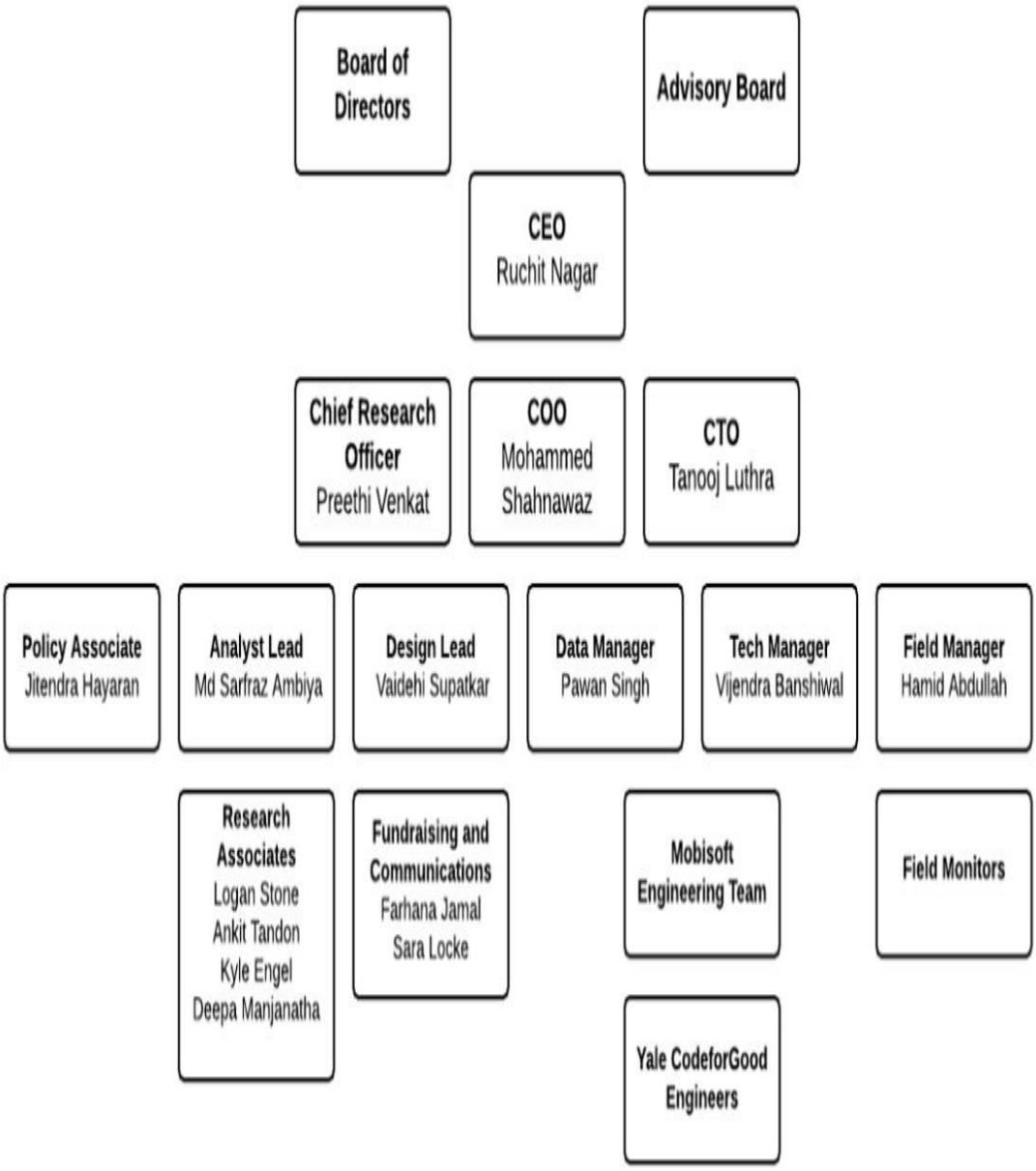
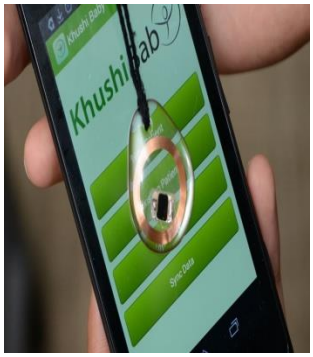


Figure 2: A representation of Khushi Baby Inc. Organogram

Khushi Baby Pendant



KhushiBaby pendant is a digital necklace that makes medical history wearable to monitor the health care of mothers and children at the last mile.

Importance of wearing of pendant:-

Being a wearable it is close to the users body this way it ensures that they hardly loose or forget it to carry to MCHN camp.

Through wearing it all the time beneficiaries also instigating a sense of wonder.

It becomes a campaignable tool to engage communities.

Tasks completed during the training for the organization :-

- Assist Research & Data Manager in finalizing the questionnaire for the End-line survey of the organization.
- Was a part of KB team to gave training to the surveyors for control group.
- Gave training to LHVs & DEOs of treatment area of KB in Salumbar (Block) of Udaipur – How to track MCHN camp & ANMs work through KB Dashboard.
- Gave training to ANMs of treatment area of KB in 3 Blocks of Udaipur – How to operate KB app.
- Met with BCMO of 2 blocks of Udaipur and discussed the ANC denial summary, ANMs & Camp attendance and about follow up of High risk children & pregnant women.
- Visited the MCHN camps in 3 blocks of Udaipur to monitor the workflow of ANMs on KB app.
- Counsell the family of high risk children & mothers to seek treatment and CO-ordinate with RBSK team and government medical professionals to follow up them.
- Was a part of KB team to gave training to the surveyors for treatment group.
- Attended Block meeting in Lasadiya Block of Udaipur to discuss the working of ANMs on KB App with Addt. CMHO, Udaipur ,BCMO, Lasadiya and ANMs of KB treatment area of Lasadiya.
- Monitored the End-line survey of the organization in both control and treatment area in 3 blocks of Udaipur.
    - Field planning for the surveyors
    - Spot checked the survey & work of surveyors
    - Shadow checked the survey & work of surveyors
    - Back checked the survey & work of surveyors

Observations from the Field

- ANMs are doing private practice at sub centre even during the working hours at sub-centre
- ANMs use to keep mamta card of the beneficiaries.
- ANMs are not trained – how to put icuds
- ANMs who are not working properly on kb app, majority of them are not doing it just because they feel extra load on them, since they know the importance of working
- Camp attendance increases where activities of ANMs monitored.
- ANMs and community health workers not aware community properly on health perspectives.
- Lack of motivation – ANMs & community workers
- Low wages and financial incentives of community health worker
- Community workers - Over burdened with work
- Lack of equipments at the majority of the MCHN sessions & also ANMs use to fill fake data in kb app & mamta card.
- Improper disposal of syringes, cotton swabs and urine containers at the campsite.
- Unhygienic surrounding for vaccine administration.
- Shortage of drugs & vaccines at Sub-centre and camp.
- Improper storage of vaccines at MCHN camp
- PHCs found locked even it is 24*7
- Even Government programs & policies, RBSK team and KB team are supporting to seek treatment to high risk women & child, but low educated people belongs to lower caste don't seek it because they have fear how they will manage to deal in such big city and that much educated medical professional and also where they leave their another children & pets when they will be out of home to seek treatment.
- Some villagers in some area told that Surveyors(who come from govt. side) ask money to survey the households.
- If surveyors or their work is not monitored properly, they can fill the questionnaire on their own, which can totally effect the data quality

Community :-

- Lack of education
- Existing superstitious practices

- Low awareness about health and vaccination
- Negative perception about vaccinating their children
- Preference to marriage and other ceremonies over vaccination.
- Fear of Adverse event followed by immunization
- Lack of family planning awareness & information
- Socio status of community also effect awareness level of the community towards health

Major learnings during training

- Questionnaire designing
- Field Planning for survey
- Field Monitoring
- Liasioning & relationship management
- Improving data quality
- A brief of data analysis
- Motivating co-workers & sub-ordinates
- Function of MCHN Camp
- Enhanced confidence

STUDY

OBJECTIVES

- To find out the number of beneficiaries wearing khushibaby pendant.
- To find out the reasons behind acceptability (wearing) of pendants among beneficiaries.
- To find out the reasons behind non-acceptability (not wearing) of pendants among beneficiaries.
- To evaluate the changes in existed pendant to increase its acceptability.

RATIONALE

This study was done to assess the acceptance of the pendant in terms of wearing,as well as also to assess the reasons behind non-acceptance of it, so that working on its major denial reasons increases its acceptance in terms of wearing.

Importance of wearing pendant :-

- Being a wearable it is close to the users body this way it ensures that they hardly loose or forget it to carry to MCHN camp.
- Through wearing it all the time beneficiaries also instigating a sense of wonder.
- It becomes a campaignable tool to engage communities.

Methodology

- **Study Design (Type)**:
  - ❖ Quantitative Research

- **Study Area:**
  - ❖ The study areas was 1 Blocks of Udaipur district of Rajasthan (Salumbarl) by two interns from IIHMR that is Vinay & Shashank..

- **Study Population:**
  - ❖ 60 mothers & their chiildren of 4 PHC area of salumbar block of Udaipur, who are beneficiaries of Khushibaby and were given khushibaby pendant.

- **Study Period:**
  - ❖ The study was carried out for 2 months from 2nd April 2018 - 1st May 2018.

- **Sampling Design:**

  Convenience sampling – 60 beneficiaries (mothers) were selected.

- **Data Collection:**
  - ❖ **Semi-structured Questionnaire** – A questionnaire of close ended and open ended questions was made to get specific and relevant information from mother.

- **Data collection tool :**

  Data collection was done by using Survey CTO tool.

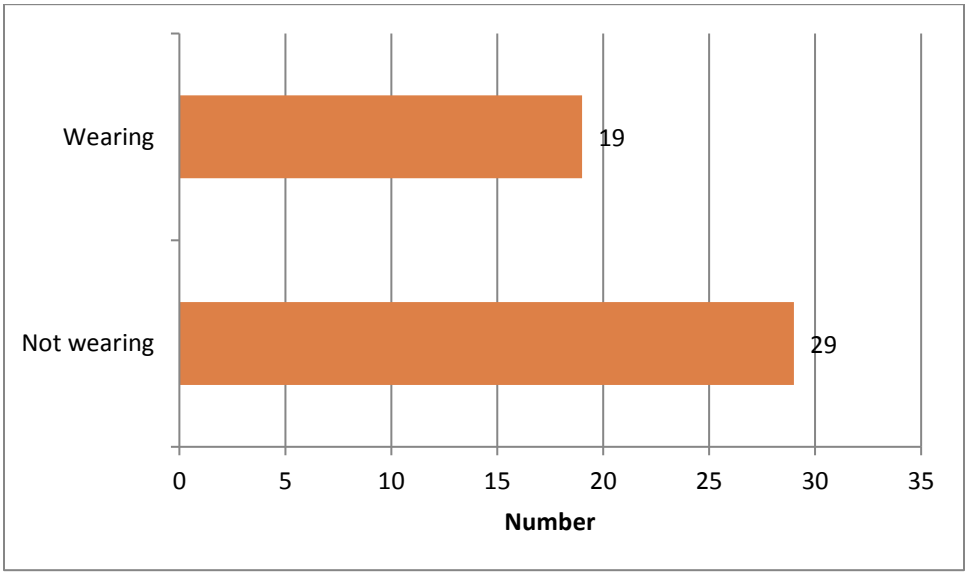
- **Data Preparation:**
  - ❖ Cleaning of data- Missing values were removed from the dataset.

- **Data Analysis:**
    - ❖ Data was analysed through Survey CTO & MS Excel.
    - ❖ Graphical Representation was done using MS Excel Software.

RESULTS OF THE STUDY :

Figure 1 : Number of children wearing/not wearing pendant

n = 60 (Children who got pendant)

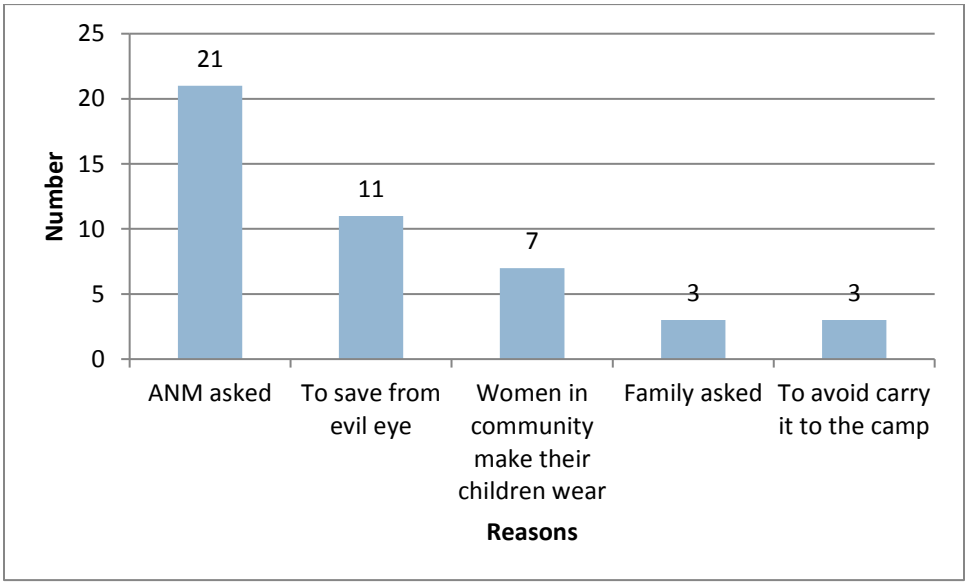


Findings :

I. 45 children were found wearing pendant.
II. 15 children were not founded wearing pendant.

Figure 2 : Reasons behind acceptance of pendant (Wearing) among children.

n = 45 (Children who found wearing pendant)

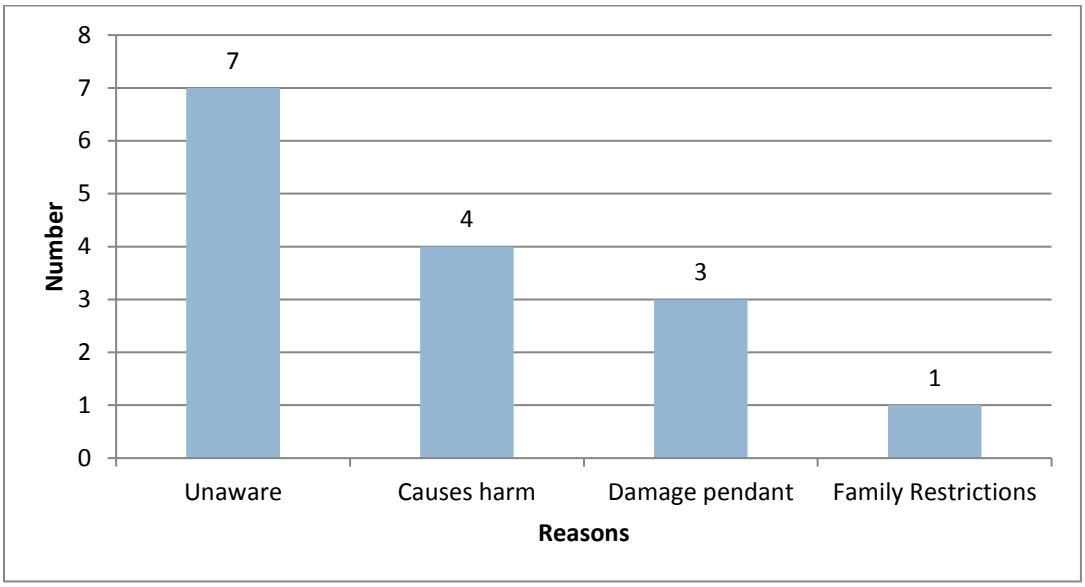


Findings :-

I. 21 out of 45 women were making their children wear pendant because ANM asks them to do so
II. 11 out of 45 women were making their children wear pendant to save their children form evils eye.
III. 7 out of 45 women were making their children wear pendant because other women in their community make their children wear.
IV. 3 out of 45 women told that they make their children wear because their family asks to do so.
V. 3 out of 45 women make wear their children to avoid carrying it to the MCHN camp.

Figur 3 : Reasons behind non-acceptance of pendant (not-wearing) among children

n = 15 (Children who were not founded wearing pendant)

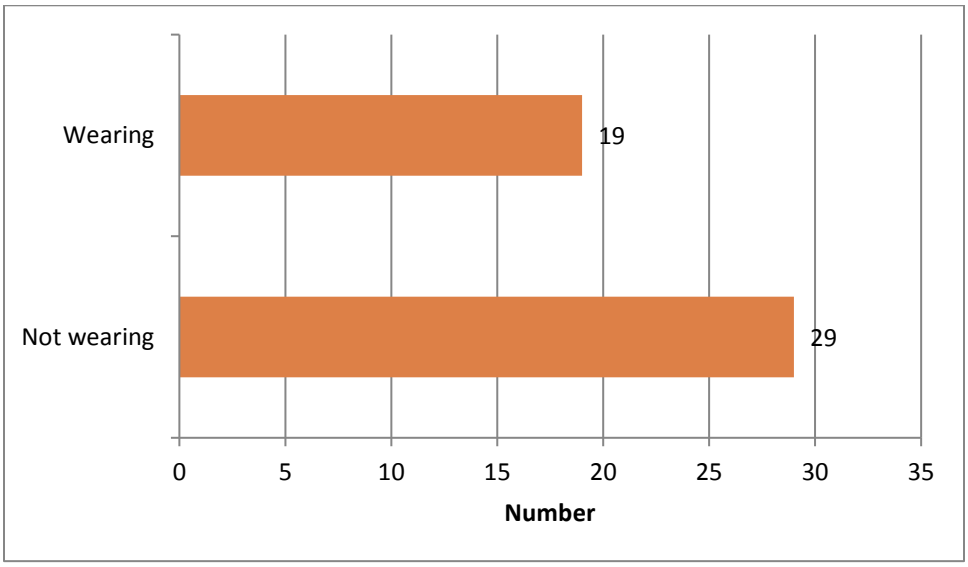


Findings :

I. 7 out of 15 women don't make their children wear because they are not aware, that its important to make child wear.
II. 4 out of 15 women don't make their children wear because it caused harm to their children like skin infection
III. 3 out of 15 women thinks making wear can damage the pendant.
IV. 1 out of 15 women don't make their children wear pendant because their family member asks not to make children wear.

Figure 4 : Number of Pregnant women who wore/didn't wore pendant during her pregnancy

n = 48 (Women those who got pendant)

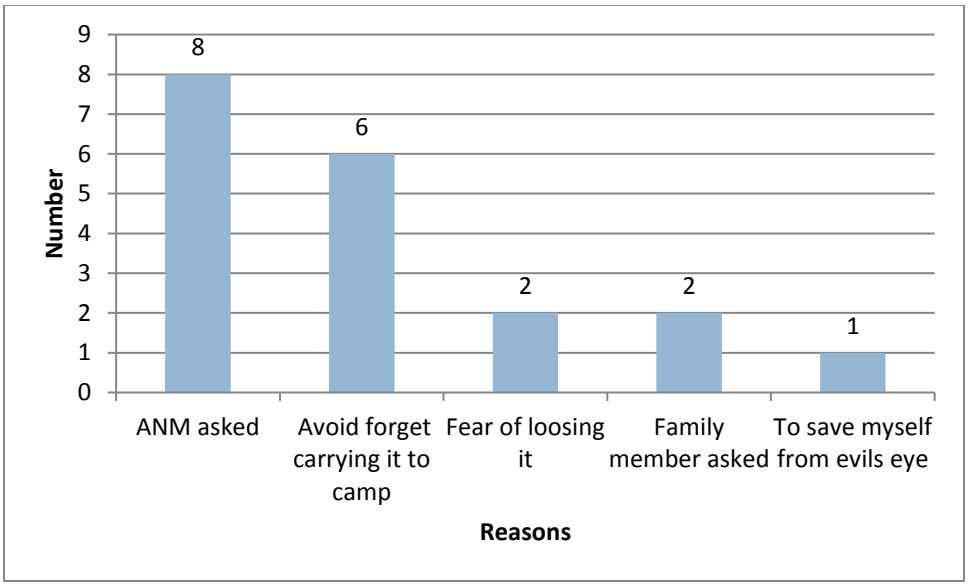


Findings :

I. 19 women out of 48 said they wore KB pendant during their pregnancy for ANC checkup.
II. 29 women out of 48 women said they don't wore KB pendant during their pregnancy.

Figure 5 : Reasons behind acceptance of pendant (wearing) among women

n = 19 (Women who wore pedant during their pregnancy)

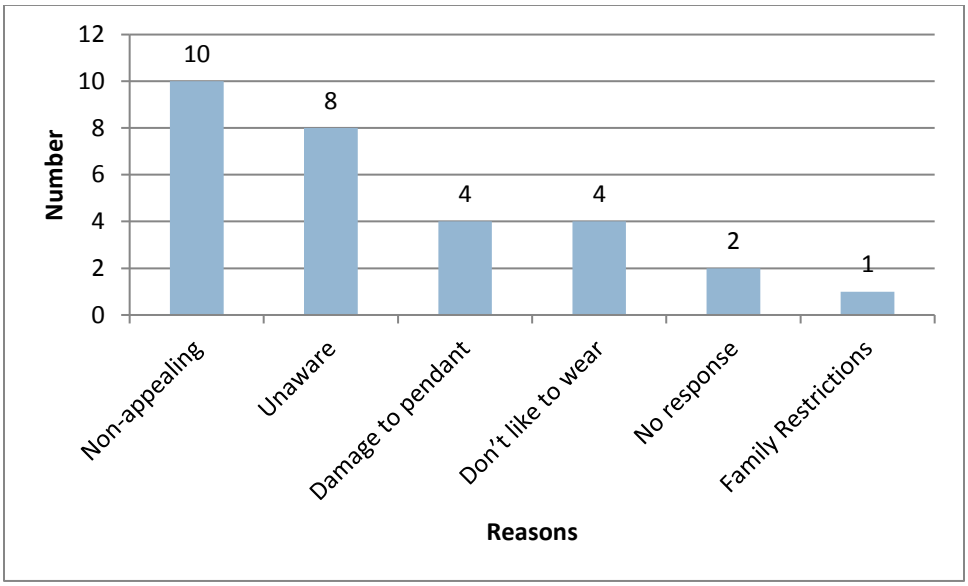


Findings:

I. 8 out of 19 women wore pendant because ANM asks them to wear.
II. 6 out of 19 women wore pendant because avoid to forget carrying it to camp.
III. 2 out of 19 women wore to avoiding of losing it.
IV. 2 out of 19 women wore because their family member asked to wear.
V. 1 out of 19 women wore to keep them self away from evils eye.

Figure 7 : Reasons behind non-acceptance of pendant (not-wearing) among women

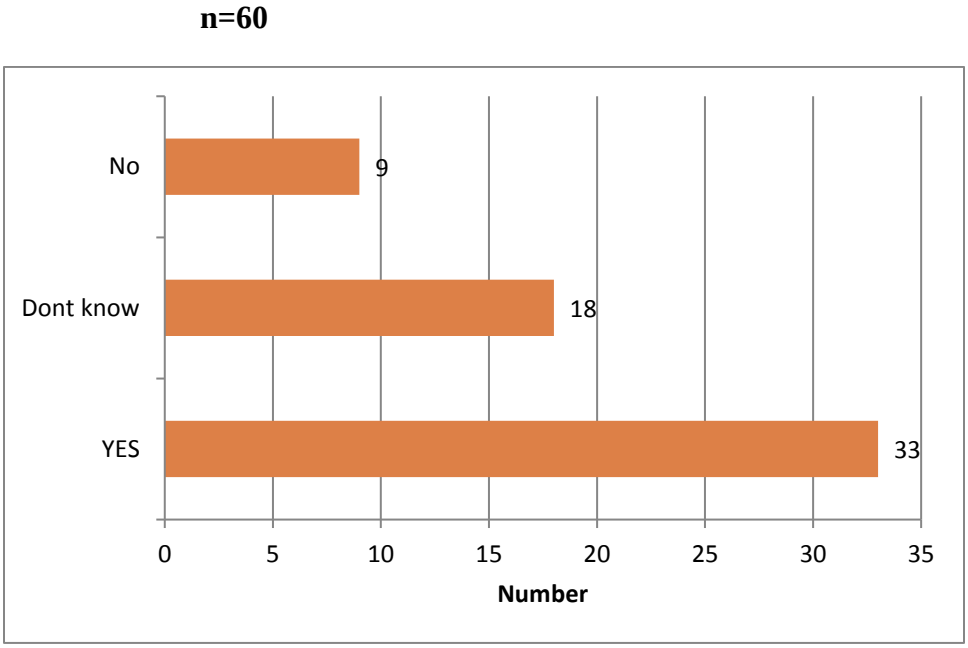
n = 29 (women who don't wore pendant)



Findings:

I. 10 out of 29 women said they don't wore pendant during their pregnancy because they didn't like the design of pendant.
II. 8 out of 29 women said that they didn't wore it because they didn't feel important to wear it.
III. 4 out of 29 women said they didn't wear because to save it from being spoiled.
IV. 4 out of 29 women didn't like to wear the pendant so they didn't wore.
V. 2 out of 29 women didn't respond anything that why didn't they wore.
VI. 1 out of 29 women said they didn't wear because their family members asked not to wear.

Fig 8 :- **Number of women want change in pendant**

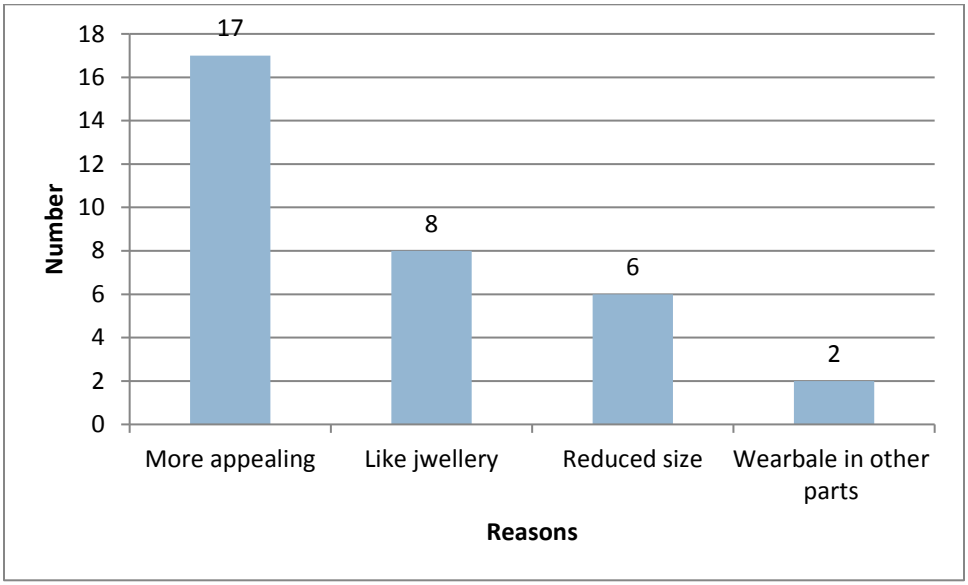


Findings –

I. Out of 60 women 33 women said that they want change in pendant.
II. 0ut of 60 women 18 women said they don't know whether they want any changes or not.
III. Out of 60 women 9 women said they don't want any change in pendant.

Fig 9 :- Changes women wants in pendant

n= 33 (women who said that they want change in pendant)



Findings:-

I. Out of 33 women 17 women said they want pendant to be more attractive than it appears.
II. Out of 33 women 9 women said that it will be made of jewelry ornaments.
III. Out of 33 women 6 women said that they want that the size of pendant should be reduced.
IV. Out of 33 women 1 women said that she wants pendant to be wearable in other parts.

LIMITATIONS OF THE STUDY:

- A two months period was not much to cover such a vast topic.
- The study area was small (only one block) and so the results cannot be generalized.
- Responders are women from catchment area,majority of them are having very less educational background, so they were not able to respond properly.

Conclusions

This study concluded that:-

- More than half percent of women and 1/4th of children are not wearing pendant.
- Major reason behind acceptance of pendant among beneficiaries is ANM asks women to wear / make their children wear pendant.
- Major reasons behind non-acceptance of pendant among women are non-appealing look of pendant and unawareness about importance of wearing it.
- Major reasons behind non-acceptance of pendant among children are unawareness about importance of wearing it as well as fear of wearing it, as it will cause harm to children.
- More than half percent of women want changes in pendant.
- Majority of women wants pendant to be more attractive than it appears.

Suggestions to the organization :-

- As per our research most of the women who are wearing pendant or make their child wear pendant are because ANMs asked them to do so, so we should ask ANMs to do it on regular basis.
- Khushibaby should also arrange Nukkad natak at MCHN camps or either in village to aware women herself about the importance of pendant to increase its acceptability.
- As per my findings majority of women didn't like the design of the pendant, so they are not wearing it, so I suggest some change in pendant according to women preferences.
- Best performing ANMs should be awarded to motivate them.
- Best performing Field monitors should be awarded to motivate them.
- Replacement of tablet in lasadiya, as it is not working properly.
- Should transfer other active monitor in lasadiy, they will be helpful in improving the performance of ANMs, will directly improve the quality of data
- Should give proper training to ANMs of non functioning area like Lasadiya & Bassi, salumbar.

Annexure

Questionnaire Format

Type of questions: semi structured

Name of Block :

Name of PHC :

Name of SC:

Name of Village :

Khushi Baby Id :

Surveyor Introduction :

Consent :

Consent - Hello! We are conducting a study to understand the vaccination of the small children of Udaipur district and the information of Mother's ANC. I will read the information given below to you and if you do not understand anything about it, then you can tailor it again.If you do not answer any questions and have the right to stop answering at any time. It will take about 15 minutes to ask all the questions.2- The information you give us will remain secret 3- Now you can ask us questions about this study. If you feel that you have been treated unfairly, or need information about your research subject, you should contact the Chief Investigator at Mohammed Shahnawaz, "Khushi Baby" on the 9001469934 contact number.You can gladly go to the Baby Office - happy baby, plot no-123, Kharol colony, Near Star Hospital, Sewa Mandir Marg, Udaipur - 313001 (Rajasthan).

If you are agree for the survey, please confirm by replying yes

Name of Women :

Age of Women :

Name of your husband :

What is your caste :

What is your qualification ?

What is your husband's qulification?

Is there anychild in your house in between 2 to 12 month?

How many child in your house?

Did you go / use to go MCHN camp for ANC check up or child Immunization?

Did you recieved Khushi baby pendent, If yes then when and to whom ?

Do you wear Khushi baby pendent?

If you wear then why?

Someone asked you something when saw you wearing pendent

if you dont wear then, why not ?

Is your child wear pendant?

If yes then why?

Someone asked you something when saw child wearing pendent

If not then, why?

Is this kind of pendant seen by you to someone else

Should there any changes made in pendant according to you

What changes we should do and why