Understanding of Maternal Health in Rajsamond, Rajasthan and Wighawali, Maharashtra

Visual Communication- Project 2
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Approval sheet

The Visual Communication-Project 2 entitled "Understanding of Maternal Health in Rajsamond district, Rajasthan and Wighawali, Maharastra " by Manish Kumar is approved, in partial fulfillment of the requirements for Master of Design degree in Visual communication at IDC School of Design, Indian Institute of Technology Bombay.

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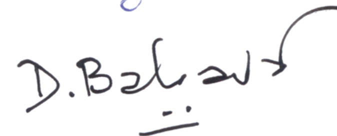
External Examiner: 

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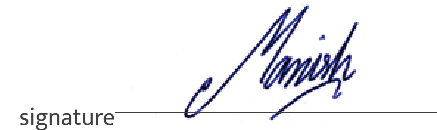

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Abstract

In India, thousands of women die of pregnancy related complications, anaemia and malnutrition. These are easily preventable deaths, requiring only good nutrition and education of basic health care. In large parts of rural and urban India, the public health system lacks basic infrastructure like labour room and blood banks, as well as staff and proper equipment for childbirth. Here an attempt has been made to educate women about pregnancy and Maternal Health especially in rural areas by providing them pregnancy related information. The output of the project is in the form of a booklet from which pregnant women could learn what important steps should be taken during her entire pregnancy period. This information is provided in the booklet in the form of images, short poems and instructions.

Aim

To understand the ecosystem of rural Maternal Health and to design a method for effective Information, Education and Communication (IEC) on Maternal Health and pregnancy for rural India.

Introduction

Why Maternal Health?

In India specially in rural areas many people die because of small and preventable causes. Why this is happening?

On the other hand, we say Medical Science has made many achievements but why we are not able to prevent lives which are preventable? I believe that maternal health has a great role in this issue and by that I mean pregnancy related diseases.

Today India is a disturbing study in health contrast. The paradox is that, on the one hand, it is presented as a favoured billion- dollar destination for Medical Tourism, offering package deal in sophisticated surgery and reproductive technologies including "womb on rent". On the other hand there exists a parallel grim reality where thousand of women die of pregnancy related complications, anaemia and malnutrition. These are easily preventable deaths, requiring only good nutrition and education of basic health care. After I came to know about this issue that in rural areas, we still are not able to prevent death properly, I thought I should understand this area more specifically that why it still exists.

Primary Study

Journey of understanding of Maternal Health in Rajsamond District, Rajasthan.

About Jatan Sansthan

Jatan Sansthan is a Non- profit organization working with a rural Population of the state of Rajasthan and the district of Rajsamond, Udaipur, Jhalwara, Bhilwara. These district are amongst more backward district of the state.
Since its inception in 2001, Jatan has designed and implemented various initiatives geared towards improving the social and demographic indicators of the state with special emphasis on youth, women, girl child and adolescents. Through the years Jatan has worked on programs related to health, education, violence against women, strengthening women in governance, migrant labour issues and livelihood issues.

Rajasthan is among the states having High Maternal and Neonatal Mortality. 'SUMA' Rajasthan White Ribbon Alliance for Safe Motherhood was launched in 2002 to create social awareness and work towards action and advocacy for reduction of high maternal and neonatal mortality in the state. CHETNA is secretariat of SUMA since 2002 and JATAN SANSTHAN is also working on Maternal and Neonatal Mortality. The members of the Rajasthan Medicare Relief Society (RMRS)/ Rogi Kalyan Samiti (RKS) who are responsible to ensure proper functioning of hospitals were trained to use these evidences to advocate for quality maternal health services at the facility level.

Observations and Study

Focus of Study

- Reproductive Health
- Maternal Health
- Newborn Health
- Child Health
- Adolescent Health
- Focus on spacing methods, particularly on PPIUCD at high case load facilities.
- Focus on interval IUCD at all facilities include sub centres.
- Home delivery of contraceptives and ensuring spacing at birth through ASHAs.
- Ensuring access to Pregnancy testing kits.

Interventions-

- Detect high risk pregnancies and line list including severally anaemic mothers and ensure appropriate management
- Review maternal, Infant and child death for corrective actions
- Identify villages with low institutional deliveries and encourage ANMs for domiciliary deliveries

Action Plan

Public hearing events were organised in Rajsamond districts through which, women demanded cleanliness of health centres, respectful behaviour from staff at health centres, stopping the demand of money for delivery services and ensuring that women who return to their natal homes for delivery, receive nutrition supplementation from the Integrated Child Development Scheme (ICDS).

Kishori mela was also organised by jatan through which adolescent girl could know about body changes in teenage life and was inspired to break the silence of shame. Many of the village girls actively participated.

Open house

I met pregnant women, husbands, mother in law, lactating women etc and discussed about maternal health. I tried to understand the situation by asking many questions.

- Do you know About contraceptives and who told you all about this
- Questions about quality of maternal and new born services at facilities

FGD (Focus on Group Discussion)

Under FGD we were suppose to discuss with separate groups of pregnant lady, husbands, lactating women about maternal health. We accessed the quality of services provided to women at public health facilities. So that we can discuss their experience further with official at those facilities and the services and care could improve motherhood in state.

Visit at Devgarh PHC (Primary Health Centre)

According to Dr. Sushil kumar, he and his staff were very passionate about working in this field and did not faced any problem regarding maternity issues yet. Even ANMs and other doctors had the same say about it. However, Dr. Sushil pointed out at the present facilities made available from the government but some of the facilities they didn't received yet.

Other visits

CHCs

- Railmagra
- Devgarh
- Kelwara

PHCs

- Kuraj
- Kuwaria
- Sangawash
- Nathdwara
- Aamet
- Selagurha

Educational session with Adolescent girls

We had conducted educational session with Adolescent girls.

- We played educational game in which they could understand the barriers given to girls by society and can raise their voice against it
- Discussion about violence, reproduction, sex education, Sanitary pads, Child marriage etc

After doing group discussion with pregnant women, their husbands and mother in law etc. I came to know that they don't know anything related to pregnancy. In rural areas of Rajasthan new generation is mostly literate. They can read and write. But I found there that the communication gap is high between pregnant lady and doctor. These females never ask any question related to their pregnancy to doctors. Only when doctors tell them, they listen and follow. Sufficient communication between doctors and pregnant women generally does not happen because of lack of staff in PHCs and CHCs. Doctors are always busy with deliveries, they rarely have time to teach the talk to the females about pregnancy related information.

In our society Maternity, Menstruation, Period, Pregnancy etc are the topics in which nobody talks openly and confidently. When I asked females about pregnancy, they felt shy. So I wondered about these embarrassing topics and where they can get such information.

Where does the information come from?

When I was in Rajasthan, I discussed with pregnant and lactating women about information related to maternal health. They told me that they don't know pregnancy and related things. So I enquired how they know these aspects of pregnancy?

I talked to 30 women of different villages. Most of them told me that they never ask anything related to pregnancy to mothers in law, husbands. They sometimes ask their mothers and most of the time their elder sisters or friends of same age.

How much correct information do they have about pregnancy ?

Customs & Traditions

In Rajasthan and Wighawali village customs, norms of the society, myths etc are there. So when a mother or sister gives information about pregnancy, it will always be a mixture of customs and myths. For example In Rajasthan females are told by mothers not to eat papaya, milk products in pregnancy. So the information about maternal health from mothers, sisters and others ladies is not proper because they also probably don't have the correct information. Women fully depend on Midwife, ANM or doctors in pregnancy. If in any case Midwife or ANM is not present in any village or during delivery she is not around then it will a very bad situation for lady.

Journal Entries (Dairy)

Week one

Early morning, we went to Devgarh PHC from Railmagra by bus for open house discussion with doctors.

According to Dr. Sushil, Devgarh PHC ranked 2nd in the service of delivery. According to him, he and his staff are very passionate about working in this field and haven't faced any problem regarding this. ANMs and other doctors have presented themselves very passionately about their work. After this, we met midwife (ASHA), she pretended herself very kind and intelligent. But according to patient, ASHA doesn't tell them anything. House of midwife was 10 km far from Devgarh District.

Midwife(ASHA) is very close to pregnant and lactating women, and can play main role in maternity health. I believe, if she would have been educated and sensitive about her work, then it would have been a great support in the village health.

In rural areas, people are ignorant about good services provided by the government and therefore if any death happen they are somewhere already prepared for it . They say,' ye to hona hi tha, upar wale ki marji hogi, doctor sahib ne to koshish ki hi hogi'.

Charts and banners in CHCs, PHCs was wrongly placed according to the villagers. We have to think that, what is purpose of chart(displayed facility)?, Does the displayed charter really fulfil its work after availability. There is no planning of displaying charts, banners etc. If chart is displayed somewhere that is not easily accessable and seen, then will it really help the viewer? Even after the availability of charts people don't know about the 108 government vehicle service, generally they come from private vehicle during delivery. What is the use of such huge banners in the hospitals, when the patients can not make use of it and cannot understand it.

Many health centres have better facilities and many have not. Why? Government gives equal money (budget) for every health centre but because of not taking better decision by the medical officers, health centre fail to give better facilities.

According to Medical Officer(MO), because of corruption and not taking better decision on time, problems are generated. He said, Rajasthan Medical Relief Society (RMRS) is not a fight club of politics. From this statement, it was communicated that, politics is highly involved in medical services. He said, drug supply is not enough, drug quality is low and that they are suggested to buy cheap medicine from RMRS.

Week two

According to MO (Medical Officer), hospitals don’t want to accept that their hospital is unclean, as they try to escape from the higher inspection. So, budget does’nt come for cleaning purposes from RMRS (Rajasthan Medical Relief Society). But 1.5 lack is proposed for cleanness in hospital from government. According to doctors, because of not taking proper decision, RMRS fails to use the money properly. When we ask a MO, why doctors are not able to take decision? he replies saying that BCMHO, CMHO are not enough motivated socially, There should be a motivational training for them because they are not good decision maker and even DPM(District Program Manager) and BPM are not from medical background. He suggested that Punjab Model is good enough about all these issue as there care is taken on this.

Discussion with Adolescent girls about Child marriage

The first question asked to the adolescent girls was that, do they know, what changes happen to small girl after marriage?
Girls smiled and replied that they don't know about it. Another question asked was that, Even after parents knowing that child marriage is a social evil, still they blindly do it for their kids, why? After discussion I understood that parents marry away their children at an early age because of lack of money. Also at times, to save money, many children are married in one expense. Parents say after age of eighteen they will send their daughters to their husband houses. That time I tried to understand that, there is no any physical loss involved in it but what about mental loss? When I asked girls that after marriage will you think about your future life and your husband? After listening this the girls laughed and whispered among themselves silently ignoring the question asked.

At starting of the discussion, they shyed however, in a meantime they gathered confidence. Girls generally don't talk with parents, friend about these topics but after this session they might get more confidence to talk about this for sure.

Journey of understanding
Maternal Health in Wighawali,
Raigad District, Maharashtra

About Local Sub- centre Wighawali

Wighawali Sub- centre is located adjacent to the main highway which is around 3 kilo meter from Wighawali village of Raigarh district, Maharashtra.
It covers seven villages comprising of 4000 to 5000 population. The government provides an incentive of around 20 thousand rupees for the maintenance of sub - centre.

- Staff pattern of sub-centre:
  - 1 Female health worker – Auxiliary nurse midwife
  - 1 Male health worker – Multipurpose worker
  - 1 Female Health Assistant (Lady Health Visitor)

- Services provided by sub centre:
  - Antenatal, natal, postnatal
  - Family planning and counselling
  - Treatment of common illnesses like respiratory tract infections, diarrhoea, fever, worm infestation
  - Prevention of malnutrition
  - Implementation of various national health programmes

The sub- centre has very less supply of medicine and other medical facilities. It also lacks, regular electricity supply and poor light fittings and supply which may create problems during delivery service. HIV and hepatitis infected mothers are not treated in the centre, they are sent to alibaug (CHC) for deliveries.

- Observations and Study

- Talk with Ashwini (50 Yrs)

Points made by her-

- Had 5 children, all delivered in Government hospitals.
- Private hospitals are available nearby village also.
- Diet- Rice, chapati, dal, sabjee.
- Village people work hard, eat limited and so stay fit.
- Dai system was better which was common in previous times.
- Dai took more care of pregnant ladies and if any complications occurred, which was a rare situation then, they approached hospitals.
- Previously, doctors used vanaspati medicine to cure any major diseases.
- Less sex education. Also, doctors don't inform all measures for child control.
- Didn't know about contraceptives

- Talk with Sonali (30 yrs), Chaitali (21 yrs)

Points made by her-

- Prefer getting pregnancy treatment at government hospitals and delivery at private hospitals.
- Had checkups twice a week.
- Nurses also visited monthly to examine them.
- Didn't refer the mother booklet given by the doctors,rather they believed on what Doctors said.
- Feels, girls should be educated well about maternal Health in school times itself.

- Talk with Radha (20 Yrs)

Points made by her-

- Girls get married after 18 yrs of age.
- Children from this Village are well educated are at great posts like engineers.
- No big disease has affected the village till now.
- Nurses come and visit homes and keep the record of village health, vaccinations and pregnancy issues twice a month.

- Talk with ASHA(Shalini) (30 yrs)

Points made by her-

- Big diseases travel from city to village.
- Do monthly survey and give medicines for normal fever and viral.
- Am trained for the work.
- Adivasi nearby have little knowledge about maternal health. So had to go to them regularly for their checkups.
- Before training had little knowledge about maternal health.
- Aware of Copper -T and other family planning materials
- Government takes sessions on sex education for 18+ groups during vaccination periods. But very few attend those sessions.

- Talk with Aanganwadi worker (Sunanda Nadkar)

Sunanda Nadkar was one of the member of aanganwadi who openly shared her views and happenings in the aanganwadi.

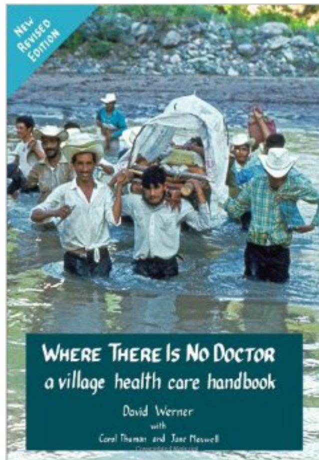
- Sanjay Gandhi Niradhar Yojna helps with monetary benefits to the needy for any medical help.

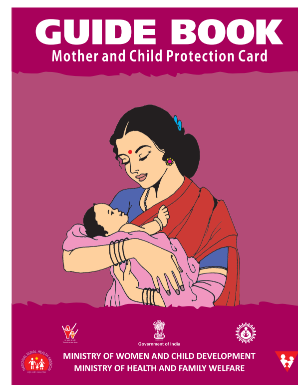
- Aanganwadi is the primary centre for the pregnant ladies for care and help.
- Provides healthy food like- Sukadi, Sheera, Upma to pregnant ladies during her pregnancy and lactating period.
- Also supply essential medicines like Ferrous-sulphate to new mothers.
- Each student is taken care of mentally and health wise. Also provided with daily rich food.

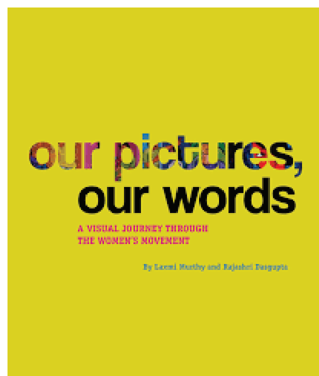
- Talk with Vanmala Patil -ANM (50 yrs)

She was female health worker , also stated as Auxiliary Nurse Midwife. She was confident in her part of work and had lots of complain against the government. She says, government fails to supply medicine regularly at the centre also the light fittings are not properly done which sometimes cause problems in lighting. She states that she holds a great experience in having successful deliveries done for pregnant mothers. Further adds that, HIV and hepatitis mothers are not treated in the centre, they are sent to alibaug (CHC) for deliveries. There are Multiple Health Workers (MHWs) who visit homes in the village and carry out checkups apart from midwife. She says, pregnant ladies normally don't go to PHCs. Her another complain was that she alone works in that sub centre. There should be more workers in the centre, but government doesn't care of it.

Secondary Study







- Books

  - Where there is no doctor

    By David Werner,
    Carol Thauman
    and Jane Maxwell

  - Our pictures our words

    By Laxmi Murthi
    Rajashri Dasgupta

  - Guide Book

    Mother and child protection card

- Internet

  - Online Reports

    Ministry of Health and Family Welfare

    Reproductive, Maternal, Newborn, Child
    and Adolescent health programme

  - Unicef India

  - National Health Mission

- Maternal Health

Maternal Health is the key for the development of any country in terms of increasing equity and reducing poverty. The survival and well-being of mothers is not only important in their own right but are also central to solving large broader, economic, social and developmental challenges. Maternal Mortality Ratio (MMR) is one of the critical indicators to judge the quality of health services in any country. India has made remarkable progress in reducing maternal deaths in the last two decades. In 1990, Maternal Mortality Ratio (MMR) in India was very high with 600 women dying during child birth per hundred thousand live births, which meant approximately one and a half lakh women dying every year. Globally MMR at that time was 400, which translated into about 5.4 lakh women dying every year. India at that time contributed 27 percent of the global maternal deaths. In the year 2010 global MMR was 210. Against this, as per latest SRS estimates MMR in India has declined to 178 per hundred thousand live births in 2011, India now contributing to only 16 percent of the global maternal deaths.

- Maternal Health in Focus

India's maternal mortality rate reduced from 212 deaths per 100,000 live births in 2007 to 178 deaths in 2012. The advance is largely due to key government interventions such as the Janani Shishu Suraksha Karyakaram (JSSK) scheme which encompasses free maternity services for women and children, a nationwide scale-up of emergency referral systems and maternal death audits, and improvements in the governance and management of health services at all levels.
However, adolescent and illiterate mothers and those living in rural or hard to reach areas still have a much greater chance of dying in childbirth. Adolescent girls are especially vulnerable as teenage marriage and pregnancies are very high in rural and remote areas of the country.
In large part of Rural and Urban India, the public health system lacks basic infrastructure like labour room and blood banks, as well as staff and proper equipment for childbirth. Even though abortion was legalised in 1972, absence of facilities, especially in rural areas means that hundreds of women end up going to quacks who use hazardous method.

- Big Picture

  - Globally, about 800 women die every day of prevent able causes related to pregnancy and childbirth ; 20 per cent of these women are from India.

  - Annually, it is estimated that 55,000 women die due to preventable pregnancy-related causes in India.

  - Good news: The Maternal Mortality Ratio – the number of maternal deaths per 100,000 live births – reduced from 212 in 2007 to 178 in 2012. UNICEF and its partners contributed to this reduction through schemes such as JSSK.

  - Mothers in the lowest economic bracket have about a two and a half times higher mortality rate.

- Mothers in the lowest economic bracket

  Its dual role with respect to women: its utter neglect of poor women who had no access to medical care while giving birth and the over materialization of pregnancy and childbirth for upper-class women, manifested by unnecessary caesarean section or hormone replacement therapy (HRT), for instance.

Equipping women with knowledge about their was a first step in changing unequal relationship as well as challenging the medical industry.

Several studies have revealed that woman have a greater need for health care, they are less likely than men to access and utilize health services.
Poor women neither afford medical treatment nor, given their role and responsibilities in the family, take time off from their work. They are intimated by a public health care system that does not respond to their system. While autonomous women's group concentrated on policy advocacy to make the government's health policies more women centres

- Family Planning

Women's group have campaigned against the two child policy in state like Rajasthan, where those who had more than two children were disqualify from standing for panchayat election. Several scheme, job and maternity benefits were also denied to those with more than two children. In Maharashtra, the public distribution (fair prize Ration shops) and education in government schools were denied to the third child.

Women’s group have stressed that families have more children for reason such a needing more working hand as well as the high infant mortality rate that does not guarantee survival of all babies born. Patriarchal control over reproduction and the obsession with sons are also reason of high birth rates, because family plan to have children until they get the desired number of sons. Thus, women who are often not in a position of determine the number of children they have and are not allowed by their families to use contraceptives, are unfairly barred from availing the government scheme or standing for elections.

- Pregnancy

Signs of pregnancy

All these signs are normal:

- The woman misses her period (often the first sign).
- ‘Morning sickness’ (nausea or feeling you are going to vomit, especially in the morning). This is worse during the second and third months of pregnancy.
- She may have to urinate more often.
- The belly gets bigger.
- The breasts get bigger or feel tender.
- ‘Mask of pregnancy’ (dark areas on the face, breasts, and belly).
- Finally, during the fifth month or so, the child begins to move in the womb.

- How to Stay Healthy during Pregnancy

- Most important is to eat enough to gain weight regularly especially if you are thin. It is also important to eat well. The body needs food rich in proteins, vitamins, and minerals, especially iron .
- Use iodized salt to increase the chances that the child will be born alive and will not have learning difficulties. (But to avoid swelling of the feet and other problems, do not use very much salt.)
- Keep clean. Bathe or wash regularly and brush your teeth every day.
- Avoid taking medicines. Some medicines can harm the developing baby. As a rule, only take medicines recommended by a health worker or doctor. Vitamin and iron pills are often helpful and do no harm when taken in the right dosage. Get tested for HIV. Medicines that fight HIV can prevent the spread of HIV to the developing baby .
- Do not smoke or drink during pregnancy. Smoking and drinking are bad for the mother and harm the developing baby.
- Stay far away from children with measles, especially German measles .
- Try to rest more, but also get some exercise.
- Avoid poisons and chemicals. They can harm the developing baby. Do not work near pesticides, Herbicides, or factory chemicals.

- Preparing for Birth

Birth is a natural event. When the mother is healthy and everything goes well, the baby can be born without help from anyone. In a normal birth, the less the midwife or birth attendant does, the more likely everything will go well.

Difficulties in childbirth do occur, and sometimes the life of the mother or child may be in danger. If there is any reason to think that a birth may be difficult or dangerous, a skilled midwife or experienced doctor should be present.

CAUTION: If you have a fever, cough, sore throat, or sores or infections on your skin at the time of the birth, it would be better for someone else to deliver the baby.

- Signs of Special Risk that Make it Important that a Doctor or Skilled Midwife Attend the Birth—if Possible in a Hospital:

  - If regular labour pains begin more than 3 weeks before the baby is expected.
  - If the woman begins to bleed before labour.

- If there are signs of pre-eclampsia.
- If the woman is suffering from a chronic or acute illness.
- If the woman is very anaemic or if her blood does not clot normally (When she cuts herself).
- If she is under 15, over 40, or over 35 at her first Pregnancy.
- If she has had more than 5 or 6 babies.
- If she is especially short or has narrow hips.
- If she has had serious trouble or severe bleeding with other births.
- If she has diabetes or heart trouble.
- If she has a hernia.
- If it looks like she will have twins.
- If it seems the baby is not in a good position (head down) in the womb.
- If the bag of waters breaks and labour does not begin within a few hours. (The danger is even greater if there is fever.)
- If the baby is still not born 2 weeks after 9 months of pregnancy.

- Roles and Responsibilities

Health Assistant is a Govt. servant who provides their services in his/her provided area. For every 50 thousand population Govt. setup one Primary Health Centre. Under these PHCs for every 5 thousand population one sub centre works. Under each sub centre 2 health workers provide their services. For each 3 sub centres one health supervisor supervises their work. Under National Rural Health Mission (NRHM) Govt. Appointed ASHA worker (Accredited Social Health Activists) to help health assistants for 1 thousand populations.

Role of Accredited Social Health Activists (ASHA)

- Every village/large habitat will have a female Accredited Social Health Activist (ASHA) chosen by and accountable to the panchayat- to act as the interface between the community and the public health system.

- ASHA would act as a bridge between the ANM and the village and be accountable to the Panchayat.
- She will be an honorary volunteer, receiving performance-based compensation for promoting universal immunization, referral and escort services for RCH, construction of household toilets, and other health care delivery programmes.
- She will facilitate preparation and implementation of the Village Health Plan along with Anganwadi worker, ANM, functionaries of other Departments, and Self-Help Group members, under the leadership of the Village Health Committee of the Panchayat.

Role and responsibilities of Anganwadi Workers (AWWs)

- To elicit community support and participation in running the programme.
- To weigh each child every month, record the weight graphically on the growth card, use referral card for referring cases of mothers/ children to the sub-centres/PHC etc., and maintain child cards for children below 6 years and produce these cards before visiting medical and para-medical personnel.

- To carry out a quick survey of all the families, especially mothers and children in those families in their respective area of work once in a year.
- To organise supplementary nutrition feeding for children (0-6 years) and expectant and nursing mothers by planning the menu based on locally available food and local recipes.
- To provide health and nutrition education and counselling on breast feeding/ Infant & young feed practices to mothers. Anganwadi Workers, being close to the local community, can motivate married women to adopt family planning/birth control measures.
- AWWs shall share the information relating to births that took place during the month with the Panchayat Secretary/Gram Sabha Sewak/ ANM whoever has been Notified as Registrar/Sub Regis trar of Births & Deaths in her village.
- To make home visits for educating parents to enable mothers to plan an effective role in the child's growth and development with special emphasis on new born child.
- To maintain files and records as prescribed.
- To assist the PHC staff in the implementation of health component of the programme viz. Immunization, health check-up, ante natal and post natal check etc.

- To assist ANM in the administration of IFA (Iron Folic Acid) and Vitamin A by keeping stock of the two medicines in the Centre without maintaining stock register as it would add to her administrative work which would affect her main functions under the Scheme.
- To guide Accredited Social Health Activists (ASHA) engaged under National Rural Health Mission in the delivery of health care services and maintenance of records under the ICDS Scheme.
- To assist in implementation of Kishori Shakti Yojana (KSY) and motivate and educate the adolescent girls and their parents and community in general by organizing social awareness programmes and Campaigns etc.
- Anganwadi Worker can function as depot holder for RCH Kit/ contraceptives and disposable delivery kits. However, actual distribution of delivery kits or administration of drugs, other than OTC (Over the Counter) drugs would actually be carried out by the ANM or ASHA as decided by the Ministry of Health & Family Welfare.
- To identify the disability among children during her home visits and refer the case immediately to the nearest PHC or District Disability Rehabilitation Centre.
- To support in organizing Pulse Polio Immunization (PPI) drives.

Government Schemes

The highest rates of declines are evident from the years 2004-06, which incidentally coincides with the period immediately after the launch of NRHM, and the numerous initiatives taken under this flagship scheme including the Janani Suraksha Yojana (JSY) which has resulted in a surge in institutional deliveries since its launch. Currently, as many as 1.66 crore women are reported to deliver in public health institutions.

Building on the phenomenal progress of the JSY scheme, Janani Shishu Suraksha Karyakram (JSSK), launched in 2011 provides service guarantee in the form of entitlements to pregnant women, sick newborns and infants for free delivery including Caesarean section and free treatment in public health institutions. This includes free transport between home and institution, diet, diagnostics, drugs, other consumable and blood transfusion if required. More than Rs. 2,000 crore was sanctioned for this scheme in 2013-14.

However, an estimated 47,000 mothers continue to die every year due to causes related to pregnancy, childbirth and the post-partum period.

The major medical causes of these deaths are Haemorrhage, sepsis, abortion, hypertensive disorders, obstructed labour and 'other' causes including anaemia. A host of socio-economic-cultural determinants like illiteracy, low socio-economic status, early age of marriage, low women's empowerment, traditional preference for home deliveries and other factors contribute to the delays leading to these deaths.

- Janani Suraksha Yojana (JSY)

Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Health Mission (NHM). It is one of the largest conditional schemes in the world and is being implemented with the objective of reducing maternal and neonatal mortality by promoting institutional delivery among pregnant women. Launched on 12 April 2005, JSY is being implemented in all States and Union Territories (UTs), with a special focus on Low Performing States (LPS). JSY is a centrally sponsored scheme, which integrates cash assistance with delivery and post-delivery care using Accredited Social Health Activist (ASHA) as an effective link between the government and pregnant women.

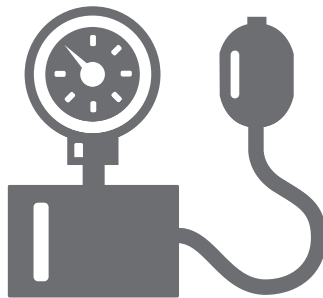
- Bhamashah Scheme

With the objectives of financial inclusion and to empower the women of the State, Bhamashah Scheme was launched in 2008, where in, around 50 lakh ladies were enrolled and 29 lakh accounts were opened. Bhamashah Scheme, an end-to-end service delivery platform to transfer cash and non-cash benefits to the targeted beneficiaries in a transparent manner, was relaunched in the year 2014 with broader objectives. The Scheme is a family-based programme of financial inclusion, where each family is issued a 'Bhamashah Card'. The Card is linked to a bank account that is in the name of lady of the house who is the head of the family.

Benefits of the Scheme

- Ensuring empowerment of women
- Financial inclusion for all sections of the society
- End-to-end service delivery platform for cash and non-cash benefits with complete transparency and real-time delivery
- Closer-to-home banking services to citizens
- A unified platform for a large number of schemes
- Includes both family and individual beneficiary schemes

Design Approach



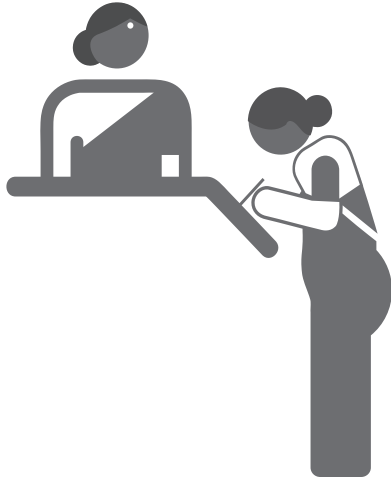
Initial Approaches

My Initial planned design invention was a pregnancy booklet for pregnant women.

Generally the duration of a normal pregnancy is 40 weeks. So, I decided my booklet will contain 40 double spread pages covering each weeks major information of pregnancy. So the idea was to make a weekly calendar book. The book would show images of baby's growth time line of the entire pregnancy period. My idea was to compare the baby's size and weight with that of the vegetables and fruits so that it will be easy for them to relate to the size of the baby.

In this booklet, there would be a section where mother can write and draw the feelings aroused during pregnancy. I thought it could be a good way of expressing her feelings, which only mother can feel when baby is inside the womb. It can also be a token of love which she can later gift to her baby.

The initial weeks would hold important information of pregnancy like registration, medical checkups, Antenatal care etc. as per the primary requirement. The later weeks would include diet plans and care during pregnancy. The remaining weeks would show the "Dangers signs during pregnancy", Abdominal examination, Government schemes, Home Delivery. After 40th week it continued with postnatal care information.



- Information visual design

  I decided that it will be a visual book because visual is fastest easy medium of communication.
- Information Icons

  I decided icons could be in Black and white so that cost could be decrease of the booklet
  These icons will represent Indian culture and tradition.
- Illustration

  Parallelly, I made colour realistic illustration related to information of pregnancy. These illustration depicts culture of rural India because females could relate with themselves.
- Colour

  Colour is medium where females can attract towards the colourful visual and can relate more with the illustrations and can understand it better.
- Language Design

  I decided that language of booklet will be Hindi for Rajasthan and in Marathi for Wighawali (Maharashtra). Hindi and Marathi are difficult languages, so I tried to remove complicated words in information and try to make a verbal Hindi and Marathi language which they can understand better and feel familiar with it.
- Informative poems

  This is another approach of giving information.

I tried to make rhyme of information about pregnancy, because poem is such a medium which can be remembered easily

- User Testing of first alteration

After design all of these things, I did user evaluation with pregnant and lactating women of Rajsamond -Rajasthan

I spoke to 30 females from 10 villages. I was supported and assisted by AWW and ASHA workers.

Before evaluation of my booklet I asked some questions.

Questions 1

Is campaigning for better nutrition and birth control effective?

From 30 females 14 said no and 16 said yes and Posters, banners are useless, we know little bit about pregnancy only from AWW and ASHA (Midwife)

Questions 2

Were old reproductive technique better for your health or new reproduction, maternal health technology are better?

Every women said new reproduction technology is better because we get more confidence in front of doctor. Before Dai maa didn't know how to handle complications.

Questions 3

Are Menstruation, contraceptives, childbirth are embarrassing topics? What are your opinion?

All of them were not aware of these. Every women said we don't know about these but doctor must know.

Questions 4

Is our customs, religious taboos, myths come in between of your health?

28 Women out of 30 said that taboo or myths are there in our society and it effects our health and nature of mind.

Questions 5

Is midwife equipped woman? Does she know basic things like menstruation, child-birth and how to resolve complications during pregnancy?

25 Out of 30 women said that she don't work good. We handle all situations in pregnancy ourselves. But we fear to say it in front of ASHA(midwife)

Points made by women after evaluation of booklet

- Illustration of information is more communicable rather than icons.
- All illustrations should be coloured
- Illustration should be realistic and detailed which also can reflect rural image
- Information through poems is understandable but direct information in booklet is preffered.

Detail of final booklet

School education in rural india doesn't include sensitive subjects like Maternal Health, pregnancy, Reproduction, Mensturation Cycle and so they remain uneducated and ignorant of the same even in the later ages of their lives.

These topics are thought of as taboo in rural villages so the people are shy and reluctant to talk openly on these topics. This booklet is my attempt to guide and spread information about pregnancy and maternal health.

I shelved (for the time being) the idea of weekly calender book and came up with new idea that my book should be sectioned in different parts according to chucking of information because weekly planned book gives wrong information of diet plan, home delivery information etc. For Example, if I put diet plan for a certain weeks it will show up as if it is constrained only for that particular week which is wrongly conveyed information. Similarly, when we put information related to taking injection and iron pills in certain week then it communicates that only in that particular week, a lady needs to take medicine and injections and not in other weeks where different information is there, which is again wrongly conveyed. So I decided that all information had to be in sections.

Design Choices made in Booklet

Size - A5

Paper size of booklet is A5 because it is a standard size which is easily portable, handy etc.

Colour - Four colour printing

It is a colour booklet because women can relate to themselves with Booklet easily.

Font - Ek mukta

Ek mukta is highly readable and stable font with many conjunct which makes writing beautiful. It is available in many indic languages also. It is open type face and free for all purposes.

Illustrations - Detailed, realistic and Colored

Illustration in booklet is highly detailed, rural centric, realistic and Colored.

Language - Hindi and Marathi

Language is in Hindi and Marathi because this booklet is mainly for Rajasthan and Maharashtra for time being.

Chucking - Chapters

Information is divided in chapters for easy understanding.

Engaging value

Poems, stories and painting related to mother and child to add engaging value.

Visual book

It comprises of more visuals than texts because visuals are fast and better medium of communication.

- Inside the book
Information

गर्भावस्था

गर्भधारण करने के संकेत
- महिला को मासिक धर्म का न आना (यह आपके गर्भधारण करने का मुख्य संकेत है ।
- सुबह के समय महिला थोडा कमजोर व बीमार महसूस कर सकती है ।(जी मिचलाना या उलटी आना)
  यह स्थिति गर्भावस्था के दुसरे या तीसरे महीने मे होती है ।
- गर्भवती महिला को कई बार मूत्र के लिए जाना पड़ता है ।
- महिला का पेट धीरे धीरे बढ़ने लगता है ।
- महिला के स्तन थोड़े बड़े और मुलायम हो जाते है ।
- महिला के चहरे, स्तन व पेट पर त्वचा का कुछ भाग काला पद जाता है ।
- पांचवे महीने के आसपास बच्चा गर्भाशय मे हिलने डुलने लगता है ।
  इसमें ९ महीनो की अवधि के दौरान बच्चे की सामान्य स्थिति को दिखाया गया है ।

गर्भावस्था के दौरान कैसे स्वस्थ रहें ?
- सबसे ज्यादा महत्वपूर्ण यह है की आपको वजन बढ़ाने के लिए ज्यादा भोजन खाना चाहिए। भोजन मे प्रोटीन, विटामिन, आयरन और खनिज पदार्थों की मात्रा ज्यादा होनी चाहिए ।
- आयोडीन नमक खाना स्वास्थ्य के लिए बहुत लाभदायक है परन्तु ज्यादा आयोडीन नमक भी नही खाना चाहिए क्योंकि ज्यादा आयोडीन नमक से शरीर मे सुजन आ सकती है ।
- महिला को साफ रहने, नहाते रहना और प्रतिदिन दांतों मे दातुन करते रहना चाहिए ।
- ज्यादा दवाइयों का प्रयोग नही करना चाहिए। इससे बच्चे के विकास मे प्रभाव पड़ता है। केवल उन्ही दवाइयों का प्रयोग करें जो डॉक्टर ने आपको खाने के लिए दी है।

- गर्भावस्था के दौरान धुम्रपान व शराब का सेवन नही करना चाहिए। ऐसा करने से माँ व शिशु के स्वास्थ्य पर बुरा प्रभाव पड़ता है।
- महिला को ऐसे व्यक्तियों, महिलाओं या बच्चों से दूर रहना चाहिए जो खसरे से ग्रस्थ हो ।
- गर्भवती महिला को हमेशा प्रयास करना चाहिए की उसे ज्यादा से ज्यादा आराम कर सके ।
- जहाँ रसायन या कीटनाशक दवाइयों का प्रयोग हो रहा हो तो ऐसे सथानो पर महिला को काम नही करना चाहिए ।

बधाई हो।
गर्भवती होने पर आपको बधाई हो। आपके साथ हम भी बहुत खुश है की आप ९ महीनों के बाद माँ बन्ने वाली है ।
इस बधाई के साथ हम कामना करते है की आपका बच्चा सुरक्षित और स्वस्थ रहे और आपका आँगन खुशियों से झूमता रहें ।

इसके साथ हम आपको गर्भावस्था से जुडी जानकारी दे रहे हैं जो आपको और आपके बच्चे की सुरक्षित और स्वस्थ रखने मे सहायता करेंगी ।

अगर आपको लगे कि आप गर्भवति है, तो आपको डॉक्टर या ए० एन० एम० से बात करनी है। डॉक्टर आपसे पूछेगें कि अगर आपको इन गुजरे महीनों मे मासिक धर्म नही हुआ है तो आपको गर्भवती माना जाएगा। गर्भवती होने की अवधि आखिर मे आने वाले मासिक धर्म के पहले दिन से शुरू होता है ।
सामान्य गर्भावस्था की सामान्य अवधि ९ महीने ७ दिन या ४० सप्ताह की मानीजाती है। गर्भावस्था के इन ४० सप्ताह को तीन त्रिमहियों मे बांटा जाता है क्योंकि आपको जन्म से पहले की जाँच (प्रसवपूर्व) मे आसानी से हो सके और जाँच भी समय पर की जा सके ।

- from the booklet

Information through poem

सबसे पहले ए० एन० एम० दीदी से बात करो ।
उनसे पंजीकरण की तारीख लेलो ॥
पहले पंजीकरण करवाना है जरुरी ।
कि बाद मे न हो कोई मजबूरी ॥
वजन का नाप भी लेलो ।
क्योंकि वजन बढ़ाना है तुम्हे हर महीनें एक किलो ॥

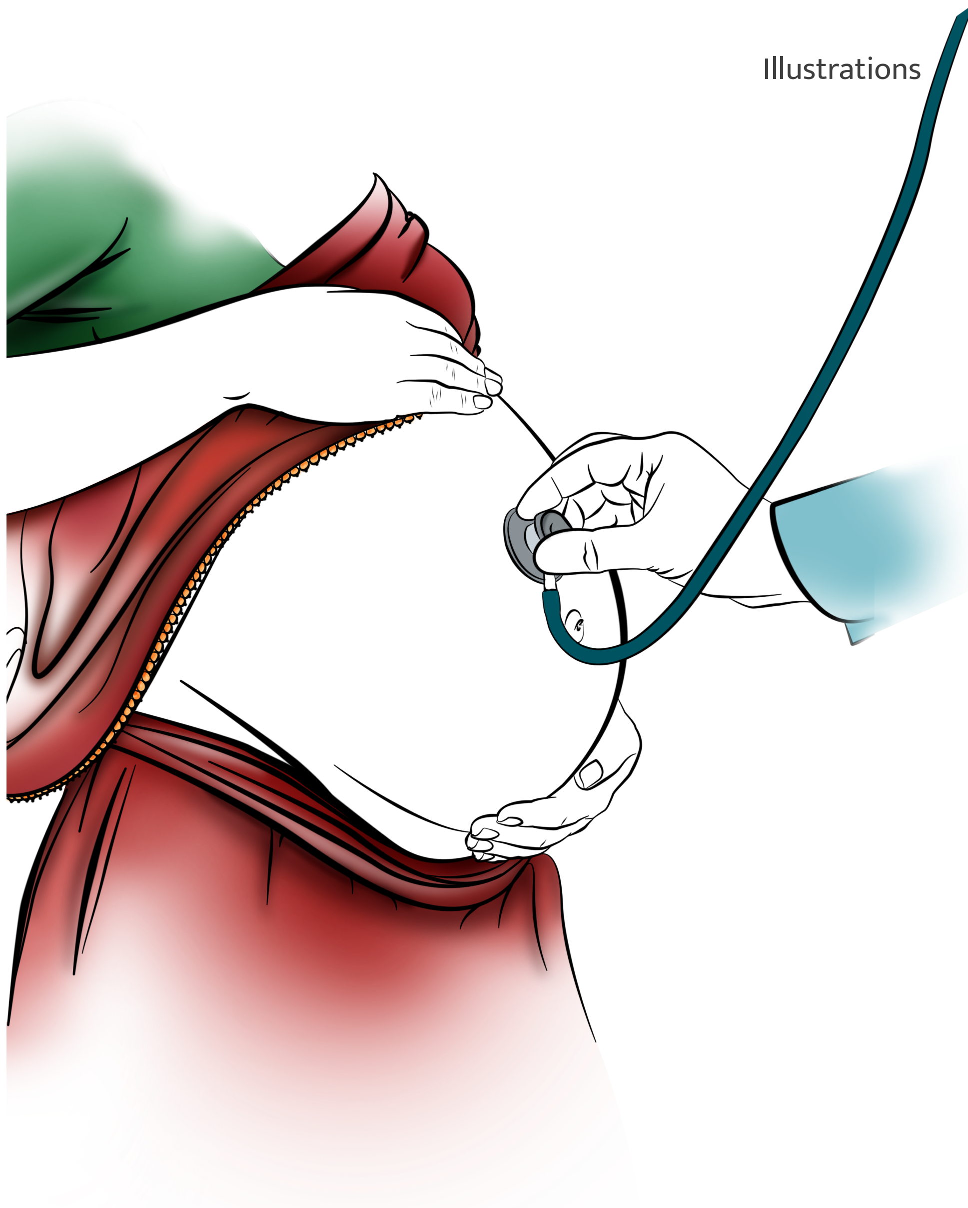
अगर आपको अपने बच्चे को स्वस्थ करना है ।
तो दिन मे एक आयरन की गोली लेना है ॥
अगर तुम तीन महीनो तक प्रतिदिन गोली लोगे ,
तभी तो तुम हस्ते खेलते बच्चे को जन्म दोगे ॥

अब एक टी टी का टीका लगवाना आवश्यक है ।
यह शरीर में होने वाली सभी बिमारियों का विनाशक है ॥
ये मत भूलना की आपको एक टीका और लगवाना है ।
क्योंकि एक महीने बाद समझदारी का परिचय भी तो देना है ॥
क्या आपको टीके से डर लगता है ?
अपने बच्चे के लिए कुछ दर्द तो सहना पड़ता है ॥

कम से कम चार बार स्वास्थ्य केंद्र में जाओगे
तभी तो अपने और अपने बच्चे के स्वास्थ्य के बारे में जान पाओगे ।
स्वास्थ्य केंद्र जाना है,
रक्तचाप और पेशाब की जाँच करवाना है ।
सोच लो जाँच के लिए कब जाना है
डॉक्टर से पूछ लेना अब हमें क्या क्या खाना है।

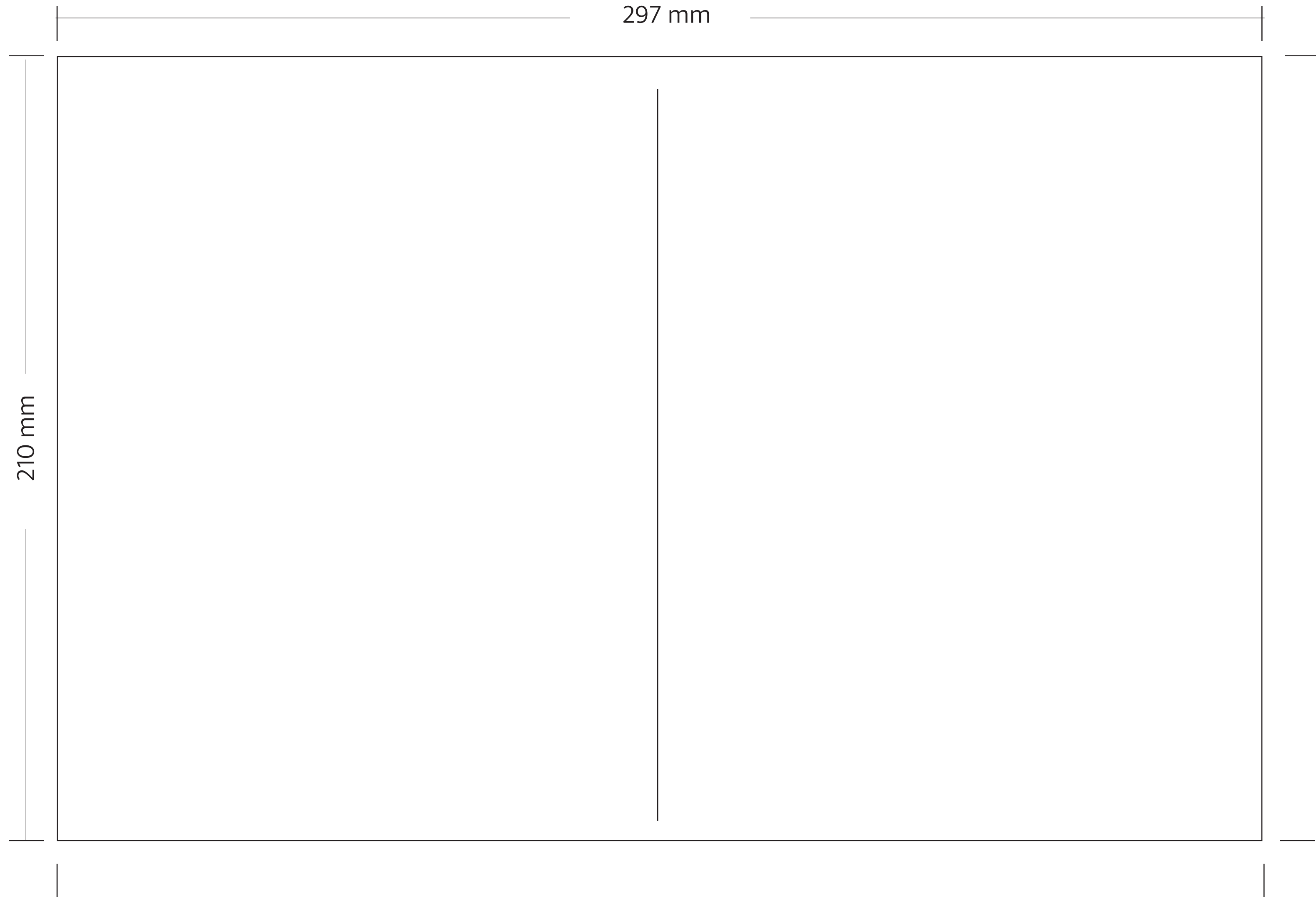
- from the booklet

Illustrations



- from the booklet

- Booklet layout



Conclusion and Future work

It was a very fulfilling experience for me to meet rural people and talk with the women there, health staff, doctors and NGOs people. I learned a lot about some of the actual problems of rural India, especially Maternal Health and pregnancy. I even got to know of a lot of other aspects of their life, work and culture. It was a great opportunity for me to have hands on experience of the life project.

In future I would like to do user evaluation of booklet and change accordingly. I plan to distribute the booklet to the NGOs and hospitals, so that this pregnancy guide book could reach to houses and can help to bring awareness among people. Also I will design this booklet in different indic languages like Marathi, Gujarati and hence forth.

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