

**EXPLORING WOMEN'S PERCEPTION ON BIRTH PROCESS
THROUGH BODY MAPPING**

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ABSTRACT

To explore women's perception on birth process 'body mapping' exercise was conducted with three different categories of rural women; trained traditional birth attendants (TBA), untrained TBAs and women who had never attended any delivery. There were 20 women in each category. Each was given a paper with the outline of a women's body and asked to draw what she imagined about the inside of a pregnant woman to look like. After completion of the drawing, each was asked to label and explain her drawings. The 'body mapping' helped to reveal the diversity of women's perception of the birth process, which would have been difficult to obtain. The drawings highlighted the difference and similarities between biomedical and indigenous concepts. By comparing the body maps done by the three categories of women, it appeared that the perception of the trained TBAs was more consistent with the biomedical model. However, some common patterns of perception and differences in scientific and indigenous vocabulary was found in all categories of women. It appears from the study that body maps have a range of potential uses as a research technique to explore lay perceptions on different health issues and as a tool for training and evaluation.

Table of content

1. Introduction	1
2. Objectives	2
3. Methodology	2
4. Findings	3
5. Discussion	6
6. Conclusions	9
7. References	9
8. Annex	10

INTRODUCTION

In recent years Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA) have emerged as useful approaches for information gathering in a relatively relaxed way, short period of time and with minimum cost (1,2). Rapid appraisal has been defined as-

“Any systematic activity designed to draw inference, conclusions, hypothesis or assessment, including accumulation of new information, in limited period of time” (3).

In this approach the process is interactive, informal and field oriented. One of the dynamic characteristics of RRA/PRA technique is the development of the visualization of information to replace or supplement verbal communication. Experience has shown that villagers carry with them a mental map of their physical and social surrounding, which they can express in a visual way that everyone can see. Dr. Virginia Sandoval described, “Mental map is a geographic representation of the cognitive image pertaining to a certain place or location. In constructing mental maps, people tend to distort proportion and scale. Instead of making faithful reproduction, they exaggerate those areas which are familiar or important to them and downplay those which are not as important or familiar” (2).

Therefore, maps and diagrams made by people have been used as a guide to people's perception of the spaces in which they live and work and a shared source of reference for interview and discussion. There are many examples of the use of visualization technique for agricultural research or community based rural development programmes.

Recently this concept has gained some popularity in health research. The use of visualization technique in health research is now at a stage of development. An innovative example is that of 'Body Mapping'. This was earlier developed by C.P. MacCormack, an anthropologist, who used it to explore lay concepts affecting use of family planning service in Jamaica (5). Later it was used in studies done in Zimbabwe, Sierra Leone and India (4-7). Medical anthropologists have drawn attention to different ways in which people within any culture or community hold and use knowledge about bodily processes. It is important because people's health behaviour has its base in their own perceptions of their bodies. It is often difficult to access people's knowledge about their bodies from verbal description; body maps, in this context, provided a way of gaining access to people's perception of their bodies and of locating explanation. Andrea Cornwell, who conducted body mapping exercise with the women in Zimbabwe, stated:

“Body Mapping can be used to explore people’s perception of a range of bodily process and the effects of medical intervention in the body” (4). She further added: “By using people’s own representation of their bodies as a starting point from which to explore particular medical issues, body mapping can facilitate a less directive interviewing style than would otherwise be possible” (4). This paper describes the experience of doing body mapping exercise with three categories of women from rural Bangladesh: Trained Traditional Birth Attendants (TTBAs), Untrained Traditional Birth Attendants (UTBAs) and women who never attended any delivery. The study was carried out with the following objectives:

1. to assess ‘Body mapping’ as a new approach of information gathering; and
2. to explore and compare the ‘mental maps’ of the three categories of women regarding female reproductive system, particularly to understand their perception of birth process.

METHODOLOGY

The body mapping exercise was conducted in three separate sessions with three different categories of women.

Categories of women	Number
1. Trained traditional birth attendants(TTBAs)	20
2. Untrained traditional birth attendants (UTBAs)	18
3. Women who never attended any delivery	18

Groups consisting of two women were formed. Each was given a paper with the outline of a woman's body and asked to draw what they imagined the inside of a pregnant woman to look like. After completion of the drawing, each group was interviewed and asked to label and explain their drawings.

The TTBAs were selected from those who received training from BRAC. BRAC initiated TBA training to provide them with basic knowledge on hygienic delivery and simple pre and postnatal care. All the TBAs received 7 days basic training from BRAC in 1991 and have been receiving one day refresher training every four months. The UTBAs were selected from those women who has attended at least 10 deliveries in their lifetime and never received any kind of training. The women who never attended any delivery were selected from the same community.

All the women were married, aged between 25 and 50 years. None of them had ever attended any school. All three categories of women were selected purposively from Shambuganj thana of Mymensingh district.

FINDINGS

Assessment of the 'Body Mapping' technique

When the women were asked to draw the female reproductive system there were moments of silence and hesitation. All three categories of women said they never drew anything like this before. It was important to stress to them that this was not a test of whether they could do it 'correctly' but a way of exploring perceptions. Once they started drawing, a great collective and creative enthusiasm was seen among them. In less than an hour they had produced amazing drawings.

Learning's from body mapping

- Though none of them had any education, every group was able to produce a drawing which clearly showed the shape and location of different body organs.
- The drawings facilitated further discussion with the women. Referring to the body maps drawn by them it was possible to discuss in detail about their beliefs on different aspects of the birth process.
- The variation, diversity and complexity of women's perceptions of the birth process, which became apparent from the body maps, would have been very difficult to obtain by any other means.
- When the women were explaining their own drawings, it was an exiting and enjoyable experience to see them as performers and presenters, not merely as respondents.
- Through body maps, it was possible to extract, a good amount of information within a very short time.

Women's perception of the birth process

The body maps produced by the selected women illustrated the patterns of perception on birth process prevailing among them.

Body maps by TTBA's

The internal organs which most of the TTBA's drew were; ribs (*panjor*), heart (*kalija*), stomach (*vater tholi*), uterus (*bachchar tholi*), vagina (*Jorayu*), placenta (*phool*), ovary (*dimer tholi*), ovum (*dim*), a tube connecting stomach and the baby and a baby inside the sac (*bachcha*). (Annex 1, Fig.1-3).

The TTBA's placed the female reproductive organs in the lower part of the abdomen, while the other organs were placed in the upper part of the abdomen. Two groups even drew a membrane to separate the two regions. (Annex 1, Fig 2.).

Most of the TTBA's clearly described how ovum was released from the ovary every month, travels through fallopian tube and meets with the sperm. Every group drew a sac (*bachchar tholi*) in the pelvic region closed in one end where they said the baby lie and grew up. They described the sac as a upside down pitcher. One group said that this sac lie upon vagina as a collapsed balloon when the women is not pregnant. Another group said that the sac grew temporarily and came out with the baby during delivery. In this connection, most TTBA's said that before they got BRAC training they used to tie a band around the chest of the pregnant women during delivery with the thought that otherwise the placenta would go up and touched the heart. They did not do it any more because they knew from the training that there was no chance for the placenta to go up as the sac was closed in upper end and some of them even knew that there is a membrane to separate the abdomen and the chest.

It was interesting to observe that while labelling the organs they did not give any particular name to the sac where the baby lie, they just called it sac for the baby (*bachchar tholi*). But they labeled the birth canal or the vagina as '*jorayu*' which is the Bangla word for uterus.

Placenta (*phool*) was drawn inside the sac. In the drawings the placenta was connected by a tube with the baby in one end and with the stomach of the mother at the other end. The placenta was described as an organ that provided blood for the baby. According to them the function of the connecting tube was to supply food to the baby from the mothers stomach. They said the food was first mixed with the blood in placenta and then enters into the body of the baby.

Body maps by UTBAs

The internal organs drawn by most UTBAs included heart (*kalija*), stomach (*vater tholi*), sac for baby (*bachchar tholi*), birth canal (*jorayu*), a tube connecting stomach and the baby, and a baby (*bachcha*) (Annex 2, Fig. 1-3). Only two groups drew ribs and one group drew a placenta at the end of the birth canal (Annex 2, Fig. 3)

The positioning of the organs varied. Generally the organs were placed in the middle of the body vertically one after another. However, the female reproductive organs were placed in the lower part of the abdomen. None of them drew any demarcating line between abdomen and chest. None of the UTBAs drew ovum, ovary, or fallopian tube. During discussion though some of them mentioned the existence of ovum (*dim*) in the female body but could not show its location in the body and how it met with sperm.

Some of the UTBAs mentioned that the sac for the baby grew temporarily during pregnancy and came out with the baby during delivery. Others mentioned that the sac lie upon the birth canal as a collapsed balloon when a woman was not pregnant and it increased in size with the pregnancy. The UTBAs did not indicate any particular shape of the sac. Some drew it as a circle, some as an oval shape and some with an irregular border.

A belief common among most UTBAs was that the baby grew within the sac but as it became mature at certain point of time it moved to the birth canal (*jorayu*), where it stayed for some time. The birth canal (*jorayu*) was drawn mostly as a wide and a separate chamber. This is interesting to note that like TTBAs they also labeled the birth canal as '*jorayu*' which is the Bangla word for uterus.

The UTBAs were found to be confused regarding the position of the placenta. Only one group drew the placenta at the end of the birth canal (Annex 2, Fig. 3). During discussion some of them said that the placenta remained in the '*jorayu*' (birth canal), others said that it remained on the top of the sac. It was found that some UTBAs tie band around the chest of the pregnant woman during delivery because of the fear that the placenta might go up and catch the heart.

Like TTBAs most UTBAs drew a tube that connected the stomach of the mother and the baby. The function of the tube was to supply food for the baby from the mother's stomach as it was mentioned by the TTBAs too.

Body maps by women who never attended any delivery

A very limited number of internal organs are seen in the drawings made by this category of women. Most of them drew only the stomach (*vater tholi*), a sac for the baby (*bachchar tholi*) and a baby (*bachcha*) inside (Annex 3, Fig. 1-3).

The organs were placed in no fixed order in the drawings. No particular shape of the organs are also observed in the drawings, some are circular, some oval, some even square. Some women mentioned about ovum in the women's body but they could not mention its location. Most women mentioned the placenta but none of them could indicate its position.

Most women drew a closed sac of different size where they said that the baby rest and grew during pregnancy. They said that the sac bursts during delivery and came out with the baby. Only one group drew a birth canal and like other women they also labeled it as '*forayu*' (Annex 3, Fig. 3). This group also drew a tube connecting the stomach of the mother to the navel, and the extended to the sac of the baby. According to them this tube takes food from mother's stomach to navel, where the food is stored and supplied to the baby.

An interesting feature was observed in the drawings of the women who never attended any delivery. Almost every group drew the baby in the sac in full figure with hands, legs, and even clothed. While the other categories of women indicated the baby in their drawings with just a line or a circle.

DISCUSSION

It appeared from the study that 'body mapping' is an interesting tool for conducting research. Through this technique it was possible to collect detailed and in-depth information within a very short time with minimal cost and in a enjoyable way. Body mapping also helped uncover the diverse and complex perceptions of women about child birth that could otherwise be difficult to obtain. The drawings show the difference and similarities between biomedical and indigenous concepts. It was mentioned earlier that none of these women have ever attended any formal school, yet they produced vivid maps of the complex human body. It implies that visual literacy is independent of alphabet based literacy.

Body maps reflect the patterns of perception of different categories of women about the female reproductive system and birth process. The differences and also some similarities in perception can clearly be observed from these drawings.

Differences in perception

The drawings made by the TTBAAs are elaborate and detailed compared to that of other categories of women. The relative position, structure and function as drawn and explained by the TTBAAs seem consistent with the biomedical description to a great extent. The closeness to biomedical concepts in the body maps of TTBAAs might be attributed to the basic and refresher training courses given by BRAC.

The shape, position and function of the internal organs drawn and explained by UTBAAs are less precise than that of the TTBAAs. None of the UTBAAs drew ovum, ovary or fallopian tube. Their perception regarding conception was also unclear. However, they drew a greater number of internal organs than the women who never attended any delivery. Moreover, there is consistency of perception within the group. The drawings reveal that though the UTBAAs were never exposed to any kind of formal training they still have a mental map regarding female reproductive system. This may be due to their involvement in child birth.

It is interesting to notice in the drawings of UTBAAs that unlike TTBAAs most of the UTBAAs drew the birth canal as a wide and separate chamber. The reason behind visualizing the birth canal in this way may be because it is the area of the body which they particularly handle during delivery.

The drawings made by the women who never attended any delivery are relatively vague. They could only visualize two sacs, one perceived as the stomach of the mother and the other as the sac for the baby. The shape and the position of the sacs also varied widely. It was revealed from the discussion that they did not have a clear understanding of the birth process. It seems from their drawings and discussion that they did not give any particular thought regarding this issue before.

The babies in the womb with hands, legs and cloths is the unique feature in the drawings of women who never attended any delivery. This may be because these women could not imagine the embryonic stage of a baby. They could not visualize the baby beyond the shape they usually see it

after birth. While the other two categories of women drew the baby in a more abstract way, which again may be attributed to their experience as birth attendants, which gave them an insight of the embryonic stage of life.

While the drawings made by TTBAAs and UTBAAs are compared with the drawings made by the women who never attended any delivery, it seems that working as a birth attendant irrespective of training gives the women a clearer perception about the female reproductive system and birth process. On the other hand when the drawings of TTBAAs and UTBAAs are compared, a definite positive impact of training on TBAs perception is observed. This is true even when the drawings of the TTBAAs are compared with the body maps done by the lay women in other parts of the world (4-7).

Similarities in perception

Irrespective of the training and experience as birth attendants there were some similarities in the perception among these three categories of women. The concept of a tube that supplies food from mother's stomach to the baby was found common in all the three categories of women. This seems to be a deep rooted belief which is not even affected by long term training. This might have some relation to the stigma of some food restriction during pregnancy in this subcontinent. The body maps by the TBAs of India also shows a similar kind of tube (7). The study women also believed that certain foods eaten by pregnant women directly affected the baby inside the womb. One of the women said that smell of hilsha fish was harmful for the baby inside the womb, so pregnant women should avoid eating hilsha.

It was also found that some of the TBAs both in the trained and untrained group perceived the sac for the baby as a collapsed balloon and some as a temporary sac which increases its size with the pregnancy and destroys after delivery. These facts reveal the importance of revising some parts of the TBA training materials.

The other common feature found in all the drawings demands special attention. It was seen from the drawings of all the categories of women that none of the women gave any particular name to the sac where the baby lies. They just called it sac for the baby (*Bachchar tholi*), whereas they all labeled the birth canal or vagina as '*jorayu*', which is the Bangla word for uterus.

This difference in scientific and indigenous vocabulary has important implications. If some health messages are given calling the uterus as *Jorayu*, they will wrongly be taken as something related to the vagina. Health messages should therefore be developed carefully, keeping these indigenous vocabularies in mind.

CONCLUSION

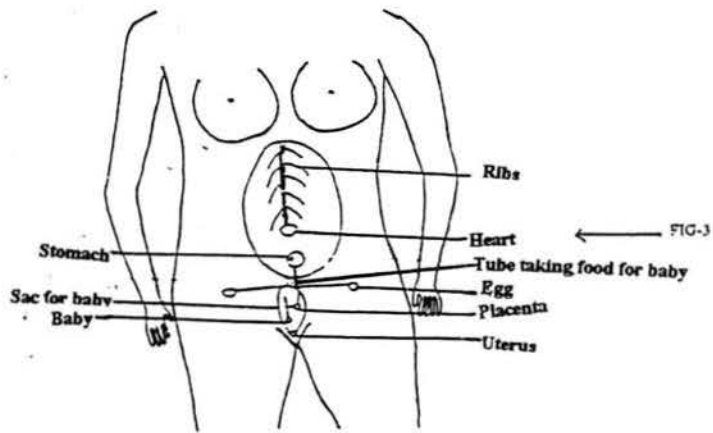
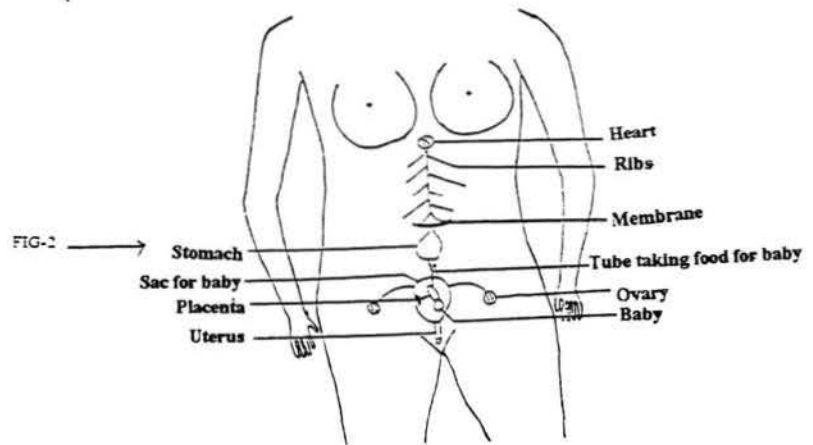
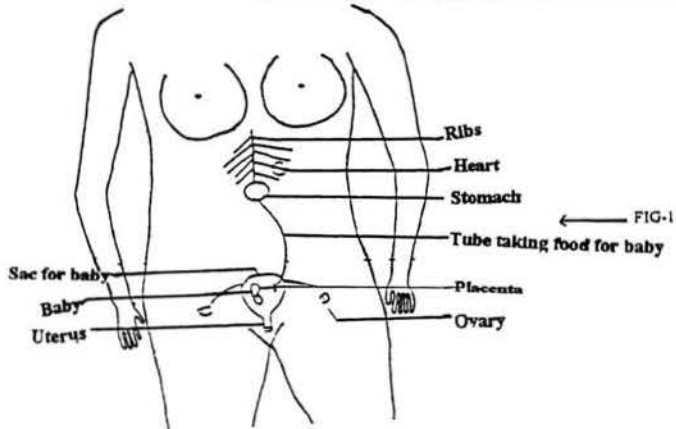
It appears from the study that body maps have a range of potential uses. Such as:

1. as a research method to explore local concepts and vocabularies about different health issues, which can later be used as building blocks for further communication with the women;
2. as a training tool for TBAs and community health workers; and
3. as a health education device for the community.

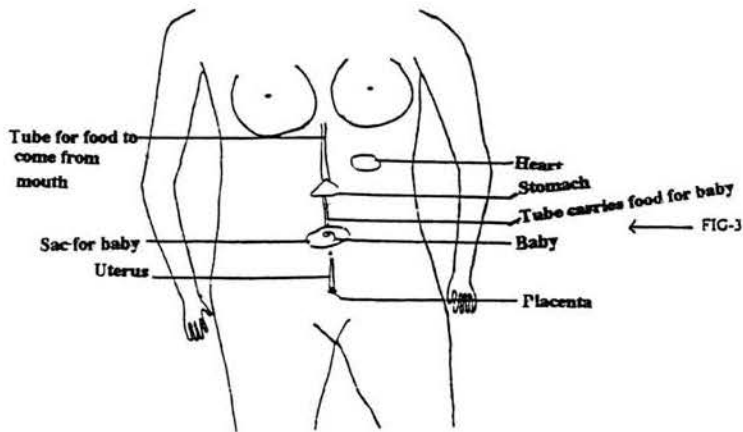
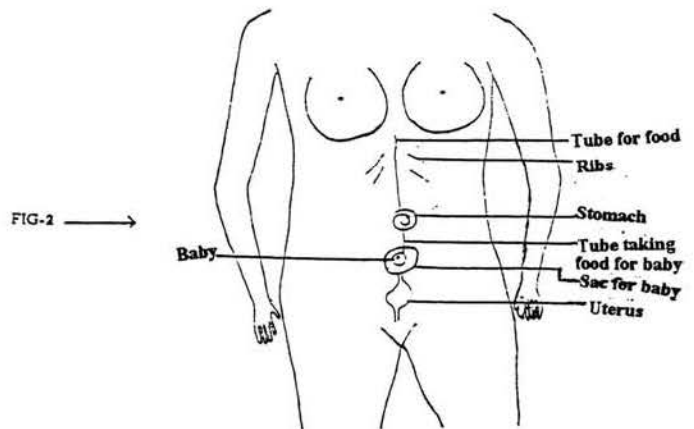
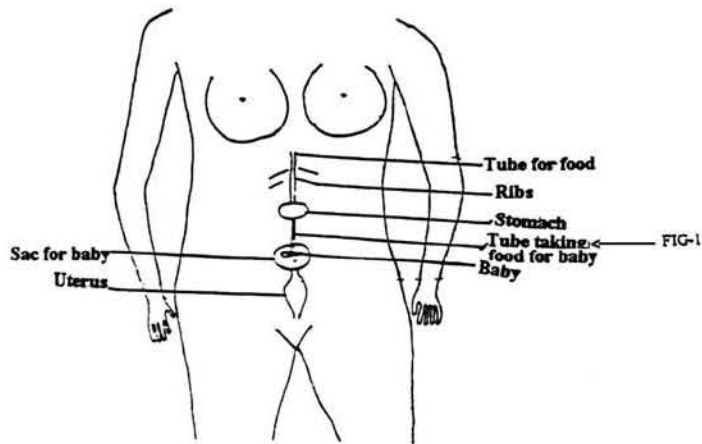
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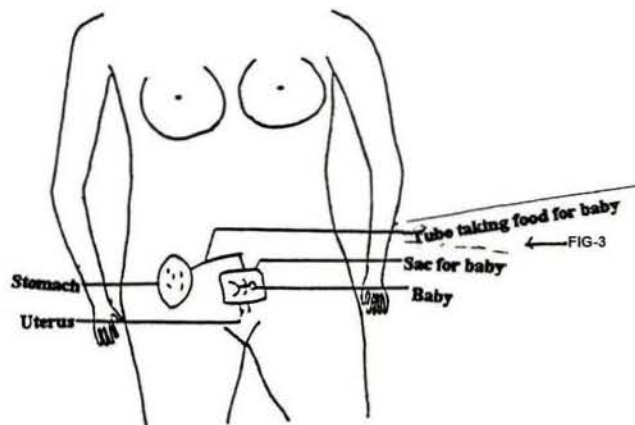
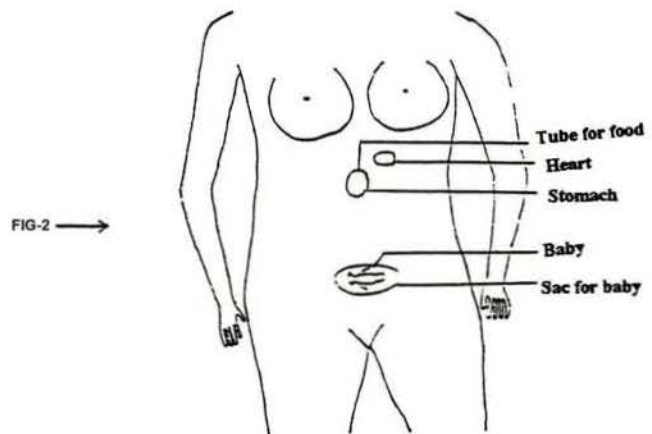
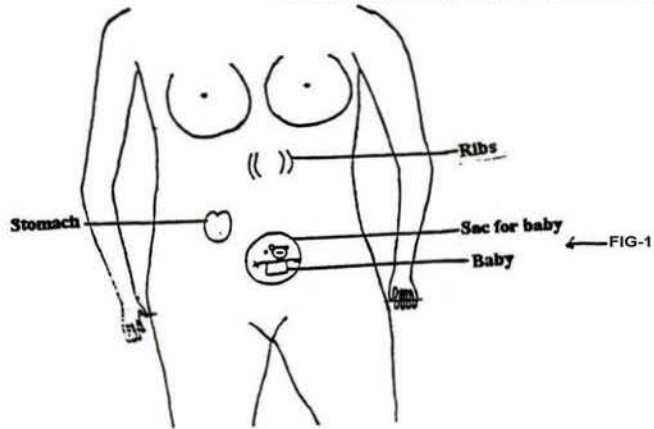
BODY MAPS BY TRAINED TRADITIONAL BRTH ATTENDENTS



BODY MAPS BY UNTRAINED BRTH ATTENDENTS



BODY MAPS BY WOMEN NEVER ATTENDED ANY DELIVERY



‘বডি ম্যাপিং’ এর মাধ্যমে জন্ম প্রক্রিয়া সম্পর্কে মহিলাদের ধারণা অনুসন্ধান

শাহাদুজ্জামান এবং এ এম আর চৌধুরী

‘বডি ম্যাপিং’ গবেষণা কৌশল ব্যবহারের মাধ্যমে জন্ম প্রক্রিয়া সম্পর্কে মহিলাদের ধারণা অনুসন্ধান করা হয়েছে। এ ব্যাপারে ৩ ধরনের মহিলাদের সাথে অনুশীলন করা হয়ঃ ক) প্রশিক্ষণপ্রাপ্ত ধাত্রী খ) প্রশিক্ষণবিহীন ধাত্রী এবং গ) সাধারণ মহিলা যারা কখনো ধাত্রী হিসেবে কাজ করেননি। প্রতি দলে ২০জন করে মহিলা ছিলেন। প্রতিটি মহিলাকে কাগজে আঁকা নারী শরীরের একটি রূপরেখা দেয়া হয়েছিল এবং বলা হয়েছিল একজন গর্ভবতী মহিলার পেটের ভেতরের অংশটি দেখতে কেমন তা’ একে দেখাতে। আঁকা শেষ হলে প্রতিটি মহিলাকে তাদের ছবিগুলোকে লেবেল (Label) করতে বলা হয় এবং ছবিটি সম্পর্কে আলোচনা করা হয়।

‘বডি ম্যাপিং’ এর মাধ্যমে জন্ম প্রক্রিয়া সম্পর্কে মহিলাদের নানামুখী ধারণা জানা সম্ভব হয় যা অন্য উপায়ে জানা কঠিন। এই ছবিগুলোর মাধ্যমে চিকিৎসা বিজ্ঞানের ধারণা এবং লোকজ ধারণার মধ্যে পার্থক্য নিরূপণ সম্ভব হয়। তিন ধরনের মহিলাদের আঁকা ‘বডি ম্যাপ’ তুলনা করলে দেখা যায়, প্রশিক্ষণপ্রাপ্ত ধাত্রীদের ধারণা বহুলাংশে চিকিৎসা বিজ্ঞানসম্মত। তথাপি কিছু ধারণা এবং নামকরণ সকল ধরনের মহিলাদের ক্ষেত্রে একইরকম হিসেবে প্রতীয়মান হয়েছে।

ফলাফল থেকে অনুধাবন করা যাচ্ছে, ‘বডি ম্যাপিং’ পদ্ধতিটিকে নানাভাবে ব্যবহার করা সম্ভব। এটিকে স্বাস্থ্য বিষয়ে সাধারণ মানুষের বিবিধ ধারণাকে জানার জন্য গবেষণার কৌশল হিসেবে ব্যবহার করা যেতে পারে এবং প্রশিক্ষণ ও মূল্যায়নের পদ্ধতি হিসাবেও ব্যবহার করা যেতে পারে।