Pregnant Women's Knowledge on Health and Iron Supplementation

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SM Ziauddin Hyder
Rita Das Roy
Sabah Tarannum

BRAC
Research and Evaluation Division
66 Mohakhali C/A
Dhaka 1212, Bangladesh

Table of contents

Summery	i
Acknowledgment	iii
Introduction	1
Objective	2
Methods	2
Findings	4
Discussion and Conclusion	11
Annexure	13

SUMMARY

The Research and Evaluation Division of BRAC conducted a pilot study in Trishal and Shamvuganj thanas of Mymensingh district to assess the knowledge of rural married women and female health workers on health including anaemia and iron supplementation. BRAC's Reproductive Health and Disease Control (RHDC) programme is in operation in the above mentioned thanas.

Focus group discussions (FGDs) with the pregnant women enrolled in the RHDC programme and in-depth interviews with the village health volunteers (*Shasthya Shebikas*) were conducted. The qualitative data were analysed and interpreted using ethnographic techniques.

It was revealed from the study that the rural women perceived health as a state of well-being which was commonly defined as the physical ability to eat normal meals and perform day to day activities. Wide mobility without any physical pain as well as the ability to sleep well were also identified as major determinants of good health. Most of the respondents including the female health workers did not take mild or moderate symptoms such as weakness, headache and mild abdominal pain into account as health problems requiring medical attention. Inability to move, work or sleep due to physical discomfort of various kinds were referred to as the sign of bad health. A list of common diseases of women including local terms and cures as perceived by the women were identified during the FGD sessions.

The rural women's knowledge on anaemia and iron medication including its side effects was also discussed. It is revealed from the study that most of the women were aware of anaemia including some of its causes. Repeated child birth, inadequate food intake during pregnancy and lactation, poverty, diets deficient in vitamins, and worm infestations were identified as the major causes of being anaemic. The pregnant women were identified as the worst victims of anaemia. The most

ommon symptoms of anaemia reported by majority of the respondents were: inadequate strength i legs and arms, vertigo, weakness and dizziness, and pale appearance in eyes and face. Many espondents could mention the name of some foods rich in iron such as small fish, meat. egg, fruits banana, papaya, olive), squash, leafy vegetables, etc. Tubewell water was also identified as a good ource of iron to prevent anaemia. Iron tablet was very much known to the women because of its dentical brown colour as a means of treating anaemia. Many of the respondents were willing to ake iron tablets. However, some women were found to be reluctant to take iron tablets due to the ide effects they had heard or experienced. The commonly mentioned side-effects were: onstipation, black stool, loose motion, nausea, vomiting, abdominal discomfort and bad smell of he tablet.

The respondents were also asked whether they were willing to give blood by finger pricking for haemoglobin estimation. It was found that all the women participated in the FGDs were willing to participate in such an activity. They thought that through finger pricking they would be able to know what was going on in their body without any cost which would help to take necessary curative measures. Most of the respondents particularly the younger ones preferred this to be done at home because it would save their time and effort and the male partners would not mind. A few respondents also preferred this to be done by a female health worker to maintain 'purdah' (seclusion).

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INTRODUCTION

BRAC is one of the largest Non-Governmental Organization (NGOs) in the world working in more than 40,000 villages of Bangladesh with the landless poor households. BRAC aims to empower the rural poor and to alleviate poverty through integrated rural development involving income generation, credit, enterprise development, health and education. Health and nutrition, particularly of women and children, have been a central concern of BRAC. BRAC, along with other development interventions, has been providing health and family planning services through the Reproductive Health and Disease Control (RHDC) Programme (previously known as Women's Health and Development Programme) since July 1991. As of December 1995, the programme covers 10 million people in 62 thanas throughout the country (HPD, BRAC 1995).

The RHDC programme provides health and related services to the pregnant women through the community-based ante-natal care centres (ANCC). The rural health volunteers (*Shasthya shebikas*) together with the programme staff help the community to run the ANCCs. The ANCCs provide ante and post-natal and other health care services including health and nutrition education to the pregnant and lactating mothers. Iron tablets are distributed to all the mothers starting from the sixth month of pregnancy to one month post-partum. Each mother is prescribed to take two tablets (each tablet contains 200 µg ferrous fumerate and 200 µg folic acid) per day. The tablets are distributed through the community based ANCCs once in every month in a plastic container free of charge.

OBJECTIVE

This study aims to assess the knowledge of the RHDC programme participants on the concepts of health, illness, anaemia and iron medication. It also aims to explore the commonly occurred diseases among women and adolescent girls in the rural communities including local names and types of treatment.

METHODS

Eight villages of Trishal and Shambhuganj Thanas of Mymensingh district were randomly selected. Data were collected through in-depth interviews and focus group discussions (FGDs). We conducted 4 FGDs (7-9 women per FGD) and 14 in-depth interviews with the RHDC programme participants. A total of 42 subjects, 20 pregnant and 22 lactating mothers, participated in this study. Age of the respondents ranged from 16 to 45 years. Out of 42 mothers, 37 belonged to BRAC target group (TG)[1] and about half of the mothers did not know how to read or write. Table 1 shows some general characterstics of the study population.

Table 1. General characteristics of the respondents

Characteristics of the respondents	Number (N=42)
Age (years):	
16-20	14
21-25	15
26-45	13
Status related to child birth:	
Second trimester	18
Third trimester	02
Lactating but not pregnant	22
Household land holding (dec.):	
No land	4
<50	33
>50	5
Level of education:	
Can not read or write	25
Class 1-5	9
Class 6+	8
Husband's occupation:	
Small trader	21
Farmer	7
Day labourer	6
Riksha puller	3
Skilled labourer	3
Service	2

[1] Household land ownership <50 dec. and at least one member sell manual labour at least 100 days per year.

Major issues discussed in the FGDs and in-depth interviews:

- knowledge on health;
- common diseases including their local names and types of treatment;
- knowledge on anaemia;
- knowledge on iron supplementation including side effects; and
- attitude towards finger pricking for blood haemoglobin estimation.

FINDINGS

Definition of health

The respondents defined health as a state of "well-being" of an individual. Majority of the respondents categorised a healthy person as being free from diseases, mental anxieties and capable of doing day to day work. Ability to eat regular diets and to perform daily activities were considered as the major characteristics of being in good health. According to most of the respondents , **"A person who is able to eat and work is a healthy person."**

All of the respondents emphasized the ability to take care of different body organs such as hair, teeth, skin, etc. as indications of being in good health. One would not be able to take care of her/himself properly if s/he do not feel well. According to some respondents, **"Health is a state which permits an individual to take care of different organs."**

'Taking care of organs' was commonly used basically as a proxy of being clean by taking bath and combing hair regularly.

The respondents classified health in two ways: a) good health; and b) bad health.

Good health

The following definitions of good health (*bhalo shasthya*) were cited by the respondents during the FGDs and in-depth interviews:

- body and mind without sickness,
- capable to walk and to carryout hard work,
- free from diseases,
- good looking/appearance,
- having good appetite, and
- can manage to eat relatively expensive/good foods (*bhalo khabar*).

Bad health

Different definitions of bad health (*kharap shasthya*) as reported by the respondents are following:

- body is always sick and thin (less weight compared to height and age),
- restricted movement or inability to work or move,
- attacked by diseases very frequently,
- abdomen loaded with worms,
- women with *shutika* (characterised by thinness and weakness) as well as having short (<1 year) birth spacing, and
- poor appearance.

Commonly occurred symptoms in female

The respondents were asked about different types of symptoms from which they suffer most frequently. Through discussions, they were able to come-up with a list of symptoms including their local names and types of treatment (Annexure 1). The most frequently occurred symptom in adolescent girls was lower abdominal pain for which supernatural treatment followed by modern medication were sought. The pregnant women, in most cases, suffered from vomiting, nausea, headache, vertigo, dizziness, and nightblindness. It was interesting to observe that the mothers could mention anaemia as one of the diseases they were suffering from. The women did not seem to seek any treatment for nightblindness. Also, they did not know the causes of nightblindness in

Symptoms of anaemia

Many symptoms of anaemia were reported during the FGDs. Physical weakness was identified as the major symptom. According to the respondents, "An anaemic woman always gets too weak to work."

Inadequate strength in legs and arms, vertigo, decreased health status, weakness and dizziness, pale looking, etc. were mentioned as the common symptoms of anaemia by most of the respondents.

Local name of iron tablet

"Bori" popularly stands for tablet in Bangladeshi rural communities. Some local terms for iron tablets were reported by the respondents based on its identical brown colour, such as, maitha ronger bori, vitamin bori, iron vitamin bori, rokto hoibar bori, koilja ronger bori, and khoeri ronger bori.

Why do the mothers take iron tablets?

The general opinion for iron supplementation was to maintain a good health, acquire more physical strength, and to remain free from diseases. Other reasons as reported by the respondents were to improve nutritional status, ensure a healthy baby, strengthen digestion ability and to protect from anaemia. The voluntary female health workers as well as the village doctors encourage pregnant women to take iron tablets regularly to improve health. A small number of the respondents did not know the reasons of taking iron tablets as they never discussed its beneficial effects with the health workers or neighbours.

Knowledge on iron tablet supplementation

Iron tablets were commonly perceived as a means to increase physical strength of an individual particularly of a pregnant woman. "A tablet to generate physical strength" was a commonly agreed statement of all the respondents. All pregnant and lactating mothers attended the FGDs were taking iron tablets starting from the sixth month of pregnancy whether the mothers were

pregnant women. The symptoms occurred within 7 days post-partum were classified as symptoms in post-partum women. According to the mothers, lower abdominal pain, general weakness, anaemia and shutika were the most frequently occurred disorders during that period. Anaemia was identified as the most commonly occurred disease for a lactating mother. The mothers defined anaemia as being weak and having pale eyes as learned from the programme staff.

Knowledge on anaemia

The respondents were asked if they knew anaemia including its causes and harmful effects. It was noticed that the term anaemia was familiar to most of them which they had learned directly from the BRAC health workers or relatives and neighbours. Most respondents were aware of some very common causes of anaemia. A few of them could not mention any cause of being anaemic. They have identified the pregnant and lactating mothers as the worst victims of anaemia because of their inadequate food intake compared to requirement. The main causes of anaemia stated by the respondents were as follows:

- inadequate food intake during pregnancy and lactation,
- long term food deficiency in a household,
- loss of blood due to child birth,
- diets deficient in vitamin,
- lack of fruits in the diet,
- inadequate blood volume,
- presence of worm in the abdomen, and
- malnutrition.

According to most respondents, the pregnant and lactating mothers were the worst sufferers of anaemia because they needed blood to support the foetal growth and child birth. They further reported that men, adolescents and children also might suffer from anaemia when their diet became less than the requirement or, according to few of them, if the diet did not contain adequate vitamin. The respondents classified iron as a kind of vitamin. The sick as well as the poor persons could also be the victims of anaemia as reported by some respondents.

anaemic or not. The iron supplementation, as informed by the programme, continues until 2 months post-partum irrespective of the level of anaemia. A few of the respondents did not know whether the supplementation had to be continued even after delivery or not. As reported, the mothers did not know much about iron medication before being involved in the programme. Many of them reported, **"BRAC's apa (female field staff) taught the benefits of iron supplementation".**

Shastiya shabikas (SSs) and the Gram (village) Committee members encouraged the respondents to take iron tablets for maintaining good health during pregnancy and lactation. In addition, the respondents were also advised to eat more iron-rich foods to prevent anaemia during pregnancy. It was revelled from the FGDs that the pregnant and lactating mothers were very much motivated to maintain good health and to deliver a healthy baby through taking iron tablets regularly. As a result they took iron tablets regularly for their own interest. It was also reported that 38 of the 42 respondents used to take iron tablets as suggested by the programme. It was further stated that one tablet was taken after lunch and another one was taken after dinner every day. If someone forget to take one tablet after lunch, the practice was to take two tablets after dinner. However, further investigations may be needed to explore how far the mothers were honest in reporting about the regularities of iron tablet intake. Elderly women had some superstitions (could not mention properly what was it all about), with which they discouraged pregnant and lactating mothers from taking iron tablets. It was found that two respondents took iron tablets every alternate day, because they thought that their fetus would become bigger which would create difficulties during delivery. Four women attended the FGD sessions never took iron tablets due to fear of side-effects. They learnt about the side-effects from their neighbours and relatives.

Dietary source of iron

The respondents believed that the nutritious foods, in general, were the rich sources of iron. The foods mentioned by most of the respondents as the best sources of iron were fish (eel fish, mola fish), meat, egg, milk, fruits (banana, papaya, olive), squash, leafy vegetable (spinach, kochu shag,puin shag), lentil, and tube-well water.

Side effects of iron supplementation and related problems

Most of the respondents had experience in taking iron tablets as prescribed by BRAC's health programme. It was asked whether they had experienced any side effects due to iron supplementation. It was revealed from the discussions that majority of the women did not have any major complain of the side effects due to regular intake of iron tablets. The most common side-effects mentioned by the respondents were black stool and constipation which they did not perceive as major health problems. A few respondents strongly complained about the side effects such as bad smell followed by anorexia and vomiting for which they had to stop taking iron tablets completely. The side effects reported by the respondents are black stool, constipation, diarrhoea, loose motion, nausea/vomiting, epigastric discomfort, and bad smell of iron tablet.

Attitude towards finger pricking

Finger pricking, particularly among the rural women at the BRAC ANCCs, thought to be a very sensitive issue. The assumption was that the women might not like to accept such an activity because of various disbelieves and superstitions attached to finger pricking and blood. It was revealed from the FGDs and in-depth interviews that the rural women were willing to participate in blood examination for haemoglobin concentration because they believed that it would let them know what was happening in the body without cost. Furthermore, according to them, it would help the health workers to have better understanding on health status of the mothers which would in turn facilitate to provide better medical care.

The following opinions on finger pricking were made by different categories of respondents during the FGDs:

Pregnant mothers:

"Why would we not give blood for examination as long as we know there is some problem in it?"

"We are very much willing to donate blood for examination but it is easier if you can do it at our house. We find it a bit difficult to visit a health centre."

Lactating mothers:

"We have no objection to participate in blood examination because we do not have to pay for that."

"Blood collection at the health center is much better because we all can participate at the same time." (Lactating woman residing near a health centre)

Elderly women:

"We have no problem in giving blood for examination, but it is preferable to do it through home visits in case of young married women."

"All of us are willing to donate blood if it is for examination purpose."

"Blood examination is very beneficial for us and we all are willing to participate."

DISCUSSION AND CONCLUSION

Women in Bangladesh particularly in the poor rural households are in urgent need of medical care. Maternal mortality rate is still one of the highest (6 per 1,000 livebirths) in the world. Improving maternal and child health has been given priority by many national development programmes implemented by both the government and NGOs. Since 1992, BRAC has been implementing a comprehensive community based health programme in rural areas to improve maternal and child health. Ante - and post - natal care, immunization and family planning are the major components of this programme. Apart from health services, the recipients also receive other development inputs of BRAC, such as credit, training and non - formal primary education. Therefore, it is important for the policy planners and implementors of the BRAC health programme to have adequate information in relation to knowledge of the programme participants on health and illness. The information is also needed for the researchers to design and implement researches in relation to women's health and related problems.

Along with health services, the programmme provides health and nutrition education to the community on a continuous basis through the village health volunteers. The study reveals that the majority of the respondents could define health which is perhaps an impact of the long term presence of the BRAC RHDC programme in that area. General well-being of an individual was identified as one of the indicators of good health which is very similar to the WHO classification of health. Furthermore, the importance of mental health was also identified as an important factor of being in good health. It was quite interesting to observe that equal emphasis was put by the mothers to both physical and mental well-being to ensure good health of an individual. Physical ability to eat adequate food has also identified as a strong determinant of good health. A healthy person, according to the respondents, should be able to move, work or eat adequately without any physical or mental disturbance, and should be free from diseases. Restrictions in normal mobility or other regular activities due to the presence of one or more symptoms was considered as a state of bad health. Traditionally the rural community does not recognise mild - to - moderate symptoms such as headache, abdominal pain, small wound, etc. that need medical care.

The study findings re-confirm that mild -to - moderate symptoms in most instances were not recognised as health problem. This particular issue needs to be addressed. Attention must be given on how to change people's current attitude regarding health care seeking behaviour. The health workers yet to educate the community about the importance of seeking medical care as early as possible to get treatment on time and reduce the cost of treatment.

The respondents could properly classify the stages of a woman's reproductive life indicating another important impact of the RHDC programme on women's knowledge on reproductive health including the importance of different stages of women's life cycle. Local term for each symptom was found to exist in the community which is more meaningful to the women. The same woman sought different types of treatment ranging from magic healer to modern medical care depending on the nature and severity of symptoms. This needs further attention.

It was very encouraging to observe that symptoms, causes and treatments of anaemia were known to most of the respondents indicating another positive impact of BRAC's health initiatives. The women were also aware of the rich sources of dietary iron including the iron tablets. A few women complained about side effects of iron tablet which they had experienced earlier. It contradicts with the findings of other studies done within and outside the country mentioning the side effects of conventional iron supplementation during pregnancy. This may be due to that the poor rural women often have diseases which they would like to be treated with iron tablets. It might be because the mothers were too gentle to report the side effects to the researchers. The mothers believe iron tablets as a source of 'strength and additional energy'.

Further in-depth research should be done to explore the nature of side-effects of the iron supplementation programme for pregnant women and also to see the impact of the side-effects on compliance of iron tablet intake.

Local term for diseases	Diseases	AG	PW	PP	LM	All	Cure and its source
Prosrab er jayga jala	Urinary tract infection	!	! !	-	-	-	Increased intake of '*cold food*' No treatment
Bomi bomi bhab'iuchat	Vomiting tendency/nausea	-	! ! !	-	-	-	It occurs only during frist trimester Increased intake '*dried food's* early in the morning No treatment
Matha betha	Headache	-	! ! !	!	-	!	No treatment
Matha gulae jay	Vertigo	-	! ! !	! !	!	-	No treatment
Jor	Fever	!	!	! !	!	!	No treatment in mild cases In case of severe condition consult with BRAC *Shasthya Shebikas*(SSs)or village doctor
Klanti	Fatigue	-	! !	! !	!	!	No treatment
Joni path ghulkanee	Itching vagina / vaginal irritation	-	! !	-	-	-	Allopathic treatment Vagina washing with warm water
Matha ghuranee	Dizziness	!	! ! !	!	-	-	No treatment
Hat pae pani asha	Oedema	-	! !	! !	-	-	No treatment

(Continued)

Local term for diseases	Diseases	AG	PW	PP	LM	All	Cure and its source
Langrar batash / ordhangar batash	Lethargic or numbness in lower limbs	-	+	+	-	-	Allopathic treatment
Hat-pa jala kora	Burning sensation in limbs	-	+ +	+	-	-	No treatment in mild cases *Kabiraji* in severe cases
Jaundice	Jaundice	-	+	-	-	+	Herbalist healer (*kabiraji*) Allopathic treatment
Pet nama / shafa batash	Diarrhoea	-	+ +	+ +	-	+	Oral Saline: home prepared purchase from markets Allopathic treatment
Prosrab kom	Less micturation	-	+	-	-	-	No treatment
Rate chokhe dahke na / ray andha	Nightblindness	-	+ + +	+	-	-	No treatment
Durgandho jukto dhekur	Offensive eructation	-	+	-	-	-	No treatment
Kacha ghaw / kacha nama	Abortion	-	+	-	-	-	Masic healer (ojha) Hervalist healer *(Kabiraji)* No treatment

(Continued)

Local term for diseases	Diseases	AG	PW	PP	LM	All	Cure and its source
Krimi Ojonee	Worm Infection	-	-	-	-	+	Allopathic treatment
Aate gha	Gastric ulcer	-	-	-	-	+	Allopathic treatment
TB khoy rog	Tuberculosis	-	-	-	-	+	Allopathic treatment
Kanpaka	Otitis media	-	-	-	-	+	Allopathic treatment
Opushti	Undernutrition	-	-	-	-	+	No treatment
Jolbasonto	Chickenpox	-	-	-	-	+	Allopathic treatment Hervalist healer*(Kabiraji)*
Hapani adani	Asthma	-	-	-	-	+	Allopathic treatment Hervalist healer*(Kabiraji)* Masic healer(ojha)
Fesha golay	Goitre	-	-	-	-	+	Hervalist healer*(Kabiraji)* Masic healer(ojha) Allopathic treatment
Chock uotha	Eye infection		-	-	-	+	Self medication