



## Accessibility and utilization of post natal care among rural mothers at primary health care level in Myanmar



Department of Medical Research

Maternal and Reproductive Health Division, Department of Health  
&  
Relief International

3MDG IS SUPPORTED BY



3MDG IS MANAGED BY UNOPS

**Blank page**

## **List of investigators**

### **Principal investigator**

Dr. Saw Saw  
Deputy Director/Head  
Health Systems Research Division  
Department of Medical Research

### **Co investigators**

1. Dr. Nyi Nyi Zayar  
Research Officer  
Epidemiology Research Division  
Department of Medical Research
2. Dr. Wai Wai Han  
Research Officer  
Medical Statistics Division  
Department of Medical Research
3. Dr. Hla Mya Thway Eindra  
Director  
Maternal and Reproductive Health Division  
Department of Public Health
4. Dr. Phyu Phyu Aye  
Programme Manager (Maternal Health)  
Maternal and Reproductive Health Division  
Department of Public Health
5. Dr. Su Wai Mon  
Technical Health Specialist  
Relief International
6. Dr. Aung Thein Tun  
Health Program Specialist  
Relief International

**Blank page**

### **Acknowledgement**

Our sincere gratitude goes to Director Generals from Department of Medical Research and Department of Public Health, Director (Socio-Medical Research), DMR for their kind approvals to conduct this study. Special thanks go to Regional Health Director from Ayeyawady Region, Medical Superintendents and Basic Health Staff from Dedaye Township. We are thankful to Mr. Joseph Mariampillai, Country Director from Relief International, Myanmar for his kind coordination. We are also grateful to Ms. Melanie Kempster, Head of Health Programs, Relief International, Myanmar for reviewing the report and providing technical comments. We are very grateful to research team members, volunteers, RI staff and research assistants who involved in data collection. We are grateful to all participants for sharing their views and experiences with great enthusiasm. The study was funded by The Three Millennium Development Goal Fund (3MDG) which is co-funded by Australia, Denmark, the European Union, Sweden, the United Kingdom and the United States of America, and managed by the United Nations Office of Project Services (UNOPS).

### Abbreviations

AMW	Auxiliary Midwife
ANC	Antenatal Care
BHS	Basic Health Staff
BP	Blood Pressure
CDK	Clean Delivery Kit
CHW	Community Health Worker
CS	Caesarean Section
DMR	Department of Medical Research
DPH	Department of Public Health
EPI	Expanded Programme on Immunization
FGD	Focus Group Discussion
GP	General Practitioner
HE	Health Education
HMIS	Health Management Information System
IDI	In-Depth Interview
INGO	International Non-Governmental Organization
IUD	
JIMNCH	Joint Initiative for Maternal Neonatal and Child Health
KII	Key Informant Interview
LHV	Lady Health Visitor
LNGO	Local Non-Governmental Organization
MDG	Millennium Development Goals
MRH	Maternal and Reproductive Health
MNCH	Maternal Newborn and Child Health
MS	Medical Superintendent
MW	Midwife
NGO	Non-Governmental Organization
OC	Oral Contraceptives

OG	Obstetric and Gynaecologist
OOP	Out of Pocket Expenditure
PNC	Postnatal Care
PONREPP	Post-Nargis Recovery and Emergency Preparedness Plan
RHC	Rural Health Centre
RI	Relief International
TBA	Traditional Birth Attendant
THD	Township Health Department
TMO	Township Medical Officer
UHC	Universal Health Coverage
UNICEF	United Nations Children's Fund
UNOPS	
VHC	Village Health Committee
VHW	Voluntary Health Worker
VTHC	Village Tract Health Committee
WHO	World Health Organization

**Blank page**



## Table of content

Content	Page
List of investigators	
Acknowledgement	
Table of contents	
Abbreviations	
Executive Summary	
Introduction	
Objectives	
Methodology	
Findings	
1. Background characteristics	
1.1. Background characteristics of BHS	
1.2. Background characteristics of mothers	
2. Knowledge and practice of health care providers on PNC	
2.1. Knowledge of BHS on PNC	
2.2. Knowledge of BHS on Birth spacing	K
3. Current PNC activities, accessibility and utilization of PNC	
3.1 Practice of BHS on PNC frequency and timing	
3.2. PN care received by mothers and Newborns	
3.3. Birth spacing services during PN period	
3.4. Health Education during PN period	
3.5. Health problems of mothers and child during PN period	

3.6. Problems of BHS for providing PNC	
3.7. Reasons for no PNC	
4. Opinions and perceptions towards PNC	
4.1. Attitude of BHS on PNC	A
4.2. Perceptions of mothers and BHS on PNC	P
5. Suggestions	
References	
Annex: Research team members & survey plan	

## **Executive Summary**

This is a collaborative study among Department of Medical Research, Maternal and Reproductive Health Division, Department of Public Health and Relief International. It aimed to explore the current situation of postnatal care at the primary health care level at Rural Health centre (RHC) and sub-RHC in Dedaye Township. This operational research included both quantitative and qualitative data collection methods. The study was conducted in 23 villages under three Rural Health Centres (RHCs) of Dedaye Township, Ayeyawady Region, Myanmar in 2015. Self-administered questionnaire for Basic Health Staff (BHS) were conducted and total of 58 BHS involved in the study. Total of 331 mothers having at least one child under one year age were interviewed face-to-face by using pre-tested structured questionnaire to determine accessibility and utilization of PN care. Two Focus Group Discussion (FGDs) with Midwives (MWs) from study areas and 25 In-depth interviews with mothers were conducted to explore their opinion and perceptions towards Post Natal Care (PNC).

Core elements of Maternal and Reproductive Health include pregnancy, delivery, postnatal and newborn care. Postnatal period is the time immediately after the birth of baby till the six weeks (42 days) after birth. More than 60% of maternal deaths occur during postnatal (PN) period. HMIS report showed mothers and newborns who received PN care visit within three days of childbirth was 90% at the end of 2015. However, a study done in Yangon Region found that only 17.4% of its study population had received adequate postnatal care. Therefore PN care is essential to save lives of mothers and newborn. Postnatal period is an opportunity for health care providers to promote exclusive breastfeeding, personal hygiene, appropriate feeding practices, and family planning counseling and services. In Myanmar, a number of studies have been conducted on Ante natal (AN) care, delivery, emergency referral for obstetric care and essential newborn care. However, studies addressing PN care are very limited. It is expected that findings from this study would provide useful information to implement

future interventions on increasing accessibility and utilization of PN care and therefore improve maternal and newborn survival.

### **Knowledge and practice of health care providers on PNC**

Knowledge of BHS on PNC was insufficient despite of the trainings provided in recent years.

About 58.6% of BHS obtained high knowledge scores for PN care. Low knowledge was observed for danger signs of newborn which need urgent referral—43.8% of BHS got high knowledge score. Regarding knowledge on birth spacing, there was low knowledge score for OC pills and management of missed pills.

### **Current PNC activities and utilization**

Among 331 mothers, 94.6% received PN care. However, after delivery only 6.7% received PN care till 6 weeks. Reported practice on PNC of BHS was good. However, while exploring in-depth during FGDs, it revealed that majority of BHS could not perform PN care according to the guidelines. Most mothers received PN care from doctors (42.8%) and nurses (14.7%). However, our findings revealed that 21.7% of mothers obtained PN care by TBA.

### **Problems for PNC**

Almost all mothers did not recognize that the PN period is 6 weeks and they perceived the PN period as only 7 days after delivery. The reason for community's perception of 7 days duration for PN period is unclear. However, it may be due to the period of umbilical cord falling out within 7 days after the delivery. Most respondents (both BHS and mothers) paid more attention to childbirth/delivery period than PN period. Some explained that since the baby has been delivered, critical period is over and it is less important to take care of mother. The main reasons for not able to provide proper PN care were transportation cost for mothers and MWs, mothers perceived PNC is not necessary if there is no complications, MWs were not available at health centre and they were occupied with trainings and meetings in township.

### **Suggestions**

Most BHS suggested awareness raising and health education to mothers on the importance of the PN period. Some suggested to provide supports for mothers during PN visits through BHS. Some also mentioned about necessary support for BHS to make PN visits.

### **Recommendations**

1. To provide training and refresher training for BHS focusing on PNC
2. To consider the out of pocket expenses for providers and community for PN care and consider necessary support for health staff to provide PN care such as transportation, timing and essential medicines
3. To emphasize or educate community on period of PN is 6 weeks (42 days) and importance of PN care
4. To conduct future study on quality of PN care at primary health care level

**Blank page**

Introduction

Photo page

**Blank page**



## **Introduction**

**MCH Situation of Myanmar-**MCH is one of the priority areas in National Health Plan of Myanmar. Maternal mortality ratio (MMR) in Daedaye Township was 2.08.

### **RI activities on MNCH/MCH in Daedaye Township:**

**Relief International (RI)**, is a non-sectarian, non-profit, humanitarian organization. Founded in 1990, RI has been working in vulnerable communities for more than 25 years. Our mission is to partner with vulnerable communities, building their resilience to disasters, crises and underlying vulnerabilities, to achieve relief from poverty and emergencies and achieve long term well-being and dignity.

As of 2012, RI has operated in 19 countries throughout the Middle East, Asia and Africa providing emergency relief, rehabilitation, development assistance, and program services. RI focuses on four pillars of intervention: Health, Livelihoods/Economic Opportunity, WASH, and Education, with cross-cutting focus on Emergency Response, Protection and Civil Society/Local Capacity Building within the four pillars

In 2008 Cyclone Nargis wreaked havoc on the lives of 2.4 million people in Myanmar and left 140,000 dead. Dedaye Township was among the most severely affected by the disaster. RI supported immediate humanitarian health, nutrition and livelihood responses to the affected areas of Dedaye, Khongyan Khone, Pyapon and Bogalay Townships. While health outcomes have improved since the disaster, significant issues in maternal and child health (MCH) and nutrition remain, especially in inaccessible areas.

Relief International implemented the Joint Initiative on Maternal, Newborn, and Child Health (JIMNCH)-Dedaye programme from 16 June 2011 to 31 December 2012 in coordination and cooperation with the Department of Health (DOH) in Dedaye Township, Ayeyarwaddy Region, Myanmar. The

“JIMNCH” programme worked to increase access to essential maternal and child health services (including nutrition and immunization).

In January 2013, Relief International (RI) launched its 3MDG funded MNCH program in Dedaye in January 2013, transitioning from the previous JIMNCH. The project aim is to improve maternal and child healthcare through the strengthening of the township health system at multiple levels and to contribute to Myanmar’s achievement of Millennium Development Goals 4 and 5. The program works on both supply and demand side interventions supporting – management and administration, planning and coordination, supervision and monitoring, training HRH – technical , training HRH – other, training VHW, training VHC, , referrals, outreach sessions, essential medicine and medical supplies, activities at community level, health facility investment and operational research.

The program covers a population of 209,477 people<sup>1</sup> from 90 village tracts and 3 downtown wards of Dedaye Township (including 58,822 women between 15 and 49 years old, 2,886 pregnant women, 2,899 children under one year old and 16,354 children under five years old)..As of 2015, 3MDG-Dedaye program supported Dedaye township health department services of 47 Sub-Rural Health Centers (S-RHCs), 9 Rural Health Centers, 1 MCH center, 3 Station Hospitals, and the Township Hospital. RI jointly manages 3MDG program implementation in cooperation with the Township Health Department (THD).

**Importance of PN care:** Core elements of Maternal and Reproductive Health include pregnancy, delivery, postnatal and newborn care. Postnatal period is the time immediately after the birth of baby till the six weeks (42 days) after birth. More than 60% of maternal deaths occur during postnatal (PN) period. HMIS report showed mothers and newborns who received PN care visit within three days of childbirth was 90% at the end of 2015 <sup>(2)</sup>.

However, a study done in Yangon Region found that only 17.4% of its study population had received adequate postnatal care <sup>(3)</sup>. Therefore PN care is essential to save lives of mothers and newborn. Postnatal period is an opportunity for health care providers to promote exclusive breastfeeding, personal hygiene, appropriate feeding practices, and family planning counseling and services. In addition, postnatal care allows for the provision of vitamin A and iron supplementation to the mother and immunization of newborns. However, according to available literature, most health care providers make more emphasis on AN care and delivery rather than PN care.

In Myanmar, a number of studies have been conducted on ante natal (AN) care, delivery, emergency referral for Obstetric care and essential newborn care. However, studies addressing PN care are very limited. It is expected that findings from this study would provide useful information to implement future interventions on increasing accessibility and utilization of PN care and therefore improve maternal and newborn survival.

### **Essential package of PN care**

- Provision of 4 targeted visits (within 24 hours, day 3, 7-14 day, day 42) for mother and baby
- Early detection, referral and management of complications in mother and newborn
- Iron/folate supplementation
- Vitamin A supplementation
- Birth spacing plan and service provision
- Counseling (nutrition, recognition of complications/danger signs)
- Availability of EmONC (referral system, management of emergencies)

(Source: DOH, Five-year Strategic Plan for Reproductive Health (2014-2018))



## Objectives

**General objective:** To explore the current situation of postnatal care at the primary health care level at Rural Health Centre (RHC) and sub-RHC in Dedaye Township

### **Specific Objectives:**

1. To identify knowledge and practice of health care providers on Postnatal (PN) care at the primary health care level
2. To find out current activities of health care providers on PN care according to six components of essential package for PN care
3. To determine accessibility and utilization of PN care by mothers having at least one child under one year age
4. To explore opinion and perceptions of mothers and health care providers towards PN care

**Blank page**

**Methods**

**Photo page**

Blank page



## Methods

**Study design:** Cross sectional descriptive study

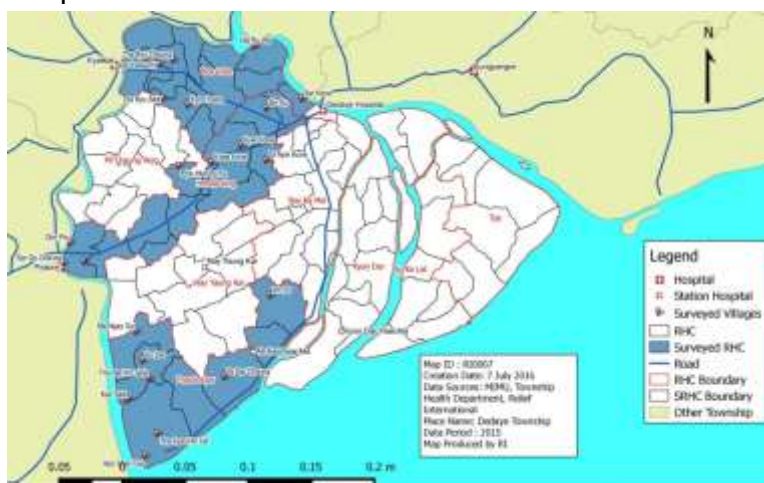
### Study population

**Health care providers at primary health care level:** All LHV and MW in Dedaye Township were included for the self-administered questionnaire. There were total of 58 respondents.

**Community:** Mothers having at least one child of under one year age

### Sampling and sample size

Multistage sampling method was applied. Firstly, random selection of three RHC catchment areas was done. Hmaw Aing, Thauk Kyar and Boe Toke RHC catchment areas were selected. Then, 23 villages (having not less than eight mothers who had given birth in the previous 12 months) within each RHC catchment area were be selected randomly until getting the required sample size.



**Map of Dedaye Township showing study villages**

According to the Myanmar Public Health Statistics 2012, postnatal care coverage in Ayeyarwaddy Region was 81.7% in 2012. However, a study

done in Yangon Region found that only 17.4% of its study population had received adequate postnatal care ( $> 6$  times)<sup>2</sup> \*. Assuming that this condition would be similar in our study area, the required sample is 342 at 95% confidence level and 5% precision with the design effect of 2.0. During data collection, we had 313 mothers have under one year old child.

**Data Collection:** Both quantitative and qualitative methods were conducted with both study populations. Interview training was given to research team members and pre-testing of questionnaire was also done with mothers of under one year old child from Dedaye. (See Annex 1 for Research team members and field survey plan)



**Self-administered questionnaire** for all health care providers (LHV and MW) were conducted. A total of 58 BHS were involved in the study.



---

<sup>2</sup> Sein, Kyi Kyi. "Maternal health care utilization among ever married youths in Kyimyindaing Township, Myanmar." *Maternal and child health journal* 16.5 (2012): 1021-1030.

**Focus Group Discussion (FGD):** Two FGDs were conducted with Midwives from study areas. Fifteen MWs were involved in FGDs.



**Face-to-face interviews** were conducted with 313 mothers having at least one child of under one year of age by using a structured questionnaire (See Annex 4 for mothers questionnaire)



**In depth interviews (IDIs):** IDIs were conducted with 25 mothers having at least one child of under 1 year of age (See Annex 5 for IDI guide).

#### **Data processing and analysis**

Descriptive analysis was carried out for quantitative data.

Qualitative data from IDIs, KIIs and FGDs were transcribed and analyzed according to main themes and sub-themes by using ATLAS ti version 6.0 software.

Triangulation of findings from quantitative data collection and qualitative data collection was also done to capture the complete picture of the situation. Investigators meetings were conducted and preliminary findings

were discussed and interpreted by research team members from DMR, DPH and RI to avoid possible bias.



## Results

Photo page

**Blank page**

## Results

The findings from the survey with BHS and survey with mothers and qualitative findings are presented together under the same themes.

Results were categorized according to the following themes:

1. Background characteristics
  - 1.1. Background characteristics of BHS
  - 1.2. Background characteristics of mothers
2. Knowledge and practice of health care providers on PNC
  - 2.1. Knowledge of BHS on PNC
  - 2.2. Knowledge of BHS on Birth spacing
3. Current PNC activities, accessibility and utilization of PNC
  - 3.1 Practice of BHS on PNC frequency and timing
  - 3.2. PN care received by mothers and Newborns
  - 3.3. Birth spacing services during PN period
  - 3.4. Health Education during PN period
  - 3.5. Health problems of mothers and child during PN period
  - 3.6. Problems of BHS for providing PNC
  - 3.7. Reasons for no PNC
4. Opinions and perceptions towards PNC
  - 4.1. Attitude of BHS on PNC
  - 4.2. Perceptions of mothers and BHS on PNC
5. Suggestions

## 1. Background characteristics

### 1.1. Background characteristics of Basic Health Staff (BHS)

Table (1) Background characteristics of the BHS (n=58)

Background characteristics	Number	Percentage
<b>Designation</b>		
Lady Health Visitor	4	6.9
Midwife	54	93.1
<b>Age group</b>		
21 – 30 years	20	34.5
31 – 40 years	18	31.0
41 – 50 years	15	25.9
51 – 60 years	4	6.9
<b>Total service years</b>		
<1 year	5	8.6
1 – 5 years	18	31.0
6 – 10 years	7	12.1
11 – 15 years	13	22.4
16 – 20 years	0	0
21 – 25 years	9	15.5
26 – 30 years	5	8.6
>30 years	1	1.7
<b>Service years in study townships</b>		
<1 year	10	17.2
1 – 5 years	26	44.8
6 – 10 years	8	13.8
11 – 15 years	6	10.3
16 – 20 years	3	5.2
21 – 25 years	3	5.2
26 – 30 years	1	1.7
>30 years	1	1.7
Birth spacing training within 2		



years		
Yes	33	56.9
No	25	43.1

## 1.2. Background Characteristics of mothers

**Table 2: Socio-demographic characteristics of mothers and children involved in the study (n=313)**

Variable	Number	Percentage
Education of mothers		
Illiterate	15	4.5
Read/write	86	26
Primary school	158	47.7
Middle school	46	13.9
High school	9	2.7
Graduate	17	5.1
Occupation of mothers		
Dependent	187	56.5
Farm works	24	6.3
Fishery	10	3
Selling	8	2.4
Odd jobs	102	30.8
Annual family income		
60,000-800,000	88	27
>800,000-1,200,000	84	25
>1,200,000-1,800,000	86	26
>1,800,000-15,000,000	73	22

Background characteristics of mothers were shown in Table (2). Mean age of the mothers is  $29 \pm 6.4$  years with a range of 17 to 45 years. Mean age of the children was  $6 \pm 3.6$  months. The median annual household income was 1,200,000 kyats (inter-quartile range 800,000-1,800,000 kyats).

## 2. Knowledge and practice of health care providers on PNC

Knowledge of BHS is divided into two portions:

- 2.1. Knowledge of BHS on PN care
- 2.2. Knowledge on Birth spacing during PN period.

### 2.1. Knowledge of BHS on PN care

Table 3: General knowledge on post natal care of BHS (n=58)

General knowledge on postnatal care	Number	Percentage
1. How many % of maternal deaths occurred during PN period? <ul style="list-style-type: none"><li>Forty percent</li><li>Fifty percent</li><li><b>Sixty percent</b></li><li>Seventy percent</li><li>Unknown</li></ul>	26 14 <b>9</b> 6 3	44.8 24.1 15.5 10.3 5.1
2. Main cause of maternal deaths during PN <ul style="list-style-type: none"><li>PPH</li><li>Malnutrition</li><li>Complication of hypertension</li><li>Underlying heart disease</li><li>Infection during delivery</li></ul>	58 11 56 17 33	100 19 96.6 29.3 56.9
3. Period of infant mortality mostly occurs <ul style="list-style-type: none"><li><b>Within a month</b></li><li>Within four months</li><li>Within six months</li></ul>	35 3 20	60.3 5.2 34.5
4. The main cause of newborn deaths <ul style="list-style-type: none"><li>Preterm</li><li>Low birth weight</li><li>Malnutrition</li><li>Birth Asphyxia</li></ul>	52 45 12 49	89.7 77.6 20.7 84.5

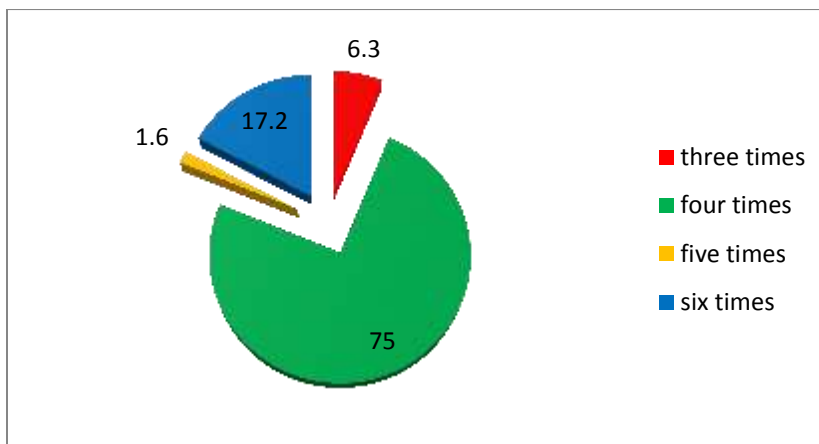
• Infection	29	50.0
• Neonatal Tetanus	30	51.7
5. Essential drugs to provide during PNC		
• Ferrous sulphate	49	84.5
• Vitamin B1	58	100
• Vitamin B12	2	3.4
• Folic acid	29	50.0
• Vitamin A	56	96.6

**Table 4: Knowledge of BHS on danger signs of mothers during PN period (n=58)**

Knowledge on danger signs of mothers	Number	Percentage
• bleeding per vagina >2 packs within 20 min	46	79.3
• inflammation of breast or nipple	15	25.9
• foul smelling discharge or bleeding per vagina during postnatal period	50	86.2
• fit	51	87.9
• urinary incontinence or pain in urination	23	39.7
• difficult to breath	50	86.2
• abdominal pain	22	37.9
• fever	23	39.7
• Pelvic inflammatory disease	36	62.1
• severe headache	43	74.1

**Table 5: Knowledge of BHS on danger signs of newborn during PN period (n=58)**

Knowledge on danger signs of newborn	Number	Percentage
• Fast breathing (respiratory rate > 60 per min	54	93.1
• Slow breathing (respiratory rate < 30 per min	50	86.2
• Chest in drawing during inspiration	53	91.4
• Grunting	40	69
• Fit	55	94.8
• Muscle weakness	26	44.8
• Fever	24	41.4
• Hypothermia	30	51.7
• More than 10 pustule on the skin	37	63.8
• Neonatal jaundice within 24 hours after birth	55	94.8



**Figure 1: Knowledge on frequency of PN visits (n=58)**

As shown in Figure 1, the majority (75%) of respondents answered four times and only 17.2% answered the correct frequency of six times for PN visits. For timing of first PN care, 43.8% answered correctly as within one hour after delivery whereas 32.8% answered within six hours after delivery.

**Table 6: Knowledge of BHS on major health care services needed for mother immediately after delivery (n=58)**

<b>Knowledge on major health care services for mothers immediately after delivery</b>	<b>Number</b>	<b>Percentage</b>
<ul style="list-style-type: none"> <li>• To monitor uterine contraction present or not</li> </ul>	55	94.8
<ul style="list-style-type: none"> <li>• To record amount of bleeding per vagina</li> </ul>	54	93.1
<ul style="list-style-type: none"> <li>• Temperature measuring</li> </ul>	39	67.2
<ul style="list-style-type: none"> <li>• To check vital sign</li> </ul>	50	86.2
<ul style="list-style-type: none"> <li>• monitor blood pressure</li> </ul>	53	91.4
<ul style="list-style-type: none"> <li>• urges the mother to do more urination</li> </ul>	23	39.7
<ul style="list-style-type: none"> <li>• nutrition education and counseling</li> </ul>	40	69.0
<ul style="list-style-type: none"> <li>• If mother is HIV positive, counseling for breast feeding</li> </ul>	26	44.8

**Table 7: Knowledge of BHS on major health care services needed for newborn immediately after delivery (n=58)**

<b>Knowledge on major health care services for newborn immediately after delivery</b>	<b>Number</b>	<b>Percentage</b>
<ul style="list-style-type: none"> <li>• checking sound of breathing</li> </ul>	52	89.7
<ul style="list-style-type: none"> <li>• monitor bleeding from umbilicus or not</li> </ul>	59	100.0
<ul style="list-style-type: none"> <li>• to apply 1% tetracycline eye ointment</li> </ul>	10	17.2
<ul style="list-style-type: none"> <li>• help for early initiation of breast feeding</li> </ul>	56	96.6

**Table 8: Knowledge of BHS on Steps of GATHER during PN visit (n=58)**

Steps of GATHER	Number	Percentage
• Step one	44	75.9
• Step two	45	77.6
• Step three	44	75.9
• Step four	44	75.9
• Step five	42	72.4
• Step six	38	65.5
• Step seven	4	6.9

About 13 (22.4%) did not know about GATHER. As shown in Table 8, the majority (75%) can answer the steps of GATHER.

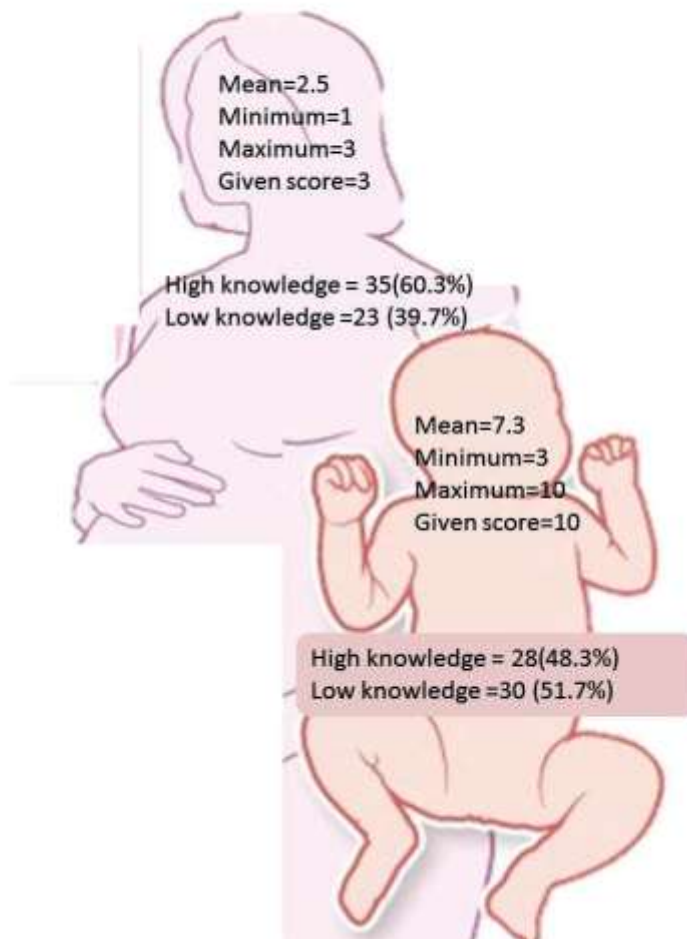
**Table 9: Knowledge of BHS on management of PPH (n=58)**

Knowledge on management of PPH	Number	Percentage
• Remove retain placenta	20	34.5
• Shock present or not , measuring of blood pressure, examine eye and palm	45	77.6
• Vaginal examination	8	13.8
• Refer to nearest medical doctor or nurse	53	91.4

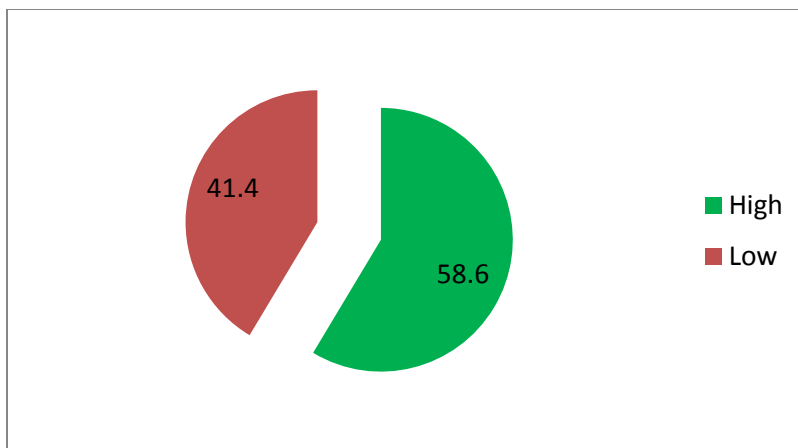
**Table 10: Knowledge of BHS on three delays in emergency referral (n=58)**

Knowledge on management of PPH	Number	Percentage
First delay-Delay to decide and recognize to go nearest health facility	51	87.9
Second delay-Delay to reach comprehensive health care facility	44	75.9
Third delay- Delay to receive quality health care at health facility	46	79.3

**Knowledge score of BHS on Danger signs which need to refer health center urgently for mothers and newborn (n=58)**



## Total knowledge scores of BHS on PNC



**Figure 2: Total knowledge scores of BHS on PN care of BHS (n=58)**

The total score for knowledge on PN care was 101 and scores of 80% and above were regarded as high knowledge while scores below 80% were regarded as low knowledge. "Must know" questions were given 1 score each and "Should know" questions were given a score of 0.5. Mean total knowledge score was 76.6 with minimum of 51 and maximum of 93. Figure ...shows total knowledge scores of BHS. About 34 BHS staff (58.6%) had high knowledge scores and 24 (41.4%) had low knowledge scores on PN care.

### **2.2. Knowledge of BHS on Birth Spacing during PN period**

Knowledge of BHS on birth spacing was divided into the following categories:

- General knowledge on Postpartum birth spacing
- Knowledge on birth spacing counseling
- Knowledge on unmet need for birth spacing
- Knowledge on OC pill
- Knowledge on 3 month depo injection
- Knowledge on IUD



**Table 11: General knowledge of BHS on birth spacing during PN period (n=58)**

General knowledge on postpartum birth spacing	Correct Answer	Incorrect Answer
	Number (%)	Number (%)
1. Reproductive age of women	51(87.9%)	7(12.1%)
2. Period for provision of birth spacing counseling (AN period)	12(20.7%)	46(79.3%)
3. Minimum interval of birth spacing (2 -3 years)	58(100%)	0(0%)

**Table 12: Knowledge of BHS on method of birth spacing (n=58)**

Methods of birth spacing*	Number	Percentage
1. Oral contraceptive pill	58	100.0
2. 3 month depo injection	58	100.0
3. IUD	58	100.0
4. Sterilization	56	96.6
5. Vasectomy	50	86.2
6. Condom	58	100.0
7. Implant	58	100.0
8. Coitus interruptus	50	86.2
9. Calendar method	55	94.8

*\*multiple response*

### **Knowledge of BHS on definition of birth spacing counseling**

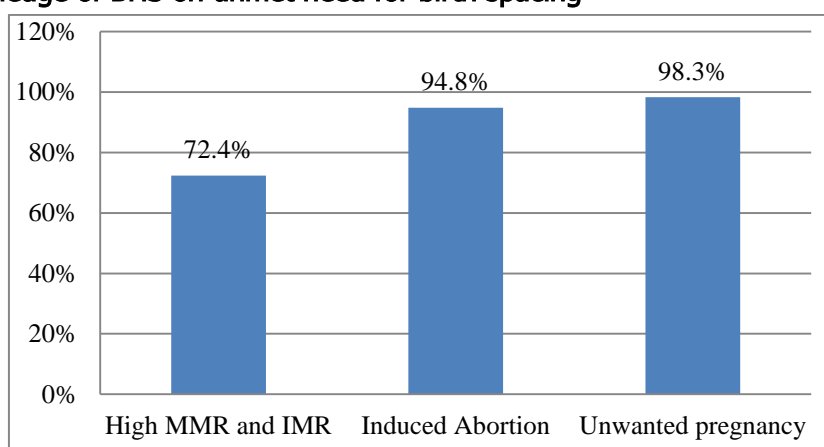
About 72.4% of respondents knew the definition of birth spacing counseling i.e. BHS have to facilitate mothers to make their own decision on choice of appropriate contraceptives.

**Table 13: Knowledge of BHS on purpose of birth spacing counseling (n=58)**

Knowledge on purpose of birth spacing*	Number	Percentage
1. Provision of precise information	52	89.7
2. Listening to mothers' needs and wants	50	86.2

*\*multiple response*

**Knowledge of BHS on unmet need for birth spacing**



**Figure 3: Knowledge of BHS on complications of unmet need for birth spacing (n=58)**

**Table 14: Knowledge of BHS on oral contraceptive pill (OC pill) (n=58)**

Knowledge on OC pill	Correct Answer	Incorrect Answer
	Number (%)	Number (%)
1. Time for starting OC pill in exclusive breast feeding mother	57(98.3%)	1 (1.7%)
2. Knowledge on Interval of return of pregnancy after stop taking OC pill	42(72.4%)	16(27.6%)

**Table 15: Knowledge of BHS on side effects of OC pill (n=58)**

Side effects of OC pill*	Number	Percentage
1. Irregular bleeding	34	58.6
2. Headache	48	82.8
3. Weight gain	35	60.3
4. Nausea	57	98.3
5. Breast discomfort	35	60.3

*\*multiple response*

**Table 16: Knowledge of BHS on contraindications OC pill (n=58)**

Contraindications for OC pill*	Number	Percentage
1. Heart disease	50	86.2
2. Hypertension (BP - $\geq 140/90$ mmHg)	31	53.4
3. Severe headache		
4. Diabetes and its complications	50	86.2
5. Liver diseases	54	93.1
6. Gall stone		
7. Deep vein thrombosis (DVT)	43	74.1
8. Breast cancer	26	44.8
	20	34.5
	32	55.2

*\*multiple response*

**Table 17: Knowledge of BHS on danger signs of OC pill (n=58)**

Danger signs of OC pill*	Number	Percentage
1. Severe headache	56	96.6
2. Blurred vision	28	48.3
3. Slurred speech	7	12.1
4. Dyspnea with Chest pain	46	79.3
5. Yellow coloration of skin	22	37.9
6. Leg muscle pain	15	25.9

*\*multiple response*

**Table 18: Knowledge of BHS on advices on missing pills (n=58)**

<b>Knowledge on advices on missing pills</b>	<b>Number</b>	<b>Percentage</b>
<b>Missed 1 or 2 pills*</b>		
1. Take 1 pill as soon as possible	56	96.6
2. Take regular pill as usual	42	72.4
<b>Missed 3 or more pills in 1<sup>st</sup> or 2<sup>nd</sup> row*</b>		
1. Take 1 pill as soon as possible	31	53.4
2. Take regular pill as usual	26	44.8
3. Take emergency pills if stayed with husband within 5 days	33	56.9
4. Use condom in first 7 days	48	82.8
<b>Missed 3 or more pills in 3<sup>rd</sup> row*</b>		
1. Take 1 pill as soon as possible	23	39.7
2. Take regular pill as usual	18	31.0
3. Take emergency pills if stayed with husband within 5 days	39	67.2
4. Use condom for 7 days	45	77.6
5. Release iron pills and take new strip	32	55.2
<b>Missed iron pills*</b>		
1. Dismiss missed pills	21	36.2
2. Take regular pill as usual	21	36.2
3. Take new strip as usual	39	67.2

*\*multiple response*

**Table 19: Knowledge of BHS on 3 month depo injection (n=58)**

Knowledge on 3 month depo injection	Correct Answer	Incorrect Answer
	Number (%)	Number (%)
1. Time for starting 3 month depo injection in breast feeding mothers	58(100%)	0(0%)
2. Time for starting 3 month depo injection in non-breast feeding mothers	24(41.4%)	34(58.6%)
3. Interval of return of pregnancy after stop taking 3 month depo injection	8(13.8%)	50(86.2%)

**Table 20: Knowledge of BHS on side effects of 3 month depo injection (n=58)**

Side effects of 3 month depo injection*	Number	Percentage
1. Irregular bleeding	57	98.3
2. Amenorrhea	54	93.1
3. Headache	46	79.3
4. Weight gain	55	94.8

*\*multiple response*

**Table 21: Knowledge of BHS on contraindications of 3 month depo injection (n=58)**

Contraindications of 3 month depo injection*	Number	Percentage
1. Heart disease	51	87.9
2. Hypertension (BP - $\geq 160/100$ mmHg)	45	77.6
3. Diabetes and its complications	52	89.7
4. Liver disease	40	69.0
5. Deep vein thrombosis (DVT)	22	37.9
6. Breast cancer	33	56.9
7. Dysfunctional uterine bleeding	36	62.1

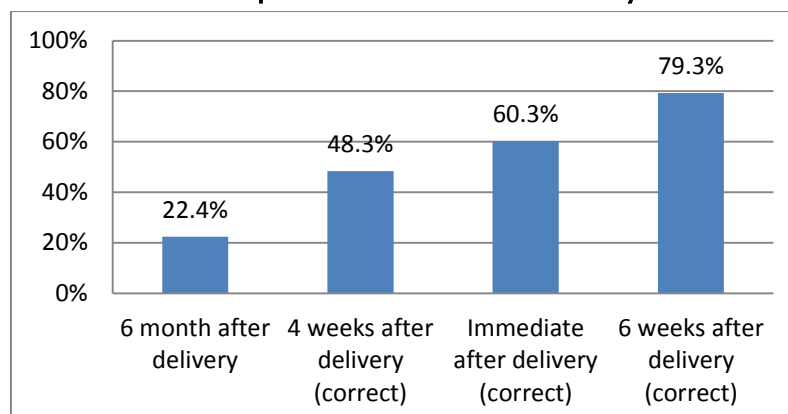
*\*multiple response*

**Table 22: Knowledge of BHS on danger signs of 3 month depo injection (n=58)**

Danger signs of 3 month depo injection*	Number	Percentage
1. Severe headache	46	79.3
2. Blurred vision	29	50.0
3. Menorrhagia	50	86.2
4. Amenorrhea followed by regular bleeding	29	50.0

*\*multiple response*

#### **Knowledge of BHS on time for provision of IUD after delivery**



**Figure 4: Time for provision of IUD after delivery (n=58)**

**Table 23: Knowledge of BHS on side effects of IUD (n=58)**

Side effects of IUD*	Number	Percentage
1. Irregular bleeding	48	82.8
2. Menorrhagia	55	94.8
3. Pain in SPA during menstruation	48	82.8

*\*multiple response*

**Table 24: Knowledge of BHS on contraindications of IUD (n=58)**

Contraindications of IUD*	Number	Percentage
1. Heart disease	9	15.5
2. Sexually transmitted infections	44	75.9

*\*multiple response*

**Table 25: Knowledge of BHS danger signs of IUD (n=58)**

Danger signs of IUD*	Number	Percentage
1. Fever with chills and rigor	24	41.4
2. Irregular bleeding	40	69.0
3. Irregular vaginal discharge	41	70.2
4. Pain during intercourse	49	84.5
5. Lost IUD string	54	93.1

*\*multiple response*

#### **Knowledge of BHS on life span of IUD (n=122)**

More than half of respondents (87.9%) had correct knowledge that IUD can be used 5 to 10 years.

**Table 26: Summary of total and subtotal knowledge scores of BHS on birth spacing (n=58)**

Category	Give n score	Knowledge Level		80 % of total give n score	8.4	Maxi mum score
		High	Low			
General knowledge score on birth spacing	12	54 (93.1%)	4 (6.9%)	8.4	7	11
Knowledge score on birth spacing counseling	4	47 (81.0%)	11 (19.0%)	2.8	1	4
Knowledge score on unmet need for birth spacing	3	41 (70.7%)	17 (29.3%)	2.1	1	3
<b>Total knowledge score on OC pill</b>	<b>35</b>	<b>18(31.0%)</b>	<b>40(69.0%)</b>	24.5	<b>14</b>	<b>29</b>
Total knowledge score on 3 month depo injection	18	33 (56.9%)	25 (43.1%)	12.6	7	18
Total knowledge score on IUD	14	25 (43.1%)	33 (56.9%)	9.8	5	13
Total knowledge score on side effects of contraceptive	12	56 (96.6%)	2 (3.4%)	8.4	7	12
Total knowledge score on contraindication of contraceptive	17	27 (46.6%)	31(53.4%)	11.9	4	16



Category	Give n score	Knowledge Level		80 % of total give n score	8.4	Maxi mum score
		High	Low			
Total knowledge score on danger signs of contraceptive	12	14(24.1%)	44(75.9%)	8.4	3	12
Total knowledge score on solution for missing pills	14	8(13.8%)	50(86.2%)	9.8	3	12
Total knowledge score	86	31(53.4%)	27(46.6%)	60.2	44	76

As shown in Table 26, there is low knowledge score for OC pills, danger signs of contraceptive and solution for missing pills. Cut off for high and low knowledge scores were set as 80% of total scores. Regarding total knowledge score on birth spacing, 46.6% of BHs got low knowledge scores and 53.4% got high knowledge score (Figure.5)

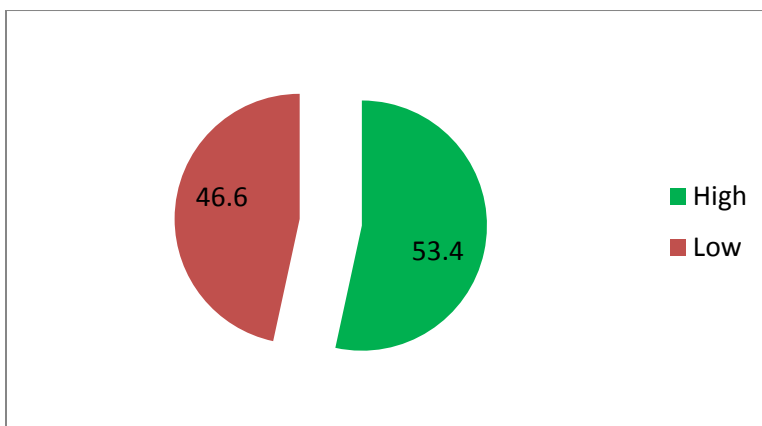


Figure 5: Total

knowledge score of BHS on Birth Spacing

(n=58)

### 3. Current PNC practices

#### 3.1. Practices of BHS on PN care

All BHS answered that they provided PN care to mothers and frequency of PN care ranged from 1 to 4 times (median=4).

#### Frequency of postnatal care received by mothers

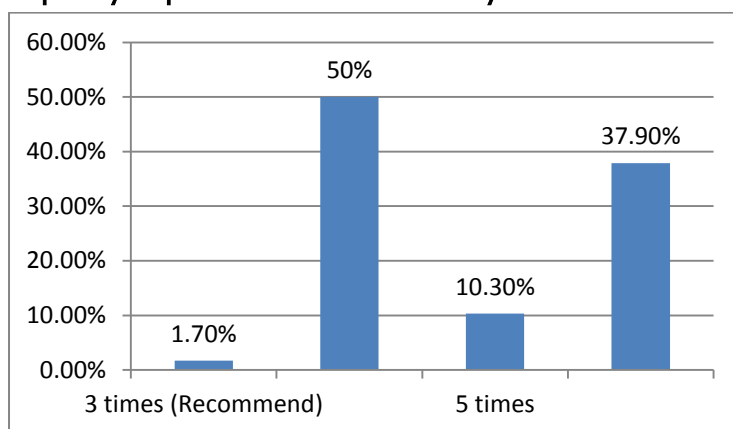


Figure 6: Frequency of postnatal care received by mothers within 6 weeks after delivery (n=313)

Findings from FGDs with MWs revealed that most mothers regarded 7 days as the PN period and majority did not come to or ask MWs for PN care unless there was some health problem.

Participant 7: Usually, they take PN care within 7 days (after delivery). Later, if there is a (health) problem, they ask us to visit them. Otherwise, they did not. If both mother and baby are well, they do not come to us.

Participant 2: We meet them (mothers and baby) after a month during immunization. At the time of EPI, we asked such mother and baby to come. We see them whether it is exactly one month after delivery or not.

(FGD-1 with MWs)

မေး- သူတို့ကအနည်းဆုံး မီးတွင်းကာလ၄၅ရက်အတွင်းမှာ ပျမ်းမျှဘယ်နှစ်ကြိမ်လောက်လာပြကြလဲ။

(၇)- မီးတွင်း၇ရက်လောက်ပဲပြတယ်။ နောက်ပိုင်းအကြောင်းတစ်ခုခုထူးခြားမှလာပြတယ်။ မထူးခြားရင် မလာတော့ဘူး။ ၇ရက်အတွင်းကလာခေါ်တယ်။ ကျွန်မတို့ကြည့်ပေးတယ်။ အမေလည်းနေကောင်းကလေးလည်းနေကောင်းရင်မလာတော့ဘူး။

(၂)- နောက်တစ်လပြည့်ရင်ပြန်တွေ့တယ်။ ကာကွယ်ဆေးထိုးတဲ့အချိန်၊ အဲဒီအချိန်မှာတစ်လပြည့်ပြည့် မပြည့်ပြည့် အဲဒီကလေးကိုခေါ်လာခဲ့၊ ငါလာပြီးဆိုပြီး၊ ရွာကိုကာကွယ်ဆေးထိုးတိုင်းလတိုင်းရောက်တယ်။

(FGD 1 with MWs)

Few mothers stated that they went to MWs if there is any health problem.

If I suffer something, I go to *Sayama* (MW). If she asks me to go to hospital, I try to find money and go. No matter if I have to serve for that money later. Transportation is not so difficult. We can get to Dedaye by motor cycle and costs 3000 kyats. If I go to *Sayama in early morning*, I can see her. But she is not at home at any other time. If my child needs urgent attention, I cannot wait and I go to Dedaye directly.

(IDI with 25 year old mother)

သမီးကတော့ တစ်ခုခုဖြစ်ရင် ဆရာမဆီသွား ဆရာမဆီက မှ ဆေးရုံသွားရင် မရရအောင်ပိုက်ဆံရှာပြီးသွားလိုက်တာပဲ။ နောက်မှကျွန်ခံရခံရ။ သွားရေးလာရေးကတော့ အခက်အခဲ မရှိဘူး။ ဆိုင်ကယ် ၃၀၀၀ ပေးရင်ဒေးဒရဲရောက်တယ်။ အိမ်ထိတောင် မောင်းပို့ပေးတာ။ ဆရာမဆီသွားရင် ဆရာမက မနက် အစောကြီး ဆိုရင်တော့ရှိတယ်။ တခြား အချိန်တော့မရှိဘူး။ ကိုယ့်ကလေး က အရေးကြီးရင်တော့ မစောင့်နိုင်လို့ ဒေးဒရဲပဲသွားလိုက်တာပဲ။

### 3.2. PN care received by mothers after delivery

Among 331 mothers, 313 (94.6%) answered that they had received PN care. However, only 21 (6.7%) received PN care till six weeks (42 days) after delivery and the rest (291, 93.2%) received PN care only during 7 days after delivery. The following table shows the attendants of PN care for mothers. The majority received PN care from doctors (42.8%) and Midwives (39.3%). However about 68(21.7%) received PN care by TBAs.

**Table 27: PN care attendants for mothers (n=313)**

PN attendant	Number	Percentage
Doctor	134	42.8
HA	1	0.3
LHV	1	0.3
MW	123	39.3
Nurse	46	14.7
AMW	18	5.6
TBA	68	21.7

\*Multiple response

Participant 3,4 & 5: For (frequency of) PN visit, there is difference between those delivered by us or not

Question: How different?

Participant 2 & 4: It differs about 2 times

Participant 5: Sometimes, there is no PN visit

Participant 4 & 5: We missed PN care

Participant 5: In my area, not inform to me at all (if mother delivered by others)

(၃၊၄၊၅) PN က ကိုယ်မွေးပေးတာနဲ့ မမွေးတာနဲ့ နည်းနည်းကွာတယ်။

မေး- ဘယ်လောက်လောက်ကွာလဲ။

(၂၊၄) ၂ကြိမ်လောက်တော့ ကွာမယ်။

(၅) PN တိုင်းကို လုံးလုံးမကြည့်ပေးရတာလဲရှိတယ်

(၄၊၅) လုံးဝလွတ်သွားတာလဲရှိတယ်။

(၅) ညီမတို့ ဒီဘက် ပိုင်းဆို လုံးဝသတင်းမပို့ဖူး။

The period or duration of Post natal was 7 days as perceived by mothers. The reason for defining PN period as 7 days was unclear although few mothers explained that after delivery, new blood was formed after 7 days. Almost all mothers were not aware that the PN period is 6 weeks (42days).

Participant 3: On 7<sup>th</sup> day, they Mee Twet (getting out of puerperium)

Participant 2: Shampooing, bathing of baby, it is tradition.

All: Yes, it is traditional

Participant 2: We have to explain that post natal period is not 7 days but 72 days and it is important.

Participant 3: Some even going out to search prawns and harvesting, fetching woods etc.

Participant 4: Some even sit 3 days after delivery and do cooking.

(FGD -1 with MWs)

(၃)- ရက်ပြည့်ရင်မီးထွက်သွားပြီ။

(၂)- ခေါင်းတွေဘာတွေလျော်တယ်၊ ရေချိုးပေးတယ်၊ ဟိုတုန်းကတည်းကအစဉ် အလာပေါ့။

(အားလုံး)- ဟုတ်တယ်၊ မိရိုးဖလာအယူ။

(၂)- သူတို့ကိုပြန်ရှင်းပြရတာပေါ့၊ ရက်မှမီးထွက်တာမဟုတ်ဘူး၊ ၄၂ရက်မှမီးထွက်တာ။ မီးတွင်းကာလပဲရှိ သေးတယ်။ အရေးကြီးတယ်ဆိုတဲ့အကြောင်း။

(၃)- တချို့ ဆိုမီးထွက်ပြီးတာနဲ့ ပုစွန်ထိုးတယ်။ စပါးရိတ်တယ်၊ ထင်းခွေတယ်။

(၄)- တချို့ဆိုမွေးပြီး ၃ရက်ဆို ထထိုင်တယ်။ ထမင်းဟင်း ချက် ဘာညှာလုပ်ပေါ့။

(FGD -1 with MWs)

**Table 28: Practice of BHS on major health care services needed for mother immediately after delivery n=58**

Major health care services for mothers immediately after delivery	Number	Percentage
Monitor uterine contraction present or not	35	60.3
Record amount of bleeding per vagina	56	96.6
Temperature measuring	28	48.3
Check vital signs	11	19.0
Monitor blood pressure	48	82.8
Urge the mother to do more urination	5	8.6
If mother is HIV positive, counseling for breast feeding	15	25.8

**Table 29: Components of PN care received by mothers (n=313)**

Health care services received by mothers during PN period	Non prompt No. (%)	Prompt No. (%)
Monitor uterine contraction present or not	52 ( 16.29)	189(60.38)
Check bleeding per vagina	66 (21.09)	238(76.04)
Check Temperature	30(9.58)	175 (55.9)
Examine breast	48 (15.34)	238(76.04)
Measure blood pressure	73(23.32)	232 (74.12)
Examine Epi wound *n=232	63 (27.16)	151 (65)

Examine LSCS scar *n=75	55 (73.3)	73(97.3)
Get Iron tablet	66(21.09)	193(61.66)
Get Folic acid tablet	47 (15.02)	146 (46.65)
Get Vitamin A	43 (13.73)	132 (42.17)
Get Vitamin B1	59 (18.85)	166 (53.04)

**Table 30: Practice of BHS on major health care services needed for newborn immediately after delivery (n=58)**

<b>Major health care services for newborn immediately after delivery</b>	<b>Number</b>	<b>Percentage</b>
Checking sound of breathing	27	46.6
Monitor bleeding from umbilicus or not	28	48.3
Apply 1% tetracycline eye ointment	2	3.4
Help for early initiation of breast feeding	45	77.6
Checking movement of baby	3	5.1
Weighing baby	27	46.6
Keep baby warm	29	50

**Table 31: Major health care services received by newborn during PN period (n=313)**

<b>Major health care services received by newborn during PN period</b>	<b>Non prompt No(%)</b>	<b>Prompt No (%)</b>
Examination of eye, mouth and skin for cleaning	61 (19.49)	200 (63.9)
Keeping warm	31 (9.9)	192 (61.34)
Examination of jaundice	72 (23)	216 (69.01)
Examination of milestone and power	22 (7.03)	172 (54.95)
Examination of umbilical cord	126 (40.26)	272 (86.9)
Measuring weight	35 (11.18)	202 (64.54)
Urged for immunization	35 (11.18)	226 (72.2)



## Practice of BHS in provision of birth spacing services during postpartum

### Provision of birth spacing services during EPI visit

All BHS also provided birth spacing services during their EPI visits.

**Table 32: Practice of BHS on provision of birth spacing counseling (n=58)**

Practice on provision of birth spacing counseling	Number	Percentage
<b>Experience on birth spacing counseling? (n=58)</b>		
1. Yes	58	100
2. No	0	0
<b>Usual time of counseling about birth spacing to mother (n=58)</b>		
1. Antenatal visit		
2. Immediate after child birth	13	22.4
3. Postnatal visit	9	15.5
4. Other	36	62.1
	2	3.4
<b>Components of birth spacing counseling* (n=58)</b>		
1. Instruction for how to use contraceptives		
2. Side effects of contraceptives	51	87.9
3. Benefits of birth spacing	51	87.9
4. Explain on misbeliefs of mother on contraceptives	58	100
	50	86.2
5. Others	2	3.4
<b>Function of BHS in birth spacing counseling</b>		
1. BHS chose most appropriate method of contraceptive for mother	5	8.6
2. Facilitate mother to choose appropriate method	53	91.4
<b>Decision makers on choice of contraceptive</b>		
1. Health Staff	13	22.4
2. Postpartum mother	13	22.4

Practice on provision of birth spacing counseling	Number	Percentage
3. Both wife and husband	32	55.2
Talk about matters of birth spacing client to other (n=121)		
1. Yes	4	6.9
2. No	54	93.1

*\*Multiple responses applied*

### Health Education message received by mothers on Birth spacing

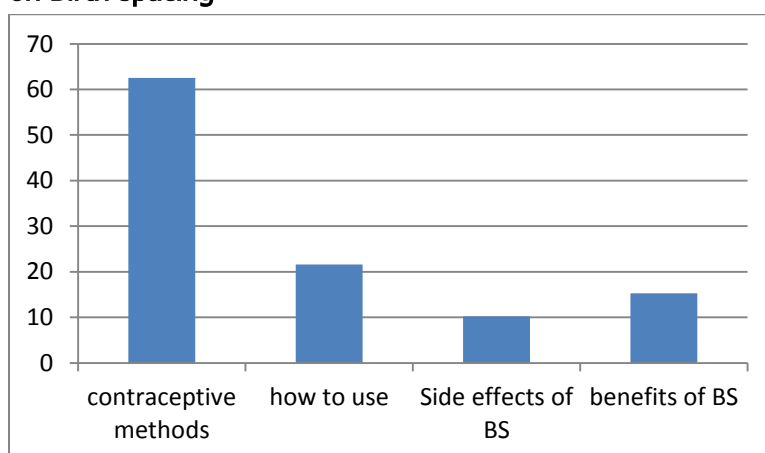


Figure 7: Health education message received by mothers regarding birth spacing (n=271)

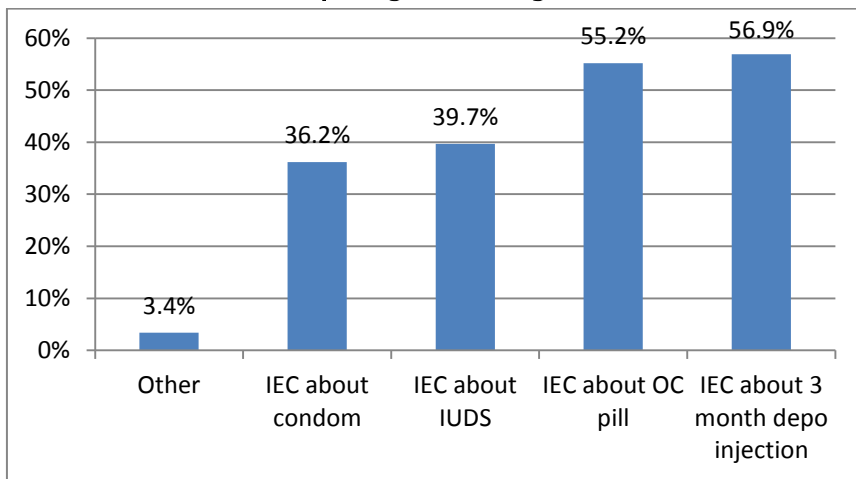
Table 33: Birth spacing methods currently used by mothers (n=313)

Types of birth spacing methods	Number	Percentage
OC pills	12	3.83
Injection 3 month Depo	205	65.5
IUD	7	2.24
Others	19	6.07
Not using any contraception	70	22.36

**Table 34: Choice of contraceptive methods by mothers (n=242)**

Way of choosing contraceptive methods	Number	Percentage
Decided by Health care providers	92	38.02
Facilitated by Health care providers	36	14.88
Self	106	43.8

**Use of IEC materials in birth spacing counseling**



**Figure 8: Provision of IECs to mother during birth spacing counseling (n=38)**

More than 65% (38) of respondents used IEC materials like pamphlets and posters about birth spacing at their clinic.

#### **Practice of BHS on provision of OC pill and starting time of OC pill in postpartum mothers**

Almost eighty percent (46) of respondents had experience of providing OC pill to postpartum mothers. Among them, 29 respondents (50%) provided OC pill to 1 to 5 postnatal mothers last year. Another 10.3% provided 6 to 10 mothers and another 8.6% to 11 to 20 mothers last year. However, only one respondent distributed to more than 20 mothers within a year. Mean value was 6.13 postnatal mothers with (SD 8.479) and median value was 3. Range was from 0 to 50. More than three quarters(77.6%) of respondents had practice of providing OC pills to breast

feeding mothers after 6 months of delivery and 32.8% had practice of 3 weeks after delivery in non-breast feeding mothers.

#### Practice of BHS on explanations about OC pill to postnatal mothers

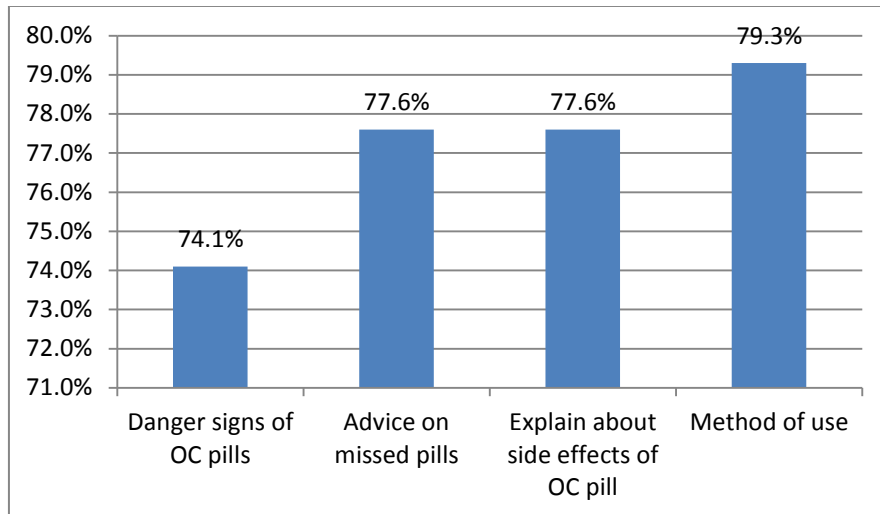


Figure 9: Practice on explanations about OC pill to postnatal mothers (n=46)

#### Practice on provision of 3 month depo injection and starting time of 3 month depo injection in postpartum mothers

All respondents had experience of providing 3 month depo injection to postpartum mothers. Most of the respondents (43.1%) provided 3 month depo injection to 26 to 50 postnatal mothers in the last year. Then, 22.4% supported to 3 to 25 postnatal mothers. There was also a respondent who supplied 3 month depo injection to more than 300 postnatal mothers last year. Mean value was 86.03 postnatal mothers with (SD 96.717) and median was 44. Range was 4 to 350. Almost all the respondents provided 3 month depo injection to postnatal mothers after 6 weeks of delivery, that is post postpartum period.

### Practice of BHS on explanations about 3 month depo injection

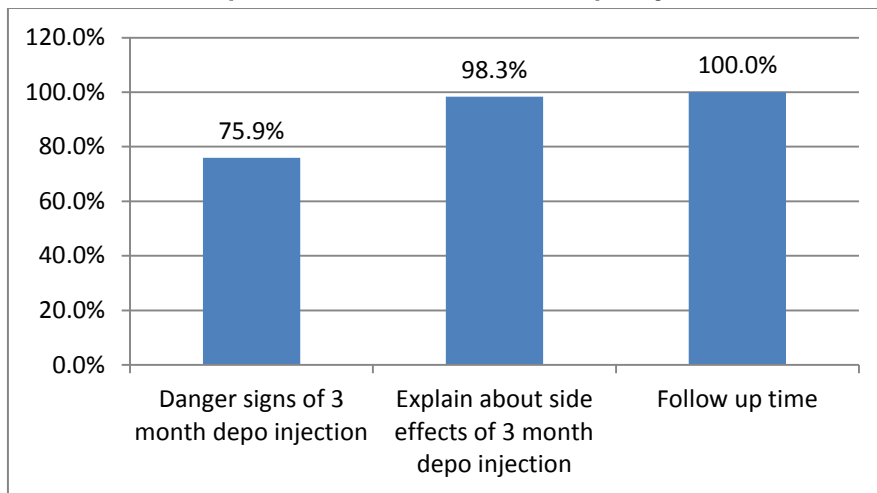


Figure 10: Practice on explanations about 3 month depo injection to postpartum women (n=58)

### Practice of BHS on provision of IUD and insertion time IUD in postpartum mothers

Out of 58 respondents, only 12 respondents (20.7%) had the experience of IUD insertion to postnatal mothers. Among them, 5 respondents (12.1%) had 1 to 5 IUD clients within postpartum period. There was also a respondent who provided IUD to 6 to 10 mothers last year. However, 4 respondents had not provided IUD last year. Mean value was 2.75(SD  $\pm$  3.108) with median 1.5. Ranged of IUD clients was from 0 to 10. Their usual time of IUD insertion was mostly 4 week after delivery (13.8%) and 6 weeks after delivery (7.5%).

#### Centers where IUD insertion performed

About three-quarters of 12 respondents performed IUD insertion at their RHC or Sub-center and remaining one-quarter (4 respondents) performed at their homes.

### Practice of BHS on explanations about IUD to postnatal mothers

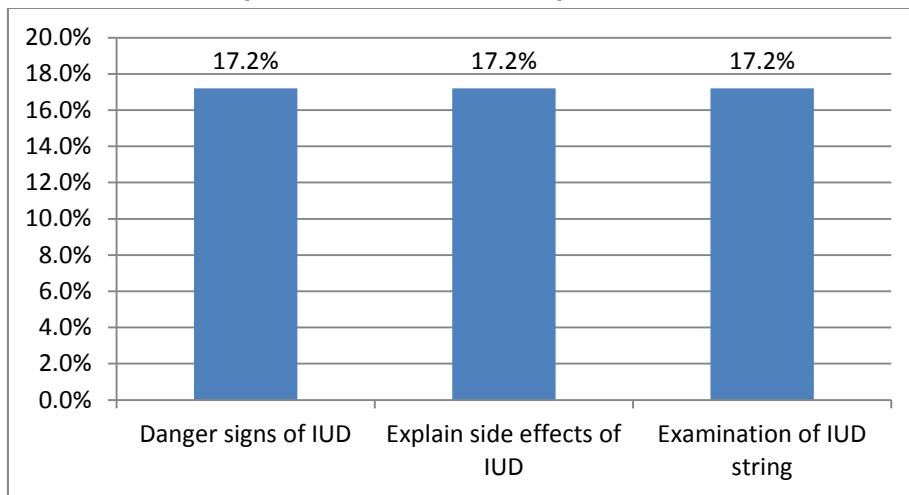


Figure 11: Practice on explanations about IUD to postnatal mothers (n=12)

### Practice about referral of postnatal mothers for IUD

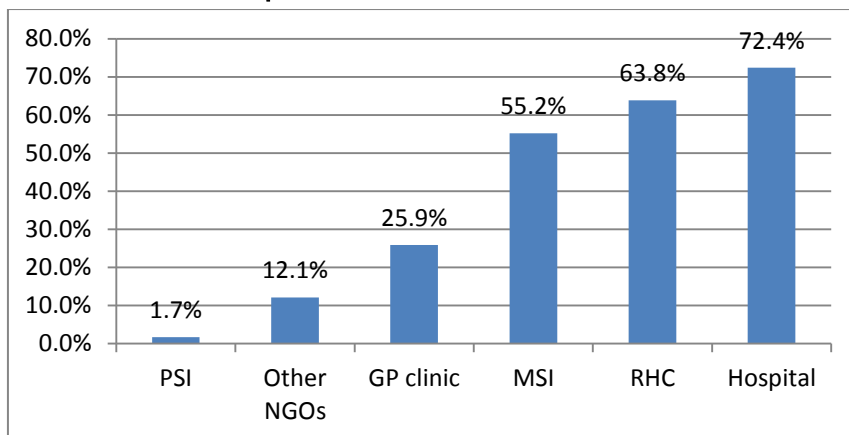


Figure 12: Referral centers for IUD insertion by respondents (n=56)

### Number of postnatal mothers referred for IUD by each respondent

Half of the respondents referred 1 to 5 postnatal mothers for IUD insertion during previous year. About one-fourth of them (22.5%) referred about 6 to 10 postnatal mothers and 10.3% referred 11 to 20 postnatal mothers. There was also a respondent who referred about 75 postnatal mothers for IUD insertion. Mean value was 11.95 and median was 5 with (SD 14.829).

**Table 35: Summary of total and Subtotal practice scores of BHSs in provision of birth spacing services in postpartum women (n = 122)**

Category`	Given score	Practice level		Minimum score	Maximum score
		High	Low		
Practice on birth spacing counseling	8	53 (91.4%)	5 (8.6%)	5	8
Practice of IEC use	5	24 (41.4%)	34 (58.6%)	0	5
Practice of OC pill	7	45 (77.6%)	13 (22.4%)	0	7
Practice of 3 month depo injection	5	58 (100%)	0 (0%)	4	5
Practice of IUD	7	8 (13.8%)	50 (86.2%)	0	6
<b>Total practice score</b>	<b>32</b>	<b>24 (41.4%)</b>	<b>34 (58.6%)</b>	<b>10</b>	<b>30</b>

**Table 36: Health Education message given by BHS to mothers immediately after delivery (n=58)**

Health education message	Number	Percentage
Urge to do more urination	1	1.7
Nutrition education	23	39.6
Danger signs for mothers	32	55.1
Danger signs of newborn	25	43.1
Encourage breast feeding	46	79.3

**Table 37: Health Education message received by mothers during PN period (n=331)**

Health education message	Number	Percentage
Breast feeding	239	88.19
Nutrition education	222	81.92
Birth spacing	176	64.94
Immunization for child	271	86.58
Danger signs for mothers	122	45.02
Danger signs for newborn	110	40.59

About 271 (85.8%) of mothers answered that they got HE message during PN period. Table36 showed health education message received by mothers during PN period.

Qualitative findings revealed that although mothers obtained health messages, some could not follow since they were struggling for their living.

We were told not to fetch water during "*Mee-twin*"(post natal period) because it can cause protrusion of guts. They (BHS) also told to feed nutritious food to baby. But...how can we eat or feed if we do not have (money).I do not avoid food. But..eating food which



contain energy...that is possible only if we have money. So I just listen..

(IDI with 35 years old mother)

ဒီဒေသမှာ မီးတွင်းမှာကလေးအမေတွေ ရေတွေ ဘာတွေ မခပ်နဲ့ အူထွက်မှာစိုးလို့။ ကလေးတွေကိုလည်း အားရှိတဲ့ဟာစား အဲလို ပြောတယ်။ စားဆိုတော့လည်း ရှိမှစား။ မရှိရင် ဘယ်လိုစားလို့ ရမှာလဲ။ အစာရှောင်တော့မရှောင်ပါဘူး။ အားရှိတဲ့အစာစားတဲ့။ အဲဒါကလည်း ပိုက်ဆံရှိမှစားရတာဆိုတော့။ နားပဲ ထောင် လိုက်တာ ပေါ့နော်။

(IDI with 35 years old mother)

For me, I have to carry water. Otherwise, I have to pay 1000 kyats for one pot. She (MW) told to feed baby with breast milk only till 6 months and then feed rice afterwards. She did not tell any other things. She also told to wrap baby's head after 7 days to prevent cough and cold. But I did not do it. I am afraid that my child will be very dedicated or too sensitive and less resistant if I take care him too much like that.

(IDI with 29 years old mother)

ကိုယ်ကတော့ ရေအိုးလည်းထမ်းရတာပဲ။ မဟုတ်ရင်တစ်အိုး ၁၀၀၀ ပေးရတယ်လေ။ ကလေးတွေကိုလည်း ၆လပြည့်မှ ထမင်းကျွေး။ ဒီကြားထဲမိခင်နို့ပဲတိုက်တဲ့။ ကျန်တာတော့ ဘာမှ မပြောဘူး။ ၇ရက်ပြည့်လို့ထွက်ရင် ကလေးနာစေးမှာဆိုးလို့ ခေါင်းပေါင်း ခိုင်း တယ်။ သမီးကတော့မလုပ်ပါဘူး။ ရှူနာရှိုက်ကုန်း ထမှာ စိုးလို့ ကြမ်းကြမ်းတမ်းတမ်းပဲ။ ရှောင်ရင်ပိုဆိုးမှာဆိုးလို့။ တချို့ကျတော့ ယုယရင်ပိုဆိုးတယ်တဲ့။

(IDI with 29 years old mother)

### Health Education message on Breast feeding received by mothers

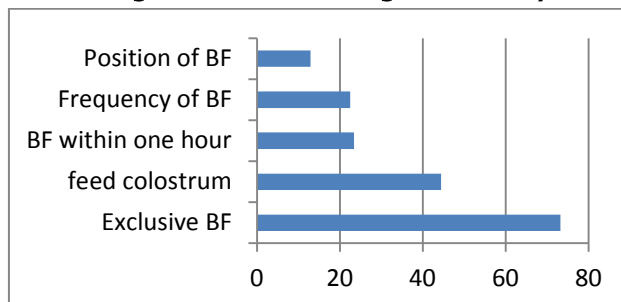


Figure 13: Health education message on Breast Feeding received by mothers (n=239)

#### Health Education message on nutrition received by mothers

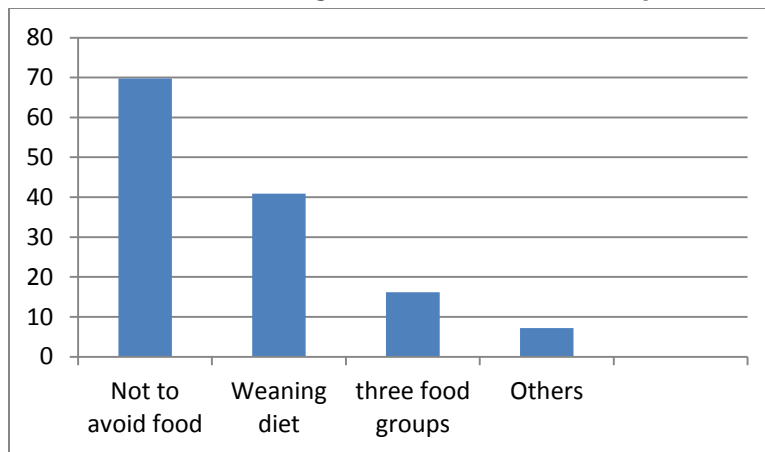


Figure 14: Health education message on Nutrition received by mothers (n=222)

#### Health Education message received by mothers on EPI

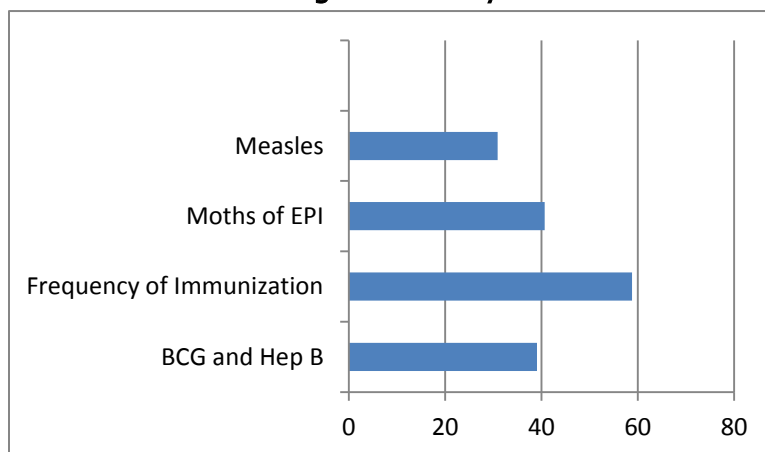
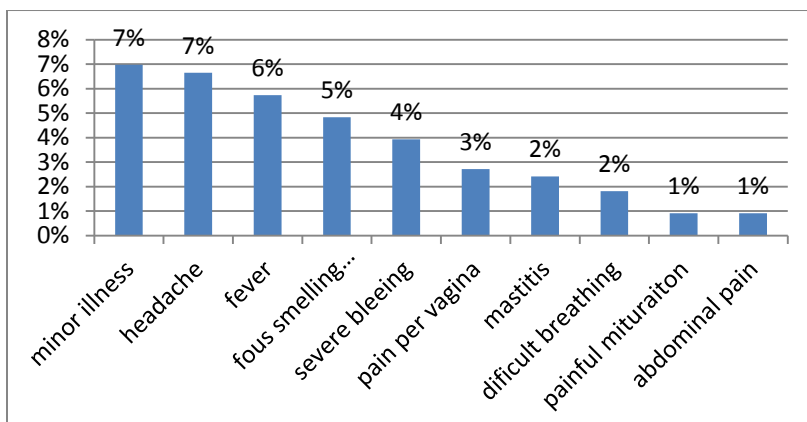


Figure 15: Health education message received by mothers on EPI (n=271)

#### 3.5. Health problems among mothers during postnatal period

Less than 10 % of mothers had health problems during post natal period. Majority (246, 74%) reported that they had no illnesses during their postnatal period of last child's delivery. The common health problems of mothers during postnatal period were minor illness, headache and fever as shown in figure 16.



**Figure 16: Common health problems among mothers during their postnatal period (n=331)**

### **3.6. Problems of BHS in providing PN care**

Qualitative findings from FGD with BHS revealed that they could not pay much attention to PN care. Most stated that timing and frequency of PN care/visits could not be achieved according to guideline. The main reasons for not being able to do PN visit were:

- Occupied with trainings and meetings in township and could not spare time for PN visit
- Mothers staying away from BHS's village
- BHS Cannot afford travel cost if patient did not come
- Those who deliver with others do not inform BHS/MW
- Most mothers perceived PNC was not important

PN care is different from theory in real practice. We cannot care full time (i.e. frequency of PN Care). I have to attend training (at Township Health Department) after 2 days of my patient's delivery. Then if they live far away from me, I cannot go and meet them. If mothers delivered by APW or TBA, it is hard for us to see mothers as soon as they deliver. We meet them mostly at one and half months after delivery when AMW comes to us to get contraceptives. Some came and asked us to come. Most mothers who delivered by AMW asked us to visit them.

(FGD 1 with MWs)

PN care ကကျတော့ စာတွေနဲ့လက်တွေ့နဲ့ တခြားစီဖြစ်နေတာ  
 အချိန်ပြည့်မကြည့်နိုင်ဘူး၊ ၂ရက်မှာ သင်တန်းတက်ရတယ်။ နောက်ပြီး  
 ကိုယ့်အပိုင်းနဲ့လေးတဲ့ နေရာတွေဆို ဆင်းမကြည့်နိုင် ဘူး၊ မိတာ ကတော့  
 မွေးပြီးပြီးချင်းမှာ လက်သည်နဲ့မွေးမွေး၊ AMW နဲ့မွေးမွေး မွေးပြီးပြီးချင်းမှာ မိခင်တယ်။  
 ကျွန်မ တို့ မိ တာ က ၁လခွဲမှာ AMW ကနေ သားဆက်ခြားဆေး တွေလာထုတ်  
 အဲဒီအခါမှာ ။ တချို့ကျတော့ လာခေါ်တယ်။ AMW နဲ့မွေးတဲ့ လူတော်တော်  
 များများက လာခေါ်တယ်။

According to qualitative findings, frequency of PN care varied whether mothers delivered by BHS or not. Majority mentioned that they requested AMW to take care of PN for mothers if they are busy with other tasks.

As she (other MW) says, we cannot meet soon after birth and we cannot meet 4 times according to guidelines. It is also different whether mother is delivered by us or not. If not, we do not meet required frequency. Mostly mothers also do not inform us as soon as they have delivered.

(FGD 1 with MWs)

သူပြောသလိုဘဲ၊အကြိမ်ပြည့်တော့မဟုတ်ဖူး၊ မွေးပြီးပြီးချင်း မဟုတ်ဖူး။  
 ကိုယ်တိုင်မွေးတာနဲ့ သူတို့ဖာသာမွေးတာ ကွာသွားတယ်။ကိုယ်တိုင်  
 မွေးတာကျတော့ အကြိမ်ပြည့်၊ ကိုယ်တိုင်မွေးတာ မဟုတ်ရင်တော့  
 အကြိမ်မပြည့်ဖူးပေါ့၊ မွေးပြီး ပြီးခြင်း ကို လှမ်းပြီး အကြောင်းကြားတာမရှိဘူး။

Some MWs said that they tried their best to make PN visits. But the majority pointed out that they dedicated their task for PN care with AMWs as AMWs have already obtained trainings. They can also get news of their patients through regular contacts with AMWs.

Although we cannot go (for PN visit), we delegate to skilled person like AMW. We give medicine for them. AMW see according to schedule like 3<sup>rd</sup> day although we cannot do it. We cannot see but

mother gets medicine and we also hear the news regularly (through AMW)

(FGD 2 with MWs)

အတတ်နိုင်ဆုံး ကျွန်မတို့ မရောက်ဘူးဆိုပေမဲ့ နားလည်တဲ့ လူနဲ့ အပ်ထားတယ်။ AMW လည်း တိုက်သင့်တဲ့ ဆေး တွေ ပေး ထားတယ်။ ကိုယ်ချိန်း ရမယ့် ရက်ကျော်ပေမဲ့ AMW တွေ က ဥရက် ဆို ဥရက် ချိန်းတာ ရှိတယ်။ ဆေးက လည်း ပုံမှန် ရနေ တယ်၊ ကိုယ်တိုင်မရောက် နိုင်ပေမဲ့ သတင်း ကတော့ အမြဲတမ်း ကြားနေရတာဘဲ။

Qualitative findings revealed that most BHS answered their practice as mentioned in the guideline (reported practice) when they answered self-administered questionnaire. However, BHS highlighted that what they discussed during FGD reflected real situation.

There is a big difference between theory and practice. What we have answered in the form was according to theory, not our real practice. In real life, it is different. We cannot do PN care properly.

(FGD 1 with MWs)

အခုက စာတွေ့နဲ့လက်တွေ့က တခြားစီကွာတယ် အခုညီမတို့ မေးခွန်းလွှာမှာ ဖြည့်ပေးလိုက်တာက စာတွေ့ တွေဘဲ ဖြည့်ပေးလိုက်တာ။ တကယ့် လုပ်ငန်းခွင်နဲ့ကျတော့ တခြားစီဘဲ၊ PN care ကို သေချာ မကြည့်နိုင်ဘူး။

If we do not have to attend training (in township), we meet patients 3 times. But sometimes, even I deliver that mother, I have to leave her after 2 days as I have to attend the training in township. In that case, I saw her on day 1 and then requested AMW to take care and asked her to call me if it is urgent. Within last 2 years, it happens like that. PN care was weak.

(FGD with MWs)

သင်တန်းလဲမရှိဖူး၊ အစည်းဝေးလဲမရှိဖူးဆိုရင်တော့ လူနာတယောက်ကို ဥကြိမ်လောက်တော့ ကြည့်မိ တယ်။ တချို့ကျတော့ ကိုယ်ကိုယ်တိုင် မွေးပေးပြီးရင် ၂ရက်လောက်နဲ့ ထားခဲ့ရတာရှိတယ်လေ ကိုယ်က သင်တန်းလာမှာမို့လို့တွေ ပထမမွေးပြီးချင်း တစ်ရက် ကြည့် နောက်နေ့ ကိုယ်ကမရှိဖူး ဆို တော့ AMW ကို ဆက်ကြည့်ပေးပါ၊ အကြောင်းတခုရှိရင်

ဆရာမ ကို ဖုန်းဆက်ပါ။ အဲလို မှာထားခဲ့ရတာလဲ ရှိတယ်။ ၂နှစ် လောက် အတွင်း အဲလိုမျိုးကိုဖြစ်နေတာ PN တွေကို ကောင်းကောင်းမကြည့်ရ PN care မှာနည်းနည်း အားနည်း တယ်။

### Reasons for No PN care

The main reasons for not taking and giving PN care were:.

Reasons for No PNC		
Provider's side	Voices of BHS and Community	Community's side
No travel allowance for PN visits	<p>The problem is water flow. For poor, it costs about 4000-5000 kyats by boat for one trip. For us (MWs), if patient's family come and invite, they can go. Otherwise we can't go and see them. Since they (patients) cannot afford fuel cost, they do not come and invite us. We also cannot pay travel cost out of our pocket.</p> <p>ရေအခက်ခဲရှိမယ် လာခေါ်ဖို့ တအား ဆင်းရဲတဲ့လူဆိုရင် သင်္ဘောနဲ့ သွားရ တော့ တခါလာခေါ်ရင်ငှာငှာ၊ ဂွာငှာ တောင်ကုန်တယ်။ ဆရာမ တွေက သူတို့လာခေါ်ရင် လိုက်နိုင်တယ် လာ မခေါ်ရင် မလိုက်နိုင်ဘူး။ ဆီဖိုးမတတ် နိုင်ကြတော့ လာမခေါ်၊ ကိုယ်ကလဲ ခရီးစရိတ်စိုက်မသွားနိုင်။</p>	Cannot afford transportation cost
Mothers did not come to see MW	<p>Usually, most mothers do not come to seek PN care. Only few come if there is any problem eg. High blood pressure.</p> <p>လာပြတာသိပ်မရှိဘူး။တချို့တလေ</p>	<p>Perceived it is not so important if there is no complication during PN</p> <p>No signs and</p>

	ကတော့ တစ်ခုခုဖြစ်မှသွေးပေါင်တက်လို့ လာခေါ်တယ်။	symptoms
Occupied with other tasks such as training and meetings	<p>Now training at township finish at 6 pm. In that case, we cannot go and see (PN visits) at nights Next day, training starts at 9 am and it is not so convenient (to do PN visit). So we ask AMW to go and see PN cases. When we finish training after 5 days, we made PN visit and it is not according to guideline. Sometimes, we see PN 10 days after the delivery.</p> <p>အခု မြို့နယ်သင်တန်းက တခါတလေ ညနေ၆နာရီမှ ပြီးတာ ရှိတယ်။ အဲလို ကျ တော့ ညဘက်ကျ တော့ ကိုယ် မသွားနိုင်တော့ဘူး၊ နောက်နေ့ မနက် ကျတော့ သင်တန်းက ၉နာရီ ဆိုတော့ အဆင်မပြေပြန်ဘူး၊ အဲလို ဆိုတော့ နီးစပ်ရာ AMW ကို သွားကြည့်ခိုင်း ရတယ်။ သင်တန်းကို ၅ရက်ဆို ၅ရက် တက်ပြီးတော့ မှ သွား ကြည့် လိုက် တော့ စာအုပ်ထဲကပါတဲ့ရက်နဲ့ မမီ တော့ဖူး၊ တခါတလေ ၁၀ရက်လောက် မှ သွား ကြည့် ဖြစ်တယ်။</p>	MW is not at home and so mothers go directly to Township Hospital

#### 4. Opinions and Perceptions towards PNC

Is PNC important?

##### 4.1. Attitude of BHS towards PNC

Most BHS regarded PN care as being important for mothers. They all knew PN period is 6 weeks after delivery. However, some stated that most people

regarded PN care is less important than AN care because baby has been delivered. Therefore, some paid less attention towards PN care.

All: PN care is the most important

Participant 7: For the life long, those mothers can get gynecological problems, I explain. I always tell that those 45 days is important. At least one bottle of blood is lost and there is no replacement. Mother suffers loss of appetite and insomnia. At that time, mother cannot eat enough nutrition and mentally also weak. So, post natal period is important, I think.

(FGD -1 with MWs)

(အားလုံး)- PN care ကအရေးကြီးဆုံးပေါ့။

(၇)- တသက်တာအတွက်ကို အဲဒီမိခင်က မီးယပ်ဖြစ်တာတို့၊ ကျွန်မတို့ရှင်းပြတယ်၊ အဲဒီ၄၅ရက်မှာအရေး ကြီးဆုံးလို့၊ အဲလိုမျိုးအမြဲတမ်းပြောတယ်။ အနည်းဆုံးသွေးတစ်ပုလင်း ကထွက်သွားပြီးသား၊ အဲဒီသွေး ကိုအစားထိုးထားတာမရှိဘူး၊ ကလေးမွေးတဲ့အတွက်ကြောင့် မိခင်က အိပ်ရေး လည်းပျက်တယ်၊ အစားလည်းပျက် တယ်။ နောက်တစ်ခုက အဲဒီအချိန်မှာ အဲဒီအမေက အာဟာရဓါတ် ပြည့်ပြည့်စုံစုံမစားရတာ၊ နောက်စိတ်ရဲ့ကိုယ်ခံအားပေါ့၊ အဲတာကြောင့် မီးတွင်းကအရမ်းအရေးကြီးတယ်ထင်တယ်။

(FGD -1 with MWs)

Their attitude is..only delivery time is dangerous. Once the baby was delivered, they do not want us invite us. They feel that they are healthy.

(FGD with MWs)

သူတို့ရဲ့ခံယူချက်ကကျတော့ ကလေးမွေးတဲ့အချိန်ဘဲ အန္တရာယ်ရှိတယ်ထင်တယ်  
ကလေးဝမ်းက ကျွတ်သွားရင် သိပ်မခေါ်ချင်တော့တာပါတယ်  
သူတို့နေကောင်းတယ်ပေါ့။



**Table 36: Attitude of BHS towards PN Care (n=58)**

No.	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
	PN care needs to provide only when	1(1.7)	3 (5.2)	25(43.1)	29(50)
	PN care must be provided to both	45(77.6)	13(22.4)	0	0
	At least three times PN care must be	9(15.5)	36(62.1)	10(17.2)	3(5.2)
	Treatment should be provided at home of PN mother if the danger	1(1.7)	2(3.4)	32(55.2)	23(39.7)
	PN care need to provide	0(0)	0(0)	30(51.7)	28(48.3)
	If the mother delivered with TBA, only TBA	0(0)	1(1.7)	29(50)	28(48.3)
	Ferrous sulphate must be provided to mother	11(19)	37(63.8)	9(15.5)	1(1.7)
	Only BHS can decide the suitable birth spacing method for	2(3.4)	9(15.5)	41(70.7)	6(10.3)
	Women cannot get pregnant easily even though there is no	2(3.4)	15(25.9)	29(50)	12(20.7)
	MWs should provide PN care for both	20(34.5)	32(55.2)	5(8.6)	1(1.7)
	If mother & child suffered danger signs during PN period, first aid care & treatment	8(13.8)	2(36.2)	23(39.7)	6(10.3)
	Role of MW is very important for PN care of mother who lives in	32(55.2)	26(44.8)	0(0)	0(0)

#### 4.2. Perceptions of mothers and BHS towards PNC

The majority of mothers also stated they needed to take care of their health during PN period. However, mothers regarded the PN period as being only 7 days after delivery.

Although mothers perceived PN period was important for their health, they mostly practiced traditional practices such as avoidance of certain foods, not going outside the room, gathering around by relatives for 3 days after delivery. Some mentioned that 3<sup>rd</sup> day after deliver was the most critical period and needed more attention not to disturb mother with any threatening event.

"*Mee- twin*" (post natal period) is 7 days. How do I know? Because my mother told me like that. After 7 days, "*Mee Haet*" (getting out of puerperium period). It is dangerous for mothers during post natal period. I have heard that on 3<sup>rd</sup> day, there is new blood occurs. On that day, relatives come to stay overnight. When I delivered this child, my mothers and elder sister came to sleep with me.

(IDI with 34 years old mother)

မီးတွင်းကာလကို ဂုရက်ပေါ့။ အဲဒါကိုဘယ်လိုသိလဲဆိုတော့ အမေတို့ကတော့  
အဲလိုပြောတာပဲ။ ဂုရက်ပြီးရင်မီး ထွက်တာပဲ။ အဲဒီ မီးတွင်းကာလဆိုရင်  
မိခင်တွေအတွက် အန္တရာယ်ရှိတယ်၊  
ဥရက်မြောက်နေ့ဆိုရင်သွေးသစ်လောင်းတယ်လို့ကြားဖူးတာပဲ။  
အဲဒီနေ့ကျရင်လာလာအိပ်ကြတယ်။ အန္တရာယ်ရှိတယ်ဆိုလို့။ ကျမတုန်းကတော့  
အမေတို့ အမကြီးတို့လာအိပ်တယ်။

(IDI with 34 years old mother)

Some BHS said community regarded post natal period as 7 days because the umbilical cord fall out after 5-7 days.

In Western medicine, there is no "*Mee Haet*" (getting out of puerperium). But in Myanmar tradition, there is "*Mee Haet*". When the baby's umbilical cord is fallen out at 3<sup>rd</sup> day after delivery, then

they (mother) make “*Mee Haet*” after 5-7 days after delivery. They go out and start working.

(FGD 2 with MWs)

ကျွန်မတို့အင်္ဂလိပ်လိုမှာ မီးထွက် တာ မရှိဖူး၊ ဗမာလို မှာ က မီးထွက်တာရှိတယ် ကလေးက ချက်က ဥရက် နဲ့ ကျွေသွား ၅ရက်-၇ ရက် နဲ့ထွက်ပစ် လိုက် တာ။

## 5. Suggestions

Majority of BHS are convinced that health education on importance of PN care to community was essential. Some pointed out that community were not interested in health talks as they have to struggle for their daily living. Some BHS highlighted roles of AMWs for providing PN care. Few BHS suggested supports for mothers such as nutritional support, baby clothing should be provided through MWs so that mothers would prefer to deliver by MW. Then community would rely and respect on MW more.

Health education on PN care and dangers during PN period should be given to community. It also depends on individual health knowledge. If mother is health literate, she comes and sees me although she stays away from my village.

(FGD with MWs)

PN မှာ အန္တရာယ်ရှိတယ်ဆို HE များများပေးဖို့တော့ လိုတယ်။ သူ့ရဲ့ကျန်းမာရေး ဗဟုသုတနဲ့လဲကွာ မယ်။ ကျန်းမာရေး ဗဟုသုတရှိတဲ့လူက ဘယ်လောက်ဘဲ ရွာဝေးဝေးလာ ခေါ်တယ်။ ဒီရက်အတွင်းလာခေါ် ဆို ခေါ်တယ်။

Since they have to struggle and have economic hardship, they cannot pay attention to our (health) talk. If we tell 10 facts, maximum 3 facts they can grasp. They have to work in the paddy field. If they cannot work, their farm owner would complain.

သူတို့စီးပွားရေးမပြေလည်သမျှ ပြောလို့ဆိုလို့မကောင်းဘူး၊ ကိုယ့်ကိုလက်မခံဘူး။ ဘဝခွန်းပြောရင် ဥခွန်းလောက် ထန်ကုန်ပါပဲ။ အချိန်လည်းမပေးဘူး၊ စပါးရိတ်တာရှိတယ်၊ ကောက်စိုက်တာရှိတယ်၊ ကျွန်မတို့ကို နာရီနဲ့ အမျှ

အချိန်မပေးနိုင်ဘူး။ သူတို့အလုပ်ကို ကျေပွန်အောင် လုပ်ရတယ်၊  
မကျေပွန်ရင်ပိုင်ရှင်ကလာပြောတယ်။

AMWs whom we brought up and also CHW are closer to community  
than us. They can take care (for PN). We can rely on them. They are  
our right arms.

ကျွန်မတို့မွေးထုတ်ထားတဲ့ အရံသားဖွားတွေ၊ CHW တွေ ရယ်က  
လူထုနဲ့ကျွန်မထက်ပိုနီးစပ်တယ် လေ။ သူတို့က  
နည်းနည်းပါးပါးသွားကြည့်ပေးနိုင်တယ်။ ကျွန်မတို့ အားကိုး ရတယ်။  
ညာလက်ရုန်းတွေဘဲ။

That would be good if we can provide nutritional support, baby  
clothing, soaps for mothers during PN. If we can support like that,  
community would rely and respect on us more.

ကလေးအမေတွေကိုအနီးပိတ်ထောက်ပံ့တာမျိုး၊ အာဟာရ ဓါတ် ထောက်ပံ့တာမျိုး  
လုပ်ပေးရင်ပိုပြီးအဆင်ပြေမယ်။ အဲဒီတုန်းကဆပ်ပြာပေးတယ်၊ အနီးပိတ်ပေးတယ်  
ဦးထုပ် ကလေးတွေ၊ အဲလိုမျိုး ကျွန်မတို့ဆရာမတွေကို မီးတွင်း  
လူနာတွေအတွက်ပေးခဲ့ရင် သူတို့ အတွက်သက်သာမယ်၊ သူတို့အတွက်  
အာဟာရဓါတ်တွေပြည့်စုံမယ်။ ဆရာမ ကို ပိုပြီးတော့အားကိုးတာပေါ့။

Discussion  
Photo page

Blank page

## **Discussion**

Our study explored the current situation of PNC at the primary health care level not only from providers' perspectives but also from community's view. Total 58 BHS and 331 mothers who have under one year old child were involved in completing quantitative surveys using pre-tested questionnaires. Qualitative data were collected by FGDs with BHS and IDIs with mothers. Findings from quantitative surveys and qualitative data collections from providers (BHS) and community (Mothers) were triangulated to capture a comprehensive picture.

### **Knowledge of BHS on PNC**

The knowledge of BHS was assessed by self-administered questionnaire. Total knowledge scores on PN care were fair –about 58.6% of BHS had high knowledge scores for PN Care. Regarding the danger signs which need urgent referral for mothers, 60.3% obtained high knowledge score. For danger signs of newborn which need urgent referral, only 43.8% got high a knowledge score. These scores could be considered relatively low considering all BHS had received training in Community Based New Born Care in 2015, MNCH training in 2013 from Central level NCH department and another CBNBC training in 2012. About 53.4% of BHS had high knowledge score for birth spacing during the PN period despite having received a 3 day Birth spacing training in 2012 from central level trainers. In our study, all respondents had known about oral contraceptive pills, 3 month depo injection, IUD and condom. This finding is similar to the knowledge of health workers in Bangladesh in 2012 (Jorge et al., 2012). However, the study conducted in Osun State, Nigeria described only 44% of health providers knew all methods of family planning (Monisola, 2015).

### **Practices on PN Care and utilization**

Reported practice on PNC of BHS was good. However, while exploring in-depth during FGDs, it revealed that majority of BHS could not perform PN care according to the guidelines. Most of them did PN care during EPI visits and relied on AMWs. Face-to-face interviews with mothers found that

94.6% received PN care. However, after delivery only 6.7% received PN care till 6 weeks. This may be due to the required reporting according to HMIS. The only indicator that monitors PNC is related to number of babies/mothers receiving PNC within 3 days. After that there is no measurement of extent of PNC especially those who receive a full package of visits. The study in Nigeria showed that 63 % of the mothers of the 19,418 children did not utilize postnatal care services (Somefun, O, 2016). In our study, some BHS highlighted the role of AMWs in providing PN care, although only 5.6% of mothers reported that they were attended by AMW for PN care. This may be due to increased number of deliveries at hospital because most mothers received PN care from doctors (42.8%) and nurses (14.7%). However, our findings revealed that 21.7% of mothers obtained PN care by TBA, showing TBA had some roles. A previous studies among internal migrants in Bogale and Mawlamingyun in Myanmar also showed that 46.5% of mothers delivered by TBA (Wai Wai Han, 2016 and Saw Saw, 2016). Thus, it is necessary to consider how to organize TBAs to collaborate with BHS or AMWs in future.

### **Barriers for PNC**

Almost all mothers did not recognize that the PN period is 6 weeks and they perceived the PN period as only 7 days after delivery. Study in Malawi found parents' perception of the postpartum period plays an important role in seeking PN care (Zamawe, 2015). Our study found that travel cost and transportation difficulties was also another barrier to access PN care in some hard-to reach areas. Similar findings were found in rural Afghanistan where lack of affordable transportation made health services inaccessible during the post natal period (Newbrander.W, 2013). In our study, BHS also mentioned travel costs to reach mothers and babies, and overburden of meetings and trainings made them able to give less attention to providing PN care.

### **Attitude of BHS and perception of mothers on PNC**

Almost all BHS had positive attitude towards PNC. Mothers regarded PN period was important for their health. However, the period or duration for



PN period was different from community perspectives. Some regarded 3 days after deliver and majority regarded 7 days after deliver as PN period. The reason for community's perception of 7 days duration for PN period is unclear. However, it may be due to the period of umbilical cord falling out within 7 days after the delivery. Most respondents (both BHS and mothers) paid more attention to childbirth/delivery period than PN period. Some explained that since the baby has been delivered, critical period is over and it is less important to take care of mother. Study in Malawi among parents showed that most perceived pregnancy and childbirth as the most risky periods to women (Zamawe, 2015). Majority in that study recognized childbirth as the most risky period followed the antepartum period. A study in Ethiopia also found that around 80% of the participants were not knowledgeable about the risks that are associated with postpartum period (Bogale, 2015).

The role that perceived susceptibility to and severity of maternal complications play on care seeking behaviors. Thus the perceptions of the mothers toward the postnatal period (low risk) might affect their decision to seek postnatal care.

### **Suggestions**

Most BHS suggested awareness raising and health education to mothers on the importance of the PN period. Some suggested to provide supports for mothers during PN visits through BHS. Some also mentioned about necessary support for BHS to make PN visits.

### **Limitation of the study**

Our study cannot assess quality of PN care and only reported practice and utilization of PN care can be identified. Using self-administered questionnaire to assess knowledge of BHS has also some possibility of getting higher knowledge scores than reality. However, the questionnaire was pre-tested and responses were mixed with true and false answers to obtain valid response. Moreover, BHS were divided into 5 groups and questions were read out by trained interviewers and asked BHS to answer simultaneously without having much time to think. This technique also

enhances reliable response. The study includes not only providers' practice but also community's (mothers of under one year old child) views. Therefore, it is believed that this can capture comprehensive picture of the situation.

### **Conclusion**

Knowledge of BHS on PNC is acceptable, about 60% had high knowledge score and reported practice on PNC is also good. However qualitative findings highlighted that in reality, BHS could not provide PN visits according to the schedule. The main reasons given were—they were occupied with several tasks including many trainings in the township, they received no support for travel/ transportation to make PN visits especially in hard-to-reach areas and there was low awareness of community on the importance of PNC. Although BHS could not provide proper PNC regarding frequency of PN visits and PN care services, all stated that they could rely on AMWs. Most BHS agreed that AMW and CHWs were their right and left hands who can be trained and utilized. There was low utilization of mothers for PN Care services because they thought it was not necessary if there is no complication. Although mothers perceived that post-partum period is crucial for them, the duration/period regarded as PN was different. Community regarded PN period as 7 days instead of 42 days. Thus they started doing daily activities and routine works after 7 days and did not pay much attention for mothers' health. It is necessary to draw attention on PN care not only to community but also to health staff to prevent preventable deaths for mothers and children during the PN period.

## Recommendations

5. To provide training and refresher training for BHS focusing on PNC
6. To consider the out of pocket expenses for providers and community for PN care and consider necessary support for health staff to provide PN care such as transportation, timing and essential medicines
7. To emphasize or educate community on period of PN is 6 weeks (42 days) and importance of PN care
8. To conduct future study on quality of PN care at primary health care level

Photo page

## References

1. Ministry of Health (MoH). Health in Myanmar 2014. Nay Pyi Taw: MoH; 2014.
2. Ministry of Health, Myanmar. Health Management Information System. 2015.
3. Bogale D, Markos D., 2015 Knowledge of obstetric danger signs among child bearing age women in Goba district, Ethiopia: a cross-sectional study. *BMC Pregnancy Childbirth*. 2015;15:77.
4. Jorge, U., Stephen, R., Kathryn, B., 2012. Assessment of Private Providers' Knowledge, Attitudes, and Practices Related to Long-Acting and Permanent Methods of Contraception in Bangladesh, Strengthening Health Outcomes through the Private Sector (SHOPS) project. Abt Associates Inc.
5. Monisola, Y.J.O., 2015. Knowledge, Attitude and Practice of Family Planning among Healthcare Providers in Two Selected Health Centres in Osogbo Local Government, Osun State. University of Ibadan, Nigeria.
6. Oluwaseyi Dolapo Somefun and Latifat Ibisomi., 2016 Determinants of postnatal care non-utilization among women in Nigeria *BMC Res Notes (2016) 9:21*. DOI 10.1186/s13104-015-1823-3
7. Stephanie, S., Susan, J.G., Elisabeth, S., 1999. Effectiveness of Contraceptive Technology Update Training: Improved Family Planning/Reproductive Health Knowledge and Stated Practices of Service Providers in Moldova (No. JHP - 06). United States Agency for International Development.
8. Wai Wai Han, Saw Saw, Dr. Zayar Lynn, Myo Myo Mon, Theingi Myit, Nyi Nyi Zayar and Kyaw Myint Tun (2015). Access and utilization of maternal and child health services among migrants in Bogale and Mawlamyinegyun Townships, Ayeyarwaddy Region, Myanmar. (Report)
9. William Newbrander, Kayhan Natiqb, Shafiqullah Shahimc, Najibullah Hamidd & Naomi Brill Skenad. ,2014, Barriers to

appropriate care for mothers and infants during the perinatal period in rural Afghanistan: A qualitative assessment. *Global Public Health: An International Journal for Research, Policy and Practice*, 9:sup1, S93-S109,

10. Zamawe.C, CMasache.G and NDube.A., 2015, The role of the parents' perception of the postpartum period and knowledge of maternal mortality in uptake of postnatal care: a qualitative exploration in Malawi. *International Journal of Women's Health*, 9 June 2015

### Annex 1: Research team members

<b>Group 1</b>	Dr.Wai Wai Han Department of Medical Research
	Ma Cho Cho Myint Department of Medical Research
	Ma Htay Htay Hlaing Relief International
	Ko Aung Thu Relief International
	Ko Aung Phyo Min Relief International
<b>Group 2</b>	Dr. Aung Thein Tun Relief International
	Ko Soe Moe Myat Department of Medical Research
	Ko Hlaing Tun Relief International
<b>Group 3</b>	Ma Thandar Min Department of Medical Research
	Ko Myo Thurein Min Relief International
	Ma Thandar Win Relief International
<b>Group 4</b>	Ma Doi Ra Relief International
	Dr. Nyi Nyi Zayar Department of Medical Research
	Dr.Myo Thurein Latt Relief International
	Ma Win Ei Thu Relief International
	Ko Nay Paing Min

<b>Group 5</b>	Dr.Saw Saw Department of Medical Research
	Ko Saw Ba Than Department of Medical Research
	Ma May Tha Zin Relief International
<b>Group 6</b>	Ma Hinin Lae Yi Khaing Relief International
	Ko Than Aung Relief International
	Ma Khin Moe Khaing Relief International
	Ma Yee Yee Win Department of Medical Research

### Field Survey Plan

Dates	Villages					
15.12.15	Ah Kel	Ta Dar Chaung	Yay Pu Wa	War Ka Mel, Set Kon	Ohn Pin Ywar Ma	
	G1	G2	G3	G4	G5	G6
16.2.15	Tha Nat Pin Seik, Kan Seik	Ka Dar Htet Su, Ma Ngay Gyi	Tha Pyu Seik	Kyon Paing	Sar Ou Chaung	Ma Ngay Ka Lay
	G1	G2	G3	G4	G5	G6
17.12.15	Pho Shan Gyi	Ta Gyar Hin Oae	Tha Phyu Chaung	Aye Ywar Thit	Pyin Htaung Su	Kywe Kone
	G1	G2	G3	G4	G5	G6
18.12.15	Kyar Kone	Sin Ku	Inn Du		Ta Nyin Kone	
	G1	G2	G3	G4	G5	G6



**Design credit: Saw Saw**

