**YANGON INSTITUTE OF ECONOMICS**

**Ph.D Programme**

# APPLICATION OF MARKETING STRATEGY FOR BEHAVIOUR CHANGE

## (A CASE STUDY OF MARRIED WOMEN OF REPRODUCTIVE AGE IN MONYWA TOWNSHIP)

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**MARCH, 2007**

# Application of Marketing Strategy

# for

# Behaviour Change

**(A Case Study of Married Women of Reproductive Age in Monywa Township)**

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# APPLICATION OF MARKETING STRATEGY FOR BEHAVIOUR CHANGE (A CASE STUDY OF MARRIED WOMEN OF REPRODUCTIVE AGE IN MONYWA TOWNSHIP)

The viva voce examination of the Ph.D candidate Ma Moe Moe Yee was successfully held on March 1, 2007 from 5:00 pm to 6:00 pm in room number (8) of Yangon Institute of Economics (Kamayut Campus) in front of the Rector of Yangon Institute of Economics, Professor Dr. Kan Zaw and examination board members.

# CERTIFICATION

I hereby certify that the content of this thesis is wholly my own work unless otherwise referenced or acknowledged. Information from sources is referenced with original comments and ideas from the writer herself.

Moe Moe Yee

March, 2007

## Yangon Institute of Economics

This is to certify that Thesis titled "Application of Marketing Strategy for Behaviour Change (A Case Study of Married Women of Reproductive Age in Monywa Township) submitted to Yangon Institute of Economics in partial fulfillment of the requirements for the degree of Doctor of Philosophy has been accepted by the Board of Examiners.

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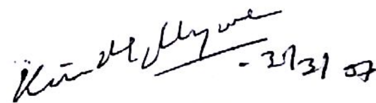

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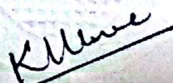

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# Abstract

This paper is a study on the application of marketing strategy for behaviour change of the Married Women of Reproductive Age in Monywa Township concerning with the reproductive health. It is a multidisciplinary study of which composed of studies on behaviour from discipline of psychology, health care education from medical science and marketing strategy from the discipline of marketing.

The main objective of the study is to highlight the role of social marketing (marketing strategy for behaviour change) of Married Women of Reproductive Age in Monywa Township concerning the reproductive health knowledge and practice. The data were collected by survey method and hypotheses were tested by appropriate statistical methods.

The first part of the paper presents the literature of social marketing and the second part is the empirical study, its findings and the suggestions for the development of the future programs.

The study found that change agent of the DOH in collaboration with MCWA delivered the reproductive health care education to the MWRA in Monywa Township mainly by health talk. Reproductive health care education includes antenatal care and postnatal care knowledge needed by the MWRA in the Monywa Township. According to the empirical study, it was found the maternal health knowledge was delivered to the target adopters. The knowledge was accepted by the MWRA in Monywa Township. Hence, the social marketing strategy was effective for the behaviour change of the target adopters in Monywa Township. It was more effective in rural area than urban area. No significant association was found between educational level and behaviour change of the MWRA in Monywa Township.

Based upon the survey findings, suggestions for future programs of knowledge delivery are presented which will contribute to the change of reproductive health behaviour of the MWRA and will support the human resource development and hence the development of the nation.

# TABLE OF CONTENTS

**ACKNOWLEDGEMENTS**........................................................................... i

**ABSTRACT**............................................................................................... ii

**LIST OF TABLES**………………………………………………………… vi

**LIST OF FIGURES**…………………………………………………………viii

**ABBREVIATIONS**……………..…………………………………………… x

| Chapter | Description | Page No. |
|---|---|---|
| **1.** | **INTRODUCTION** | |
| 1.1. | Background…………………………………………………….... | 1 |
| 1.2. | Statement of the Problem……………………………………………… | 4 |
| 1.3. | Rationale and Justification………………...……………………...…..... | 6 |
| 1.4. | Objectives of the Study……………………..……………………..... | 7 |
| 1.5. | Hypotheses of the Study………………………………………………… | 7 |
| 1.6. | Methodology……………………………………………………..... | 8 |
| 1.7. | Structure of the Dissertation…………………………………………… | 13 |
| **2.** | **THEORETICAL BACKGROUND OF SOCIAL MARKETING** | |
| 2.1 | Introduction…………………………………………………… | 14 |
| 2.2 | The Marketing Concept in Practice………………………….. | 15 |
| 2.3 | Developing Marketing Strategies……………………………….…..... | 16 |
| 2.4 | Defining Social Marketing………………………………………... | 17 |
| 2.5 | Elements of Social Marketing………………………………………. | 19 |
| 2.6 | Social Product Market Fits……………….……………………………… | 23 |
| 2.7 | Social Marketing Management Process……………………………… | 27 |
| 2.8 | Components of Communication ……………………………………... | 32 |
| 2.9 | Behaviour Change ……………………………………………………. | 35 |
| 2.10 | The Previous Research ………………………………………………. | 37 |
| 2.11 | The Strategies Applied by Social Marketers to Deliver Health Care Education to MWRA in Moywa Township. …………………… | 38 |

**3. EMPIRICAL STUDY**

3.1 Demographic Factor of respondents ……………………………………42

3.2 Behaviour Change of Married Women of Reproductive Age Regarding Reproductive Health …………………………………………………47

**4. FINDINGS AND DISCUSSION** ……………………….......…………..…93

**5. CONCLUSION** …………………………………………………………100

**Appendix 1** Questionnaire…………………………………………………..…105

**Reference** ……………………………………………………………….……..120

# LIST OF TABLES

Table 3.1 Age of Married Women of Reproductive Age……………………..…….42

Table 3.2 Educational Level of MWRA…………………………………………43

Table 3.3 Current Occupation of MWRA…………………………………..…44

Table 3.4 Occupation of MWRA's Husbands……………………………………45

Table 3.5 Current Marital Status of MWRA..……………………………...…46

Table 3.6 Monthly Family Income by Region (Kyat thousands)…………..……46

Table 3.7 Promotional Tools of Social Marketing………………………………47

Table 3.8 The Months of Pregnancy at First Antenatal Care Visit to Midwives (or) Doctorsby Region……………………………………..…49

Table 3.9 The Month of Pregnancy before Paying First Visit for Antenatal Care and Education Level……………………………………………52

Table 3.10 The Month of Pregnancy after Paying First Visit for Antenatal Care and Educational Level ………………………………………..53

Table 3.11 The Impact of the Frequency of obtaining Health Care Education on the Month of Pregnancy to Pay First visit to Midwives for Antenatal Care ……………………………………….…55

Table 3.12 Vaccination during Pregnancy……………………………………..…56

Table 3.13 Medical Care during Pregnancy……………………………….…………58

Table 3.14 The Knowledge of the Danger Signs of Pregnancy …………………62

Table 3.15 Attitude Change in Care of Pregnant Women ………………………64

Table 3.16 Knowledge of Access to Safe and Clean Delivery………………..…66

Table 3.17 The Change in Practice of Breastfeeding after Delivery…………......68

Table 3.18 The Behaviour of Feeding Foremost Milk to the Infant after Delivery ……………………………………………………...…...70

Table 3.19 Change in Practice of Avoiding Diet during Breastfeeding……… 72

Table 3.20 The Change in Practice of Using Injection for Birth Spacing after 45 days of Delivery……………………………………………73

Table 3.21 The Relationship between Educational Qualification of MWRA and Practice of Birth Spacing before Health Care Education ………74

Table 3.22 The Relationship between Educational Qualification of MWRA and Practice of Birth Spacing after Health Care Education……………75

Table 3.23 Frequency of Getting Knowledge from DOH…………………………..…77

Table 3.24 The Behaviour Change in Following the Health Knowledge Obtained form DOH………………….………………………………….79

Table 3.25 Time Required for Going to Health Centre ………………….……….……81

Table 3.26 Change in Place of Taking Delivery ……………………..……..……..…82

Table 3.27 Change in Place to Take Antenatal Care……………………………..……..85

Table 3.28 Source of Media ……………………………………………………….87

Table 3.29 Gaining Knowledge from the Mottos of Myanmar Maternal and Child Welfare Association ……………………………………..………88

Table 3.30 Change in the First Person Approached by MWRA for their Antenatal Care ……………………………………………….…..……89

Table 3.31 Change in the First Person who Suggest MWRA to Take Antenatal Care……………………………………………………….91

# LIST OF FIGURES


| | | |
|---|---|---|
| Figure 2.1 | Conceptual Frame Work of the Study | 14 |
| Figure 2.2 | Marketing Manager Framework | 17 |
| Figure 2.3 | Social Marketing Products | 20 |
| Figure 2.4 | Defining the Product-Market Fit | 24 |
| Figure 2.5 | Designing Social Products that Lack a Tangible Product Base | 25 |
| Figure 2.6 | Designing Social Products with a Tangible-product Base | 26 |
| Figure 2.7 | Basic Communication model | 33 |
| Figure 2.8 | Designing the Application of Marketing Strategy for Monywa Township for 600 MWRA for Behavior Change | 39 |
| Figure 3.1 | Promotional tools of Social Marketing | 49 |
| Figure 3.2(.a) | The Month of Pregnancy to pay First Antenatal Care Visit to Midwives (or) Expert (Urban) | 51 |
| Figure 3.2(.b) | The Month of First Antenatal Care Visit to midwives (or) Expert (Rural) | 51 |
| Figure 3.3(.a) | Vaccination during Pregnancy (Urban) | 57 |
| Figure 3.3 (b) | Vaccination during Pregnancy (Rural) | 59 |
| Figure 3.4 (a) | Medical Care during Pregnancy (Urban) | 59 |
| Figure 3.4.(b) | Medical Care during Pregnancy (Rural) | 60 |
| Figure 3.5 (a) | Behaviour of the knowledge of the Danger Signs of Pregnancy (Urban) | 63 |
| Figure 3.5(b) | Behaviour of the knowledge of the Danger Signs of Pregnancy (Rural) | 64 |
| Figure 3.6 (a) | Attitude change in Care of Pregnant Women (Urban) | 65 |
| Figure 3.6 (b) | Attitude change in Care of Pregnant Women (Rural) | 66 |
| Figure 3.7 | Knowledge to Access Safe and clean Delivery | 67 |
| Figure 3.8.(a) | The Change in Practice of Breastfeeding after Delivery (Urban) | 68 |
| Figure 3.8 (b) | The Change in Practice of Breastfeeding after Delivery (Rural) | 69 |

| | | |
|---|---|---|
| Figure 3.9 (a) | The Behaivour change in Feeding Foremost Milk to the Infant after Delivery (Urban) | 70 |
| Figure 3.9 (b) | The Behaivour change in Feeding Foremost Milk to the Infant after Delivery (Rural) | 71 |
| Figure 3.10 (a) | The change in Practice of using Injection for Birth Spacing after 45 days of Delivery (Urban) | 76 |
| Figure 3.10 (a) | The change in Practice of using Injection for Birth Spacing after 45 days of Delivery (Rural) | 76 |
| Figure 3.11 | Frequency of getting Knowledge from Department of Health | 78 |
| Figure 3.12 (a) | Behaviour change in Following the Health Knowledge obtained form Health Department (Urban) | 80 |
| Figure 3.12 (b) | Behaviour change in Following the Health Knowledge obtained form Health Department (Rural) | 81 |
| Figure 3.13 (a) | Place of taking Delivery (Urban) | 84 |
| Figure 3.13 (b) | Place of taking Delivery (Rural) | 85 |
| Figure 3.14 (a) | Place to take Antenatal care (Urban) | 87 |
| Figure 3.14 (b) | Place to take Antenatal care (Rural) | 87 |
| Figure 3.15 | Source of Media | 88 |

## . ABBREVIATIONS

AIDS = Acquired Immune-Deficiency Syndrome

AN = Antenatal

ATT = Anti Tetanus Toxic

DOH = Department of Health

FSS = First Stage Sample

FSUs = First Stage Units

GSMF = Ghana Social Marketing Foundation

HIV = Human Immune-Deficiency Virus

IEC = Information, Education, and Communication Material

IMR = Infant Mortality Rate

IPPF = International Planned Parenthood Federation

LHV = Lady Health Visitors

MCWA = Maternal and Child Welfare Association

MMCWA = Myanmar Maternal and Child Welfare Association

MMR = Maternal Mortality Rate

MOH = Ministry of Health

MWRA = Married Women of Reproductive Age

NGO = Non-Government Organization

ORT = Oral Rehydration Therapy

PDA = Population and Community Development Association

PSI = Population Services International

RH = Reproductive Health

RHC = Rural Health Center

SSS = Second Stage Sample

SSUs = Second Stage Units

STI = Sexually Transmitted Infections

UNFPA = United Nations Fund for Population Activities

USUs = Ultimate Stage Units

WHO = World Health Organization

# CHAPTER 1
# INTRODUCTION

## 1.1 Background

Every nation in the world is experiencing social problems that its citizens and governments are attempting to solve them. Solving social problems involve social change, changing the way individuals and groups lead their lives by transforming adverse or harmful practices into productive ones, changing attitudes and values in communities and entire societies and creating new social technologies that usher in desired changes and elevate the quality of people's lives. More people in more societies are eager for social change - changes in their ways of lives, their economies and social systems, their life styles and their beliefs and values- than ever before. In other words, to achieve these social changes, social change campaigns are being organized, conducted by one group (the change agent), which intends to persuade others (the target adopters) to accept, modify or abandon certain ideas, attitudes, practices and behaviour.[1]

Some social change occur spontaneously, that take place in the course of life without deliberate planning or rational human intervention, but some are planned and engineered by human beings to achieve specific agreed-on objectives and goals.

In recent times, social change campaigns have focused on health reforms (antismoking , the prevention of drug abuse, nutrition, and physical fitness), environment reforms (safe water, clean air, the preservation of national parks and forests and the protection of wild life refuges), educational reforms (to increase adult literacy, to improve public schools, to raise students' test scores in science and mathematics and to grant merit - pay increases to increase the morale of teachers), and economic reforms (to revitalize older, industrial cities, boost job

**. Kotler, P, E, L. Roberto ( 1989), Social Marketing, Strategies for Changing Public Behavior, Pg6**

skills and training and attract foreign investors.) In countries, such as Sweden, Canada and Australia, campaigns have been launched vigorously to reduce smoking and alcoholic consumption, encourage safe driving and protect the environment. Developing countries, such as Philippines, Indonesia conduct forceful social campaigns to inoculate children against viruses, to make widespread use of oral rehydrations therapies, and to promote family planning, literacy, and healthy diets. In many cases, the change agent ultimately seeks to change the target adopters' behaviour. Behaviour change may occur at the end of a series of intermediate stages, such as change in a population's information, knowledge, and attitudes. However, changing behaviour to improve people’s lives is not an easy task.

As mentioned above, social change offers a revolutionary approach to solving a range of social problems such as drug use, smoking, pollution, unsafe sex and many health problems. Out of many health problems, reproductive health is one of health care problems that need attention. It is an important area to study in health sector because it is a state of complete physical, mental, and social well being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.[2]

Reproductive health is supported by four pillars namely, family planning, antenatal care, clean and safe delivery and essential obstetric care. Since women have been fulfilling their reproductive responsibility of propagating human race, many have died and many more faced death in the process of delivering babies. However people have come to accept the fact that this can be prevented by taking appropriate antenatal care , postnatal care , clean and safe delivery and essential Obstetric care. In other words, full care must be given to MWRA.

**2. Department of health, Five-Year Strategic Plan for Reproductive Health in Myanmar, (2004-2008) Ministry of Health, Union of Myanmar, pg 5**

MWRA are of prime importance as they have been fulfilling their reproductive responsibility of propagating human race, for increasing manpower which is urgently needed for the developing countries. Thus, maternal and child health care is an integral part of the comprehensive health care system which consists of preventive, curative and rehabilitative health systems.

In most developing countries, more than 60% of total population are women and children which is the most vulnerable group. Thus, Health Status of a country has been estimated by maternal mortality rate (MMR) and infant mortality rate (IMR), which in turn indicates utilization and effectiveness of antenatal and postnatal care services that MWRA take. MWRA behaviour will be changed if they receive more frequency and improve their knowledge, attitude and practice concerned health education. Last, but not the least, it would prevent pain and suffering and socio economic burden from complications of pregnancy.

Authority concern who understand and are being aware of the importance of the maternal health care for the development of the nation as a whole are undertaking the necessary measures to take care of it. The Ministry of Health has been undertaking the measures with all out efforts to this matter. As the core reason for the maternal health problem lies on lack of knowledge about the maternal health care by the MWRA in Myanmar, delivering that knowledge to them is the most important step to solve this problem. Only after the acceptance of that knowledge by the MWRA will lead to positive change in their behaviour accordingly. So it is required to find the ways and means required to be able to disseminate maternal health care knowledge effectively and efficiently to the target adopters.

The solution to this problem of how to change behaviour is in the discipline of marketing and this study intends to highlight the application of marketing strategy to change the knowledge, attitudes and behaviour of MWRA. This strategy is called “social marketing approach” which is being applied in solving the social problems by the nations nowadays. The following is the brief presentation of what social marketing is.

A new, innovative approach to the way in which societies address important problems including health problems is social marketing. Social marketing is the application of proven concepts and techniques drawn from commercial sector to promote changes in diverse socially important behaviours such as drug use, smoking, sexual behaviour, family planning and children. In simplest terms social marketing is the application of marketing technologies developed in the commercial sector to the solution of social problems where the bottom line is behaviour change. As many social marketing programs use advertising and advertising techniques, it is confused often with social advertising. However, these two terms are not the same as social marketing core approach is much broader. It recognizes that in influencing behaviour, especially behaviour change, it cannot happen just by promoting the benefits of some new course of action .Careful attention must be paid to the nature of the behaviour to be promoted (the product), the ways in which it will be delivered (the place) and the costs that consumers perceive they will have to pay to undertake it (the price).

## 1.2 Statement of the Problem

The five year strategic plan for reproductive health has been developed to ensure that there is a logical and coordinated response to the reproductive needs of the population in Myanmar. Development was initiated by the Ministry of Health (**MOH**) in discussion with the World Health Organization **(WHO)** and the United Nations Fund for Population Activities **(UNFPA).**

As the changing social and economic policies call for introduction of wider concept of comprehensive reproductive health care in life cycle approach into the health care delivery system, conventional maternal and child health care has been transformed into reproductive health care since 1996.

The total population of Myanmar in 2004 is estimated at 52.2 million with a population growth rate of 2.02%. Half of the population is estimated to be between the age of 15 and 49 years, and 30% of the population is that of MWRA. Seventy percent of the population lives in rural areas and population density is concentrated in the lowland delta and central dry zone. The least densely populated areas are in the far north and northwest of the country in the foothills of the Himalayas. Maternal and child health care services are provided to both urban and rural settings and it is also a crucial component of National Health Plan. One of the services is behaviour change activity.

In 2004, in Myanmar, MOH estimated a crude birth rate of 24 live births per 1,000 populations in urban areas, and 26 in rural areas. Thus, approximately 1.3 million women give birth each year. The maternal mortality ratio according to routine reporting is 11 deaths per 1,000 live births in urban and 19 in rural areas. Accordingly, crude death rate is 6.2 / 1,000 in urban areas and 7.1/1,000 in rural areas. Thus, the crude death rate is 25% of birth rate in urban areas and 27.3% of birth rate in rural area. Infant mortality rate is 48.3/1,000 in urban area and 50.1/1,000 in rural area. Under age five mortality rate is 65.1/1,000 in urban area and 85.1/1,000 in rural areas which are still high compared to developed countries and are still a public health problem in our country. This shows that there is a lack of knowledge in health education regarding maternal and obstetric care.

According to the data from National Health Plan, antenatal care attendance of pregnant women to midwives is only 3.5 visits through out the pregnancy period & for auxiliary midwives only 0.5 visits when the required number of visit is at least five times through out pregnancy.

There is lack of the required behaviour being practice by the pregnant women. So for the required behaviour to be practiced, the first step is to make them aware of the idea and accept it. Hence we need to measure the awareness of health education of MWRA which lead to behaviour change. Thus, this study is to find out the impact of the application of marketing strategy for behaviour change of MWRA.

### 1.3 Rationale and Justification

Social marketing is adopted as a strategy for changing behaviour by the social organization nowadays. It combines the best element of the traditional approaches to social change in an integrated planning and action. This research will endeavor to describe the use of marketing principles and techniques in advancing a social cause, idea or behaviour.

Reproductive health care education for MWRA is very important in developing countries. Thus, health campaigns are delivered to MWRA about antenatal care and postnatal care. Antenatal care services are intended to ensure good health in every lactating MWRA by health screening of both MWRA and babies, giving prompt and adequate treatment if necessary, referral to specialized institutes, giving health care education concerning how to take care of herself and to be aware of danger signs during pregnancy about birth spacing and to enable her to have a normal delivery and healthy baby and to teach the art of the child care.[3]

Also postnatal care services are very essential in the life of a woman. The postnatal care services are intended to ensure good health in every borne MWRA to give initiating breastfeeding, birth spacing, nutrition, personal hygiene and healing, sexual lives.

Thus, there is a need to encourage the practice according to the instruction given by MCWA and department of health. The behaviour changes will start from

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**3. Khin Set Lin, Dr, relationship of antenatal care utilization and type of delivery of pregnant men attending Thingkankyun Sanpya Hospital (2003), Pg 4**

their awareness, knowledge, attitudes, and then change practices. If the knowledge, attitude and practice of pregnant women on antenatal care are enhanced and improved the quality of health services, it will lead to reduce the maternal as well as fetal complications encountered during process of delivery.

It is hoped, that this study could highlight the underlying causes for not changing the behaviour of MWRA, the existing behaviour of MWRA concerning maternal health care and designing social marketing strategies to promote the acceptability of the social idea or practice of maternal health care.

## 1.4 Objectives of the Study

The main objective is to identify the impact of marketing strategy for behaviour change of MWRA in Monywa Township, Sagaing Division.

This study has the following core objectives:

(1)To study knowledge of MWRA regarding reproductive health.

(2)To analyze existing behaviour of MWRA concerning maternal health care.

(3)To study social marketing strategies to promote the behaviour of MWRA taking antenatal care and postnatal care.

## 1.5 Hypotheses of the Study

This study proposes the following hypotheses to support the objectives.

(1) There is relationship between educational qualification of MWRA and knowledge of antenatal care and postnatal care.

(2) There is relationship between health care education obtained and behaviour change

(3) There is difference in behaviour change between MWRA of urban area and MWRA of rural area.

(4) There is an impact of frequencies of obtaining health care education and behaviour change.

## 1.6 Methodology

Survey method is adopted for analyzing the behaviour of MWRA in Monywa Township.

### 1.6.1 Description of Sample Design in the Survey

In this survey, the target population was all the married women in the reproductive age group of (15-49) years which is regarded as reproductive by World Health Organization. As Monywa Township is considerably wide and population size is very large, it is practically impossible to collect data from each and every MWRA in the township. Hence the sampling design employed in this survey was stratified into three stage cluster sampling design. First, all the Married Women of Reproductive Age (MWRA) in the whole target population of Monywa Township were divided into two strata, first stratum consisting of those for the urban area and second stratum being rural area of the Township.

Based on information obtained from the office of Monywa Township Peace and Development Council, (70,838) MWRA were stratified two strata (23,614) (MWRA) in all the twenty wards in the urban area (first stratum) and (47,224) MWRA from all eight rural health centers (RHCs) in the rural area of second stratum. The size of the sample to be selected in this survey was predetermined to be 600 MWRA, which were allocated into two strata, using the method of proportional allocation, resulting in (253) MWRA in the urban area of first stratum and (347) MWRA in the rural area of second stratum. As Monywa Township is considerably wide and population size in very large, it is practically impossible to collect data from each and every MWRA in the township.

After dividing all MWRA into two strata, the wards in the urban area were taken as first stage units (FSUs). From the population of (20) wards (FSUs), a simple random sample of (10) wards was selected as the first stage sample (FSS) with the sampling fraction of 50 percent. In a selected ward (FSU) Yareinhmus (administrative agent of the wards) were taken as second stage units (SSUs). From the population of the Yareinmus (SSUs) in a selected ward (FSU), a simple

random sample of some Yareinhmus was selected as the second stage sample (SSS). And then, simple random sample of some MWRA was selected as ultimate stage units (USUs). From the population of third stage units (MWRA) under a selected Yareinhmus (SSU) in the selected ward (FSU) is the first stratum of urban area.

From all the Yareinhmus (SSUs), a required sample of predetermined size of 253 MWRA was selected proportionately based on the total number of MWRA (USUs) under the respective Yareinhmus (SSUs). After selecting respective number of MWRA (USUs) proportionately under the selected Yareinhmus (SSUs) in the selected ward (FSU) the required data were collected through face-to-face interview conducted by trained interviewers, using structured questionnaires.

In the case of second strum of rural area, there were a total of eight rural health centers (RHCs) in the target population of all MWRA in the Monywa Township. All RHCs were taken to be first stage units (FSUs) and the villages in the RHCs were considered to be second stage units (SSUs). From the population of eight RHCs (FSUs) a simple random sample of two RHCs was selected as first stage sample (FSS) with sampling fraction of 25% from the selected FSU of RHC, a simple random sample of some villages (SSUs) was selected as second stage sample (SSS). Again, from the selected villages (SSU) in the selected RHC (SSU) a simple random sample of some MWRA was selected as USUs. From all the selected villages (SSUs) a required sample of (347) MWRA was selected proportionally based on the total number of MWRA in each of selected village in the selected RHC. After selecting respective number of MWRA (USUs) from the selected village (SSU). Under the selected rural health center (RHC) required data were collected through face-to-face interview conducted by the trained interviewers, using structured questionnaire.

### 1.6.2 Limitations of this Research

The limitations and constraint in this study is the difficulty to obtain access to the M W R A. Although the local authorities gave full support, some of the M W R A from the selected sample were not easily attainable. They were busy with their housework, looking after the children that they did not want to give time to answer the question raised and avoided the interviewers. Even when they were being interviewed, some of the M W R A were impatient, however the trained interviewers tried their best to overcome this obstacle although it was very time consuming.

### 1.6.3 Survey Methodology

The survey methodology in this study is divided into (9) sections, which are individually principal, steps in designing and executing of survey.

#### (a) Defining the Population to be Sampled

The objective of this study is to investigate impact of social marketing strategy introduced in Monywa Township on behaviour change of MWRA. In line with the objective of study, the population to be sampled is all married women of reproductive age (MWRA) of 15- 49. There were total of (70838) MWRA out of which (23614) MWRA were living in the urban area while (47224) MWRA were living in rural area of the township. Since, Monywa Township is considerably wide, and population size in very large, it is practically impossible to collect data from each and every MWRA in the township. Therefore, it was decided that an appropriate sample design should be employed in collecting required data for the purpose of (i) reducing cost (ii) delivering greater speed and wider scope of the population (iii) getting greater accuracy and (iv) producing more accurate result by collecting sample MWRA instead of enumerating the whole population.

**(b) Data to be collected**

In a sample survey, it is very important to verify that the data collected are relevant to the objectives of the survey and that no essential data were omitted. For this purpose, a well-prepared questionnaire design was planned and a questionnaire consisting of questions which are actually relevant to the objective of the study was developed and the required data were collected from the sample MWRA in the township.

**(c) Degree of Precision Required and Determination of Sample Size**

The result of sample survey are always subject to some uncertainty because only part of the population was enumerated and because of errors of measurement as well as response errors. This uncertainty can be reduced by taking larges samples. However, these larger samples usually cost, time and money. Therefore, degree of precisions of estimates required should be predetermined and then required sample size should be determined. In this survey, margin of error for a population proportion was taken to be 5% at 95% confidence level. Sample size was computed using standard formula and it turned out be 600 MWRA to be sampled from the whole population of 70,838 MWRA.

**(d) Sampling Frame**

Since the sampling frame decides the structure of survey and its design, it is necessary to pay adequate attention to up-to-date and accurate sampling frame. For this purpose, the list of all MWRA living in Monywa Township as of May, 2005 and number of MWRA in each ward and village Maternal and Child Welfare Association are obtained from the NGO in the township.

**(e) Choice of Sampling Design**

After considering the various technical, operational and risk factor which could be encountered in this survey, decisions about an optimum sampling design play a very important task in the study. In deciding upon the optimum sample design to be adopted in this survey, the following principles were kept in mind to achieve.

(i) either a given required degree of precision, here in term of marginal error of 5% for a population proportion at 95% confidence level with a minimum cost, time and manpower, or

(ii) the maximum possible precisions within a fixed cost, time and manpower used in the survey.

Upon balancing the above factors with required degree of precision it was decided that stratified three stage cluster sampling was optimum sampling design for the study within the available constraints of cost, time, manpower and other resources.

**(f) Method of Data Collection**

The planning and execution of a survey is influenced to a large extent by the method of data collection. After a very careful examination of the sampling frame, sampling design, budget and objectives of the survey of MWRA on their social behavioural change, it was decided that the proper method of data collection chosen in this survey was face-to-face personal interview as a clear-cut mode of data collection, to collect the required data from the selected individual MWRA using a well-prepared questionnaire in order that more accurate response could be obtained from the respondents of MWRA. To maintain uniformity, detailed field instruction for data collection was compiled as an "Interviewer's Data Collection Manual."

**(g) Pretest and Pilot Survey**

The questionnaire developed for this study and field methods were pre- tested in the pilot survey conducted in a ward in the urban area and a village in the rural area of Monywa Township. This pre-test helped to improve upon the questionnaire and field work procedures substantially.

**(h) Training of Personnel and Field Work**

It is essential that the personnel, who will serve as interviewers in the survey, should be thoroughly trained in locating sample units MWRA and the methods of collection of required data, before starting the field work. In this

survey, post-graduate students majoring in Commerce were chosen as interviewers. They were given thorough training for five days at Monywa Institute of Economics, giving detailed field instruction as well as locating of sample cluster and method of random selection of sample units stage in the field. The interviewers were trained well, not only in the statistical aspects but also in the art of eliciting correct information from individual respondents in the field.

**(i) Processing of Survey Data Collected**

Processing of the collected data in this impact assessment survey of MWRA could be broadly classified under the following headings:

(i) Scrutiny and editing of data collected
(ii) Data entry through computer
(iii) Tabulation of data
(iv) Statistical data analysis and interpretation of results.

In this way, the whole survey work in this study have been planned well and satisfactorily so that the flow of work-material, including data collected, through various stages of data processing ensures the desired degree of precision in survey results.

## 1.7 Structure of the Dissertation

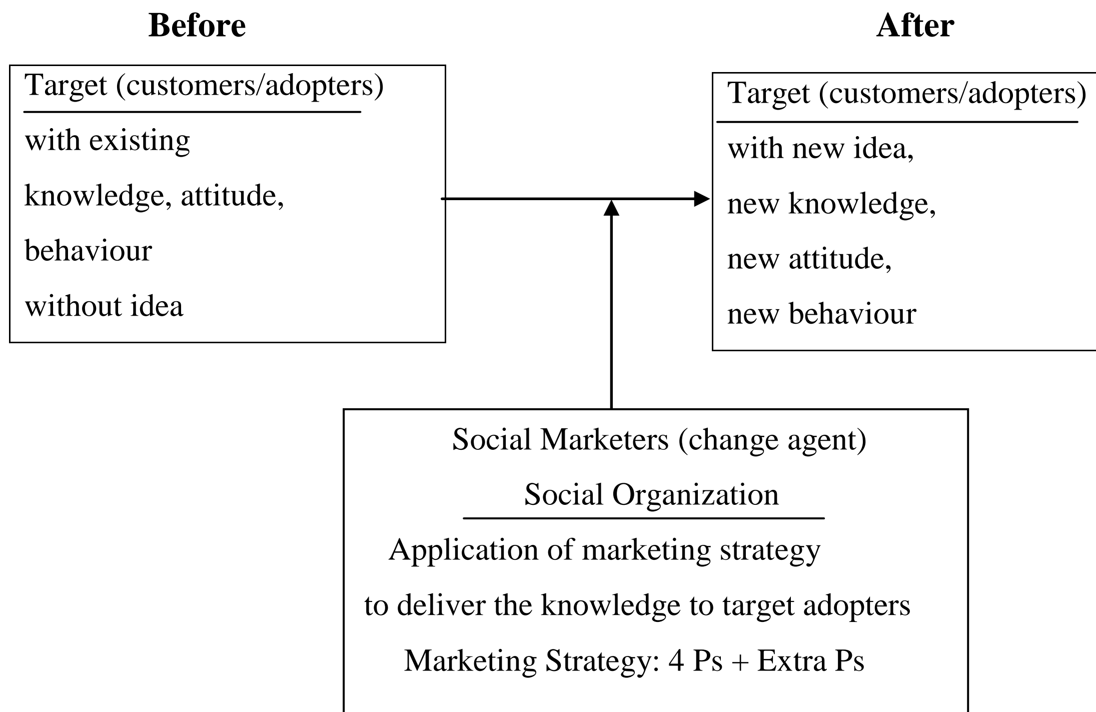
This thesis is organized into five main chapters, chapter one is introduction which includes the importance and the relevance of the study, the background, statement of the problems, rationale and justification, the objectives and hypotheses of the study. Chapter two is theoretical framework of the study. It includes social marketing, its elements, strategies, behaviour change and previous research. Chapter three is the empirical study; it describes the behaviour of Married Women Reproductive Age in Monywa Township. Chapter four is major findings of the study. Chapter five is conclusion where the role of social marketing concerned with changing behaviour of MWRA in Monywa Township and suggestion are presented.

# CHAPTER II
# THEORETICAL BACKGROUND OF SOCIAL MARKETING

## 2.1 Introduction

This study reveals how the application of marketing strategy will be applied to change the behaviour of MWRA (target adopters). Social marketers are the change agent who deliver the knowledge of reproductive health care education to the target adopters. Social marketers in this study include organizations such as DOH, and MCWA. They disseminate the health care education to the target adopters. Target adopters are the MWRA with existing knowledge, attitude and behaviour and without idea of reproductive health before obtaining health care education. Social marketers (change agent) they try to change the behaviour of target adopter by delivering the health care education to MWRA through application of marketing strategy. Due to the effectiveness of the delivery system (marketing strategy) the target adopters will obtain the required knowledge of the health care education so that their idea and attitude will be changed and finally their behaviour will be changed in accordance with the health care education. It is described in figure 2.1.

**Figure 2.1 Conceptual Framework of the Study**



## 2.2 The Marketing Concept in Practice

To adopt the marketing concept, organizations encounter several barriers. Some firms simply do not understand the concept and therefore cannot implement it effectively. Other firms experience a conflict between short and long-term goals; these firms are not willing to sacrifice short-term profits for long-term customer satisfaction and thus fail to adopt the marketing concept.

### 2.2.1 The Societal Marketing Concept

The traditional marketing concept has focused on satisfying consumer needs and wants to meet organizational goals. But the changing marketing concept now focus on the welfare of society. Emphasis is now being placed on how marketing affects society as a whole in an age of scarce resources, environmental destruction and worldwide competition. This societal orientation is to satisfy customer needs and serves the long-term interest of society. Thus, the new concept, referred to as the societal marketing concept, is a management philosophy that considers the welfare of society as well as the interests of the firm and its customers. Firms adopting the societal marketing concept make marketing decisions in an ethical and socially responsible manner. They must consider not only the short-term needs of customers but also the well-being of every one affected by their operations.

Many firms are adopting the societal marketing concept by preserving scarce resources or developing products that do not harm the environment, thus practicing green marketing. The societal marketing concept is difficult to implement because it requires firms to place the needs of society ahead of the goals of the organization. Firms cannot survive in the long- term if they ignore the welfare of society.

To implement the societal marketing concept, some firms engage in demarketing, that is, using the marketing activities to reduce the demand for a product. E.g. marketing activities also have been used to decrease the demand for tobacco products, dangerous drugs and scarce resources like energy. By decreasing the demand for harmful or dangerous products, business and non-profit organizations need to practice the societal marketing concept.

## 2.3 Developing Marketing Strategies

Marketing managers are responsible for developing and managing marketing strategies that facilitate satisfying exchanges between buyers and sellers. Marketing strategy is a plan for selecting and analyzing a target market and developing and maintaining marketing mix that will satisfy this target market. A target market is a group of consumers at whom an organization directs its marketing efforts. Once a firm selects a target market, it must develop a marketing mix that satisfies the needs of the target market.

The marketing mix consists of four elements: product, price, place and promotion. A *product* is anything that satisfies a need or wants and can be offered in an exchange. A product can be a good, service or idea. *Price* is the value placed on the "something of value" in an exchange. Consumer exchanges something of value, normally purchasing power (money) for the satisfaction or utility they accept a product to provide. *Distribution* refers to marketing activities that make product available to consumers at the right time and in a convenient location .*Promotion r*efers to marketing activities used to communicate positive, persuasive information about an organization, its products and activities to directly or indirectly expedite exchanges in a target market. The marketing mix is built around the target market in a manner consistent with the marketing concept. The target market and marketing mix variables are surrounded by the marketing environment which includes cultural and social environment, resources and objectives of firm, competitive environment, economic and technological environment, and political and legal environment. See figure 2.2.

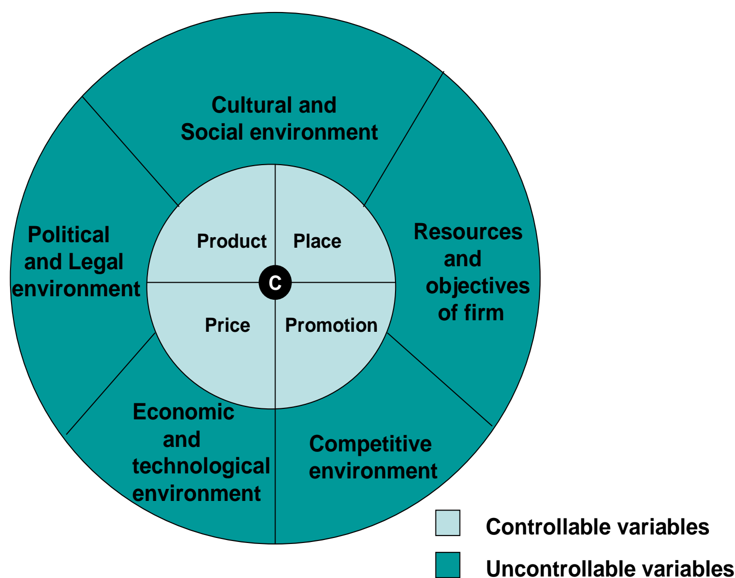



**Figure 2.2 – Marketing manager's framework**

Traditional marketing concept has focused on satisfying consumer needs and wants to achieve organizational goals. But the new marketing concepts focus the welfare of society. Marketers need to consider not only short term needs of customers but also long term interest of society. The success of the commercial marketing model in the 1950s and 1960s led marketing theorists to hypothesize that the same model should be applied to social programmes. Since the 1970s the elements of marketing have been applied to social problems such as drug and alcohol abuse, heart disease and cancer. In developing countries they have addressed the areas of malnutrition, diarrhea diseases, overpopulation and others. Social marketers argue that marketing is a planned approach to solving social problems. In carrying out the various forms of research necessary for successful marketing they claim they are learning about their client's needs, desires and perceptions.

## 2.4 Defining Social Marketing

The term social marketing was first introduced in (1971) to describe the use of marketing principles and techniques to advance a social cause, idea or behaviour. The term has come to mean a social change management

technology involving the design, implementation and control of programs aimed at an increasing acceptability of a social idea or practice in one or more groups of target adopters. It utilizes concepts of market segmentation, consumer research, product concept development and testing, directed communication, facilitation, incentive and exchange theory to maximize the target adopters' response. The sponsoring agency pursues the changed goals in the belief that they will contribute to the individual's or society's best interests[4]

By social marketing it is meant (1) a social idea or practice, (2) one or more groups of target adopters and (3) social change management technology[5] Social marketing was born as a discipline in the (1970) s, when Philip Kotler and Gerald Zaltman realized that the same marketing principles that were being used to sell products to consumers could be used to "sell" ideas, attitudes and behaviours.[6]

Several authors defined social marketing in various ways. Kotler and Andreason defined social marketing as differing from other areas of marketing only with respect to the objectives of the marketer and his or her organization. Social marketing is a strategy for changing behavior. It combines the best elements of the traditional approaches to social change in an integrated planning and action framework and utilizes advances in communication technology and marketing skill.[7]

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**4. Kotler, P.and E.L.Roborto ( 1989), Social Marketing, Strategies for Changing Public Behavior, Pg 24**

**5. Social Marketing. com, http:// www. social-marketing. com/ what is. htm,**

**6. Social Marketing. com, http://www. social-marketing. com/ what is. htm,**

**7 Kotler, P.and E.L.Roborto ( 1989), Social Marketing, Strategies for Changing Public Behavior, Pg 9**

Andreason (1995) defined social marketing as that application of commercial marketing technologies to the analysing, planning, execution and evaluation of program designed to influence the voluntary behavior of target audiences in order to improve their personal welfare and that of their society. This technique has been used extensively in international health programs, especially for contraceptives and oral rehydration therapy (ORT).[8]

Social marketing seeks to influence social behaviours that are not for the benefit of the marketer, but to the benefit of the target audience and the general society. Public like commercial-marketing, the primary focus is on the consumer-on learning what people want and need rather than trying to persuade them to buy what we happen to be producing.

### 2.5 Elements of Social Marketing

The four “P's" of marketing- product, price, place and promotion – are often cited in social marketing literature.

#### 2.5.1 Social Product

The social marketing “product” is not necessarily a physical offering. A continuum of products exists, ranging from tangible, physical products (e.g. condoms), to services (e.g. medical exams), practices (e.g. breastfeeding, ORT or eating a heart- healthy diet) and finally, more intangible ideas (e.g. environment protection).

Social idea that may take the form of a belief, attitude, or value. A belief is a perception that is described as a factual matter, it does not include evaluation. (e.g. Cigarette) smoking is hazardous to one’s health. The social idea to be marketed may be an attitude, as exemplified in the expression used in family planning programs. Attitudes are positive or negative evaluations of people, objects, ideas or events.[9]

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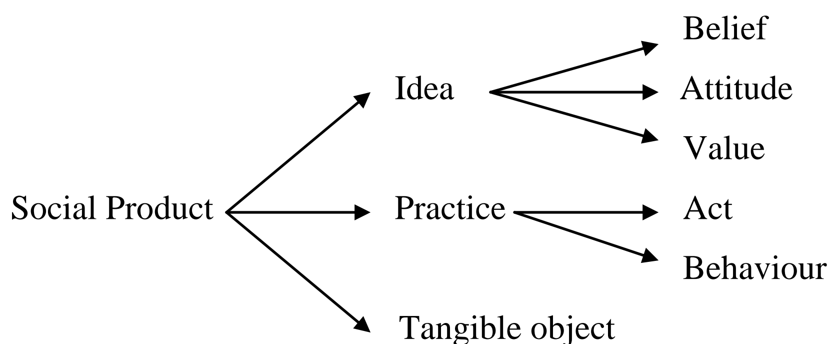
**8. Social Marketing. com, http://www. social-marketing. com/ what is htm**

**9. Kotler,p, and E.L. Roborto ( 1989), Social Marketing, Strategies for Changing Public Behavior pg 25**

The second type of social product is a social practice. It may be the occurrence of single act, (e.g. quitting smoking or using condoms for birth control). The third type of social product is a tangible object, such as a contraceptive pill, condom, or foam that is distributed in family planning campaigns. But, the contraceptive pill, condom, foam are not the main product, these are tools to accomplish social practice.[10]

Social practices prove the ultimate aim to change behaviour. Thus, the purpose of a nutrition campaign is not simply to help consumers know about and desire better nutrition, but to change their eating habits. Social marketing is built around the knowledge gained from business practices the setting of measurable objectives, research on human needs targeting products to specialized groups of consumers, the technology of positioning products to fit human needs and wants and effectively communicating their benefits, the constant vigilance to changes in the environment, and the ability to adapt to change.

**Figure 2.3 Social Marketing Products**

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**10. Kotler,p, and E.L. Roborto ( 1989), Social Marketing, Strategies for Changing Public Behavior, Pg 26**

### 2.5.2 Price

Price refers to what the consumer must do in order to obtain the social marketing product. This cost may be monetary, or it may instead require the consumer to give up intangibles, such as time or effort or to risk embarrassment and disapproval.[11]

However, if the benefits are perceived as greater than their costs, chances of trial and adoption of the product is much greater. In setting the price, particularly for a physical, such as contraceptives, there are many issues to consider. If the price of product is too low, or provide free of charge, the consumer may perceive it as being low in quality. On the other hand, if the price is too high, some will not be able to afford it. Social marketers need to balance these considerations.

### 2.5.3 Place

Place describes the way that the product reaches the consumer. For tangible product, e.g., the distribution system, including the warehouse, tracks, sales force, retail outlets, where it is sold or, places, where it is given out for free. For an intangible product, place is less clear-cut, but refers to decisions about the channels through which consumers are reached with information or training. This may include doctors' offices, shopping malls, mass media vehicles or in-home demonstrations.

### 2.5.4 Promotion

Finally, the last "P" in traditional marketing mix is promotion. Because of its visibility, this element is often mistakenly through of as comprising the whole of social marketing.

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**11. http:// www. social-marketing. com/ what is. htm**

Promotion consists of the integrated use of advertising, public relations, promotions, media advocacy, personal selling and entertainment vehicles. The focus is on creating and sustaining demand for the product. Public service announcements or paid ads are one way, but there are methods, such as coupons, media events, editorials. Research is crucial to determine the most effective and efficient vehicles to reach the target audience and increase demand. The primary research finding themselves also is used to gain publicity for the program at media events and in news stories.

**"Additional Social Marketing Ps"**

### 2.5.5 Publics

Social marketers often have many different audiences that their program has addressed in order to be successful. Publics refer to both the external and internal groups involved in the program. External publics include the target audience, secondary audiences, policy makers, and gate keepers, while the internal publics are those who are involved in some way with either approval or implementation of the program.

### 2.5.6 Partnership

Social and health issues are often so complex that one agency can't make a deal by itself.

### 2.5.7 Policy

Social marketing programs can do well in motivating individual behavior change, but that is difficult to sustain unless the environment they are in supports that change for the long run often, policy change is needed, and media advocacy programs can be an effective complement to a social marketing program.

### 2.5.8 Purse Strings

Most organizations that develop social marketing programs operate through funds provided by sources such as foundations, government grants or donations.

**Additional "P" for services includes; Personnel, Process and Physical.**

### 2.5.9 Personnel

The person who sells and delivers the social product to the target adopters. They are doctors, midwives, ladies health visitors. They disseminate reproductive health care to the target adopters.

### 2.5.10 Process

The steps through which target adopters go to acquirer the social product.

### 2.5.11 Physical

The element is remaining in the target adopter group. Social marketers gives the present to target adopter concerning reproductive health such as pamphlet, booklet.

## 2.6 Social Product Market Fit

### 2.6.1 Defining the Product-Market fit

The first requirement of success in social marketing is either to create a new social product to meet a need that is not being satisfied or to design a better product than those that are available. According to Kotler the marketing concept holds that the key to achieving organizational goals consists in determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors.[12]

If follows that the degree of product-market fit determines the value to the target adopters of what the social marketers is offering. Therefore, the fit affects the perception, attitude, and motivation of the target-adopter group. The wrong fit results in an adequate or contrary response by target adopters.

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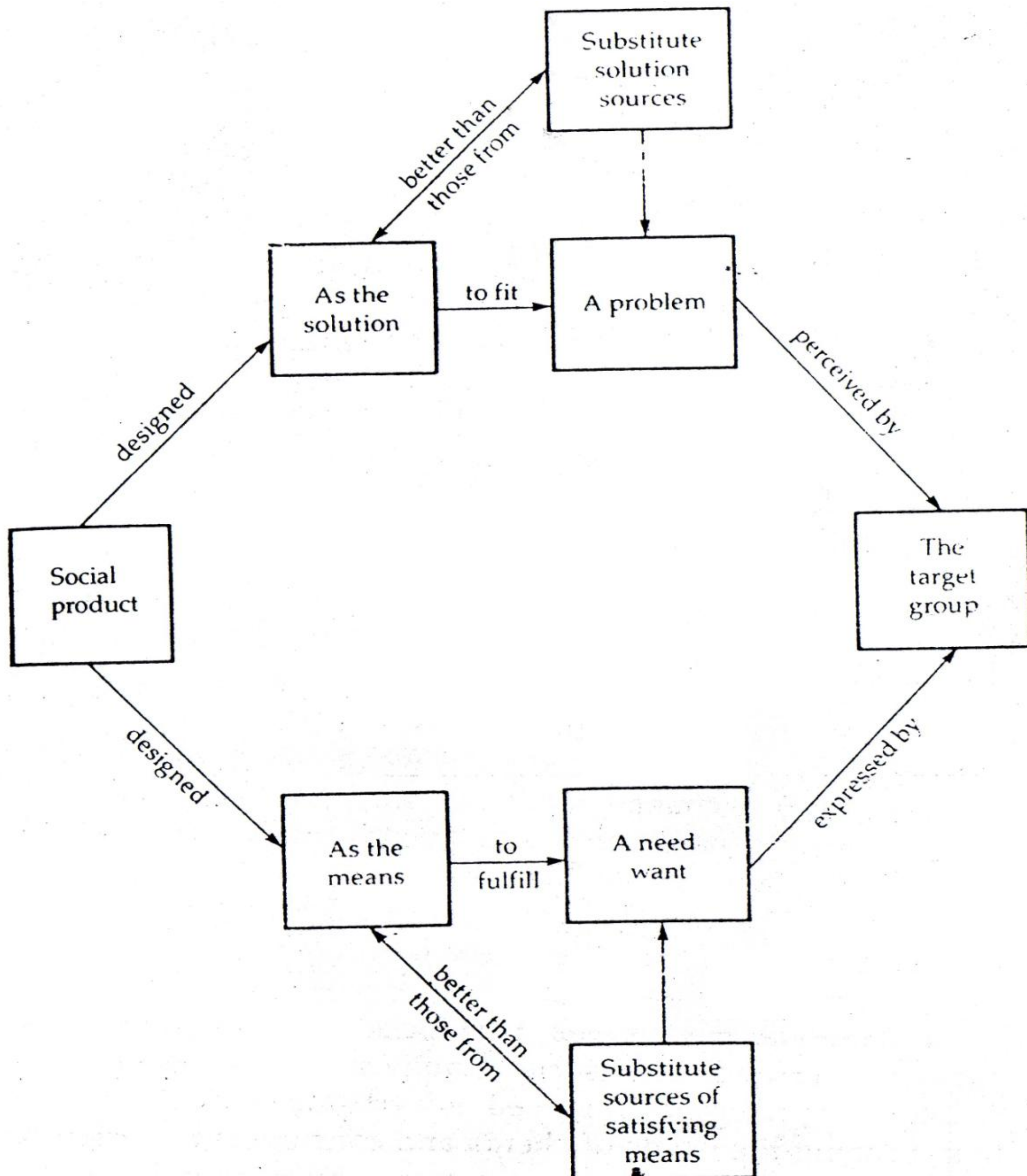
**12. Kotler, p, and E.L. Roborto (1989), Social Marketing, Strategies for Changing Public Behavior, pg 26**

**Figure 2.4 Defining the Product-Market Fit**




Thus social marketer must research how and why a target- adopter group views a situation in which the social marketer wishes to intervene. Typically, the research will reveal that the target – adopter group either has a problem it wants to solve or an objective (a need or a want) that it seeks to achieve.

Many causes and social change campaigns fail because their target-adopter group does not perceive a problem, want or need. Antismoking campaigns are a case in point. Although smokers acknowledge that smoking is

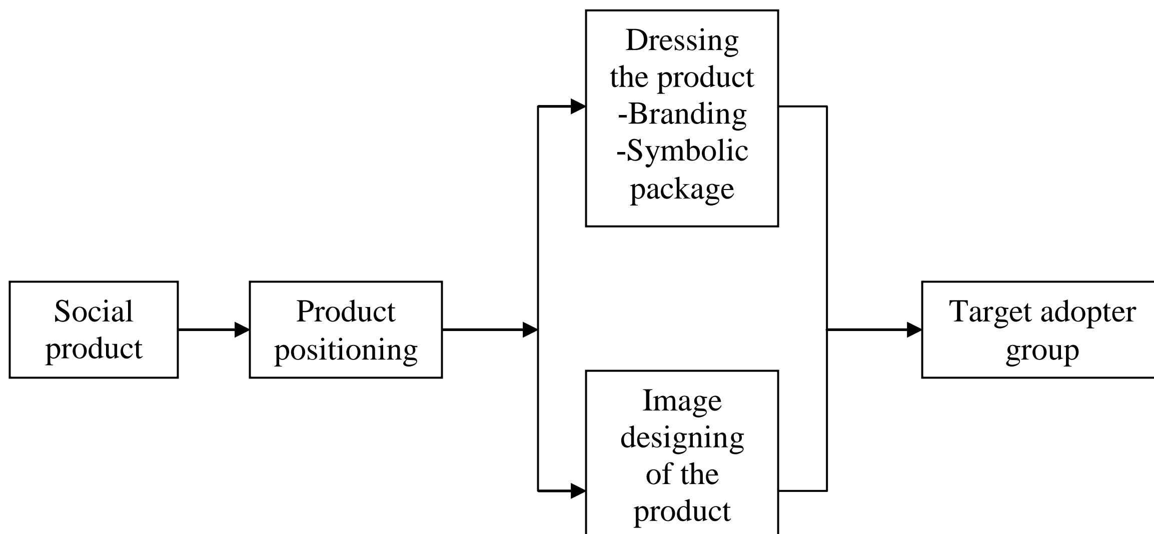
a health hazard, many do not see a problem or do not feel any want or need to do anything about the risk.

The possibility of a better life through changes in social ideas and processes is not widely perceived in many parts of the world, rather, resignation to the existing order-fatalistic attitude-prevails. For this reason, social change campaigns and social marketing are not simply a set of tools to accomplish social change. They represent a new ideology, or mindset, the assimilation of which can prepare the ground for widespread and more effective social change.

### 2.6.2 Designing the Product-Market Fit

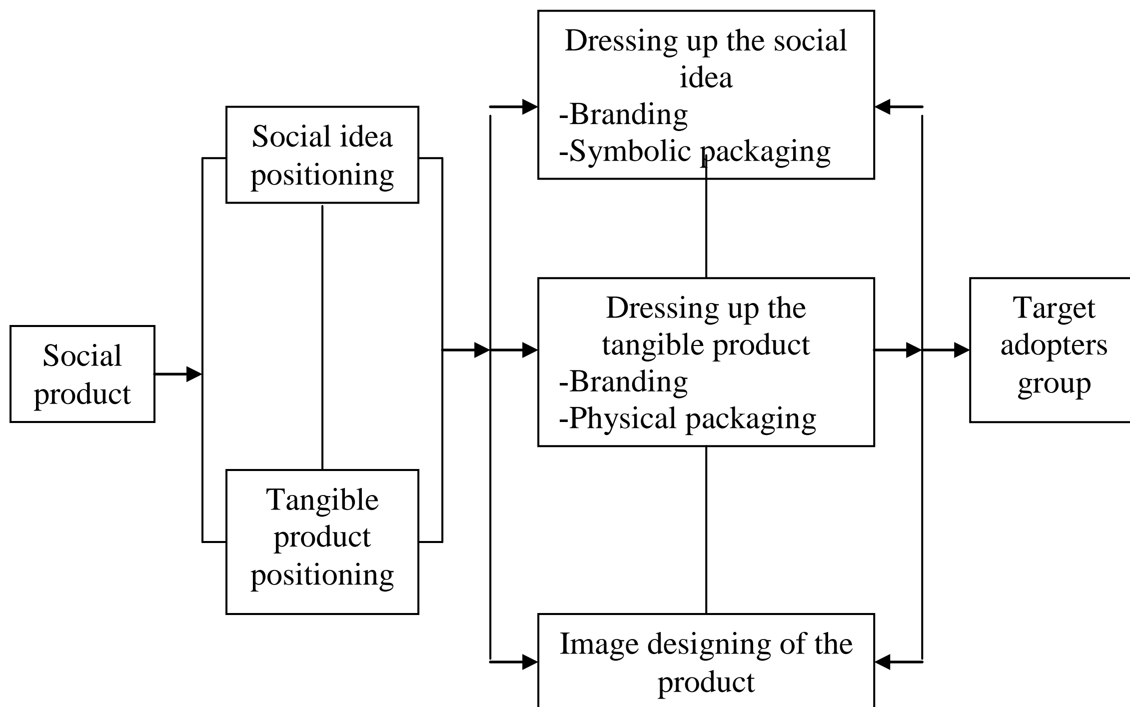
The social marketer's next task is to present the solution effectively to the target adopter group. Three marketing inputs are required for this purpose. The social marketer must (1) translate the fit into the corresponding positioning of the social idea or practice, then (2) dress it up to reinforce the chosen positioning and then (3) develop reinforcing image for the cause that is consistent with the nature of the cause. This process is illustrated in figure is illustrated in Figure 2.5 for a case in which the cause has no tangible –product base.

**Figure 2.5 Designing Social Products that Lack a Tangible Product Base**



Marketing a cause with tangible product base requires the additional stages of positioning and dressing up. At the positioning stage, the tangible product base must also be positioned.

**Figure 2.6 Designing Social Products with a Tangible-Product Base**




**2.6.3 Delivering the Product-Market Fit**

The social marketers need to deliver the desired social practice to the target adopter group. The required steps are function of two factors.

(1) Where there is a tangible product base.

(2) Whether the start and maintenance of the target adopter's acceptance of the social idea or practice requires personal service.

In the case of tangible product, the social marketer will arrange with outlets to store, display and distribute the tangible product. The tangible product may also require personal persuasion and demonstration. There is one

further step in the delivery process namely adoption triggering or getting the target-adopter population to act now, rather than later.

When a social campaign requires a presentation demonstration, three "P" elements must be managed.

(1) The delivery personnel

(2) The delivery presentation

(3) The delivery process

### 2.6.4 Defending the Product-Market Fit

The final task is to sustain or change the product-market fit to respond to relevant changes in the environment and in the target adopter population. There are three steps in this stage of a marketing program.

(1) First, the target groups' condition must be researched and monitored.

(2) The second step is the utilization of research.

(3) The third step, the social marketer makes the needed adjustments and changes in the marketing plan. Social marketing requires continuous thinking, or adjustment of fit, as circumstances change.

## 2.7 Social Marketing Management Process

### 2.7.1. Analyzing the Social Marketing Environment

The first step in the social marketing management process is to analyze the environment immediately surrounding the particular social campaign. The next step is to review the sponsoring organization's ability to distribute the social products. This analysis led to the following conclusion: the best way to reach the target adopter group was a campaign restricted to a particular type of product using the distribution capabilities of the private sector. This conclusion defined the appropriate target adopter segment and therefore helped shape the next step in the management process researching the target- adopter group.

### 2.7.2. Researching the Target-Adopter Population

Social marketers need to achieve a thorough understanding of target adopter group and its needs. Adopter segmentation is the task of breaking the total target adopter population into the segment that have common characteristics in responding to a social campaign method which they want to prefer socio-economic status. The reachable segment is the most required need to divide the group by geographic areas. Need to develop position strategy for the segment. Aim of positioning is to satisfy the target adopter segments need and to do better than others. Key task is to identify the competition.

### 2.7.3. Designing Social Marketing Objectives and Strategies

The social marketing strategy specifies the game plan for achieving the objectives of the social marketing campaign. It defines the broad principles by which the social organization expects to attain its objectives in a target-adopter segment. It consists of basic decisions on the total marketing expenditures, marketing mix, and marketing allocation. Social marketers must first set specific, measurable, and attainable social marketing objectives. Social organizations tend to state their program objective in broad terms like "raising the quality of life" raising children social competence, empowering people, conserving energy, preventing crimes.

### 2.7.4. Planning Social Marketing Mix Programs

Planning social marketing programs after the broad strategy is formulated the management of more detailed social marketing – mix programs must be prepared. Finally, social marketing management process, the final step is to organize the marketing resources, implement the social marketing -mix programs.

### 2.7.5. Organizing, Implementing, Controlling and Evaluating the Social Marketing Effort

In the social marketing management process, the final step is to organize the marketing resources implement the social marketing mix programs, control the performance of the programs and evaluate the results of that implementation. Effective control and evaluation require data about the target-adopter group's responses to the implemented social program which are generated by social marketing research.

### 2.7.6. Analyzing the Behaviour of Target Adopter

To succeed in marketing social ideas or practices-"the products that social change campaigns seeks to market"- requires being able to predict how the target adopter will behave. Prediction requires knowing the processes that guide and determine the behaviours of target adopters. A target adopter has adopted a belief when he or she says; I believe smoking is hazardous to my health. Social marketer can think of their task as converting a non-belief into belief, belief into attitude or an attitude into a value.

Social marketing aims to target one or more groups of target adopters. (e.g., a family planning program that wants to distribute contraceptive devices. There are numerous group that are definable in various ways, such as by age, socio economic status, family size or geographic location. Social marketing requires knowledge of each target-adopter group including its

(1) Socio demographic characteristics (external attributes of social class, income, education, age, family size and so forth)
(2) Psychological profile (internal attributes, such as attitudes, values, motivation, and personality).
(3) Behavioural characteristics (patterns of behaviour, buying habits, and decision marketing characteristics)

To know the target adopters in these three related ways enables the social marketer to make more accurate predictions. In addition to differentiating among and selecting target adopter groups, the social marketer

will identify influence holding groups or influentially who can affect a program's success. An effective social marketing program requires knowledge of the characteristics of each influence-holding group and addressing the needs of each group with an appropriate "mega marketing" strategy.

### 2.7.7. The Social Marketing Models for Product Base Reproductive Program

**(i) The NGO Model:** NGO- based social marketing programs typically market their own brands, designed to meet the needs and wants of a specific target group. The entire marketing mix is geared toward maximizing the number of users in this target group, which may lead to strategies that make little sense from a commercial standpoint but are consistent with a social goal. NGOs aim to price products in a way that increases access to the poorest users while providing a profit margin to wholesalers and retailers.

The NGO-based approach is common in countries with weak commercial systems or limited commercial presence. In less-developed countries, the most effective intervention is to launch an affordably priced product in popular retail outlets.

NGO based model sells the product by their own brand, cost the product at a reasonable price and distribute product to reach a specific target adopter group. Thus, they have full control over the product brand name and pack aging, price distribution and promotion. There are different target adopters, thus NGO try to reach entirely new target adopters and sell the product in combination with attractive packaging, lower price and convenient outlet.

NGO model has long term health impact than for profit companies, relay on donated commodities. They can not stand on their own if donor funding and technical capacity is unlikely in the future. The major disadvantage of the model is the problem of institutional and financial sustainability.

**(ii) The Manufacturer's Model:** Social marketing programs designed according to this model are conducted in partnership with one or more commercial manufacturers of family planning product. The products marketed through these programs are selected from a manufacturer's portfolio and marketed through conventional commercial distribution and communication channels.

The manufacturer's model is based on a give and take approach. Commercial partners typically agree to reduce prices and increase distribution coverage while the social marketing organization commits to a strong market-building program, such as a consumer-directed mass media campaign. The combination of lower prices, increased availability and targeted communication creates a marketing mix that is expected to attract large numbers of new users. In the long term, it is hoped that the resulting sales increase will encourage more investment by the manufacturers and allow for the phase-out of donor funding. The first to adopt this model was the USAID-funded Social Marketing for change (SOMARC) project.

The manufacturer's model aimed sustainable development in a longer term, do not depend on donor funding. Manufacturers attempt to sell their product at a reasonable price for full cost recovery, they also reduce the cost of creating and marketing a new brand for the project and to increase the financial sustainability of the intervention.

As Manufacturers sell their product at reasonable price, sales volume may not be economically sustainable for manufacturers. They prefer to maximize profits by selling low volumes of high-priced products in easy- to reach urban areas and to meet enough demand.

**(iii) Variations and Hybrid model:** Social marketing projects do not always abide by a particular model, and many have evolved in their approach. In fact,

it may be increasingly difficult to find classic examples of NGO-based or manufacturer-based programs. Distribution is increasingly subcontracted to the same agents used by commercial suppliers and portfolios have been expanded to include profit-generating brands. This program essentially is trying to expend supply and meet demand in areas not typically served by the commercial sector through unconventional sales networks.

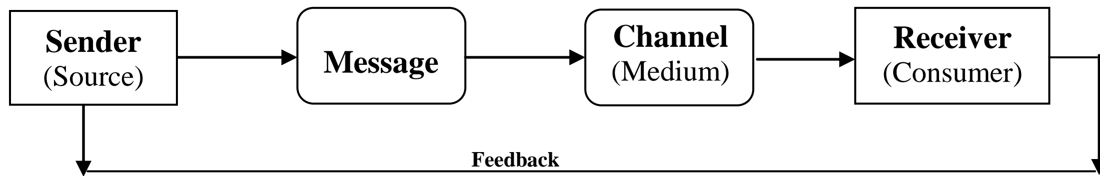
Many NGOs are developing their own entrepreneurial capacity to increase financial and institutional sustainability. Some NGO-based projects have developed in-house capacity in sales and marketing that enables them to seek profit-marketing partnerships. In a different twist on the manufacturer's model, a commercial supplier may choose to approach social marketing as a new business venture, rather than passively waiting for partnership opportunities.

This approach keeps the blurring the line between the commercial and non-profit. world. Combination of the elements of the NGO and manufacturer's models might compensate for each model's drawbacks. The key disadvantage of hybrid model is complexity. Need managing for profit and donor dependent programs within the same organization. This approach should be established NGO's with substantial technical capacity and a combined record of successful business ventures and proven social impact.

## 2.8 Components of Communication

Although there are many ways to define communication, most marketers agree that **communication** is the *transmission of a message from a sender to a receiver via a medium (or channel) of transmission.* In addition to these four basic components-sender, receiver, medium , and message- the fifth essential component of communication is *feedback,* which alerts the sender as to whether the intended message was, in fact, received. Figure 2.7 depicts this basic communications model.

**Figure 2.7 Basic Communication Model**




**2.8.1 The Sender**

The sender, as the initiator of the communication, can be a formal or an informal source. A **formal communications source** is likely to represent either a for-profit (commercial) or a not-for-profit organization; an **informal source** can be a parent or friend who gives product information or advice. Consumers often rely on informal communications sources in making purchase decisions because, unlike formal communications sources in making purchase decisions because, unlike formal sources, the sender is perceived as having nothing to gain from the receiver's subsequent actions. For that season, **word-of-mouth communications** tend to be highly persuasive. Many studies recommend that marketers should encourage detailed, positive word-of mouth about their products and services among consumers.

**2. 8.2 The Receiver**

The **receiver** of formal marketing communications is likely to be a targeted prospect or a customer (e.g., a member of the marketer's target audience). *Intermediary and unintended* audiences are also likely to receive marketer's communications. Examples of intermediary audiences are wholesalers, distributors, and retailers who receive trade advertising from marketers designed to persuade them to order and tock merchandise, and relevant *professionals advertising* in the hopes that they will specify or prescribe the marketer's products. Unintended audiences include everyone who is exposed to the message who is not specifically targeted by the sender. Unintended receivers of marketing communications often include publics that are important to the marketer, such as shareholders, creditor, suppliers, employees, bankers and the local community. It is important to remember that the audience- no matter how large or how diverse- is composed of individual receivers, each of whom interprets the message according to his or her won personal perceptions and experiences.

### 2. 8.3 The Medium

The **medium** , or communications channel, can be impersonal (e.g., a mass medium) or **interpersonal** ( a formal conversation between a salesperson and a customer or an informal conversation between two or more people that takes place face-to-face, by telephone, by mail, or online).

Mass media are generally classified as *print* (newspapers, magazines, billboards, broadcast (radio, television), or *electronic* (primarily the Internet). New modes of *interactive communication* that permit the audiences of communication messages to provide direct feedback are beginning to blur the distinction between interpersonal and impersonal communications.

### 2. 8.4 The Message

The **message** can be **verbal** (spoken or written), **nonverbal** (a photograph, an illustration, or a symbol), or a combination of the two. A verbal message, whether it is spoken or written, can usually contain more specific product (or service) information than a nonverbal message. However, a verbal message combined with a nonverbal message often provides more information to the receiver than either would alone.

Nonverbal information takes place in both interpersonal channels and in impersonal channels and often takes the form of symbolic communication. Marketers often try to develop logos or symbols that are associate exclusively with their products and that achieve high recognition.

### 2. 8.5 Feedback

**Feedback** is an essential component of both interpersonal and impersonal communications. Prompt feedback permits the sender to reinforce, to change, or to modify the message to ensure that it is understood in the intended way. Generally, it is easier to obtain feedback (both verbal and nonverbal) from interpersonal communications than impersonal communications.

Such feedback may take the form of facial expressions (a smile, a frown, a look of total boredom, an expression of disbelief) or body movements (finger tapping, head nodding, head shaking, or clenched hands). Because of the high cost of space and time in impersonal media, it is very important for sponsors of impersonal communications to devise methods to obtain feedback as promptly as possible, so that they may revise a message if its meaning is not being received as intended.

## 2.9 Behaviour Change

For a behaviour to change it goes through the followings stages according to Prochaska's

(1) Pre - contemplative stage: Individual is not ready to make change, but is ideal target for health awareness strategies that personalize risks and destructive behaviours.

(2) Contemplative stage: Individuals need more information, motivation to start changing and incentives to move to the next stage.

(3) Planning stage: Individuals require a clear plan of action with structured goals and timeliness to follow. Participant also needs additional tools such as education based upon skill building techniques and methods for making changes.

(4) Action stage: Individuals need to change in activity that reflects positive change small rewards and recognition of change can help motive them. Individuals in this stage should be held accountable for behaviours and should track changes.

(5) Maintenance stage: Individuals are activiely engaging in healthy lifestyles and require continued encouragement with positive support and reinforcement. This stage requires incentives. Incentive can be monetary or non - monetary and can be and can be awarded by the supporting sponsor.[17]

**Social Marketing and Behaviour change:** Before the advent of social marketing, there were a great many other technologies around that rough to induce behaviour change. These can be grouped into four approaches-

(1) The Educations Approach

(2) The Persuasion Approach

(3) The Behaviour Modification Approach

(4) The Social Influence Approach.

The Education Approach – This approach begins with the primary assumption that individuals will do the right thing, if they understand why they need to do this behaviour. It is this approach that underlies the Health Belief Model (HBM) which is used extensively in the health care field. (Hockbaccm /1958. Rosenstock, 1960, 1966, 1974). In the early version of this mode, behaviour was seen as driven by four sets of beliefs' which are (1) Perceived susceptibility to a given health problem (2) perceived severity of the problem (3) perceived benefits from practice and (4) perceived barriers to taking the action. Though there was same contours as to whether HBM apply a strategy for change, it was concluded that any behaviour change strategy must focus an directly modifying these beliefs although changing beliefs can be successful it does not focus on behaviour. It is just an assumption that if one change belief, behaviour will follow. As for social marketers they pay a great deal of attention to how to make that behaviour happen and how to sustain it.

The Persuasion Approach – The fundamental belief of this approach is action takes place only if people are sufficiently motivated. The problem in this approach is to get the consumer abopt the percussionist view i.e. The percussionists knows what is good for consumers and attempts to push this new on them . By contrast the social marketers adopt a custom centered approach and recognize that change will only come about if one starts with the customer's reality and adapts messages to the customers' perception, needs and wants.

The Behavioural Modification Approach -This approach stresses very simple principles of a learning theory which states that people behave in a certain manner because they (a) learn the techniques necessary for the action and (b) find the outcomes rewards. This approach is frequently used to change behaviours, but it is very costly as it is done at an individual level.Social marketers recognized that to have maximum social effectiveness in a world of very limits budgets one must focus on changing groups' of consumers.

The Social Influence Approach – People who use this approach held campaigns directed at community rooms and collected behaviour and according to these campaigns are the most cost-effective way to reach and change individuals and families. However it is more likely that the more educated the individual consumers are the less likely the group norms would have a major role to play in behaviour change.

Social marketing has features in common with each of the above approaches. It often attempts to educate. It tries to motivate people to act. It introduces group pressure when appropriate and employ modeling and rewards to ensure the long term success of its programmes.

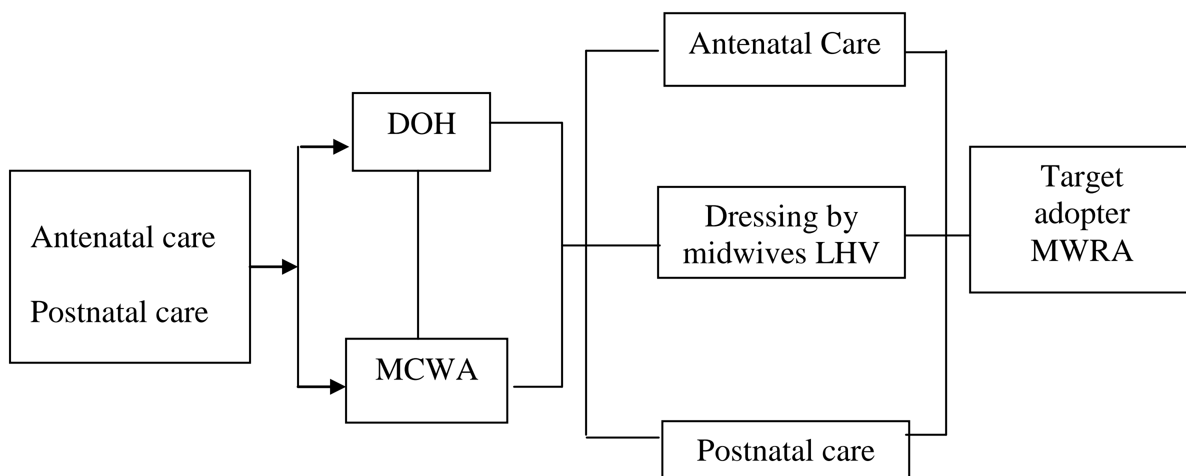
**2.10 The Previous Research**

The Pokokku Township Mother and Child Transmission (PMCT) project had produced a baseline quantitative study report in 2005. PMCT feasibility report highlights the knowledge, attitudes, practices, behaviour and belief as essential to the success of the program. It found that most of the pregnant women took antenatal care (AN care) for at least two times from midwives and lady health visitors. The reasons for those who did not take AN care are due to the distance of the health center being far away from their residence, financial problem, depending on the traditional birth attendant and auxiliary midwives who are not as skillful as midwives and lady health visitor. However, this research studied only the knowledge and attitude of the target adopters. It did not cover the changing behaviour of reproductive age woman.

## 2.11 The Strategies Applied by Social Marketers to Deliver Health Care Education to MWRA in Monywa Township

Social Marketers promote idea as well as social practices, their ultimate goal is to change behavior. The current research is conducted based the strategy used by the DOH and MCWA in delivering health care education about antenatal care and postnatal care services for pregnant women.

**Figure. 2.8 Designing the Application of Marketing Strategy for Monywa Township for 600 MWRA for Behaviour Change**




**(1)The Components of Social Product (used in Monywa Township)**

- Month of Pregnncy
- Vaccination
- Medical care
- Antenatal care
- Prenatal care
- Postnatal care
    - Birth spacing
    - Breast feeding
    - Diet

(2) **DOH & MCWA**: They act as the "Sender" in communication Process.

The followings are coverage of the components of their activities:

**Concerned with antenatal care**

(a) The idea of paying first visit to midwife at the second month of the pregnancy

(b) The idea of danger sign of pregnancy

(c) Belief the importance of antenatal care

(d) Taking medical care during pregnancy

(e) To take antenatal care frequently

**Concerned with postnatal care:**

(a) Knowledge of access to safe and clean delivery

(b) The practice of breastfeeding after delivery

(c) The behaviour of feeding foremost milk to the infant

(d) Food to avoid diet during breastfeeding

(e) The practice of injection for birth spacing after 45 days of delivery

(2) Attitude to ward importance of antenatal care

(3) Mottos of the knowledge of RH

**(3) Dressing**: Dressing by the DOH and staff health care given by MW, LHV, etc.,. They are the medium of communication process.

**Concerned with the prices of reproductive health care education are:**

(a) Time

(b) Cost - Tangible

(eg monetary cost- medicines, IEC materials, transportation cost)

**-** Intangible (opportunity cost, social cost, psychic cost)

**Concerned with the place in receiving reproductive health care education:**

(a) Community centers

(b) Urban health centers, rural health centers

(c) Clinics

(d) Maternity home

**Concerned with the promotion of reproductive health care education:**

(a) Health talks

(b) TV

(c) Radio

(d) Poster

(e) Magazines, journals, articles

(f) Pamphlet

**(4) Target Adopter**: Target adopters are MWRA in Monywa Township (600) respondents. The change in the behavior of the target adopters MWRA are observed by this research. The MWRA are the "receiver" of the communication process, and the elements of change studied are as follow:

Figure 2.9 Elements of Change

| Sr No | Elements of product | Antenatal care | Post natal care |
|---|---|---|---|
| 1 | Idea | Knowledge of<br>-First visit of pregnancy<br>-Medical care while pregnancy<br>- Danger sign of pregnancy | Knowledge of<br>-Access to safe and clean delivery<br>- Methods of breastfeeding<br>- Methods of birth spacing<br>- Avoiding unsuitable diet |
| 2 | Belief | - Importance of the care of pregnant women<br>- Consulting with expert | -Importance of the antenatal care knowledge<br>- Consulting with expert |
| 3 | Attitude | - Attitude towards importance of care of pregnancy | - Attitude towards importance of making deliver at DOH |

# CHAPTER III
# EMPIRICAL STUDY

This section is concerned with the responses of MWRA from Monywa Township regarding reproductive health. All the MWRA in the study were given a structured questionnaire comprising questions on the safe delivery and maternal health. The questionnaire was constructed with the objective to find out the knowledge and the practice of MWRA regarded antenatal care and postnatal care before they receive health care education and how much they benefit after receiving health care education which is a strategy used in social marketing in this study. Hypotheses of this study will be tested from these findings.

## Section A- Demographic Factors of respondents

### 3.1 Demographic Factors of Respondents

**Table 3.1 Age of Married women of Reproductive Age**

| Sr. No | Age group | Types of Region | | Total % |
|---|---|---|---|---|
| | | Urban % | Rural % | |
| 1 | 15-19 | 1.6 | 0.2 | 1.8 |
| 2. | 20-24 | 18.2 | 19.3 | 18.8 |
| 3. | 25-29 | 24.1 | 22.5 | 23.2 |
| 4. | 30-34 | 26.0 | 25.1 | 25.5 |
| 5. | 35-39 | 20.6 | 18.7 | 19.5 |
| 6. | 40-44 | 8.7 | 10.7 | 9.8 |
| 7. | 45-49 | 0.8 | 1.7 | 1.4 |
| | Total | 100 | 100 | 100 |

*Sources: Survey Data, 2006.*

In urban area, 88.9% of MWRA were between the age of 20–39 years. In rural area, 85.6% of MWRA were between the age of 20–39 years. The table also showed that number of MWRA of age between 20 –39 years in urban area is more than rural area.

**Table 3.2 Educational Level of MWRA**

| Sr No | Educational qualification | Types of Region | | Total % |
|---|---|---|---|---|
| | | Urban % | Rural % | |
| 1. | Illiterate | 2.8 | 3.5 | 3.2 |
| 2. | Just read and write | 2.0 | 6.3 | 4.5 |
| 3. | Primary school | 43.1 | 43.8 | 43.5 |
| 4. | Middle school | 21.7 | 23.6 | 22.8 |
| 5. | High school | 11.5 | 8.9 | 10.0 |
| 6. | Passed high school | 4.0 | 2.3 | 3.0 |
| 7. | Graduate | 12.6 | 8.6 | 10.3 |
| 8. | Post graduate | 2.4 | 1.7 | 2.0 |
| 9. | Other | 0.0 | 1.2 | 0.7 |
| | Total | 100 | 100 | 100 |

***Source: Survey Data, 2006***

In urban area, 43.1% of MWRA's educational level was at primary school level. Nineteen percent of MWRA passed high school and above. In rural area, 43.8% educational level was at primary level and 13.8% of MWRA passed high school level and above.

**Table 3.3 Current Occupation of MWRA**

| Sr No | Current occupation | Types of Region | | Total % |
|---|---|---|---|---|
| | | Urban % | Rural % | |
| 1. | Dependent | 62.1 | 47.3 | 53.5 |
| 2. | Causal workers | 1.6 | 6.9 | 4.7 |
| 3. | Agriculture | 0.8 | 4.0 | 2.7 |
| 4. | Artistes | 0.0 | 0.6 | 0.3 |
| 5. | Merchant | 8.3 | 7.2 | 7.7 |
| 6. | Government service | 1.6 | 1.4 | 1.5 |
| 7. | Brokers | 10.28 | 15.56 | 13.33 |
| 8. | Grocers | 9.49 | 12.39 | 11.17 |
| 9. | Tailors | 5.93 | 4.61 | 5.17 |
| | Total | 100 | 100 | 100 |

*Sources: Survey Data, 2006.*

As far as current occupation of MWRA in the survey is concerned, in urban area it was found that 62.1% of MWRA were dependents, 1.6% were government service personnel and others were grocers, tailors and brokers. In the rural area also 47.3% of MWRA were dependents, 1.4%, government service personnel and others were grocers, tailors, and brokers. In comparing current occupation of women among different occupations, it is found that most of the MWRA were dependents in both urban and rural area and government service personnel were the least.

**Table 3.4 Occupation of MWRA'S Husbands**

| Sr. No | Occupation of husband | Types of Region | | Total % |
|---|---|---|---|---|
| | | Urban % | Rural % | |
| 1. | Non-response | 2.8 | 0.0 | 1.2 |
| 2. | Government service | 10.3 | 11.2 | 10.8 |
| 3. | Company service | 0.4 | 1.7 | 1.2 |
| 4. | Merchant | 15.0 | 14.4 | 14.7 |
| 5. | Dependent | 0.4 | 0.6 | 0.5 |
| 6. | Causal workers | 4.7 | 10.4 | 8.0 |
| 7. | Agriculture | 2.0 | 9.2 | 6.2 |
| 8. | Culture | 0.4 | 3.2 | 2.0 |
| 9. | Brokers | 28.46 | 23.34 | 25.5 |
| 10. | Grocers | 20.55 | 15.27 | 17.5 |
| 11. | Tailors | 15.02 | 10.69 | 12.4 |
| | Total | 100 | 100 | 100 |

***Source: Survey Data, 2006***

In urban area, it was found that 10.3% of MWRA's husbands were government services personnel, 15% of them were merchants, 0.4% were dependents, 4.7% were causal workers. In rural area, 14.4% of husbands of MWRA were traders. 10.4% were causal workers 0.6% were dependents.

**Table 3.5 Current Marital Status of MWRA**

| Sr. No | Marital status | Types of Region | | Total |
|---|---|---|---|---|
| | | Urban % | Rural % | % |
| 1. | Separated | 2.8 | 2.0 | 2.3 |
| 2. | Married | 97.2 | 98.0 | 97.7 |
| | Total | 100 | 100 | 100 |

***Source: Survey Data, 2006***

In the urban area it was found that 97.2% of MWRA were married and 2.8% were separated. In the rural area, 98.0% of MWRA were currently married and 2.0% were separated.

**Table 3.6 Monthly Family Income by Region (Kyat Thousands)**

| Sr No | Monthly family income (Kyat Thousands) | Types of Region | | Total % |
|---|---|---|---|---|
| | | Urban % | Rural % | |
| 1. | <20 | 11.5 | 19.3 | 16.0 |
| 2. | 21-40 | 38.7 | 48.4 | 44.3 |
| 3. | 41-60 | 38.3 | 24.5 | 30.3 |
| 4. | 61-80 | 2.0 | 2.3 | 2.2 |
| 5. | 81-100 | 7.5 | 3.5 | 5.2 |
| 6. | >101 | 2.0 | 2.0 | 2.0 |
| | Total | 100 | 100 | 100 |

***Source: Survey Data, 2006***

In urban area, 77% of MWRA earn monthly income of Kyat 21-60 thousand. The MWRA having month of income were above Kyat 61 thousand was 11.5%. In rural area, 48.4% of MWRA earn Kyat 21- 40 thousand. The lowest percentage, 7.8% of MWRA's monthly income earn above Kyat 61 thousand in rural area. It was found that the family income of the MWRA in urban area was greater than that of rural area in Monywa Township.

## 3.2 Behaviour Change of Married Women of Reproductive Age Regarding Reproductive Health

DOH in collaboration with MCWA of Monywa Township regarded the Age between 15-49 years as reproductive age according to the definition of World Health Organization. In this study, product- market fit concerned with the reproductive health is described as follows.

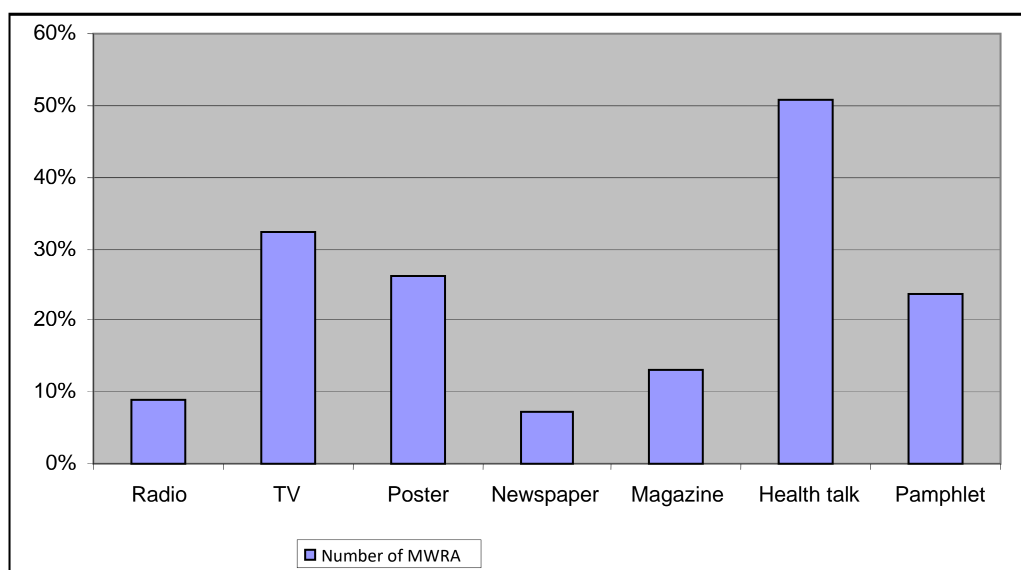
**Table 3.7 Promotional Tools of Social Marketing**

| Sr. No | Tools of social marketing | No of MWRA | Percent of MWRA (%) |
|---|---|---|---|
| 1. | Radio | 54 | 9.0 |
| 2. | TV | 194 | 32.3 |
| 3. | Poster | 157 | 26.2 |
| 4. | Newspaper | 44 | 7.3 |
| 5. | Magazine | 78 | 13.0 |
| 6. | Health talk | 305 | 50.8 |
| 7. | Pamphlet | 143 | 23.8 |

***Source: Survey Data, 2006***

Based on Table 3.7, among all the MWRA in the survey, 50.8% of MWRA responded that they got knowledge from health talk, followed by 32.3% of MWRA who responded that they got the knowledge from TV, 26.2% from poster, 7.3% from newspaper. The least percentage of the MWRA got knowledge from radio. Thus, most of the MWRA got reproductive health knowledge from health talks given by DOH and MCWA.

**Figure 3.1 Promotional Tools of Social Marketing**




*Source: Table (3.7)*

Following are the results of the survey concerning the behaviour of MWRA before and after obtaining the reproductive health knowledge, (antenatal, and postnatal care) delivered by DOH and MCWA

**Section B- The product in the social marketing process are idea, belief, attitude, practice and tangible (or) physical products concerning reproductive health**

### 3.2.1 Product Concerned Antenatal Care and Postnatal Care

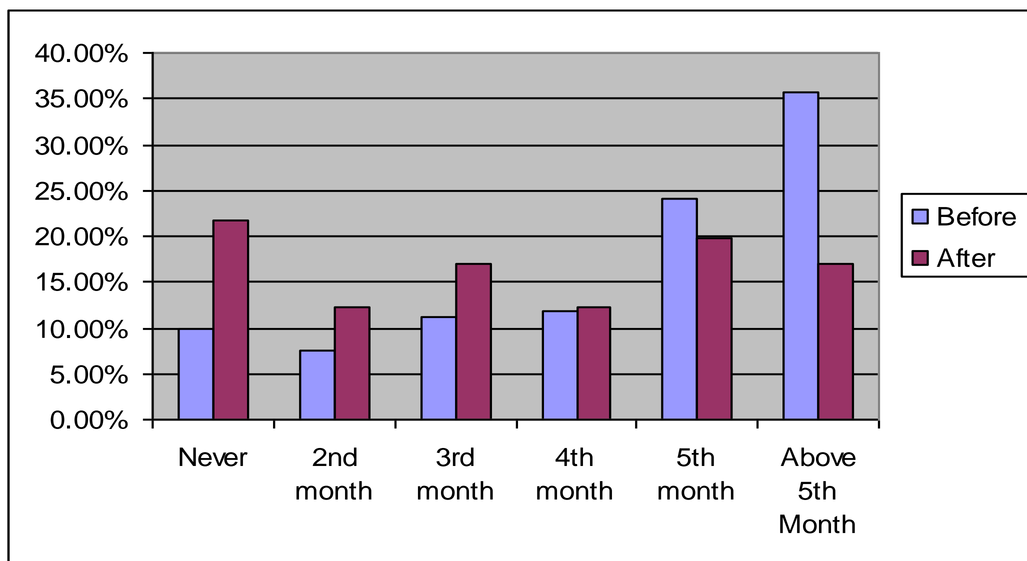
The month of first antenatal care visit to midwives (or) expert is presented in Table 3.8.

**Table 3.8 The Month of Pregnancy at First Antenatal Care Visit to Midwives and Doctors By Region**

| Sr No | Month of pregnancy to pay first visit | Types of Region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | Never | 9.9% | 21.7% | 5.8% | 3.2% | 7.5% | 11.0% |
| 2. | 2nd month | 7.5% | 12.3% | 12.4% | 37.8% | 10.3% | 27.0% |
| 3. | 3rd month | 11.1% | 17.0% | 18.2% | 30.5% | 15.2% | 24.8% |
| 4. | 4th month | 11.9% | 12.3% | 9.8% | 9.2% | 10.7% | 10.5% |
| 5. | 5th month | 24.1% | 19.8% | 20.2% | 10.7% | 21.8% | 14.5% |
| 6. | Above 5th month | 35.6% | 17% | 33.7% | 8.6% | 34.5% | 12.2% |
| | Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

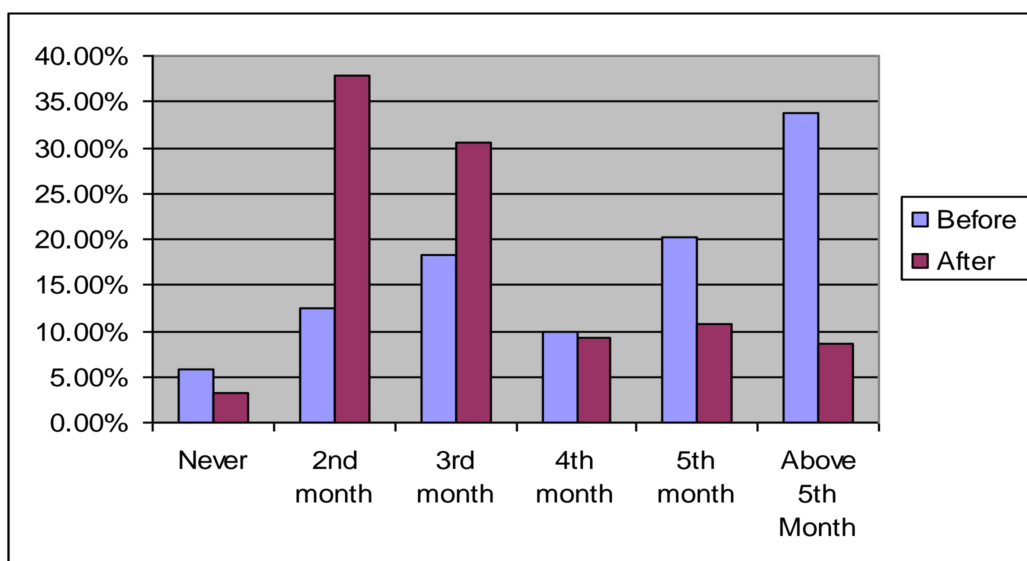
***Source : Survey Data, 2006***

**Figure 3.2(a) The Month of Pregnancy to Pay First Antenatal Care Visit to Midwives (or) Doctors (Urban)**




*Source: Table (3.8)*

**Figure (3.2 b) The Month of First Antenatal Care Visit to Midwives (or) Doctors (Rural)**




*Source: Table (3.8)*

According to health care education the month of pregnancy to pay first visit to midwives is the second month of pregnancy. From Table 3.9 it was found that before health care education 24.1% of MWRA in urban area paid first visits to midwives only at fifth month of pregnancy. And only 7.5% visited midwives at second month of pregnancy. This percentage increased to 12.3%

after health care education. This indicates that there is the impact of social marketing strategy on the behavior change of MWRA in urban area.

In the rural area, before health care education only 12.4% of MWRA visited midwives at the second month of pregnancy. This percentage increased to 37.8% after health care education. Thus, there is also same impact of the knowledge concerning the month of pregnancy to pay first visit to midwives for both urban and rural area.

In order to assess impact of social marketing of health care education in urban and rural area of Monywa Township from the stand point of starting month of first visit to midwives (or) doctors, the null hypothesis is that there is no impact of social marketing of health care education on starting month of first visit to midwives (or) doctors . This hypothesis is tested using '**Z**' test for the significance of the population proportions before and after social marketing of health care education. Based on the results of testing, it was found that the proportion of MWRA who made first visit to midwives (or) doctors starting from second month of pregnancy before health care education is significantly less than the proportion of MWRA who made first visit to midwives or doctors after health care education, with the result of computed '**Z**' test statistic of -2.0924 and '**p**-value of 0.0182. Therefore it could be concluded that there exists impact of health education on the month of starting first visit of pregnant MWRA to midwives (or) doctors at 5% level of significance. Therefore, it could be generally concluded that social marketing of health care education has impact on the starting month of first visit to midwives and doctors and that there is behaviour change. There is difference the behaviour of month of visit to midwives between MWRA from urban and rural area.

Relationship between education level and month of pregnancy paying visit to midwives for antenatal care (before) is as follow.

**Table 3.9 The Month of Pregnancy before Paying First Visit for Antenatal Care and Education Level**

| First visit to midwives | Educational Level of MWRA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Illiterate | Just read and write | Primary school | Middle school | High school | Passed high school | Graduate | Post Graduate | Others | Total |
| Never | 0.00% | 0.00% | 3.50% | 2.33% | 0.67% | 0.33% | 0.50% | 0.00% | 0.17% | 7.5% |
| 2nd month | 0.00% | 0.17% | 3.67% | 2.83% | 1.00% | 0.67% | 1.50% | 0.50% | 0.00% | 10.33% |
| 3rd month | 0.67% | 0.67% | 6.17% | 3.33% | 2.17% | 0.00% | 1.83% | 0.17% | 0.17% | 15.17% |
| 4th month | 0.67% | 0.67% | 4.00% | 2.17% | 1.00% | 0.50% | 1.33% | 0.33% | 0.00% | 10.67% |
| 5th month | 0.50% | 1.67% | 10.83% | 4.67% | 2.33% | 0.17% | 1.33% | 0.17% | 0.17% | 21.83% |
| over 5th month | 1.33.% | 1.33% | 15.33% | 7.50% | 2.83% | 1.33% | 3.83% | 0.83% | 0.17% | 34.50% |
| Total | 3.17% | 4.50% | 43.50% | 22.83% | 10.00% | 3.00% | 10.33% | 2.00% | 0.67% | 100.00% |

***Source: Survey Data, 2006*** ***chi-square statistic = 42.37, with p-value = 0.369***

The above table reveals the MWRA of different educational level from illiterate to postgraduate level took their first antenatal care at different month of pregnancy before having health education. With the chi-square statistic of 42.37 and the '**p**'-value of 0.369, it could be concluded that at 5% significance level that there is no significant association between the educational level of MWRA and the month of pregnancy to pay first visit to midwives during pregnancy.

The relationship between educational level of MWRA and the months of pregnancy after paying first visit for antenatal care is presented in Table 3.10.

**Table 3.10 The Month of Pregnancy after Paying First Visit for Antenatal Care and Educational Level**

| First visit to midwives | Educational Level of MWRA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Illiterate | Just read and write | Primary school | Middle school | High school | Passed high school | Graduate | Post Graduate | Others | Total |
| Never | 0.67% | 0.17% | 6.33% | 1.83% | 1.00% | 0.17% | 0.50% | 0.33% | 0.00% | 11.00% |
| 2nd month | 0.50% | 1.33% | 10.00% | 6.67% | 2.83% | 1.50% | 3.17% | 0.83% | 0.17% | 27.00% |
| 3rd month | 1.00% | 1.33% | 10.50% | 6.00% | 2.17% | 0.17% | 3.00% | 0.50% | 0.17% | 24.83% |
| 4th month | 0.33% | 0.33% | 4.17% | 2.17% | 1.50% | 0.50% | 1.33% | 0.17% | 0.00% | 10.50% |
| 5th month | 0.33% | 1.00% | 7.17% | 3.50% | 1.17% | 0.17% | 0.83% | 0.17% | 0.17% | 14.50% |
| over 5th month | 0.33.% | 0.33% | 5.33% | 2.67% | 1.33% | 0.50% | 1.50% | 0.00% | 0.17% | 12.17% |
| Total | 3.17% | 4.50% | 43.50% | 22.83% | 10.00% | 3.00% | 10.33% | 2.00% | 0.67% | 100.00% |

***Source: Survey Data, 2006*** ***Chi-square statistic = 34.591, with p-valu = 0.712***

Table 3.10 also revealed that even after health care education MWRA of different educational level took their first antenatal care at different month of pregnancy and not at second month of pregnancy as the social marketer had said. After having health care education, with the chi-square statistic of 34.591 and the '**p**'-value of 0.712. According to the hypothesis (1), it could be concluded that there is no association between the educational qualification of MWRA and the month of first visit to midwives during pregnancy at 5% significance level.

The conclusion that there is a significant change of month to pay first visit to midwives during pregnancy after having health knowledge is drawn because the test revealed the '**Z**' test statistic of -7.40887, the '**p**'-value of less than1%.

Thus, social marketing strategy has impact on the behavior of month of first visit to midwives after health care education. In the behaviour of month of pregnancy to pay first visit for antenatal care, rural area has more impact than urban area. It was found that the visits to midwives starting from second month of pregnancy is more in rural than urban area. Hence knowledge delivery by MCWA has more impact to rural than urban. Thus there is difference of behaviour change of MWRA from urban area and MWRA from rural area. According to hypothesis (3), there is difference in behavior change between urban and rural area.

The relationship between frequency of obtaining health care education and month of pregnancy to pay first visit to midwives for antenatal care is as follows.

**Table 3.11 The Impact of the Frequency of Obtaining Health Care Education on the Month of Pregnancy to Pay First Visit to Midwives for Antenatal Care**

| First visit to midwives | Frequency of obtaining health care education | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | >5 | Total |
| Never | 7.8% | 0.8% | 1.0% | 0.8% | 0.0% | 0.5 % | 0.0% | 11.0% |
| 2nd month | 1.8% | 3.2% | 6.3% | 5.8% | 4.7% | 3.3% | 1.8% | 27.0% |
| 3rd month | 1.8% | 4.2% | 5.5% | 7.5% | 3.0% | 2.2% | 0.7 % | 24.8% |
| 4th month | 0.7% | 1.7% | 3.2% | 3.2% | 0.5% | 0.7% | 0.7% | 10.5% |
| 5th month | 3.0% | 2.5% | 3.2% | 2.8% | 1.0% | .8 % | 1.2% | 14.5% |
| Total | 19.0% | 15.3% | 21.7% | 21.7% | 9.3% | 8.3% | 4.7% | 100% |

*Source: Survey Data 2006* *chi –square statistic=201. 185%, with p-value<1%*

According to the above table, 41.2% of MWRA who did not have health care education had never visited to midwives. More than thirty percent 34.6% of MWRA who had received health care education thrice on reproductive health visit to midwives at third pregnancy. MWRA, who had receive more than 5 times of obtaining health care education has the 39.3% with regarded to first visit to midwives at second month of pregnancy. With the chi-square statistic of 201.185 and '**p**'-value is less than 1%. Thus, there is association between frequency of health care education and month of first visit to midwives at 1% significance level. Thus there is an impact of the frequency of obtaining health care education of pregnancy to pay first visit to midwives for antenatal care. According to the hypothesis (4), there is relationship between

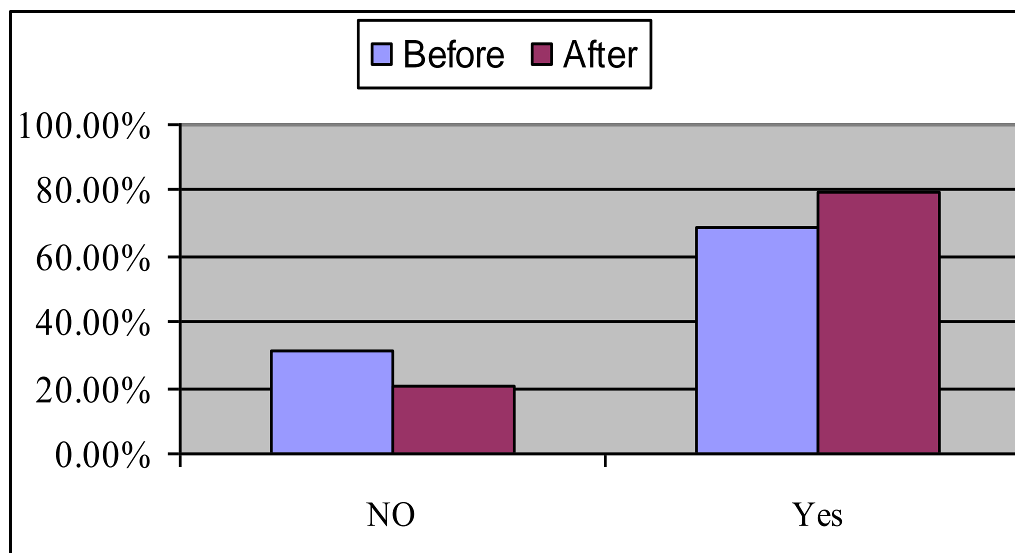
frequency of obtaining health care education and month of pregnancy to pay first visit to midwives for antennal care.

**Table 3.12 Vaccination during Pregnancy**

| Sr. No. | Vaccination | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | No | 31.6% | 20.9% | 28.2% | 6.3% | 29.7% | 12.5% |
| 2. | Yes | 68.4% | 79.1% | 71.8% | 93.7% | 70.3% | 87.5% |
| | Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

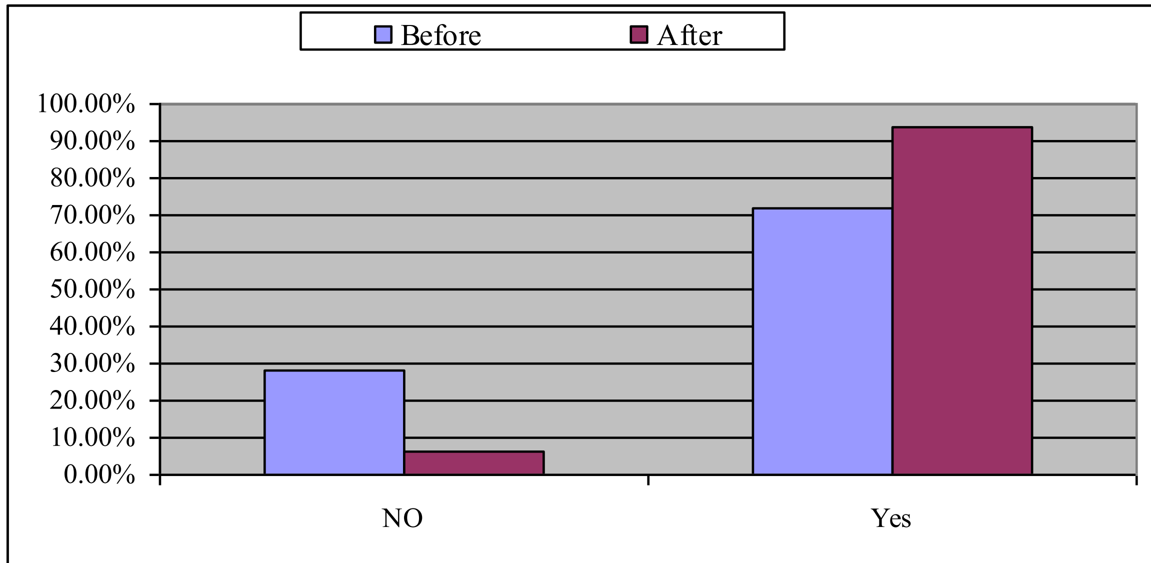
***Source: Survey Data, 2006***

**Figure 3.3 (a) Vaccination during Pregnancy (Urban)**




***Source: Table (3.12)***

**Figure 3.3 (b) Vaccination during Pregnancy (Rural)**




***Source: Table (3.12)***

According to health care education, for vaccination during pregnancy MWRA need to take two times ATT (Tetanus) during pregnancy. In the urban area, 68.4% had vaccination during pregnancy before receiving health care education of antenatal care. This percentage increased to 79.1% after health care education. On the other hand, 31.6 % of MWRA had no vaccination during pregnancy before health care education. This percentage decreased to 20.9% after health education. In the rural area, 71.8% of MWRA had vaccination during pregnancy before health care education. While this percentage increased to 93.7% after health care education, it was found that, 28.2 % of MWRA in the sample had no vaccination before health care education. This percentage decreased to 6.3% after health care education. Thus, both in the urban and rural area, there is the impact of social marketing strategy on the behaviour of vaccination during pregnancy.

Statistical test on impact of health care education on vaccination of MWRA during their pregnancy before and after social marketing of healthcare education was also carried out for the MWRA of health care education with the computed '**Z**' test statistic of -2.985 and '**p**'-value of (0.00012), it could be concluded that MWRA took more vaccination after health care education than

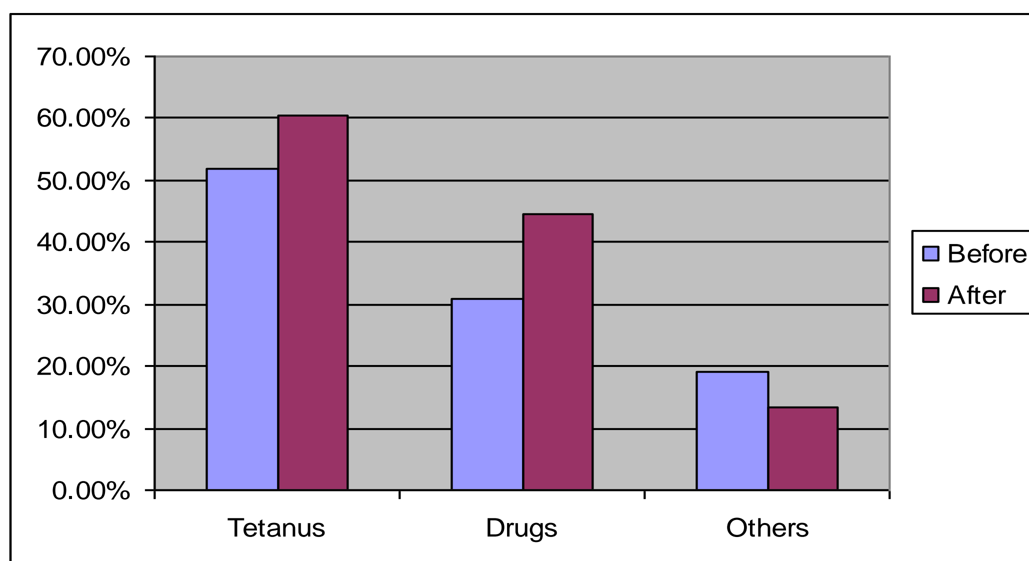
before health care education. It indicated that there existed impact of health care education on taking vaccination of MWRA during pregnancy.

**Table 3.13 Medical Care during Pregnancy**

| Sr No | Medical Care | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | Tetanus (ATT Vaccine) | 51.8% | 60.5% | 53.3% | 84.7% | 52.7% | 74.5% |
| 2. | Drugs ($Feso_4$,Folicacid,Vitamins) | 30.8% | 44.7% | 30.8% | 52.2% | 30.8% | 49.0% |
| 3. | Others | 19.0% | 13.4% | 27.7% | 12.1% | 24% | 12.7% |

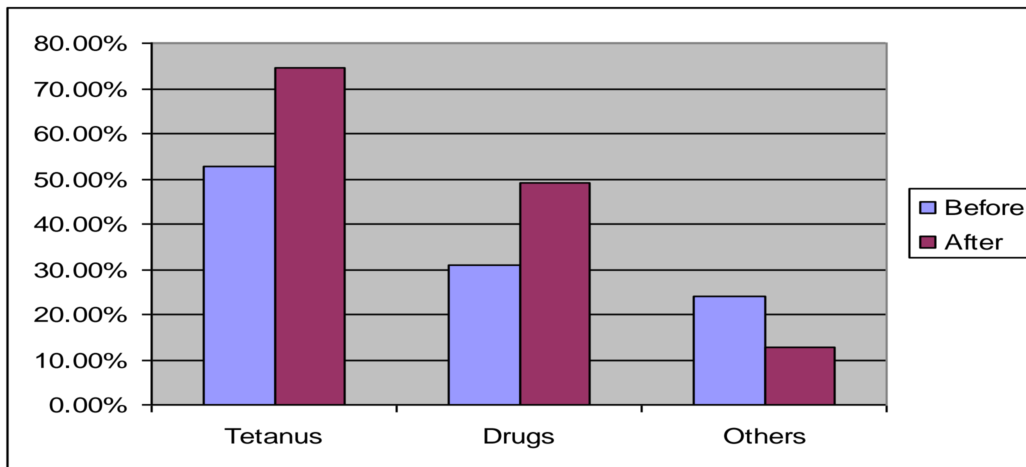
***Source: Survey Data, 2006***

**Figure 3.4 (a) Medical Care during Pregnancy (Urban)**




***Source: Table (3.13)***

**Figure 3.4 (b) Medical Care during Pregnancy (Rural)**




***Source: table (3.13)***

Table 3.13 revealed that the largest number of MWRA, in the urban area, 51.8% had tetanus vaccination during pregnancy before receiving health care education. The second largest number of the MWRA 30.8% had ironic drug before health education. Thus 60.5% of MWRA in the sample, had tetanus vaccination after health care education. This indicates that the social marketing strategy had impact on changing behaviour of the vaccination during pregnancy.

In rural area, most of the MWRA 53.3% had the tetanus vaccination before health care education. This percentage increased up to 84.7% after health care education. 30.8% of MWRA had drugs such as folic acid. This percentage increased to 52.2% after health care education. Thus, social marketing strategy had impact on the behaviour of medical care during pregnancy. It is found that there is more impact in rural area than urban area.

According to the health care education of antenatal care, pregnant MWRA needs to inject the tetanus vaccination at least two times. It is that most of the pregnant MWRA, inject the tetanus vaccination during pregnancy. Thus, there is behaviour change, i.e. there is impact of health care education on the

behaviour of pregnant women. Thus, vaccination during pregnancy is in accordance with the facts given in the health care education. Hence, knowledge delivery by social marketer has more impact to rural than urban.

The same procedure of '**Z**' test is conducted to assess impact of health care education on the type of vaccination received by MWRA before and after social marketing of health care education. The test indicated that social marketing of health care education increased the percentage of MWRA who took tetanus vaccination rather than before health care education, with the result of '**Z**' test statistic of -4.186 and '**p**'-value much less than (1%). Therefore, it could also be concluded that social marketing of health care education had impact on the taking of the tetanus vaccination of MWRA during their pregnancy. According to hypothesis (3), there is difference in behaviour change between MWRA from urban and rural area.

In conclusion it can be stated that there is a significant change of use of Tetanus, drugs and other vaccinations during pregnancy after having health knowledge is drawn because the test revealed that the '**Z'** test statistic of -7.8588 and P-value of '**Z'** test statistic is less than 1% . According to hypothesis (2), there is association between obtaining health care education and medical care during pregnancy.

In the urban area, 30.4% of MWRA, do not take antenatal care before health care education. However, this percentage decreased to 23.3% after receiving antenatal care knowledge the least of the MWRA 3.6% take antenatal care about four times before health care education. There were 32.8% that seek antenatal care about six times after health care education.

In rural area, 22.8% of MWRA received three times antenatal care before health care education. This percentage decreased to 12.1% after health care education. Among the MWRA, 28.8% had antenatal care about six times during pregnancy after health care education. Most of MWRA in the sample had antenatal care for a few time before pregnancy. However, they had more

antenatal care after obtaining antenatal care knowledge. The frequency of antenatal care taken is according to the facts given in health care education.

The assessment of impact of health care education on the number of times the antenatal care was taken from the midwives (or) doctors was made. With the ‘**Z**’ test statistic of -6.387 and ‘**p**’-value much less than 1%, it could be concluded that the proportion of MWRA who took antenatal care five times from the midwives (or) doctors after health care education was significantly larger than that of those MWRA before social marketing of health care education. A test of two population proportion is conducted to determine if there is a change of the percentage of MWRA who take antenatal care after having health care education.

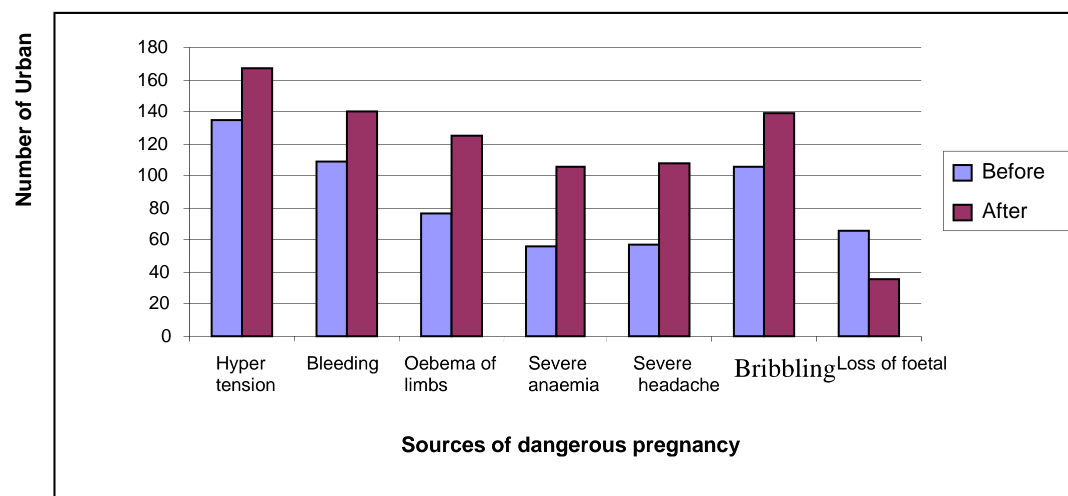
The conclusion that there is a significant change of the percentage of MWRA who take antenatal care after having health knowledge is drawn because the test revealed that '**Z**' test statistic of -6.3870 and the '**p'-**value of less than 1%. Thus there is relationship between obtain health care education and medical care during pregnancy.

**Table 3.14 The Knowledge of the Danger Signs of Pregnancy**

| Sr No | Danger signs of pregnancy | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | Number | % |
| | | Before | After | Before | After | Before | After |
| 1. | Hyper tension | 135 | 167 | 176 | 290 | 311 | 457 |
| | | 53.4% | 66.0% | 50.7% | 83.6% | 51.8% | 76.2% |
| 2. | Bleeding | 109 | 140 | 178 | 267 | 287 | 407 |
| | | 43.1% | 55.3% | 51.3% | 76.9% | 47.8% | 67.8% |
| 3. | Oebema of limbs | 76 | 125 | 86 | 194 | 162 | 319 |
| | | 30.0% | 49.4% | 24.8% | 55.9% | 27.0% | 53.2% |
| 4. | Severe anaemia | 56 | 106 | 73 | 139 | 129 | 245 |
| | | 22.1% | 41.9% | 21.0% | 40.1% | 21.5% | 40.8% |
| 5. | Severe headache | 57 | 108 | 80 | 198 | 137 | 306 |
| | | 22.5% | 42.7% | 23.1% | 57.1% | 22.8% | 51.0% |
| 6. | Bribbling | 106 | 139 | 180 | 252 | 286 | 391 |
| | | 41.9% | 54.9% | 51.9% | 72.6% | 47.7% | 65.2% |
| 7. | Loss of foetal movement | 66 | 36 | 81 | 27 | 147 | 63 |
| | | 26.1% | 14.2% | 23.4% | 7.8% | 24.5% | 10.5% |

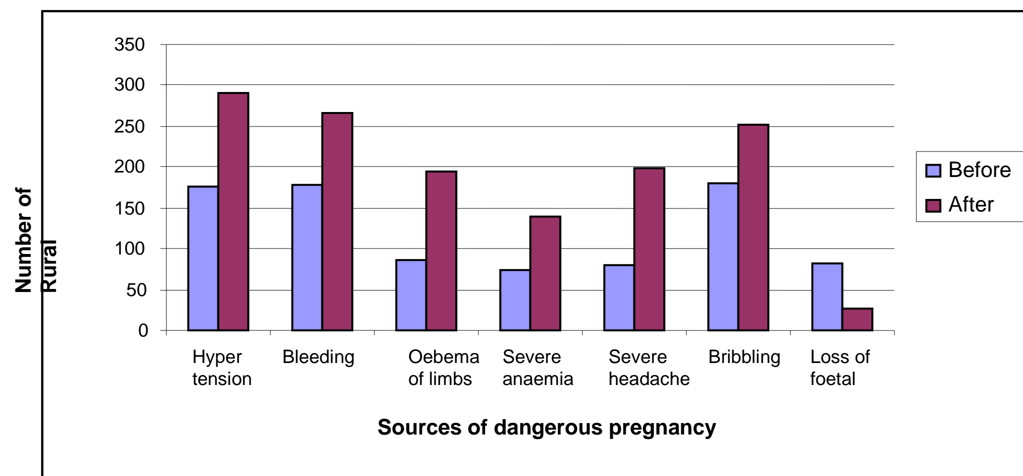
***Source: Survey Data, 2006***

**Figure 3.5(a) Behaviour of the Knowledge of the Danger Signs of Pregnancy (Urban)**




*Source: Table (3.14)*

**Figure 3.5(b) Behaviour of the Knowledge of the Danger Signs of Pregnancy**




*Source: Table (3.14)*

Based on the results in the above table, it was found that 53.4% of MWRA, had already known that the hyper tension is harmful during pregnancy before antenatal care knowledge in urban area. This percentage increased to 66% after antenatal care knowledge. Twenty two point one percent 22.1% had already known the oebema of limbs before health care education in urban area.

This percentage increased to 41.9% after health care education. In rural area, 51.9% of MWRA had already known about the dribbling before antenatal care knowledge. This percentage increased to 72.6% after antenatal care knowledge. Fifty point seven percent 50.7% of MWRA who had known hypertension, increased to 83.6% after health care education.

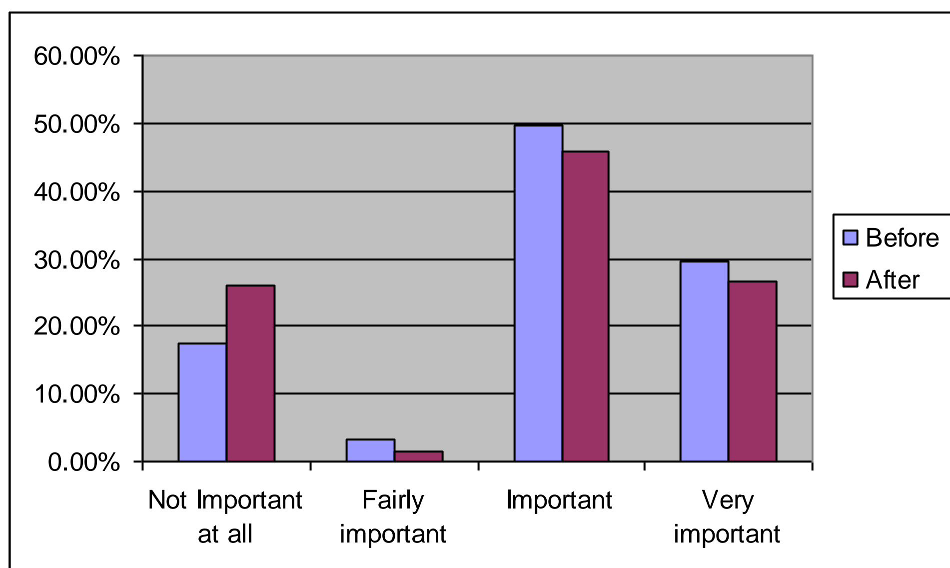
Out of all (urban and rural), 51.8% of MWRA had already known the danger of hyper tension before receiving antenatal care knowledge. It increased to 76.2% after health care education. Least of the MWRA, 53.2% had already known the oebema of limbs after health care education. Thus, the knowledge of danger sign of pregnancy fits the current behaviour of MWRA in Monywa Township. Thus, social marketing strategy had impacts on the knowledge of danger sign of pregnancy.

**Table 3.15 Attitude Change in Care of Pregnant Women**

| Sr No | Importance of care of pregnant women | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | Not important at all | 44 | 66 | 40 | 14 | 84 | 80 |
| | | 17.4% | 26.1% | 11.5% | 4.0% | 14.0% | 13.3% |
| 2. | Fairly important | 8 | 4 | 16 | 17 | 24 | 21 |
| | | 3.2% | 1.6% | 4.6% | 4.9% | 4.0% | 3.5% |
| 3. | Important | 126 | 116 | 207 | 123 | 333 | 239 |
| | | 49.8% | 45.8% | 59.7% | 35.4% | 55.5% | 39.8% |
| 4. | Very important | 75 | 67 | 84 | 193 | 159 | 260 |
| | | 29.6% | 26.5% | 24.2% | 55.6% | 26.5% | 43.3% |
| | Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

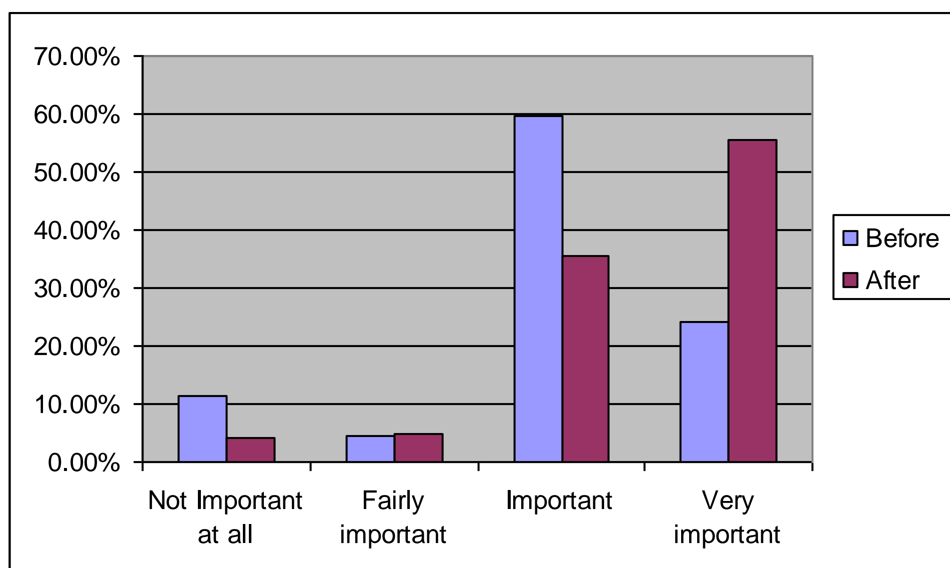
***Source: Survey Data, 2006***

**Figure 3.6 (a) Attitude Change in Care of Pregnant Women (Urban)**




***Source: table (3.15)***

**Figure 3.6 (b) Attitude Change in Care of Pregnant Women (Rural)**




***Source: table (3.15)***

In urban area, 49.8% of MWRA said that care of pregnant women is important. However, 45.8% of MWRA think that care of pregnant women is "important" after health care education. In rural area, 59.7% of MWRA, think that care of pregnant women is "important" before health care education.

55.6% of MWRA think that care of pregnant women is "very important" after health care education. However, least of the MWRA 4.6% of MWRA think that care of pregnant women is fairly important before health care education.

On comparing the findings between urban and rural area, the impact of health care education delivered by social marketing is more effective in rural area than urban area. Assessment of impact of health care education on attitude of MWRA on care of pregnant women is carried out. With the computed '**Z**' test statistic of-6.1162 and '**p**'-value much less than 1%, it could be concluded that the proportion of MWRA who considered care of pregnant women to be very important after health care education is significantly greater than that of MWRA before social marketing of health education.

After studying the antenatal care behaviour, it is required to study the postnatal care behaviour of the target adopters.

**Postnatal Care**

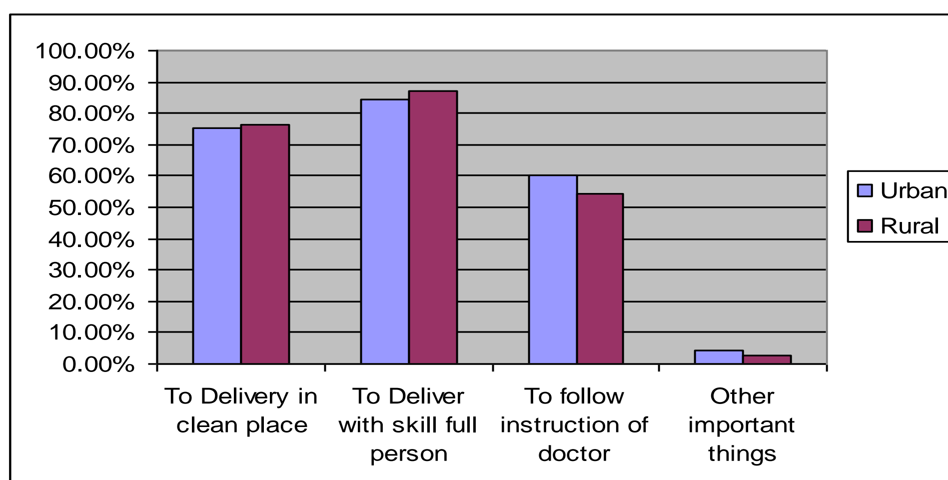
Knowledge of access to safe and clean delivery is required to deliver to the MWRA to get safe delivery**.**

**Table 3.16 Knowledge of Access to Safe and Clean Delivery**

| Sr. No | Knowledge of access to safe and clean delivery | Types of region | | Total |
|---|---|---|---|---|
| | | Urban | Rural | |
| 1. | To deliver in clean place | 75.1% | 76.4% | 75.8% |
| 2. | To deliver with skillful person | 84.6% | 87.0% | 36% |
| 3. | To follow instruction of doctor | 60.1% | 54.2% | 56.7% |
| 4. | Other important things | 4.3% | 2.6% | 3.3% |

***Source: Survey Data, 2006***

**Figure 3.7 Knowledge to Access Safe and Clean Delivery**




***Source: Table (3.16)***

In urban area, 84.6% of MWRA had already known to deliver the child with the skillful person. In rural area, 87.0% of MWRA had already known to deliver the child with the skillful person as the most important thing to do.

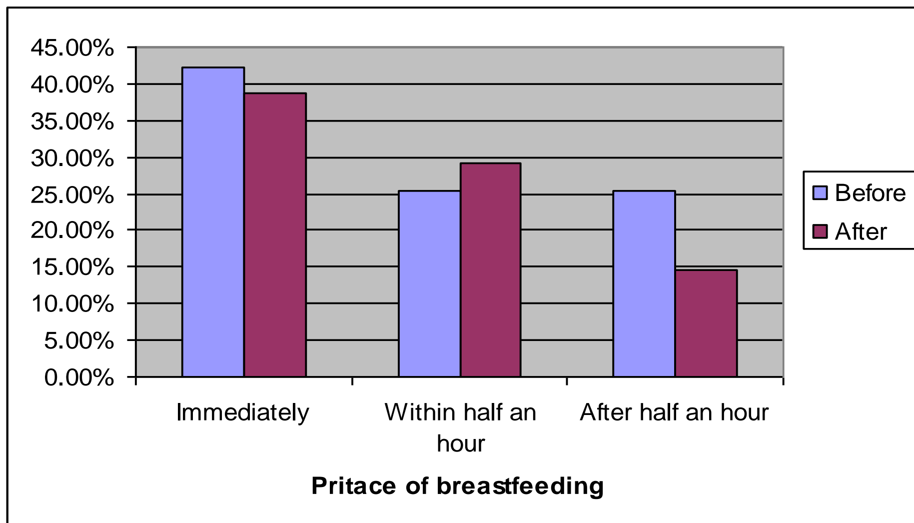
## Postnatal Care

**Table 3.17 The Change in Practice of Breastfeeding after Delivery**

| Sr No | Practice of breastfeeding | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | Immediately | 107 | 98 | 169 | 207 | 276 | 305 |
| | | 42.3% | 38.7% | 48.7% | 59.7% | 46% | 50.8% |
| 2. | Within half an hour | 64 | 74 | 65 | 102 | 129 | 176 |
| | | 25.3% | 29.2% | 18.7% | 29.4% | 21.5% | 29.3% |
| 3. | After half an hour | 64 | 37 | 96 | 42 | 160 | 79 |
| | | 25.3% | 14.6% | 27.7% | 12.1% | 26.7% | 13.2% |

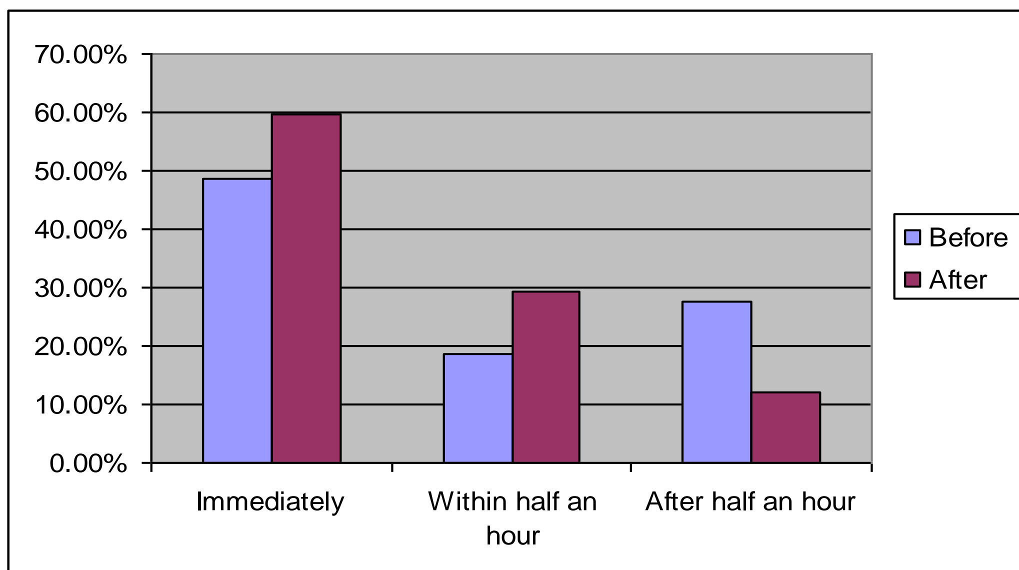
***Source: Survey Data, 2006***

**Figure 3.8(a) The Change in Practice of Breastfeeding after Delivery (Urban)**




*Source: Table (3.17)*

**Figure 3.8(b) The Change in Practice of Breastfeeding after Delivery (Rural)**




*Source: Table (3.17)*

Before health care education in urban area, 42.3% of MWRA breastfed immediately before health care education. This percentage decreased to 38.7% after health care education. It is required to breastfeed immediately according to the health care education. However 25.3% breastfeed their children within half an hour (or) after half an hour before health care education. This percentage increased to 29.2% for within half an hour of breastfeeding after health care education and 14.6% fed their children after half an hour after health care education.

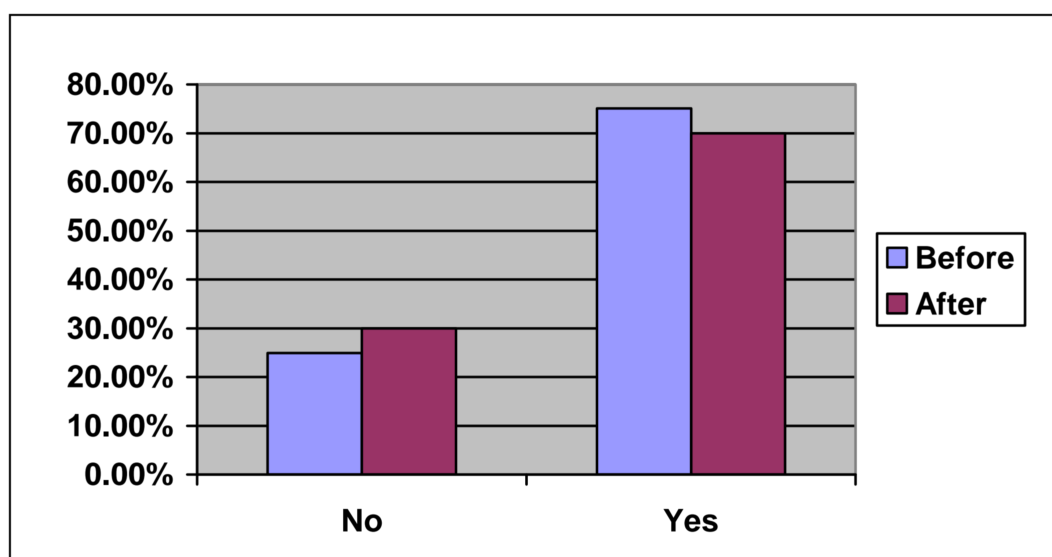
In rural area, 48.7% of MWRA had practiced breastfeed immediately before health care education. This percentage increased to 59.7% after health care education. The practice of breastfeeding immediately is greater on rural area than in urban area after obtaining health care education. A test two-population proportion is conducted to determine if there is a change of the percentage of MWRA who breastfeed immediately after delivery after obtaining health care education. The test revealed that the '**p**'–value of '**Z**' test statistic is than 1%. Thus, there is association of the relationship between obtaining health care education and immediately breastfeeding. Thus, social marketing strategy impacts on the behaviour of breastfeeding after delivery. The behaviour of breastfeeding after delivery, rural area is greater than urban area. According to the hypothesis, there is differences in behaviour change between MWRA from urban area and rural area.

**Table 3.18 The Behaviour of Feeding Foremost Milk to the Infant after Delivery**

| Sr No | Behavior of Feeding foremost milk to the infant | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | No | 63 | 76 | 74 | 27 | 137 | 103 |
| | | 24.9% | 30.0% | 21.3% | 7.8% | 22.8% | 17.2% |
| 2. | Yes | 190 | 177 | 273 | 320 | 463 | 497 |
| | | 75.1% | 70.0% | 78.7% | 92.2% | 77.2% | 82.8% |
| | Total | 253 | 253 | 347 | 347 | 600 | 600 |

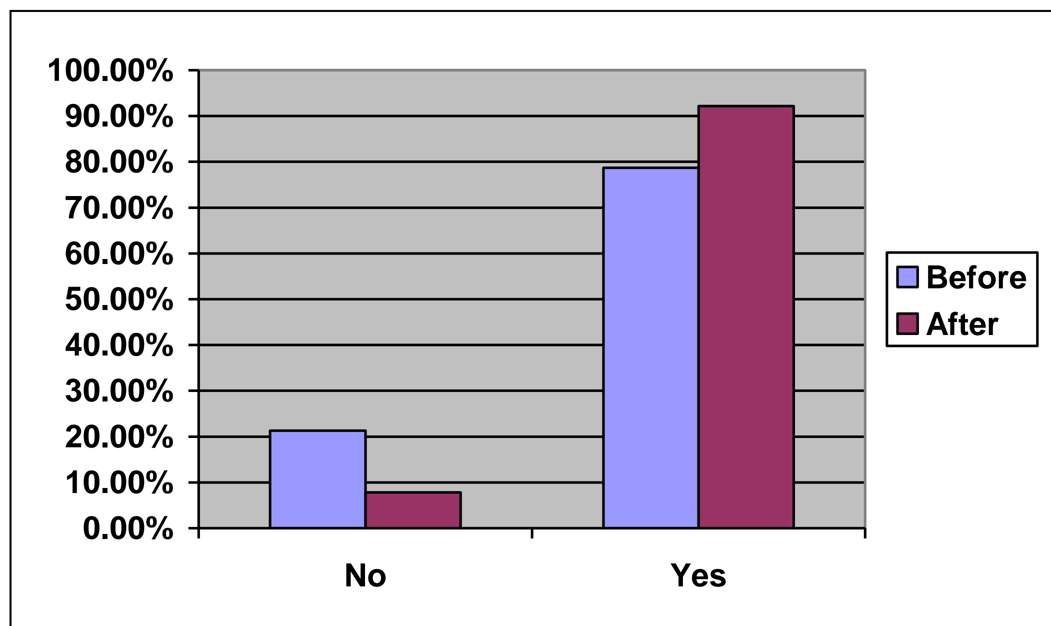
***Source: Survey Data, 2006***

**Figure 3.9(a) The Behaviour Change in Feeding Foremost Milk to the Infant after Delivery (Urban)**




***Source; Table (3.18)***

**Figure 3.9(b) The Behaviour Change in Feeding Foremost Milk to the Infant after Delivery (Rural)**




***Source: Table (3.18)***

In urban area, 75.1% of MWRA feed foremost milk to the infant before health care education. However, this percentage decreased to 38.7% after health care education. It is found that the knowledge wrongly fits with the health care education in urban area. In rural area, 78.7% of MWRA feed foremost milk to the infant after delivery before health care education. This percentage increased to 92.2% after health care education. This knowledge fits after health care education. Among all the MWRA, in rural and urban area, 82.8% behave according to the knowledge of feeding foremost milk to the infant. According to the knowledge of health care education, it is required to feed foremost milk to the infant. However, the behaviour of feeding foremost milk in rural area is greater than urban area.

**Table 3.19 Change in Practice of Avoiding Diet during Breastfeeding**

| Sr. No | Practice of Avoiding Diet | Type of Region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1 | Not avoid diet | 43.10% | 49.40% | 44.70% | 37.20% | 44.00% | 42.30% |
| 2 | Avoid diet | 56.90% | 50.60% | 55.30% | 62.80% | 56.00% | 57.70% |
| 3 | Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

***Source: Survey Data, 2006***

In urban area, 56.9% of MWRA had avoided diet like chilies before health care education. This percentage decreased to 50.6% after health care education. 43.1% of MWRA had not avoided diet before health care education. This percentage increased to 49.4% after health care education. Thus social marketing strategy impacts negatively on the behaviour of avoiding diet during breast feeding. In rural area, most of the MWRA 55.3% had avoided diet before health care education. This percentage increased to 62.8% after health education.44.7% of MWRA had not avoided diet before health care education. This percentage decreased down to 37.2% after health care education. Thus social marketing strategy does impact on the behaviour of avoiding diet during breast feeding.

A test of two-population proportion is conducted to determine if there is a change of the percentage of MWRA who avoided diet during breastfeeding after obtaining health care education. It can be drawn as such because the test revealed that the '**p**'-value of '**Z**' test statistic is very large o.4535. According to the hypothesis (2) , there is relationship between obtaining health education and practice of avoiding diet during breastfeeding

**Table 3.20 The Change in Practice of Using Injection for Birth Spacing after 45 days of Delivery**

| Sr. No. | Taking injection | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | No | 135 | 116 | 180 | 72 | 315 | 188 |
| | | 53.4% | 45.8% | 52.0% | 20.8% | 52.6% | 31.4% |
| 2. | Yes | 118 | 137 | 166 | 274 | 284 | 411 |
| | | 46.6% | 54.2% | 48.0% | 79.2% | 47.4% | 68.6% |
| | Total | 253 | 253 | 346 | 346 | 599 | 599 |

***Source: Survey Data, 2006***

In urban area, 46.6% of MWRA, has injection for birth spacing after 45 days of giving birth before health care education. This percentage increased to 54.2% after health care education. This indicates that there is the impact of social marketing on the behaviour of injection for birth spacing after 45 days of giving birth. In rural area, 48% of MWRA had injection for birth spacing after 45 days of giving birth before health care education. This percentage increased to (79%) after health care education. It is found that the majority of MWRA adopt the practice of injection for birth spacing after 45 days of giving birth both in urban and rural area.

A test of two –population proportion is conducted to determine if there is a change of the percentage of MWRA who practiced birth spacing after having health knowledge. The conclusion that there is a significant change of the percentage of MWRA who practiced birth spacing after obtaining health care education can be can be drawn because the test revealed that the '**p**'- value of '**Z**' test is less than 1%.

Relationship between educational qualification of MWRA and practice of Birth spacing (before) is presented in the following Table 3.21

**Table 3.21 The Relationship between Educational Qualification of MWRA and Practice of Birth Spacing before Health Care Education**

| Practice of birth spacing | Educational Level of MWRA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Illiterate | Just read and write | Primary school | Middle school | High school | Passed high school | Graduate | Post Graduate | Others | Total |
| No | 2.00% | 2.84% | 22.20% | 12.02% | 4.84% | 1.17% | 5.68% | 1.50% | 0.33% | 52.59% |
| Yes | 1.17% | 1.67% | 21.37% | 10.68% | 5.18% | 1.84% | 4.67% | 0.50% | 0.33% | 47.41% |
| Total | 3.17% | 4.51% | 43.57% | 22.70% | 10.02% | 3.01% | 10.35% | 2.00% | 0.67% | 100.00% |

***Source: Survey Data, 2006*** ***chi-square statistic = 6.647, p-value = 0.575***

Regarding the relationship between educational qualifications of MWRA and practice of birth spacing before health care education, it shows that MWRA with primary school level education has the highest percentage of practice of birth spacing 49.05%. From middle school level has the highest to 52.95%. As for MWRA who are graduates only 67.7% made birth spacing after delivery, chi-square statistic of 6.647 and the '**p**'-value of 0.575. According to hypothesis (1), there is no association between the educational qualification of MWRA and practice of birth spacing during pregnancy at 5% significance level.

Relationship between educational qualification of MWRA and practice of birth spacing after health care education is found as follows.

**Table 3.22 The Relationship between Educational Qualification of MWRA and Practice of Birth Spacing after Health Care Education**

| Practice of birth spacing | Educational Level of MWRA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Illiterate | Just read and write | Primary school | Middle school | High school | Passed high school | Graduate | Post Graduate | Others | Total |
| No | 1.34% | 1.50% | 13.19% | 7.85% | 3.84% | 0.33% | 2.84% | 0.50% | 0.00% | 31.39% |
| Yes | 1.84% | 3.01% | 30.38% | 14.86% | 6.18% | 2.67% | 7.51% | 1.50% | 0.67% | 68.61% |
| Total | 3.18% | 4.51% | 43.57% | 22.70% | 10.02% | 3.00% | 10.35% | 2.00% | 0.67% | 100% |

***Source: Survey Data, 2006*** ***chi-square statistic = 9.139, with p-value = 0.331***

After health care education, as regards that the relationship between educational qualification of MWRA and practice of birth spacing, it shows that MWRA of primary school level has the highest percentage of practice of birth spacing 69.73%. MWRA who are of middle school level has the next highest percentage of practice of birth spacing 65.46%. Similarly MWRA of graduate level has the highest percentage of practice of birth spacing 75.56%. With the chi-square statistic of 9.139 and the '**p**'-value of 0.331, it can be concluded that there is no association between the educational qualification of MWRA and birth spacing after health care education at 5% significance level.

The conclusion is that there is a significant change of the percentage of MWRA who practiced birth spacing after having health knowledge is drawn because the test revealed that the '**p**'-value of '**Z**' test statistic is less than 1%. Thus, there is association between birth spacing and obtaining of health care education at 1% significance level.

The behaviour of birth spacing after 45days delivery in rural area is greater than urban area after health care education. It is assumed that MWRA

of urban area know the birth spacing method but they do not want to act in the practice

The relationship between obtaining the frequencies of health care education and birth spacing (after) is presented in Table 3.23.

**Table 3.23 The Relationship between obtaining the Frequencies of Health Care Education and Birth Spacing (After)**

| Method of birth spacing | Frequencies of health care education | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | >5 |
| No | 45.6% | 41.3% | 285% | 32.3% | 17.9% | 16.0% | 32.1% |
| Yes | 54.4% | 58.7% | 71.5% | 67.7% | 82.1% | 84.0% | 67.9% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

***Source: Survey Data, 2006*** ***chi-square statistic = 140.622, with p-value<1%***

According to the above table, MWRA who had without health education has the highest percentage (45.6%) do not make birth spacing. Sixty seven point seven percent of MWRA who has 3 times health care education has highest percentage for birth spacing. MWRA who had above 5 times health care education has highest percentage (67.9%) for birth spacing. After health care education chi-square statistics of 140.622, with '**p**'-value < 1%. According to the hypothesis (4), there is association between obtaining the frequencies of health care education and birth spacing (after) at (1%) significant level.

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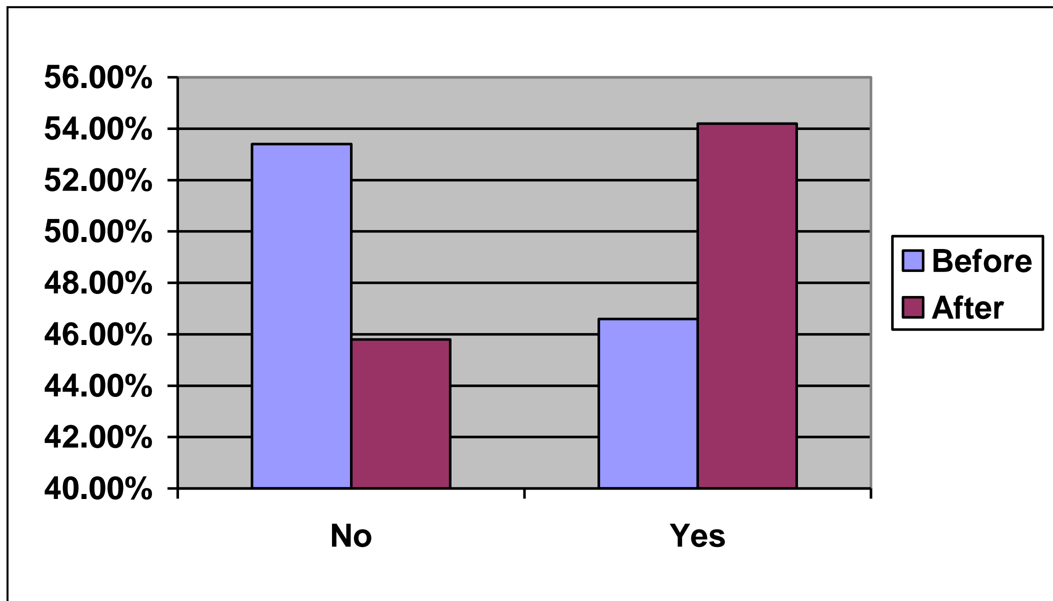
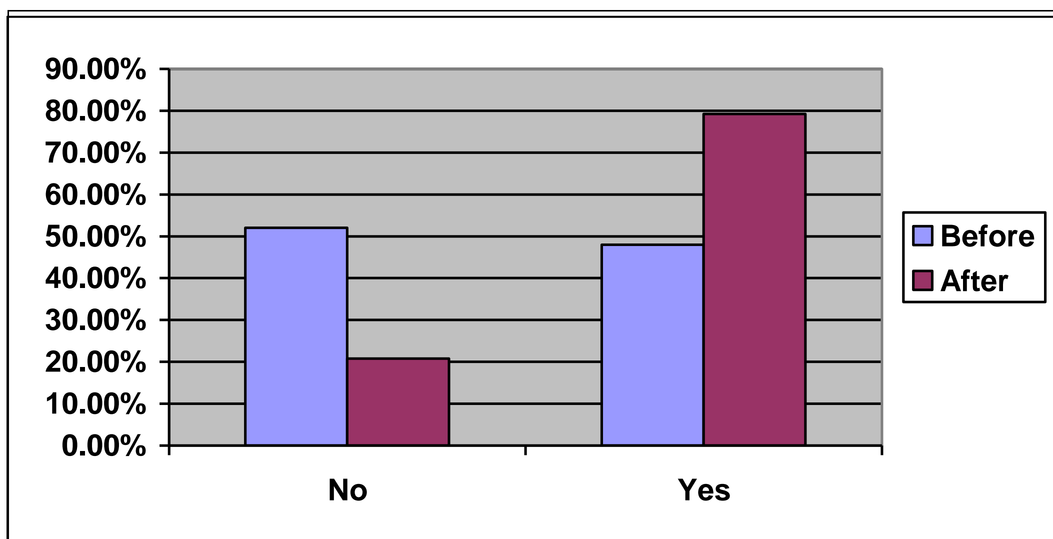
**Figure 3.10(a) The Change in Practice of Using Injection for Birth Spacing after 45 days of Delivery (Urban)**




*Source: Table (3.20)*

**Figure 3.10(b) The Change in Practice of Using Injection for Birth Spacing after 45 days of Delivery (Rural)**




*Source: Table (3.20)*

**Table 3.24 Frequency of Getting Knowledge from DOH**

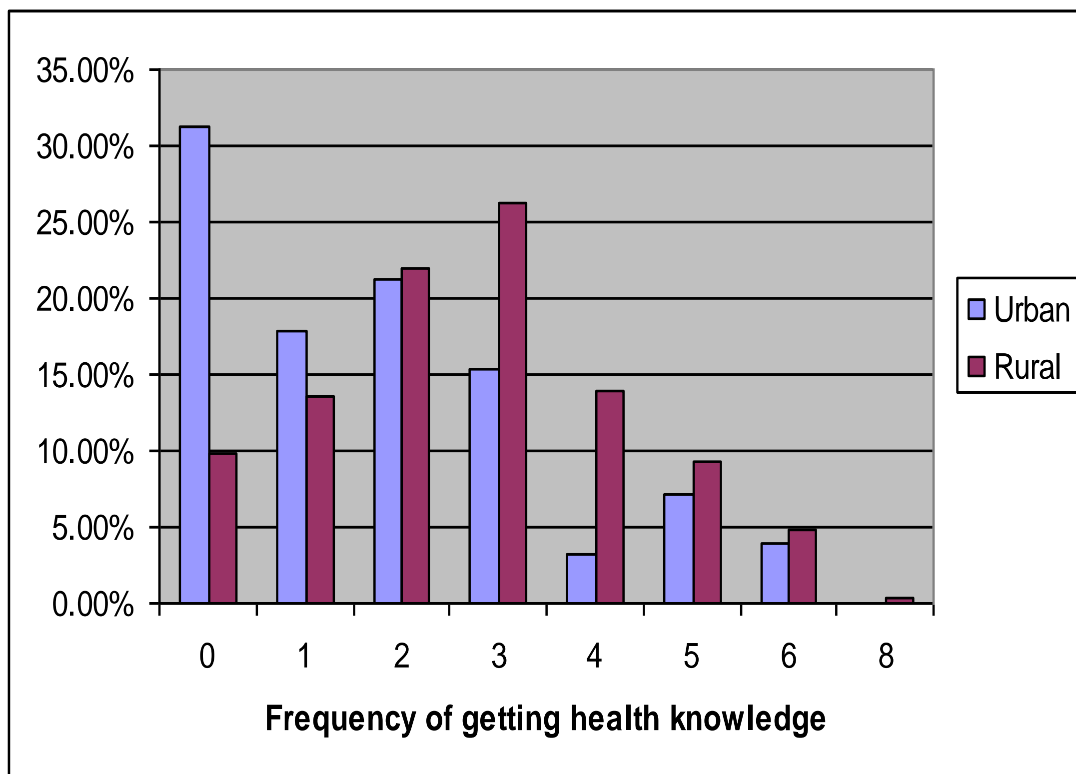
| Sr. No. | Frequencies of getting the health knowledge | Types of Region | | Total |
|---|---|---|---|---|
| | | Urban | Rural | |
| 1. | 0 | 79 | 34 | 113 |
| | | 31.2% | 9.8% | 18.9% |
| 2. | 1 | 45 | 47 | 92 |
| | | 17.8% | 13.6% | 15.4% |
| 3. | 2 | 54 | 76 | 130 |
| | | 21.3% | 22.0% | 21.7% |
| 4. | 3 | 39 | 91 | 130 |
| | | 15.4% | 26.3% | 21.7% |
| 5. | 4 | 8 | 48 | 56 |
| | | 3.2% | 13.9% | 9.3% |
| 6. | 5 | 18 | 32 | 50 |
| | | 7.1% | 9.2% | 8.3% |
| 7. | 6 | 10 | 17 | 27 |
| | | 4.0% | 4.9% | 4.5% |
| 8. | 8 | 0 | 1 | 1 |
| | | 0.0% | 0.3% | 0.2% |
| | Total | 253 | 347 | 600 |

***Source: Survey Data, 2006***

In urban area, 31.2% of MWRA do not get health education from DOH. Twenty one point three percent 21.3% of MWRA get the health knowledge two times from DOH. It is found that frequency above six times of obtaining knowledge is very few.

In rural area, 26.3% of MWRA, got the knowledge three times from DOH. The least of MWRA had health knowledge between six times and eight times in urban and rural area. It is most effective for MWRA who received more health care education regarding antenatal care and postnatal care. It is found that frequency of getting knowledge from DOH and MCWA in rural area is greater than urban area. In urban area, midwives from RHC closely supervise to the MWRA, the place where obtaining health education is near. In urban area, midwives can not closely supervise and unable to organize the MWRA to receive health care education because MWRA are more interested in their work.

**Figure 3.11 Frequency of Getting Knowledge from DOH**




***Source: Table (3.24)***

**Table 3.25 The Behaviour Change in following the Health Knowledge Obtained from DOH**

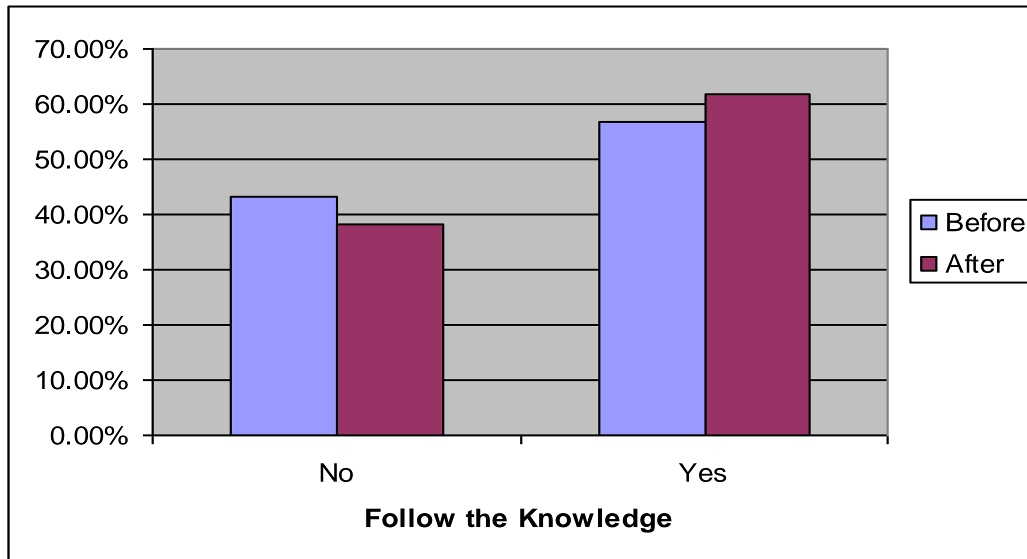
| Sr. No. | Follow the knowledge | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | No | 109 | 97 | 116 | 48 | 225 | 145 |
| | | 43.1% | 38.3% | 33.4% | 13.8% | 37.5% | 24.2% |
| 2. | Yes | 144 | 156 | 213 | 299 | 375 | 455 |
| | | 56.9% | 61.7% | 66.6% | 86.2% | 62.5% | 75.8% |
| | Total | 253 | 253 | 347 | 347 | 600 | 600 |

***Source: Survey Data, 2006***

In urban area, 56.9% of MWRA, follow the health knowledge obtained from health department before health care education. This percentage increased to 61.7% after health care education. This indicates that the impact of health care education on the behaviour of following the messages from the health care education . In rural area, 66.6% of MWRA followed the health care education. This percentage increased to 86.2% after health care education. It is found that behaviour change is more in rural area than in urban area because the MWRA in rural area obtain more frequent of health care education than in urban area in the study.

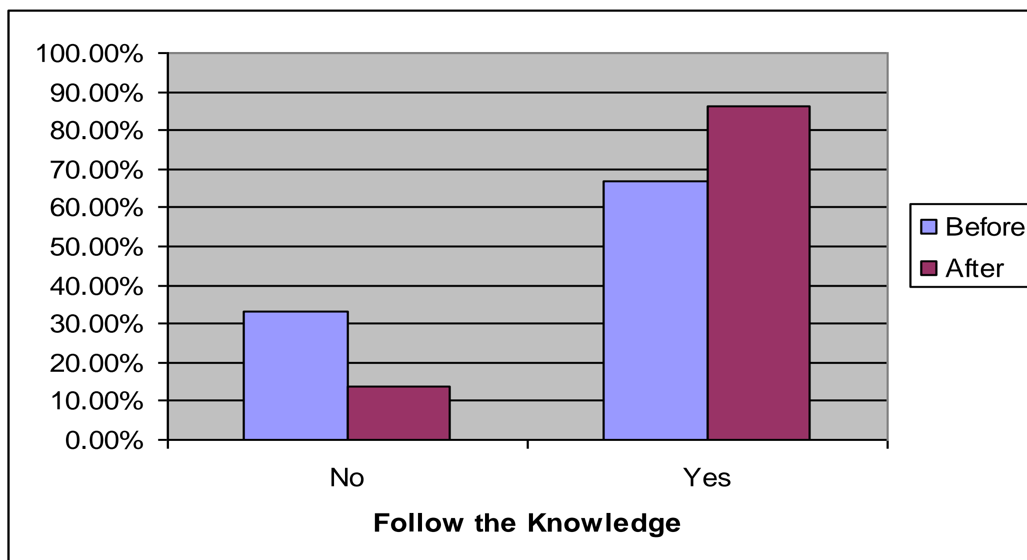
The impact of health care education on the practice and habit of following instructions and knowledge received from midwives or doctor or medical personnel by MWRA was assessed using '**Z**' test. With the computed '**Z**'test statistic of -5.008 and '**p**'-value much less than 1% , it could be concluded that the proportion of MWRA who follow instructions and use the knowledge received from midwives or doctors in the lives of MWRA before obtaining health care education is greater after obtaining health care education.

**Figure 3.12 (a) The Behaviour Change in Following the Health Knowledge Obtained from DOH (Urban)**




***Source: Table (3.25)***

**Figure 3.12(b) The Behaviour Change in Following the Health Knowledge Obtained from DOH (Rural)**




***Source: Table (3.25)***

After analysis of the product (idea, belief, attitude, tangible, intangible) then the next "P" (place) will be analysed.

### 3.2.2 Price of Antenatal Care and Postnatal Care

**Table 3.26 Time Required for Going to Health Centre**

| Sr.No | Time (hour) required for going to health center | Types of region | | Total % |
|---|---|---|---|---|
| | | Urban % | Rural % | |
| 1. | 10 minutes | 1.2 | 15.9 | 9.7 |
| 2. | 20 minutes | 43.1 | 16.4 | 27.7 |
| 3. | 30 minutes | 11.9 | 33.4 | 24.3 |
| 4. | 40 minutes | 19.0 | 26.8 | 23.5 |
| 5. | 50 minutes | 15.0 | 7.2 | 10.5 |
| 6. | 1 hour | 9.9 | 0.3 | 4.3 |
| | Total | 100 | 100 | 100 |

***Source: Survey Data, 2006***

In urban area, 43.1% of MWRA had taken 20 minutes to seek health care education from health center .The least time required is 10 minutes for going to health center. In rural area, 33.4% of MWRA had taken 30 minutes to seek heath care education from health center. On comparing between MWRA of urban and rural area, rural area had to pay more time than urban area to seek health care education, because rural health center is far away from their residences.

### 3.2.3 Place of Taking Delivery of Antenatal Care and Postnatal Care

Concerning with place of taking antenatal care and postnatal care, first place of delivery will be analysed as presented in Table.

**Table 3.27 Change in Place of Taking Delivery**

| Sr. No | Place of taking delivery | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | Home | 102 | 90 | 107 | 114 | 209 | 204 |
| | | 40.3% | 35.6% | 30.8% | 32.9% | 34.8% | 34.0% |
| 2. | Hospital | 57 | 71 | 18 | 60 | 75 | 131 |
| | | 22.5% | 28.1% | 5.2% | 17.3% | 12.5% | 21.8% |
| 3. | RHC | 4 | 3 | 23 | 39 | 27 | 42 |
| | | 1.6% | 1.2% | 6.6% | 11.2% | 4.5% | 7.0% |
| 4. | Not decided | 27 | 11 | 14 | 14 | 41 | 25 |
| | | 10.7% | 4.3% | 4.0% | 4.0% | 6.8% | 4.2% |
| 5. | Others | 44 | 45 | 65 | 19 | 109 | 64 |
| | | 17.4% | 17.8% | 18.7% | 5.5% | 18.2% | 10.7% |

***Source: Survey Data, 2006***

In urban area, 40.3% of MWRA, intend to deliver the child at home before health care education. This percentage decreased to 35.6% after health care education. However, 22.5% of MWRA deliver the children at hospital before health care education. This percentage increased to 28.1% after health care education. This indicates that the impact of social marketing strategy on the behaviour of place of delivery.

In rural area, 30.8% of MWRA intend to deliver at home before health care education. This percentage increased to 32.9% after health care education. In rural area 6.6% of MWRA, deliver the children at rural health center. This percentage increased to 11.2% after health care education. Five point two percent (5.2%) of MWRA deliver the child at the hospital in rural area. This percentage increased to 17.3% after health care education. This indicates the impact of social marketing strategy on the behavior of place of delivery. It is

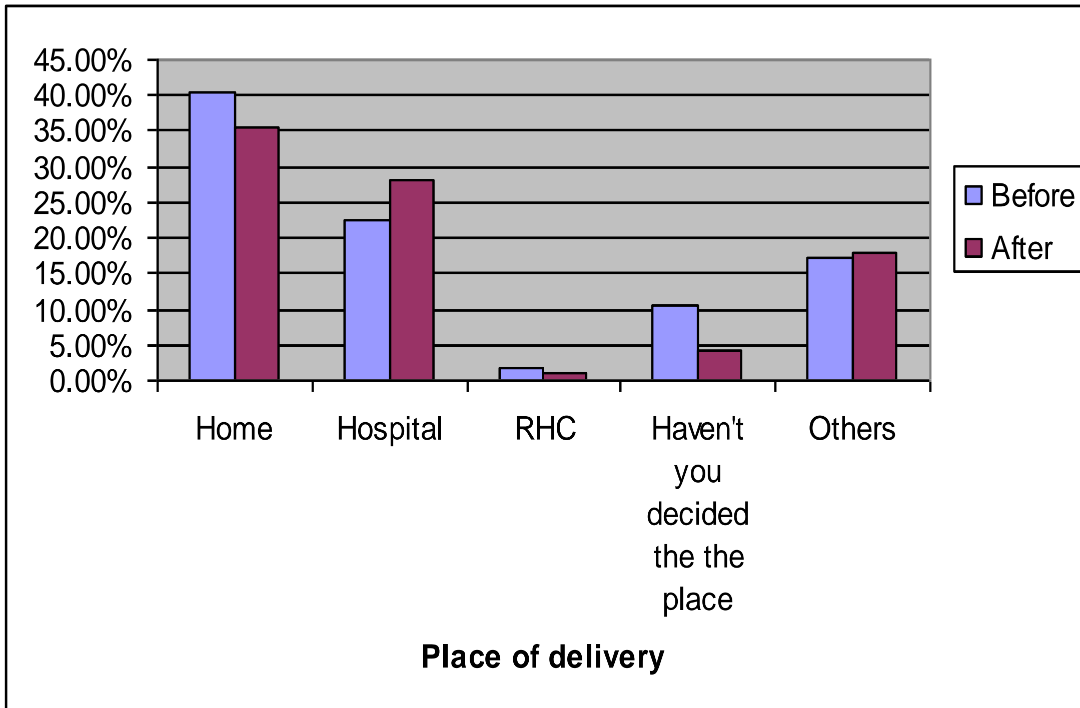
found that before health care education, majority of the MWRA deliver at home.

`An attempt has been made to assess the impact of social marketing of health care education on the place of delivery of MWRA after health care education. With the computed '**Z**' test statistic of -4.287 and '**p**'-value of less than 1%, it could be concluded that the proportion of the MWRA whose place of delivery was hospital after health care education was significantly greater than the proportion of the MWRA whose place of delivery was hospital before health care education. Similarly, with the computed '**Z**' test statistic of -1.8601 and '**p**'-value of delivery of RHC, it could be concluded that the proportion of the MWRA whose place of delivery was RHC after health care education was greater than the proportion of those MWRA before health care education. Therefore, social marketing of health care education had significant impact on the place of delivery of the MWRA after health care education.

It could be concluded that, the behaviour of practice of MWRA in rural area is in line with the health care education knowledge than urban area because rural health center has residence of midwives in the village and easily accessible by MWRA. So MWRA can get close attention by midwives during pregnancy.

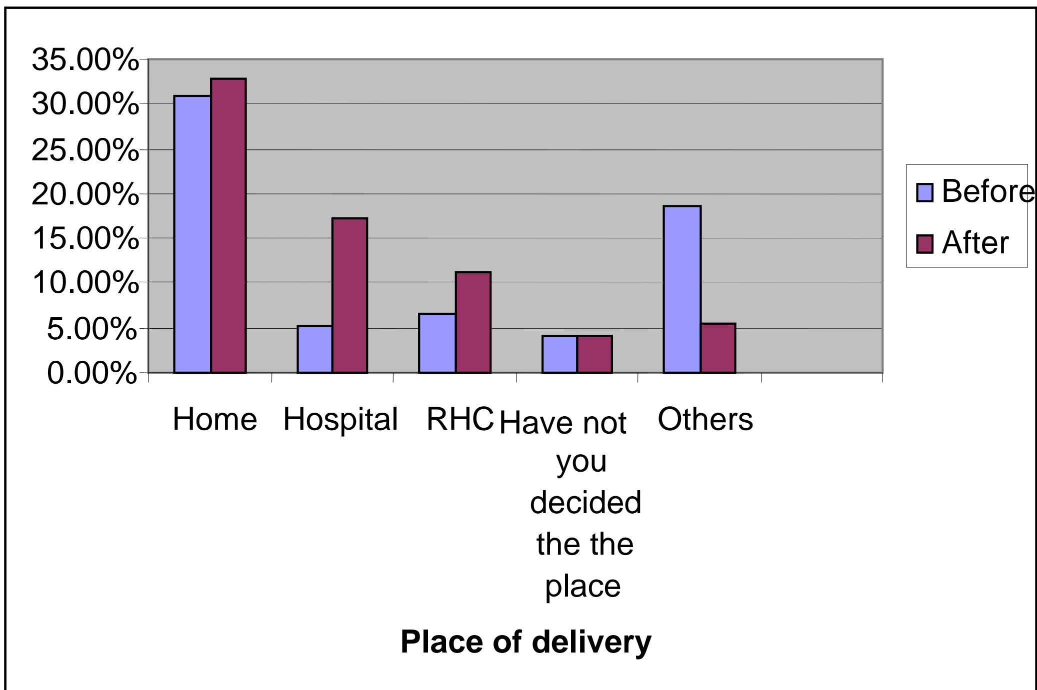
There is different behaviour change concerning maternal health care of MWRA of rural and urban area. The different being the degree or percentage of MWRA in showing the behaviour change.

**Figure 3.13(a) Place of Taking Delivery (Urban)**




*Source: Table (3.27)*

**Figure 3.13(b) Place of Taking Delivery (Rural)**




*Source: Table (3.27)*

**Table 3.28 Change in Place to Take Antenatal Care**

| Sr. No. | Place to take antenatal care | Types of region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | Maternal and child welfare association | 25 | 32 | 3 | 4 | 28 | 36 |
| | | 9.9% | 12.6% | 0.9% | 1.2% | 4.7% | 6.0% |
| 2. | Government hospital | 65 | 74 | 111 | 205 | 176 | 279 |
| | | 25.7% | 29.2% | 32.0% | 59.1% | 29.3% | 46.5% |
| 3. | Private hospital | 7 | 8 | 3 | 7 | 10 | 15 |
| | | 2.8% | 3.2% | 0.9% | 2.0% | 1.7% | 2.5% |
| 4. | Clinics | 43 | 44 | 40 | 75 | 83 | 119 |
| | | 17.0% | 17.4% | 11.5% | 21.6% | 13.8% | 19.8% |
| 5. | Others | 108 | 78 | 157 | 48 | 265 | 126 |
| | | 42.7% | 30.8% | 45.2% | 13.8% | 44.2% | 21.0% |

***Source: Survey Data, 2006***

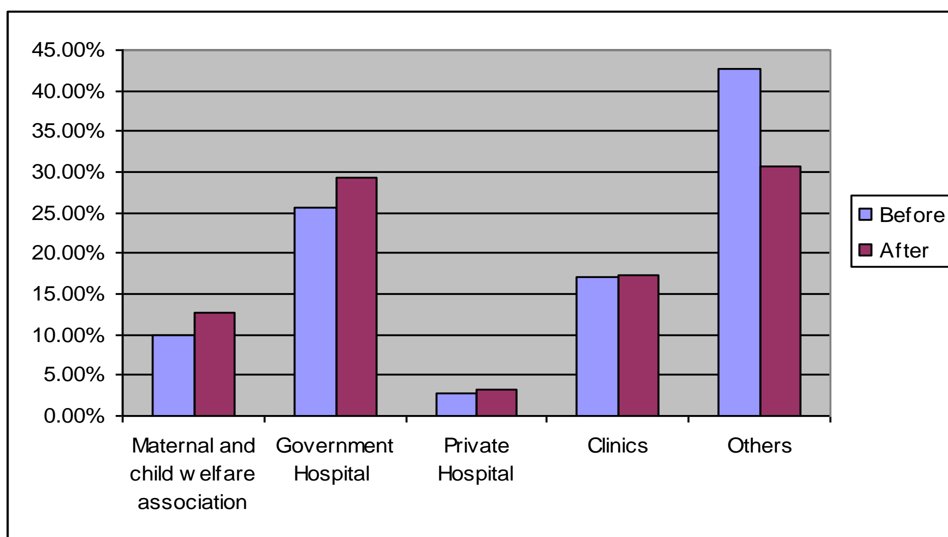
In urban area, 25.7% of MWRA, take antenatal care from government hospital before health care education. This percentage increased to 29.2% after health care education. This indicates that there exists impact of social marketing strategy on the behaviour of place to take antenatal care.

In rural area, 32% of MWRA, take antenatal care at government hospital before health care education. This percentage increased to 59.1% after health care education. It is found that social marketing strategy had impact on the behaviour of place to take antenatal care. There were, very few who take antenatal care at maternal and child welfare association in rural area. Thus, maternal and child welfare association needs to promote antenatal care activity.

Assessment of health care education on the place where pregnancy care was taken by the MWRA was carried out using '**Z**' test procedure. With the

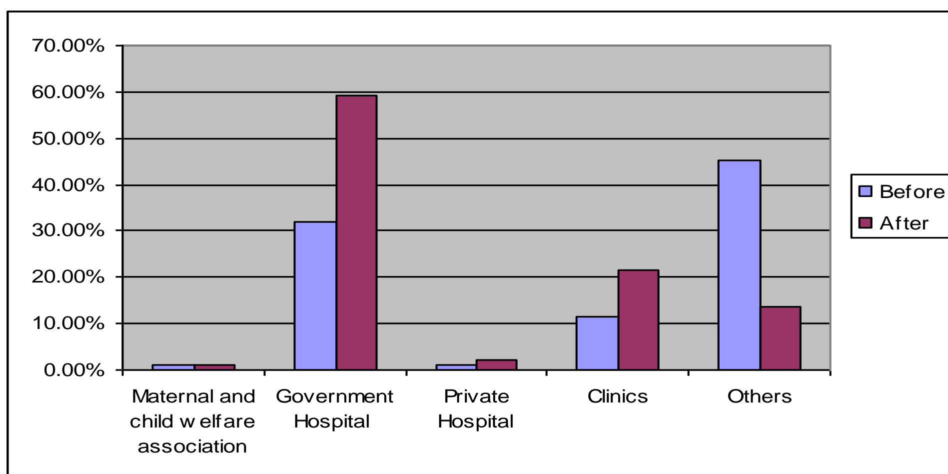
computed ‘**Z**’ test statistic of -6.1284 and ‘**p**’-value of less than 1%, it could be concluded that proportion of the MWRA who took the pregnancy care from the government hospital after social marketing of health care education was significantly greater than the proportion of those MWRA before health care education. Therefore, social marketing of health care education had significant impact on the place where pregnant care was taken by MWRA.

**Figure 3.14(a) Place to Take Antenatal Care (Urban)**




***Source: Table (3.28)***

**Figure 3.14(b) Place to Take Antenatal Care (Rural)**




***Source: Table (3.28)***

After analyzing the place to take antenatal care then the next source of media will be analyzed.

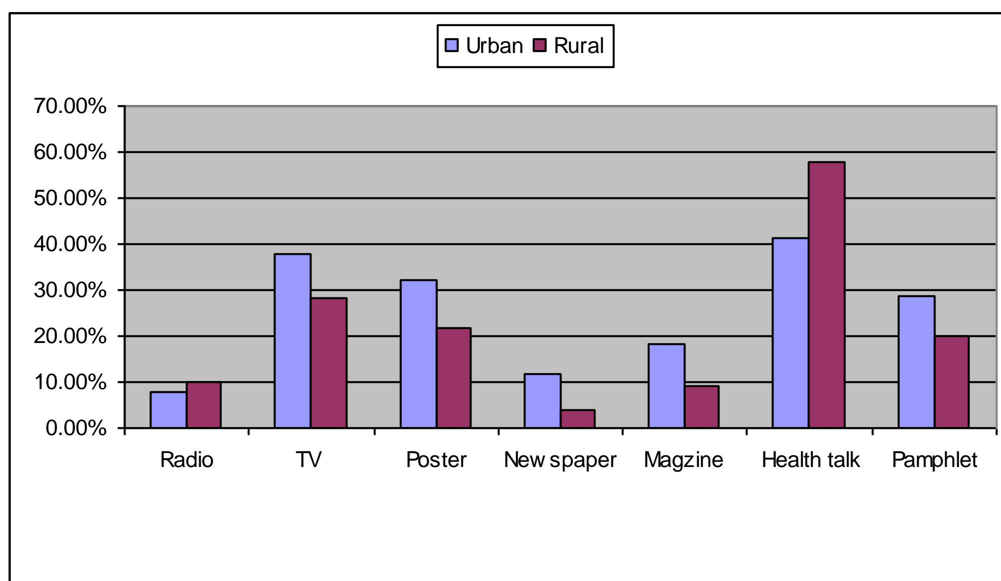
### 3.2.4 Promotion for Antenatal Care and Postnatal Care

**Table 3.29 Source of Media**

| Sr No | Source of medias | Types of Region | | Total % |
|---|---|---|---|---|
| | | Urban % | Rural % | |
| 1. | Radio | 7.9 | 9.8 | 9.0 |
| 2. | TV | 37.9 | 28.2 | 32.3 |
| 3. | Poster | 32.0 | 21.9 | 26.2 |
| 4. | Newspaper | 11.9 | 4.0 | 7.3 |
| 5. | Magazine | 18.2 | 9.2 | 13.0 |
| 6. | Health talk | 41.1 | 57.9 | 50.8 |
| 7. | Pamphlet | 28.9 | 20.2 | 23.8 |

***Source: Survey Data, 2006***

**Figure 3.15 Source of Media**




***Source: Table (3.29)***

According to the above table, 41.1% of MWRA in urban area, get health care education from health talks. It is found that only 7.9% of MWRA, get health care education from radio. Thus, social marketer needs to use many ways of media to deliver health care education to target adopter.

In rural area, 57.9% of MWRA, get reproductive health education from health talk. It is found that 4% of MWRA, get health care education from newspaper. Social marketer needs to apply various media to deliver reproductive health care education to target adopter groups.

After analyzing the source of media, then promotion of antenatal care and postnatal care will be analysed.

**Table3.30 Gaining Knowledge from the Mottos of Myanmar Maternal and Child Welfare Association**

| Sr. No | Gaining knowledge from the mottos of MMCWA | Total | |
|---|---|---|---|
| | | Before | After |
| 1. | Breast-Feeding for health of newly born child (motto.1) | 68.0% | 83.2% |
| 2. | Prevent disease with vaccine, giving loving kindness upon children (motto.2) | 77.5% | 84.5% |
| 3. | Tender and warm treatment on newly born child (motto .3) | 72.0% | 82.5% |
| 4. | Pregnancy is special, let's save life (motto.4) | 71.3% | 82.8% |
| 5. | Birth spacing for happy and health family (motto.5) | 66.5% | 79.2% |
| 6. | Give treatment for health of reproducing (motto. 6) | 63.0% | 77.3% |

***Source: Survey Data, 2006***

All of the MWRA, 77.5% of MWRA had already known the motto (2), before health care education. This percentage increased to 84.5% after health care education. However, 68% of MWRA had already known the motto (2). This percentage increased to 84.5% after health care education. Most of the

MWRA, have already known the entire motto after health care education. This indicates the impact of motto of social marketing on obtaining the knowledge of reproductive health.

After analysis of the 4Ps (product, price, place, and promotion) of social marketing, then the extra Ps (person, process, physical and purse string) will be studied.

### 3.2.5 Social Marketing the Extra "Ps"( Person, Process, Physical and Purse String

**Person**

**Table 3.31 Change in the First Person Approached by MWRA for their Antenatal Care**

| Sr No | The first person approached by MWRA | Types of Region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | Traditional birth attendant | 60.5% | 64.4% | 60.2% | 79.3% | 60.3% | 73.0% |
| 2. | Auxiliary midwives | 34.0% | 9.9% | 27.4% | 8.6% | 30.2% | 9.2% |
| 3. | Midwives | 44.7% | 49.0% | 43.2% | 64.3% | 43.8% | 57.8% |
| 4. | Doctor | 20.6% | 20.2% | 5.5% | 17.0% | 11.8% | 18.3% |
| 5. | Others | 19.8% | 14.2% | 30.8% | 4.0% | 26.2% | 8.3% |

***Source: Survey Data, 2006***

`In urban area, 60.5% of MWRA had firstly approached to traditional birth attendant during pregnancy before health care education. This percentage increased to 64.4% after health care education. Twenty point six percent (20.6%) of MWRA had firstly approached to doctor before health care education. This percentage decreased to 20.2% after health care education.

However, 44.7% of MWRA had firstly visited midwives before health care education. This percentage increased to 49% after health care education in urban area. Thus, in urban area, social marketer needs to improve their approach to change the behaviour of MWRA to approach to the doctors or midwives for antenatal care.

In rural area, 60.2% of MWRA had firstly approached to traditional birth attendant before health care education. This percentage increased to 79.3% after health care education. 5.5% of MWRA had firstly approached to doctor before health care education. This percentage increased to 17% after health care education. There are 64.3% of MWRA who firstly approached to midwives after health care education. It is found that the behaviour change in rural area is more consistent with the given knowledge than urban area.

An attempt has been made to assess the impact of social marketing of health education on the person seen at the first visit of MWRA for antenatal care. With the '**Z**' test statistic of -3.072 and '**p**-value of 0.0011 it could be concluded the proportion of the MWRA who had seen the midwives for antenatal care after health care education was significantly greater than the proportion of the MWRA before health care education. Similarly, with the computed '**Z**' test statistic -3.0721 and '**p**'-value of 0.0011ess than 1%, it could be concluded that the proportion of MWRA who had seen doctor for their antenatal care after health care education was significantly greater than the proportion of those MWRA before health care education. Therefore, social marketing of health care education had impact on the type of persons seen by the MWRA for their antenatal care.

**The First Person approached by MWRA in taking Antenatal Care:**

The first person by whom MWRA, got suggestion to take antenatal care can be doctors (or) midwives (or) auxiliary midwives (or) the traditional birth attendant. It is shown in Table 3.32.

**Table 3.32 Change in the First Person who Suggest MWRA to Take Antenatal Care**

| Sr No | The first person who suggest MWRA to take antenatal care | Types of Region | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Urban | | Rural | | | |
| | | Before | After | Before | After | Before | After |
| 1. | Traditional birth attendant | 5.9% | 4.3% | 7.2% | 4.9% | 6.7% | 4.7% |
| 2. | Auxiliary midwives | 1.6% | 1.2% | 4.0% | 9.5% | 3.0% | 6.0% |
| 3. | Midwives | 30.8% | 39.5% | 36.0% | 56.8% | 33.8% | 49.5% |
| 4. | Doctor | 15.4% | 16.6% | 4.3% | 14.7% | 9.0% | 15.5% |

***Source: Survey Data, 2006***

In urban area, 30.8% of MWRA take antenatal care from midwives. However, 16.6% of MWRA, take antenatal care from doctor after health care education. In rural area, 36% of MWRA, take antenatal care of midwives before health care education. However, 4.3% of MWRA take antenatal care from doctors. This percentage increased to 14.7% after health care education. Thus, social marketing strategy had impacts on the behaviour change of MWRA in Monywa Township. It is found that there is very few who take care from traditional birth attendant after health care education.

## Process

Health talk is the major process by which DOH and MCWA deliver the reproductive health care education to the MWRA in Monywa Township. Health talk is disseminated to the MWRA by doctors, LHV midwives and volunteer health worker.

**Physical**

Reproductive health service is an intangible product. Thus, the product can not remain in the mind. There are some of the supporting physical (tangible) items to support the reproductive health knowledge such as pamphlet, and knowledge booklet.

**Purse string**

Social marketers need to raise funds to effectively deliver the knowledge and sustainability of the institution. For that purpose DOH and MCWA co-operate and network with like minded organizations to attain sustainable development in the long term. There are social marketing models such as NGO model, manufacturing model, variation and hybrid model. DOH and MCWA get donation from (UNICEF and UNFPA) concerning reproductive health service. According to the NGO model, donated products are sold at prices to cover marketing and distribution cost. This model is used in less developed countries. The NGO model offer flexibility in all aspect of the marketing mix. However, this model rely on donated fund, increase cost recovery, so it needs to improve financial sustainability. DOH and MCWA used the NGO model. They still rely on NGO support.

Variation and hybrid model expands supply to meet demand. However, $NGO_S$ are developing their own entrepreneurial capacity. To increase financial and institutional sustainability DOH and MCWA can apply this model to find fund and sustainable development. Nowadays most of the social marketers apply variation and hybrid model, which is NGO based but not abide by a particular model.

# CHAPTER IV

# FINDINGS AND DISCUSSION

Chapter 3 presents the data obtained from the survey. From the demographic data of the survey the general profile of the respondents can be drawn as follows. There is no difference between the socio-economic situation of MWRA in this study between urban and rural area. Most of the respondents were in the age group of 25-39 years with the education of primary level, dependents, non income earners and their husbands were low income earners. So their socio-economic situation can be designated as low. Thus one can definitely say that this study group will need health care education or rather there is a necessity for social marketing.

In social marketing process of this study, health talks are most frequently used as a tool followed by radio and poster. This is not a surprising fact as the educational level of MWRA were quite low and thus may not read news paper and magazine which were not easily accessible for them; for health talk to be conducted, personnel from DOH and MCWA in Monywa Township had to arrange advocacy meeting first with the local authorities. These local authorities then arranged for talks to be held such as sending out invitations, arranged places etc.

The data from section A concerning products revealed that some of MWRA do have some knowledge even before receiving health care education. They may receive the knowledge from the parents and relatives, Myanmar families as every one is aware of is mostly extended type and is usually a close knit family. The mothers, aunts, and other elders in the family passed on their experience to the young expectant mothers. In both urban and rural area, the MWRA had their first ante-natal care in different months. There was an increase in percentage to have first ante-natal care at the second month but still it is not cent-percent. It could be due to personal factors such as not having enough time and could not leave home

as they wish to. Regarding danger signs of pregnancy MWRA from both urban and rural had knowledge of the danger signs. After receiving health care education there was a marked increment in the percentage of responses of MWRA from rural area than from the MWRA from urban area.

Another element of product is the attitude of MWRA toward pregnancy. Most of the MWRA attitude towards pregnancy even before attaining health care education is “important” and “very important”. This showed very vividly that most of MWRA regarded pregnancy as a serious matter. However there are still some MWRA who responded that it is not important. It could be due to their personality, who never made a fuss about themselves or may be due to lack of knowledge. In urban area, even after attaining health education 26% of MWRA still regarded pregnancy as not important and there was a decrement in percentages in responding “important” and “very important”. As for the MWRA in rural area, there was a marked increase in percentage of responding ‘very important’ and decrement in “not important” at all. Thus one can definitely state that impact of social marketing is found only in rural area concerning the attitude toward pregnancy.

Regarding “belief” there was the occurrence of change in both rural and urban areas. However the finding is that is change in urban area of the belief that ante-natal care is “important" but it is a negative change. There was a decrement in percentage after attaining health care education. The responses of "very important”, "Important” and an increment at “not important” at all. It could be due to the ineffective communication between the social marketer and the target adopter. The marketer may state that there is nothing to be afraid of being pregnant for assurance and the target adopter may misunderstand that antenatal care is not important. As for the respondents in rural area there was positive change, the percentage of “very important” responses 20.5% increased to 53.8 % after health

care education. Careful studying of the results revealed that the MWRA had enough knowledge to deliver their children in a clean place; to approach the knowledgeable person or rather an expert and to follow the instructions of doctors. The MWRA were given the knowledge that they must breastfed their baby immediately or “within half an hour after delivery”. There was not much change in the behaviour of MWRA but there is a positive change of behaviour in rural area. The idea of an element of product reached the MWRA of rural area although for MWRA in urban area it is not so. The percentage of mothers to breast fed their children decreases in “immediately” and increases in “with in half an hour” but again decreases markedly in “after half an hour”.

To sum up the findings on the product in this social marketing process one can state that there is impact of social marketing on the behaviour of MWRA although same behaviours did not change. This could be due to various factors like really paying attention to health talks, and having a strong original belief every one is aware of. To change a belief is not an easy task and one factor the social marketer must pay attention to. Another revealing factor is although the education level was the same for MWRA from both rural and urban MWRA from rural area followed the instruction more than those from urban area. This showed the simplicity of people from rural area, who will think highly of people whom they regarded as more knowledgeable than them.

The second 'P' in social marketing is the “price” and in this process the time (number of hours) required to go to health care centre is designated as the price. Health talks were given mostly at places where it is easily accessible but in urban area 15.0% of MWRA had to take 50 minutes to reach the centre and 9.9% took one hour to reach there. In rural area, only 0.3% took 1 hour and 7.2% took 50 minutes. This could be one reason that social marketing is more effective in rural area.

As for the “place” of deliveries the health care education most of health talk are conducted at the rural or urban health center. So, it depends on the location of the health care center for the convenient of the MWRA in that area to attend the health talk.

The fourth 'P' in social marketing is “promotion”. The tools used in this process as mentioned in the previous chapter are health talks, TV videos, radio, poster, pamphlets, newspaper and journals. Among these, most of MWRA attained health care education from health talks. The Ministry of Health in collaboration with NGOs are striving their best to reduce infant mortality, and maternal mortality and these are done through social marketing. However it is HIV/AIDS that got more attention than safe delivery in reproductive health. More attention should be given for the behaviour change of MWRA as most of MWRA still lack knowledge of the importance of antenatal and post natal care.

In every culture there are norms and beliefs. Norms which are standard of desirable behaviour of the society are easy to change. But belief which is a statement about reality that people accepted as true is hard to change. Thus the magnitude of the impact of social marketing will not be high.

However this study meets the objective stated in chapter 1. This study showed the knowledge of MWRA reproductive health and it was found that existing knowledge is not enough but should be enhanced. The findings also identified the behaviours of MWRA concerning maternal health care. The social marketing strategies were studied and analyzed and had identified the gaps that need to be promoted.

The following are some of the gaps that need to be changed for the success of social marketing.

**Concerning Product**

The social marketers in this case study are midwives and doctors when they were disseminating knowledge or rather sending messages some of their vocabulary are technical and not easily understandable by MWRA for example they talk about tetanus without complaining what tetanus is . It is not only in health educational talks but also in the brochure. Some are illiterates, thus they cannot read. No doubt there are illustrations but it is not clear what it meant to say. Thus, social marketers should use the simple language which market adopters could understand.

Health care education talks were held almost monthly at places where it is needed most. They passed on messages not only on RH but also regarding different topics such as malaria, diarrhea, negative consequences of smoking etc. Because of the procedure, the MWRA received messages on how to take care of themselves during pregnancy and or after delivery. Because of this factor, there is not much impact of social marketing for social marketing to be effective more talks on the same topic should be conducted. Social marketing tools used nowadays are mostly health education talks, pamphlets, brochures, TV and video clips. It is just a one way procedure. For instance, the marketer will talk to a large audience who were passive and did not participate in the discussion .There is really a need to motivate them to talk care of themselves and also to find out the problem they are facing and helping them to solve them. Thus instead of simply holding health talks, there should be a small group discussion where the marketer can really explain to them and will thus motivate them more in following instructions for safe delivery . MCWA, social marketer in this study have very painstakingly developed mottos on safe delivery for MWRA. It was found in this study that MWRA , the target adopters are quite ignorant of it Thus, the township MCWA should try ways and means to enhance the awareness of MWRA regarding the mottos and explain the in depth meaning of their mottos.

**Concerning Price**

The social marketers, the midwives mostly go around the village by bicycles and make house to house visit , to pregnant mothers and give health care education . It was found to be effective but the midwives are now facing the problem of the unavailability of new bicycles and also the financial problem of maintaining the old one. Thus, provision of transportation for the social marketers is a most.

Although normal birth delivery is not a problem in the village sometimes complication arises during delivery. If such cases takes place, the midwives faced the problem of shifting the patient to a hospital because of the lack of transport, Thus, social marketers should raise the awareness of this problem in the village community and helping them to have to draw a plan to have transport (eg. bullock cart, or a boat) in care of emergency. Health care educational talks are the most common tool used in social marketing in this study. They are usually held in a village and all the MWRAs from other villages had to go there. The villages sometimes are quite far a part and not an easy walking distance. Thus transport should be provided for MWRAs from other villages to attend health talks.

**Concerning Place**

Health care educational talks are mostly held in big villages in rural areas. Poster are put up in urban areas, brochures are also distributed in urban area. Thus MWRA in rural areas do not have easy accessibility to health care education. Social marketers should be aware of this fact and provide the tools for easy accessibility. MWRA in both rural and urban area are usually busy with their housework and thus could not give their time to go to places to receive health care education during the day. Thus social marketers should choose places where MWRA could easily receive health care education.

**Concerning Promotion**

One of the social marketing tools used in promoting reproductive health is disseminating knowledge through mass media. However, in Myanmar, there are only two channels in radio and four (one added recently) channels in television and it is not shown the whole day. Thus, video plays and clips can be displayed only for a certain amount of time and not enough sink in and internalized by MWRA. Thus, more time should be allotted for health education. When MWRA are invited to attend a health care education talk, they are quite reluctant to do so as they feel it is a waste of time. But when there are incentives offered such as distribution vitamins the attendance is high. Thus, incentives should be given for the first two or three talks and motivate them to become interested motivated .Although IEC materials have been distributed, these have not reached to all population at the grass root level. More IEC materials, simple but attractive, should be provided.

**Concerning Persons**

For effective social marketing, social marketers must be efficient and knowledgeable not only in the subject but must have good communication skills. Thus, training workshops should be held to have trained social marketers. Social marketers should do follow-up on the target's behavior to see if there is really change in behavior.

At present social marketers are doing social marketing without curriculum or manual. These should be developed by holding seminars and workshops.

# CHAPTER V
# CONCLUSION

It can generally be concluded that the social marketing strategy for behaviour change of the reproductive health applied by the DOH in collaboration with MCWA in Monywa Township is effective.

`The findings proved that most of the reproductive health knowledge and practices delivered are accepted by the MWRA in Monywa Township. Although some of the target adopters did not have the knowledge before, their behaviour changed after obtaining the knowledge from health talks and the promotional tools applied by DOH and MCWA of Monywa Township.

Effectiveness of the knowledge delivery is proved by the increased number of MWRA in behaviour change of the target adopters after obtaining the knowledge. But the effectiveness was found more in rural than urban areas. Thus the role of social marketing or marketing strategy for behaviour change could be observed in this study. But there are rooms for improvement to be made for future programs to be better and more effective. The improvements can be made based upon some of the findings concerning with the marketing tools applied in present situation. The suggestions and recommendations for the future programs are concerned with the factors to be practiced by the change agents of DOH in collaboration with the MCWA for the convenience of the target adopters. The objective of social marketing focuses on the convenience of the target adopters in obtaining the required knowledge, attitude, belief and practice and hence lead to the behaviour change accordingly. The product in this case is the idea, attitude, belief and practice concerning the reproductive health. The need is the right fit with the target adopters since there is the problem of lack of knowledge of reproductive health in that area. There are some suggestions for improvement concerning with the price, place, promotion, person and purse strings.

## Recommendation and suggestions

Recommendation and suggestions to the social marketers or change agents, DOH in collaboration with MCWA concerning the delivery of reproductive health knowledge and education more effectively and efficiently to the target adopters are mentioned as follows:

### Concerning Product

- social marketers, personnel of the respective organizations such as doctors and midwives need to use the language which is suitable or can be easily understood by the target adopters in delivering the health knowledge;
- give health care education frequently to all the target adopters and more frequently to those whose level of knowledge is low;
- need to motivate and find out the problems of MWRA and give idea to solve them;
- The Township MCWA should make the MWRA aware of the mottos concerning reproductive health;

### Concerning Price

- provide transportation for staff to make their rounds to villages for which they are responsible as it is unavailable in many places. This kind of provision will support the convenience of the target adopters;
- provide antenatal care and referral of high risk cases, conduct home deliveries, provide postnatal care health education;
- arrange transport facilities (such as bullock carts, horses, bicycles in rural area: cars, bicycles, motor cycles in urban area) for MWRA to get health care education;

### Concerning Place

- give health care education near the residence of public, for easy accessibility. Choice of the right place also support to minimize the time cost for the target adopters;
- provide maternal health care knowledge either directly to women in their residences or at central village locations, such as village leaders' house. Activities including progress monitoring, immunization, antenatal care and postnatal care in rural areas should also be confined to such places.

- health officers, doctors and nurses under the guidance of MCWA should go to villages and give antenatal care and postnatal care services;
- need to open hospitals, clinics where they can treat easily to the patients referred from urban health center and rural health center for high risk cases;

**Concerning Promotion**

- the Township MCWA should extend media-work to educate about reproductive health. It should be educated through TV, radio, magazines and newspaper;
- for the upgrade of knowledge on antenatal and postnatal care, some kind of incentive or tactic should be used in educating the MWRA;
- pamphlets on antenatal and postnatal care should be delivered to MWRA and also widely propagated through media such as TV, radio, newspapers, periodicals or magazines;
- MCWA are required to give some gifts (such as food, key chain, calendar, stationary, accessories) to the MWRA as incentives for them to listen to health talk in urban and rural health centers in addition to pamphlet;
- need to provide IEC (Information, Education and Communication) material enough in urban and rural area;
- need to analyse the campaign, health talk, pamphlet and booklet in delivering health care education to the target adopter to make improvements in future program;
- the Township MCWA should prepare programmes for education about reproductive health systematically and should educate MWRA in their villages;

**Concerning Persons**

- social marketers such as doctors, midwives and health personnel need to be skillful not only in their profession but also in the skills such as communication skills, technical skill and interpersonal skills or human skills to deliver health care education effectively to the MWRA in urban and rural area;
- the health officer should explain about antenatal care to the MWRA till they realise the importance of it at the first visit to Health Centre;
- take time on educating health knowledge on MWRA enthusiastically;

- undertake educating MWRAs till their knowledge can lead to behaviour change;
- during antenatal period and postnatal period, the health officer should persuade the MWRA to rely on government hospitals or clinics and not to rely on traditional birth attendants;
- to provide skillful person and to develop training material to improve antenatal care and postnatal care services;
- to provide enough training cost to trainees and trainers;
- attempt to deliver health education concerned with the antenatal care and postnatal care comprehensively to understand within the short duration to reduce time cost;

**Concerning Purse Strings**

- to conduct fund raising activities to get donation from donor organizations
- need to attract donors by disseminating from mass medias regarding activities concerning delivery of health care education undertaken by the Department of Health and MCWA;
- Department of Health and NGO(s) can not rely on donors' fund forever that systematic reproductive health programs are required for the sustainable development in the long term. So they should adopt practices like those of social enterprise;
- need to use fund raising methods in combination with cost sharing;

The idea of social marketing highlights the importance of the awareness of the social problem; the root of the problem, the tools to solve the problem and ways and means of educating those who do not have the required knowledge. It will be more effective for the change agent/social marketers to be aware of and understand the idea of marketing strategy and it’s tools and apply it accordingly in their knowledge delivery programmes.

The health delivery program should be prepared for the convenience of the target adopters by all means. According to the marketing concept the cost or price they have to pay in terms of money, time and emotion, must be the amount they are willing to offer or exchange. Based on consideration of things such as place,

promotion and the other “Ps” arrangements are to be determined accordingly in preparing the program. Findings and suggestions based upon the survey conducted in Monywa Township, proved the effectiveness and the impact of the application of marketing strategy for behavior change program of MOH. Further improvement in the program will lead to the cent percent acceptance of the health care education and behavior change of MWRA. It also proved the role of MCWA in implementation of the behavior change program which is the vital issue for the human resource development of the whole nation.

# Appendix; Questionnaire

## Study of the result of Strategies that are used to change social behaviour

Name of interviewer - ----------------------- Serial No. - -------------------

Date of interview - ----------------------- Township - -------------------

Place of interview - ----------------------- ward/village - -------------------

## The Questionnaire for Mothers' Health Care

### (A) The Background of the Socio-economic Situation of the Respondent

1. Name - -----------------------

2. Age - -----------------------

3. Educational Qualification

| | | |
|---|---|---|
| (a) Illiterate ☐ | (d) Middle ☐ | (g) Graduate ☐ |
| (b) Literate ☐ | (e) High ☐ | (h) Post graduate ☐ |
| (c) Primary ☐ | (f) High school pass ☐ | (i) Others ☐ |

4.(a) Respondent's Occupation

| | | |
|---|---|---|
| (1) Government Servant ☐ | (4) Dependant ☐ | (7) Husbandry ☐ |
| (2) Company Staff ☐ | (5) Casual worker ☐ | (8) Others ☐ |
| (3) Trader ☐ | (6) Agriculture ☐ | |

4.(b) Husband's Occupation

| | | |
|---|---|---|
| (1) Government Servant ☐ | (4) Dependent ☐ | (7) Husbandry ☐ |

| | | | |
|---|---|---|---|
| (2) Company Staff ☐ | (5) Casual worker ☐ | (8) Others ☐ |
| (3) Trader ☐ | (6) Agriculture ☐ | |

5. Presently married Yes ☐ No ☐

6. Married Year ( ) , Age ( )

7. (a) Family income ( )

   (b) Respondent's income ( )

**(B) <u>The State of the giving birth of the pregnant respondent</u>**

8. Respondent's (a) Age at first child birth ( ) year

   (b) Age at second child birth ( ) year

   (c) Age at third child birth ( ) year

   (d) Age at fourth child birth ( ) year

   (e) Age at other's child birth ( ) year

9. The frequencies of pregnancy ( )

10. The frequencies of birth ( )

11. Total number of the alive birth child ( )

12. Number of presently living children ( )

13. Age of the youngest child ( )

14. If you have an abortion, how many times will you have ( )

15. The cause of the abortion

(a) -----------------------------

(b) -----------------------------

(c) -----------------------------

**(C) Knowledge of maternal care**

16. Where do you get the knowledge concerning with maternal care?

| | | | |
|---|---|---|---|
| (a) Radio ☐ | (d) Newspaper ☐ | (g) Pamphlet ☐ |
| (b) Television ☐ | (e) Magazine ☐ | (h) Others ☐ |
| (c) Poster ☐ | (f) Educative seminar ☐ | |

17. Before getting this knowledge

(a) The number of alive delivery child ( )

(b) Present number of alive child ( )

(c) The number of the abortation ( )

18. After getting this knowledge

(a) The number of alive delivery child ( )

(b) Present number of alive child ( )

(c) The number of the abortation ( )

19. Do you know the organization of the maternal care?

| | Before | After |
|---|---|---|
| (a) Maternal and Child Welfare Association | ☐ | ☐ |
| (b) United Nations International Children Emergency Fund | ☐ | ☐ |
| (c) Health Department | ☐ | ☐ |

(d) Others ☐ ☐

**(D) <u>Practice of knowledge in maternal care</u>**

20. (a) First visit to midwives (or) expert before getting the knowledge about maternal care

second month ☐ third month ☐ fourth month ☐

fifth month ☐ others ☐

20. (b) First visit to midwives (or) expert after getting the knowledge about maternal care

second month ☐ third month ☐ fourth month ☐

fifth month ☐ others ☐

21. (a) Do you take a preventive injection during your pregnancy before getting the health knowledge?

Inject ☐ Not Inject ☐

21. (b) After getting the health knowledge

Inject ☐ Not Inject ☐

21. (c) Do you know the kind of the injection that you have taken?

Yes ☐ No ☐

(<u>Yes</u>)

| | | Before | After |
|---|---|---|---|
| (i) | Tetanus Drug | ☐ | ☐ |
| (ii) | Iron tables | ☐ | ☐ |
| (iii) | Others | ☐ | ☐ |

21. (d) How do you know about taking this injection?

| | | Before | After |
|---|---|---|---|
| (i) | Nurse | ☐ | ☐ |
| (ii) | Doctor | ☐ | ☐ |
| (iii) | Seminar | ☐ | ☐ |
| (iv) | Pamphlet / Educative handout | ☐ | ☐ |
| (v) | Others | ☐ | ☐ |

22. (a) How do you get this injection?

| | | Before | After |
|---|---|---|---|
| (i) | Free | ☐ | ☐ |
| (ii) | Friends | ☐ | ☐ |
| (iii) | Health Care Centre | ☐ | ☐ |
| (iv) | Buying | ☐ | ☐ |
| (v) | Others | ☐ | ☐ |

22. (b) How much does this injection cost if you bug it? ( ) kyats

23. Where do you get this injection?

| | | Before | After |
|---|---|---|---|
| (i) | Neighbors | ☐ | ☐ |
| (ii) | Drug shop | ☐ | ☐ |
| (iii) | Health Staff | ☐ | ☐ |
| (iv) | Health Care Centre | ☐ | ☐ |
| (v) | Others | ☐ | ☐ |

24. Do you avoid food while pregnancy?

| | | Before | After |
|---|---|---|---|
| (i) | Avoid | ☐ | ☐ |

(ii) Not Avoid ☐ ☐

25. (a) Do you know the three groups of diets?

| | Before | After |
|---|---|---|
| (i) Yes | ☐ | ☐ |
| (ii) No | ☐ | ☐ |

25. (b) Yes

(i) Food that causes energy ☐

(ii) Food that causes growth of the body ☐

(iii) Food that prevents from disease ☐

25. (c) Do you eat the three groups of diet?

| | Before | After |
|---|---|---|
| (i) Yes | ☐ | ☐ |
| (ii) No | ☐ | ☐ |

26. Do you know the "motto" of the Maternal and Children Welfare Association?

(a) Breast feeding for Health of Newly Born Baby

| 1. | Before | After | | Before | After |
|---|---|---|---|---|---|
| (i) Yes | ☐ | ☐ | (ii) No | ☐ | ☐ |

2.

| | | | | | |
|---|---|---|---|---|---|
| (i) Participate | ☐ | ☐ | (ii) Not participate | ☐ | ☐ |

26. (b) Prevent disease with vaccine best wing loving upon daughter and son;

| 1. | Before | After | | Before | After |
|---|---|---|---|---|---|
| (i) Known | ☐ | ☐ | (ii) Unknown | ☐ | ☐ |

2.

| | | | | | |
|---|---|---|---|---|---|
| (i) Participated | ☐ | ☐ | (ii) Not participate | ☐ | ☐ |

26. (c) Treat Tenderly and warmly for Health of Newly Born Baby

| 1. | Before | After | | Before | After |
|---|---|---|---|---|---|
| (i) Known | ☐ | ☐ | (ii) Unknown | ☐ | ☐ |

2.

(i) Participated ☐ ☐ (ii) Not participate ☐ ☐

26. (d) Pregnancy is special let if safe.

1. Before After Before After

(i) Known ☐ ☐ (ii) Unknown ☐ ☐

2.

(i) Participated ☐ ☐ (ii) Not participate ☐ ☐

26. (e) Birth spacing for living happy (or) health y family

1. Before After Before After

(i) Known ☐ ☐ (ii) Unknown ☐ ☐

2.

(i) Participated ☐ ☐ (ii) Not participate ☐ ☐

26. (f) All Treats for Health of Reproducing

1. Before After Before After

(i) Known ☐ ☐ (ii) Unknown ☐ ☐

2.

(i) Participated ☐ ☐ (ii) Not participate ☐ ☐

27. To whom did you pay first visit during your pregnancy?

| | | Before | After |
|---|---|---|---|
| (a) | Traditional Birth Attendant | ☐ | ☐ |
| (b) | Auxiliary Midwives | ☐ | ☐ |
| (c) | Midwives | ☐ | ☐ |
| (d) | Doctor | ☐ | ☐ |
| (e) | Others | ☐ | ☐ |

28. Taking maternal care (or) Not taking maternal care

| | | Before | After |
|---|---|---|---|
| (a) | Yes | ☐ | ☐ |

(b) No ☐ ☐

29. Who give advice to take care of your pregnancy?

| | | Before | After |
|---|---|---|---|
| (a) | Traditional Birth Attenda | ☐ | ☐ |
| (b) | Auxiliary Midwives | ☐ | ☐ |
| (c) | Midwife | ☐ | ☐ |
| (d) | Doctor | ☐ | ☐ |
| (e) | Others | ☐ | ☐ |

30. From where do you get the care of your pregnancy?

| | | Before | After |
|---|---|---|---|
| (a) | Maternal and Child Welfare Association | ☐ | ☐ |
| (b) | Civil Hospital | ☐ | ☐ |
| (c) | Private Hospital | ☐ | ☐ |
| (d) | Clinic | ☐ | ☐ |
| (e) | Others | ☐ | ☐ |

31. The frequencies of taking care of your pregnancy.

(a) Before

Once ☐ Twice ☐ Three times ☐ Four times ☐

Five times ☐ Five times and above ☐

(b) After

Once ☐ Twice ☐ Three times ☐ Four times ☐

Five times ☐ Five times and above ☐

32. Do you know the practice of birth spacing after 45 days of delivery?

| | | Before | After |
|---|---|---|---|
| (a) | Yes | ☐ | ☐ |
| (b) | No | ☐ | ☐ |

33. (a) Do you know the dangerous features of the pregnant women?

| | | Before | After |
|---|---|---|---|
| (i) | Yes | ☐ | ☐ |
| (ii) | No | ☐ | ☐ |

(b) Do you know the following features of the pregnant women?

| | | Before | After |
|---|---|---|---|
| (i) | Hypertension | ☐ | ☐ |
| (ii) | Bleeding | ☐ | ☐ |
| (iii) | Oebema of limbs | ☐ | ☐ |
| (iv) | Severe anaemia | ☐ | ☐ |
| (v) | Severe headache | ☐ | ☐ |
| (vi) | Bribbling | ☐ | ☐ |
| (vii) | Loss of foetal | ☐ | ☐ |

(c) How to behave during your pregnancy?

---------------------------------------------

---------------------------------------------

34. Do you think which programme of the Health Department is effective to get the health education?

35. Where do you arrange to deliver child.

| | | Before | After |
|---|---|---|---|
| (a) | House | ☐ | ☐ |
| (b) | Hospital / Clinic | ☐ | ☐ |
| (c) | Rural Health Clinic | ☐ | ☐ |

(d) Not decide ☐ ☐

(e) Others ☐ ☐

36. Skillful person of being delivered child.

| | Before | After |
|---|---|---|
| (a) Doctor | ☐ | ☐ |
| (b) midwive | ☐ | ☐ |
| (c) Auxiliary midwive | ☐ | ☐ |
| (d) Traditional midwive | ☐ | ☐ |
| (e) Not decide | ☐ | ☐ |
| (f) Other | ☐ | ☐ |

37. Do you think that Antenatal care of pregnancy is important

| | Before | After | | Before | After |
|---|---|---|---|---|---|
| (i) Yes | ☐ | ☐ | (ii) No | ☐ | ☐ |

(1) not very important ☐ (2) not important ☐ (3) Average ☐

(4) important ☐ (5) very important ☐

(Note; your opinion mark as 1, 2, 3, 4, 5)

38. Do you believe in Antenatal Care?

39. Tell the requirements to able to deliver in agreement with healthy practice.

(a) To be delivered in clear place ☐

(b) To be delivered by skillful person ☐

(c) To obey instruction of doctor ☐

(d) Others ☐

40. Have you ever seen single used delivering bag?

(a) Have been seen ☐ (b) Have never been seen ☐ (c) Others ☐

41. At what time is milk fed to baby immediately after have borned

| | Before | After |
|---|---|---|
| (a) immediately | ☐ | ☐ |
| (b) within – half an hour | ☐ | ☐ |
| (c) other | ☐ | ☐ |

42. Should colostrum be fed to Newly Born Baby?

| | Before | After |
|---|---|---|
| (a) Yes | ☐ | ☐ |
| (b) No | ☐ | ☐ |
| (c) Others | ☐ | ☐ |

43. Should water (or) small liquid be fed to newly born baby?

(a) Should be fed ☐

(b) Should not be fed ☐

(c) Other ☐

44. How many year of age does only one kind of breast milk feed to baby of being borned?

45. Should mother refrain food while Breast – Feeding?

| | Before | After |
|---|---|---|
| (a) Yes | ☐ | ☐ |
| (b) No | ☐ | ☐ |
| (c) Others | ☐ | ☐ |

46. What kind of food should to be refrained from?

| | Before | After |
|---|---|---|
| (a) Food that increases heat, Hot – food, food of feeling, congested in chest, food which causes loose travels, I'm compatible food | ☐ | ☐ |
| (b) meat and vegetable | ☐ | ☐ |
| (c) Other | ☐ | ☐ |

47. Tell Benefits of feeding Breast-milk as you know.

**(i)<u>For mother</u>**

| | | Before | After |
|---|---|---|---|
| (a) | Enabling to make Birth-spacing | ☐ | ☐ |
| (b) | Breast cancer | ☐ | ☐ |
| (c) | Uterus cancer | ☐ | ☐ |
| (d) | Saving cost | ☐ | ☐ |
| (e) | More familiar between mother and child | ☐ | ☐ |
| (f) | Other | ☐ | ☐ |

**(ii)<u>For children</u>**

| | | Before | After |
|---|---|---|---|
| (a) | Enabling to make Birth-spacing | ☐ | ☐ |
| (b) | Nutrition's | ☐ | ☐ |
| (c) | Intelligent Bright | ☐ | ☐ |
| (d) | Others | ☐ | ☐ |

48. Who does the last child born / labor?

(a) Traditional midwives ☐

(b) Auxiliary midwives ☐

(c) Midwives ☐

(d) Health worker ☐

(e) Doctor ☐

(f) Other ☐

49. Where does the last child born?

| | Before | After |
|---|---|---|
| (a) Inner house | ☐ | ☐ |
| (b) Outside house | ☐ | ☐ |
| (c) Clinic | ☐ | ☐ |
| (d) Dispensary | ☐ | ☐ |
| (e) Hospital | ☐ | ☐ |
| (f) Others | ☐ | ☐ |

50. Whether or not milk is fed just after having laboured.

| | Before | After |
|---|---|---|
| (a) Yes / Fed | ☐ | ☐ |
| (b) No / Not fed | ☐ | ☐ |

51. Do you inject birth spacing medicine after having laboured 45 day?

| | Before | After |
|---|---|---|
| (a) Yes | ☐ | ☐ |
| (b) No | ☐ | ☐ |
| (c) Others | ☐ | ☐ |

52. Do you know methods of Birth spacing?

| | Before | After |
|---|---|---|
| (a) Yes | ☐ | ☐ |
| (b) No | ☐ | ☐ |

53. If Yes, which methods do you use?

| | | Before | After |
|---|---|---|---|
| (a) | Injection | ☐ | ☐ |
| (b) | Taking family planning pill | ☐ | ☐ |
| (c) | Castration of ovaries | ☐ | ☐ |
| (d) | Inserting device into uterus | ☐ | ☐ |
| (e) | Use of condom | ☐ | ☐ |
| (f) | Other | ☐ | ☐ |

54. Do you use condom.

| | | Before | After |
|---|---|---|---|
| (a) | Yes | ☐ | ☐ |
| (b) | No | ☐ | ☐ |
| (c) | Others | ☐ | ☐ |

55. Do you get the knowledge disseminated by health department.

(a) Yes ☐ (b) No ☐

**Frequencies**

one ☐ twice ☐ 3 times ☐ 4 times ☐ 5 times ☐

6 times ☐ Other ☐

56. Do you follow and practice health knowledge disseminated by Health department?

| | | Before | After | | | Before | After |
|---|---|---|---|---|---|---|---|
| (a) | practiced | ☐ | ☐ | (b) | not practiced | ☐ | ☐ |

57. Whether or not knowledge delivered by health department is sufficient for you in laboring your child easily and smoothly?

(a) Sufficient ☐ (b) In sufficient ☐

58. If not, describe necessary factor.

(a) using medicine ☐

(b) place where to be laboured ☐

(c) getting health knowledge ☐

(d) money ☐

(e) other ☐

59. Distance duration from home to health center ( ) minute.

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