# SOCIAL MARKETING: A MULTIDISCIPLINARY APPROACH TO IMPROVE LOW USAGE OF ORAL REHYDRATION THERAPY AND CONTINUED FEEDING PRACTICES IN LAHAREPAUWA VILLAGE, RASUWA DISTRICT, NEPAL

Pawan Koirala

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Public Health, Health System Development Programme College of Public Health Chulalongkorn University Academic year 1998

ISBN 974-637-377-3

© College of Public Health, Chulalongkorn University Bangkok, Thailand Thesis Title:

Social Marketing: A Multidisciplinary Approach to improve

low usage of Oral Rehydration Therapy and Continued feeding Practices in Laharepauwa Village, Rasuwa District,

Nepal.

By:

Pawan Koirala

Program:

Master of Public Health (Health Systems Development)

College of Public Health, Chulalongkorn University

Advisor:

Sathirakorn Pongpanich, M.A., M.P.H., Ph. D.

Accepted by the College of Public Health, Chulalongkorn University, Bangkok, Thailand in Partial Fulfillment of the Requirements for the Master's Degree.

Shilt Lithi-auren Dean of the College of Public Health

(Professor Chitr Sitthi-amorn, M.D., Ph. D.)

#### THESIS COMMITTEE:

Wattana S. Tanjan Chairperson

(Associated Professor Wattana S. Janjaroen, Ph.D.)

...., Thesis Advisor

(Sathirakorn Pongpanich, M.A., M.P.H., Ph.D.)

...., Member

(Siripen Supakankunti, Ph.D.)

...., viember

(Stephen King, M.Med. Sgi., Dr. P.H.)

#### **ABSTRACT**

Diarrhoeal Diseases among the children of under- 5 years age is a serious public health problem and a government priority concern in Nepal. National Control of Diarrhoeal Diseases Program (NCDDP) estimates that about 44% death among the under 5 years age children is associated with this disease. Dehydration and malnutrition are two main causes of death during diarrhea, which can be averted by the usage of simple home remedies: increased amount of fluids (Oral Rehydration Therapy) and continued feeding during each episode of diarrhea. Different surveys have revealed that the usage of Oral Rehydration Therapy and continued feeding practices in the country is very low. NCDDP has considered it as a big problem, and therefore, concerned to improve this problem situation.

Different programs intervened during last decades, have significantly improved the knowledge of the mothers/caretakers about the importance of Oral Rehydration Salt (ORS). Still the usage of increased amount of fluids and foods) is being ignored during diarrhea. In a country like Nepal, where pre-packaged ORS cannot be ensured all the time in every places (particularly in remote and rural areas), the alternative is to educate them to use increased amount of home fluids and foods (which are equally effective as ORS solution for the prevention of dehydration) for each episode of diarrhoea. Similarly, they should be adviced to reserve prepackaged ORS to treat existing dehydration. The proposed study aims to intervene a multidisciplinary health education program in Laharepauwa village, Rasuwa district, Nepal for improve usage of ORT and feeding practices.

The study will be an action research with a qualitative approach. Focus group discussion will be the main data collection technique. This technique will be utilized in a series through out development and implementation process of the health education program (such as: identification of target audiences, identification of their needs and wants, identification of possible channels of communication and pre-testing the proposed media, messages etc). In addition, key informant interview and review of service statistics will be other data collection techniques (apart from focus group discussion) to evaluate the impact of the intervention program. Some focus group discussion and key informant interview were conducted in the study area, as a part of data exercise. The main objective of data exercise was to test the appropriateness of data collection tools and techniques that were designed for the original study.

NCDDP will be the main beneficiary of this study. The study results will be evidences to the planners and programmers of NCDDP to decide whether this type of intervention programs can be introduced in other parts of the country in order to improve the usage of ORT and feeding practices. Another beneficiary will be National Health Education, Information Communication Center (NHEICC). The main concern of this center is to design and disseminate effective health education messages towards the targeted population through different channels of communication that have more access and usage up to peripheral level. Thus, the findings of health education intervention process (such as: identification of target audiences, their needs and wants, availability and usage of media etc.) and process evaluation of this study will be utilized by NHEICC to design and implement better health education strategies in the study area in near future.

### **ACKNOWLEDGEMENTS**

This thesis is a complete form of precious contribution of my professors, college staffs and various Individuals/Organizations. Particularly, the respected professors of Chulalongkorn University and Mahidol University, Salaya have provided me their valuable suggestion, timely guidance and other contribution to bring this thesis into this form.

I am very grateful to the Dean, College of Public Health, Professor Chitr Sitthiamorn for providing the valuable suggestions during Dean's session on every Friday as well as the whole study period. Similarly, I am also grateful to Associate Dean, Associated Professor Wattana S. Janjaroen for her kind suggestion and support throughout the year.

I am specially indebted to my advisor Dr. Sathirakorn Pongpanich for providing precious suggestions, guidelines and innumerable comments on every part of this thesis as well as preparing me for thesis presentation. I am equally indebted to my professors, Assistant Dean (Academic) Dr. Stephen King and Dr. Nuntavarn Vichit-Vadakan, who introduced me to critical thinking and research methodology respectively. In addition, I am grateful to them for being advisors of chapter II and chapter III of this thesis since the earliest day of thesis writing.

I am extremely grateful to Dr. Siripen Supakankunti, Faculty of Health Economics, for her precious guideline on overall part of this thesis. This thesis would not come in this form without her valuable guidance and inspiration.

I am grateful to Dr. Sauwakon Ratanawijitrasin for introducing me to strategic planning during my study period. Similarly, I am grateful to Dr. Pimonpon. Isarabhakdi, Institute for Population and Social research, Mahidol University, Salaya, who taught me the ways to conduct focus group discussion.

I express my sincere gratitude to Ajarn Wacharin Tanyanont, Ajarn Ratana Somrongthong, Ajarn Tanawat Likitkererat and Ajarn Channawong Burapat for their kind suggestion, co-operation and inspiration during the whole study period. I am also grateful to Miss Sunanta Wongchalee (Tum) and Miss King Keawbunroung (Tui) for their unforgettable help and co-operation at information center of my college.

Sincere gratitude is also extended to Mr. J.L. Lamichhane and Kumar Lamichhane of JSI/Nepal, Mr. K.B. Rayamajhi, Nepal CRS Company and Mr. Charles Pradhan, ENPHO/Nepal for their kind suggestion and information on different subject matters related to this study. Similarly, I am grateful to Ministry of Health and WHO, Nepal for selecting me to study MPH in Thailand. Finally, I am grateful to the official and board members of GNHA (particularly Mr. Andreas Falk, president and Mr. Kamal Rupakheti, co-ordinator) for providing me the financial support to complete this study. This study would not be completed in time without the financial assistance of GNHA.

## **ACRONYMS AND ABBREVIATIONS**

AHW = Auxillary Health worker

ANM = Auxillary Nurse Midwife

CDDP = Control of Diarrhoeal Diseases Program

CVD = Cardio Vascular Diseases

CDR = Central Development Region

DOHS = Department of Health Services

DD = Diarrhoeal Diseases

EDR = Eastern Development Region

FWDR = Far- Western Development Region

FCHV = Female Community Health Volunteer

FWM = Female Ward Member

HPG = High Privileged Group

HMG = His Majesty's Government

IEC = Information Education Communication

JSI = John Snow Incorporate

LPG = Low Privileged group

MOH = Ministry of Health

MWDR = Mid- Western Development Region

NMIS = Nepal Medical Indicator Surveillance

NFH = Nepal Family Health Survey

NCDDP = National Control of Diarrhoeal Diseases Program

NHEICC = National Health Education, Information Communication

Center

ORT = Oral Rehydration Therapy

ORS = Oral Rehydration Salt

TV = Television

UNICEF = United Nations Children's Fund

UNESCO = United Nations Educational Scientific and Cultural

Organization.

VHW = Village Health worker

WHO = World Health Organization

WDR = Western Development Region

# LIST OF CONTENTS

			Page Nun	nber
ΑB	STR	ACT	III	
AC	KNC	WLEDGEMENTS	V	
AC	RON	YMS AND ABBREVIATION	VII	
LIS	ST O	F TABLES	XIX	ζ
LIS	ST O	F FIGURES	XX	
CH	APT	ER:		
I:	IN1	RODUCTION	1	
П:	ES	SAY		
	2.1	Introduction:	4	
	2.2	Social Marketing	10	
	2.3	Component of Social Marketing:	12	
		2.3.1 Product:	12	

	2.3.2	Price: 13	3
	2.3.3	Place: 14	ļ
	2.3.4	Promotion:	ļ
	2.3.5	Producer: 15	5
	2.3.6	Purchaser:	5
	2.3.7	Probing: 16	5
		A. Consumer Orientation: 17	7
		B. Voluntary Exchanges: 18	3
		C. Audience Analysis And Segmentatio: 18	3
		D. Formative Research: 18	3
		E. Analysis Of Distribution And Communication Channels: 19	)
		F. Marketing Mix: 19	•
		G. Process Tracking System: 19	•
		H. Management: 19	•
2.4	Oral 1	Rehydration And Continued Feeding: 21	1
2.5	Probl	em Statement: 23	3

2.6	Diarrhoeal Diseases Problem In Nepal:	27
2.7	Diarrhoeal Diseases And Diarrhoea:	30
2.8	Control Of Diarrhoeal Diseases Program:	32
2.9	Government Policy On Control Of Diarrhoeal Diseases Program:	33
2.10	Analyzing Precede-Proceed Model:	34
	2.10.1 Predisposing Factors:	36
	2.10.1.1 Knowledge:	36
	2.10.1.2 Beliefs:	37
	2.10.2 Reinforcing Factors:	37
	2.10.2.1 Interaction With Health Workers	39
	2.10.2.2 Interaction With Community Health Volunteers:	40
	2.10.3 Enabling Factors:	41
	2.10.3.1 Accessibility Of Media:	41
	2.10.3.2 Affordability Of Services:	43
	2.10.3.3 Availability Of Respective Commodity:	43
	2.10.3.4 Accessibility Of The Services:	45

	2.11	Prioritizing the factors:	46
	2.12	Conclusion:	47
		References:	49
III:	PR	OPOSAL	
	3.1	Introduction:	53
		3.1.1 Rationale of the Study:	53
		3.1.2 Application of the Study:	61
	3.2	Purpose Statement of The Study:	62
	3.3	Objectives of The Study	63
		3.3.1 General objective of the Study:	63
		3.3.2 Specific objectives:	63
	3.4	Study Area:	64
	3.5	General information of the study area:	64
	3.6	Study design:	65
	3.7	Conceptual frame work:	66
	3.8	Proposed program:	70

	3.8.1	1 <sup>st</sup> phase: Development of Social Marketing strategies:	<b>7</b> 0
		3.8.1.1 Identification of target audiences:	73
		3.8.1.2 Identification of the needs:	74
		3.8.1.3 Identification of the channels of communication:	75
		3.8.1.4 Design and pretest of health education messages:	78
		3.8.1.5 Setting objectives of the project:	80
	3.8.2	2 <sup>nd</sup> Phase: Implementation part:	81
		3.8.2.1 Usage of mass media:	84
		3.8,2.2 Face-to-face education:	85
		3.8.2.3 Availability of respective commodity:	86
		3.8.2.4 Monitoring and supervision of services:	87
	3.8.3	3 <sup>rd</sup> Phase: Evaluation of the intervention program:	91
		3.8.3.1 Process evaluation:	91
		3.8.3.2 Impact evaluation	93
3.9	Study	population:	95
3.10	Data	collection:	96

	3.10.1 Focus group discussion:	97
	3.10.2 Key informant interview:	99
	3.10.3 Review of service statistics:	101
3.11	Sampling	102
	3.11.1 Focus group discussion:	102
	3.11.1.1 Focus group discussion with the mothers of under	
	5 year children:	102
	3.11.1.2 Focus group discussion with FCHVs of Laharepauwa	
	village	103
	3.11.2 Key informant interview	103
3.12	Activity Plan With timetable:	105
3.13	Budget and man power for the study:	111
3.14	Human resource requirements:	112
3.15	Sustainability of services:	112
	3.15.1 Mass media:	113
	3 15 2 Face-to-face education:	113

		3.15.2.1 Selling Oral Rehydration Salt:	114
	3.16	Ethical issues of the study:	114
	3.17	Limitations of the study:	116
		References:	117
IV:	DA	ATA EXERCISE	
	4.1	Introduction:	121
	4.2	Objectives:	122
	4.3	Techniques:	122
	4.4	Instruments used:	123
	4.5	Pre-field activities	124
	4.6	Sampling	125
		4.6.1 Focus group discussio	125
		4.6.2 Key informant intervi	125
	4.7	General characteristice respondents	126
		4.7.1 Focus group discussion	126
		4.7.2 Key informant interview	126

	4.8	Field activities:	127
		4.8.1 Focus group discussion	127
		4.8.2 Key informant interview	129
	4.9	Tabulation	130
	4.10	Findings	130
		4.10.1 Focus group discussion:	130
		4.10.2 Key informant interview	141
	4.11	Discussion	146
	4.12	Limitation	151
	4.13	Lesson learned	152
V:	PR	ESENTATION	155
VI	: AN	NOTATED BIBLIOGRAPHY	165

## **APPENDICES:**

1.	Composition of WHO/UNICEF recommended ORS	170
2.	WHO/CDD program recommended home fluids during diarrhea	171
3.	WHO/CDD program recommended foods during diarrhea	173
4.	Seeking medical help if the child is not getting better	175
5.	Administrative division of Nepal	176
6.	Causative organisms of acute diarrhea in developing countries	177
7.	Precede-Proceed planning model	178
8.	Correct preparation of ORS solution	179
9.	The potential project members	180
10.	Interview guidelines for focus group discussion	181
11.	Interview guidelines for focus group discussion	184
12.	Interview guidelines for focus group discussion	186
13.	Meeting minute work sheet	188
14.	Diarrhea history from	189
15.	Diarrhea information form	190

16.	Supervision checklist for FCHV	192
17.	Diarrhea register	194
18.	Interview guidelines for focus group discussion	195
19.	Interview guidelines for focus group discussion	197
20.	Interview guidelines for focus group discussion	198
21.	Open ended questionnaires for key informants	200
22.	Review of service statistics	203
23.	Open ended questionnaires for key informants	205
24.	Tabulation of the focus group discussion results	208
	Curriculum vitae	217

## **LIST OF TABLES**

2.1	Social Marketing concepts	20
2.2	Diarrhoeal diseases morbidity in 276 surveys in children aged 4 years and	
	younger using the WHO/CDD methodology, 1981-1986	25
2.3	Diarrhoeal diseases morbidity in 276 surveys in children aged 4 years and	
	younger using the WHO/CDD methodology, 1981-86	26
2.4	Morbidity and mortality rate of diarrhoeal diseases among the children of	
	under 5 years age in the year 1994/95	28
2.5	Classification of reported diarrhoeal diseases dehydration and treatment	
	schedule of this disease in the country in the year 1994/95	29
2.6	The global goals, present situation, intermediate goals and NCDDP goals	
	by the year 2000AD	33
3.1	Time table of activity plan	107
3.2	Budget for the proposed intervention program	111

## LIST OF FIGURES

# Page Number

2.1	The casual relationship of different factors affecting the usage of oral	
	rehydration therapy and feeding during diarrhoeal diseases	35
3.1	Conceptual framework	69
3.2	Net work of the proposed intervention program	83