CALIFORNIA STATE UNIVERSITY, NORTHridge

DEVELOPING HEALTH EDUCATION IN THE
LATRINE PROGRAM IN SONGKHLA PROVINCE, THAILAND

A THESIS SUBMITTED IN PARTIAL SATISFACTION OF
THE REQUIREMENT FOR THE DEGREE OF
MASTER OF PUBLIC HEALTH

BY

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JANUARY, 1974.
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JANUARY, 1974.
DEDICATION

To my family.
ACKNOWLEDGMENTS

I wish to acknowledge my indebtedness and express my sincere thanks to Yanee, Somjit, and to my colleagues for their generous contribution of time for references.

My deepest appreciation and gratitude go to Dr. Lennin Glass, and to Dr. Allan Steckler for their critical guidance and lavish encouragement.

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ABSTRACT

DEVELOPING HEALTH EDUCATION IN THE
LATRINE PROGRAM IN SONGKHLA PROVINCE, THAILAND

by
Sermpan Tippayaprapa
Master of Public Health

January, 1974

In Thailand, community health committees are usually made up of males, who are the recognized head of several families in a particular village. Housewives have never served on health development committees dealing with environmental sanitation, especially latrine programs. In the rural areas, women usually follow their husbands, they have never been given the leading role in the community. They do not participate in any activities in the village. They stay at home and take care of the children. This program proposes that the pattern of participation be changed. A Housewives' Committee dealing with a latrine program is described.

The most important activity of the latrine program is to create a positive attitude toward health which will improve the health behavior of the housewives.
and their children by construction and use of the sanitary latrine.
Chapter 1

INTRODUCTION

Every year the Thai government spends a tremendous amount of money to prevent and control gastrointestinal diseases in the villages of rural Thailand. The most important causes of ailing health and death in infancy and young childhood are the results of poor sanitation in these rural areas (42:4).

Among the major diseases, the most prevalent are diarrhea, dysentery, and a variety of other enteric ailments, such as helminthiasis and typhoid fever (36: 368-369).

Epidemics of cholera occurred in Thailand long before official records were kept. In 1820 cholera spread through Bangkok and killed 300,000 people during the course of one month. The great cholera epidemic of 1849 claimed the lives of about one-tenth of the population of Bangkok. During the climax of the epidemic, deaths occurred at the rate of 1,500 per day. Cholera epidemics occurred rather regularly about every five years (42:10).

However, cholera visited Thailand again in July of 1963. The epidemic subsided in 1964, but sporadic
cases still occurred until 1967 (42:16). In 1966 an epidemic of typhoid occurred, causing a death rate of 4.2 per 10,000 and a dysentery death rate of 16.7 per 100,000 (43:54-55).

When epidemics break out, the Thai government not only suffers economically but the people lose work time also, thereby adding more problems. For example, when a member of the family is sick, he places a great burden on the other family members. They lose job opportunities, thus leading to a lower income for supporting their families. The final results are poor health and low economic status, leading to a nation of weak and sickly people.

Every year, more hospitals have been constructed throughout the country. Patients have been receiving satisfactory treatment from these hospitals and returning to their villages.

Sooner or later, the same patients have returned to the hospital to get treatment again. Generally, this has been due to poor sanitation and health practices among villagers. They did not learn anything in the hospital that would help them to prevent subsequent health problems. Hospitals have not developed health education programs with this aim in mind. What is needed is the development of a program that will help to improve the health of village people.
Such a program needs to be concerned with three components:

1. medical care (personal health care),
2. environmental control measures, and
3. influencing behavior (educational measures) (8:8).

Many public health problems throughout Thailand involve illnesses or diseases in which individuals must become motivated to assume responsibility for long continuing health practices. Health personnel should be aware of the villagers' beliefs, culture, values, and attitudes in respect to health and diseases. Different concepts of health also vary among groups in the same culture (23:11-23).

The positive way to control and prevent gastrointestinal diseases is not just to make health knowledge available; the individual himself has to accept such knowledge and decide to make it part of his way of life (6:41-46).

Statement of the Problem.

In Thailand, the health problems in the rural areas can be expressed in terms of the prevalence of intestinal diseases. While the key to control of these diseases is believed to be the installation of latrines, the prevalence of infection in many instances has not
declined with such measures. This does not mean that the measures adopted are wrong in principle but indicates that the facilities provided are not being used properly. Apparently, the people have not improved their knowledge or altered their thinking and behavior.

Health educators should help people, individually or in groups, to develop their desire for health and to become aware of their social problems; to learn how to apply this knowledge; and to absorb the necessary knowledge with appropriate advice and encouragement.

Purpose of Study.

This study is an attempt to develop health education techniques which will help to bring about a change in the level of awareness and knowledge of villagers relative to a latrine program.
Chapter 2

THE SETTING

Thailand is located in Southeast Asia. On the north and the west it is bounded by Burma, on the south by Malaysia, and on the northeast and east by Laos and Cambodia. It has an area of about 200,000 square miles (21:vii). The total population in 1971 was estimated to be 37.8 million. Bangkok, the capital, has an estimated population of about 3.4 million (41:2).

The climate is warm and humid. There are three seasons: the hot season runs from February to May, the rainy season from June to October, and the cold season from November to January. The southern part of the country is the rainiest, with rain falling about six months per year. The average rainfall is about 120-160 inches per year (21). Rivers, rain, wells, canals, and ponds are the sources of villagers' drinking water.

The national language is Thai, similar to the language spoken in Laos. English is the second language of the country. Other commonly spoken languages include Chinese (4.5 million) and Malay (1 million) (42:4).

The majority of the people are native born
Thais who live in the rural areas. Chinese form a large ethnic minority and live mostly in central Thailand and the big cities. Smaller minorities include the Malaysians, the Vietnamese, and Khmer (21).

Buddhism is the largest religion in Thailand, about 94 per cent of the people being Buddhists. Other religions include Islam (3.4 per cent) and Christianity (0.6 per cent) (42).

Rice is the main export product. Other principal crops are corn, cotton, coconuts, and rubber. About 51.5 per cent of the total land mass is in forests. Fish provide the main protein for the villagers. Other sources of protein come from a variety of beans (21).

Socio-Economic and Cultural Factors.

The vast majority of Thai people are native born. They have developed an independent culture and identity that are uniquely national in character (21). About 80 per cent of the population are farmers (41:2). The average income is about $180 per capita. More than 90 per cent of the people live in rural areas where society is relatively unorganized (42).

Between villages, there are differences in language, diet, dress, culture, and custom. The basic unit of rural society is the family household, which
consists of parents, children, and other relatives (a "nuclear" family). Other than the family, social life focuses on the local temple and the village school, both of which have provided opportunities to the youth for social advancement. Usually, females stay home and take care of the children (21:66-67).

In the remote areas villagers depend upon the village headman as an essential link to the outside world. Villagers cooperate with one another in village activities. Younger age groups are respectful of older people, monks, teachers, and leaders. Wealthier family members usually share and help other members of the family (21:184-185).

Health Problems.

The main cause of sickness and death of the people who live in the rural areas is a group of diseases associated with poor sanitation. The most prevalent diseases are diarrhea, dysentery, and a variety of other enteric ailments such as helminthiasis and typhoid fever. It is estimated that six out of ten cases of illness throughout the country are due to these "filth diseases" (42:68). The main reasons for this high morbidity rate are: (1) the villagers are not interested in constructing and using latrines, and (2) the villagers' lack of knowledge and understanding
of the relationship between unhygienic conditions and diseases (36:368-369).

Critique of Previous Health Education Programs.

A Health Education Section was established in 1916 under the Ministry of the Interior. There were only two persons assigned to this section. One was a foreign physician-consultant and the other was an interpreter. Their work resulted in the creation and distribution of two or three kinds of posters and a few pamphlets (49).

In 1918, the Department of Public Health was created under the Ministry of the Interior to supervise the medical and public health services of the country. The Health Education Section changed its name to the Editorial Division. The functions of this division included preparing all kinds of public health articles and pamphlets (49).

In 1925, when an epidemic of cholera occurred in Bangkok, health education activities were put into operation for the first time. Mass health propaganda was carried out and public notices and bulletins were freely used. The people began to become aware of the importance of sanitation and cleanliness in relation to disease. Sanitary conditions improved in many towns (42:10-11). The work of the department expanded
gradually and, in 1926, the Department of Public Health reorganized under a new administration and divided itself into thirteen divisions (49).

The Editorial Division changed its name to the Health Education Division in 1929. This division consisted of three sections, a Central Section, an Articles and Pamphlets Section, and a Mobile Health Education Unit Section (49).

On November 27, 1929, the Department of Health changed its name to the Ministry of Public Health. Once formed, it integrated almost all medical and public health activities of the nation into one administrative unit. The Health Education Division, being one of thirteen divisions of the Health Department, assisted and supported other health programs. However, it was not effective in educating the public because it lacked the necessary budget and public support (49).

In 1942, at the beginning of the Intestinal Parasite Control Program, the Health Department efforts had been directed toward communicable diseases including malaria, leprosy, tuberculosis, yaws, and intestinal diseases. In those years the development of an extensive health education program about intestinal parasite control was achieved with assistance of the International Health Board and the Rockefeller Foundation (42:13).
In 1949, the Malaria Projects were extended outward to the villages. From 1914-1965 the malaria death rate was reduced from 201.5 per 100,000 population to 15 per 100,000 population (42:14).

The Health Education Division now is widely recognized as one of the essential elements of health planning. It not only provides simple instruction in health matters but also includes activities which are likely to influence health attitude, behavior, individual knowledge, and practices (42:80).

The important responsibility of the Health Education Division is to help other divisions and provincial health officers recognize, develop, and utilize their educational opportunities and responsibilities to the fulfillment of their goals. These responsibilities may be described as follows:

(1) Providing health education training to public health workers, students, sanitarians, nurses, midwives, junior health workers, and personnel of other government agencies as requested;

(2) Cooperating with other health projects by planning, participating and coordinating matters related to health education;

(3) Producing health education materials; and

(4) Providing an information service to teach individuals about the prevention of diseases and the
promotion of health (5:35-37). This type of service was rendered to the following programs:

a. Trachoma Control Program: a health educator was assigned to help plan and execute educational programs in training of health workers, develop audio-visual materials, and aid in the evaluation and solution of problems.

b. Occupational Health Program: one health educator was assigned part-time to help in program planning, to survey factory sanitation, and to organize exhibits at the occupational health center.

c. Leprosy Control Program: a health educator was sent to help with training in health education of the twenty leprosy workers and seven Peace Corps volunteers, and to assist staff in designing pamphlets and posters to be used by the leprosy workers.

d. Venereal Diseases Control Program: the Chief of the Health Education Division headed a subcommittee for this program. It focused on the extent of the problem, planning educational activities, and designing slides for television and movie theaters to help make the people aware of the seriousness and prevalence of venereal disease. The committee drafted pamphlets and posters for venereal disease information to the public.

e. Strengthening Rural Health Projects: a health educator was assigned to be a consultant in this
project to identify leaders through a health survey, and to provide educational materials (42:80-83).

The Health Education Section of the Village Health and Sanitation Project.

A Village Health and Sanitation Project was launched in 1960 to deal with environmental sanitation in the rural areas. It was divided into eight sections. There were nine sub-headquarters in each part of the country. Each sub-headquarters was also divided into eight sections (11:5-11). One of the important sections created was health education. The main duties were:

1. Analyze health problems to identify the educational needs.
2. Design a method of gathering data to define an educational need.
3. Gather information regarding the level of health knowledge and practice for use in planning health education activities.
4. Write objectives for educational activities in terms which will permit appropriate evaluation of the outcome.
5. Select methods in health education and/or health communications to be included in health program.
6. Involve outside sources to help design an
educational activity.

(7) Develop effective involvement of program personnel in designing and carrying out an evaluative method in an educational activity in community health development program.

(8) Design a questionnaire or other system for gathering and analyzing information useful in determining if a health education objective has been or is being achieved.

(9) Organize community resources to meet health problems.

(10) Write articles or news releases, announcements, etc., for publication, utilizing health program data or other information.

(11) Design, produce, distribute, and evaluate audio-visual materials for use in health education in community health development programs.

(12) Produce a health program bulletin or newsletter.

(13) Produce a health information pamphlet, including writing, design, and illustration for distribution.

(14) Provide requested technical assistance in the development and guidance of health education programs in groups and organizations such as school, public and voluntary agencies, professional groups,
and citizen groups.

(15) Provide consultation on the selection of appropriate teaching or group work methods to further health education or training objectives.

(16) Plan, conduct, and evaluate staff meetings with health program staff; arrange orientation sessions, field visits, demonstrations of methods of health education, workshops, and other in-service training activities.

In this project was also created a group of ten mobile health development units in four regional sub-headquarters. Other activities of the health workers in the mobile units included:

(1) Helping and supporting health workers in the area of community development;

(2) calling meetings in the villages and sponsoring an orientation and/or a refresher course in health education for the leadership to deal with health problems, and parasitic control program;

(3) providing health education that is involved with protecting and preventing intestinal diseases;

(4) encouraging the health workers to open a village health and sanitation facility as a good example in that province;

(5) visiting the chief of the community and the people in that village to get acquainted and develop a
personal relationship with them; and

(6) teaching health education in the schools and volunteer groups (11:5-17).

The health educator in the Health Education Section of the sub-headquarters has the following duties:

(1) Develop an educational plan to achieve program objectives.

(2) Organize community resources to meet health problems.

(3) Write annual reports on program operations and developments and articles.

(4) Produce filmstrips, slides, or other audiovisual teaching aids for use in community health development programs.

(5) Provide consultation on the selection of appropriate or group work methods to further health education for health personnel.

(6) Train the health personnel, border police, teachers, students, monks, youth groups, and community leaders in environmental sanitation.

(7) Plan, conduct, and evaluate staff meetings with health program staff; arrange orientation sessions, field units, demonstrations of methods of health education, workshops, and other in-service training activities (13).
Table 1

ACCOMPLISHMENT OF THE VILLAGE HEALTH AND SANITATION PROJECT DURING 1960-1970 (42:69)

<table>
<thead>
<tr>
<th>Region</th>
<th>VHS/CHD Village</th>
<th>Houses in VHS/CHD Village</th>
<th>Sanitary Village</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>7,885</td>
<td>845,025</td>
<td>293,540</td>
</tr>
<tr>
<td>South</td>
<td>2,331</td>
<td>263,679</td>
<td>63,182</td>
</tr>
<tr>
<td>North</td>
<td>3,668</td>
<td>547,809</td>
<td>310,651</td>
</tr>
<tr>
<td>Central</td>
<td>3,501</td>
<td>333,780</td>
<td>197,578</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17,385</td>
<td>1,990,293</td>
<td>864,951</td>
</tr>
</tbody>
</table>

Songkhla Province.

Songkhla is located in the southern part of Thailand. It is also the location of Region 9. The total population is 621,849. The provincial administration is divided into ten districts; one hundred, eleven sub-districts; and 869 villages (only outside of the municipal areas). The population is comprised of 496,452 Buddhists, 123,384 Islam, 775 Christians, 453 others, and 735 of no religion. Almost 90 percent of the people are engaged in occupations such as agriculture, forestry, hunting, and fishing (40: 43-45).
Table 2

OCCUPATIONS OF THE PEOPLE IN SONGKHLA PROVINCE

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agriculture, Forestry, Hunting,</td>
<td>119,401</td>
<td>112,361</td>
</tr>
<tr>
<td>and Fishing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mining and Quarrying</td>
<td>1,618</td>
<td>198</td>
</tr>
<tr>
<td>3. Manufacturing</td>
<td>5,772</td>
<td>3,294</td>
</tr>
<tr>
<td>4. Commerce</td>
<td>6,555</td>
<td>9,748</td>
</tr>
<tr>
<td>5. Textile, Clothing, Made-Up Textile and Leather Industries</td>
<td>588</td>
<td>1,650</td>
</tr>
<tr>
<td>6. Transport, Storage, and Communication</td>
<td>5,710</td>
<td>196</td>
</tr>
<tr>
<td>7. Service</td>
<td>12,175</td>
<td>5,785</td>
</tr>
<tr>
<td>8. Activities unknown or not adequately described</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>156,592</strong></td>
<td><strong>132,388</strong></td>
</tr>
</tbody>
</table>

Table 3

ACCOMPLISHMENTS OF SONGKHLA COMMUNITY HEALTH DEVELOPMENT FROM OCTOBER 15, 1971 TO MARCH 15, 1973 (11:20)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Total Villages</th>
<th>VHS/CHD % of Total Villages</th>
<th>Number of VHS/CHD Village per Villages</th>
<th>Number of Houses in VHS/CHD Villages</th>
<th>Sanitary Latrines in VHS/CHD Villages % of Latrines per House</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>869</td>
<td>183</td>
<td>21.06</td>
<td>24,084</td>
<td>9,006</td>
</tr>
<tr>
<td>1972</td>
<td>869</td>
<td>208</td>
<td>23.90</td>
<td>24,937</td>
<td>9,452</td>
</tr>
<tr>
<td>1973</td>
<td>869</td>
<td>266</td>
<td>30.61</td>
<td>29,684</td>
<td>10,135</td>
</tr>
</tbody>
</table>

VHS = Village Health and Sanitation Project
CHD = Community Health Development

* % = \( \frac{\text{Number of CHD} \times 100}{\text{Total Villages}} = \frac{183 \times 100}{869} = 21.06 \)

** % = \( \frac{\text{Number of Sanitary Latrines} \times 100}{\text{Number of Houses of CHD}} = \frac{9,006 \times 100}{24,084} = 37.39 \)
The health personnel in this province consisted of four physicians, eleven senior sanitarians, five public health nurses, twenty-two nurses, thirty-one junior health workers, and forty-two midwives. The senior sanitarians and junior health workers are assigned to their own villages for the purpose of improving environmental sanitation in those areas. They are required to extend this program every other year until all the districts are covered. Improvement in environmental sanitation is given as the goal of this project.

The health teams have been working in this province for thirteen years. The results of their work have not yet reached the long term goal (projected for fifteen years). There are many villages in which sanitation has not yet improved. Each household in the villages does not yet have a sanitary latrine. The latrines are neither constructed nor maintained properly and as a result there are still many parasitic diseases present among the villages.
Table 4
A STUDY OF THE PREVALENCE AND INTENSITY OF INTESTINAL PARASITIC INFECTION IN BAN LANSAI, NUMBER 2, TUMBON-TONGKAMIN, HADYAI DISTRICT, SONGKHLA PROVINCE.

2nd MAY TO 20th JUNE, 1972 (11:30)

COMMUNITY HEALTH DEVELOPMENT CENTER,
REGION 9.

THE PREVALENCE OF INTESTINAL PARASITIC INFECTIONS

<table>
<thead>
<tr>
<th>Age Group (year)</th>
<th>Number of Persons Examined</th>
<th>Number of Persons Found</th>
<th>Number of Parasitic Infections</th>
<th>Number of Infected Persons Infected by Intestinal Parasites</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>90</td>
<td>79</td>
<td>5 (87.8)</td>
<td>28 (30.5) (41.7) (46.8)</td>
</tr>
<tr>
<td>5-9</td>
<td>95</td>
<td>92</td>
<td>79 (96.9)</td>
<td>60 (65.1) (56.6) (55.4)</td>
</tr>
<tr>
<td>10-14</td>
<td>92</td>
<td>80</td>
<td>72 (87.0)</td>
<td>62 (77.6) (32.5) (48.8)</td>
</tr>
<tr>
<td>15-19</td>
<td>74</td>
<td>53</td>
<td>46 (87.0)</td>
<td>37 (77.6) (32.5) (48.8)</td>
</tr>
<tr>
<td>20-24</td>
<td>62</td>
<td>47</td>
<td>34 (71.8)</td>
<td>28 (69.9) (37.8) (37.8)</td>
</tr>
<tr>
<td>25-29</td>
<td>38</td>
<td>29</td>
<td>22 (75.9)</td>
<td>19 (59.7) (34.1) (36.0)</td>
</tr>
<tr>
<td>30+</td>
<td>189</td>
<td>168</td>
<td>133 (76.4)</td>
<td>116 (65.7) (31.0) (38.0)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>640</td>
<td>548</td>
<td>442 (85.4)</td>
<td>350 (64.0) (32.1) (41.8)</td>
</tr>
</tbody>
</table>

* Hook worm (Necator Americanus)
** Ascaris Lumbicoides
*** Trichuris Trichura
Chapter 3

REVIEW OF LITERATURE

Basic Concepts and Perception.

People vary greatly in their abilities to communicate with others in the exchange of knowledge, ideas, feelings, and emotions (32:59). The process of perception cannot be directly observed. It is assumed to take place if the individual responds when a stimulus is presented to a sense organ--an eye, ear, taste bud--and fails to respond when the stimulus is not present (32:159).

The perception of individuals in the same situation will vary according to the background, hopes, fears, and expectations of each person. The same objective situation may be perceived in two different ways by two different people or even by the same person at two different times (45). The perception of individuals is influenced by social, cultural, and custom factors, and by the personality of the perceiver. The roles of an individual in any position are dependent upon the roles of other individuals in that setting (10).
Social roles furnish a basis for communication between people. They help the individual group member to know what to expect of other members, how to approach them, and how to communicate with them. Social roles provide guides to behavior and eliminate the necessity of constant experimentation. Understanding the personal role definition, therefore, involves an understanding of both how the role is conceived and how the role is performed (32:119-120).

Knowledge of the people, whether it is innate or acquired, is one of great significance for public health. If it is true that health beliefs, knowledge, attitudes and feelings were inherited, attempts to change these ideas through education would probably be futile (32:150). Attitudes are formed and changed throughout the process of growth, and maturation being affected by such factors as experience within the family, peer groups, education and others (32:150-293). Attitudes are probably the result of three kinds of influences: (1) selection of role occupants, (2) socialization, and (3) selective exposure to information. Attitudes have generally been regarded as either mental readiness or implicit predispositions which exert some general and consistent influence on a fairly large class of evaluative response (23).
Rewards and punishments should be highly effective means of producing attitude change, and it should be possible to use them to predict the amount of generalized attitude change that will occur (55:91). Attitudes have been shown to affect perception, thinking, learning, and forgetting in studies inside and outside the psychological laboratory. Attitudes, values, and beliefs have a pervading influence over all of man's behavior (32:259, 394).

The adoption of a new idea or practice depends on the individual's personal belief system and perception of the idea plus the conviction that the new idea has received the endorsement of the community. This implies the need for learning in real-life situations through practical experience (24).
Chapter 4

THE PROPOSED HEALTH EDUCATION PROGRAM

Latrine installation and proper use by each household is one of the primary problems with which health personnel are faced in improving sanitation conditions. It requires more consideration and attention than is presently devoted to it. Many of the difficulties have continued to exist because of a lack of awareness on the part of the villagers themselves. In keeping with community development and its basic concept of "self help" in improving conditions, all current health programs are usually aimed at the male, who is the head of the household. This program seeks to educate housewives, who also have influence in the community. It is hoped that such a housewife would carry the message of health back to her family, especially her children. Sanitation problems might be solved by approaching this new target group.

Target Groups.

The Thai family is a nuclear family. The ideal form of family life includes the housewife who does
most of the purchasing for the family. As a result, the housewife has an important voice in the handling of the family's finances (21:66-69). Most of the villagers have big families, with the average family having six children. It is a burden for the housewife to take care of so many children. After the harvesting season, the farmers leave their fields and many leave home for four or five months at a time to take temporary jobs in Bangkok (50:4).

An infant in Thailand is officially recognized as a member of the community when he is several months old. The child begins to learn the proper forms of address for older and younger brothers and sisters, older and younger cousins, and older and younger aunts and uncles, and to accept his place in the family hierarchy. The children begin to attend school at the age of seven and continue in school until they have completed the required primary school or until they reach fourteen years of age (21:70-71). The housewife is responsible for her children until they reach fourteen years of age. During this time, concepts of health and illness and many lasting health habits are formed while the child is under the influence of his parents' attitudes and behavior, before the child begins to grasp their significance to his health and safety (23:11-12).
The development of basic health habits of the child depends on the health knowledge, attitudes, and practices of the mother.

The proposed housewives' committee in the villages would be a group of women who are interested in improving the health of the village through instituting a latrine program.

It would be composed of housewives whose age ranges from thirty to forty-five years. It would consist of fifteen to twenty housewives.

Criteria for the development of a housewives' committee: Some reasons for the development of a housewives' committee include:

(1) They have more influence upon the child;
(2) they take more responsibility for the child's health than does the father;
(3) they stay in the home with the child more than the father does;
(4) the relationship between the mother and the child is closer than between father and child;
(5) the child imitates and accepts the mother's behavior; and
(6) the habits of the child can be developed gradually by his mother.
Objectives.

The primary objective of this health education program is to bring about a reduction in the incidence of intestinal parasites in the rural areas in Songkhla Province from 90 per cent to 20 per cent in two years in the children 1 - 15 years of age.

The secondary objectives are as follows:

(1) Members of the housewives' committee will demonstrate an understanding of the life cycle of selected intestinal parasites.

(2) Members of the housewives' committee will discuss with other community members the need for sanitary latrines in the village.

(3) The proportion of sanitary latrines in the village will be significantly increased.

(4) The proportion of villagers who regularly use sanitary latrines will be increased.

(5) Members of the housewives' committee will understand that there is a causative relationship between insanitary disposal of human waste and intestinal parasitic diseases.

(6) Housewives who are not committee members will also understand that there is a causative relationship between insanitary disposal of human waste and intestinal parasitic diseases.
When a health educator works in the community, he usually works through a committee. The health educator helps develop the organized group of community members who will take action to improve the health status of the community. One type of community committee is a school health committee. It is comprised of a group of teachers, a local health personnel member, and a community leader. The objectives of such a committee, for example, would be improving the school lunch program for the school children.

The goals of the proposed housewives' health committee would be as follows:

1. To determine how the intestinal parasite problems of the village could be solved;
2. To promote new, sound health practices and attitudes toward environmental sanitation;
3. To receive health education from health personnel and pass this education on to other members of the community;
4. To help the health educator discover what are feasible ways of increasing the number of latrines in the community;
5. To participate in the execution of a variety of action programs, e.g., urging each family to dig
latrine pits or leading people to join together for one
day to install the latrine; and

(6) to gain skill and confidence in techniques
of democratic discussion and action so that when the
health educator leaves, the housewives will carry on
by themselves.

**Community Approach:** Communication is an impor-
tant link between the health educator and the villagers.
It is the key to success of the latrine program. The
health educator must pass on knowledge to the people
and translate and interpret it so that he will not be
misunderstood. It is important that he maintain a good
working relationship with the members of his group.

Effective ways to approach the villagers are
through face-to-face meetings and small group discus-
sions.

**A. Face-to-face method.**

1. Home visit.

2. Formal talks.

These two methods should be short (probably not
longer than half an hour) and should talk about only
one subject. The session should be simple and inter-
esting. Visual aids (e.g., flipchart, pictures,
posters) should be used when possible. The advantages
of these methods are:
(1) Firsthand observation of each person and his/her family;
(2) gaining an understanding of socio-economic factors in the community;
(3) immediate feedback;
(4) establishing a close relationship between interviewer and interviewee; and
(5) learning directly villagers' opinions (3: 9-14).

The disadvantages of this approach are that it takes a great deal of time and money. Too, some poor people are embarrassed by their surroundings and do not want to be seen by outsiders.

B. Small group discussion method.

The size of the small group discussion should be about fifteen to twenty people. A major advantage of this method is that it can teach members to think and participate equally in a group setting. This method can generally succeed:

(1) When the group is small enough for everyone to be involved in discussion;
(2) when the members have enough interest in the problem and want to know more about it or solve it through overt participation;
(3) when the group members are willing to listen, to exchange ideas, and to explore deeply into
a problem;
(4) when the level of human relation skills of members is adequate to facilitate good discussion;
(5) when a group atmosphere is permissive and good feeling prevails; and
(6) when members have some understanding of functional roles (17).

In order for groups to function properly, the group should:
(1) Have the group objective clearly in mind;
(2) make sure that the problem or idea is worthy of discussion;
(3) select a meeting place appropriate to the size of the group;
(4) appoint a discussion recorder;
(5) give everyone a chance to talk about the problem, whether he agrees or not;
(6) keep the discussion directed and on the track; and
(7) discuss with fairness and objectivity and avoid any bias.

Good discussion is based on and requires objective thinking. Each member must be willing to share information. Listening is vital to discussion, each member must hear every other member and do some thinking about what he hears. Good discussion depends upon
individual contributions (17).

**Methods and Activities.**

There are many ways and steps to approach the housewives. After considering the nature of the health problem and knowing the target group, the health educator has to organize the program and involve the community from the very beginning. As a result, the people will realize that they are actually part of the program.

The first step taken is to call a meeting of all the villagers and share with them the results of the sanitary survey (base line data). The need for the village women to attend is especially emphasized. The mass media approach will be used to develop awareness and interest of the people. The discussion of the health problem will help to clarify any doubtful points in their minds.

The second step is to set up the community committee of fifteen to twenty persons to be the health committee. Its purpose will be to help discover what the felt needs of the community are.
The steps in approaching the different resource people in latrine program:

A. At the regional office (sub-headquarters).
B. At the provincial level.
C. At the district level.
D. At the village level.
At the regional office: The health educator has to prepare himself technically before he goes to the province. As such he must:

(1) Read the previous reports about provincial activities (suggestions, requests, problems and situations);

(2) bring the material requested by the P.H.O.;

(3) take all report forms:
   a. Health education activities reports;
   b. community health development reports;
   c. matching and revolving fund reports; and
   d. pamphlets, flipcharts, and articles;

(4) transmit official messages; and

(5) give allowances.

At the provincial level, he must:

(1) Meet the provincial health officer (P.H.O.);

(2) give him the regional community health development message;

(3) meet senior sanitarian and staff;

(4) meet the governor with P.H.O.'s message:
   a. Explain our program;
   b. meet the chief of other agencies; and
   c. get the message to the district officer;

(5) meet and consult with the senior sanitarian about working program;

(6) meet and consult the senior public health
sanitarian after he comes back from the field each day if it is possible.

In small group meetings at the provincial level, he must:

(1) Meet the district health officer at the end of the meeting each month;

(2) propose a working schedule and program;

(3) explain about the job, steps of approaching and steps of working in the village; and

(4) discuss the situation.

Then he must get the message from the provincial health officer to the district health officer.

At the district level, he must:

(1) Meet the district health officer, nurse, and midwife, giving them the provincial health officer's message;

(2) meet the district officer with him and give him the governor's message;

(3) meet the other agencies at the district office; and

(4) meet the sub-district headmen and village headmen at the end of each month, to whom he:

a. Explains about the program, and
b. gets the response and some problems.

Finally, at the village level, he must:

(1) Prepare himself with the following:
   a. Health education tools, and
   b. dress simply;

(2) meet the village headmen with the district health officer and:
   a. Use polite terms of address in speaking to him and villagers;
   b. be friendly;
   c. eat food offered by villagers;
   d. watch personal conduct;
   e. work with hands;
   f. use humor;
   g. live in the community;
   h. visit other leaders (monk, teacher, and granny midwife);
   i. do favors when possible;
   j. make home visits;
   k. arrange medical treatment; and
   l. arrange special help for children;

(3) meet the housewives' committee, using:
   a. The mass media approach:
      1. Calling a large number of the people, making them feel united;
      2. communicating with them by speeches
or movies for entertainment;

3. showing good health education films mixed in with entertainment films;

4. holding mass meetings more often during an intensive part of the program; and

5. holding a mass meeting after first questionnaires but before the first formal survey;

b. individual approach:

1. Explain the purpose of the program and the steps of working;

2. encourage team work;

3. build trust;

4. stress neatness and cleanliness;

5. use religious teaching; and

6. discussion;

c. small group discussion approach:

1. Show that the problem of the intestinal parasite can be solved by construction of the latrine;

2. focus on life cycle of worms;

3. proceed from things the villagers know to things they do not know;

4. use visual aids (e.g., film, slides, pamphlets, flipcharts);

5. show worms and demonstrate stool examination;
6. encourage competition among them; and

7. discussion.

In the early stages of the temporary committee, meetings might need to be held as often as once every week or two. After work is better organized, regular meeting dates and times should be set, not less frequently than once a month.

Work with the Housewives' Committee: The following points should be followed:

(1) Build the committee gradually, start by appointing just a few committee persons, then gradually increase the membership;

(2) start from some things they know and move to things they do not know;

(3) conduct meetings informally;

(4) let the meetings emerge naturally;

(5) watch for deficiencies they are still lacking;

(6) guide them in the meeting;

(7) emphasize cohesiveness and helping each other; and

(8) establish construction day for the latrine.

After work is better organized, regular meeting dates and times should be set, not less frequently than once a month. Find a regular meeting place that is
convenient and quiet. Visit each member at her house prior to each meeting to remind her to attend.

Steps of Health Education Change: The health educator is concerned with the creation of public interest in health and in the promotion of an awareness of health needs. Successful education of the villagers in a latrine program not only rests on an understanding of the basic concepts in human behavior but also on a knowledge of beliefs and attitudes of the people toward certain fundamental problems. Village people are not interested in cleanliness and filthiness. There is no awareness of the relationship between feces and health because they lack such knowledge.

Learning depends upon the perception of the individual toward the innovations presented to him. It is more effective when the experience has meaning for him and he is able to see the full implications of the experience. The adoption of a new idea or practice depends on his beliefs and perceptions. Learning usually starts from the known to the unknown, from the simple to the complex. In the rural areas, it could be a basic information on the prevention of intestinal parasites (round worm) through a health program in the small group approach. The main reasons are:

(1) Round worm showed a high incidence among
the age group 1 - 15 years, and

(2) epidemiology of the disease is clear and well defined and infection is preventable with sanitary measures.

Figure 2
Relationship Between Health Education and Housewives' Activities in Changing Health Behavior *

(10:54)

Health Education Activities
(diffusion)

Housewives' Activities (adoption)

Promote

Inform, Tell

Demonstrate, Show

Train

Help

Service

Nurture

Awareness

Interest: Information-Seeking

Evaluation

Trial, Test

Installation

Adoption

Institutionalization

* Adopted from Havelock Renold, Planning for Innovation.
After considering the health problems, the size of the target group, the objectives, and selecting the housewives' health committee, it may be decided that the one-to-one and small group approach would be appropriate and effective methods to accomplish the stated goals.

The techniques that should be used in carrying out the small group method are: first, make the housewives aware of this program; and, second, hold meetings during the first formal survey at the same time as the interview for basic health knowledge. For the small group method, short lectures will help to disseminate the information which will facilitate the discussion. A film will help to reinforce concepts and visualize the problem. Demonstrations of experiments will help the housewives to realize that the problems can be solved.
By giving them a chance to ask questions, to see demonstrations, to participate in meetings, to build the latrine, they will realize that the latrine is important for them. At the conclusion of each meeting, the health educator should ask them some questions which relate to the prevention of round worms. Pamphlets, leaflets, and posters should be provided to help reinforce certain aspects of the program. The latrine program must start in a dry season of the year in February and last through September, when the rainy season begins. The meetings will be set for the fourth Saturday in each month at 1-3 PM.

A. The first meeting. The purpose is to make the villagers aware of the high death rate due to intestinal diseases. Then the point will be made that these diseases can be prevented by using a latrine and by personal hygiene practice.

Place: Temple in the particular village.

Date: Saturday, February 28, 1974.

Time: 1-3 PM.

Attendance: Fifteen housewives to form the housewives' health committee and villagers.

(1) Introduction: District Health Officer introduces everybody who is involved in the program.

The health educator explains the reason for the meeting,
then introduces the housewives' health committee.

(2) Health educator explains how a revolving fund operates. This is a sum of money that the government or some organization advances to the people to promote a latrine program. When the money is paid back, the government or organization then uses the money again to promote the same or some other program in another village. For example, the Provincial Health Office might advance $100 for selling latrine slabs to the people at $5 per slab. When the money has been collected, it is used again by the Health Office to finance additional latrine slabs, or some other project, in the same or in another community. The housewives' health committee can get as many of the low-cost slabs from the health worker or health personnel as they want.

(3) Interview: The purpose is to determine the basic health knowledge of the villagers about the relationship between the intestinal parasites and feces. The villagers should be told that the interview is not intended to test them but is a way of gathering information before starting on the health problem. There is no need to sign names, since the interview is anonymous and confidential.

(4) The infection and the life cycle of the round worm is explained.

(5) The worms and stool examination is exhibited.
(6) Pamphlet, leaflet, and pictures are distributed.

(7) The steps of the latrine construction are demonstrated.

(8) Discussion.

(9) An appointment is made for the next meeting at the school on the third Saturday of the month.

B. The second meeting. This meeting will involve only the housewives' committee. The purpose of this meeting is to find out an available time to put up the latrines.

Place: School in that district.

Date: Saturday, March 21, 1974.

Time: 1-3 PM on weekend.

Attendance: Fifteen persons (committee only).

(1) Thanks for cooperation in the latrine program is expressed by the health educator.

(2) A film about the steps of latrine construction is shown.

(3) Discussion related to latrine construction is held. Committee members are asked to establish the day for putting up the latrine. The date and time for digging the latrine hole is set.

(4) The stool examination is demonstrated.

(5) The cause of infection, symptoms, and prevention of intestinal parasites are explained.
(6) The benefits of having a latrine are explained.

(7) Stools are examined.

(8) Discussion.

(9) An appointment for the next meeting is made.

C. The third meeting. The purpose of this meeting is to find out the problems which should be dealt with by the committee. The resource people who can help in this program should be identified. The teacher, the village leader, the monk, and midwife can be useful to help to spread out the program.

Place: Temple.

Date: Saturday, April 21, 1974.

Time: 1-3 PM.

Attendance: Committee, village leader, monk, teacher, and midwife.

Introduction: The district officer would express our thanks for their cooperation and attendance at the meeting. The problems they might have in the construction of the latrines should be explained to them.

(1) The committee is motivated by the health educator's asking, "Who doesn't have a latrine to build?" A good example will be set for the rest of the villagers.

(2) Their problems in constructing and using
the latrine are found out.

(3) These problems are solved in a feasible way.

(4) Treatment is given to the people who have a positive stool and already have set up the latrine and use it.

(5) Discussion.

(6) An appointment for the next meeting is made.

D. The fourth meeting. The purpose of this meeting is to encourage the construction and use of the latrine by other villagers. Each member of the committee will be asked to take responsibility for eight to fifteen houses in the village. Each committee member will be asked to take responsibility for her relatives in the village. Each member (leader, teacher, monk) should have a latrine ready within three months. Usually, it is best to divide the community into blocks corresponding as closely as possible to the natural geographical subdivisions of the community. In other cases a more arbitrary division is necessary, using as boundaries such easily recognized features as roads, canals, and parts. Once blocks are established, each block should be represented by one member of the committee. If there is no good leader who lives in Block X, they should use as their representative a committeeman who lives as close as possible.

Place: Temple.
Date: Saturday, May 21, 1974.

Time: 1-3 PM.

Attendance: Committee, village leaders, monks, midwife, teachers, and villagers.

Thanks for attendance and participation in this program is expressed by the health educator.

(1) Block Representatives to take care of their own blocks should be established.

(2) The credits to the school children who use the latrines should be given by teachers and housewives.
   a. The worms and the transmission of the disease are explained to the school children, and
   b. the cause of infection and how to prevent it is explained to them.

(3) A film is shown and pamphlets are distributed.

(4) The school children should be visited at home at least once a week by teachers and housewives.

(5) Discussion.

(6) An appointment for the next meeting is made.

E. The fifth meeting. The purpose of this meeting is to encourage competition among the housewives on the health committee. Each should take responsibility for her areas. For example, the health educator might invite the Provincial Health Officer to come and look over the community and give his decision
as to which block has the most latrines constructed and being used. At the next meeting of the housewives' health committee, the Provincial Health Officer might present a small prize to the Block Representative of the winning block.

   Place: Temple.
   Date: Saturday, June 21, 1974.
   Time: 1-3 PM.
   Attendance: Committee, leaders, monks, midwife, teachers, and villagers.

(1) Thanks for attendance and participation in this program is expressed by health educator.

(2) The ideas for community committee members' contest among their responsibility areas are proposed by the health educator.

(3) The referees consist of the Provincial Health Officer, Senior Sanitarian, supervisor from the Community Health Development sub-headquarters, health educator, public health nurse, and the chairman of community committee members.

(4) The prizes are offered by the Provincial Health Officer and the Community Health Development sub-headquarters.

(5) Discussion.

(6) A feasible way should be found to solve the problem faced by the ones who do not construct the
(7) An appointment for the next meeting is made. Where possible, the health educator should encourage Block Representatives to hold block meetings from time to time. Each family in the block sends a member to the meeting. The health educator attends these meetings and gives health information. He thus brings his message to twenty or thirty houses in one evening. Such meetings help people to realize that they are members of the same block, and help them to generate a feeling of pride in constructing the latrine. Before and after the meeting, the health educator should walk through the block with the Block Representative, dropping in here and there for a home visit. One way to improve efficiency is to make a standing arrangement with all Block Representatives to meet at a convenient time, for instance every Saturday night, and walk through the community as a group. All of the committees together look for recent improvements in outward appearance, latrine cleanliness, etc., of each block. Health educators should praise householders and Block Representatives who have done well.

F. The sixth meeting. The purpose of this meeting is to bring about cohesiveness of the committee by arranging trips by using free government transportation to visit other community health development pro-
grams to get some new ideas to improve their community.

Place: Temple.
Date: Saturday, July 21, 1974.
Time: 1-3 PM.
Attendance: Committee.

(1) Thanks for attendance and participation in the program is expressed by the health educator.

(2) The idea for field trips is proposed and set up.

(3) The reasons why certain villagers did not yet construct latrines should be found out.

(4) A feasible way to deal with certain problems should be found out.

(5) Discussion.

(6) An appointment is made for the next meeting.

G. The seventh meeting. The purpose of this meeting is to help the villagers who do not yet have latrines. There are usually some villagers who do not have enough money to buy a slab, a bowl, and superstructure, and also some villagers who are resistant to change. For the low-economic-status villagers, the health educator and the community committee should help them by letting them participate in construction. Have them provide the sand, gravel, etc., so that the poor villagers will be able to build a latrine.

For the villagers who are resistant to change, the health educator and committee have to find out
their reasons, then try to overcome that resistance.

Place: School.

Date: Saturday, August 21, 1974.

Time: 1-3 PM.

Attendance: Committee and villagers.

(1) Thanks for attendance and participation in this program are expressed by health educator.

(2) The villagers who are poor should be identified and if it be determined they need help and support, that help and support should be provided by the committee.

(3) The resistance of those villagers who are reluctant to build the latrine should be overcome.

(4) The villagers who have already built their latrines should be encouraged to maintain their good condition.

(5) Discussion.

(6) An appointment is made for the next meeting.

H. The eighth meeting. The purpose of this meeting is to maintain the latrines that have already been built and are in good condition. Every house in this village should have the latrine. The housewives should visit the families and ask them how often they use the latrine.

Place: Temple.

Date: Saturday, September 21, 1974.
Attendance: Housewives' health committee, village leaders, teacher, monks, and midwife.

(1) Thanks for attendance and participation in the program are expressed by the health educator.

(2) The school children who are using the latrine should be given the credit by teachers and housewives' health committee.

(3) Home visits after school should be made by teacher and housewives' health committee as often as possible.

(4) Discussion.

(5) An appointment is made for the next meeting.

After the latrine program in this province has achieved its main goals in two years, the health educator will begin to work with the other nearby provinces.

Every described step should be taken by the housewives' health committee in this operation. Moreover, the health worker will be able to visit the housewives' health committee from time to time, give encouragement, attend meetings, and remain informed of what occurs in each community.
Evaluation.

Evaluation is concerned with the result of the latrine program in relation to whether or not its stated objectives have been achieved.

The methods of evaluation of this latrine program will consist of the following:

(1) An interview eliciting health knowledge, attitudes, and practices will be conducted. Each individual in the target group will be given a pre-test score for each area concerned. The test will be readministered and each individual will be given a post-test score. Whether or not a significant change has occurred between the pre-test and the post-test will be determined by the following formula:

\[
t = \frac{\bar{D}}{\sqrt{\frac{N \bar{D}^2 - (\bar{D})^2}{N - 1}}}
\]

(2) Comparing the number of latrines before the program starts and after the stated period of time (usually once each year).

(3) By using the following unobtrusive observations:

a. The extent of footprints to the latrine;

b. the upkeep of the superstructure;
c. the upkeep of the slab and bowl; and
d. the supply of water stored in the latrine
(if no water, then assume little or no use).
Chapter 5

SUMMARY

Thai villagers have established ways of doing things. Health educators must learn how to understand the people's behavior, practices, and beliefs before starting health programs. They must know the pre-existing behavior of the people toward the specific disease in question before they start their educational programs.

Community health development in the Village Health and Sanitation Project in the past has dealt mostly with the male head of the family. Many community committee leaders do not have a latrine installed at their homes. It was determined that the most critical part of the community health development was that the leaders themselves had not changed their own health behavior. Therefore, it is difficult to change the villager. The local leadership is the most important aspect in communicating ideas and in overcoming cultural, social, and educational barriers.

The housewives' health committee is a new target group. They should be helpful in solving health problems of the villagers because they stay at
home more than their husbands and are thus influential in the village. They also exert more influence upon their children than do men. This program, if properly planned and implemented, should help create better informed and motivated housewives and should reduce the incidence of intestinal parasitic infections.
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