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Paradigm Shifts for Community Health Development by Medical Professions: A Case Study of Health Promoting Hospitals Devolved to Local Government in Thailand

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ABSTRACT

Paradigm is important to determine people's ideas, beliefs, values, and life-style of the people and understanding their problems. The first paradigm that had influence over the ideas, beliefs, values and practices of most people in earlier times was called Normal Science until the scientific revolution era. Where prior knowledge cannot explain a phenomenon or a new discovery occurs, for people in the community to agree with a new practice for changing behaviour and making life better, it's called a paradigm shift. This research aims to study and offer a new paradigm for community health development that the medical profession currently practices as Thailand's community health development paradigms are both biological models and centralisation, these present limitations on promoting people's health achievement and well-being. This research is "ethnography" based. Participants were selected from the health promoting hospitals in two areas in Thailand. The interviewees consisted of 11 participants. This research indicated that community health development comprised the community-based, holistic health, and decentralisation methodologies. The medical profession has many paradigms for integrating knowledge, skills and ability; the research limitation being longer time-scale and higher budgets. Paradigm shifts for community health development by the medical profession found benefits in decentralisation, community based solutions and holistic health. This study suggested that these issues should be studied, in addition to the impacted paradigms on community health status, within the next devade. The value of this study was to highlight the importance of initiating, implementing, and maintaining community health and to provide insights into the conditions that should be considered when planning and developing community health.

INTRODUCTION

Paradigms or paradigm shifts, such as those mentioned by Thomas Kuhn who presents the argument that the development of scientific theory is not evolutionary but rather a series of interludes punctuated by intellectually violent revolution and as a result of those revolutions one conceptual world view is replaced by other. Kuhn is especially noted for the development and specialised use of the term "paradigm shift" where a paradigm is defined as "universally recognised scientific achievements that for a time provide model problems and solutions to the community of practitioners". Because of the fact that different scientists hold different world views and lenses through which they understand and even attempt to solve problems within that world view, Kuhn's description of scientists as being not necessarily objective, free-thinking sceptics attempts to convey this general idea that scientists accept and live within certain given paradigms and consequently are able to understand and explain this phenomenon within this paradigm. However, when scientists within a given paradigm are no longer able to explain and solve problems within that paradigm, Kuhn purports that a crisis stage will be reached after which the emergence of a new paradigm arises and when this takes place, a paradigm shift is said to have occurred. Since paradigms are usually incommensurable, the phenomenon explained by one paradigm would usually not be explained by another paradigm. This in some way creates a sense of advancement in moving from one paradigm to another. (Kuhn, 1970; Kinra et al*.,* 2010).

LITERATURE REVIEWS

Thailand's health system has had many crises; First, the budget increases every year but the health service decreases. Second, the population is still becoming ill and dying from diseases that can be both controlled and prevented. Finally, the health system emphasises treatments more than it does health promotion. In 21st century Thailand, many people have health problems, such as cancer, diabetes, hypertension, AIDS, and older people with dependencies as well as social problems such as suicide, addiction and accidents. The current health crisis has arisen from the aforementioned. They have arisen from health knowledge and understanding with at least two paradigms: centralisation and biomedical paradigms. Centralisation paradigm has unique characteristics. (Frifjob, 1982). First, centralisation paradigm has been shown to decide and resolve problems because centralised bureaucracies have many hierarchies (Mills, 1994; Loraine et al., 2009). Second, centre bureaucracies tend to micro-control and regulate for the sub-organisations. Policy and activities from central bureaucracies are not responsive to people's problems (Saltman et al., 2007). Third, the centralisation of bureaucracies obstructs the participation and will of people. Finally, health services are unequally distributed, contributing to

health inequalities across status groups, the structure and dynamics of health care organisation shape the quality, effectiveness, and outcomes of health service for different groups and community. The biomedical paradigm describes health, disease and illness as reductionist which is a tendency to reduce all explanations to the physical workings of the body and is absent mind, soul, values, and humanity (Porter, 1999). One major criticisms of the biomedical model stems from its apparent unwillingness to acknowledge that both social and psychological factors exist (Freidson, 1970; Illich, 1976; Barker et al., 2013).

The paradigms mentioned above present limitations. The medical profession must investigate in order to select the paradigms they fall under. From literature and research, the current available paradigms are decentralisation, community based, and holistic health (Gutmann & Dennis, 2004). First, decentralisation was used in Europe post War II with the objective of reforming the bureaucracies, politics, democracy, economics and the privatisation of resources. This decentralisation process brought the service closer to the population and gave the municipalities a greater role in budgets and provision. However, it also gave local government the authority to decide autonomously whether or not to fund health care, including the option to use the central government transfer for other purposes. Furthermore, power was devolved to different sectors to oversee production factors such as labour, capital, and inputs. This setup created difficulties for the local

government to implement national priorities such as the management of facilities and human resources as well as transparency and accountability. In Thailand, power had been devolved to local bureaucracies via decentralisation by King Rama V to local. The purpose was to promote local bureaucracies in order to strengthen and respond to the people who live in the community. Decentralisation became an obligation as enshrined in the 2009 Thai Constitution.Health promoting hospitals being devolved to local bureaucracies was one area of decentralisation. Second, another paradigm is community based and is called "participation".The concept of participation can be initiated at grassroots level without professional sponsorship such as voluntary/ bottom-up/community supportive, social participation, and imposed from above, with organisational components defined by professionals and state authorities such as top-down, community oppressive, and direct participation (Morgan,1993). The community based paradigm aims to resolve many problems and support people's empowerment (Starfiel, 1994; Sadan, 1997). People's involvement in health refers to community cohesion that result from positive aspect of community life, particularly from high level of civil engagement as reflected in membership in local voluntary association. Finally, paradigm is holistic health. Holistic health is in contrast to the biological paradigm in that it treats the whole person and is an understanding of life and disease being more than just life's component parts as it also

includes the social determinants of health.

CONCEPTS USED IN THIS RESEARCH

For this research, we chose three paradigms: community based, decentralisation, and holistic health which are used to understand the medical professions which alter the community health development paradigms. These paradigms will support data and create community health policy.

MAIN QUESTIONS

These areas are determined by central bureaucracies and provide the biological paradigm to promote community health. This study seeks to answer the following research questions: What are the other paradigms that medical professions choose? What are the related problems and conditions? How do the medical professions manage the problems and conditions?

SUB-QUESTIONS

1. How do the medical professions define "health"?
2. Do the medical professions have concepts to deal with what they regard as community health development? If so, what are they?
3. Do the medical professions have method to develop the community health? If so, How?
4. What are the problems or conditions in shifting the community health development paradigms? How are they tackled?

OBJECTIVE

This research aims to study and alter the paradigms of community health development that the medical profession currently use.

SPECIFIC OBJECTIVES OF THE STUDY

1. To determine the conceptual sets of community health development used by the medical profession.
2. To explore practices of the medical profession in community health development.
3. To explain the process and conditions for changing the community health development paradigms in the medical profession.

DEFINITION

1. Paradigm means both concept and method used by the medical profession in providing community health services and well-being.
2. Community health means the complete health of people; including mind, soul and equality in society.
3. The medical professionals are those who work at health promoting hospital as medics, nurses and public health officials.
4. Health decentralisation means the medical institution transferring power to communities, local bureaucracies and the public sectors.
5. The biomedical model describes health, disease, and illness in terms of the

physical working of the body; absent mind, soul, values, and humanity.

6. Community based means many problems are resolved in the people community such as by participation and empowerment.

7. Holistic health means understanding health and diseases are included in the social and psychological factors.

MATERIALS AND METHODS

Study areas

Study areas: the starting point of the study began when the researcher arrived at two health promoting hospitals, known as "Ban Prok" and "Buengyitho" in central region of Thailand. They are 166 km and 30 km from Bangkok respectively. The characteristics of the study areas were devolved to local government and received "Good governance awards" . The researcher resided in the community for 6 months.

Key Information

This research used a case study approach in order to explain the paradigms that medical professionals choose to promote community health. The authors used qualitative research and select medical professionals who have experience and knowledge on community health development methodology called "information rich case".

Key information: The authors started the field work without any problems. They were interested in the geography, economy and the people in those areas, especially medical professionals whom they

befriended. The author introduced themself and briefed about the objectives of the study to key informants. The key informants were required to sign a consent form before being interviewed.

Instrument

Two kinds of field notes were used: a diary to note appointments and used as a scratchpad, and a chronological record of important events that happened each day. These notes are taken on site during interviews or observations. They are rough drafts complete with diagrams and sketches. Furthermore, both pictorial, using a camera, and audio records were made. By the end of the field work, recordings had been made of 33 cases, together with 109 pictures. As the instrument for data collection, the authors collected data from the field by non-participant observation and by in-depth interviews with 11 medical professionals.

In-depth interview: some of the guidelines in the in-depth interviews were derived from approaches such as community based, decentralisation, holistic health, centralisation, and biological models. The guidelines were developed after the researcher had reviewed relevant literature, documents, and previous research so that the guideline would cover the content and objectives of the study. Some of the guidelines for the questions in the in-depth interviews were created before data collection. The authors created additional questions when available data indicated important and interesting issues related to community health development of

medical professionals. Data analysis and data collection in the field were done simultaneously. All questions were open-ended questions. In order to completely gather information from each in-depth interview, the author asked the informants permission for sound-recordings and written note-talking. The authors used an audio digital player to prevent any awkwardness on the part of the informants when answering questions or revealing details about their lives.

Aside from data collection through in-depth interviews, the authors used non-participant observation by accompanying the medical professionals on their rounds when they visited patients at home as well as when they rallied to control and prevent diseases.

This is not a quantitative research study, instead, the researcher used himself as the instrument to obtain data, using his own expertise as public health technical officer working at a health promoting hospital in Sisaket province.

Data Analysis

Data analysis is conducted immediately after the daily data collection in order to gather all the information related to the study items. When data reaches saturation point, the researcher stops and starts analysing the data using an inductive approach. The inductive approach has the following procedures: (1) Producing transcripts of the interview and reading through a small sample of the text (2) Identifying potential analytic categories or potential themes that arise (3) As the categories emerge, data from those categories are gathered and compared (4) There is a brainstorming session on how to link the categories together (5) After that, the relationships among the categories are used to build a theoretical module by constantly checking the models against the data, particularly in negative cases (6) Final step is to present the results of the analysis using exemplars, such as quotes from interviews that explain and validate the theory (Bernard, 2006).

RESULTS

Eleven medical professionals took part in the in-depth interviews detailing their demographic such as sex, age, life experiences, positions and areas . The minimum and maximum ages were 28 and 53 years respectively. The minimum and maximum in life experiences of the community health development were between 6 and 24 years. The positions of medical professions at health promoting hospital comprised medical physicians, 2 directors, 2 register nurses, 2 physical therapists, 1 public health technical officer, 1 dental nurse, 1 physical therapy specialist, 1 Thai traditional medicine practitioner, and a public health officer. The study areas were the health promoting hospitals known as "Ban Prok" in the Prok sub district Muang district of Samud Songkram province and "Buengyitho" in the Thanyabury district of Pathum Thani province, both in the central region of Thailand. (Appendix 1)

The health paradigms were defined as holistic health, community based and decentralisation respectively.

The most important question is: what is the community health view? Answer: "healthcare must promote prevention rather than treatment", (Key informant B, C, F).

The concepts were proven in community health in areas such as community based, holistic health, and decentralization.

Principle question would be: which concept do you think should be used to improve community health? Answer; "all policy for health must include the people's participation". (Key informant A, D).

The practices required to increase the community health status were community based, holistic health, and decentralisation.

Significant question would be: what practice do you undertake to improve the community health status? Answer: "co-operate with agencies that may assist in problems relevant to their areas" (Key informant A, B).

The medical professionals outlined the conditions or problems, changing conceptions and methods present in community health development such as work load, complex problems, and better local government resolution. A simple question would be: what are the conditions or problems that change your conception and the methods used in community health development? Answer: "the organisation has too few officers and is micro-managed by the central bureaucracies" (Key informant B, C) (Appendix 2).

The most used paradigm in community health development was holistic health. A lesser used paradigm was decentralisation, with community based used the least. (Appendix 3)

The medical professional that used the most paradigms in community health development was the director.

FINDING AND DISCUSSION

The research indicated that community health development comprised holistic health, decentralisation and community based paradigms respectively. These findings were derived from questions on defined health, methods, and concepts, and conditions in community health development in the central region of Thailand. To answer the specific objective of the study I) Medical professionals can understand illness and disease as not being necessarily inherent in any particular behaviours or conditions, but as constructed through human interaction or social determinant.

To answer the specific objective of the study II) what method is used in community health development: Community health development can improve by integrating with local government, health services and social care. The medical professionals mentioned above practise holistic health, decentralisation and community based healthcare. For example, holistic health is broadly defined as social, emotional mental and physical well-being. Medical professionals can apply a mixture of social behaviours and psychological and biological factors in health. This is consistent with

the findings of previous studies: (1) Harris found that an integrative approach bridges biomedical sciences with social and behavioural sciences by understanding the linkages between social, behavioural, psychological, and biological factors in health (Harris, 2010). (2) Keawanuchit and colleagues found that Thai farmers were psychosocially stressed with both Thai contract farmers and Thai farm workers due to globalisation (Keawanuchit et al., 2012; Keawanuchit et al., 2015a). A research about mental health among Thai immigrant employees in Pranakron Si Ayutthaya province by a path analysis found that job conditions and distance travelled between house and workplace had a direct effect on mental health (Kaewanuchit et al., 2015b). In addition, researchers found that university employees (Keawanuchit et al., 2015) and male academic university employees (Kaewanuchit, 2015) in Thailand were faced with occupational stress. These researches used the holistic health paradigms as bases for their explanation.

Many medical professionals have good skills mix; 1) integrated working provides the opportunity to consider staff and skill mix required to deliver health and social care service across traditional professional and organisational boundaries. 2) More staff enables more timely and appropriate communication concerning patients. 3) Medical professionals who made used of the resources improve information sharing and decision-making as well as risk management 4) improved their practices by avoiding repetition and frustration for the patient or

care user. A developing tradition among medical professionals has the discernment of unification in the heterogenetic of care (Coupe, 2013). This holistic health method involves gathering together individuals from different professions and specialists in order to provide good community health service. These medical professionals comprised physicians, nurses, physical therapists, amongst others (Dubois et al., 2009). Medical professionals can create interprofessional conflicts when developing a coherent treatment plan for patients. Community based and volunteer organisations such as self –help groups and learning together have ensured that community health development is more efficient and promotes equality. This is consistent with the findings of previous studies such as community health workers who are trained in family planning and refer clients to clinic-based services.

Furthermore, because community knowledge is organic, epistemological criticism that counters misunderstood characteristics of resource-poor settings has the potential for the making of healthful live it the world both now and in the future (Hoke et al., 2012). Community here is defined as the provider and recipient of health services as well as the clinical outcome (Blood, 2013). This result is in accord with previous research, such as training female community health volunteers, can outweigh the burden and challenges that arise, encompassing social engagement for healthy ageing in disadvantaged urban communities, and provide both a sense of community and

innovative health care endeavours to create a sustainable holistic health care model (Barbir, 2011; Beech et al., 2013). Health programmes are currently administered and implemented through a decentralised network of actors, organised by quasi-market relationship and charged with the task of bringing disciplines to the health of patients (Wright et al., 2010).

Decentralisation is related to public policy for health. The public policy for health has been almost totally directed and regulated by the central bureaucracies, with the exception of the medical policies practiced in the health promoting hospital called "Buengyitho". Decentralisation and the other paradigms benefit community health development in Thailand. These are paradigms that the famous academic "Putnam" applied in Italy. Decentralisation had been used in South Africa to provide relief for the "Rwanda genocide" by the Trauma Center for Victims of Violence and Torture (Putnam et al., 1993; Gutmann et al., 2004). The decentralised paradigm is consistent with findings from previous research in that health care reform was used to achieve increased coverage and access to high quality medical care, together with accountability to local government (Mechanic et al., 2010). When power was devolved to local bureaucracies and the public sector, it was found that local bureaucracies regulated health activities in order to protect the environment. To answer a special objective of the study (III), a condition of the 2009 Thai constitution

is that centralised bureaucracies devolve power to local bureaucracies and promote particular posts. Certain posts in the medical professionals such as the director use the most paradigms because persons in that position have more knowledge, skills and vision for community health development.

Thus, the authors recommend this research findings be applied in developing countries that aim for equality of health across humanity (Rondinelli et al., 1983. This research shows a strong preference for decentralised and local service provision, as opposed to central and bureaucratic systems stemming from a very different rationale and characteristics. Thus, it emphasises privatisation and the limitation of the state's role, and places the onus on decision making in a market setting (Collins et al., 1993). Decentralisation involves the transfer of resources, decision making, planning and management functions from the central government system to such bodies as field agencies, subordinate units of government, semi-autonomous public corporations, local government and specialised functional authorities. This reallocation of authority and resources is a major political issue affecting the internal power relationships within the public sector and the access of social groups to the decision-making process and state resources. This institutional transfer is, however, not an absolute virtue in itself. The researcher's appreciation of it will depend on how we interpret the redistribution of power and its effect on state allocation of resources.

The results of this research is consistent with the previous studies which found that decentralisation changes the vertical dimension of activation policies directed at social assistance recipients and challenges the distribution of responsibilities across policy areas, which are often located at different territorial levels (Williams, 2015).

CONCLUSION

Paradigm shifts for community health development by the medical profession found benefits in decentralisation, community based solutions and holistic health. In the past, centralised bureaucracies took on the community health development role and that must be changed to include more particular people and local government. Public policies for health influence the promotion of cooperation among people as a consumer group and also protects the environment for conservative tourism. Being community based, many problems are solved by the community itself, because the community is more understanding of the problems and has more resources.

ETHICAL CONSIDERATIONS

This research began when the researchers sent the qualitative questionnaire to the Ethics committee for Human research at Mahidol University to approve ethics of research. Human ethics code is COA. No.2014/395.2912, accepted on 29th December, 2014.

REFERENCES

Barbir, F. (2010). Challenges in planning and implementing community-based health interventions: training female community health volunteers with the Bedouin communities in the Bekaa valley of Lebanon. *Migration, Health and Social Care, 6*(3), 36– 41.

Barker, C., Cox, L., Krinsky, J., &Nelsen, G.A. (2013). *Marxism and Social movement.* Koninklijke Brill NV.

Beech, R., & Murray. (2013). Social engagement and healthy ageing in disadvantaged communitie*s. Quality in Ageing and Older Adults, 14*(1), 12 – 24.

Bernard, H. R. (2006). *Research methods in anthropology: qualitative and quantitative approach*. Altamira press.

Blood, I. (2013). Integrating housing with care for older people. *Journal of integrated care, 2*(4), 178-187.

Collins, C., & Green, A. (1993). Decentralization and primary health care in developing countries: Ten key question. *Journal of management in medicine, 7*(2), 58-68.

Coupe, M. (2013) Integrated care in Herefordshire: case study. *Journal of Integrated care, 2*(4), 198-207.

Dubios, A. C., & Singh, D. (2009). From staff-mix to skill and beyond: toward a systemic approach to health workplace management. *Human Resource for health, 7*(87), 1-19.

Freidson, E. (1970). *Profession of medicine*, New York, Harper Row.

Frifjob, C. (1982). *The turning point: science, society and rising culture.* New York, A bantam book.

Gutmann, A., & Dennis, T. (2004).*Why deliberative democracy?* Prince University press.

Harris, M. K. (2010).An integrative approach. *Demography, 47*(1), 1-22.

Hoke, T., Brunie, A., Krueger, K., Dreisbach, C., & Akol, A. (2012). Community-Based Distribution of Injectable Contraceptive: Introduction strategies in four Sub-Saharan Africa Countries. *International Perspectives on Sexual and Reproductive Health, 38*(4), 214-219.

Illich, I. (1976). *Medical nemesis.* Pantheon books, New York.

Kaewanuchit, C. (2015). A study of causal relationship of occupational stress among male academic university employees in Thailand. *Pertanika Social Sciences & Humanities, 23*(4), 1243 – 1256.

Keawanuchit, C., Muntaner, C., Dendoung, S., Labonte, R., & Suttawet, C. (2012). The psychosocial stress model for Thai contract farmers under globalization: a path analysis model. *Asian Biomedicine, 6*(3), 385-395.

Kaewanuchit, C., Muntaner, C., & Isha, N. (2015). A causal relationship of occupational stress among university employees. *Iranian Journal of Public Health*, *44*(7), 931-938.

Kaewanuchit, C., Muntaner, C., Labonte, R., & Johnson, D. A. (2015a).Stress among Thai Farm worker under globalization: A Cause Model. *Pertanika Social Sciences and Humanities, 25*(1), 169-182.

Kaewanuchit, C., & Sawangdee, Y. (2015b). A path analysis of mental health among Thai immigrant employees in Pranakron Si Ayutthaya Province. *Journal of Immigrant and Minority Health.* Published first online August 20, 2015 DOI 10.1007/s10903-015-0262-5. Retrieved October 9, 2015 from http://link.springer.com/article/10.1007/s10903-015-0262-5.

Kinra, A., & Antai, I. (2010). Emerging logics of competition paradigm shift, fantasy, or reality check? *Competitiveness review: an international business journal*, *20*(2), 94-110.

Kuhn, T. (1970). *The structure of scientific revolution.* Chicago, The University of Chicago.

Loraine, H., Srisasalux, J., & Osornprasop, S. (2009). *Devolution of health centers and hospital autonomy in Thailand: A rapid assessment*. Health System Research Institution and World Bank.

Mechanic, D., & Mcalpine, D. D. (2010). Sociology of health care reform: building on research and analysis to improve health care. *Health and Social Behavior, 51*(1 suppl), S147-S159.

Mills, A. (1994). Decentralization and accountability in health sector from an international perspective: What are the choices? *Public administration and development, 14*(3), 281-292.

Morgan, M. L. (1993). *Community participation in health: the politics of Primary care in Costa Rica*. University of Cambridge.

Montoya, J. M. (2013). Potential futures for a health city: community, knowledge, and hope for the science of life. *Current Anthropology, 54*(7), 45-55.

Putnam, D. R., Leonard, R., & Nanetti, Y. R. (1993). *Making democracy work: Civil traditions in modern Italy.* New Jersey, Princeton University Press.

Rondinelli, D. A, Nellis, J. R., & Cheema, G. S. (1983). *Decentralization in Developing*

countries: A review of resent experience. Washington, The work bank.

Porter, D. (1999). *Health, Civilization and the state: A history of health from ancient to modern times.* London: Routledge.

Sadan, E. (1997). *Empowerment and community planning: Theory and practice of people-focused social solution.* Tel Aviv: Hakibbutz Hameuchad publisher.

Saltman, R, B., Bankauskaite, V., & Vrangbaek, K. (2007). *Decentralization in Health care: Strategies and outcomes.* World health organization.

Starfield, B. (1994). Is primary care essential? *The lancet, 344,* (8930), 1129-1133.

Williams, B. (2015). The local government accountant perspective on sustainability. *Sustainability Accounting, Management and policy Journal,* 6(2), 267-287. Retrieved May 30, 2015 from http://dx.doi.org/10.1108/SAMJ-07-2014-0043.

Wright, R. E., & Perry, L. B. (2010). Medical sociology and health service research: past accomplishment and future policy challenges. *Health and Behavior, 51,* 107-119.

APPENDIX 1

Basic Information Related to Key Informants

Case	Sex	Age(years)	Experience (years)	Positions	Areas
A	Men	53	10	Medical physician	Buengyitho
B	Female	45	27	Director	Ban Prok
C	Men	43	23	Director	Buengyitho
D	Men	42	24	Public health technical officer	Ban Prok
E	Men	38	19	Thai traditional medicine	Buengyitho
F	Men	36	16	Public health officer	Ban Prok
G	Female	35	15	Registered nurse	Ban Prok
H	Female	33	6	Registered nurse	Buengyitho
I	Female	30	8	Physical therapy	Buengyitho
G	Female	30	12	Dental nurse	Ban Prok
K	Female	28	10	Physical therapy	Buengyitho

APPENDIX 2

Shows the Paradigms

Case	Question and answer	Paradigms		
		Community based	Holistic health	Decentralisation
	1. What is community health in your view?			
B,C,G,J	1.1 "everyone can promote basic health and treat the common disease themselves."	yes	yes	
C,F,G	1.2 "People are happy and not suffering"		yes	
B,D,F	1.3 "Lay people want good homes and improved well-being"	Yes	yes	yes
B,C,D	1.4 " People need not only an understanding of the treatment but also knowledge of the source of disease such as Dengue haemorrhagic fever"	yes	yes	yes
B,C,F	1.5 Healthcare professionals must promote prevention more than treatment"	yes	yes	yes
	Total used paradigm	4	5	3
	2. Which concept do your use to improve the community health?			
B,K	2.1"*Policies must be significant and continuous*"(is this correct)	yes	yes	Yes
B,D	2.2"All policy for health must have people's participation"	yes	yes	Yes
G,H	2.3"people can resolve many problems by themselves"	yes	yes	yes
	Total used paradigm	3	3	3

APPENDIX 2

Example Shows the Paradigms (Continuous)

Case	Question and answer	Paradigms		
		Community based	Holistic health	Decentralization
	3. What are the practices you use to increase the community health status?			
B,C,D	3.1"Supported to build the field sport as futsal field"	yes	yes	yes
C,F,G,K	3.2"Volunteers empowerment help aging and disabled patients including children.	yes	yes	yes
A,B	3.3"co-operation with many agencies with similar problems"	yes	yes	yes
	Total used paradigm	3	3	3
	4. What are the conditions or problems that changed your conception and method used by the community health development?			
C,G,F	"Current work load"		yes	yes
B,C,D	4.1"Problems are complex and the way to resolve them involve related multi agencies.		yes	yes
B,C	4.2"Organisations have fewer officers and micro-controlled by central bureaucracies."		yes	y
B,C	4.3"Local administrative organisations are penetration, understanding, and solution problems better the central bureaucracies.	yes	yes	yes
	Total used paradigm	1	4	4
Total		9	15	12

APPENDIX 3

Positions and Paradigms

Positions	Paradigms			Total of paradigms
	Community Based	Holistic health	Decentralisation	
Director	yes	yes	yes	3
Dental nurse	yes	yes		2
Registered nurse	yes	yes		2
Public health technical officer	yes	yes		2
Thai traditional medicine.	yes	yes		2
Medical physician	yes	yes		2
Physical therapy	yes	yes		2
	7	7	1	

Figure 1. Patient being helped using physical therapy by volunteers

Figure 2. A patient using a pillar as a tool for exercise and rehabilitation

Figure 3. A medical professional visiting a patient at home