SWOT Analysis of Primary Care Unit Service in Urban and Suburban Areas by Primary Care Medical Students: A Comparative Study of Bangkok and Pathumthani Province

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Abstract

Background: *Primary care, the "port-of-entry" into the health care system must consequently adapt to higher demands and expectations from healthcare consumers. Urbanization has significant impact on health and quality of life, in which primary care units (PCUs) must rethink their service.*

Objectives: *The study aimed to compare the SWOT analysis of PCUs in urban and suburban areas through an observational study of medical student experience with PCU health care delivery.*

Methods: *Students are divided into groups and sub-groups and experience the health service distributed by PCUs in urban and suburban areas in the context of Kolb's experiential learning method. SWOT analysis is performed in comparison between these PCUs. After action review and presentation of SWOT results with PCUs is finally carried out.*

Results: *It appears that health care which is provided by each PCU correlates with the nature of each population and the availability of skills in health care providers. This demands a different strategic plan for PCUs in urban and suburban areas. During the after action review, PCU personnel agreed with the SWOT analysis, even though students mentioned points that PCUs had overlooked.*

Conclusion: *A collaborative model between academic sector, service sector and social sector taking part in primary health care system is promising. SWOT analysis by medical students showed that PCU strategies should be tailor-made, depending on the character of the population and the PCU itself.*

Keywords: Primary health care, primary care unit, SWOT analysis, urbanization

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Background

Defining health in modern society has shifted from the biological model toward a bio-psycho-social-spiritual dimension in which health care is more proactive. In this model there is an increase in the role of health promotion and disease prevention as well as a greater concern for quality-of-life (QOL), rather than merely concentrating on physical wellness. Primary care, as the "port-of-entry" into the health care system must consequently adapt to the higher demands and expectations from health care consumers. These demands and expectations are also influenced by globalization, urbanization, and increased patients' rights advocacy.

In light of these pressures, primary care units (PCUs) can face significant difficulties in providing a sustainable, holistic approach to providing health care. First, it may be difficult for them to change their health care provision paradigm to include more proactive health care. Depending on the cultural setting, the health care providers may not be fully culturally competent in addressing the quality-of-life issues of a particular population. Moreover, there may not be the health education skills available to train health care providers in the new methods. Finally, the new paradigm may require additional administrative and managerial skills that also need to be acquired by the health care providers or their support staff.

In Thailand, PCUs are no exception, as they are faced with all of these difficulties. On the contrary, additional obstacles are faced by Thai PCUs due to the significant differences within the country, particularly differences between the needs of urban, suburban, and rural populations. PCUs in Thailand are the largest health care workforce in Thailand's Primary Care System under the national universal coverage policy. Each PCU is responsible for a population ranging from approximately 10,000 to 30,000 persons. Less than 50% of the PCUs are staffed with a full-time physician. It is anecdotally known that, there are many fewer physicians in suburban PCUs than in urban areas, and the discrimination in care is even more acute in rural areas where nurse practitioners or official public health workers are more rarely available. However, there is, at this time, no existing study of the differences between the nature of care in different geographic area types, and there is no official or unofficial program for addressing these discrepancies. This research presented in this paper uses a portion of the Thammasat University medical curriculum (particularly the Holistic Health Care portion) to examine this differential health care availability. More specifically a comparative analysis of competencies between PCUs in urban and suburban areas is conducted based on the experience of medical students.

Objectives

The objectives of this study are to:

1) Compare the strengths, weaknesses, opportunities, and threats of PCUs in urban and suburban areas.
2) Examine the issues regarding PCU personnel through an observational study of medical student experience with PCU health care delivery

Methods

The design of this evaluation was an observational study carried out during March and April of 2011, by the 4th year medical students of Thammasat University. These students are required to practice primary care to meet the requirements of their Holistic Health Care course. The students visited PCUs in Pathumthani province (a largely suburban area) and in the city of Bangkok. Students were divided into three groups, each group was then sub-divided into three sub-groups, with approximately 10 students per sub-group. Each of the three groups visited a PCU in Bangkok (responsible for a population of approximately 30,000 persons) and three Pathumthani PCUs (each PCU responsible for a population of approximately 10,000 persons).

The students attended seven hours of lecture prior to the visits, to instruct them in primary care and to provide them with requirements for observing the situation at the PCUs. Each group visited the PCUs for 19 hours in order to gain concrete experience in the operation of the PCU. After the visits (Concrete Experience), the medical students attended 14 hours of group discussion concerning the subjects at the PCUs and their observations (Reflective Observation). This discussion was intended to make the results of the observation most effective and to allow the students to organize their thoughts about individual observations into more abstract conceptualizations of the situations they observed (Abstract Conceptualization). Finally, students were required to synthesize their experiences into presentation form, and to discuss their findings with staff and other students (Active Experimentation). This learning process was designed in correlation with the Kolb's experiential learning model (Figure 1).

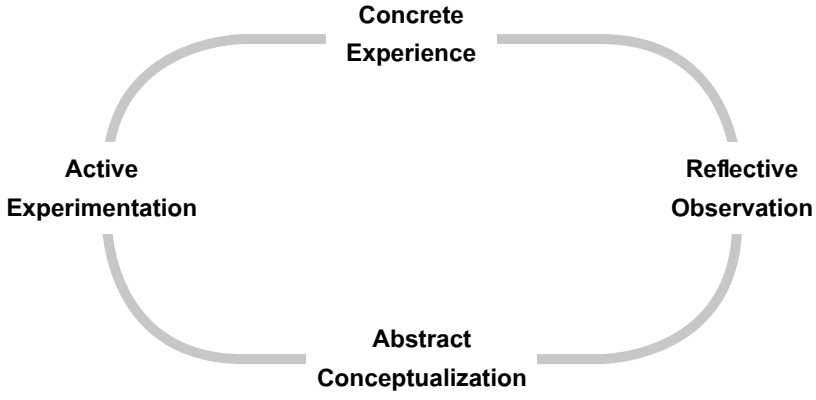


Figure 1 Kolb's experiential learning model

At the conclusion of the presentations by the nine sub-groups a comparison was made of the results of the SWOT analysis performed by each group, and staff members then held an after action review (AAR) with the PCUs to discuss the student perceptions with PCU personnel.

Results

Students in the medical curriculum are familiar with the conventional method of education; a strong focus on one-sided lecture presentations with some site visits and observation after the lectures. In the research presented here it was apparent that the introduction of experiential learning has created enthusiasm among primary care medical students completing their Holistic Health Care course, in addition to broadening their experience from pure theory to practical fieldwork experience.

The students collected the observations from PCUs in Bangkok and in Pathumthani province. The PCUs in Bangkok are administered by the Health Department of the Bangkok Metropolitan Administration, whereas the PCUs in Pathumthani province are under the administration of the provincial Ministry of Public Health. Both sets of PCUs are subject to the budgets and administrative oversight of the National Health Universal Coverage (UC) system. The characteristics of both types of PCUs were gathered through the students' participatory observation, and interviews with health personnel and health care consumers. These are summarized in Table 1.

Table 1: Character of PCUs in Bangkok and Pathumthani province

Characteristic\Site	Bangkok (Urban)	Pathumthani province (Suburban)
Character of Population • Income • Education • Daily Earnings	 Middle to lower income Above minimal education standard Non-governmental company	 Lower income Some below minimal education standard Private job
Budgets	Mainly from UC system	Mainly from UC system
Health Personnel	3 physicians 10 nurse practitioners	Part-time physician (twice per week) 2 nurse practitioners Public Health workers
Health Seeking Behavior	Highly interdependent	Dependent on health care workers
Form of Health Care Provided	High rate of polypharmacy Diagnostic and therapeutic care	Lower level of polypharmacy Health promotion and disease prevention

It appears from this data that the health care that is provided by each PCU correlates with the nature of each population and the availability of skills of the health care providers. This demands a different strategic plan for PCUs in urban and suburban areas. These plans can begin to be generated through a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis. The SWOT analysis and subsequent presentation and feedback process conducted by the Thammasat University medical students has identified a consensus of opinion regarding prospects for improving care at PCUs, and addressing discrepancies in care. These results are presented in Table 2.

Table 2 SWOT Analysis by 4th year medical students for PCUs in Bangkok and Pathumthani Province

Characteristic\Site	Bangkok (Urban)	Pathumthani province (Suburban)
Strengths (S)	Accessibility: The population have convenient access to health care due to good transport system access and high purchasing power to cover costs not included in universal coverage	Proactive form of health care services via prominent health promotion
	Availability: Various health care services are available; especially physicians and paramedic, laboratory, radiological, and dental services	Strong partnerships between local communities and the PCU
	Referral System: Teaching hospitals in tertiary care promptly accept referrals from the PCUs	Strong alliances with volunteers from the community in performing home visits and health education
Weaknesses (W)	A modest profile in sustainable health promotion in the population is overlooked from the success in therapeutic care	A proportion of the community is dependent on health care workers, while other patients seek medical care in secondary care hospitals (thereby bypassing the port of entry to health care)
	The role of volunteers is minimal when compared to the role of workers hired per day from the community	There is a scarcity of physicians and nurse practitioners

Table 2 (continued)

Characteristic\Site	Bangkok (Urban)	Pathumthani province (Suburban)
	There is an inappropriate amount of personnel in the workforce for the workload that is required	There are limitations in the referral system in terms of the number of destination hospitals, the promptness with which referrals are accepted
Opportunity (O)	The already frequent courses in training health personnel held by the Bangkok Metropolitan Health Administration can be focused more on holistic and preventive medicine	Thammasat University is a well-known university that is encouraged to work with the community. A Memorandum of Understanding (MOU) between the provincial division of the ministry of public health and Thammasat University is possible
	A shared health promotion team among PCUs shows a high promise of possibility	A strong volunteer health workers' system is a key player in driving the primary care sector
	Medical schools can be important stakeholders in leveraging therapeutic and health promotion services	
Threat (T)	Loss of health care personnel to the secondary care level, as well as to the private sector	Loss of health care personnel to the secondary care level, as well as to the private sector
	Change in the population pyramid towards an aging society may result in higher medical costs	Change in the population pyramid towards an aging society may result in higher medical costs

During the after action reviews, PCU personnel agreed with the SWOT analysis, even though students mentioned some points that the PCUs had overlooked. These items were enumerated and are outlined in Table 3.

Table 3 SWOTAnalysis by 4th year medical students overlooked by PCUs

Characteristic\Site	Bangkok (Urban)	Pathumthani province (Suburban)
Strengths (S)	Accessibility of care through an effective referral system	None
Weaknesses (W)	None	The community is overly dependent on the few health care providers
Opportunity (O)	Inclusion of various medical schools as stakeholders	None
Threat (T)	Change towards aging society	Change towards aging society

Discussion

In Thailand, robust health system based on primary health care (PHC) is the most effective means to reduce disease burden and improve quality of life. In achieving this goal, strengthening the teaching of primary health care in undergraduate school is essential. An additional benefit of making an experiential learning model-based process is that it provides students with an open-minded participatory observation as well as imprinting the ability to analyze and compare certain PCU models across different areas. This valuable experience is unable to be substituted by learning process in the classroom, as in the conventional method or rote learning. Moreover, the success of this process demonstrates that the academic process can involve key players (professors, lecturers, students, and administrators) in partnerships with elements of the primary care system. It is believed that this can allow the academic sector and the service sector to help each other in creating a more effectively functioning primary care sector. Academics will surely gain benefits in having precious learning resources, while at the same time can dedicate themselves in corporate social responsibility (CSR). On the other hand, the service sector will receives an updated knowledge in primary health care and recruit more health care warriors in the health service system. The social sector can also participates as key players, especially in suburban areas as shown in the study. A collaborative model between academic sector, service sector and social sector taking part in the development of primary health care system is promising regarding to the results of this research. SWOT analysis by medical students showed that PCU strategies should be tailor-made, depending on the character of the population and the PCU itself. SWOT analysis as a tool, demonstrates its effectiveness and efficacy, no matters carried out by which party, thus should be one of the managerial skills taught in medical school. Health promotion seems to be the hallmark of care in suburban areas, but this situation is still worrisome due to the wave of urbanization. In urban areas, health promotion is only dominated by certain caregivers and simply not the type of care that the population demanded. In

despite of this pre-contemplation phase in urban population's perceptions involving the benefit of health promotion, health personnel must dedicate their effort even more. Eventually, all sectors should be encouraged and enrolled in continuous professional development system, as well as demonstrate potentials of being a role model in transferring both tacit and explicit knowledge in primary care.

Conclusion

The pace of urbanization is expected to continue, and while suburban PCUs may therefore believe that movement toward the PCU model that has evolved in urban areas would represent positive advancement, these suburban PCUs should allow their own model to evolve based on their own strengths and opportunities.

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