

Human Capital Identification Process: Linkage for Family Medicine and Community Medicine to Mobilize the Community

Chanuantong Tanasugarn DrPH*,
Krid Thongbunjob MD**

* Department of Health Education and Behavioral Sciences, Faculty of Public Health, Mahidol University,
Bangkok, Thailand

**Department of Preventive and Social Medicine, Faculty of Medicine, Srinakharinwirot University Bangkok, Thailand

Background: Community diagnosis and approach has shifted from a professional focus to a community focus. The information system has also been developed to reflect socio-cultural information. This new system has been established throughout the country and is being recorded in the computer system. However, these data still lack human capital information to promote community mobilization.

Objective: The present study aims to develop a process which reflects human capital from the insider and outsider points of view and which builds on the existing work system of primary care service, family medicine, and community medicine.

Material and Method: The present study applies the participatory action research design with mixed methods including community grand-tour, household survey, socio-metric questionnaire and focus group discussion in order to gather insider view of human capital. A key instrument developed in the present study is the socio-metric questionnaire which was designed according to the community grand tour and household survey results.

Results: The findings indicate that the process is feasible and the insider point of view given a longer evidence based list of the human capital. The model enhanced a closer relationship between professional and community people and suggested the realistic community mobilizer name list.

Conclusion: Human capital identification process is feasible and should be recommended to integrate in the existing work process of the health staff in family and community practice.

Keywords: Human capital, Social capital, Community mobilization, Family medicine, Community medicine

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Human capital has been discussed not only in terms of economic development, but also in other settings including community development⁽¹⁾. The research emphasis has been placed on the human capacity to work in the factory which will contribute to increased productivity. But for the community development group, human capital in the community has been viewed as part of social capital⁽²⁾.

Meredith Minkler⁽³⁾ has summarized the community organization and community building typology which employs two models, or two approaches which professionals can apply in their practice. Based on those models and approaches, four

types of people can be found in every community. The two models are the Consensus Model and the Social Action-Conflict Based Model. Each model is composed of two approaches.

The Consensus Model is composed of the following: (1) A needs-based approach or community building model where in a group is perceived as those who cannot help themselves (MM1). Thus, they are provided with money and materials to fulfill their needs; and (2) a strength-based approach which is used when the group of people try to help themselves but lack competency and capacity to be self-sufficient (MM2). The Social Action-Conflict Based Model is composed of the following: (1) A needs-based approach of the stakeholder group or the well-to-do group who still have their own agenda which is needed to be fulfilled (MM3) and (2) a strength-based approach of those who are volunteerism-minded even though they may not be appointed or may not be rich compared to others

Correspondence to:

Tanasugarn C, Department of Health Education and Behavioral Sciences, Faculty of Public Health, Mahidol University, 420/1 Rajavithi Rd. Rajathevi, Bangkok 10400, Thailand.
Phone: 08-1823-7880
E-mail: phctn@mahidol.ac.th

in the community (MM4).

Therefore, human capital can be identified according to the typology of these different approaches. Moreover, tools, methods, processes and techniques used in community development projects changed from a professional focus or outsider point of view using a questionnaire survey where questions are developed based on epidemiological principles, to a community-people focus or insider point of view⁽⁴⁾ using participatory oriented action such as the Action Oriented Community Diagnosis⁽⁵⁾, or Appreciative Influence and Control model (AIC).

In Thailand, the shift from epidemiological principles to anthropological principles including social determinants of health has taken place⁽⁶⁾. All primary care units have to collect community and family information using different tools and techniques such as community maps, community calendars, family trees, etc. This practice shift has changed the professional view towards the community, family and people in the community as a unit of practice for different disciplines such as family and community medicine. The shift has also made professionals realize how to practice evidence-based methods in the community approach. More recent developments include those through the Thai Health Fund Organization through the Tambon computerized database system⁽⁷⁾.

Given those changes of the community medicine or community health approach, the information collected has not yet reflected the significant contribution of human capital to solve community problems or promote health in the community either through the practice of family medicine/primary care physician, or the primary care system which has now been established throughout the country.

Therefore, the present study attempts to develop a process to collect information which can reflect human capital categorized into four groups as suggested by community organization and community building typology summarized by Meredith Minkler which professionals can draw upon in mobilizing the community to promote self-care in the family and promote health of the community.

Material and Method

The present study was approved by the Faculty of Public Health, Mahidol University Ethical Review Committee (MUPH 2011-091) before conducting the participatory action research design with mixed methods including community grand-tour, household

survey, socio-metric questionnaire and focus group discussion. Moo 6 Banpakbuengpai, Tambon Chumpol, Ongkarak District, Nakhon Nayok Province was purposively selected and a total population 355 people were informed and signed the inform consent prior to their involvement of each step accordingly.

Step 1. Learning and sensing the community social determinants of health: Community grand tour

The community grand-tour is composed of two steps:

Step 1 the researcher tours the community alone for a day to get a sense of community assets such as physical environment, community public resources, community groups and gathering places. As a result, a sense of social interaction or relationships, the needy groups or stakeholders in the community can be listed.

Step 2 the researcher repeats the community tour with a few village health volunteers for another one day so that the insider point of view is incorporated. As a result, the name of the needy group, stakeholders and the natural helper group are added.

Step 2. Learning ways of life at the household level: Household-visit survey

The household survey questionnaire was developed based on the minimum requirement survey questionnaire. The present study adds some questions to identify roles and activities perceived and performed by each household in relation to their participation in the community development activities.

The natural helper self-assessment tool developed by Stahl⁽⁸⁾ was also administered to the household representatives to document their perception of themselves in building capacity for others in the community. The household-visit survey takes 14 days to complete the 100 percent coverage.

Step 3. Learning network of community people: Sociometric analysis

Sociometry principle^(9,10) was applied in the questions used as social capital assessment activity. The socio-metric analysis is conducted to identify those who have the outstanding capacity related to the community way of life and are well-liked by the community people due to different social networks existing in the community, particularly the stakeholder group and the natural helper group. The questions were presented to the household representative who completed the second step and were able to join a focus

Table 1. Community grand tour results in human capital number, qualitative information and resources needed for implementing the step

Community grand tour	Number of Human Capital Coverage (from 355 persons)	Human Capital qualitative results	Resources needed to identify human capital
1.1 community grand tour by the researcher alone	MM1 = 1 MM2 = 57 MM3 = 8 MM4 = 1 Total = 67(20%)	By observation, the household condition was identified, interview questions were generated	8 hours were needed to cover 104 households in the community
1.2 grand tour with village health volunteer	MM1 = 7 MM2 = 151 MM3 = 12 MM4 = 2 Total = 172(51%)	Able to cover the whole community and information regarding community administration and structures were identified, and additional details on the needy group and natural-helper group were documented. Moreover, relationship between professional and village health volunteer began to develop.	6 hours and 2 people needed

Table 2. Household survey results in human capital number, qualitative information and resources needed for implementing the step (n = 355)

Step activities	Number of human capital coverage (person)	Human capital qualitative results	Resources needed to identify human capital
2.1 household interview was administered to 104 households (100 %) but reached only 136 people (38% of the 355 total population)	MM1 = 8 MM2 = 319 MM3 = 20 MM4 = 8 Total = 355	Data attained from this step reflected human capital in terms of number and quality of people which can fit in the categories set in this research in MM 1-4 with evidence. The open-ended questioning and in-depth interview process stimulated rapport building and detailed discussion between professionals and the community. A more holistic view of the family and community was revealed to the researcher.	1 hour per one household as indicated in the family medicine standard.
2.2 Natural helper survey		This information reflected the family member's perception of their contribution to others in the community. This type of data reflects community assets or social capital.	Time was included in the one-hour household in interview.

group. More than eighty percent of the community people participated since there was a wedding in that community and all community people complied to join

the wedding. After completing the socio-metric questionnaire facilitated by the research team, the researcher asked the meeting attendants to shortlist

the names and to vote for the popular names in each category.

This activity takes one day preparation and half a day for the analysis meeting at the community. Information in this step not only reflected social bonding aspect of the social capital but also suggested the potential community mobilizer group. The number and types of network which they can mobilize are also identified for future use since the socio-metric questions were developed based on the community social determinants information gathered in Steps 1 and 2.

Step 4. Learning inner view from community people: human capital validation

Human capital name list suggested by step 3 was validated by a focus group discussion which group members who are the community experts that met the recruitment criteria of living in the community for a long period of time and know many community people because of living and working there. Researcher validation and sharing perspective on human capital list from Human identification process from Steps 1, 2 and 3 produced a comprehensive name list of stakeholder (MM3) and natural helper (MM4) groups who have potential in mobilizing the community.

To conclude, the whole human capital identification process takes 19 days to complete.

Results

Key results classified by each step are highlighted and significant findings of each step are in

the following tables:

Step 1. Community grand tour

Step one could cover the total physical environment which can be regarded as social capital of the community. Moreover, the researcher can identify what should be listed as social determinants unique to this community context. In this case they are the religious and rural agricultural ways of life.

Step 2. Household survey

Demographic data from the family member interviews reflect demographic characteristics which related to the different groups (MM1-MM4). As the result of the household survey step, additional information and names were listed in each category of the community group.

The family tree analysis indicates that this community is composed of six major families who can be assets or social capital for mobilizing the community, and three more families can be identified (Table 3). If these three could attend or participate in the community development project, they could become community assets or social capital in the future.

Step 3. Sociometry

More than eighty percent of the community people participated since there was a wedding in that community and culturally speaking all community people complied to join the wedding. Names were expanded from the researcher MM3 and MM4 of twenty

Table 3. Family tree as the linkage between social capital and human capital in the study community (n = 355)

Family name	Human capital classified by community organization and community building typology							
	MM1		MM2		MM3		MM4	
	frequency	%	frequency	%	frequency	%	frequency	%
Major families								
WW Family	-	-	49	13.80	4	1.13	2	0.56
MS Family	-	-	12	3.38	4	1.13	1	0.28
JJ Family	-	-	45	12.68	3	0.85	2	0.56
MPY Family	-	-	12	3.38	2	0.56	-	-
JM Family	2	0.56	6	1.69	-	-	-	-
MUS Family	-	-	13	3.66	-	-	1	0.28
Minor families								
SM Family	-	-	4	1.13	1	0.28	-	-
KPR Family	1	0.28	4	1.13	-	-	-	-
SMY Family	1	0.28	-	-	-	-	-	-
Total	4	1.12	145	40.85	14	3.95	6	1.68

eight names to fifty two names. The insider criteria for MM4 included the excellent performance and service-minded nature.

Step 4. Focus Group Discussion (FGD)

Twelve community experts joined the focus group to validate the human capital characteristics listed by the community people in the socio-metric analysis step. The FGD participants added more names to the list due to the evidence based approach which these community people have achieved.

Outcomes of each step are compared in the Table 5 to reflect significant contribution of each step in identifying the human capital in the present study. It is obvious that step one and two, professional focus method could identify a limited number of the potential mobilizers. Step 3 and 4, community focus or insider point of view, help adding potential mobilizers three times higher than our professional focus practice.

Discussion

In conclusion, the human capital process proposed in the recent study (as shown in Fig. 1) can generate a comprehensive human capital list covering points of view of the insider, community people and the outsider, researcher or community developer, which is useful for community mobilization activities and align with the community development concept which emphasizes starting where people are⁽¹¹⁾ and community participation as way to promoting health of the community⁽¹²⁾. As commonly practiced in Thailand, health workers spend a lot of time developing a community information system for their primary care

unit. Despite those efforts and products, the system still lacks human capital information from the community as the insider point of view⁽¹³⁾. The present study proves that the human capital identification process can be built on top of the existing systems such as the family folder and the community folder development process. Staff members who can carry out this process

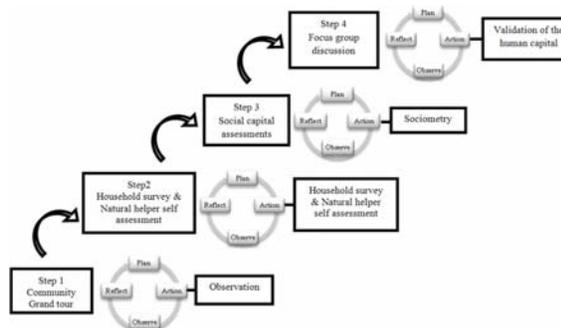


Fig. 1 Participatory Action Research: Human Capital Identification Steps

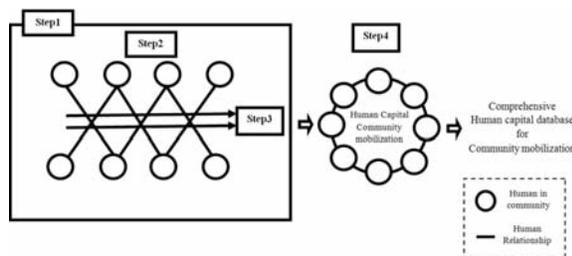


Fig. 2 Human Capital Identification Process: Ecological Model and Social Determinant of Health

Table 4. Social capital assessment results in human capital number, qualitative information and resources needed for implementing the step (n = 355)

Sociometry	Number of human capital coverage (persons)	Human capital qualitative result	Resources needed to identify human capital
Sociometric questions were presented in the community meeting and voted publicly by the meeting participants	MM3 = 33	Meeting attendants actively participated in shortlisted the names and voting for the popular names in each category. The community people or the insider group distinguished their human capital who may be able to help mobilize the community according to their excellent performance and service- or voluntary-minded nature.	One day preparation and half a day implementation

Table 5. Focus group discussion results in human capital number, qualitative information and resources needed for implementing the step (n = 355)

FGD:Step activities	Number of human capital coverage (person)	Human capital qualitative results	Resources needed to identify human capital
Focus group discussion with the community experts. The human capital name list was expanded after the FGD participants reviewed the list from Steps 1, 2, and 3.	MM3 = 56 MM4 = 27 Total = 83	It was obvious that these community experts who had an insider point of view have evidence-based preferences in mind when they discussed, added or dropped a name from the list. Criteria used by these community experts included human competency, acceptance by the community, service-mindedness, and role either formal or informal leadership characteristics.	One day preparation and half a day implementation

Table 6. Comparing outcomes of each identification step with the human capital group (n = 355)

Human capital	Step 1		Step 2		Step 3		Step 4	
	frequency	%	frequency	%	frequency	%	frequency	%
MM1	7	1.97	8	2.3	-	-	-	-
MM2	151	42.54	319	89.9	-	-	-	-
MM3	12	3.38	20	5.6	33	9.30	56	15.77

need qualitative research skill including self isolation or self conscious skill and participatory learning skill.

Theoretically speaking, this model integrates not only community participation and mobilization approaches, but also includes the ecological framework as incorporated with the multi-level interaction. Therefore it is an interactive model which should be applied in the community practice⁽¹⁴⁾. The process also is feasible in time and in line with professional competency training in family medicine, family nursing, and community health staff. Based on the present study findings, the only change which may be needed is to advocate the integration of social and human capital concepts with participatory approaches throughout the professional work process.

In addition, community people reflected that they now feel that the health staff knows them more thoroughly than before and they also felt closer to the health staff. This statement reflects a higher level of community and professional partnership⁽¹⁵⁾. That is a key success indicator for sustainable community development in the next step.

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Potential conflicts of interest

None.

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กระบวนการค้นหาทุนมนุษย์ในชุมชน: จุดเชื่อมโยงระหว่างเวชศาสตร์ครอบครัวและเวชศาสตร์ชุมชนเพื่อการทำงาน ขับเคลื่อนชุมชน

ชชนวนทอง ธนสุกาญจน์, กฤษฎี ทองบรรจบ

ภูมิหลัง: การทำงานและรูปแบบการวิจัยชุมชนได้ปรับเปลี่ยนจากการทำงานโดยเน้นวิถีคิดของเจ้าหน้าที่วิชาชีพเป็นหลักไปสู่การเน้นให้ความสำคัญของชุมชนเป็นหลัก ส่งผลให้มีการพัฒนาระบบข้อมูลที่ครอบคลุมข้อมูลด้านสังคมและวัฒนธรรม แต่อย่างไรก็ตามระบบใหม่นี้ซึ่งได้มีการดำเนินการได้ครอบคลุมไปทั่วทั้งประเทศทั้งในรูปแบบแฟ้มและระบบคอมพิวเตอร์ข้อมูลชุมชนเหล่านี้ยังคงขาดซึ่งข้อมูลด้านทุนมนุษย์หรือศักยภาพของคนในชุมชนที่จะนำมาใช้ในการขับเคลื่อนชุมชนได้ตามเป้าหมายการทำงานชุมชน

วัตถุประสงค์: การศึกษาครั้งนี้มีเป้าหมายเพื่อพัฒนากระบวนการซึ่งเป็นผลของการผสมผสานมุมมองระหว่างคนนอกคือกลุ่มวิชาชีพและมุมมองของคนในคือคนในชุมชนเองโดยพัฒนาต่อยอดจากระบบการทำงานในการจัดทำแฟ้มข้อมูลชุมชนซึ่งมีอยู่เดิมของระบบงานบริการปฐมภูมิงานเวชศาสตร์ครอบครัวและชุมชน

วัสดุและวิธีการ: การศึกษานี้ได้ประยุกต์กระบวนการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วมในการค้นหาทุนมนุษย์ในชุมชนเพื่อใช้ในการขับเคลื่อนชุมชนซึ่งประกอบด้วยขั้นตอนการสำรวจชุมชน การสำรวจครัวเรือน การสำรวจทุนสังคมโดยใช้เทคนิคสังคมมิติ และการสนทนากลุ่ม โดยได้ทำการศึกษาในช่วงเดือนมกราคมถึงพฤษภาคม พ.ศ. 2554 เครื่องมือที่ใช้ในการทำการเยี่ยมและสำรวจที่บ้านพัฒนามาจากแบบสำรวจ จปฐ. แต่เพิ่มคำถามเรื่องการรับรู้บทบาทและการมีส่วนร่วมในชุมชน ส่วนเครื่องมือสำรวจสังคมมิติได้พัฒนาโดยใช้ผลการเรียนรู้ชุมชนในชั้นที่ 1 และ 2 มาประกอบเพื่อให้สอดคล้องกับปัจจัยกำหนดสุขภาพของชุมชนเป็นสำคัญ

ผลการศึกษา: การศึกษาชี้ให้เห็นว่ากระบวนการดังกล่าวนั้นมีความง่ายต่อการนำไปใช้และการรวมมุมมองของคนในชุมชนช่วยทำให้ได้ข้อมูลเชิงประจักษ์ด้านทุนมนุษย์ในชุมชนมากกว่ามุมมองของคนนอกชุมชนอย่างเดียว นอกจากนี้ด้วยกิจกรรมในกระบวนการระบุทุนมนุษย์ยังทำให้เกิดความสัมพันธ์ที่ใกล้ชิดกันมากขึ้นระหว่างเจ้าหน้าที่กับคนในชุมชนอันนำมาซึ่งสามารถ ได้ฐานข้อมูลรายชื่อทุนมนุษย์ที่ถูกต้องและสอดคล้องกับความจริงของชุมชนได้มากยิ่งขึ้น

สรุป: กระบวนการการค้นหาทุนมนุษย์ในชุมชนนั้นสามารถนำไปดำเนินการได้และควรแนะนำให้ทำงานต่อยอดจากกระบวนการทำงาน ที่มีอยู่เดิมของเจ้าหน้าที่วิชาชีพด้านเวชศาสตร์ครอบครัวและชุมชน
