Participation in Medical Encounter—Does Social Capital Matter?

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ABSTRACT--- ***Social capital provides knowledge about available health resources or increase awareness that treatment is needed. It is argued that social capital does matter in medical encounter. There were 529 males and 569 females participated in the study. The demographics, health information searching, social capital, and the interaction with doctor were collected by a questionnaire. The result showed gender difference of involvement in medical encounter, health information searching and social capital were significant factors for discussing with doctor about both treatment and health status. Implication is discussed.***

Keyword--- Social capital, Medical encounter, Patient Participation

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1. INTRODUCTION

The physician-patient relationships can play a crucial role of influencing patient's satisfaction in health care system. The current health care system in Taiwan, known as National Health Insurance (NHI), was instituted in 1995. Since the system promises equal access to health care for all citizens, patients visit the doctor more frequently than before. It makes doctors to keep visits short to about 2 to 5 minutes per patient. Patients have to participate in clinic encounters for better outcomes. The patients' involvement in the treatment process needs the ability to seeking information and discussing with doctors. Social capital provides knowledge about available health resources or increase awareness that treatment is needed [1, 2]. It is argued that social capital does matter in the clinic encounter.

The paper is structured as follows. First, we briefly review theory about patient-physician interaction and social capital. Then, having explained the research design, the empirical results are presented and discussed.

2. LITERATURE REVIEW

2.1. Patient-Physician Interaction

Patient-physician interaction has been a topic to research in the medical field. Evidence indicates that effective patient-physician interaction is beneficial to several outcomes [3-5] and failures in effective communication between physicians and patients can lead to increased medical costs arising from overuse or misuse of medical services [6-8].

Traditionally, sociological theories have had a profound influence in shaping discussions regarding the patient-physician relationship. Functionalism holds that society is a complex system with various parts working together to produce stability and solidarity [9]. The patient-physician relationship is seen as a social system, in which both the patient and physician have their respective functions and roles. Conflict theorists have argued that throughout history, people in higher social classes have exploited those with lower status to control economic, social and psychological resources [10]. From this theoretical perspective, patient-physician interaction is rooted in a power relationship.

Emanuel and Emanuel [11] proposed four models of the physician-patient relationship. In the paternalistic model, the physician has a parental role, and decides which treatment would be best. In the informative model, the physician tells patients of treatment options and relevant medical information, but patients select their own treatment. In the interpretive model, the physician helps patients explore their values, and select the treatment that best fits these values. In the deliberative model, the physician helps patients explore health-related values, and choose their treatment based on those values.

Before the last two decades, the physician-patient relationship was clearly asymmetric or imbalance. From the functionalism's view, the interaction between physician and patient is in paternalistic model. The physicians act as parent like, strong figures who are permissive, supportive, objective and ethical. Patients become desocialized, and act as relatively weak, dependent, childlike figures. Now it seems to have undergone a transition to a more active and autonomous role for the patient in medical decision making. The interaction in medical encounter is in the informative, interpretive, or deliberative model. The patient takes more active role in medical encounter. From the view of conflict theory, the asymmetric or imbalance interaction rooted in a power relationship still has impact on the role of patients.

2.2. Social capital

The sources of social capital may trace to Pierre Bourdieu, James Coleman and Robert Putnam [12]. Portes [13] suggests that social capital means the ability to secure benefits through membership in networks and other social structures. Woolcock [14] classified the nature of network relations and the levels at which social capital applies. Lin's theory [15] is grounded in the classic tradition of capital theories that explicate the nature of various types of capital and how each generates returns to an actor. It defines social capital as 'resources embedded in a social structure which are accessed and/or mobilized in purposive actions' [15]. Thus, social capital contains three elements: resources embedded in a social structure; accessibility to such social resources by individuals; and use or mobilization of such social resources by individuals in purposive actions.

In Chinese society, individual ties that people build and maintain among themselves through various connections such as family, clan, clique, friends, classmate, and colleagues, are termed in Chinese as 'Guanxi' [16]. Guanxi, or interpersonal connections is the social structure for fulfilling moral and ethical obligations to one's family and pseudofamily. The social capital theory has specifically proposed that access to and use of social resources embedded in social networks can have two types of outcomes, instrumental and expressive returns. For instrumental action, there are three possible returns: economic, political, and social. For expressive action, social capital is a means to consolidate resources and to defend against possible resource losses. Three types of return may be specified: physical health, mental health, and life satisfaction.

There are two methodologies used to measure access to social capital, name generators and position generators. Position generator was proposed by Lin and associates [17]. This measurement samples positions in a hierarchical structure, rather than sampling ego-centered interpersonal ties. To the extent that social capital reflects embedded resources in the structure, then this approach should yield meaningful information regarding ego's access to such structurally embedded resources. From the responses, it becomes possible to construct three indicators. Range is the distance between the highest and lowest accessed positions, and it represents the accessibility to different hierarchical positions in the society. Extensity is the number of positions accessed and it indicates the heterogeneity of accessibility to different positions. Upper reachability indicates the prestige or status of the highest position accessed.

3. METHOD

3.1. Subjects

The subjects were persons over 15 years old in Taiwan. The sampling frame was island-wide and composed of a stratified (by administrative district) probability sample including outlying islands and mountain townships of Taiwan. The over-all criterion that should be applied in choosing a sampling design is to so design the sample that it will yield the desired information with the reliability required at a minimum cost; or, conversely, that at a fixed cost it will yield estimates of the statistics desired with the maximum reliability possible [18]. Because a complete frame of reference was not available, area sampling method was adopted. An area sampling is a method in which the area to be sampled is subdivided into smaller blocks which are selected at random and then subsampled or fully surveyed. The entire 1100 sample came from 17 counties, 7 cities and 1 island. There were 2 respondents who did not complete the questionnaire.

3.2. Measurement

Structured personal interviews in the respondents' home were conducted to obtain information on patient on subjects' demographics, health information searching, social capital, and the interaction with doctor. The demographics included gender and education. One item with yes/no response was used to measure health information searching. The questionnaire for generating social capital was adopted from Lin, Fu, and Hsung [19]. The respondents were asked 'among your relatives, friends, or acquaintances, are there people who have the following jobs?'. Following the questions were fifteen 'job' positions sampled from two structural dimensions: occupational prestige and class. Three indexes were constructed from the three position-generator items, extensity, upper reachability, and range. These three measures of position data were highly correlated, a composite variable was constructed. A factor score, as table 1, was computed for both male and female respondents as a weighed sum of the three measures (.02 extensity+.50 range +.51 upper

reachability). Both range and upper reachability carried much more weight than extensity. This composite variable was social capital in this study.

There were 2 questions measuring interaction with doctors. The subjects were asked the possibility of discussing with doctor about treatment, and about health status in medical encounters. And four-point Likert anchored scales ("1=never", "2=seldom", "3=occasional", "4=always") were used for evaluation.

Table 1. Factor structures of access to social capital

	Sample (N=1098)	Male (N=529)	Female (N=569)
Factor eigenvalues			
I	2.42	2.46	2.39
II	0.19	0.20	0.18
III	0.39	0.35	0.43
Factor loading			
Extensity	0.73	0.75	0.71
Range	0.97	0.97	0.97
Upper reachability	0.97	0.98	0.97
Factor scoring			
Extensity	0.02	0.02	0.02
Range	0.50	0.48	0.51
Upper reachability	0.52	0.53	0.51

4. RESULT

Participants' characteristics are shown as table 1. There were males of 48.2% and females of 51.8%. Most of them were graduated from university, and searching health information. The mean score of social capital was 55.70 with range of 0-68.86.

Table 1 Description of participants

Variables	N	%	Variables	N	%
Gender			Education		
Males	529	48.2	Junior high	96	8.7
Females	569	51.8	Senior high	312	28.4
Health information searching			University	690	62.8
Yes	763	69.5	Social capital(0-68.86)	Mean	SD
No	335	30.5		55.70	17.23

The regression models of interaction with doctor in medical encounter were shown as table 2. Females were more likely to discuss with doctor about the treatment. But for discussing about health status, there was no gender difference. Health information searching was important for both dependent variables. Social capital was also a significant factor for both discussing with doctor about treatment and health status.

Table 2 Factors of participation in medical encounter

Variables	Discussion about treatment			Discussion about health status		
	B	t	p	B	t	p
constant	2.56	16.71	<.001	2.96	21.26	<.001
Gender(females/males)	0.13	2.33	0.020	0.08	1.51	0.132
Education						
Junior high/university	0.06	0.57	0.572	-0.04	-0.36	0.720
Senior high/university	0.05	0.49	0.622	0.02	0.22	0.825
Health information searching (yes/no)	0.57	8.94	<.001	0.61	10.537	<.001
Social capital	0.01	5.25	<.001	0.01	4.40	<.001
R		0.34			0.37	
R square		0.12			0.13	

5. DISCUSSION AND CONCLUSION

There is a very strong social component to participate in medical encounter for patients. The result tested that health information searching and social capital are influencing factors for patients to participate in clinical settings.

4.1. Gender difference of involvement in medical encounter

The purposes of communication are identified as creating a good inter-personal relationship, exchanging information, and making treatment-related decisions [20]. There are gender differences of communication. Women use language as a tool to enhance social connections and create relationships, men use language to exert dominance and achieve tangible outcomes [21, 22]. The barrier for patients to ask their physician questions was afraid they would be perceived as stupid [23]. Due to societal norms women perceived lower status to men. Since most of the doctors are males, women are not afraid of being wrong. Women are more likely than men to ask physician questions about the treatment.

4.2. Social capital does matter

Those with high social capital and better health knowledge should have the confidence to question what the physician suggests. Traditionally, sociological theory of professions has awarded power to the professional, based on the command of an esoteric body of knowledge acquired through academic training and clinical practice [24]. Thus, in the physician-patient relationship, the physician is always in a superior position and in control of various resources, including medical information and technology for treatment and the right to order laboratory tests and prescribe drugs. People with higher social capital have social relations with higher occupational prestige and class. They can mobilize these resources to have information for involvement in clinical context.

4.3. Conclusion

The literature suggests that there is relation between patient participation and patient satisfaction. Patient satisfaction is not necessarily related to a good outcome but may be influenced by interpersonal factors in the physician-patient relationship [25-28]. Professional communication aimed at empowering patients to act as co-producers can indeed have an effect on clinical outcome. Further, the patients can increase their social capital through the relationship with their physician. The relational communication and its associated benefits may be fostered through encouraging patients to involve in medical encounter. Creating an interactive care plan enables the physician and patient to become partners and create actionable intelligence accessible by the patient and all members of their healthcare team. Its effect is everyone benefits, the patient, the physician and NIH system.

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7. REFERENCES

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