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Winter 12-4-2009

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# A CASE STUDY FOR EXPLORING DENTAL PATIENTS' PREFERRED ROLES IN TAIWAN

Yon-Lin Cheng<sup>1</sup>, Ya-Hsin Li<sup>2</sup>, Chi-Chang Chang<sup>1,\*</sup>, Chung-Han Lee<sup>1</sup>

<sup>1</sup>School of Applied Information Sciences, Chung Shan Medical University, Taichung, Taiwan

<sup>2</sup>School of Health Policy and Management, Chung Shan Medical University, Taichung, Taiwan

threec@csmu.edu.tw

## Abstract

The purpose of this study was to explore the dental patients' preferred roles in Taiwan. A convenience sample of 66 patients, 26 recruited from one dental clinic, and 40 from one medical center, were interviewed and their preferences for participation in treatment decision making were established using a measurement tool designed to elicit decision-making preferences. Patients' preferences for participation in treatment decision making were established using Control Preference Scale (CPS) tool. In addition, Unfolding theory provided a means of analyzing the data so that the degree of control preferred by each patient could be established. This study found that nearly 70% clinic patients perceived passive role in treatment decision making whereas 50% patients in medical centre. Further, the collaborative role was most commonly preferred, but an active role was more commonly perceived in clinics than in medical centre. Finally, the implications of the results for patient participation are discussed.

**Keywords:** Control Preference Scale (CPS), Treatment decision making, Patients' preferences

## BACKGROUND

Prior to the 1980s, the most prevalent approach to treatment decision-making in the world was paternalistic with physicians assuming the dominant role. [1, 2] In recent years, providers of health care have moved away from a paternalistic approach to one that actively encourages patient autonomy and participation in treatment decision making. [3] A number of previous studies have suggested that patients have some opportunities to participate in medical decision making in these years. [4-9] In other word, owing to the steady development of the health services industry, the development of health system in Taiwan is facing the important timing of a transformation from the physician dominant to the patient-centered and the patient-involvement. However, a number of

previous studies have suggested that the Taiwan have few opportunities to participate in medical decision-making, as a result both of entrenched physician paternalism and national characteristics of dependency and passivity. Even some elements of the physician-patient relationship, notably satisfaction, have been explored. This work is now dated. Therefore, this study is to evaluate Taiwanese patients' preference for participating in medical decision making. The study will compare dental patients' decision making role between clinic and medical centre and explore what differences of patients' preferred and perceived dental treatment decision making roles in both organizations.

## RESEARCH DESIGN AND METHODS

### Aims of the study

The aims of this study were:

- The first one is to evaluate Taiwanese patients' preference for participating in medical decision making.
- The second is to compare dental patients' decision making role between clinic and medical center and explore what differences of patients' preferred and perceived dental treatment decision making roles, respectively.

### Data collection

Prior to the interview, all patients were asked to provide written consent before being involved in the study and each patient was given an information sheet outlining the purpose of the study and assured of the confidentiality of their responses. The introductory section of the questionnaire covered socio-demographic information, including age, sex, marital status, employment status, and education distribution.

A convenience sample of 66 patients was recruited to the study from Chung Shan Medical University Hospital (40), and Yuan-zoe dental clinic (26) who over a 2-month period in 2009. No individuals declined to take part in the study and no individuals were excluded. The overall proportions

of respondents were a broad age range and the gender distribution was fairly even.

**Study design and method**

Patients' preferences for participation in treatment decision making were established using Control Preference Scale (CPS) tool, a set of sort cards outlining five decisional roles (active, semi-active, collaborative, semi-passive, passive)(see figure 1). [10] The CPS cards were shuffled at the outset and presented in a random order by face-to-face interview. Patient were present with the cards in subsets of two and were asked to state a preference between the two cards, depending on which role they ideally would like to play in treatment decision making. Once the role preference hierarchy had been obtained, the patients were asked to pick one card (see fig 2) and give a rationale for their perceived role after the physician treatment. Rationale for choice of preferred role was recorded verbatim. Frequency description and unfolding theory were conducted to provide a means of analyzing the data so that the degree of control preferred by each patient was established. In addition, Unfolding theory provided a means of analyzing the data so that the degree of control preferred by each patient could be established. [9, 11]

Figure1 Contents of five sort cards used to explore expected role

Active role options	Collaborative role option	Passive role options
<b>Card A</b> I prefer to make the final selection about which treatment I will receive.	<b>Card C</b> I prefer that my doctor and I share responsibility for deciding which treatment is best for me.	<b>Card D</b> I prefer that my doctor makes the final decision about which treatment will be used, but seriously considers my opinion.
<b>Card B</b> I prefer to make the final selection of my treatment after seriously considering my doctor's opinion.		<b>Card E</b> I prefer to leave all decisions regarding my treatment to my doctor.

\*adapted for present study by replacing 'doctor' with 'dentist'

Source: Chapple et al., 2003 [10]

Figure2 Contents of five sort cards used to explore perceived role

Active role options	Collaborative role option	Passive role options
<b>Card A</b> I make the final selection about which treatment I will receive.	<b>Card C</b> My doctor and I share responsibility for deciding which treatment is best for me.	<b>Card D</b> My doctor makes the final decision about which treatment will be used, but seriously considers my opinion.
<b>Card B</b> I make the final selection of my treatment after seriously considering my doctor's opinion.		<b>Card E</b> I leave all decisions regarding my treatment to my doctor.

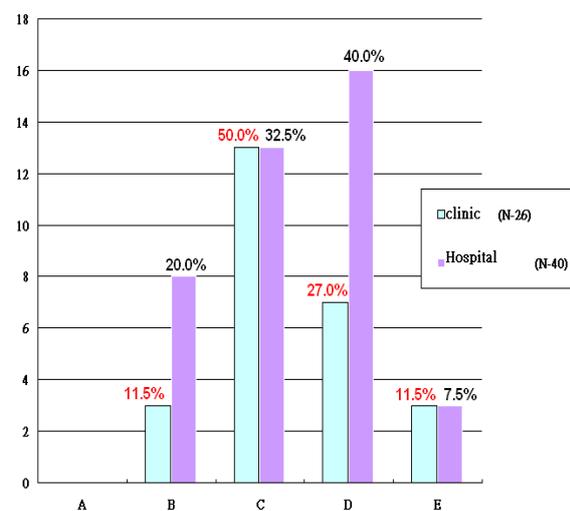
\*adapted for present study by replacing 'doctor' with 'dentist'

Source: Chapple et al., 2003 [10]

**DATA ANALYSIS**

Among all of the patients, the ratios of preferences for patient participation in treatment decision making have show in figure 3. Both of the clinic and hospital have 0% of patients chose A as the most preferred role. Patients of the clinic prefer C as the collaborative role and patients of the hospital prefer D as the semi-passive role.

Figure3 Distribution of most preferred roles in treatment decision making



In the hospital, more respondents selected the passive role (card D, approximate 40%) as most preferred than any other role. Respondents who chose B trust in the dentist ordinary, have fully of knowledge about the subject, feel lack of time for discussion and common of the consumerist stance. The patients who chose C are lack of trust in the dentist, have lack of knowledge about the subject, feel ordinary of time for discussion and common of the consumerist stance. The patients who chose D are fully of trust in the dentist, have ordinary of knowledge about the subject, feel ordinary of time

for discussion and common of the consumerist stance. In the clinic, more respondents selected the collaborative role (card C, approximate 50%) as most preferred than any other role. Patients who chose C are fully of trust in the dentist, have ordinary of knowledge about the subject, feel fully of time for discussion and satisfied of the consumerist stance. The patients who chose D are fully of trust in the dentist, have vague of differences about knowledge of the subject, feel fully of time for discussion and satisfied of the consumerist stance. There is no one selected Card A, the fully active role, as their most preferred. In the clinic, most preferred roles were collaborative role (50.0%), whereas at the hospital site the active role type (20.0%) was less commonly preferred than the collaborative (32.5%) or passive types (47.5%).

Figure 4 have shows the distribution of least preferred roles in the sample. Both of A and E are least preferred of the patients ether in clinic or hospital. There are 76.9% patients of the clinic and 50% of the hospital least prefer A. The patients of clinic dislike active role and almost a half of patients in hospital dislike passive role.

Figure4 Distribution of least preferred roles in treatment decision making

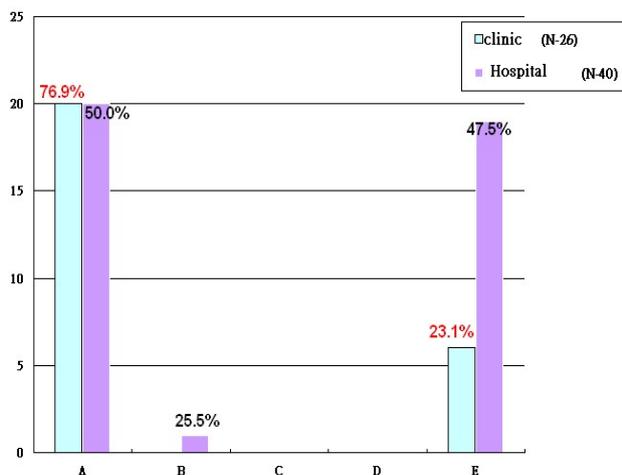


Table 1 shows the preference orders for the total sample. There was a range of preference orders, from the most active (ABCDE) to the most passive (EDCBA), but in our research didn't have the ABCDE preference order. In the clinic sample, the most common preference order was CDEBA, a 'collaborative-passive' preference order. By contrast, the Hospital sample, the most common preference order was CBDAE, a 'collaborative-active' preference order.

This result didn't have the preference order (ABCDE), also didn't show that all 11 transitive orders present and mirror image orders. However both of the two sites passed the standard of 50%+1.

By the way, clinic is over 73.0% to fit in with 50%+1.

Table 1 Decisional role preference orders for the sample

Preference order	Number of patient		
	Clinic (N=26)	Hospital (N=40)	
ABCDE*	0	0	
BACDE*	0	0	
BCADE*	11.5%	20.0%	Active
BCDAE*	0	4	
BCDEA	2	0	
BDCAE	0	1	
CBDAE*	3	7	
CBDEA	0	1	
CBEDA	0	1	
CDBAE*	46.1%	32.5%	Share
CDBEA*	3	1	
CDEBA*	5	1	
CEBDA	0	1	
CEDBA	1	0	
DBCAE	0	1	
DBCEA	1	2	
DCBAE	1	2	
DCBEA	3	5	
DCEBA*	1	2	
DEBCA	0	1	
DECBA*	38.4%	47.5%	Passive
EADCB	0	1	
ECBDA	1	1	
ECDBA	1	1	
EDECA	0	0	
EDCBA*	1	0	

\*=transitive order

Table 2 Extent to which Coomb's goodness of fit criteria were met

Patient group	All 11 transitive orders present	Mirror image orders (ABCDE/EDCBA)	50%+1 of preference present orders are transitive
Total sample	No	No	Yes (41/66, 62.1%)
Clinic	No	No	Yes (19/26, 73.0%)
Hospital	No	No	Yes (22/40, 55.5%)

Notice: No ABCDE transitive order

Table 2 shows the preference orders for the total sample. According to Coomb's goodness of fit criteria, [9] there is none of the eleven 'transitive' orders completely emerged, also none of the contrast orders as 'ABCDE/EDCBA'. The sample of the study is fit to the 50%+1 transitive orders. Comparing the sample of clinic and hospital, the clinic has 73% fit to 50%+1 transitive orders and the hospital has 55.5% which is a bit over the standard.

## DISCUSSIONS

Content analysis of the verbatim data regarding patients' rationales for their role preference revealed the following:

Four-six of the 66 patients interviewed mentioned lack of knowledge of the subject as influencing their ability to participate in treatment decisions, and several comments were: "I don't know the science behind medicine, so I'll leave the decision to someone who does", "I am paying to see the expert/professional, therefore should consider his/her opinion".

Besides, trust was specifically referred to by ninety of the 66 patients' comments were: "the doctor is a professional, therefore you should trust him/her", "if you can't trust the doctor, there's something wrong". Therefore, lack of knowledge about health care appeared to be closely linked with trust for these patients.

A further common theme amongst patients was lack of time for discussion. Forty of the 66 patients cited lack of time as a reason, and comments were: "there isn't enough time for the doctor to really consider my opinions", "the doctor just needs to get my treatment done as quickly as possible", "there's never enough time to sit and discuss everything". Typical comments relating to the consumerist stances issue were: 'The dentist is calculating compensation by the amounts of case, so there is lack of consumer rights.'

In the part of preferences for patient participation in treatment decision making, the most preferred role in medical center is semi-passive compare to collaborative role in dental clinics. The two extreme choices 'active' and 'passive' were overwhelmingly the least preferred at both sites. In the part of preference orders, for patients in medical center, the most common preference order was 'collaborative-active' preference order. By contrast, the most commonly preference orders in dental clinic was "collaborative-passive". In the part of perceived roles in treatment decision-making, nearly 70% clinic patients perceived passive role in treatment decision making whereas 50% patients in medical centre.

In summary, Taiwan patients have positive attitudes towards participation in relation to dental treatment decision making, provided they are fully informed of the nature of the disease, the treatment options, and benefits of the options. Physicians can increase patient satisfaction by accepting the role of helping their patients participate in decision-making and understanding their patients' wishes, and so cultivating a democratic relationship in which decisions can be made cooperatively. In this study, the collaborative role was most

commonly preferred, but an active role was more commonly perceived in clinics than in medical centre. Less patients in Taiwan prefer active rather than collaborative role, and patients in medical centre prefer passive role. However, there was no clear evidence that Taiwan patients prefer more passive roles than do their counterparts in advanced countries. Finally, this finding suggests that a majority of Taiwan patients have positive attitudes towards participation in medical decision making if they are fully informed.

## FURTHER RESEARCH AND SUGGESTIONS

Two important questions will arise as researchers conduct further studies with this study. The first involves the nature of the relationship of perceived facilitation to measured facilitative behaviors objectively. Our ongoing research seeks to determine whether all facilitative behaviors are equally important in fostering positive patient outcomes, such as satisfaction and adherence. If they are not, interventions might focus particularly on increasing those behaviors that are most important to patients. The second major question involves the interaction between a healthcare provider's encouraging patient involvement and the patient's desire to be involved.

Another focus of our ongoing research is an examination of outcomes related to complementary versus contradictory ideas about the patient's role. For instance, interactions between patients who want to be involved and physicians or dentists who hinder the patient's involvement are apt to be the most problematic. These interactions are also promising areas for research because they influence both objective and subjective patient outcomes. Similarly, if a patient prefers to play passive role but has a physician or dentist who constantly encourages involvement, conflict and dissatisfaction are again the likely outcomes. Therefore, it may be that facilitation is most important when viewed in the context of the "match" between the physician's facilitation and the patient's desire for involvement.

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