## ORIGINAL ARTICLE

# A Study to Evaluate Patient Preferences in the Decision Making of Dental Treatment

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#### **ABSTRACT**

**Objective:** The purpose of this study was to explore patient preferences in their dental treatment decision making and establish their role as active, passive or collaborative.

Study Design: Questionnaire based cross-sectional.

**Place and Duration of Study:** Department of Prosthodontics and the Executive private clinics of the Islamic International Dental College, Hospital from the 1<sup>st</sup> of February till the 30<sup>th</sup> of March 2012.

**Materials and Methods:** A convenience sample of 80 patients, 40 recruited from the Department of Prosthodontics and 40 from the executive clinics at the Islamic International Dental College were interviewed and their preferences for participation in treatment decision making were established using a measurement tool designed to elicit decision-making preferences. Patient preferences for participation in treatment decision making were established using a simplistic modification of the Control Preference Scale (CPS) tool.

**Results:** This study found that 45% clinic patients perceived active/semi-active roles in treatment decision making, 42.5% chose passive/semi-passive roles. 90% patients interviewed at the Department of Prosthodontics preferred passive/semi-passive roles. Over all, out of 80 patients, 53 chose the passive/semi-passive roles.

**Conclusion:** Patients presenting at the private clinics prefer being actively involved in their treatments, having said that, majority of them choose to get treatment from private clinics because they expect better services and have more trust in their doctors.

Key Words: Control Preference Scale (CPS), Treatment decision making, Patient preferences.

## Introduction

The demise of "single best treatments", rise in multi-faceted chronic illnesses, variations in the provision of services, increasing costs and increasing availability of newer and easily accessible information are all cited as reasons contributing to patients getting actively involved in the decision making of their treatment plans. The shift in paternalistic decision-making where physicians play a more dominant role to one that actively involves patient involvement has been documented to be on the rise.1 Studies on patient-doctor relationship along with elements addressing satisfaction have also been documented.<sup>2,3,4</sup> No research so far has been conducted on assessing the

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Dr. Faisal Moeen Asstt Prof of Dental Material Islamic International Dental College, Islamabad E.mail:faisal.moeen@riphah.edu.pk participation preferences of any Pakistani population in their dental decision making. It is pertinent to explore the elements of decision making in dental care, as patient participation is a field which has both ethical and legal implications in an increasingly user-focused, 'consumerist' health service, given that most dental care is paid for, in part or whole, by the patient. More importantly, by identifying the patient's dental preferences as active, passive or somewhere in-between, clinicians would obtain an insight not only into the outcome the perceived but also in patients have deciphering between different patient personalities.

Although, a number of methods have been used to examine patients' decisional role preferences, a modification of the Control Preferences Scale would be used in this observational study.<sup>5</sup> This simple

methodology involves presenting individuals with five options, each with a written statement. These options describe increasing levels of patient involvement in treatment decision-making, from the patient completely relinquishing control to clinicians, through to the patient maintaining complete control of treatment decision-making. Patients are asked to choose one most preferred and one least preferred role from the five possible options which would determine whether the patient prefers a passive, collaborative or an active role.

The aims of this study are to firstly evaluate patient preferences in the decision making of their dental treatments and secondly to compare the dental decision making preferences between patients presenting at the Department of Prosthodontics and the private, executive clinics both situated at the Islamic International Dental College, Islamabad.

#### Materials and Methods

Patients were eligible for inclusion if they presented at the department of Prosthodontics and the private clinics of the teaching hospital for elective replacement of missing teeth. They needed to be above the age of 18. Patients were recruited consecutively and studied prospectively between February and March of 2012. The protocol of the study was approved by the ethics committee of the Islamic International Dental College and all patients gave informed consent.

A convenience sample of 80 patients was recruited for this study from the Prosthodontic Department (40) and the executive clinics (40) of the Islamic International Dental College. Each patient

was explained the objectives of the study and assured confidentiality of their responses. No patient declined to be a part of this study and no patient was excluded.

Patient preferences for participation in decision making were established using the Control Preference Scale (CPS).5 Although, the CPS enables identification of a role preference hierarchy for each respondent i.e. an order of preference from most preferred to least preferred role, our study for the sake of simplicity would not formulate a hierarchy of role preferences. **Patients** would simply make choices as to the most preferred and least preferred options. The cards would however be presented to the patients in a mixed, randomly arranged format. This would eliminate the possible introduction of bias which exists if the fixed order approach is used. Once an option was selected, each patient was asked to give a rationale as to why that option was selected. The responses were recorded verbatim. By the end of the procedure, each patient would have chosen one option of the five and would be classed as either having an active, collaborative or passive decisional role preference.

Data from the Control Preferences Scale can be analyzed in a number of ways.<sup>5</sup> The simplest approach which is adopted here

Active role options	Collaborative ro options	le Passive role options
Card A I make the final selection about which treatment will receive.	Card C My doctor and I share responsibility for deciding which treatment is best for me.	Card D My doctor makes the final decision about which treatment will be used, but seriously considers my opinion.
	selection of my treatme	Card E  I leave all decisions regarding my treatment to my Doctor.

Source: Chapple et al., 2003 (10)6

will be to extract the most and least preferred roles from each patient's response followed by a frequency count for each role. Non-numerical data relating to patients' rationales for choice of role preference were content analyzed to enable identification of themes.<sup>7</sup>

## Results

All 80 patients appeared to understand the options presented in each of the five cards and their applicability to dental situations was confirmed. No further revision of the cards was necessary. Each participant understood the concept of choosing the most and the least preferred options applicable to their treatments however some degree of explanation was required in a few situations.

At the hospital setting, 21 patients out of the 40 (52.5%) chose card 'E' as the most preferred choice, leaving all decisions regarding their treatment planning and execution to the dentists. 15 patients (37.5%) chose card 'D' as their most preferred choice which is again following a similar trend as card 'E' i.e. the doctor deciding what is in the best interest of the patient although in consult with the patient. Patients who were questioned at the executive clinics/private setting showed varied and mixed responses with choices leaning slightly more towards an active or a semi-active role. 6 patients (15%) chose option 'A', 12 (30%) chose option 'B', hence 45% patients accumulatively chose between options 'A' and 'B'.

Five patients (12.5%) chose option 'C', 15 (37.5%) chose option 'D' and finally only 2 patients (5%) chose option 'E' as their most preferred choices. 42.5% patients hence choose between options 'D' and 'E'.

The two extreme choices 'A' and 'E' were overwhelmingly the least preferred at both sites, with the fully active role (card A) being particular unpopular. From the 40 patients questioned at the dental college, 30 patients (75%) chose option 'A' and 10 (25%) chose option 'E' as their least preferred choices. 22 patients (73.3%) and 18 (45%) chose options 'A' and 'E' respectively from the clinics.

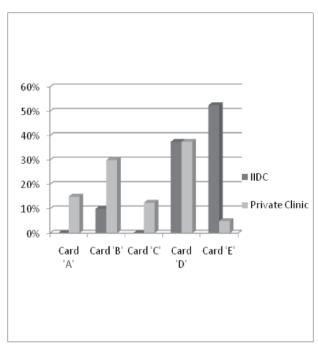


Figure 1: Distribution of the most preferred roles in treatment decision making.

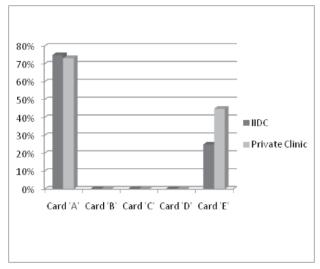


Figure 2: Distribution of the least preferred roles in treatment of decision making.

### Discussion

Previous studies using the Control Preferences Scale have mainly been with patients suffering from cancer or other serious illness. 8-10 However, the methodology has worked well in the dental context giving rise to interesting insights which are of great relevance to dental practitioners. 11, 12 This would suggest that this extremely useful methodology is transferable to dental settings.

Although this study focuses on a select group of patients and the results obtained from such a small sample size does not represent the preferences in dental decision making of the general population, it does provide valuable information regarding the attitudes patients can have towards involvement in their treatments. Dentists need to help patient participation in the decision making by explaining the nature of the disease, treatment options, benefits of the options, time required in completing the treatment and most importantly the cost incurred in achieving the desired treatment. Analysis of the verbatim data regarding patients' rationales for their role preference revealed that 52 of the 80 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".

Patients presenting at the private clinics in particular mentioned that they were paying extra to get treated by a specialist and hence they would seriously consider the decisions of their doctor. Trust was specifically referred to by 68 of the 80 patients, with comments like: "the doctor is a professional,

therefore you should trust him/her", "if you can't trust the doctor, there's something wrong". Therefore, either the patients lacked knowledge about health care and hence had no choice but to trust the healthcare provider or they knew the doctor before hand having genuine trust in his/her abilities and decision making skills.

A further common theme amongst patients was lack of time for discussion. Twenty nine of the 80 patients cited lack of time as a reason, and comments were: "there isn't enough time for the doctor to really consider my opinions", "there's never enough time to sit and discuss everything".

In the part of preferences for patient participation in treatment decision making, the most preferred role in the private clinic is semi-active compared to a collaborative role in the hospital setting. It is interesting to see that 15% of patients at the private clinic choose option 'A' as their most preferred role with the rationale that they know beforehand the expenses involved in getting treatment from a private clinic and they would solely decide if or when is the correct time to proceed with the treatments.

## Conclusion

In this study an active role was more commonly perceived in clinics than in the teaching hospital. Over-all lesser number of patients preferred an active rather than the passive role, however, there is no clear evidence that Pakistani patients prefer more active roles than do their counterparts in advanced countries. Finally, this finding suggests that a majority patients presenting at the Islamic International Dental College have positive attitudes towards participation in dental decision making if they are fully informed.

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