

## ORIGINAL RESEARCH

### **Effectiveness of Counseling and Motivational Interviewing with Chair Side Talk Method on Improving Knowledge of Dental and Mouth Health in patients attending dental college**

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#### **ABSTRACT**

**Background:** Motivational Interviewing can be used as a brief intervention to boost incentive for patients to modify their dental hygiene habits, as well as a framework for delivering nutrition, smoking cessation, oral health modifications, and alcohol recommendations. The Chair Side Talk approach is a pre- or post-treatment extension activity performed by the instructor while the patient is being treated. The goal of this study is to determine the effectiveness of extending oral health information as well as motivation using the chairside talk method.

**Research methodology:** This study employs a one-group quasi experiment approach of pre- and post-testing. A total of 255 people took part in the study, all of whom went to the Department of Oral Medicine and Radiology's dental O.P.D. on a single day. The dependent variable was oral health knowledge, and the independent variable was chair side talk method. Patients were given questionnaires, then counselled and motivated using the chairside talk method, and at following appointments, the patient was given another questionnaire. Using the paired t-test for data analysis.

**Result:** Before counselling only 20% of the subjects knowledge was graded as well, but after counselling there was improvement in knowledge about oral health as, 81.56% subjects were graded well, The findings of the paired t-test revealed that chairside talk counselling was beneficial in enhancing dental health knowledge. The p-value of 0.001 demonstrated this.

**Conclusion:** Counselling and motivational interviewing of the subjects by chair side talk method is an effective behaviour change method, which can be utilized in the dental practice setting.

**Keywords:** Motivation, Counselling, Oral Health

#### **INTRODUCTION**

Oral illnesses are ubiquitous and common all throughout the world. The most prevalent oral diseases are preventable and reversible when caught early. Men, women, and children are all affected by dental caries, periodontal disorders, and oral malignancies. Oral diseases affect

about 3.5 billion people worldwide, threatening the health, well-being, and social and economic productivity of millions of individuals in underdeveloped countries. Oral diseases are growing more prevalent worldwide, and they should be considered a public health priority.<sup>1</sup> Poor dental hygiene, smoking, drinking too much alcohol, and eating an unhealthy diet are all modifiable risk factors for periodontal diseases. Periodontal disease is one of the most frequent oral diseases, and it can be avoided by practising good oral hygiene habits such as brushing teeth with a toothbrush and toothpaste, flossing between teeth, and other oral hygiene procedures.<sup>2</sup> Mouth hygiene is one strategy to improve your health because it can help you avoid a number of oral ailments.<sup>3</sup>

Dental teams are well-positioned to offer patients both preventive counselling and quick interventions that go beyond just improving their oral health. A variety of factors influence patient behaviour, including attitudes, beliefs, social norms, and perceived control.<sup>4</sup> Cognitive therapy, behavioural therapy, cognitive behavioural therapy (CBT), advice, and feedback are some of the counselling strategies based on distinct psychological models that have been used in a variety of health care settings.<sup>5,6,7</sup> Individual behavioural traits such as oral health knowledge, attitude, practise, eating habits, tooth decay, periodontal health, and oral cleanliness are all influenced by health education activities.<sup>8</sup>

In today's world, efforts to expand understanding through health education or counselling are critical. Dental and oral health education is a type of activity that tries to improve, for example, by educating people about the importance of keeping their teeth and mouth healthy.<sup>9</sup> According to Herijulianti et al. (2002), the goal of oral health education is to alter people's habits toward healthier ones in order to attain optimal public health.<sup>10</sup>

Chairs Side Talk the outreach actions carried out by the extension before and after the patient's treatment. In most cases, the dental nurse or dentist will offer oral hygiene maintenance information on the dental chair. Phantom models and a flipchart were among the instruments employed.<sup>10,11</sup>

The goal of this study is to determine the effectiveness of extending oral health information as well as motivation using the chairside talk method.

## MATERIAL AND METHODS

This study employs a one-group quasi experiment approach of pre- and post-testing. A total of 255 people took part in the study, all of whom went to the Department of Oral Medicine and Radiology's dental O.P.D. on a single day. The dependent variable was oral health knowledge, and the independent variable was chair side talk method. Patients were counselled by chair side talk method after data was collected by questionnaire at the dental clinic, and the patient was given another questionnaire back on following appointments. The research data using nominal and ordinal scale so that the normality test kolmogorov-smirnov, Statistical tests to analyze the data, when normal data using a paired t-test, while not normal use wilcoxon test.

## RESULT

**Table 1: Demographic variables of study subjects**

<b>Variables</b>	<b>Number</b>	<b>Percentage</b>
<b>Gender</b>		
Male	115	45.09%
Female	140	54.90%
<b>Education level</b>		
Illiterate	30	11.76%
High school	112	43.92%
Bachelor degree	75	29.41%

Post graduate degree	38	14.90%
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Table 1 represents the demographic variables of study population. Of the total 255 subjects involved in study, 115 (45.09%) were males and rest were females (n=140, 54.90%). Education level of the study subjects was also recorded. Maximum subjects had highest education till high school (43.92%), followed by Bachelor degree (29.41%) and Post graduate degree (14.90%). And only 30 subjects were illiterate (11.76%).

**Table 2: Overview of dental health knowledge of study participants**

Knowledge level	Number	Percentage
<b>Before counselling</b>		
Well	51	20%
Enough	89	34.90%
Less	115	45.09%
<b>After counselling</b>		
Well	208	81.56%
Enough	44	17.25%
Less	3	1.17%

Table 2 depicts the level of knowledge of study participants before and after counselling by chair side talk method. Before counselling only 20% of the subjects knowledge was graded as well, 34.90% knowledge was graded as enough and 45.09% subjects had less knowledge about oral health. But after counselling there was improvement in knowledge about oral health as, 81.56% subjects were graded well, 17.25% were graded enough and only 1.17% subjects had less knowledge.

**Table 3: Test the effectiveness of counselling methods chair side talk method on knowledge**

Variables	Mean	SD	Mean± SD	p-value
Knowledge (pretest)	58.12	12.98	26.21±9.37	<0.01**
Knowledge (post-test)	89.12	10.98		

\*\* : highly significant

The test results of data effectiveness of oral health knowledge showed p-value 0.001 ( $P < 0.05$ ) means counselling and motivation of subjects by chair side talk method effectively lead to the improvement of oral health knowledge of the study participants.

## DISCUSSION

The study's findings show that respondents have a good degree of oral health awareness before counselling were 51 people (20%), having an adequate level of knowledge were 89 people (34.90%) and having a low level of information or no knowledge were 115 people (45.09 percent). The researchers then used the chair side talk method using flipchart media to counsel and motivate the subjects on dental and oral health, as well as teach how to brush teeth with the use of a jaw model. The level of knowledge was then re-measured after counselling, and it was discovered that subjects with good knowledge were 208 (81.56 percent), subjects with sufficient knowledge were 44 (17.25 percent), and only three subjects had less knowledge after counselling. This could be because 11.76 percent of the study participants were illiterate, so they may not be able to understand instructions properly. It also supports Notoatmodjo's (2012) assertion that variables affecting understanding of one of them are a source of concern. Respondents who pay more attention to a material will grasp it better, whereas respondents who pay less attention to a material would comprehend it less well.<sup>12</sup>

The test results of data effectiveness of oral health knowledge showed p-value 0.001 ( $P < 0.05$ ) means counselling and motivation of subjects by chair side talk method effectively lead to the improvement of oral health knowledge of the study participants. This is in line with the behavioural change idea. The Stimulus-Organism-Response (SOR) theory states that different stimuli or stimuli produce diverse behaviours. The findings support Notoatmodjo's (2012) assertion that a person's knowledge of the individual against objects can alter and evolve based on their abilities and experience.<sup>12</sup> This study supports the findings of Supriani and Ratmini (2016), who found that 18 people (25.35%) had very good dental health knowledge, 37 people (52.11%) had good dental health knowledge, 13 people (18.30%) had sufficient dental health knowledge, and three people (4.22%) had less dental health knowledge before receiving counselling. But after getting counselling on dental health subjects with excellent criteria were 67 people (94.36%), while the level of knowledge with good criterion were of four subjects (5.63%), and there was no subject who has less or sufficient knowledge.<sup>13</sup>

## CONCLUSION

Counselling and motivational interviewing of the subjects by chair side talk method is an effective behaviour change method, which can be utilized in the dental practice setting. It can be used as a brief intervention to motivate patients to improve their oral hygiene behaviours as well as their knowledge regarding oral health.

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