



RESEARCH ARTICLE

KNOWLEDGE, ATTITUDE & PERCEPTION OF POPULATION TOWARDS THE USE OF RUBBER DAM IN DENTAL CLINICS AT RIYADH CITY

*Alaa Alyousef-Roula Albounni

Department of Restorative and Endodontic, Riyadh Colleges of Dentistry and Pharmacy, Saudi Arabia

ARTICLE INFO

Article History:

Received 25th September, 2017
Received in revised form
12th October, 2017
Accepted 16th November, 2017
Published online 27th December, 2017

Key words:

Rubber dam,
Patient's attitude,
Questionnaire,
Isolation.

ABSTRACT

Background: Majority of patients visiting the Dental clinic have poor knowledge about the use of rubber dam, Also Majority of patients have negative attitude towards treated under rubber dam.

Objective: To determine the knowledge, attitude and perception of patients towards the use of rubber dam at Riyadh City.

Design: Questionnaire survey.

Material and Method: Study area: The study will be conducted in Riyadh city, kingdom of Saudi Arabia. Study design the study was a descriptive cross-sectional on Riyadh population. Sample size is of (302) will reached. The study population implicated adult patients aged between 16-50 years of age, This study conducted the time frame of 2 months.

Results: A total of 302 questionnaires were distributed, the gender distribution was the 46% patients (n = 163) were male and 54% (n = 139) women. The patients had seen the Rubber Dam before 29.1% (n=88) and 70.9% (n= 214) had never seen the Rubber dam before of the 88 patients who had previous Rubber dam application, had it placed by a dental student 18.9% (n=57) and 6.6% (n=20) by current dentist and 3.6% (n=11) by different dentist.

Conclusions: In our study we found the majority of patients have not any knowledge about rubber dam.

Copyright © 2017, Alaa Alyousef-Roula Albounni. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Alaa Alyousef-Roula Albounni, 2017. "Knowledge, attitude & perception of population towards the use of rubber dam in dental clinics at riyadh city", *International Journal of Current Research*, 9, (12), 62582-62585.

INTRODUCTION

The Rubber Dam (RD) was introduced into dentistry in 1864 by s.c.Barnum, a NewYork City Dentist. Its use in dentistry is essential as it confers benefits to both the Dentist & the patient. The Rubber Dam is used to define the operating field by isolating one or more teeth from the oral environment. It eliminates saliva from the operating site and retracts the soft tissues. When the Rubber Dam is used, many procedures are facilitated as dryness is ensured during tooth preparation and restoration. In addition, there are fewer interruptions to replace cotton rolls to maintain isolation. When excavating a deep carious lesion that has risk of pulpal exposure, use of the Rubber Dam is strongly recommended to prevent pulpal contamination from oral fluids (Theodore *et al.*, 2002). The goal of the rubber dam is to achieve isolation and the benefits of this is good moisture control, Operative dentistry cannot be executed properly unless the moisture in the mouth is controlled. The moisture control refers to excluding sulcular fluid, saliva and gingival bleeding from the operating field. Rubber dam also prevents the hand piece spray and restorative

debris being swallowed or aspirated by the patient (Pinkham *et al.*, 2005). Generally the rubber dam is the recommended technique for moisture control. However, have reported that achieving effective isolation is more important than the specific technique utilized. The other techniques for achieving isolation are the use of cotton rolls, cellulose wafers, throat shields, high volume evacuators, saliva ejectors, retraction cord, mirror and evacuator tip retraction, Mouth props and use of drugs to control salivation is rarely indicated in restorative dentistry and is generally limited to Atrophine (Raskin *et al.*, 2000; Fusayama, 1992). Rubber dam is considered an ideal device for operation field isolation in dentistry, one which enables a high-quality treatment 1994 (European Society of Endodontology, 1994). Training in the proper use of rubber dam has become a fundamental part of the curriculum for students of dentistry (Schulte *et al.*, 2011; Buchalla *et al.*, 2011). Rubber dam also prevents harm to the patient. The axiom taught to every member of the health profession is "Do no harm" and an important consideration of isolating the operating field is preventing the patient from being harmed during the operation (Heling *et al.*, 1988; Huggins, 1986).

*Corresponding author: Alaa Alyousef-Roula Albounni,
Department of Restorative and Endodontic, Riyadh Colleges of Dentistry and Pharmacy, Saudi Arabia.

Aim and Objective

To investigate the awareness of people about the usage & Objective of rubber dam in Dental Clinics At Riyadh city. To determine the knowledge, attitude and perception of patients towards the use of rubber dam at Riyadh.

MATERIALS AND METHODS

Study area: The study will conducted Riyadh city, kingdom of Saudi Arabia.

Study design: The study was a descriptive cross-sectional on Riyadh population.

Study population: The study population implicated adult patients aged between 16-50 years of age, This study will conducted the time frame of 2 months. Thesample size is of 302 of sample.

Inclusion criteria: Patients who consent to follow up with this study. Patients aged 16 -50 years visiting Dental Clinic for conservative dental Procedures.

Exclusion criteria: Patients not willing to participate out the aforementioned aged group. After preparing the questionnaire with the determined questions, we distributed it on the selective patients in order to get the answers and analyses them. Each patient answered the questions included in a special form that designed specifically for this study, then all data subjected to statistical analysis to gain accurate results.

302 patient included in our study, each patient subjected to individual form of the same questions, this questioner was structureedspecific points including: personal data (age, gender, adders), questions related with awareness of patient about using and benefits of rubber dam isolation. Then we used statistical analysis to get the results by program (Spss version 21).

RESULTS

The sample size of research was 302. The according to distribution of respondents by age and gender, shown in Figure 1 & Figure 2.

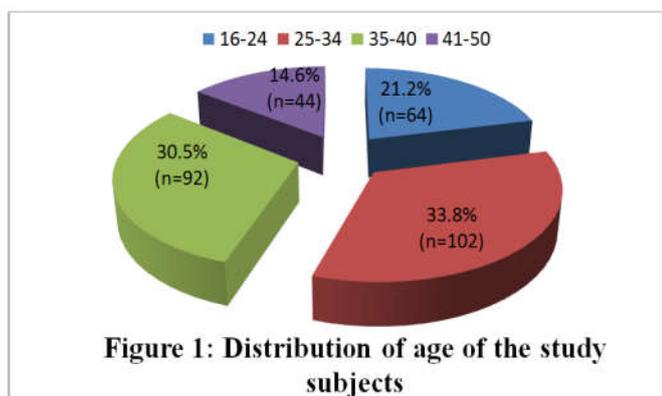


Figure 1: Distribution of age of the study subjects

The patients had seen the Rubber Dam before 29.1% (n=88) and 70.9% (n= 214) had never seen the Rubber dam before. shown in Figure 3 & Table 1.

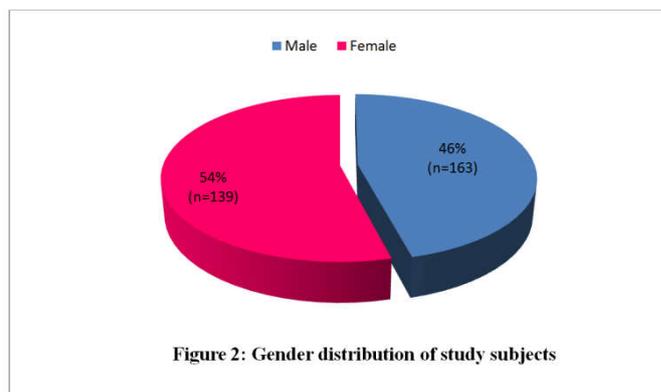


Figure 2: Gender distribution of study subjects

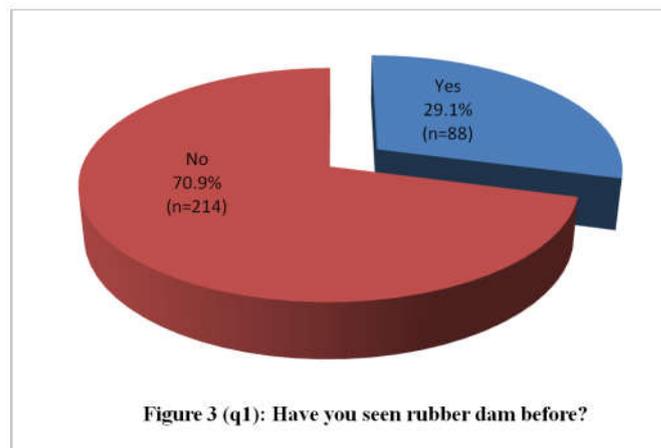


Figure 3 (q1): Have you seen rubber dam before?

Table 1 (q1): Have you seen the Rubber dam before??

Responses	N	%
Yes	88	29.1
No	214	70.9

The 88 patient have received dental treatment under rubber dam. Shown in Figure 4 & Table 2.

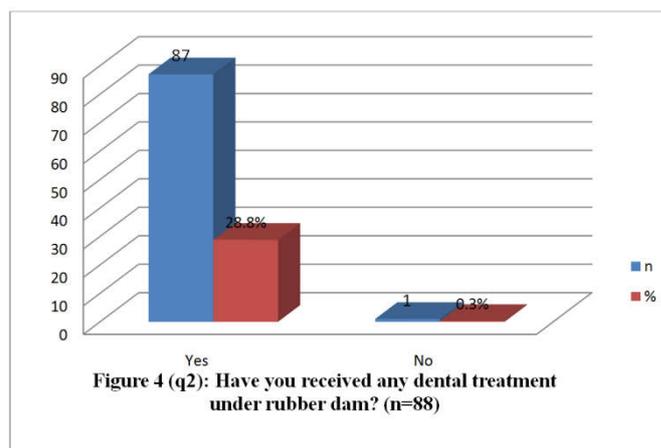


Figure 4 (q2): Have you received any dental treatment under rubber dam? (n=88)

Table 2 (q2): Have you received any dental treatment under rubber dam? (n=88)

Responses	N	%
Yes	87	28.8
No	1	0.3

The patient had it placed the rubber dam isolation by a dental student 18.9% (n=57) and 6.6% (n=20) by current dentist and 3.6% (n=11) by different dentist. Shown in Figure 5 & table 3.

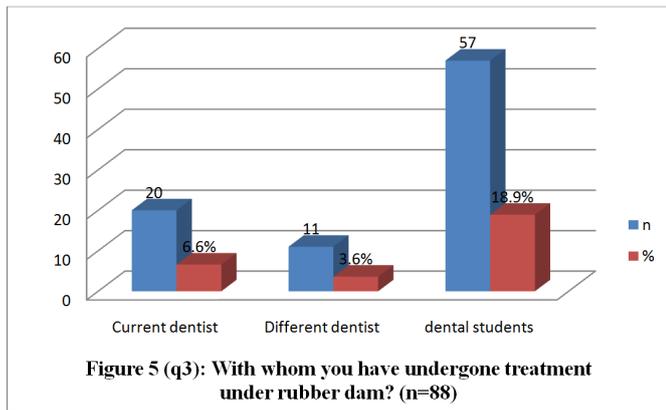


Figure 5 (q3): With whom you have undergone treatment under rubber dam? (n=88)

Table 3 (q3): With whom you have undergone treatment under rubber dam? (n=88)

Responses	N	%
Current dentist	20	6.6
Different dentist	11	3.6
Dental students	57	18.9

In comparison with the previous experience 59(19.5%), patients considered the present' experience better than the previous one, 21(7 %) had the same experience while 8(2.6%) consider the present experience worse than the previous. Show Figure 6, Table 4.

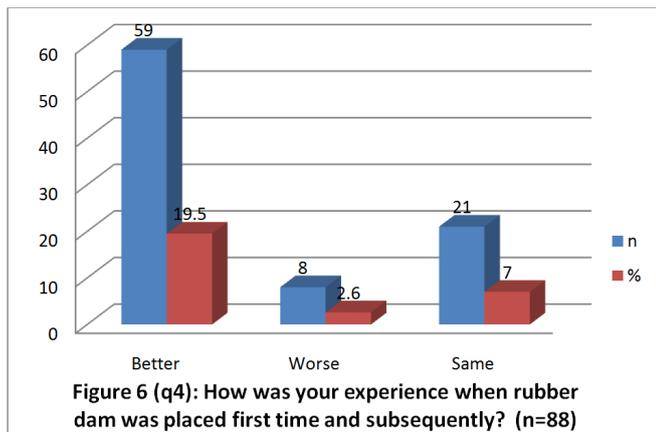


Figure 6 (q4): How was your experience when rubber dam was placed first time and subsequently? (n=88)

Table 4 (q4): How was your experience when rubber dam was placed first time and subsequently? (n=88)

Responses	N	%
Better	59	19.5
Worse	8	2.6
Same	21	7

The 20 (6.6%) of the patients on whom the rubber dam was used, were not given any explanation by the dentist/dental student of the reason for Rubber dam use before its application. 68 (22.5%) of patients claimed that an explanation was given to them. Show Figure 7, Table 5.

Table 5 (q5): Did your doctor explain you about using rubber dam? (n=88)

Responses	N	%
Yes	68	22.5
No	20	6.6

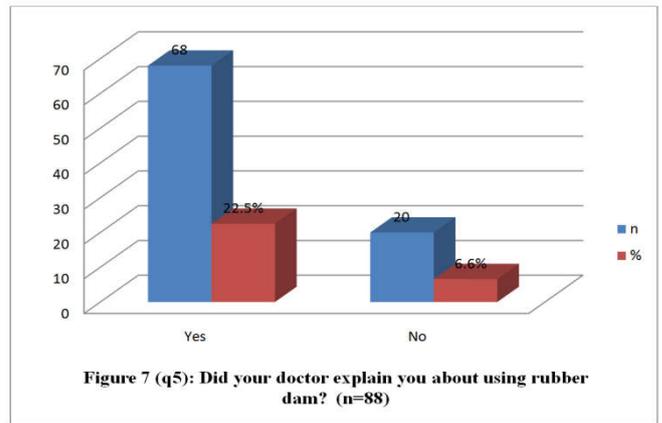


Figure 7 (q5): Did your doctor explain you about using rubber dam? (n=88)

And the 57(18.9%) of the patients said that the purpose of the Rubber dam was clear to them while only 11(3.6%) respondents stated that they did not understand the explanation. show Figure 8, Table 6.

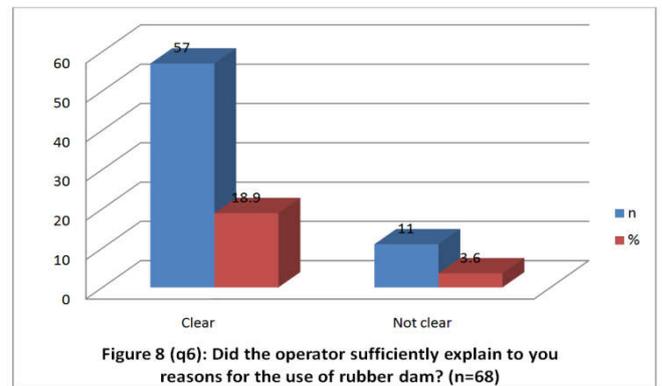


Figure 8 (q6): Did the operator sufficiently explain to you reasons for the use of rubber dam? (n=68)

Table 6 (q6): Did the operator sufficiently explain to you reasons for the use of rubber dam? (n=68)

Responses	N	%
Clear	57	18.9
Not clear	11	3.6

The Patients feelings towards present Rubber dam experience. show Figure 9, Table 7

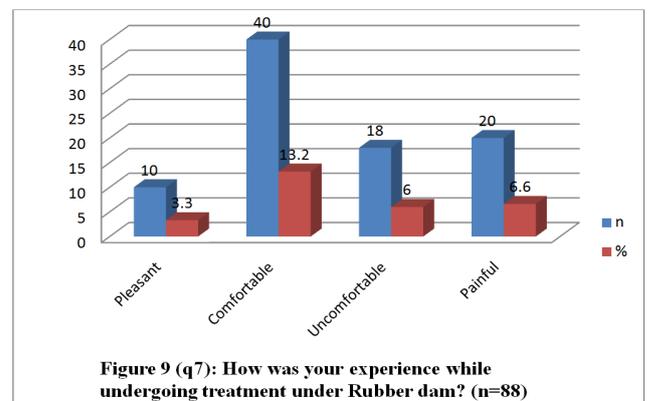


Figure 9 (q7): How was your experience while undergoing treatment under Rubber dam? (n=88)

Table 7 (q7): Table 6: How was your experience while undergoing treatment under Rubber dam? (n=88)

Responses	N	%
Pleasant	10	3.3
Comfortable	40	13.2
Uncomfortable	18	6
Painful	20	6.6

Table 8 (q8): Would you prefer rubber dam next time? (n=88)

Responses	N	%
Yes	69	22.8
No	19	6.3

Table 9: Preference to use of rubber dam among family and friends

Variables		Yes		No		Chi-square	P value
		n	%	N	%		
Age	16-24	45	25.1	19	15.4	17.78	<0.001
	25-34	57	31.8	45	36.6		
	35-40	62	34.6	30	24.4		
	41-50	15	8.4	29	23.6		
Gender	Male	75	41.9	64	52.0	3.01	0.083
	Female	104	58.1	59	48.0		

DISCUSSION

In our study the aim was to investigate the awareness of population in Riyadh city about the rubber dam isolation, we found that 70.9 % of population have no information. About using or benefit of the rubber dam using. We are in same line with (Kapitan *et al.*, 2015) who found that there are a lot of benefits from using the rubber dam in dental procedure. We are in disagreement with (Saurab Singh Viridi, 2006) who found that 60% of patient responded in positive way to word using the rubber dam while in our study high percentage of subjects (70.9%) don't know about the rubber dam isolation, but again, We are in accordance with (Kapitan *et al.*, 2015) who stated that the dentist attitude about explanation of benefits of using the rubber dam to his patients has a positive influence on the cooperation of patient in dental treatment.

Conclusion

In our study we found that the awareness of this isolation method is very poor among population in Riyadh city, the majority of patients have no information about rubber dam So we need to condense our efforts to increases the awareness of importance and benefits of this beneficial method in this country to accomplish long lasting successful results in all dental treatment.

REFERENCES

- Buchalla W, Wiegand A, Hall A. 2011. Decision-making and treatment with respect to surgical intervention in the context of a European Core Curriculum in Cariology. *European Journal of Dental Education*, 15 (Suppl. 1): 40–44.
- European Society of Endodontology. Consensus report of the European Society of Endodontology on quality guidelines for endodontic treatment. *International Endodontic Journal*, 1994; 27 :115 -24
- Fusayama T. 1992. Total etch technique and cavity isolation, *Journal of Esthetic Dentistry*, 4: 105- 109
- Heling I, Sommer M, Kot I. 1988. Rubber dam- an essential safe guard, *Quintessence Int.*, 88: 377-378
- Huggins DR. 1986. The Rubber dam - An insurance policy against litigation, *J Indiana Dent Assoc.*, 65: 23-24.
- Pinkham, Casamassimo, Fields, McTigue, Nowak. Pediatric Dentistry Infancy through Adolescence 4th edition, Elsevier, Inc 2005.
- Raskin A, Setcos JC, Vreven J. 2000. Influence on the isolation method on the 10year clinical behaviour of posterior resin composite restorations, *Clinical Oral Investigation*, 25: 148 -152
- Schulte AG, Pitts NB, Huysmans MCDNJM, Splieth C, Buchalla W. 2011. European core curriculum in cariology for undergraduate dental students. *European Journal of Dental Education*, 15(Suppl. 1): 9–17.
- Theodore M. Roberson. H Heymann, E J Swift JR. Art & Science of Operative Dentistry 4th edition. Mosby, Inc. 2002
