

### Evaluation of the satisfaction of patients referred to pediatric department of BABOL dental school

**Introduction:** Achieving proper clinical outcomes relies on patient cooperation and patient cooperation relies on their satisfaction; thus patient satisfaction is essential for health care improvement; The aim of this study was to evaluate the satisfaction of patients referred to pediatric department of BABOL dental school in 2011-2012.

**Method and material:** In this cross-sectional study, questionnaires containing 16 questions were used. 150 questionnaires were given to the parents of children who were referred to the pediatric department of BABOL dental school. Once completed, the data were analyzed by SPSS software using Paired T-test and Chi-square test.

**Results:** Overall, 138 participants (92%) noted high level of satisfaction and 12 of them (8%) showed moderate level of satisfaction which didn't show any significant difference according to gender and age ( $P > 0.05$ ). 48 (32%) patients preferred the female dentist, 30 (20%) patients preferred the male dentist and 72 patients (48%) didn't note any preference about the dentist gender. Overall, 142 (94.5%) patients preferred to go back to previous dentist for subsequent treatments and 8 (5.5%) of them preferred treatment by a new one.

**Conclusion:** Results indicated that pediatric department has been successful in achieving patient's satisfaction and especially patients were satisfied with student's communication manner in both undergraduate and postgraduate level. With a little effort it can be successfully upgraded to highest level.

**Keywords:** patient satisfaction, pediatric department, dental faculty

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### درابه مستوى الرضا عند المرضى في قسم الاطفال في كلية طب الاسنان من اداء الطلاب و الموظفين و الخدمات في جامعه مدينه بابل.

**المقدمه:** إن الحصول على نتائج طبية جيدة تحتاج الى التعامل الجيد بين المريض والطبيب و التعامل الجيد من قبل المريض يكون نتيجة مستوى رضاه من عمل الموظفين و الاداء الطبي إذن الرقابة الصحية ضرورية جداً من اجل الحصول على اعلى مستوى من رضی المريض. إن الهدف من هذه الدراسة هو تقييم مستوى الرضا عند المرضى في قسم الاطفال في كلية الاسنان في جامعه بابل الطبية في سنة ٩١-١٣٩٠ هـ. ش

**الاهداف:** في هذه الدراسة المقطعية تم استعمال استمارات ذو ١٦ سؤال. تم توزيع ١٥٠ استماره على اهالي الاطفال الذي ارتادو قسم الاطفال في كلية طب الاسنان في جامعه بابل الطبية. في عام ٩١-١٣٩٠ هـ. ش تم تحليل المعلومات عبر برنامج spss تم استعمال فحص T و chi square.

**النتائج:** كان هناك ١٣٨ شخص (٩٢٪) جوابهم (المستوى اعلى) و ١٢ شخص (٨٪) المستوى متوسط. و لم يكن هناك اختلاف ذو قیبة في مستوى الرضا. عند ادراج متغیری السن و الجنس ( $p > 0.05$ ). إن اعلى مستوى من الرضا كان تجاه الطلاب و خصوصاً بالنسبة الى تعاملهم مع الاطفال و ذويهم (٩٨٪) المستوى تجاه طلاب الطب العام في الاسنان و طلاب التخصص في الاسنان ( $p > 0.05$ ).

٤٨ شخص (٣٢٪) كانوا يفضلون الطبيبه على الطبيب و ٢٠ شخص (٢٠٪) كانوا قد فضلوا الطبيب على الطبيبه و ٧٢ شخص (٤٨٪) لم يكن لديهم فروه. ١٤٢ شخص (٩٤.٥٪) كانوا قد رجعوا استمر العلاج عبر نفس الطبيب و هناك ٨ اتخاص (٥.٥٪) رجعوا أن يتابعوا علاجهم عند طبيب اخر.

**الاستنتاج:** تنفيذ النتائج الى إن قسم الاطفال قد سجل اداءً مميزاً في مجال كسب رضا المريض و يستطيع ببذل جهد بسيط أن يصل الى ١٠٠٪. الكلمات الرئيسية: رضا المريض، قسم الاطفال، كلية طب الاسنان.

### بابل ڏينٽل ڪاليج ڪي بچون ڪي شعبي ڪي ميڊيڪل عملي ڪي پيشه ورانه ڪارڪردگي ڪي بيمارون ڪي رضائيت ڪي جائزه.

**بيڪ گراونڊ:** مطلوبه ڪلينيڪل نتايج تک پهچڻ ڪي لڳ ضروري ٿي ڪي ميڊيڪل عملي بيمار ڪي ساٿي بهت اچي طرح تعاون ڪري ڪيونڪي يه نهايت ضروري ٿي ڪي بيمار ميڊيڪل سروسز ڪي مطمن ٿي. اس تحقيق ڪا هدف بابل ڏينٽل ڪاليج ڪي بچون ڪي شعبي ڪي رجوع ڪرڻ ڪي والي بيمارون ڪي اطمينان ڪا جائزه لينا ٿي.

**روش:** اس تحقيق ڪي سوله سولون پر مشتمل سولنامه استعمال ڪيا ڪيا. ايڪ سو پچاس سولنامي ان بچون ڪي والدين ڪو ڏئي گڻي جو ڊيٽا رڪارڊ اور ڊيٽا رڪارڊ ڪي اس شعبي ڪي اينڻ بچون ڪي علاج ڪي غرض ڪي آئي تهي. جوابون ڪا تجزيه ايس ٿي ايس ٿي سافٽ وير، ٿي اور چي اسڪوائر پروگرامون ڪي ڪيا ڪيا.

**نتيجه:** مجموعي طور پر ايڪ سو اڙتيس بچون ڪي والدين ڪي اس شعبي ڪي ميڊيڪل سروسز پر مڪمل اطمينان ڪا اظهار ڪيا جيڪي آڻي فيصد ڪي ڪيا ڪي سروسز اچي ٿي. نيتس فيصد والدين اس بات ڪو ترجيح ڏيڻي تهي ڪي ڏينٽل ڏاڪٽر ليڏي ٿي.

**سفارشات:** اس تحقيق ڪي پتہ چلتا ٿي ڪي بابل ڏينٽل ڪاليج ڪي بچون ڪي شعبي پيشه ورانه خدمات پيش ڪرڻ ڪي ڪيا ڪيا ٿي به البتہ ڪجهه ڪوشش ڪرڻ ڪي سروسز ڪي معيار ڪو نهايت اعليٰ بنايا جا سگهيا ٿي به بالخصوص اس وجه ڪي بهي ڪي بيمارون ڪي ميڊيڪل طبلاء ڪي عمدہ رويي ڪو سراها ٿي اور جنرل نيز اسپيشلسٽ طبلاء ڪي اطمينان ڪا اظهار ڪيا ٿي.

**ڪليدي الفاظ:** بيمار، رضائيت، بچون ڪا شعبي، ڏينٽل ڪاليج.

### بررسی میزان رضایت بیماران مراجعه کننده به بخش کودکان دانشکده دندانپزشکی بابل نسبت به رفتار حرفه ای دانشجویان و کارکنان و خدمات ارائه شده

**مقدمه:** دستیابی به نتایج کلینیکی مناسب به همکاری بیماران و همکاری بیماران به رضایتمندی آن ها وابسته است، بنابراین رضایت بیماران لازمه مراقبت های بهداشتی است؛ هدف از این مطالعه ارزیابی میزان رضایت بیماران مراجعه کننده به بخش کودکان دانشکده دندانپزشکی دانشگاه علوم پزشکی بابل در سال ٩١-١٣٩٠ بود.

**روش ها:** در این مطالعه مقطعی، از روش پرسشنامه شامل ١٦ سؤال استفاده شد. ١٥٠ پرسشنامه در اختیار والدین کودکانی که در سال ٩١-١٣٩٠ به بخش کودکان دانشکده دندانپزشکی بابل مراجعه کرده بودند قرار گرفت. پس از تکمیل اطلاعات، داده ها به وسیله نرم افزار SPSS و با استفاده از آماره های توصیفی و آزمون T زوجی و chi square واکاوی گردید.

**نتایج:** به طور کلی ١٣٨ نفر (٩٢٪) بیماران رضایت عالی و ١٢ نفر (٨٪) آن ها رضایت متوسط داشتند که این میزان رضایت به تفکیک جنس و سن تفاوت معنی داری نداشت ( $P > 0.05$ ). بیشترین میزان رضایت مربوط به دانشجویان، به ویژه از نحوه برخورد آن ها با کودک و والدین (٩٨٪ رضایت عالی و ٢٪ رضایت متوسط) بود. به طور کلی میزان رضایت از دانشجویان عمومی و دستیار تخصصی با یکدیگر تفاوت معنی داری نداشت ( $P > 0.05$ ). ٤٨ نفر (٣٢٪) از بیماران ترجیح می دادند که دندانپزشک آن ها خانم باشد، ٣٠ نفر (٢٠٪) دندانپزشک آقا را ترجیح داده و برای ٧٢ نفر (٤٨٪) بقیه جنسیت دندانپزشک تفاوتی نداشت. به طور کلی ١٤٢ نفر (٩٤/٥٪) از والدین ترجیح می دادند درمان های بعدی نیز توسط همان دندانپزشک انجام گیرد و ٨ نفر (٥/٥٪) از آنها درمان توسط دندانپزشک دیگر را ترجیح می دادند.

**نتیجه گیری:** یافته ها نشان داد که بخش کودکان در زمینه کسب رضایت بیماران تا حد زیادی موفق عمل نموده است و با اندکی تلاش این موفقیت را می توان تا حد اعلاء ارتقا داد. بویژه بیماران از رفتار دانشجویان در هر دو سطح عمومی و تخصصی رضایت داشتند

**واژگان کلیدی:** رضایت بیمار، بخش کودکان، دانشکده دندانپزشکی

## INTRODUCTION

Satisfaction is one of the components of psychological science. Patient satisfaction with care is a useful measure that evaluates care, including the quality of care and provider-patient relationships(1,2). Patient satisfaction is regarded as an outcome of care and is one of the major factors that contributes towards better patient compliance and consequently to better clinical outcomes(3). It is necessary to access the patients view about their health care programs, because patients are the primary source of gathering data about the quality and effectiveness of care services and secondly paying attention to their point of view during care planning is their right and should be considered(2). Patient satisfaction with dental care is a multidimensional concept reflecting patients' expectations, values and experiences(3). Since clinical outcomes are dependent on patient cooperation and the latter relies on their satisfaction, patient satisfaction with health care is essential. In a simple term, it can be said that without satisfied patient, health care will not be qualified(4). In this regard, Bond and Tomas has noted that satisfaction is the only factor to make patient participated in his health care(5). In 1988, American Dental Association noticed that During a 5-year period, all of the American dentists had lost half of their patients; Kress have noticed the 'dissatisfaction' as a cause of this problem(6). Given the importance of the subject, knowing the level of patient satisfaction seems to be necessary in order to overcome the deficiencies and shortcomings and also to attract more health care participation. Several studies have been conducted to assess satisfaction of patients admitted to medical centers; in 2009, a cross-sectional study was performed to evaluate patients' satisfaction in first rank hospitals of Tehran University of Medical Sciences and indicated the strong positive correlation between hospital environment and patient satisfaction; therefore by a proper planning for improving this condition, a higher satisfaction would be achieved(7). Another study in the same year was conducted to assess the satisfaction rate of elderly patients in general hospitals affiliated with the Isfahan University of Medical Sciences which noticed the minimum level of satisfactory in the field of communication(8). In a research in Kuwait, the average of patient satisfaction with three dental specialty services was 49%(9). In USA, ninety percent of patient referred to dental school of Louisiana were satisfied(10). In a study at the Shahid Beheshti University of Medical Sciences, a proper level of care services was seen(11). In another research, the rate of the satisfaction of patients referred to endodontic department of Gilan university of medical sciences was evaluated and demonstrated that the overall level of satisfaction was good and acceptable to the clients(12). In a study in 2005, results showed that satisfaction of patients admitted to Tehran dental faculty were at the appropriate level(13). In another same study in 2010, the most satisfaction level of patients in Tehran dental faculty was seen with student's communicational skills(14). A research in Shiraz indicated that most of the patients were satisfied with dental faculty services(15).

Since no study was conducted to evaluate the satisfaction of patients referred to pediatric department of Babol dental school and given the fact that the continuity of health care for children, which relies on their satisfaction, is especially important, the aim of this study was to evaluate the satisfaction of patients referred to pediatric department of Babol dental school.

## METHODS

This study is a descriptive and analytic study which is conducted to evaluate the satisfaction of patients admitted to the pediatric department of Babol University of Medical Sciences. In order to gathering the information, questionnaires containing 16 questions were used. 150 questionnaires were given to the parents of children who were referred to the pediatric department of Babol dental school in first and second semester of the academic year in 2011-12.

The questionnaires were designed in three parts; the first part included questions to gather demographic information. The second part consisted of 13 items assessing satisfaction by means of 5-point Likert scale with the extremes labeled 'very poor' and 'excellent'. These 13 items included two questions about the environment and physical space of department, 6 questions about students (in terms of parent and child-student communication, Seriousness in doing their tasks and following infection control principles), 2 questions regarding staff's behavior (nurses and receptionist) and at the end, 3 separate questions concerning the satisfaction about waiting time for appointment, cost and quality of services.

The third part of the questionnaire included 3 questions; first, a question regarding whether under or postgraduate student was responsible for child care, The second question regarding parental preference of a dentist gender and the last one about parental preference for subsequent treatments to be performed by previous dentist or a new one.

Content-related and criterion-related validity of this questionnaire was confirmed by experts and professors of this field and reliability of the instrument scale was measured by the reliability coefficient (Cronbach's alpha =0.83).

After gathering data, the lowest and the highest score of satisfaction-related questions were assigned. The interval of the two obtained scores was divided into three parts: The first one third was specified as low level of satisfaction, the second one-third was specified as moderate level of satisfaction and the third one specified as high level of satisfaction.

Data were processed by means of SPSS statistical package, using paired t-test and chi-square test with  $P \leq 0.05$  as the cut-off level for significance.

## RESULTS

In this study, 150 patients who were admitted to the pediatric department of Babol dental school have been evaluated. 69 female(46/2%) and 81 male(53/8%) with a mean age of 5/6 years (3 to 10 years) were participated.

After collecting data and calculating scores, results were classified in three groups in order to easier description; low level of satisfaction, moderate level of satisfaction and high level of satisfaction.

Overall, 138 patient (92%), showed high rate and 12 patient (8%) showed moderate rate of satisfaction. This level of satisfaction didn't significantly differ according to age and gender of patients( $P>0/05$ ). Table 1 depicts the patients' ratings of the questionnaire items.

No significant differences were found about the factors being listed above according to age and gender groups of patients( $P>0/05$ ).

In more detail, the highest level of satisfaction to students, especially the way they deal with children and parents (98% satisfied and 2% higher average satisfaction) were found.

In more detailed evaluation, the highest level of satisfaction was seen with students, especially about their manner of communicating with children and parents(98% high and 2% low level of satisfaction).

In general, 70 children(46/6%), were treated by undergraduate students and 80 children(54/4%), were treated by postgraduate ones. Data pertaining to this item are listed in Table 2. No significant differences were seen according to student's educational grade( $P>0/05$ ).

About gender of the dentist, 48 patients(32%), preferred female and 30 patients(20%), preferred male dentist. Other 72 patients (48%) didn't note any preference about this issue.

Overall, 142 patients(94/5%) preferred to go back to previous dentist for subsequent treatments and 8 patients(5/5%) preferred to be treated by another dentist in next visits.

## DISCUSSION

Awareness of patient satisfaction seems to be essential in order to overcome the deficiencies and shortcomings and to gain greater cooperation in their health care services. The aim of this study was to assess the satisfaction of patients referred to the pediatric department of Babol dental faculty in 2011-12. Since the pediatric patients were not capable of understanding and fulfillment of the questionnaires, 150 questionnaires were given to their parents.

In this study, an overview of the results indicated the high level of patient's satisfaction which didn't differ according to age and gender of patients.

This level of satisfaction could be the result of several reasons; more accurate evaluations showed that the highest level of satisfaction was related to students communication manner with children and their parents. Good deal and appropriate communication are the factors needed to achieve patient satisfaction and motivate them to continue their treatment.

In a study conducted in Kuwait in 2003, a high rate of satisfaction with patient-dentist relationship was found(9). Proper communication between patient and dentist can play an important role in understanding patient chief complaint and therefore conducting the most appropriate treatment.

In the present study, the minimum level of satisfaction with department physical space and environment was concluded. Although the quantity of satisfaction about this factor was less than others, the sole assessment of this factor without comparing with others, indicated that patients were

**Table 1: Rate of satisfaction with each evaluated factor**

	High level of satisfaction		moderate level of satisfaction		low level of satisfaction	
	Number	Percent	number	percent	number	Percent
Space and Environment	79	53%	69	46/3%	2	1/3%
Student	148	98/6%	2	1/4%	0	0
Staffs	103	68/5%	46	30/9%	1	0/7%
Appointment time	118	78/8%	22	14/7%	10	6/8%
Cost	125	83/8%	23	15/4%	2	1/3%
Quality of Treatment	141	93/7%	9	6/3%	0	0

**Table 2. patient satisfaction according to student's degree of education**

	high level of satisfaction		moderate level of satisfaction		low level of satisfaction	
	Percent	Number	Percent	number	Percent	Number
Undergraduate student	146	97/1%	4	2/9%	0	0
Postgraduate student	135	90/2%	15	9/8%	0	0

satisfied with physical space of department. It seems that asking the children about environmental issues would be more effective in addressing shortcomings because this department is designed according to children's interests; so there may be differences in children and parent's comments in this field.

In studies conducted in 1999 in Louisiana(10), 2003 in Kuwait(9), 2004 in Gilan(12), and 2009 in Isfahan(8), The minimum level of satisfaction was seen with waiting so long for appointment time. In this study results indicated a high satisfaction rate about this factor; therefore this department has gained success in this regard. In this study no significant differences were seen between satisfaction level with undergraduate and postgraduate department. This finding indicates the proper classification of patients according to student's skills and confirms that most student were successful in achieving patient satisfaction by delivering appropriate treatment to them.

In this research gender of dentist was not an important factor for most of the patients. May and Sundus performed a study in 2005 in Baghdad and concluded that patients don't have any gender preference for dental cares(16).

Mcperson et al. in a same study in 2008 in USA noted that Gender preference is found for specific procedures. For instance male dentists were more suited for oral surgery, and female dentists were more suited to work with children(17). In another study which conducted to determine whether physician gender and patient gender influence the process of communication and parent/child satisfaction during pediatric office visits, they noticed that Children were more satisfied with physicians of the same gender, while parents were more satisfied with female physicians(18). Since it would be differences between children's and parent's view in this field, it is better to ask this question from children themselves before reporting any conclusion.

About the last question, the majority of patients noted that they would rather go back to their previous dentist for next treatments instead of visiting the new one; this matter emphasize their high level of satisfaction.

Results indicated that pediatric department has been successful in achieving patient's satisfaction and specially patients were satisfied with student's communication manner in both pre and post graduated level. With a little effort it can be successfully upgraded to maximum level.

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