

مستوى معرفة أطباء الأسنان السوريين بالمعوقين وموقفهم منهم

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الملخص

الهدف من البحث هو التحري عن معرفة أطباء الأسنان السوريين وموقفهم تجاه الأفراد المعوقين والعوامل المؤثرة في ذلك.

لم تجر أي دراسة سابقة عن هذا الموضوع في سورية.

مواد البحث وطرائقه: ملأ 120 طبيب أسنان يعملون في مدينة دمشق استبيان هذه الدراسة، حيث جُمعت المعلومات الشخصية والتعليمية وسلوكهم السريري مع المعلومات المتعلقة بمعرفتهم وموقفهم تجاه المعوقين.

النتائج: ذكر 22.6% أن سبب الإعاقة هو الأمراض العقلية، و19.4% هو الأمراض الوراثية، و17.7% هو الاضطرابات الولادية، و9.7% هو الرضوض، و1.6% هو الحوادث.

مصدر المعرفة 41.1% مرحلة قبل التخرج، و8.1% مرحلة بعد التخرج. لم يرغب 75% من أطباء الأسنان في معالجة المعوقين. يعتقد 29.9% أن معالجة المعوقين في العيادة نفسها سينفر باقي المرضى من إتمام المعالجة. يذكر 27.5% أن تدبير العيادة لا يسمح بمعالجة المعوقين. أطباء أسنان الأطفال هم الأكثر معالجة للمعوقين من باقي الاختصاصات ($p=0.048<0.05$). تميل الطبيبات لاتخاذ موقف إيجابي أكثر تجاه المعوقين من الأطباء الذكور ($p=0.03<0$).

الخلاصة: هذه الدراسة هي الأولى التي تتحرى عن معرفة أطباء الأسنان السوريين وموقفهم من الأفراد المعوقين. يقترح: 1- زيادة التدريب للطلاب بعد التخرج تحسُّن كلاً من نوعية العناية بالمعوقين ومقدارها. 2- زيادة البحوث المستقبلية عن التجارب السريرية الهادفة للمعوقين.

كلمات مفتاحية: أطباء الأسنان السوريين - المعرفة - الموقف - الإعاقة.

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Syrian Dentists' Knowledge and Attitudes Towards People with Disability

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Abstract

Purpose: It is to investigate the knowledge, attitudes and clinical behavior of Syrian dentists towards people with disability, following up the factor influencing this knowledge and attitudes. No such data were available from Syria.

Materials and methods: 120 Syrian dentists in practice working in Damascus completed the survey administered by this study. The dentists' demographic and educational data were collected, along with information about their knowledge, attitudes and clinical behavior toward the disabled.

Results: The knowledge was limited. The dentists' revealed the reasons of disability were 22.6% of mental disease, 19.4% of genetic disease, 17.7% of birth disorders, 9.7% of tumors, 1.6% of accidents, and 29% all of that. Sources of knowledge were 41.1% from under graduated study, and 8.1% from post graduated study. The attitude was negative: 75.8% of the dentists are not willing to treat the disabled. 29.9% believed that having that disabled treated in the same office might make other patients reluctant to continue their dental care there. 27.5% indicated that the office policy did not allow them to treat the disabled. Pediatric dentists appeared to be the prominent ones to treat the disabled among other specializations ($p= 0.048<0.05$). Female dentists had significantly more favorable attitudes to the disabled compared with male dentists ($p= 0.03<0.05$).

Conclusion: This study was the first to investigate the knowledge and attitudes of Syrian dentists towards people with disability. The author suggested increasing the:1-undergraduate and postgraduate training to improve the quantity and quality of the disabled care, and 2-future research about purposeful clinical experience for the disabled.

Key wards: Syrian- dentists- knowledge -attitudes – disability.

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Introduction:

Many groups of patients with disabilities have a higher risk of oral disease due to compromised oral hygiene as a consequence of their impairment, oral manifestations of their particular condition and/or the side effects of drug regimes, notably xerostomia and sugar in medicines.^{1,2} Dental care is one of the most important spheres in rehabilitation and treatment for persons with disabilities. Improving the levels of oral health in those with impairments of disabilities is consequently a major issue for the dental care services³. It is estimated that one out two persons with a significant disability can't find a professional resource to provide appropriate and necessary dental care⁴.

Lack of access to dental services for this segment of this population is reaching critical levels.

There were studies from several countries as in Georgia, Ireland, Ontario, Nigeria and Texas to investigate knowledge of the dentists about people

with disability and dental care for them.⁵⁻⁹ No such data are available from Syria. So the design was made to investigate the Syrian dentists' knowledge, attitudes and clinical behavior towards people with disability that will help guide practicing dentists to understand their role in the care of patients with disability. It was the first study of its kind that explored these issues among dentists from general and different specializes in Syria.

Materials and Methods:

A cross-sectional survey of dental professionals and practitioners at Damascus - Syria.

The study protocol was reviewed and approved by an Independent Ethics Committee at the faculty of dentistry- Damascus University- Syria.

120 Syrian dentists in practice working in Damascus (90 males, 30 females) completed the survey given by this study, with a mean age of male (45.6), female (35.5) and for all (40.7) years old (shown in Table 1).

Table 1: characteristics of the sample

| Gender | n | % | Mean age |
|--------|-----|-----|----------|
| male | 90 | 75 | 45.6 |
| female | 30 | 25 | 35.5 |
| total | 120 | 100 | 40.7 |

Most of the dentists were general dental practitioners. The others were from eight different specializations; 12.9% were pediatric dentists, 12.1% operative dentists, 19.4% endodontists, 6.5% pathologic dentists, 2.4% periodontists, 4% surgeons, 1.6% orthodontists, 1.6% oral medicine dentists, and 39.5% general practitioners (shown in Table 2).

Table 2: specializations of participated dentists

| specialization | n | % |
|--------------------------|-----|------|
| pediatric | 16 | 12.9 |
| Oral medicine | 2 | 1.6 |
| Operative | 15 | 12.1 |
| perio | 3 | 2.4 |
| Ortho | 2 | 1.6 |
| surgery | 5 | 4.0 |
| Pathologic | 8 | 6.5 |
| Endo | 20 | 19.4 |
| GP= General practitioner | 49 | 39.5 |
| Total | 120 | 100 |

The survey was designed to assess Knowledge, Attitudes, and behavior towards treating individuals with disabilities. Respondents were not required to answer every question. A response rate 76.3% returned a fully completed survey with valid data.

After reviewing several survey instrument about knowledge, attitude and practices used by professionals and practitioners dentists, we developed a survey.

subject to the same types of subject biases as all such studies.

The data was analyzed using the SPSS version 21.0 software. Frequency distribution, number and percentage were calculated. To compare between different specializations and gender of dentists Chi-square test. Significance was considered when P-value < 0.05.

Results: The dentists' knowledge of disability was limited. Answers given about dentists' reasons of disability, 28(22.6%) mental disease, 24 (19.4%) genetic disease, 22(17.7%) birth disorders, 8(9.7%) tumor, 2 (1.6%) accidents, and 44 (38.7%) all of that (shown in Table 3).

Table 3: frequency and percentage of answers about reasons of disability

| reason | frequency | % |
|-----------------|-----------|------|
| Mental disease | 28 | 22.6 |
| Genetic disease | 24 | 19.4 |
| accidents | 2 | 1.6 |
| Birth disorder | 22 | 17.7 |
| Tumor | 8 | 9.7 |
| All | 44 | 38.7 |
| Total | 120 | 100 |

Answers given about their sources, 51(41.1%) Under graduated study, 10 (8.1%) post graduated study, 7 (6.5%) Conferences, 8 (6.5%) Under +post graduated study, 20 (16.1%) Under graduated study+ conferences, 4 (3.2%) Post graduated study+ conferences, 12 (12.9%) books and journals and 8 (6.5%) all of that (shown in Table 4).

Table 4: frequency and percentage of answers given about their sources

| Source | frequency | % |
|------------------------------------|-----------|------|
| Under graduated study | 51 | 41.1 |
| post graduated study | 10 | 8.1 |
| Conferences | 7 | 5.6 |
| Under +post graduated study | 8 | 6.5 |
| Under graduated study+ conferences | 20 | 16.1 |
| Post graduated study+ conferences | 4 | 3.2 |
| all | 8 | 6.5 |
| total | 108 | 87.1 |

The participants' attitude to disability, 91 (75.8%) of dentists not willing to treat a disabled (shown in Table 5).

Table 5: frequency and percentage of dentists according to treating a disable

| Treat a disable? | frequency | % |
|------------------|-----------|------|
| no | 29 | 24.1 |
| yes | 91 | 75.8 |

Number and percentage of dentists according to factors driving dentists to treat disables, 31.5% Human and moral aspects, 16.9% Professional Obligations, 17.7% Competence and ability for treating such patients (shown in Table 6) .

Table 6: number and percentage of dentists according to factors driving them to treat disables.

| factors | n | % |
|--|----|------|
| Human and moral aspects | 39 | 31.5 |
| Professional Obligations | 21 | 16.9 |
| Competence and ability of treating such patients | 22 | 17.6 |

Number and percentage of dentists according to factors driving them away from treating disables, 47.5% Lack of information and clinical training, 58.9% Lack of suitable equipment and environment in clinic and they can't treat disables safely, 2.4% Factors related to disable patients and their guardians (shown in Table 7).

Table 7: number and percentage of dentists according to factors driving them away from treating disables.

| factors | n | % |
|---|----|------|
| Lack of information and clinical training | 37 | 13.7 |
| Lack of suitable equipment and invironment in clinic | 41 | 58.9 |
| Factors related to disable patients and their guardians | 3 | 2.4 |

Factors related to clinical behavior, (10.5 strongly agree, 19.4% agree), believed that knowing that patients with disability were treated in the same office might make other patients reluctant to continue their dental care there.

(7.3 strongly agree, 20.2% agree), indicated that the office policy where they worked did not allow them to treat patients with disability (shown in Table 8) .

Table 8: answers given by the participants about the questionnaire items

| Items | VA(%) | A(%) | R(%) | RV(%) |
|--|-------|------|------|-------|
| If I treat disables, other patients will refuse to come back | 10.5 | 19.4 | 12.2 | 28.4 |
| Policy of dental clinic prevents treating disables | 7.3 | 20.2 | 10.5 | 34.7 |

The effect of specialism of the dentist treating persons with disabilities, Pediatric dentists appeared to be the most ones treated disables among other specializes (p= 0.048<0.05).

(shown in Table 9)

| specialize | (%) | p-value |
|--------------------------|-------|---------|
| Pediatric | 79.12 | 0.048 |
| GP= General practitioner | 6.59 | |
| Other | 13.18 | |

Female dentists had significantly higher mean scores and hence more favorable attitudes to disability compared with male dentists (p= 0.03<0.05). (shown in Table 10) .

Table 10: Comparison of Knowledge, Attitudes, and behavior by gender

| | male | female | p-value |
|-----------|--------|--------|---------|
| Behavior | 0.137 | 0.047 | 0.858 |
| Attitudes | -0.149 | 0.029 | 0.03 |
| Knowledge | 0.122 | 0.012 | 0.73 |

Discussion:

This study presented a comprehensive overview of the knowledge, attitudes and behavior of Syrian dentists from general and different specializes towards treatment of disabled people, represents the first study of its kind that explored these issues among dental care professionals in Syria. In spite of these dentists were working in Damascus, many of them were born at other cities in Syria had been studied dentistry at other faculty of dentistry like Aleppo or Teshreen or Albaath. For this reason we can say that the results for this study for Syria not only for Damascus.

The study results identified the main problems that affect the desired results efficiency of the service and providing the dental services to the persons with disabilities.

Reason of disability:22.6% mental disease, 19.4% genetic disease, 17.7% birth disorders, 9.7% tumor, 1.6% accidents, and 29% all of that. As other studies from several countries in Irish and Texas.^{6,9}

Sources of information, 41.1% Under graduated study, 8.1% post graduated study, these findings could be explained by the fact that many of our subjects were general practitioners who had little information in their under-graduated curriculum.

Loeppky , Sigal found that most general dentists received training in the treatment of Persons with Disabilities in undergraduate dental school, and 40% reported taking continuing education courses in this area. Most pediatric dentists received this training during their advanced dental specialty training, and

29% reported taking continuing education courses in this area.⁷

Recognition of the need for specialist training is not new; however, the momentum to include it within the undergraduate curriculum has picked up pace over the last few years,¹⁰⁻¹¹ amidst arguments about whether the training is needed at pre- or postgraduate level.¹²

In this study the attitude toward treating persons with disabilities is similar to the dentists in Georgia.⁵

In this study 91 (75.8%) of dentists were not willing to treat a disabled, while 50.4%,71% of dentists were willing or very willing to treat disabled patients in the study of Tsai *et al.* 2007 and Oredugba & Sanu 2006 successively^{13,8}. Nagarajappa *et al.* 2013 found that overall attitude of dentists towards provision of care for people with learning disabilities was favorable¹⁴. Dao *et al.* 2005 said: providing a solid knowledge and skills basis will improve dentists' attitudes towards treating these patients and will give them more confidence.¹⁵

In this study, number and percentage of dentists according to factors driving dentists to treat disables, 31.5% Human and moral aspects, 16.9% Professional Obligations, 17.7% Competence and ability for treating such patients.

Tsai *et al.* 2007said, the factors significantly affecting dentists' willingness included dentist's age, specialty field, perception of the program in promoting the quality of dental services, and perception of the ability to provide adequate treatments for severely disabled patients.¹³ Smith *et al.* 2010 said that, an experience of training in special needs patients was recorded by

41%, and 65% of dentists expressed a willingness to partake in some/further training.⁶ Loeppky & Sigal 2006 said that, a majority of dentists report treating people with disability whose dental care is paid through various government-funded programs.⁷ Casamassimo *et al.* 2004 said, Dentists willing to see people with disability also were more likely to perform procedures associated with special needs and underserved child populations including pharmacologic management and stainless steel crowns.¹⁶

In this study the factors driving the dentists away from treating disables, 47.5% Lack of information and clinical training, they haven't learn how to treat disables in faculty, They felt that the training they had received in relation to preparing them to work for people with disability was inadequate, and special training was necessary. Cassamassimo *et al.* 2007 had also found that general dentists who are not exposed to children with special needs during their training are less likely to treat these patients in their practice than those with such experience.¹⁶

In this study a large part of the respondents 58.9% believed that the lack of suitable equipment and environment in clinic for the services to be rendered to the persons with disabilities and they can't treat disables safely. This goes along with previous studies as Tsai *et al.* 2007.¹³

In this study 2.4% Factors related to disable patients and their guardians. Dao *et al.* 2005 added the ability to pay and amount of time needed to treat special need patients.¹⁵ Milano & Seybold 2002 found that insufficient financial reimbursement was a major reason cited for not providing dental services to more of these patients.⁹ Oredugba and Sanu 2006 high on the list of barriers to providing care for this group of patients were the tedious and challenging process in the clinic, time consumption and the uncooperative behavior of the children.⁸

The dentists in private practice are less exposed to patients with disability, because they are often treated in special practices or they may consider their dental health the least of their problem. Many dentists appeared to be referred inappropriately through fear, lack of expertise or time – related issues, which was a source of frustration.

For clinical behavior, In this study a small percentage of respondents 29.9% (10.5% strongly agree, 19.4% agree) believed that knowing that patients with disability were treated in the same office might make other patients reluctant to continue their care there so they would not allow their patients to socialize with people with disability.. Despite this, the majority of the study population didn't link between these issues.

Only a few of our dentists 27.5% (7.3% strongly agree, 20.2% agree) indicated that the office policy where they worked did not allow them to treat patients with special needs. Although we did not ask about this refusal in our survey, one explanation could be related to financial access to dental office, or maybe they made a lot of noise or movement inside the office.

Dae *et al.* 2005 suggested that many factors such as ability of patient to pay and the amount of time needed to treat a patient will play a role in the decision to treat special needs patient.¹⁵ Altwasser and Kranhe 2013 determine three main factors seem to have negative access: 1- the poor physical accessibility, 2- lack of low level to disability, 3- a negative attitude towards the people with disabilities.¹⁷

In this study, the effect of specialism of the dentist treating persons with disabilities, Pediatric dentists appeared to be the most ones treated disables among other specializes. This may be due to continuing dental education in postgraduate specialism. Most pediatric dentists received this training during their advanced dental specialty training.⁷ Coyle *et al.* 2013 observed the importance of undergraduate and continuing dental education with regard to modifying professional attitudes to assist practitioners treat adolescents with LD and provide them with inclusive dental services.¹⁸ Nagarajappa *et al.* 2013 found that higher qualification increased overall attitude of dentists towards provision of care for people with learning disabilities.¹⁴ Nowak 2002 said: Also it was the continuing involvement of pediatric dentists in private practice in scheduling and treating patients with special health care needs after the completion of training.¹⁹ Dao *et al.* 2005 found that general dentists who felt well prepared in dental school to treat patients with intellectual disabilities conveyed more positive attitudes toward treating these patients and more confidence in their ability to do so.¹⁵ Milano & Seybold 2002 found that: most respondents had a significant portion of their training program devoted to special patient care, Virtually all reported treating some special needs patients in their professional position, 3) Most provided conscious sedation and general anesthesia and adjuncts to behavior management for these patients.⁹

Female dentists had significantly higher mean scores and hence more favourable attitudes to disability compared with male dentists. But the majority were males between the ages of 41 and 50 years in the study of Nawak.¹⁹ No significant difference across gender and training in the study of Oredugba and Sanu 2006.⁸

A number of dental team and nursing staff talked about the fact that the "disability" is our problem and

not the patients. In other words the patient should expect and receive the same quality of care and treatment as any other patient and it is up to the dental team to work out the practicalities of how to make that happen.²⁰

Although the results of our sampling of dentists in Damascus, are not representative of all Syrian dentists, our survey provides some interesting insights into our group of dental practitioners knowledge and attitudes toward people with disability.

Activities for raising the awareness and practical skills for practicing doctors are needed. This will eventually

improve the dentist's knowledge regarding disability then minimize the facts of rejection to provide the services from the dentists. Dental schools need to develop more continuing dental education courses to update dental practitioner about patients with special needs.

Conclusion: Increasing the undergraduate and postgraduate training would improve the quantity and quality of care for disabled people. Future research should focus on purposeful clinical experience for this population.

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