**Clinical Guidelines and Implementation Into Daily Dental Practice**

**Normas Clínicas e sua Implementação na Prática Médico Dentária**

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**Abstract**

**Objectives**: The purpose of this study is to assess the extent of the familiarity, and attitude and perceptions of dental professionals regarding clinical dental guidelines (CDGs) and their implementation into daily dental practice.

**Methods:** For this purpose, a questionnaire which was developed by the members of the World Dental Federation (FDI), European Regional Organization (ERO) Working Group − ‘Relation Between Dental Practitioner and Universities’ , was implemented by the National Dental Associations (NDAs) of 6 ERO-zone countries (Georgian Stomatological Association (GSA) Georgia, Associazione Nazionale Dentisti Italiani (ANDI) Italy, Portuguese Dental Association (Portugal), Russian Dental Association (RDA) Russia, Swiss Dental Association (SSO) Switzerland, and Turkish Dental Association (TDA) (Turkey). The questionnaire was filled by a total of 910 dental professionals who are members of one of these NDAs and who voluntarily wanted to participate to this survey.

**Results:** Most of the survey participants were familiar with CDGs (68%), claimed that they implemented them into daily practice (61.7%), and generally acknowledged their benefits (81.8%). Many participants believed that CDGs could help to improve the clinical treatment plan (50.6 %) and the accuracy of diagnosis (39.4%); which increased with age and years of practice (p<0.05). The most frequently perceived barrier to the effective implementation of CDGs was expressed as “lack of awareness”, while participants suggested a role for NDAs in spreading CDGs.

**Conclusions:** Despite a significant familiarity and a common positive attitude, dental professionals are likely to have different perceptions towards CDGs, especially regarding their effective implementation into daily practice, benefits and barriers.

**Keywords**: clinical dental guidelines, survey, clinical practice, efficacy

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**Resumo**  
**Objetivos:** Este estudo tem como objetivo avaliar a abrangência da familiaridade, das atitudes e das percepções dos profissionais da área da saúde oral em relação às normas clínicas dentárias (*CDGs*) e a sua implementação na prática da Medicina Dentária diária.  
**Métodos:** Com esta finalidade, desenvolveu-se um questionário pelos membros da Federação Dentária Mundial (*FDI*), pelo Grupo de Trabalho da Organização Regional Europeia (*ERO*) - "Relação entre Médicos Dentistas e as Universidades" e, foi implementado pelas Associações de Medicina Dentária/Estomatologia Nacionais de 6 países da ERO (Associação Estomatológica da Geórgia (*GSA*) Geórgia, Associação Nazionale Dentisti Italiani (*ANDI*) Itália, Ordem dos Médicos Dentistas (Portugal), Associação Dentária Russa (*RDA*) Rússia, Associação Dentária Suíça (*SSO*) Suíça e Associação Dentária Turca (*TDA*) Turquia. O questionário foi preenchido por um total de 910 profissionais da área da saúde oral, membros de uma dessas Associações de Medicina Dentária/estomatologia Nacionais e que, voluntariamente quiseram participar neste inquérito.  
**Resultados:** A maioria dos entrevistados estava familiarizada com os *CDGs* (68%) e implementaram-nas na clínica diária (61,7%) reconhecendo os seus benefícios (81,8%). Muitos participantes acreditavam que os *CDGs* poderiam ajudar a melhorar o plano de tratamento clínico (50,6%) e a precisão do diagnóstico (39,4%); que aumentou com a idade e os anos de prática (p <0,05). A barreira mais frequentemente percepcionada para a implementação efetiva dos *CDGs* foi expressa como "falta de conscientização". Os participantes sugeriram o papel das *NDAs* na disseminação das *CDGs*.  
**Conclusões:** Apesar da familiaridade significativa e de uma atitude positiva comum, os profissionais de saúde oral têm percepções diferentes em relação às *CDGs*, especialmente em relação à sua implementação efetiva na prática diária, benefícios e barreiras.

**Palavras chave**: eficácia, inquérito, normas clínicas dentárias, prática clínica

**Introduction**

Clinical decision-making is a routine for every health professional. Generally, by using their educational background, training, available data, scientific evidence and clinical expertise, they are able to make appropriate and optimal clinical decisions. However, this does not mean that additional scientific support is never needed. Clinical recommendations, position papers, consensus statements, position statements and clinical guidelines (CGs) essentially aim at providing such support for health professionals.

The Institute of Medicine (IOM) has described clinical practice guidelines as “systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances”1-3.  More than two decades later, this definition was reviewed, highlighting the rigorous methodology in the processes of developing guidelines: “Clinical guidelines are statements that include recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options”3, thus implying a dynamic relation between structure, process, and outcome4. CGs has been widely accepted as a support and an essential part of quality practice for many decades1. High-quality, evidence-based clinical practice guidelines offer a mode of bridging the gap between policy, best practice, local contexts and patient options1, 2, support effective clinical practice and bring potential benefits to practitioners and patients5, 6. They get research into practice by providing the link, reducing the gap between evidence-based literature and clinical practice, and providing users with consistent advice and common points of reference for assessing their performance against measurable criteria6, 7.

While CGs are mainly developed to support and assist clinicians and patients, they can also help to improve and monitor patient safety, clinical effectiveness, and quality of care8. Improved quality of care, efficiency and cost containment9, reduced morbidity and mortality10, increased patient knowledge and awareness on treatment about benefits and harm of various treatments5, 7, are all listed as goals and benefits. Recently, guidelines are being used in a more expanded manner in order to direct care delivered by individuals with less training and who are less well equipped to make judgment decisions, and the third party players and various government agencies which need strong and precise language to guide them in their application of the guidelines11.

Despite all these facts, developing of CGs and their use in health care (including dentistry, nursing, medicine) is a process where certain questions and concerns also arise; including CG’s reliability, validity, availability, dissemination and their efficacy and implementation into practice. Usually guidelines are developed by experts through consensus-based decision making 6, 12. They are typically presented as a checklist with completion of key items required to adequately inform end users including clinicians, researchers, and guideline and policy developers 13, 14. These “recommendations” as some authors refer, are a useful tool to follow in most instances, but not the absolute truth15. Naturally, they should be based on the best available evidence15-17 and are meant to help healthcare professionals and patients in taking the best decisions, without replacing the knowledge, experience and skills of individual practitioners15. Although more guidelines become available, still they may not be available in all fields of practice which may leave some of the clinical questions of health practitioners unanswered, while effective dissemination may not also always be achieved7.

On the other hand, availability of guidelines does not automatically ensure the use of them, due to the various barriers (e.g. lack of interest, lack of agreement, lack of involvement, lack of outcome expectancy, lack of time and lack of remuneration, fear of restricted professional autonomy, etc.8,18, 19) for adapting guideline recommendations to clinical practice successfully20. Further, little is known about the degree to which dental schools are teaching evidence-based guidelines or implementing them in their clinics21.

CGs, for the prevention and treatment of oral conditions, have been published, and some have already endorsed by dental specialty organizations6. It should be added that some Dental Associations in Europe and North America have developed a quality assurance program, wherein the construction of nationwide clinical practice guidelines and inter-professional collaboration in dental peer groups, both on a voluntary basis, are essential parts8, 21. However, in many countries these guidelines do not seem to be systematically disseminated and implemented nationwide8.

As can easily be seen, the various debated issues in all health professions concerning CGs and their routine use, need further professional concern.

Thus, the purpose of the present study was to evaluate the extent of familiarity of dental professionals with clinical dental guidelines (CDGs), with a specific emphasis on their perceptions regarding the benefits of CDGs, the need for further improvement of the process of their development/ dissemination, and the potential barriers to their effective implementation into daily practice.

**Materials and Methods**

A questionnaire by the FDI-ERO Working Group ‘Relation Between Dental Practitioner and Universities’ was developed. The questionnaire started with a specific section at the beginning where the background and the aims of the survey were briefly explained to the participants. There also was a section for demographic data (e.g. age, gender, years of practice, mode of practice, etc.), which was followed by a total of 16 questions. Questions essentially focused on the perceptions of dental professionals regarding the reliability of the available CDGs, the source of their knowledge on CDGs, their perceived barriers to effective implementation of CDGs into practice, their opinion regarding the organizational body to develop CDGs, the frequency of review for any existing CDGs, and their suggestions for a better and effective use of CDGs in daily practice (Figure 1). The questionnaire also focused on the perceptions of dental professionals regarding the benefits of CDGs and they were asked to comment if CDGs particularly benefited dentists themselves, or their patients or the dental profession itself.

A total of 6 National Dental Associations (NDAs) in the FDI-ERO zone (Georgian Stomatological Association (GSA) Georgia, Associazione Nazionale Dentisti Italiani (ANDI) Italy, Portuguese Dental Association (Portugal), Russian Dental Association (RDA) Russia, Swiss Dental Association (SSO) Switzerland, and Turkish Dental Association (TDA) (Turkey), voluntarily participated in the survey and these NDAs themselves conducted the survey among their members. While some NDAs preferred to conduct the survey by post (GSA, SSO), or by email (ANDI, RDA), others preferred to conduct an electronic survey through their official web sites (PDA, TDA). The survey was conducted between months May to June 2015.

The surveys in each country was conducted by the relevant NDA in the country. Members of NDAs participated in the survey on a voluntary basis. While some NDAs preferred to contact their members by e-mails or post (E.g. SSO, GSA), some preferred an on-line survey by giving link from their home page (E.g. PDA,TDA).  The survey was translated into the local language in all countries, except SSO, where the survey was conducted in English. The present survey has been conducted in full accordance with the World Medical Association Declaration of Helsinki22. Participants were all members of NDAs in their countries and were contacted only once by the relevant NDAs. Non-NDA members were not contacted.

The authors prepared a standard Excel sheet for the NDAs to put in their own data. Each NDA used this Excel sheet to put in their own data and then send the Excel sheet to the authors electronically. Data obtained from the 6 NDAs were entered on a spread sheet and the frequency distribution of the responses was calculated. For data analyses, the chi-square test and Fisher exact test was used (P < 0.05). Demographic data were used to identify the potential differences between dental professionals in their attitudes and perceptions based on their age, gender, practice models and years of experience. All analysis was made by use of the SPSS Statistics for Windows Version 20 (IBM Corp., Armonk, NY, USA). The percentage of responses to each questionnaire item was calculated in order to analyse cumulative data gathered from the 6 participating NDAs. To compare the differences among the participants from different countries, concerning the extent of their awareness on and perceptions towards CDGs, perceived barriers for implementation of CDGs, opinions for effective use of CDGs in clinical practice and the process of development and review of CDGs, pairwise comparisons of countries were performed using the chi- square test (p<0.05). Factors with the potential to have an impact on the perceptions, attitudes and active use of CDGs by dental professionals (e.g. age, gender, years of practice and type of practice) were also analysed using the chi-square test (p < 0.05). ‘Age ’ of the respondents was categorized as ‘20–30’, ‘31–40’, ‘41–50’ and ‘≥51’ for comparison of age groups. Similarly, ‘years of practice’ was categorized as ‘0–10’, ‘11–20’, ‘21–30’ and ‘≥31’, while ‘kind of practice’ was evaluated under three categories, as follows: (i) General practice, or Specialist in dentistry; (ii) Private or public or Public and private; and (iii) Solo practice, or Solo practice in a medical clinic, or Group practice (in a dental clinic with other dentists), or Group practice (in a medical clinic with other dentists), or University faculty member (private university), or University faculty member (public university). In the third category, to obtain an adequate sample size for statistical analysis, the subcategories were combined into Solo practice, Group practice or University faculty member which enabled us to evaluate further the potential impact of mode of various practice models on the perceptions and attitudes towards CDG.

The data of this questionnaire study has been analyzed by using chi-square test due to  the qualitative data. By chi-square test, pairwise comparisons of the the countries which are the independent variables are performed. Therefore type 1 error increasement is not expected. Bonferroni correction which is used for multiple comparisons as Kruskal Wallis test has not been performed in this study where pairwise comparisons made.

**Results**

A total of 910 responses were received from the participating members of GSA, RDA, PDA, SSO, ANDI, and TDA. (Figure 2)

**Demographic data:** Demographic characteristics of participants, expressed as number and frequency (percentage), are given in Table 1. Response rates to age, gender, years of practice and type of practice were different, and therefore the distribution of respondents according to these demographic variables was calculated on the basis of response rates. There were responders from all age categories, majority being over 31 years, while 16.3% were below 31 years. Most dentists were general practitioners (65.5%) and in private practice (75.5%), were either solo practicing (42.1%) or in group practice (38.2%).

**Overall data from the participants (n=910):** Table 2 presents the response to each question given by all participants without stratiﬁcation according to the demographic variables. The majority (68%) knew about CDGs, mainly from “dental journals (24.8%) and ‘continuing education courses’ (23.1%). CDGs were generally implemented into daily practice (61.7%), either ‘frequently’ (54.7%), or ‘always’ (27%). The benefit of CDGs was highly acknowledged (81.8%), in an equal manner for both dentists (37.5%) and patients (37.1%). The top reasons for limited implementation of CDGs into practice was ‘lack of awareness’ (29%), followed by lack of time (13.9%), difficulty in reaching CDGs (11.1%) and limited number of guidelines in dentistry (10.2%). More than half of the respondents suggested a role for NDAs, especially for ‘creating a general awareness’ (23.6%), ‘informing dentists about available (19.7%) and updated (19.8%) clinical guidelines’. Most respondents were in favour of collaboration between dental faculties and NDAs for developing CDGs. ‘Universities’ (27%) and ‘NDAs’ (22%) were addressed for developing CGs. ‘New evidence’ was the essential measure for both the validity of CDGs, and for their update since almost half felt that available guidelines would be valid ‘until new evidence becomes available’ (47.4%) and CDGs should be updated ‘when new evidence becomes available’ (46.8%). (Figure 2)

**Data based on participants as members of different NDAs:** There were clear differences among the participating members of different NDAs regarding most of the questions included. (Table 3 and Table 4). For example,although the participants who were members of the RDA, ANDI and SSO were generally aware of CDGs,there were differences in the extent of knowledge/awareness on CDGs among the participants from the 6 NDAs (Figure 3). In general, participants from the most of NDAs reported a high level of implementation of CDGs into practice (ANDI (90.3%), SSO (86%), PDA (79.8%), RDA (75.7%). Although PDA and ANDI were significantly different from others (p<0.05). Participants from all of the 6 NDAs, dentists implemented CDGs into their dental practice either ‘frequently’ (68.8%-40%) or ‘always’ (42%-22.6%). When benefits of CDGs were concerned, there the differences between participants from PDA and RDA; SSO, and ANDI (p<0.05). Data regarding potential barriers are presented in Table 3. “Lack of awareness” was the most frequently perceived barrier by all participants of NDAs, except TDA. Most members of NDAs suggested a role for NDAs (Figure 3) including “creating awareness” (GSA (29.7%), RDA (26%), Italy-ANDI (27.4%) and a collaboration between dental faculties and NDAs, in almost all countries, especially for dissemination of CDGs.

**Data regarding the potential impact of demographic variables on perceptions and attitudes towards clinical dental guidelines (CDG):**

Table 5 shows the impact of gender, age, kind of practice and years of practice on the responses of dentists. It can easily be seen that all these variables had a certain effect on different items. For example, age and years in practice did not have a significant effect on dentists’ knowledge about CDGs’. However, the knowledge was higher for males than females, ‘specialist’ than ‘general practitioner’, ‘dentists worked in public’ or ‘public and private’ than only ‘private practitioners’ and ‘faculty members’ than ‘dentists in group practice’ and ‘solo practicing’ dentists. While for older dentists or dentists with more practice years ‘dental journals’ or ‘information sent by NDAs’, for younger dentists or dentists with less years of practice ‘web sites’, ‘continuing education courses’ and ‘undergraduate education’ were the primary sources of information for CDGs. ‘Kind of practice’ was likely to be the more prominent factor in affecting the attitudes and perceptions of dentists. As an example, age, gender, and years in practice did not have significant effect on ‘dentists’ implementation CG into daily practice’. However, kind of practice had an impact (p<0.05), since higher implementation for ‘specialists’ than ‘general practitioners’ (p=0.001), for dentists working in ‘public’ and ‘public/private’ than dentists in ‘private practice’ (p=0.019) was observed. In a similar manner, kind of practice had an effect on the frequency of implementation of CDGs into daily practice and the benefits of CDGs (p<0.05). “Frequent” implementation was reported more for specialists than general practitioners (p=0.001) while ‘always’ was reported more for specialists (p=0.001). The highest frequency for ‘always’ was observed for dentists working in public (40.5%) and for “frequently” dentists working in private practice 61.4 % (p=0.038). Dentists working in ‘public’ believed in the benefits of CDGs (89.3%), followed by ‘private and public’ (83.3%), while the least was for ‘private’ mode of practice (74.9%). Participants mostly believed that CDGs could improve the clinical treatment plan (50.6 %) and improvement of accuracy of diagnosis (39.4%) and this increased with the age and years of practice (p<0.05), and was prominent for specialists (47.9%, 28.2%) than general practitioners (29.9%, 18.9%). Data for implementation of CDGs into daily practice is presented in (Figure 3). Significantly higher percentage of dentists working in public indicated ‘Lack of time’ as a barrier, while ‘Limited guidelines available in the dental field’ and ‘Clinical guidelines being perceived as restricting the clinical freedom of dentists’’ was indicated mostly by specialist, dentists working in public, and academics (p<0.05). Regardless of demographic variables, more than 75% of dentists believed that ‘dental faculties and NDAs could collaborate for developing CG’ and more than 80% believed that they could collaborate for effective dissemination of CDGs. However, there were differences based on age, gender and kind of practice, regarding the developing and disseminating body (E.g. universities, NDAs, ‘joint activity of various dental bodies’) and the duration of the validity of CDGs (in years) (p<0.05). Although ‘when new evidence becomes available’ was the main answer with no impact of age and years in practice (p>0.05), there was a difference between dentists working in private practice and university members compared to other modes of practice (p<0.05) regarding the appropriate time for update.

**Discussion**

The dental professionals participating in this survey is a small sample. Thus, it needs to be kept in mind that is not possible to generalize the results to all the dental professionals in these countries. However, since the study reflects the perceptions and attitudes of a total of 910 dentists as members of different NDAs and different backgrounds, who all were interested in this topic and were willing to provide feedback, still it be considered as a study which enables us  with a better understanding the current status of CDGs and their implementation into practice. One of the important gains can be the confirmation of the presence of a general positive attitude of dental professionals towards CDGs and acknowledgement of their benefits, as this can encourage the dental profession to further work on developing reliable and valid CDGs, in-line with the needs and demands of dental professionals. On the other hand, the ‘broad picture’ of the 'perceived barriers’ regarding the implementation of CDGs  into practice and the opinions/suggestions of dental professionals for a more effective use of CDGs may assist the dental educators and the organized dentistry to find more innovative ways of disseminating and promoting CDGs.

The 'multidimensional' benefits of CDGs were widely acknowledged (81.8%) in the present study, since the benefit of CDGs for improvement of the clinical treatment plan (28.6%), outcome of the treatment (22.8%) and the accurate diagnosis (17.4%) and, decreasing the treatment complication (19.9%) and the time necessary for diagnosis (10%) were all underlined. Further, besides dentists (37.5%), patients  (37.1%) were also identified as beneficiaries from CDGs. This finding support the earlier general positive attitude towards clinical guidelines and list their benefits both for the dentists and for the patients6, 8, 11, 18, 23.

In many countries CDGs do not seem to be systematically disseminated and implemented nationwide8. However, this is not restricted to dentistry and ineffective dissemination and limited implementation has been reported for other health professions including medicine20 and nursing7. The limited implementation of CDGs was again observed in the present survey. Although these results cannot be claimed to reflect all dentists in a given country, since it was observed as a common situation among the members of the 6 NDAs, still they can confirm the earlier evidence that availability does not automatically lead to effective use of CGs7, 8, 20 .

Certain barriers exist when the implementation of CGs into practice (E.g. lack of interest, lack of involvement, lack of information, lack of time) is concerned.7, 19 Very similar barriers were highlighted by the survey participants, the most important barriers being ‘lack of awareness’ (29%), ‘lack of time’ (13.4%), ‘lack of practical ways to reach CDGs’ (11.1%), and limited availability of CDGs in the dental field (10.2%). It is also worth mentioning that the fear of CDGs restricting clinical freedom and autonomy of dentists8 was also expressed in the present study (5.2%).

Recently, efficacy (efficacy of guidelines in changing health professionals and patients behaviour) is a concern and an increased attention is paid to the methodology of guideline development.24 Health professional’s attitude towards clinical guidelines would be an important parameter and it should be noted that health professional’s attitude may change over time according to the validity of the guideline20.

Changes in the available interventions, in the evidence on the benefits and harms of existing interventions, in the outcomes that are considered important, in the values placed outcomes, in the evidence that current practice is optimal are situations regarding a guideline to be revised or updated25. However, there is no consensus on the time interval and methodology to up date a guideline. In the literature it was reported that about half of the guidelines became out-dated in 5.8 years and no more than 90% of the guidelines were still valid 3.6 years after delivery. Thus, it was suggested that guidelines should be assessed after a 3 years time period.20 In the present survey responders also frequently choose “every 2 years” and “every 5 years” as the frequency of CDGs reassessment. A group of people, exerting a specific role in the guideline developing process, is required6, 12. It is suggested that guidelines developed by clinicians whom they are intended were more successful in changing clinical behaviour24 and with no conflict of interest20. Moreover, experts from different countries are necessary for development of international guidelines to adapt them to meet local needs and socio-economic and health care standards and resources20. In the present study, although universities were suggested as the primary group, other groups were also suggested to be involved in developing CDGs (e.g. NDAs, scientific committees, joint activities of various dental bodies, expert people).

Translating scientific knowledge into practice is challenging and developing guidelines and dissemination of them is an important part of this procedure. While dissemination alone is not an adequate way of changing practice, it is a prerequisite for guideline implementation7. Publication of guidelines in professional journals and mailing them to targeting individuals are passive methods of dissemination and rarely leads to change in clinical approach26. In the present survey, the most common dissemination tools were observed as dental journals and continuing education courses. Getting information from NDAs and reading them on websites of special organizations were the other common sources of information on CDGs. A collaboration of dental faculties and NDAs for effective dissemination of CDGs was also suggested (88.2%).

It has been shown that demographic variables have impact on health professional’s perceptions and attitudes and this has been shown for health professionals of different backgrounds (e.g. physicians, dentists, nurses)27-32. For example, the impact of age, gender, years of practice and kind of practice on the perceptions and attitudes of dental professionals regarding EBD was documented27. The present study is in line with these previous studies27, 28 as a clear impact of age, gender, years of practice and 'kind of practice' on dentists perceptions and attitudes towards CDGs and their implementation into dental practice was concerned. Age and gender had impact however kind of practice was noticed to have the prominent impact. Knowledge about CDGs, implementing CDGs into daily practice, believing CDGs benefits were all specifically affected by 'kind of practice’ determinant. Thus, besides other demographic variables, the significant importance of working conditions of dental professionals’ perceptions and attitudes may be suggested.

In literature, there are studies observing differences in perceptions and attitudes of health professionals from different countries, related with different social, economical and cultural circumstances33-37. The clear differences among countries regarding provision of oral health care services, oral health care needs and demands, dental education, composition of dental team and available oral health workforce, and basic oral health coverage and insurance systems are well documented38-40. In a similar manner, differences in perceptions and attitudes towards various professional matters and issues of dental professionals' from different countries have also been documented27,33-36,41. Despite the limited number of participants and within the limitations of the study design, the differences in the perceptions and attitudes of dentists towards CDGs observed in the present study are shaped by local circumstances. This may be of particular importance for attempts aiming at overcoming the barriers for effective implementation of CDGs into daily practice as each specific barrier may require a different approach again based on the local circumstances.

Although the influence of individual characteristics, different professional backgrounds, and geographical/cultural differences were evident, it is quite clear that dentists were generally positive towards CDGs. However, at the same time, dentists had some very clear and common concerns about CDGs reliability, availability, their being up-to-date, and applicability and they expressed certain barriers making their effective implementation to everyday practice difficult. For achieving the major goals of CDGs, increasing their efficacy and also increasing patient safety and quality of care through effective implementation of CDGs into daily practice, the opinions and attitudes of dental professionals need be taken into consideration. At this point, all structures of organized dentistry (specialist organizations, dental faculties, dental associations, etc.) are likely to have important roles.

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**Figure Legends**

**Figure 1.** Full version of the Questionnaire developed by the European Regional Organization Working Group of the World Dental Federation − ‘Relation Between Dental Practitioner and Universities’.

**Figure 2.** Frequency of questionnaires completed by the participants of each of the six NDA’s.Frequency of implementation of the clinical guidelines into daily practice.Groups benefiting from clinical guidelines and its implementation into daily practice. Frequency of the timeframe dentists think is required for updating the clinical guidelines.

**Figure 3.** Awareness of the existence of clinical guidelines by country. Participants’ opinion concerning the role of the National Dental Association regarding clinical guidelines by country. Estimated frequencies of the implementation of clinical guidelines into daily practice according to years of practice.

**Table 1.** Demographic data (n=910)

**Table 2.** Cumulative data for all participants.

**Table 3.**  Percentages of respondents considering each variable

**Table 4.** Statistical data regarding comparative analysis of the six NDA’s.

**Table 5.** Data regarding the impact of age, gender, years of practice, and kind of practice on the responses.

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristics** | | **Number** | **Frequency (%)** |
| **Country** | |  |  |
|  | GDA | 92 | 10.1 |
|  | RDA | 107 | 11.8 |
|  | PDA | 262 | 28.8 |
|  | SSO | 50 | 5.5 |
|  | Italy-Andi | 103 | 11.3 |
|  | TDA | 296 | 32.5 |
| **Age** | |  |  |
|  | 20-30 | 147 | 16.3 |
|  | 31-40 | 274 | 30.5 |
|  | 41-50 | 219 | 24.4 |
|  | 51- over | 258 | 28.7 |
| **Gender** | |  |  |
|  | Male | 420 | 46.6 |
|  | Female | 481 | 53.4 |
| **Years of Practice** | |  |  |
|  | 0-10 | 324 | 35.8 |
|  | 11-20 | 234 | 25.9 |
|  | 21-30 | 220 | 24.3 |
|  | 31-over | 127 | 14 |
| **Kind of Practice** | |  |  |
|  | General practitioner | 586 | 65.8 |
|  | Specialist | 305 | 34.2 |
| **Kind of Practice** | |  |  |
|  | Private | 689 | 75.5 |
|  | Public | 122 | 13.5 |
|  | Private and public | 90 | 10 |
| **Kind of Practice** | |  |  |
|  | Solo | 376 | 42.1 |
|  | Group practice | 341 | 38.2 |
|  | University | 174 | 19.5 |
|  | Others | 2 | 0.2 |
|  | |  |  |

Table 1 : Demographic data (n=910)

|  |
| --- |
|  |

Table 2. Cumulative data for all participants.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q1- I know about clinical guidelines** | **n** | **%** | **Q10. Is there a role for the National Dental Association regarding clinical guidelines?** | **n** | **%** |
| **TOTAL** | **910** |  |
| Yes | 612 | 68 | **TOTAL** | **852** |  |
| No | 288 | 32 | Yes | 484 | 56.8 |
|  |  |  | No | 45 | 5.3 |
| **Q2 - If yes, I know about clinical guidelines because;** | **n** | **%** | No idea | 323 | 37.9 |
|  |  |  |
| **TOTAL** | **1112** |  | **Q11. If yes, what is the role of National Dental Associations in improvement of the implementation of clinical guidelines**  **and clinical decision support systems in practice? (more than one option)** | **n** | **%** |
| I read them in dental journals | 278 | 24.8 |
| I read them onweb sites of specialization organizations | 174 | 15.5 |
| I use search engines to find them. | 114 | 10.2 | **TOTAL** | **1167** |  |
| My National Dental Organization sends me information about them. | 176 | 15.7 | Creating a general awareness on clinical guidelines | 275 | 23.6 |
| I learn about them from the continuing education courses which I attend | 259 | 23.1 | Developing evidence-based clinical guidelines | 197 | 16.9 |
| I learned about them from my Undergraduate dental education | 93 | 8.3 | Developing various evidence based-clinical decision support systems including clinical guidelines | 150 | 12.9 |
| Other (please specify) | 18 | 1.6 | Informing dentists about available clinical guidelines | 230 | 19.7 |
|  |  |  | Informing dentists about updated clinical guidelines | 231 | 19.8 |
| **Q3 - I implement clinical guidelines into my daily practice** | **n** | **%** | Attempts to overcome the barriers to implementation of clinical guidelines into practice | 78 | 6.6 |
| **TOTAL** | **892** |  | Others (please specify) | 4 | 0.3 |
| Yes | 554 | 61.7 | None | 2 | 0.2 |
| No | 197 | 22.3 |  |  |  |
| No idea | 141 | 16 | **Q12. Do you believe that dental faculties and National Dental Associations can collaborate for developing clinical guidelines?** | **n** | **%** |
|  |  |  |
| **Q4 - If yes, I implement clinical**  **guidelines into my dental practice** | **n** | **%** |
| **TOTAL** | **578** |  | **TOTAL** | **827** |  |
| Always | 156 | 27 | Yes | 716 | 86.6 |
| Frequently | 316 | 54.7 | No | 31 | 3.7 |
| Sometimes | 76 | 13.1 | No idea | 80 | 9.7 |
| Rare | 16 | 2.8 |  |  |  |
| Very rare | 14 | 2.4 | **13. Do you believe that clinical guidelines should be developed by;** | **n** | **%** |
|  |  |  |
| **Q5- Do you believe that clinical** guidelines **are generally beneficial?** | **n** | **%** | **TOTAL** | **1191** |  |
| Universities | 321 | 27 |
| **TOTAL** | **866** |  | National Dental Associations | 262 | 22 |
| Yes | 708 | 81.8 | Scientific communities | 223 | 18.7 |
| No | 22 | 2.5 | Expert people | 132 | 11.1 |
| No idea | 136 | 15.7 | Joint activity of various dental bodies | 218 | 18.3 |
|  |  |  | Other (please specify) | 21 | 1.8 |
| **Q6- If yes, I believe that clinical guidelines can be beneficial because;** | **n** | **%** | No idea | 14 | 1.2 |
|  |  |  |
| **TOTAL** | **1147** |  | **Q14. Do you believe that dental faculties and National Dental Associations can collaborate for disseminating clinical guidelines?** | **n** | **%** |
| They can improve the accuracy of diagnosis. | 202 | 17.6 |
| They can improve the clinical treatment plan. | 329 | 28.7 |
| **TOTAL** | **834** |  |
| They can decrease the time necessary for the diagnostic process. | 118 | 10.3 | Yes | 736 | 88.2 |
| No | 24 | 2.9 |
| They can decrease treatment complications. | 228 | 19.9 | No idea | 74 | 8.9 |
|  |  |  |
| They can improve the outcome of treatment. | 253 | 22.1 | **Q15. Do you believe that clinical guidelines should be valid for;** | **n** | **%** |
| Other (please specify) | 17 | 1.5 | **TOTAL** | 849 |  |
|  |  |  | Up to 2 years | 224 | 26.4 |
| **Q7- Who benefits from clinical guidelines and its implementation to dental practice?** | **n** | **%** | Up to 5 years | 154 | 18.1 |
| Until new evidence becomes available | 402 | 47.3 |
| No idea | 69 | 8.1 |
| **TOTAL** | **1181** |  |  |  |  |
| Dentists | 443 | 37.5 | **16.How often clinical guidelines should be updated?** | **n** | **%** |
| Patients | 438 | 37.1 |
| Public | 111 | 9.4 | **TOTAL** | 842 |  |
| Dental profession | 173 | 14.6 | Every 2 years | 197 | 23.4 |
| Other (please specify) | 16 | 1.4 | Every 5 years | 157 | 18.6 |
|  |  |  | When new evidence becomes available | 425 | 50.5 |
| **Q8. Do you believe that dentists implementclinical guidelinesinto practice?** | **n** | **%** | No idea | 63 | 7.5 |
|  |  |  |
| **TOTAL** | **848** |  | **17. Do you know any clinical guidelines that should be introduced (please provide the title and the web address)** | **n** | **%** |
| Yes | 303 | 35.7 |
| No | 232 | 27.4 |
| No idea | 313 | 36.9 |  |  |  |
|  |  |  |  |  |  |
| **Q9. If no, what are the barriers to implementation of clinical guidelines into practice? (more than one option)** |  |  |  |  |  |
| **TOTAL** | **922** |  |  |  |  |
| Lack of time | 122 | 13.4 |  |  |  |
| Lack of awareness on clinical guidelines | 264 | 29 |  |  |  |
| Lack of practical ways to reach to clinical guidelines | 101 | 11.1 |  |  |  |
| Limited guidelines available in the dental field | 93 | 10.2 |  |  |  |
| Lack of evidence-based clinical guidelines for dental care | 70 | 7.7 |  |  |  |
| Clinical guidelines being perceived as restricting the ‘clinical freedom of dentists’ | 47 | 5.2 |  |  |  |
| Lack of consensus/agreement regardingcertain aspects of the available guidelines | 38 | 4.2 |  |  |  |
| Limited knowledge regarding the reliability of the methods used for developing guidelines | 32 | 3.5 |  |  |  |
| Limited knowledge regarding the reliability of the guideline development group/body | 26 | 2.9 |  |  |  |
| Lack of confidence regarding competing interests of guideline development group members | 27 | 3 |  |  |  |
| Limited knowledge regarding the regular update of the guidelines when new evidence becomes available | 56 | 6.2 |  |  |  |
| Lack of specific and unambiguous recommendations in the guideline | 38 | 4.2 |  |  |  |
| Other (please specify) | 8 | 0.9 |  |  |  |
|  |  |  |  |  |  |

\* Multiple choice questions

**Table 3**: Percentages of respondents considering each variable

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **COUNTRY**  **(n/%)** | | | | | | **AGE**  **(n/%)** | | | | **GENDER**  **(n/%)** | | **YEARS OF PRACTICE**  **(n/%)** | | | | **KIND OF PRACTICE**  **(n/%)** | | **KIND OF PRACTICE**  **(n/%)** | | | **KIND OF PRACTICE**  **(n/%)** | | |
|  |  | **GDA** | **RDA** | **PDA** | **SSO** | **Italy- ANDI** | **TDA** | **20-30** | **31-40** | **41-50** | **51- over** | **Male** | **Female** | **0-10** | **11-20** | **21-30** | **31-over** | **General practitioner** | **Specıalist** | **Private** | **Pubiıc** | **Private and public** | **Solo** | **Group practice** | **Unıversity** |
| Q1 | Yes | 70 / 76.1 | 100/ 93.5 | 212/  80.9 | 45/  90 | 94/  91.3 | 93/  31.4 | 103/  70.1 | 180/  67.5 | 139/  63.5 | 180/  69.8 | 298/  71.0 | 313/  65.1 | 234/  72.2 | 152/  65 | 142/  64.5 | 81/  63.8 | 355/  60.6 | 245/  79.3 | 435/  63.1 | 99/  81.1 | 72/  80 | 204/  54 | 251/  73.6 | 147/  84.5 |
| No | 22/ 23.9 | 7/ 6.5 | 50/ 19.1 | 5/  10 | 9/  8.7 | 203/  68.6 | 44/  29.9 | 94/  34.3 | 80/  36.5 | 78/  30.2 | 122/  29.0 | 168/  34.9 | 90/  27.8 | 82/  35 | 78/  35.5 | 46/  36.2 | 231/  39.4 | 64/  20.7 | 254/  36.9 | 23/  18.9 | 18/  20 | 174/  46.0 | 90/  26.4 | 27/  15.5 |
|  | **TOTAL** | **92** | **107** | **262** | **50** | **103** | **296** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |
| Q2 | I read them in dental journals | 18/  19.6 | 54/  50.5 | 107/  40.8 | 34/  68 | 36/  35 | 29/  9.8 | 38/ 25.9 | 84/ 30.7 | 65/ 29.7 | 87/ 33.7 | 141/ 33.6 | 136/ 23.8 | 91/ 28.1 | 75/ 32.1 | 68/ 30.9 | 43/ 33.9 | 176/ 30 | 96/ 31.5 | 199/ 28.9 | 47/ 38.5 | 27/ 30 | 102/ 27.1 | 113/ 33.1 | 60/ 34.5 |
| I read them on web sites of specialization organizations | 13/  14.1 | 33/  30.8 | 86/  32.8 | 18/  36 | 16/  15 | 8/  2.7 | 35/ 23.8 | 54/ 19.7 | 39/ 17.8 | 37/ 14.3 | 91/ 21.7 | 80/ 16.7 | 79/ 24.4 | 44/ 18.8 | 32/ 14.5 | 15/ 11.8 | 108/ 18.4 | 56/ 18.4 | 123/ 17.9 | 28/ 23 | 18/ 20 | 42/ 11.2 | 79/ 23.2 | 47/ 27 |
| I use search engines to find them. | 22/  23.9 | 16/  15 | 46/  17.6 | 8/  16 | 10/  9.7 | 12/  4.1 | 26/ 17.7 | 32/ 11.7 | 32/ 14.6 | 22/ 8.5 | 60/ 14.3 | 52/ 10.8 | 50/ 15.4 | 31/ 13.2 | 24/ 10.9 | 8/ 6.3 | 66/ 11.3 | 44/ 14.4 | 77/ 11.2 | 18/ 14.8 | 17/ 18.9 | 22/ 5.9 | 43/ 12.6 | 46/ 26.4 |
| My National Dental Organization sends me information about them. | 8/  8.7 | 3/  2.8 | 82/  31.3 | 18/  36 | 56/  54.4 | 9/  3 | 28/ 19 | 43/ 15.7 | 37/ 16.9 | 68/ 26.4 | 95/ 22.6 | 81/ 16.8 | 57/ 17.6 | 41/ 17.5 | 51/ 23.2 | 26/ 20.5 | 118/ 20.1 | 56/ 18.4 | 144/ 20.9 | 5/ 4.1 | 25/ 27.8 | 79/ 21 | 78/ 22.9 | 17/ 9.8 |
| I learn about them from the continuing education courses which I attend | 41/  44.6 | 38/  35.5 | 102/  38.9 | 28/  56 | 31/  30.1 | 19/  6.4 | 47/ 32 | 86/ 31.4 | 52/ 23.7 | 71/ 27.5 | 127/ 30.2 | 130/ 27 | 100/ 30.9 | 70/ 29.9 | 57/ 25.9 | 29/ 22.8 | 157/ 26.8 | 92/ 30.2 | 192/ 27.9 | 37/ 30.3 | 25/ 27.8 | 73/ 19.4 | 112/ 32.8 | 71/ 40.8 |
| I learned about them from my Undergraduate dental education | 0 | 0 | 61/  23.3 | 6/ 12 | 11/  10.7 | 15/  5.1 | 38/ 25.9 | 27/ 9.9 | 16/ 7.3 | 12/ 4.7 | 41/ 9.8 | 52/ 10.8 | 58/ 17.9 | 18/ 7.7 | 10/ 4.5 | 7/ 5.5 | 79/ 13.5 | 14/ 4.6 | 79/ 11.5 | 6/ 4.9 | 8/ 8.9 | 27/ 7.2 | 53/ 15.5 | 11/ 6.3 |
| Other | 0 | 4/  3.7 | 7/  2.7 | 6/ 12 | 2/  1.9 | 9/  3 | 4/ 2.7 | 3/ 1.1 | 4/ 2.7 | 6/ 2.3 | 11/ 2.6 | 6/ 1.2 | 6/ 1.9 | 3/ 1.3 | 5/ 2.3 | 3/ 2.4 | 9/ 1.5 | 8/ 2.6 | 10/ 1.5 | 5/ 4.1 | 3/ 3.3 | 8/ 2.1 | 5/ 1.5 | 5/ 2.9 |
|  | **TOTAL** | **102** | **148** | **491** | **118** | **162** | **102** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **305** | **689** | **122** | **90** | **376** | **341** | **174** |
| Q3 | Yes | 53/  57.6 | 81/  75.7 | 209/  79.8 | 43/  86 | 93/  90.3 | 65/  22 | 92/  62.5 | 156/  56.9 | 127/  58 | 157/  60.9 | 264/  62.9 | 277/  57.6 | 205/  63.3 | 137/  58.5 | 126/  57.3 | 71/  55.9 | 321/  54.8 | 213/  68.9 | 389/  56.5 | 84/  68.9 | 63/  70 | 181/  47.9 | 233/  68.3 | 120/  69 |
| No | 37/  40.2 | 14/  13.1 | 11/ 4.2 | 1/  2 | 7/  6.8 | 127/  42.9 | 25/ 17 | 60/  21.9 | 58/  26.5 | 54/  20.9 | 85/  20.2 | 111/  23.1 | 56/  17.3 | 56/  23.9 | 58/  26.4 | 27/  21.3 | 134/  22.9 | 60/  19.4 | 159/  23.1 | 23/  18,9 | 15/  16.7 | 105/  27.8 | 47/  13.8 | 43/  24.7 |
| No idea | 2/ 2.2 | 12/ 11.2 | 42/ 16 | 6/ 12 | 3/  2.9 | 104/35.1 | 30/ 20.4 | 58/  21.2 | 34/  15.5 | 47/  18.2 | 71/  16.9 | 93/  19.3 | 63/  19.4 | 41/  17.5 | 36/  16.4 | 29/  22.8 | 131/  22.4 | 36/  11.7 | 141/  20.5 | 15/  12.3 | 12/  13.3 | 92/  24.3 | 61/  17.9 | 11/  6.3 |
|  | **TOTAL** | **92** | **107** | **262** | **50** | **103** | **296** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |
| Q4 | Always | 12/  22.6 | 34/  42 | 49/  23.4 | 12/  27.9 | 28/  30.1 | 17/  26.2 | 23/  25 | 39/ 25 | 29/ 22.8 | 53/ 33.8 | 64/  24.2 | 87/  31.4 | 58/  28.3 | 33/  24.1 | 36/  28.6 | 24/  33.8 | 73/  22.7 | 75/  35.2 | 95/  24.4 | 34/  40.5 | 20/  31.7 | 61/  33.7 | 57/  24.5 | 31/  25.8 |
| Frequently | 29/  54.7 | 33/ 40.7 | 136/65.1 | 25/  58.1 | 64/  68.8 | 26/  40 | 54/ 58.7 | 89/  57.1 | 82/  64.6 | 84/ 53.5 | 159/  60.2 | 153/  55.2 | 119/  58 | 78/  56.9 | 77/  61.1 | 37/  52.1 | 203/  63.2 | 106/  49.8 | 239/  61.4 | 36/  42.9 | 35/  55.6 | 94/  51.9 | 149/  63.9 | 63/  52.5 |
| Sometimes | 8/  15.1 | 10/ 12.3 | 23/ 11 | 5/  11.6 | 1/  1.2 | 15/  23.1 | 12/  13 | 21/  13.5 | 11/  8.7 | 18/ 11.5 | 31/  11.7 | 31/  11.2 | 24/  11.7 | 18/  13.1 | 11/  8.7 | 8/  11.3 | 39/  12.1 | 21/  9.9 | 44/  11.3 | 10/  11.9 | 7/  11.1 | 21/  11,6 | 22/  9.4 | 19/  15.8 |
| Rare | 4/ 7.5 | 3/ 3.7 | 1/ 0.5 | 1/ 1.3 | 0 | 7/ 10.8 | 3/ 3.3 | 6/ 3.8 | 5/ 3.9 | 2/ 1.3 | 10/  3.8 | 5/  1.8 | 4/  2.0 | 7/  5.1 | 2/  1.6 | 2/  2.8 | 6/  1.9 | 10/  4.7 | 11/  2.8 | 3/  3.6 | 1/  1.6 | 5/  2.8 | 4/  1.7 | 7/  5.8 |
| Very rare | 0 | 1/ 1.2 | 0 | 0 | 0 | 0 | 0 | 1/ 0.6 | 0 | 0 | 0 | 1/  0.4 | 0 | 1/  0.7 | 0 | 0 | 0 | 1/  0.5 | 0 | 1/  1.2 | 0 | 0 | 1/  0.4 | 0 |
|  | **TOTAL** | **53** | **81** | **209** | **43** | **93** | **65** | **182** | **156** | **127** | **157** | **264** | **277** | **205** | **137** | **126** | **71** | **321** | **213** | **389** | **84** | **63** | **181** | **233** | **120** |
| Q5 | Yes | 57/  62 | 94/  87.9 | 223/  85.1 | 47/  94 | 90/  87.4 | 198/  66.9 | 122/  83 | 205/  74.8 | 163/  74.4 | 207/  80.2 | 336/  80,0 | 369/  76,7 | 246/  75.9 | 181/  77.4 | 179/  81.4 | 98/  77.2 | 463/  79 | 232/  75.1 | 516/  74.9 | 109/  89.3 | 75/  83.3 | 276/  73 | 281/  82.4 | 138/  79.3 |
| No | 3/  3.3 | 1/  0.9 | 5/  1.9 | 1  2 | 6/  5.8 | 6/  2 | 2/  1.4 | 4/  1.5 | 7/  3.2 | 9/  3.5 | 13/  3.1 | 9/  1.9 | 5/  1.5 | 4/  1.7 | 8/  3.6 | 5/  3.9 | 11/  1.9 | 10/  3.2 | 20/  2.9 | 0 | 2/  2.2 | 10/  2.6 | 8/  2.3 | 4/  2.3 |
| No idea | 32/  34.8 | 12/  11.2 | 34/ 13 | 2/  4 | 7/  6.8 | 92/  31.1 | 23/  15.6 | 65/  23.7 | 49/  22.4 | 42/  16.3 | 71/  16.9 | 103/  21.4 | 73/  22.5 | 49/  20.9 | 33/  15 | 24/  18.9 | 112/  19.1 | 67/  21.7 | 153/  22.2 | 13/  10.7 | 13/  14.4 | 92/  24.3 | 52/  15.2 | 32/  18.4 |
|  | **TOTAL** | **92** | **107** | **262** | **50** | **103** | **296** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |
| Q6 | They can improve the accuracy of diagnosis. | 18/  19.6 | 32/  29.9 | 28/  13.7 | 32/  23.9 | 36/  18.2 | 44/  17.1 | 16/ 10.9 | 39/ 14.2 | 45/ 20.5 | 95/ 36.8 | 101/ 24 | 99/ 20.6 | 50/ 15.4 | 39/ 16.7 | 60/ 27.3 | 50/ 39.4 | 111/ 18.9 | 86/ 28.2 | 151/ 21.9 | 28/ 23 | 19/ 21.1 | 88/ 23.4 | 71/ 20.8 | 43/ 24.7 |
| They can improve the clinical treatment plan. | 35/  38 | 56/  53.3 | 59/  28.9 | 37/  27.6 | 47/ 23.7 | 79/  30.7 | 42/ 28.6 | 91/ 33.2 | 84/ 38.4 | 106/ 41.1 | 164/ 39 | 161/ 33.5 | 109/ 33.6 | 73/ 31.2 | 89/ 40.5 | 54/ 42.5 | 175/ 29.9 | 146/ 47.9 | 225/ 32.7 | 60/ 49.2 | 37/ 41.1 | 126/ 33.5 | 111/ 32.6 | 88/ 50.6 |
| They can decrease the time necessary for the diagnostic process. | 12/  13 | 20/  18.7 | 11/  5.4 | 9/  6.7 | 19/  9.6 | 38/  14.8 | 12/ 8.2 | 21/ 7.7 | 40/ 18.3 | 43/ 16.7 | 58/ 13.8 | 60/ 12.5 | 31/ 9.6 | 22/ 9.4 | 39/ 17.7 | 24/ 18.9 | 59/ 10.1 | 57/ 18.7 | 89/ 12.9 | 23/ 18.9 | 5/ 5.6 | 47/ 12.5 | 35/ 10.3 | 33/ 19 |
| They can decrease treatment complications. | 21/ 22.8 | 36/ 18.7 | 47/ 23 | 25/ 18.7 | 45/ 22.7 | 44/ 17.1 | 36/ 24.5 | 53/ 19.3 | 59/ 26.9 | 78/ 30.2 | 118/ 28.1 | 111/ 23.1 | 80/ 24.7 | 52/ 22.2 | 60/ 27.3 | 36/ 28.3 | 116/ 19.8 | 107/ 35.1 | 168/ 24.4 | 43/ 35.2 | 16/ 17.8 | 88/ 23.4 | 81/ 23.8 | 55/ 31.6 |
| They can improve the outcome of treatment. | 21/ 19.3 | 46/ 23.8 | 59/ 28.9 | 29/ 21.6 | 47/ 23.7 | 48/ 18.7 | 37/ 25.2 | 77/ 28.1 | 55/ 25.1 | 86/ 33.3 | 147/ 35 | 114/ 23.7 | 84/ 25.9 | 70/ 29.9 | 63/ 28.6 | 42/ 33.1 | 144/ 24.6 | 114/ 37.4 | 173/ 25.1 | 51/ 41.8 | 34/ 37.8 | 97/ 25.8 | 101/ 29.6 | 64/ 36.8 |
| Other (please specify) | 2/ 1.8 | 3/ 1.6 | 0 | 2/ 1.5 | 4/ 2 | 4/ 1.6 | 3/ 2 | 6/ 2.2 | 5/ 2.3 | 4/ 1.6 | 11/ 2.6 | 7/ 1.5 | 7/ 2.2 | 2/ 0.9 | 8/ 3.6 | 1/ 0.8 | 7/ 1.2 | 10/ 3.3 | 13/ 1.9 | 3/ 2.5 | 2/ 2.2 | 5/ 1.3 | 10/ 2.9 | 3/ 1.7 |
|  | **TOTAL** | **109** | **193** | **204** | **134** | **198** | **257** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **305** | **689** | **122** | **90** | **376** | **341** | **174** |
| Q7 | Dentists | 56/  41.5 | 87/  45.3 | 40/  17.5 | 41/  35.3 | 69/  35.6 | 150/  47.5 | 58/ 39.5 | 111/ 40.5 | 114/ 52.1 | 148/ 57.4 | 211/ 50.2 | 226/ 47 | 135/ 41.7 | 104/ 44.4 | 126/ 57.3 | 74/ 58.3 | 232/ 39.6 | 200/ 65.6 | 313/ 45.4 | 90/ 73.8 | 35/ 28.9 | 186/ 49.5 | 153/ 44.9 | 100/ 57.5 |
| Patients | 47/  34.8 | 59/  30.7 | 143/  62.7 | 43/  37.1 | 83/  71.6 | 63/  19.9 | 68/ 46.3 | 142/ 51.8 | 96/ 43.8 | 124/ 48.1 | 238/ 56.7 | 196/ 40.7 | 153/ 47.2 | 125/ 53.4 | 104/ 47.3 | 52/ 40.9 | 260/ 44.4 | 169/ 55.4 | 335/ 48.6 | 57/ 46.7 | 40/ 44.4 | 155/ 41.2 | 175/ 51.3 | 99/ 56.9 |
| Public | 15/  11.1 | 12/  6.3 | 4/  1.8 | 5/  4.3 | 3/  1.6 | 72/  22.8 | 12/ 8.2 | 26/ 9.5 | 34/ 15.5 | 38/ 14.7 | 49/ 11.7 | 62/ 12.9 | 39/ 12 | 22/ 9.4 | 23/ 10.5 | 27/ 21.3 | 60/ 10.2 | 497 16.1 | 82/ 11.9 | 14/ 11.5 | 13/ 14.4 | 55/ 14.6 | 25/ 7.3 | 31/ 17.8 |
| Dental profession | 17/  12.6 | 33/  17.2 | 41/  18 | 23/  19.8 | 36/  18.6 | 23/  7.3 | 22/ 15 | 44/ 16.1 | 40/ 18.3 | 64/ 24.8 | 91/ 21.7 | 81/ 16.8 | 49/ 15.1 | 39/ 16.7 | 63/ 28.6 | 19/ 15 | 103/ 17.6 | 66/ 21.6 | 111/ 16.1 | 30/ 24.6 | 30/ 33.3 | 64/ 17 | 66/ 19.4 | 40/ 23 |
| Other (please specify) | 0 | 1/  1 | 0 | 4/  3.5 | 3/  1.6 | 8/  2.5 | 1/ 0.7 | 3/ 1.1 | 6/ 2.3 | 6/ 2.3 | 11/ 2.6 | 5/ 1 | 3/ 0.9 | 1/ 0.4 | 9/ 1.6 | 2/ 1.6 | 8/ 1.4 | 7/ 1.7 | 10/ 1.5 | 3/ 2.5 | 3/ 3.3 | 8/ 2.1 | 7/ 2.1 | 1/ 0.6 |
| **TOTAL** | **135** | **192** | **228** | **116** | **194** | **316** | **147** | **274** | **219** | **258** | **600** | **570** | **324** | **234** | **220** | **127** | **586** | **305** | **689** | **122** | **90** | **376** | **341** | **174** |
| Q8 | Yes | 25/  29.8 | 57/  54.3 | 127/  55 | 29/  61.7 | 46/  44.7 | 19/  6.8 | 62/  44.6 | 82/  32.7 | 72/  35.5 | 78/  32 | 140/  35.3 | 163/  36.6 | 122/  41.4 | 75/  34.2 | 79/  37.1 | 24/  20.5 | 188/  34.9 | 108/  36.6 | 218/  34.4 | 51/  42.5 | 30/  34.9 | 106/  30.1 | 140/  44.2 | 52/  31.3 |
| No | 36/  42.9 | 18/  17.1 | 38/  16.5 | 7/  14.9 | 30/  29.1 | 123/  44.1 | 40/  28.8 | 77/  30.7 | 66/  32.5 | 67/  27.5 | 116/  29.2 | 133/  29.9 | 89/  30.2 | 63/  28.8 | 56/  26.3 | 42/  35.9 | 147/  27.3 | 101/  34.2 | 189/  29.8 | 34/  28.3 | 29/  33.7 | 98/  27.8 | 85/  26.8 | 66/  39.8 |
| No idea | 23/  27.4 | 30/  28.6 | 66/  28.6 | 11/  23.4 | 27/  26.2 | 137/  49.1 | 37/  26.6 | 92/  36.7 | 65/  32 | 99/ 40.6 | 141/  35.5 | 149/  33.5 | 84/  28.5 | 81/  37 | 78/  36.6 | 51/  43.6 | 204/  37.8 | 86/  29.2 | 227/  35.8 | 35/  29.2 | 27/  31.4 | 148/  42 | 92/  29 | 48/  28.9 |
|  | **TOTAL** | **84** | **105** | **231** | **47** | **103** | **279** | **139** | **251** | **203** | **244** | **420** | **481** | **295** | **219** | **213** | **117** | **539** | **295** | **634** | **120** | **86** | **378** | **341** | **174** |
| Q9 | Lack of time | 21/  16.3 | 45/  21.5 | 9/ 12 | 3/  9.1 | 3/  4 | 125/  31.3 | 19/ 12.9 | 36/ 13.1 | 30/ 13.7 | 32/ 12.4 | 46/ 11 | 75/ 15.6 | 45/ 13.9 | 32/ 13.7 | 32/ 14.5 | 12/ 9.4 | 48/ 8.2 | 69/ 22.6 | 72/ 10.4 | 38/ 31.1 | 10/ 11.1 | 40/ 10.6 | 53/ 15.5 | 28/ 16.1 |
| Lack of awareness on clinical guidelines | 40/  31 | 47/ 22.3 | 16/ 21.3 | 5/  15.2 | 18/  23.7 | 9/  6.5 | 35/ 23.8 | 82/ 29.9 | 65/ 29.7 | 80/ 31 | 123/ 29.3 | 139/ 28.9 | 84/ 25.9 | 63/ 26.9 | 67/ 30.5 | 49/ 38.6 | 143/ 24.4 | 113/ 37 | 174/ 25.3 | 60/ 49.2 | 26/ 28.9 | 105/ 27.9 | 87/ 25.5 | 68/ 39.1 |
| Lack of practical ways to reach to clinical guidelines | 15/  11.6 | 25/  12 | 13/  17.3 | 3/  9.1 | 1/  1.3 | 4/  2.9 | 22/ 15 | 32/ 11.7 | 26/ 11.9 | 19/ 7.4 | 48/ 11.4 | 50/ 10.4 | 43/ 13.3 | 27/ 11.5 | 20/ 9.1 | 9/ 7.1 | 57/ 9.7 | 38/ 12.5 | 58/ 8.4 | 32/ 26.2 | 10/ 11.1 | 36/ 9.6 | 40/ 11.7 | 25/ 14.4 |
| Limited guidelines available in the dental field | 24/ 18.6 | 23/ 11.3 | 8/ 10.7 | 2/ 6.1 | 2/ 2.6 | 41/ 10.3 | 13/ 8.8 | 28/ 10.2 | 28/ 12.8 | 24/ 9.3 | 48/ 11.4 | 45/ 9.4 | 32/ 9.9 | 28/ 12 | 19/ 8.6 | 14/ 11 | 37/ 6.3 | 51/ 16.7 | 59/ 8.6 | 24/ 19.7 | 8/ 8.9 | 22/ 5.9 | 35/ 10.3 | 36/ 20.7 |
| Lack of evidence-based clinical guidelines for dental care | 10/ 7.8 | 16/ 7.7 | 3/ 4 | 3/  9.1 | 2/ 2.6 | 138/ 34.5 | 10/ 6.8 | 22/ 8 | 17/ 7.8 | 19/ 7.4 | 30/ 7.1 | 39/ 8.1 | 24/ 7.4 | 227 9.4 | 15/ 6.8 | 9/ 7.1 | 39/ 6.7 | 29/ 9.5 | 38/ 5.5 | 16/ 13.1 | 12/ 13.3 | 28/ 7.4 | 20/ 5.9 | 22/ 12.6 |
| Clinical guidelines being perceived as restricting the ‘clinical freedom of dentists’ | 8/ 6.2 | 10/ 4.8 | 1/ 1.3 | 3/  9.1 | 15/ 19.7 | 44/ 11 | 5/ 3.4 | 15/ 5.5 | 13/ 5.9 | 14/ 5.4 | 28/ 6.7 | 19/ 4 | 18/ 5.6 | 6/ 2.6 | 157 6.8 | 8/ 6.3 | 18/ 3.1 | 28/ 9.2 | 29/ 4.2 | 10/ 8.2 | 8/ 8.9 | 16/ 4.3 | 13/ 3.8 | 18/ 10.3 |
| Lack of consensus/agreement regarding certain aspects ofthe available guidelines | 2/ 1.6 | 6/ 2.9 | 7/ 9.3 | 5/  15.2 | 9/ 11.8 | 34/ 4.8 | 3/ 2 | 14/ 5.1 | 10/ 4.6 | 8/ 3.1 | 25/ 6 | 12/ 2.5 | 15/ 4.6 | 8/ 3.4 | 9/ 4.1 | 4/ 3.1 | 19/ 3.2 | 187 5.9 | 23/ 3.3 | 9/ 7.4 | 6/ 6.7 | 12/ 3.2 | 17/ 5 | 8/ 4.6 |
| Limited knowledge regarding the reliability of the methods used for developing guidelines | 3/ 2.3 | 4/ 3 | 1/ 1.3 | 2/ 6.1 | 4/ 5.3 | 36/ 9 | 7/ 4.8 | 3/ 1.1 | 7/ 3.2 | 13/ 5 | 12/ 2.9 | 19/ 4 | 11/ 3.4 | 4/ 1.7 | 10/ 4.5 | 6/ 4.7 | 15/ 2.6 | 16/ 5.2 | 18/ 2.6 | 8/ 6.6 | 3/ 3.3 | 11/ 2.9 | 10/ 2.9 | 117 6.3 |
| Limited knowledge regarding the reliability of the guideline development group/body | 0 | 3/ 1.4 | 5/ 6.7 | 1/ 3 | 3/ 4 | 10/ 2.5 | 4/ 2.7 | 6/ 2.2 | 9/ 4.1 | 6/ 2.3 | 16/ 3.8 | 10/ 2.1 | 7/ 2.2 | 9/ 3.8 | 5/ 2.3 | 5/ 3.9 | 16/ 2.7 | 10/ 3.3 | 207 2.9 | 4/ 3.3 | 1/ 1.1 | 9/ 2.4 | 14/ 4.1 | 3/ 1.7 |
| Lack of confidence regarding competing interests of guideline development group members | 0 | 7/ 3.3 | 1/ 1.3 | 1/ 3 | 4/ 5.3 | 9/ 2.3 | 3/ 2 | 6/ 2.2 | 4/ 1.8 | 12/ 4.7 | 12/ 2.9 | 14/ 2.9 | 6/ 1.9 | 5/ 2.1 | 10/ 4.5 | 5/ 3.9 | 14/ 2.4 | 11/ 3.6 | 16/ 2.3 | 6/ 4.9 | 5/ 5.6 | 15/ 4 | 9/ 2.6 | 3/ 1.7 |
| Limited knowledge regarding the regular update of the guidelines when new evidence becomes available | 4/ 3.2 | 7/ 3.3 | 9/ 12 | 5/  15.2 | 7/ 9.2 | 13/ 3.3 | 9/ 6.1 | 15/ 5.5 | 17/ 7.8 | 14/ 5.4 | 32/ 7.6 | 23/ 4.8 | 20/ 6.2 | 15/ 6.4 | 15/ 6.8 | 5/ 3.9 | 35/ 6 | 20/ 6.6 | 42/ 6.1 | 9/ 7.4 | 4/ 6.1 | 23/ 6.1 | 24/ 7 | 9/ 5.2 |
| Lack of specific and unambiguous recommendations in the guideline | 2/ 1.6 | 11/ 5.3 | 2/ 2.7 | 0 | 5/ 6.6 | 14/ 3.5 | 6/ 4.1 | 5/ 1.8 | 7/ 3.2 | 17/ 6.6 | 22/ 5.2 | 16/ 3.3 | 13/ 4 | 2/ 0.9 | 14/ 6.3 | 8/ 6.3 | 20/ 3.4 | 17/ 5.6 | 23/ 3.3 | 13/ 10.7 | 2/ 2.2 | 15/ 4 | 15/ 4.4 | 7/ 4 |
| Other | 0 | 0 | 0 | 0 | 3/ 4 | 14/ 3.5 | 1/ 0.7 | 0 | 3/ 1.4 | 4/ 1.6 | 3/ 0.7 | 5/ 1 | 1/ 0.3 | 0 | 4/ 1.8 | 3/ 2.4 | 3/ 0.5 | 5/ 1.6 | 7/ 1 | 0 | 1/ 1.1 | 5/ 1.3 | 3/ 0.9 | 0 |
|  | **TOTAL** | **129** | **209** | **75** | **33** | **76** | **400** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **539** | **295** | **689** | **122** | **90** | **376** | **341** | **174** |
| Q10 | Yes | 64/ 69.6 | 67/ 62.6 | 133/ 50.8 | 41/ 82 | 88/ 85.4 | 99/ 33.4 | 69/ 46.9 | 128/ 46.7 | 121/ 55.3 | 168/ 65.1 | 258/  61.4 | 232/  48.2 | 152/  46.9 | 121/  51.7 | 135/  61.4 | 80/  63 | 279  47.6 | 205  66.3 | 352/  51.1 | 71/  58.2 | 64/  71.1 | 195/  51.6 | 160/  46.9 | 128/  73.6 |
| No | 10/ 10.9 | 1/ 0.9 | 18/ 6.9 | 2/ 4 | 2/ 1.9 | 13/ 4.4 | 4/ 2.7 | 19/ 6.9 | 16/ 7.3 | 7/ 2.7 | 24/  5.7 | 21/  4.4 | 21/  6.5 | 15/  6.4 | 4/  1.8 | 6/  4.7 | 28  4.8 | 18  5.8 | 41/  6 | 3/  2.5 | 2/  2.2 | 9/  2.4 | 18/  5.3 | 18/  10.3 |
| No idea | 18/ 19.6 | 39/ 36.4 | 111/ 42.4 | 7/ 14 | 13/ 12.6 | 184/ 62.2 | 74/ 50.3 | 127/ 46.4 | 82/ 37.4 | 83/ 32.2 | 138/  32.9 | 228/  47.4 | 151/  46.6 | 98/  41.9 | 81/  36.8 | 41/  32.3 | 279  47.6 | 86  27.8 | 296/  43 | 48/  39.3 | 24/  26.7 | 174/  46 | 163/  47.8 | 28/  16.1 |
|  | **TOTAL** | **92** | **107** | **262** | **50** | **103** | **296** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |
| Q11 | Creating a general awareness on clinical guidelines | 44/ 29.7 | 52/ 26 | 62/ 19 | 27/ 20.9 | 55/ 27.4 | 35/ 21.7 | 36/ 24.5 | 67/ 24.5 | 70/ 32 | 100/ 38.8 | 142/ 33.8 | 131/ 27.2 | 85/ 26.2 | 68/ 29.1 | 74/ 33.6 | 46/ 36.2 | 134/ 22.9 | 135/ 44.3 | 185/ 26.9 | 50/ 41 | 34/ 37.8 | 108/ 28.7 | 94/ 27.6 | 73/ 42 |
| Developing evidence-based clinical guidelines | 18/ 12.2 | 42/ 21 | 54/ 16.6 | 24/ 18.6 | 28/ 13.9 | 32/ 19.9 | 30/ 20.4 | 58/21.2 | 43/ 19.6 | 64/ 24.8 | 103/ 24.5 | 93/ 19.3 | 59/ 18.2 | 54/ 23.1 | 50/ 22.7 | 32/ 25.2 | 114/ 19.5 | 77/ 25.2 | 133/ 19.3 | 36/ 29.5 | 25/ 27.8 | 70/ 18.6 | 72/ 21.1 | 51/ 29.7 |
| Developing various evidence based-clinical decision support systems including clinical guidelines | 23/ 15.5 | 11/ 5.5 | 39/ 12 | 13/ 10.1 | 27/ 13.4 | 37/ 23 | 21/ 14.3 | 40/ 14.6 | 42/ 19.2 | 46/ 17.8 | 92/ 21.9 | 58/ 12.1 | 46/ 14.2 | 33/ 14.1 | 44/ 20 | 26/ 20.5 | 95/ 16.2 | 52/ 17 | 115/ 16.7 | 12/ 9.8 | 23/ 25.6 | 67/ 17.8 | 417 12 | 38/ 21.8 |
| Informing dentists about available clinical guidelines | 35/23.7 | 41/ 20.5 | 70/ 21.5 | 32/ 24.8 | 30/ 14.9 | 22/ 13.7 | 37/ 25.2 | 77/ 28.1 | 46/ 21 | 68/ 26.4 | 130/ 31 | 98/ 20.4 | 81/ 25 | 62/ 26.5 | 527 23.6 | 34/ 26.8 | 120/ 20.5 | 101/ 33.1 | 160/ 23.2 | 43/ 35.2 | 22/ 24.4 | 74/ 19.7 | 807 23.5 | 70/ 40.2 |
| Informing dentists about updated clinical guidelines | 25/ 16.9 | 39/ 19.5 | 80/ 24.5 | 26/ 20.2 | 43/ 21.4 | 18/ 11.2 | 36/ 24.5 | 64/ 23.4 | 48/ 21.9 | 80/ 31 | 126/ 30 | 103/ 21.4 | 75/ 23.1 | 51/ 21.8 | 73/ 33.2 | 30/ 23.6 | 125/ 21.3 | 997 32.5 | 159/ 23.1 | 36/ 29.5 | 31/ 34.4 | 76/ 20.2 | 93/ 27.3 | 567 32.2 |
| Attempts to overcome the barriers to implementation of clinical guidelines into practice | 3/ 2 | 16/ 8 | 20/ 6.1 | 7/ 5.4 | 18/ 9 | 14/ 8.7 | 15/ 10.2 | 15/ 5.5 | 23/ 10.5 | 24/ 9.3 | 46/ 11 | 32/ 6.7 | 26/ 8 | 15/ 6.4 | 23/ 10.5 | 13/ 10.2 | 38/ 6.5 | 35/ 11.5 | 53/ 7.7 | 14/ 11.5 | 117 12.2 | 29/ 7.7 | 35/ 10.3 | 14/ 8 |
| Others | 0 | 0 | 1/ 0.3 | 0 | 0 | 3/ 1.9 | 2/ 1.4 | 1/ 0.4 | 0 | 17 0.4 | 1/ 0.2 | 3/ 0.4 | 3/ 0.9 | 0 | 0 | 1/ 0.8 | 4/ 0.7 | 0 | 4/ 0.6 | 0 | 0 | 1/ 0.3 | 3/ 0.9 | 0 |
|  | **TOTAL** | **148** | **200** | **326** | **129** | **201** | **161** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **305** | **689** | **122** | **90** | **376** | **341** | **174** |
| Q12 | Yes | 68/ 73.9 | 80/ 74.8 | 199/ 76 | 43/ 86 | 95/ 92.2 | 231/ 78 | 117/ 79.6 | 210/ 76.6 | 174/ 79.5 | 206/ 79.8 | 345/  82.1 | 365/  75.9 | 245  75.6 | 187  79.9 | 182  82.7 | 97  76.4 | 459/  78.3 | 245/  79.3 | 535/  77.6 | 97/  79.5 | 77/  85.6 | 293/  77.5 | 267/  78.3 | 146/  83.9 |
| No | 14/ 15.2 | 1/ 0.9 | 3/ 1.1 | 1/ 2 | 5/ 5.9 | 8/ 2.7 | 0 | 9/ 3.3 | 7/ 3.2 | 16/ 6.2 | 13/  3.1 | 19/  4.0 | 9  2.8 | 8  3.4 | 6  2.7 | 9  7.1 | 13/  2.2 | 19/  6.1 | 28/  4.1 | 0 | 4/  4.4 | 14/  3.7 | 6/  1.8 | 11/  6.3 |
| No idea | 10/ 10.9 | 26/ 24.3 | 60/ 22.9 | 6/ 12 | 3/ 2.9 | 57/ 19.3 | 30/ 20.4 | 55/ 20.1 | 38/ 17.4 | 36/ 14 | 62/  14.8 | 97/  20.2 | 70  21.6 | 39  16.7 | 32  14.5 | 21  16.5 | 114/  19.5 | 45/  14.6 | 126/  18.3 | 25/  20.5 | 9/  10 | 71/  18.8 | 68/  19.9 | 17/  9.8 |
|  | **TOTAL** | **92** | **107** | **262** | **50** | **103** | **296** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |
| Q13 | Universities | 62/ 39.5 | 51/ 27.6 | 43/ 20.3 | 35/ 32.7 | 47/ 20.7 | 83/ 27.4 | 47/ 32 | 90/ 32.8 | 82/ 37.4 | 98/ 38 | 170/ 40.5 | 149/ 31 | 108/ 33.3 | 91/ 38.9 | 74/ 33.6 | 46/ 36.2 | 170/ 29 | 146/ 47.2 | 229/ 33.2 | 52/ 42.6 | 36/ 40 | 123/ 32.5 | 98/ 28.7 | 97/ 55.7 |
| National Dental Associations | 50/ 31.8 | 31/ 16.8 | 57/ 26.9 | 18/ 16.8 | 50/ 22 | 56/ 18.5 | 38/ 25.9 | 75/ 27.4 | 60/ 27.4 | 87/ 33.7 | 138/ 32.9 | 123/ 25.6 | 87/ 26.9 | 60/ 25.6 | 67/ 30.5 | 47/ 37 | 146/ 24.9 | 114/ 36.9 | 196/ 28.4 | 26/ 21.3 | 35/ 38.9 | 113/ 29.9 | 74/ 21.7 | 73/ 42 |
| Scientific communities | 20/ 12.7 | 22/ 11.9 | 39/ 18.4 | 20/ 18.7 | 48/ 21.1 | 74/ 24.4 | 26/ 17.7 | 55/ 20.1 | 56/ 25.6 | 84/ 32.6 | 111/ 26.4 | 108/ 22.5 | 58/ 17.9 | 56/ 23.9 | 71/ 32.3 | 38/ 29.9 | 122/ 20.8 | 98/ 31.7 | 172/ 25 | 28/ 23 | 20/ 22 | 96/ 25.4 | 70/ 20.5 | 52/ 29.9 |
| Expert people | 16/ 10.2 | 28/ 15.1 | 16/ 7.5 | 14/ 13.1 | 36/ 15. 9 | 22/ 7.3 | 17/ 11.6 | 32/ 11.7 | 33/ 15.1 | 48/ 18.6 | 75/ 17.9 | 56/ 11.6 | 33/ 10.2 | 39/ 16.7 | 46/ 20.9 | 14/ 11 | 55/ 9.4 | 75/ 24.3 | 89/ 12.9 | 25/ 20.5 | 17/ 18.9 | 50/ 13.2 | 49/ 14.4 | 33/ 19 |
| Joint activity of various dental bodies | 7/ 4.5 | 51/ 27.6 | 51/ 24.1 | 16/ 15 | 44/ 19.4 | 49/ 16.2 | 30/ 20.4 | 57/ 20.8 | 54/ 24.7 | 70/ 27.1 | 104/ 24.8 | 111/ 23.1 | 72/ 22.2 | 51/ 21.8 | 59/ 26.8 | 35/ 27.6 | 128/ 21.8 | 85/ 27.5 | 135/ 19.6 | 53/ 43.4 | 25/ 27.8 | 89/ 23.5 | 94/ 27.6 | 30/ 17.2 |
| Other | 2/ 1.3 | 0 | 0 | 3/ 2.8 | 1/ 0.4 | 15/ 5 | 3/ 2 | 5/ 1.8 | 8/ 3.7 | 5/ 1.9 | 11/ 2.6 | 10/ 2.1 | 6/ 1.9 | 3/ 1.3 | 8/ 3.6 | 3/ 2.4 | 13/ 2.2 | 7/ 2.3 | 17/ 2.5 | 3/ 2.5 | 1/ 1.1 | 9/ 2.4 | 10/ 2.9 | 2/ 1.1 |
| No idea | 0 | 2/ 1.1 | 6/ 2.8 | 1/ 0.9 | 1/ 0.4 | 4/ 1.3 | 2/ 1.4 | 2/ 0.7 | 3/ 1.4 | 7/ 2.7 | 4/ 1 | 10/ 2.1 | 2/ 0.6 | 3/ 1.3 | 6/ 2.7 | 3/ 2.4 | 8/ 1.4 | 6/ 1.9 | 11/ 1.6 | 2/ 1.6 | 1/ 1.1 | 9/ 2.4 | 3/ 0.9 | 2/ 1.1 |
|  | **TOTAL** | **157** | **185** | **212** | **107** | **227** | **303** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |
| Q14 | Yes | 68/ 73.9 | 87/ 8 1.3 | 197/ 75.2 | 45/ 90 | 101/ 98.1 | 238/ 80.4 | 117/  79.6 | 212/  77.4 | 177/  80.8 | 219/  84.9 | 352/  83.8 | 378/  78.6 | 254/  78.4 | 189/  80.8 | 183/  83.2 | 105/  82.7 | 472/  80.5 | 249/  80.6 | 549/  79.7 | 102/  83.6 | 78/  86.7 | 305/  80.7 | 272/  79.8 | 147/  84.5 |
| No | 12/ 13 | 4/ 3.7 | 2/ 0.8 | 1/ 2 | 0 | 7/ 2.4 | 4/  2.7 | 7/  2.6 | 8/  3.7 | 7/  2.7 | 8/  1.9 | 18/  3.7 | 9/  2.8 | 6/  2.6 | 7/  3.2 | 4/  3.1 | 8/  1.4 | 18/  5.8 | 18/  2.6 | 3/  2.5 | 5/  5.6 | 13/  3.4 | 3/  0.9 | 10/  5.7 |
| No idea | 12/ 13 | 16/ 15 | 63/ 24 | 4/ 8 | 2/ 1.9 | 51/ 17.2 | 26/  17.7 | 55/  20.1 | 34/  15.5 | 32/  12.4 | 60/ 14.3 | 85/ 17.7 | 61/  18.8 | 39/  16.7 | 30/  13.6 | 18/  14.2 | 106/  18.1 | 42/  13.6 | 122/  17.7 | 17/  13.9 | 7/  7.8 | 60/  15.9 | 66/  19.4 | 17/  9.8 |
|  | **TOTAL** | **92** | **107** | **262** | **50** | **103** | **296** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |
| Q15 | Up to 2 years | 17  18.5 | 26/ 24.3 | 27/ 10.3 | 4/ 8 | 94/ 91.3 | 56/ 18.9 | 24/  16.3 | 62/  22.6 | 54/  24.7 | 83/  32.2 | 130/  31.0 | 93/  19.3 | 61/  18.8 | 65/  27.8 | 62/  28.2 | 36/  28.3 | 118/  20.1 | 104/  33.7 | 167/  24.2 | 30/  24.6 | 25/  27.8 | 115/  30.4 | 70/  20.5 | 36/  20.7 |
| Up to 5 years | 13/ 14.1 | 40/ 37.4 | 33/ 12.6 | 12/ 24 | 9/ 8.7 | 47/ 15.9 | 21/  14.3 | 41/  17.5 | 45/  20.5 | 44/  17.1 | 66/  15.7 | 88/  18.3 | 42/  13 | 41/  17.5 | 46/  20.9 | 24/  18.9 | 81/  13.8 | 70/  22.7 | 94/  13.6 | 33/  27 | 25/  27.8 | 63/  16.7 | 56/  16.4 | 34/  19.5 |
| Until new evidence becomes available | 53/ 57.6 | 31/ 29 | 146/55.7 | 30/ 60 | 0 | 130/ 43.9 | 79/  53.7 | 122/  44.5 | 87/  39.7 | 97/  37.6 | 175/  41.7 | 209/  43.5 | 167/  51.5 | 87/  37.2 | 84/  38.2 | 48/  37.8 | 271/  46.2 | 112/  36.2 | 304/  44.1 | 45/  36.9 | 36/  40 | 129/  34.1 | 160/  46.9 | 93/  53.4 |
| No idea | 9/ 9.8 | 10/ 9.3 | 56/21.4 | 4/ 8 | 0 | 63/ 21.3 | 23/  15.6 | 49/  17.9 | 33/  15.1 | 34/  13.2 | 49/  11.7 | 91/  18.9 | 54/  16.7 | 41/  17.5 | 28/  12.7 | 19/  15 | 116/  19.8 | 23/  7.4 | 124/  18 | 14/  11.5 | 4/  4.4 | 71/  18.8 | 55/  16.1 | 11/  6.3 |
|  | **TOTAL** | **107** | **107** | **262** | **50** | **103** | **296** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |
| Q16 | Every 2 years | 2/ 2.2 | 23/ 21.5 | 42/ 16 | 8/ 18 | 26/ 25.2 | 95/ 32.1 | 37/  25.2 | 58/  21.2 | 48/  21.9 | 51/  19.8 | 92/  21.9 | 102/  21.2 | 68/  21 | 55/  23.5 | 48/  21.8 | 25/  19.7 | 129/  22 | 65/  21 | 154/  22.4 | 24/  19.7 | 16/  17.8 | 92/  24.3 | 76/  22.3 | 26/  14.9 |
|  | Every 5 years | 13/ 14.1 | 40/ 37.4 | 49/ 18.7 | 13/ 26 | 0 | 42/ 14.2 | 20/  13.6 | 46/  16.8 | 41/  18.7 | 47/  18.2 | 57/  13.6 | 100/  20.8 | 46/  14.2 | 46/  19.7 | 37/  16.8 | 28/  22 | 91/  15.5 | 63/  20.4 | 94/  13.6 | 36/  29.5 | 24/  26.7 | 67/  17.7 | 57/  16.7 | 32/  18.4 |
|  | When new evidence becomes available | 70/ 76.1 | 31/ 29 | 114/ 43.5 | 23/ 46 | 77/ 74.8 | 99/ 33.4 | 68/  46.3 | 123/  44.9 | 95/  43.4 | 124/  48.1 | 222/  52.9 | 188/  39.1 | 158/  48.8 | 93/  39.7 | 105/  47.7 | 54/  42.5 | 252/  43 | 155/  50.2 | 322/  46.7 | 45/  36.9 | 44/  48.9 | 149/  39.4 | 153/  44.9 | 104/  59.8 |
|  | No idea | 7/ 7.6 | 13/ 12.2 | 57/ 21.8 | 5/ 10 | 0 | 60/ 20.3 | 22/  15.0 | 47/  17.2 | 35/  16.0 | 36/  14.0 | 49/  11.7 | 91/  18.9 | 52/  16 | 40/  17.1 | 30/  13.6 | 20/  15.7 | 114/  19.5 | 26/  8.4 | 119/  17.3 | 17/  13.9 | 6/  6.7 | 70/  18.5 | 55/  16.1 | 12/  6.9 |
|  | **TOTAL** | **92** | **107** | **262** | **50** | **103** | **296** | **147** | **274** | **219** | **258** | **420** | **481** | **324** | **234** | **220** | **127** | **586** | **309** | **689** | **122** | **90** | **378** | **341** | **174** |

**Table 4.** Statistical data regarding comparative analysis of the six countries.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **GDA/ RDA** | **GDA/ PDA** | **GDA/ SSO** | **GDA/ ANDI** | **GDA/ TDA** | **RDA/ PDA** | **RDA/ SSO** | **RDA/ ANDI** | **RDA/ TDA** | **PDA/ SSO** | **PDA/ ANDI** | **PDA/ TDA** | **SSO/ Italy-ANDI** | **SSO/ TDA** | **ANDI / TDA** |
| **Q1** | Yes | **0.001** | 0.401 | 0.073 | **0.007** | **0.001** | **0.004** | 0.522 | 0.734 | **0.001** | 0.18 | **0.024** | **0.001** | 0.773 | **0.001** | **0.001** |
| No |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **0Q2** | I read them in dental journals | **0.000** | **0.000** | **0.000** | **0.017** | **0.012** | 0.091 | **0.039** | **0.023** | **0.000** | **0.000** | 0.300 | **0.000** | **0.000** | **0.000** | **0.000** |
| I read them on web sites of specialization organizations | **0.005** | **0.001** | **0.003** | 0.783 | **0.000** | 0.712 | 0.520 | **0.009** | **0.000** | 0.662 | **0.001** | **0.000** | **0.004** | **0.000** | **0.000** |
| I use search engines to find them. | 0.109 | 0.183 | 0.270 | **0.008** | **0.000** | 0.544 | 0.865 | 0.249 | **0.000** | 0.790 | 0.061 | **0.000** | 0.257 | **0.001** | **0.031** |
| My National Dental Organization sends me information about them. | **0.070** | **0.000** | **0.000** | **0.000** | **0.021** | **0.000** | **0.000** | **0.000** | 1 | 0.514 | **0.000** | **0.000** | **0.033** | **0.000** | **0.000** |
| I learn about them from the continuing education courses which I attend | 0.193 | 0.343 | 0.193 | **0.037** | **0.000** | 0.539 | **0.015** | 0.403 | **0.000** | **0.025** | 0.114 | **0.000** | **0.002** | **0.000** | **0.000** |
| I learned about them from my Undergraduate dental education | n.a | **0.000** | **0.002** | **0.001** | **0.027** | **0.000** | **0.001** | **0.001** | **0.014** | 0.075 | **0.006** | **0.000** | 0.807 | 0.099 | **0.047** |  |
| Other | 0.125 | 0.197 | **0.002** | 0.499 | 0.123 | 0.736 | 0.075 | 0.683 | 0.752 | **0.009** | 1 | 0.794 | **0.015** | **0.012** | 0.736 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q3** | Yes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No | **0.001** | **0.001** | **0.001** | **0.001** | **0.001** | **0.006** | 0.088 | **0.014** | **0.001** | 0.556 | **0.002** | **0.001** | **0.04** | **0.001** | **0.001** |
| No idea |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q4** | Always |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Frequently |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sometimes | 0.137 | **0.007** | 0.651 | **0.001** | 0.426 | **0.001** | 0.414 | **0.001** | 0.058 | 0.533 | **0.014** | **0.001** | **0.011** | 0.105 | **0.001** |
| Rare |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Very rare |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q5** | Yes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No | **0.001** | **0.001** | **0.001** | **0.001** | 0.6 | 0.753 | 0.309 | 0.085 | **0.001** | 0.19 | 0.042 | **0.001** | 0.487 | **0.001** | **0.001** |
| No idea |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q6** | They can improve the accuracy of diagnosis. | 0.094 | **0.029** | **0.000** | **0.017** | 0.283 | **0.000** | **0.000** | 0.435 | **0.001** | **0.000** | **0.000** | 0.142 | **0.001** | **0.000** | **0.000** |
| They can improve the clinical treatment plan. | **0.044** | **0.004** | **0.000** | 0.284 | 0.039 | **0.000** | **0.010** | 0.331 | **0.000** | **0.000** | **0.000** | 0.245 | **0.001** | **0.000** | **0.000** |
| They can decrease the time necessary for the diagnostic process | 0.280 | **0.003** | 0.427 | 0.303 | 0.959 | **0.000** | 0.917 | 0.964 | 0.139 | **0.001** | **0.000** | **0.000** | 0.947 | 0.324 | 0.161 |
| They can decrease treatment complications. | 0.092 | 0.306 | **0.001** | **0.002** | 0.074 | **0.001** | 0.050 | 0.135 | **0.000** | **0.000** | **0.000** | 0.327 | 0.462 | **0.000** | **0.000** |
| They can improve the outcome of treatment. | **0.003** | 0.952 | **0.000** | **0.001** | 0.148 | **0.000** | 0.079 | 0.700 | **0.000** | **0.000** | **0.000** | 0.059 | 0.151 | **0.000** | **0.000** |
| Other | 1 | 0.067 | 0.613 | 0.686 | 0.631 | **0.024** | 0.654 | 0.717 | 0.388 | **0.025** | **0.006** | 0.126 | 1 | 0.210 | 0.213 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q7** | Dentists | **0.001** | **0.000** | **0.017** | 0.374 | 0.087 | **0.000** | 1.000 | **0.018** | **0.000** | **0.000** | **0.000** | **0.000** | 0.081 | **0.000** | **0.004** |
| Patients | 0.568 | 0.563 | **0.000** | **0.000** | **0.000** | 0.922 | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | 0.550 | **0.000** | **0.000** |
| Public | 0.402 | **0.000** | 0.436 | **0.003** | 0.142 | 0.000 | 1.000 | **0.039** | **0.006** | **0.007** | 0.408 | **0.000** | 0.114 | **0.039** | **0.000** |
| Dental profession | 0.066 | 0.640 | **0.001** | **0.010** | **0.006** | 0.002 | 0.095 | 0.526 | **0.000** | **0.000** | **0.000** | **0.004** | 0.254 | **0.000** | **0.000** |
| Other (please specify) | 1.000 | n.a | **0.014** | 0.249 | 0.207 | 0.290 | **0.036** | 0.362 | 0.455 | **0.001** | **0.022** | **0.008** | 0.217 | 0.080 | 1.000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q8** | Yes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No | **0.001** | **0.001** | **0.001** | 0.073 | **0.001** | 1 | 0.692 | 0.118 | **0.001** | 0.678 | **0.028** | **0.001** | 0.1 | **0.001** | **0.001** |
| No idea |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q9** | Lack of time | **0.004** | **0.000** | **0.020** | 0.000 | 0.059 | **0.000** | **0.000** | **0.000** | **0.000** | 0.416 | 1.000 | **0.000** | 0.393 | 0.190 | **0.004** |
| Lack of awareness on clinical guidelines | 0.949 | **0.000** | **0.000** | **0.000** | 0.597 | **0.000** | **0.000** | **0.000** | 0.631 | 0.352 | **0.002** | **0.000** | 0.331 | **0.000** | **0.000** |
| Lack of practical ways to reach to clinical guidelines | 0.288 | **0.001** | 0.134 | **0.000** | 0.865 | **0.000** | **0.015** | **0.000** | 0.064 | 0.728 | 0.125 | **0.000** | 0.102 | 0.142 | **0.000** |
| Limited guidelines available in the dental field | 0.553 | **0.000** | **0.003** | **0.000** | **0.001** | **0.000** | **0.011** | **0.000** | **0.017** | 0.665 | 0.731 | **0.000** | 0.597 | 0.176 | **0.007** |
| Lack of evidence-based clinical guidelines for dental care | 0.521 | **0.000** | 0.543 | **0.022** | 0.880 | **0.000** | 0.180 | **0.002** | 0.569 | 0.054 | 0.624 | **0.000** | 0.331 | 0.302 | **0.004** |
| Clinical guidelines being perceived as restricting the ‘clinical freedom of dentists’ | 1.000 | **0.000** | 0.747 | 0.296 | 0.046 | **0.000** | 0.553 | 0.340 | **0.030** | **0.014** | **0.000** | **0.025** | 0.202 | 0.412 | **0.000** |
| Lack of consensus/agreement regarding certain aspects of the available guidelines | 0.290 | 1.000 | 0.097 | 0.094 | 1.000 | 0.211 | 0.329 | 0.540 | 0.240 | **0.028** | **0.019** | 0.995 | 0.773 | 0.037 | **0.025** |
| Limited knowledge regarding the reliability of the methods used for developing guidelines | 0.221 | 0.055 | 1.000 | 1.000 | 0.772 | **0.000** | 0.504 | 0.283 | 0.187 | 0.068 | **0.024** | **0.006** | 1.000 | 1.000 | 1.000 |
| Limited knowledge regarding the reliability of the guideline development group/body | 0.250 | 0.333 | 0.352 | 0.249 | **0.048** | 0.696 | 1.000 | 1.000 | 0.576 | 1.000 | 0.692 | 0.110 | 1.000 | 0.706 | 0.577 |
| Lack of confidence regarding competing interests of guideline development group members | **0.016** | 1.000 | 0.352 | 0.124 | **0.048** | **0.001** | 0.437 | 0.579 | 0.639 | 0.295 | **0.024** | **0.004** | 1.000 | 0.706 | 1.000 |
| Limited knowledge regarding the regular update of the guidelines when new evidence becomes available | 0.716 | 0.748 | 0.278 | 0.668 | 0.324 | 0.257 | 0.522 | 1.000 | 0.757 | 0.055 | 0.164 | **0.031** | 0.529 | 0.588 | 0.830 |
| Lack of specific and unambiguous recommendations in the guideline | **0.043** | 0.278 | 0.541 | 0.450 | 0.181 | **0.000** | **0.017** | 0.222 | 0.222 | 1.000 | **0.021** | **0.002** | 0.173 | 0.087 | 0.830 |
|  | Other (please specify) | n.a | n.a | n.a | 0.249 | 0.596 | n.a | n.a | 0.116 | 0.331 | n.a | **0.022** | 0.064 | 0.551 | 1.000 | 0.431 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q10** | Yes | **0.001** | **0.001** | 0.234 | **0.007** | **0.001** | **0.021** | **0.006** | **0.001** | **0.001** | **0.001** | **0.001** | **0.001** | 0.773 | **0.001** | **0.001** |
| No |
| No idea |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q11** | Creating a general awareness on clinical guidelines | 0.913 | **0.000** | 0.482 | 0.437 | **0.000** | **0.000** | 0.646 | 0.487 | **0.000** | **0.000** | **0.000** | **0.000** | 1.000 | **0.000** | **0.000** |
| Developing evidence-based clinical guidelines | **0.004** | 0.949 | **0.001** | 0.279 | **0.044** | **0.000** | 0.330 | 0.086 | **0.000** | **0.000** | **0.224** | **0.001** | **0.018** | **0.000** | **0.000** |
| Developing various evidence based-clinical decision support systems including clinical guidelines | **0.010** | **0.042** | 1.000 | 0.976 | **0.006** | 0.315 | **0.021** | **0.005** | 0.665 | 0.084 | **0.017** | 0.412 | 1.000 | **0.022** | **0.002** |
| Informing dentists about available clinical guidelines | 0.968 | **0.041** | **0.005** | 0.187 | **0.000** | **0.027** | **0.005** | 0.159 | **0.000** | **0.000** | 0.642 | **0.000** | **0.000** | **0.000** | **0.000** |
| Informing dentists about updated clinical guidelines | 0.163 | 0.544 | **0.006** | **0.033** | **0.000** | 0.270 | 0.095 | 0.431 | **0.000** | **0.006** | **0.041** | **0.000** | 0.307 | **0.000** | **0.000** |
| Attempts to overcome the barriers to implementation of clinical guidelines into practice | **0.011** | 0.223 | **0.033** | **0.003** | 0.772 | 0.050 | 1.000 | 0.758 | 0.001 | 0.167 | **0.010** | 0.210 | 0.755 | **0.020** | **0.000** |
| Others (please specify) | n.a | 1.000 | n.a | n.a | 1.000 | 1.000 | n.a | n.a | 0.569 | 1.000 | 1.000 | 0.626 | n.a | 1.000 | 0.572 |
| None | 1.000 | n.a | n.a | n.a | 1.000 | 0.290 | 1.000 | 1.000 | 0.461 | n.a | n.a | 1.000 | n.a | 1.000 | 1.000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q12** | Yes | **0.001** | **0.001** | 0.051 | **0.002** | **0.001** | 0.906 | 0.198 | **0.001** | 0.312 | 0.219 | **0.001** | 0.268 | 0.056 | 0.461 | **0.001** |
| No |
| No idea |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q13** | Universities | **0.005** | **0.000** | 0.896 | **0.002** | **0.000** | **0.000** | **0.014** | 0.768 | **0.000** | **0.000** | **0.000** | **0.001** | **0.008** | **0.000** | **0.001** |
| National Dental Associations | **0.000** | **0.000** | 0.056 | 0.418 | **0.000** | 0.140 | 0.484 | **0.004** | **0.042** | 0.048 | **0.000** | 0.405 | 0.197 | **0.011** | **0.000** |
| Scientific communities | 0.977 | 0.175 | **0.034** | **0.000** | 0.618 | 0.239 | **0.018** | **0.000** | 0.356 | **0.000** | **0.000** | **0.003** | 0.550 | **0.042** | **0.000** |
| Expert people | 0.188 | **0.002** | 0.206 | **0.009** | 0.009 | **0.000** | 0.962 | 0.167 | **0.000** | **0.000** | **0.000** | 0.651 | 0.499 | **0.000** | **0.000** |
| Joint activity of various dental bodies | **0.000** | **0.013** | **0.000** | **0.000** | 0.050 | **0.000** | 0.094 | 0.472 | **0.000** | 0.073 | **0.000** | 0.371 | 0.273 | **0.017** | **0.000** |
| Other (please specify) | 0.212 | 0.067 | 0.345 | 0.603 | 0.381 | n.a | **0.031** | 0.490 | **0.014** | **0.004** | 0.282 | **0.001** | 0.102 | 0.733 | 0.082 |
| No idea | 0.500 | 0.346 | 0.352 | 1.000 | 0.577 | 1.000 | 1.000 | 1.000 | 0.658 | 1.000 | 0.678 | 0.527 | 0.548 | 0.544 | 1.000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q14** | Yes | 0.056 | **0.001** | 0.047 | **0.001** | **0.001** | **0.024** | 0.472 | **0.001** | 0.636 | **0.032** | **0.001** | 0.051 | **0.04** | 0.271 | **0.001** |
| No |
| No idea |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q15** | Up to 2 years | **0.001** | **0.034** | 0.241 | **0.001** | **0.048** | **0.001** | **0.002** | **0.001** | **0.001** | **0.044** | **0.001** | **0.008** | **0.001** | **0.012** | **0.001** |
| Up to 5 years |
| Until new evidence becomes available |
| No idea |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q16** | Every 2 years | **0.001** | **0.001** | **0.001** | **0.001** | **0.001** | **0.001** | 0.214 | **0.001** | **0.001** | 0.236 | **0.001** | **0.001** | **0.001** | **0.011** | **0.001** |
|  | Every 5 years |
| When new evidence becomes available |
| No idea |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* Difference is statistically significant between two compared countries (p<o.o5)

n.a: statistical comparison was not applicable because of low response rate

GSA: Georgian Stomatological Association, ANDI: Associazione Nazionale Dentisti Italiani, PDA: Portuguese Dental Association, RDA: Russian Dental Association, SSO: Swiss Dental Association, TDA: Turkish Dental Association

**Table 5**: Data regarding the impact of age, gender, years of practice, and kind of practice on the responses.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **AGE (n/%)** | | | | | **GENDER (n/%)** | | | **YEARS OF PRACTICE (n/%)** | | | | | **KIND OF PRACTICE (n/%)** | | | | | | | | | | |
|  |  | **20-30** | **31-40** | **41-50** | **51-over** | **p** | **Male** | **Female** | **p** | **0-10** | **11-20** | **21-30** | **31-over** | **p** | **General**  **practıtıoner** | **Specıalıst** | **p** | **Private** | **Public** | **Private**  **and public** | **p** | **Solo** | **Group**  **practıce** | **University**  **member** | **p** |
| **Q1** | Yes | 70.1 | 67.5 | 63.5 | 69.8 | 0.394 | 71.0 | 65.1 | 0.06 | 72.2 | 65 | 64.5 | 63.8 | 0.13 | 60.6 | 79.3 | **0.001** | 63.1 | 81.1 | 80 | **0.001** | 54 | 73.6 | 84.5 | **0.001** |
| No | 29.9 | 34.3 | 36.5 | 30.2 | 29.0 | 34.9 | 27.8 | 35 | 35.5 | 36.2 | 39.4 | 20.7 | 36.9 | 18.9 | 20 | 46.0 | 26.4 | 15.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q2** | I read them in dental journals | 25.9 | 30.7 | 29.7 | 33.7 | 0.418 | 33.6 | 23.8 | 0.86 | 28.1 | 32.1 | 30.9 | 33.9 | 0.606 | 30 | 31.5 | 0.658 | 28.9 | 38.5 | 30 | 0.102 | 27.1 | 33.1 | 34.5 | 0.154 |
| I read them on web sites of specialization organizations | 23.8 | 19.7 | 17.8 | 14.3 | 0.108 | 21.7 | 16.7 | 0.55 | 24.4 | 18.8 | 14.5 | 11.8 | **0.004** | 18.4 | 18.4 | 0.980 | 17.9 | 23 | 20 | 0.393 | 11.2 | 23.2 | 27 | **0.000** |
| I use search engines to find them. | 17.7 | 11.7 | 14.6 | 8.5 | 0.38 | 14.3 | 10.8 | 0.115 | 15.4 | 13.2 | 10.9 | 6.3 | 0.54 | 11.3 | 14.4 | 0.173 | 11.2 | 14.8 | 18.9 | 0.080 | 5.9 | 12.6 | 26.4 | **0.000** |
| My National Dental Organization sends me information about them. | 19 | 15.7 | 16.9 | 26.4 | 0.11 | 22.6 | 16.8 | **0.029** | 17.6 | 17.5 | 23.2 | 20.5 | 0.345 | 20.1 | 18.4 | 0.526 | 20.9 | 4.1 | 27.8 | **0.000** | 21 | 22.9 | 9.8 | **0.003** |
| I learn about them from the continuing education courses which I attend | 32 | 31.4 | 23.7 | 27.5 | 0.209 | 30.2 | 27 | 0.287 | 30.9 | 29.9 | 25.9 | 22.8 | 0.279 | 26.8 | 30.2 | 0.287 | 27.9 | 30.3 | 27.8 | 0.853 | 19.4 | 32.8 | 40.8 | **0.000** |
|  | I learned about them from my Undergraduate dental education | 25.9 | 9.9 | 7.3 | 4.7 | **0.000** | 9.8 | 10.8 | 0.606 | 17.9 | 7.7 | 4.5 | 5.5 | **0.000** | 13.5 | 4.6 | **0.000** | 11.5 | 4.9 | 8.9 | 0.081 | 7.2 | 15.5 | 6.3 | **0.001** |
|  | Other | 2.7 | 1.1 | 2.7 | 2.3 | 0.588 | 2.6 | 1.2 | 0.131 | 1.9 | 1.3 | 2.3 | 2.4 | 0.791 | 1.5 | 2.6 | 0.260 | 1.5 | 4.1 | 3.3 | 0.076 | 2.1 | 1.5 | 2.9 | 0.745 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q3** | Yes | 62.5 | 56.9 | 58 | 60.9 | 0.34 | 62.9 | 57.6 | 0.275 | 63.3 | 58.5 | 57.3 | 55.9 | 0.179 | 54.8 | 68.9 | **0.001** | 56.5 | 68.9 | 70 | **0.019** | 47.9 | 68.3 | 69 | **0.001** |
| No | 17 | 21.9 | 26.5 | 20.9 | 20.2 | 23.1 | 17.3 | 23.9 | 26.4 | 21.3 | 22.9 | 19.4 | 23.1 | 18.9 | 16.7 | 27.8 | 13.8 | 24.7 |
| No idea | 20.4 | 21.2 | 15.5 | 18.2 | 16.9 | 19.3 | 19.4 | 17.5 | 16.4 | 22.8 | 22.4 | 11.7 | 20.5 | 12.3 | 13.3 | 24.3 | 17.9 | 6.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q4** | Always | 25 | 25 | 22.8 | 33.8 | 0.48 | 24.2 | 31.4 | 0.177 | 28.3 | 24.1 | 28.6 | 33.8 | 0.62 | 22.7 | 35.2 | **0.001** | 24.4 | 40.5 | 31.7 | **0.038** | 33.7 | 24.5 | 25.8 | **0.042** |
| Frequently | 58.7 | 57.1 | 64.6 | 53.5 | 60.2 | 55.2 | 58 | 56.9 | 61.1 | 52.1 | 63.2 | 49.8 | 61.4 | 42.9 | 55.6 | 51.9 | 63.9 | 52.5 |
| Sometimes | 13 | 13.5 | 8.7 | 11.5 | 11.7 | 11.2 | 11.7 | 13.1 | 8.7 | 11.3 | 12.1 | 9.9 | 11.3 | 11.9 | 11.1 | 11.6 | 9.4 | 15.8 |
|  | Rare | 3.3 | 3.8 | 3.9 | 1.3 | 3.8 | 1.8 | 2.0 | 5.1 | 1.6 | 2.8 | 1.9 | 4.7 | 2.8 | 3.6 | 1.6 | 2.8 | 1.7 | 5.8 |
|  | Very rare | 0 | 0.6 | 0 | 0 | 0 | 0.4 | 0 | 0.7 | 0 | 0 | 0 | 0.5 | 0 | 1.2 | 0 | 0 | 0.4 | 0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q5** | Yes | 83 | 74.8 | 74.4 | 80.2 | 0.102 | 80.0 | 76.7 | 0.141 | 75.9 | 77.4 | 81.4 | 77.2 | 0.203 | 79 | 75.1 | 0.265 | 74.9 | 89.3 | 83.3 | **0.004** | 73 | 82.4 | 79.3 | **0.042** |
| No | 1.4 | 1.5 | 3.2 | 3.5 | 3.1 | 1.9 | 1.5 | 1.7 | 3.6 | 3.9 | 1.9 | 3.2 | 2.9 | 0 | 2.2 | 2.6 | 2.3 | 2.3 |
| No idea | 15.6 | 23.7 | 22.4 | 16.3 | 16.9 | 21.4 | 22.5 | 20.9 | 15 | 18.9 | 19.1 | 21.7 | 22.2 | 10.7 | 14.4 | 24.3 | 15.2 | 18.4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q6** | They can improve the accuracy of diagnosis. | 10.9 | 14.2 | 20.5 | 36.8 | **0.000** | 24 | 20.6 | 0.212 | 15.4 | 16.7 | 27.3 | 39.4 | **0.000** | 18.9 | 28.2 | **0.002** | 21.9 | 23 | 21.1 | 0.947 | 23.4 | 20.8 | 24.7 | 0.619 |
| They can improve the clinical treatment plan. | 28.6 | 33.2 | 38.4 | 41.1 | **0.049** | 39 | 33.5 | 0.82 | 33.6 | 31.2 | 40.5 | 42.5 | 0.061 | 29.9 | 47.9 | **0.000** | 32.7 | 49.2 | 41.1 | **0.001** | 33.5 | 32.6 | 50.6 | **0.000** |
| They can decrease the time necessary for the diagnostic process. | 8.2 | 7.7 | 18.3 | 16.7 | **0.000** | 13.8 | 12.5 | 0.553 | 9.6 | 9.4 | 17.7 | 18.9 | **0.002** | 10.1 | 18.7 | **0.000** | 12.9 | 18.9 | 5.6 | **0.017** | 12.5 | 10.3 | 19 | **0.043** |
|  | They can decrease treatment complications. | 24.5 | 19.3 | 26.9 | 30.2 | **0.031** | 28.1 | 23.1 | 0.084 | 24.7 | 22.2 | 27.3 | 28.3 | 0.510 | 19.8 | 35.1 | **0.000** | 24.4 | 35.2 | 17.8 | **0.009** | 23.4 | 23.8 | 31.6 | **0.013** |
|  | They can improve the outcome of treatment. | 25.2 | 28.1 | 25.1 | 33.3 | 0.171 | 35 | 23.7 | **0.000** | 25.9 | 29.9 | 28.6 | 33.1 | 0.462 | 24.6 | 37.4 | **0.000** | 25.1 | 41.8 | 37.8 | **0.000** | 25.8 | 29.6 | 36.8 | 0.051 |
|  | Other | 2 | 2.2 | 2.3 | 1.6 | 0.939 | 2.6 | 1.5 | 0.213 | 2.2 | 0.9 | 3.6 | 0.8 | 0.159 | 1.2 | 3.3 | **0.031** | 1.9 | 2.5 | 2.2 | 0.767 | 1.3 | 2.9 | 1.7 | 0.362 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q7** | Dentists | 39.5 | 40.5 | 52.1 | 57.4 | **0.000** | 50.2 | 47 | 0.330 | 41.7 | 44.4 | 57.3 | 58.3 | **0.000** | 39.6 | 65.6 | **0.000** | 45.4 | 73.8 | 28.9 | **0.000** | 49.5 | 44.9 | 57.5 | **0.026** |
| Patients | 46.3 | 51.8 | 43.8 | 48.1 | 0.347 | 56.7 | 40.7 | **0.000** | 47.2 | 53.4 | 47.3 | 40.9 | 0.144 | 44.4 | 55.4 | **0.002** | 48.6 | 46.7 | 44.4 | 0.726 | 41.2 | 51.3 | 56.9 | **0.001** |
| Public | 8.2 | 9.5 | 15.5 | 14.7 | **0.048** | 11.7 | 12.9 | 0.577 | 12 | 9.4 | 10.5 | 21.3 | **0.007** | 10.2 | 16.1 | **0.013** | 11.9 | 11.5 | 14.4 | 0.765 | 14.6 | 7.3 | 17.8 | **0.002** |
| Dental profession | 15 | 16.1 | 18.3 | 24.8 | **0.031** | 21.7 | 16.8 | 0.066 | 15.1 | 16.7 | 28.6 | 15 | **0.000** | 17.6 | 21.6 | 0.150 | 16.1 | 24.6 | 33.3 | **0.000** | 17 | 19.4 | 23 | **0.011** |
| Other | 0.7 | 1.1 | 2.3 | 2.3 | 0.377 | 2.6 | 1 | 0.073 | 0.9 | 0.4 | 1.6 | 1.6 | **0.011** | 1.4 | 1.7 | 0.410 | 1.5 | 2.5 | 3.3 | 0.212 | 2.1 | 2.1 | 0.6 | 0.477 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q8** | Yes | 44.6 | 32.7 | 35.5 | 32 | 0.076 | 35.3 | 36.6 | 0.821 | 41.4 | 34.2 | 37.1 | 20.5 | **0.003** | 34.9 | 36.6 | **0.024** | 34.4 | 42.5 | 34.9 | 0.413 | 30.1 | 44.2 | 31.3 | **0.001** |
| No | 28.8 | 30.7 | 32.5 | 27.5 | 29.2 | 29.9 | 30.2 | 28.8 | 26.3 | 35.9 | 27.3 | 34.2 | 29.8 | 28.3 | 33.7 | 27.8 | 26.8 | 39.8 |
| No idea | 26.6 | 36.7 | 32 | 40.6 | 35.5 | 33.5 | 28.5 | 37 | 36.6 | 43.6 | 37.8 | 29.2 | 35.8 | 29.2 | 31.4 | 42 | 29 | 28.9 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q9** | Lack of time | 12.9 | 13.1 | 13.7 | 12.4 | 0.981 | 11 | 15.6 | **0.042** | 13.9 | 13.7 | 14.5 | 9.4 | 0.564 | 8.2 | 22.6 | **0.000** | 10.4 | 31.1 | 11.1 | **0.000** | 10.6 | 15.5 | 16.1 | 0.138 |
| Lack of awareness on clinical guidelines | 23.8 | 29.9 | 29.7 | 31 | 0.463 | 29.3 | 28.9 | 0.898 | 25.9 | 26.9 | 30.5 | 38.6 | **0.049** | 24.4 | 37 | **0.000** | 25.3 | 49.2 | 28.9 | **0.000** | 27.9 | 25.5 | 39.1 | **0.001** |
| Lack of practical ways to reach to clinical guidelines | 15 | 11.7 | 11.9 | 7.4 | 0.105 | 11.4 | 10.4 | 0.619 | 13.3 | 11.5 | 9.1 | 7.1 | 0.203 | 9.7 | 12.5 | 0.210 | 8.4 | 26.2 | 11.1 | **0.000** | 9.6 | 11.7 | 14.4 | 0.382 |
|  | Limited guidelines available in the dental field | 8.8 | 10.2 | 12.8 | 9.3 | 0.558 | 11.4 | 9.4 | 0.308 | 9.9 | 12 | 8.6 | 11 | 0.682 | 6.3 | 16.7 | **0.000** | 8.6 | 19.7 | 8.9 | **0.001** | 5.9 | 10.3 | 20.7 | **0.000** |
|  | Lack of evidence-based clinical guidelines for dental care | 6.8 | 8 | 7.8 | 7.4 | 0.972 | 7.1 | 8.1 | 0.587 | 7.4 | 9.4 | 6.8 | 7.1 | 0.731 | 6.7 | 9.5 | 0.128 | 5.5 | 13.1 | 13.3 | **0.001** | 7.4 | 5.9 | 12.6 | 0.054 |
|  | Clinical guidelines being perceived as restricting the ‘clinical freedom of dentists’ | 3.4 | 5.5 | 5.9 | 5.4 | 0.738 | 6.7 | 4 | 0.067 | 5.6 | 2.6 | 6.8 | 6.3 | 0.182 | 3.1 | 9.2 | **0.000** | 4.2 | 8.2 | 8.9 | **0.048** | 4.3 | 3.8 | 10.3 | **0.010** |
|  | Lack of consensus/agreement regardingcertain aspects ofthe available guidelines | 2 | 5.1 | 4.6 | 3.1 | 0.373 | 6 | 2.5 | **0.009** | 4.6 | 3.4 | 4.1 | 3.1 | 0.853 | 3.2 | 5.9 | **0.059** | 3.3 | 7.4 | 6.7 | 0.059 | 3.2 | 5 | 4.6 | 0.650 |
|  | Limited knowledge regarding the reliability of the methods used for developing guidelines | 4.8 | 1.1 | 3.2 | 5 | 0.057 | 2.9 | 4 | 0.369 | 3.4 | 1.7 | 4.5 | 4.7 | 0.312 | 2.6 | 5.2 | **0.038** | 2.6 | 6.6 | 3.3 | 0.076 | 2.9 | 2.9 | 6.3 | 0.192 |
|  | Limited knowledge regarding the reliability of the guideline development group/body | 2.7 | 2.2 | 4.1 | 2.3 | 0.576 | 3.8 | 2.1 | 0.122 | 2.2 | 3.8 | 2.3 | 3.9 | 0.535 | 2.7 | 3.3 | 0.645 | 2.9 | 3.3 | 1.1 | 0.639 | 2.4 | 4.1 | 1.7 | 0.391 |
|  | Lack of confidence regarding competing interests of guideline development group members | 2 | 2.2 | 1.8 | 4.7 | 0.193 | 2.9 | 2.9 | 0.962 | 1.9 | 2.1 | 4.5 | 3.9 | 0.223 | 2.4 | 3.6 | 0.296 | 2.3 | 4.9 | 5.6 | 0.080 | 4 | 2.6 | 1.7 | 0.488 |
|  | Limited knowledge regarding the regular update of the guidelines when new evidence becomes available | 6.1 | 5.5 | 7.8 | 5.4 | 0.696 | 7.6 | 4.8 | 0.076 | 6.2 | 6.4 | 6.8 | 3.9 | 0.734 | 6 | 6.6 | 0.731 | 6.1 | 7.4 | 6.1 | 0.678 | 6.1 | 7 | 5.2 | 0.838 |
|  | Lack of specific and unambiguous recommendations in the guideline | 4.1 | 1.8 | 3.2 | 6.6 | **0.038** | 5.2 | 3.3 | 0.154 | 4 | 0.9 | 6.3 | 6.3 | **0.013** | 3.4 | 5.6 | 0.125 | 3.3 | 10.7 | 2.2 | **0.001** | 4 | 4.4 | 4 | 0.982 |
|  | Other | 0.7 | 0 | 1.4 | 1.6 | 0.152 | 0.7 | 1 | 0.730 | 0.3 | 0 | 1.8 | 2.4 | **0.018** | 0.5 | 1.6 | 0.131 | 1 | 0 | 1.1 | 0.681 | 1.3 | 0.9 | 0 | 0.496 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q10** | Yes | 46.9 | 46.7 | 55.3 | 65.1 | **0.001** | 61.4 | 48.2 | **0.001** | 46.9 | 51.7 | 61.4 | 63 | **0.002** | 47.6 | 66.3 | **0.001** | 51.1 | 58.2 | 71.1 | **0.004** | 51.6 | 46.9 | 73.6 | **0.001** |
|  | No | 2.7 | 6.9 | 7.3 | 2.7 | 5.7 | 4.4 | 6.5 | 6.4 | 1.8 | 4.7 | 4.8 | 5.8 | 6 | 2.5 | 2.2 | 2.4 | 5.3 | 10.3 |
|  | No idea | 50.3 | 46.4 | 37.4 | 32.2 | 32.9 | 47.4 | 46.6 | 41.9 | 36.8 | 32.3 | 47.6 | 27.8 | 43 | 39.3 | 26.7 | 46 | 47.8 | 16.1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q11** | Creating a general awareness on clinical guidelines | 24.5 | 24.5 | 32 | 38.8 | **0.001** | 33.8 | 27.2 | 0.032 | 26.2 | 29.1 | 33.6 | 36.2 | 0.113 | 22.9 | 44.3 | **0.000** | 26.9 | 41 | 37.8 | **0.002** | 28.7 | 27.6 | 42 | **0.004** |
|  | Developing evidence-based clinical guidelines | 20.4 | 21.2 | 19.6 | 24.8 | 0.531 | 24.5 | 19.3 | 0.060 | 18.2 | 23.1 | 22.7 | 25.2 | 0.303 | 19.5 | 25.2 | **0.046** | 19.3 | 29.5 | 27.8 | **0.013** | 18.6 | 21.1 | 29.7 | **0.002** |
|  | Developing various evidence based-clinical decision support systems including clinical guidelines | 14.3 | 14.6 | 19.2 | 17.8 | 0.441 | 21.9 | 12.1 | **0.000** | 14.2 | 14.1 | 20 | 20.5 | 0.130 | 16.2 | 17 | 0.749 | 16.7 | 9.8 | 25.6 | **0.010** | 17.8 | 12 | 21.8 | **0.000** |
|  | Informing dentists about available clinical guidelines | 25.2 | 28.1 | 21 | 26.4 | 0.332 | 31 | 20.4 | **0.000** | 25 | 26.5 | 23.6 | 26.8 | 0.883 | 20.5 | 33.1 | **0.000** | 23.2 | 35.2 | 24.4 | **0.018** | 19.7 | 23.5 | 40.2 | **0.000** |
|  | Informing dentists about updated clinical guidelines | 24.5 | 23.4 | 21.9 | 31 | 0.096 | 30 | 21.4 | **0.003** | 23.1 | 21.8 | 33.2 | 23.6 | **0.021** | 21.3 | 32.5 | **0.000** | 23.1 | 29.5 | 34.4 | **0.030** | 20.2 | 27.3 | 32.2 | **0.012** |
|  | Attempts to overcome the barriers to implementation of clinical guidelines into practice | 10.2 | 5.5 | 10.5 | 9.3 | 0.167 | 11 | 6.7 | **0.022** | 8 | 6.4 | 10.5 | 10.2 | 0.395 | 6.5 | 11.5 | **0.012** | 7.7 | 11.5 | 12.2 | 0.175 | 7.7 | 10.3 | 8 | 0.441 |
|  | Others | 1.4 | 0.4 | 0 | 0.4 | 0.274 | 0.2 | 0.4 | 0.628 | 0.9 | 0 | 0 | 0.8 | 0.264 | 0.7 | 0 | **0.010** | 0.6 | 0 | 0 | 1 | 0.3 | 0.9 | 0 | 0.428 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q12** | Yes | 79.6 | 76.6 | 79.5 | 79.8 | **0.027** | 82.1 | 75.9 | 0.071 | 75.6 | 79.9 | 82.7 | 76.4 | 0.101 | 78.3 | 79.3 | **0.004** | 77.6 | 79.5 | 85.6 | 0.054 | 77.5 | 78.3 | 83.9 | **0.004** |
|  | No | 0 | 3.3 | 3.2 | 6.2 | 3.1 | 4.0 | 2.8 | 3.4 | 2.7 | 7.1 | 2.2 | 6.1 | 4.1 | 0 | 4.4 | 3.7 | 1.8 | 6.3 |
|  | No idea | 20.4 | 20.1 | 17.4 | 14 | 14.8 | 20.2 | 21.6 | 16.7 | 14.5 | 16.5 | 19.5 | 14.6 | 18.3 | 20.5 | 10 | 18.8 | 19.9 | 9.8 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q13** | Universities | 32 | 32.8 | 37.4 | 38 | 0.442 | 40.5 | 31 | **0.003** | 33.3 | 38.9 | 33.6 | 36.2 | 0.535 | 29 | 47.2 | **0.000** | 33.2 | 42.6 | 40 | 0.081 | 32.5 | 28.7 | 55.7 | **0.000** |
|  | National Dental Associations | 25.9 | 27.4 | 27.4 | 33.7 | 0.248 | 32.9 | 25.6 | **0.016** | 26.9 | 25.6 | 30.5 | 37 | 0.102 | 24.9 | 36.9 | **0.000** | 28.4 | 21.3 | 38.9 | **0.020** | 29.9 | 21.7 | 42 | **0.000** |
|  | Scientific communities | 17.7 | 20.1 | 25.6 | 32.6 | **0.001** | 26.4 | 22.5 | 0. 651 | 17.9 | 23.9 | 32.3 | 29.9 | **0.001** | 20.8 | 31.7 | **0.000** | 25 | 23 | 22 | 0.783 | 25.4 | 20.5 | 29.9 | 0.055 |
|  | Expert people | 11.6 | 11.7 | 15.1 | 18.6 | 0.096 | 17.9 | 11.6 | **0.008** | 10.2 | 16.7 | 20.9 | 11 | **0.003** | 9.4 | 24.3 | **0.000** | 12.9 | 20.5 | 18.9 | **0.043** | 13.2 | 14.4 | 19 | 0.203 |
|  | Joint activity of various dental bodies | 20.4 | 20.8 | 24.7 | 27.1 | 0.267 | 24.8 | 23.1 | 0.554 | 22.2 | 21.8 | 26.8 | 27.6 | 0.388 | 21.8 | 27.5 | 0.058 | 19.6 | 43.4 | 27.8 | **0.000** | 23.5 | 27.6 | 17.2 | **0.033** |
|  | Other | 2 | 1.8 | 3.7 | 1.9 | 0.530 | 2.6 | 2.1 | 0.592 | 1.9 | 1.3 | 3.6 | 2.4 | 0.360 | 2.2 | 2.3 | 0.964 | 2.5 | 2.5 | 1.1 | 0.721 | 2.4 | 2.9 | 1.1 | 0.450 |
|  | No idea | 1.4 | 0.7 | 1.4 | 2.7 | 0.314 | 1 | 2.1 | 0.173 | 0.6 | 1.3 | 2.7 | 2.4 | 0.211 | 1.4 | 1.9 | 0.344 | 1.6 | 1.6 | 1.1 | 0.937 | 2.4 | 0.9 | 1.1 | 0.239 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q14** | Yes | 79.6 | 77.4 | 80.8 | 84.9 | 0.365 | 83.8 | 78.6 | 0.083 | 78.4 | 80.8 | 83.2 | 82.7 | 0.785 | 80.5 | 80.6 | **0.001** | 79.7 | 83.6 | 86.7 | 0.077 | 80.7 | 79.8 | 84.5 | **0.002** |
|  | No | 2.7 | 2.6 | 3.7 | 2.7 | 1.9 | 3.7 | 2.8 | 2.6 | 3.2 | 3.1 | 1.4 | 5.8 | 2.6 | 2.5 | 5.6 | 3.4 | 0.9 | 5.7 |
|  | No idea | 17.7 | 20.1 | 15.5 | 12.4 | 14.3 | 17.7 | 18.8 | 16.7 | 13.6 | 14.2 | 18.1 | 13.6 | 17.7 | 13.9 | 7.8 | 15.9 | 19.4 | 9.8 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q15** | Up to 2 years | 16.3 | 22.6 | 24.7 | 32.2 | **0.009** | 31.0 | 19.3 | **0.001** | 18.8 | 27.8 | 28.2 | 28.3 | **0.004** | 20.1 | 33.7 | **0.001** | 24.2 | 24.6 | 27.8 | **0.001** | 30.4 | 20.5 | 20.7 | **0.001** |
|  | Up to 5 years | 14.3 | 17.5 | 20.5 | 17.1 | 15.7 | 18.3 | 13 | 17.5 | 20.9 | 18.9 | 13.8 | 22.7 | 13.6 | 27 | 27.8 | 16.7 | 16.4 | 19.5 |
|  | Until new evidence becomes available | 53.7 | 44.5 | 39.7 | 37.6 | 41.7 | 43.5 | 51.5 | 37.2 | 38.2 | 37.8 | 46.2 | 36.2 | 44.1 | 36.9 | 40 | 34.1 | 46.9 | 53.4 |
|  | No idea | 15.6 | 17.9 | 15.1 | 13.2 | 11.7 | 18.9 | 16.7 | 17.5 | 12.7 | 15 | 19.8 | 7.4 | 18 | 11.5 | 4.4 | 18.8 | 16.1 | 6.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q16** | Every 2 years | 25.2 | 21.2 | 21.9 | 19.8 | 0.876 | 21.9 | 21.2 | **0.001** | 21 | 23.5 | 21.8 | 19.7 | 0.466 | 22 | 21 | **0.001** | 22.4 | 19.7 | 17.8 | **0.001** | 24.3 | 22.3 | 14.9 | **0.001** |
|  | Every 5 years | 13.6 | 16.8 | 18.7 | 18.2 | 13.6 | 20.8 | 14.2 | 19.7 | 16.8 | 22 | 15.5 | 20.4 | 13.6 | 29.5 | 26.7 | 17.7 | 16.7 | 18.4 |
|  | When new evidence becomes available | 46.3 | 44.9 | 43.4 | 48.1 | 52.9 | 39.1 | 48.8 | 39.7 | 47.7 | 42.5 | 43 | 50.2 | 46.7 | 36.9 | 48.9 | 39.4 | 44.9 | 59.8 |
|  | No idea | 15.0 | 17.2 | 16.0 | 14.0 | 11.7 | 18.9 | 16 | 17.1 | 13.6 | 15.7 | 19.5 | 8.4 | 17.3 | 13.9 | 6.7 | 18.5 | 16.1 | 6.9 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* Difference is statistically significant (p<o.o5) n.a: statistical comparison was not applicable because of low response rate

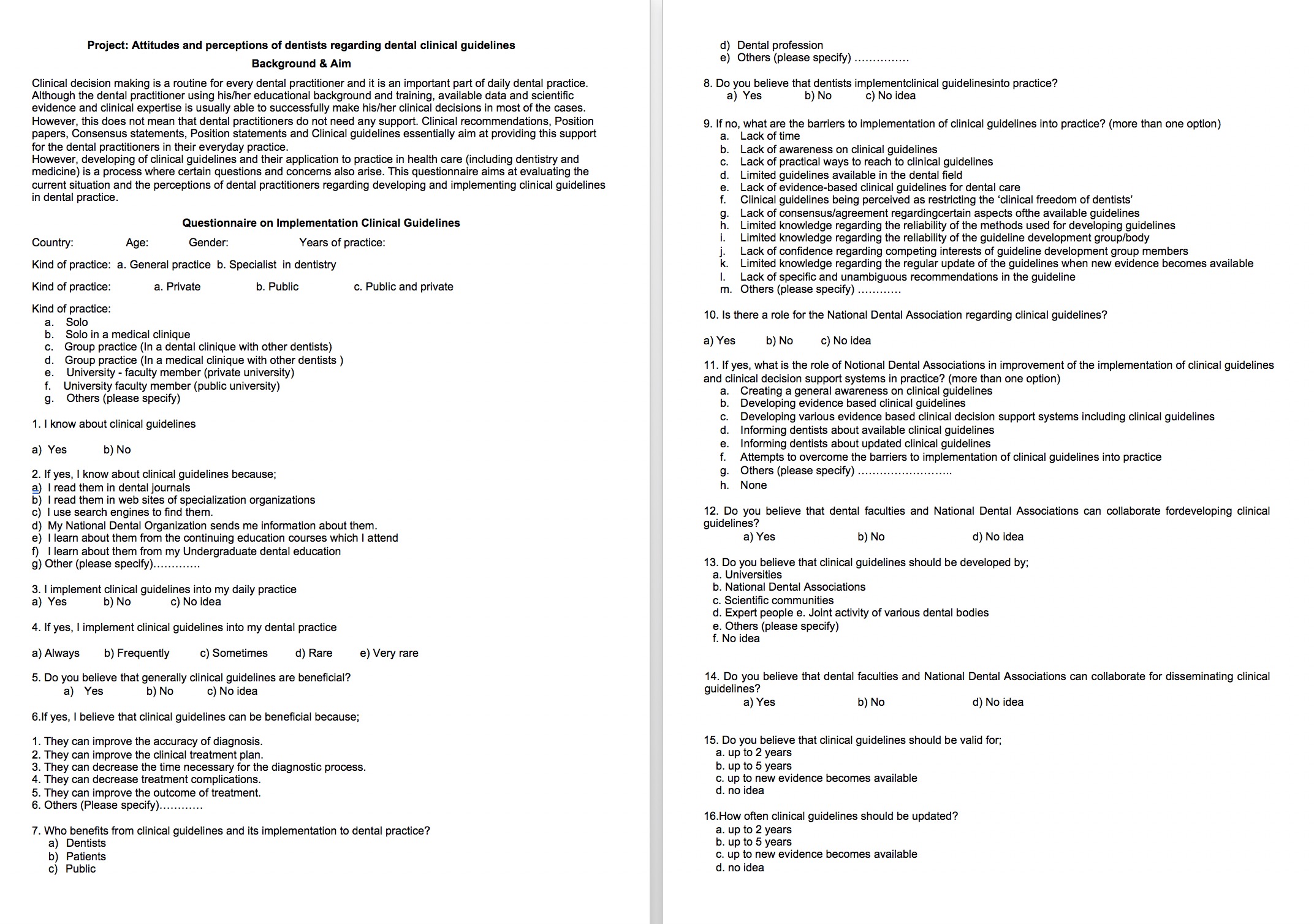
Figure 1

Figure 2

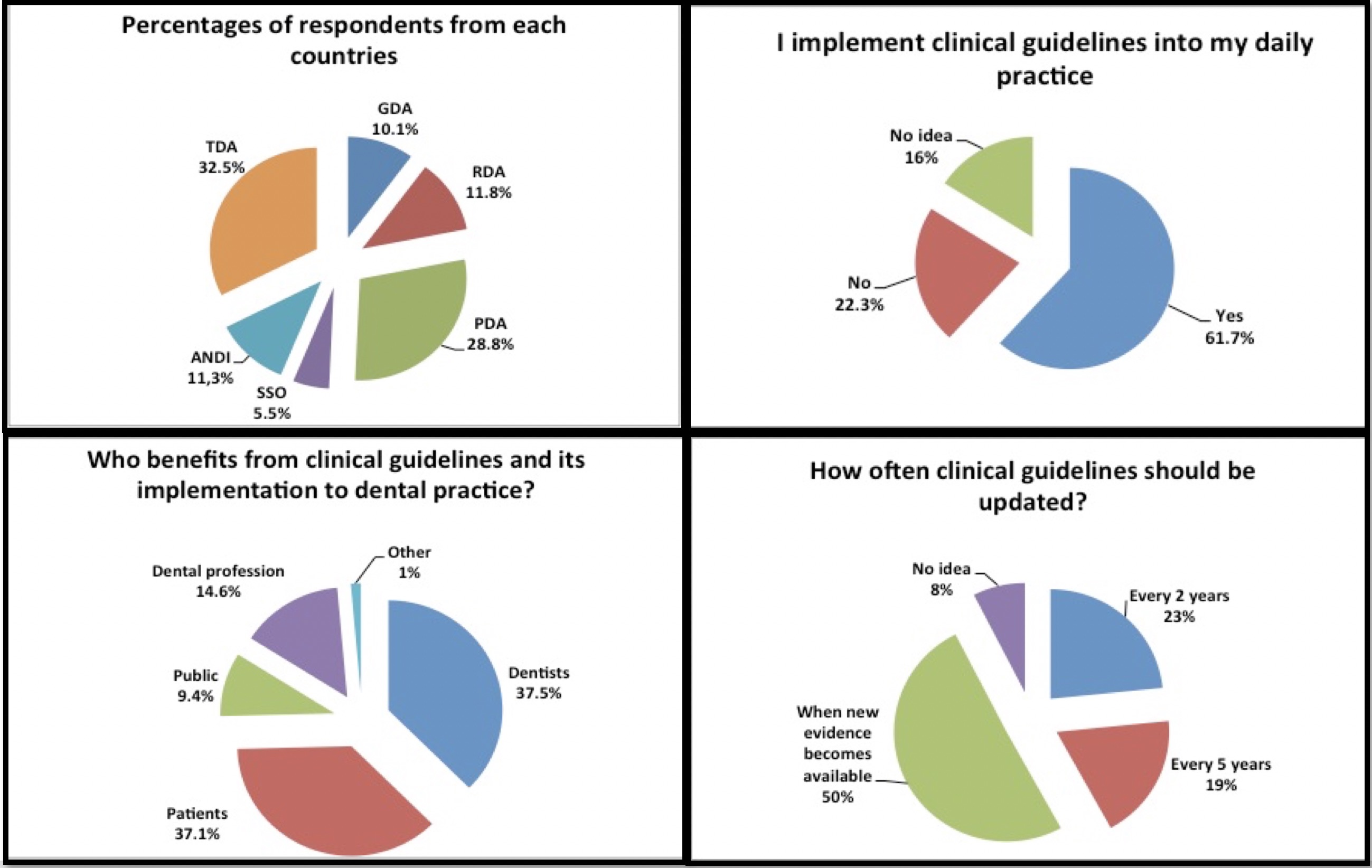


Figure 3

