



From Class Room to Career: Perception & Satisfaction towards Undergraduate Dental Education among Dental Alumni and its Impact on Specialties Preference - Faculty Based Cross sectional study 2022 – 2023

Motaz Ibrahim Suliman^{1,2*}, Tibyan Ibrahim Altahir³, kholisa Abdo Zaroug⁴, Eman Ahmed Hassan⁵, Amer Alrashed Mohamed⁶, Mohamed Adil Merghani⁷, Alaa Abuelgasim M Ibrahim⁸

¹Lecturer & HOD in Community Dentistry Department, College of Oral and Dental Medicine at Karary University. Omdurman, Sudan.

²Lecturer, Dental Department, Kampala International University. Ishaka, Bushenyi, Uganda.

^{3,4,5,6,7}College of Oral and Dental Medicine, Karary University. Omdurman, Sudan.

⁸Dean, College of Oral and Dental Medicine, Karary University. Omdurman, Sudan.

⁸Educational Development Center (EDC), Sudan Medical Specialization Board (SMSB).

DOI: <https://doi.org/10.68050/JAMS.2026.402>

Received: 06 Sept 2026; Accepted: 07 Sept 2026; Published: 10 September 2026

ABSTRACT

Title: From Classroom to Career: Perception and Satisfaction Towards Undergraduate Dental Education Among Dental Alumni and its impact on specialties preference.

Background: Dental education plays a critical role in shaping the skills and competencies of future dentists. However, the effectiveness of this education in preparing students for real-world challenges varies, particularly in regions where resources and opportunities are limited. In Sudan, dental professionals face considerable challenges, including economic instability, insufficient training resources, and governance issues, which impact career satisfaction. This study aims to assess the perceptions and satisfaction of Karary University dental alumni regarding their undergraduate education, focusing on the curriculum, clinical training, and professional readiness.

Methods: A cross-sectional institutional-based study was conducted with dental alumni from Karary University's College of Oral and Dental Medicine. The study involved 162 alumni from seven graduating batches, using a self-administered online questionnaire. The questionnaire covered demographic information, perceptions of dental education, professional satisfaction, and challenges faced in the workforce. Data were analyzed using SPSS, employing descriptive statistics and chi-square tests to examine significant relationships between variables.

Results: The majority of participants (51.9%) reported considering a career shift, with financial stress and loss of interest as the primary reasons. Despite this, 74.7% of respondents felt they had better competence compared to graduates from other universities, with a strong emphasis on clinical competence. However, only 29% were satisfied with the research-based education they received, highlighting an area for improvement. The study also found a significant correlation between satisfaction with research education and graduating batch ($p = 0.05$), suggesting improvements in the curriculum over time. Additionally, 69.8% of participants believed their education prepared them well for professional practice, though dissatisfaction with lecture rooms and clinical facilities was noted by 24.7% of respondents.

Conclusion: While Karary University's dental alumni generally feel confident in their clinical training and



professional competence, key areas for improvement remain, particularly in research education and infrastructure. Addressing these gaps, alongside providing financial and career development support, can enhance the satisfaction and career trajectories of future graduates. By investing in these areas, Karary University can better prepare its dental students for the professional challenges ahead, ultimately contributing to the broader advancement of oral health care in Sudan.

Keywords: Dental education, Alumni satisfaction, Clinical competence, Research-based education, Career shift, Karary University, Sudan.

INTRODUCTION

Dental education plays a pivotal role in training future dentists to address the diverse oral health needs of individuals and communities. It encompasses the essential skills required for the prevention, diagnosis, and treatment of oral diseases, ensuring that graduates can meet the increasing demands of patients and public health. Conversely, dentistry is a professional field that not only focuses on dental care but also involves correctional practices ⁽¹⁾. However, this profession is often characterized by high levels of stress and burnout, which significantly influence job satisfaction among practitioners. Key factors affecting this satisfaction include curriculum design, infrastructure, and the opportunities available during training ⁽²⁾. In Sudan, a staggering 75% of dentists report dissatisfaction with their careers, with inadequate basic training cited as a primary concern. Additional challenges within the Sudanese dental profession include governance issues, varying quality of training, and a lack of evidence-based and community-oriented practices. Research indicates that dental students frequently feel they have received insufficient practical training ⁽³⁾.

Several studies provide valuable insights into perceptions of undergraduate dental education. For instance, a 2011 study by Bengmark in Malmö, Sweden, highlighted that graduates from Malmö University's problem-based dental education rated their professional satisfaction highly, with 90% scoring above six on a visual analogue scale. Respondents emphasized the importance of holistic principles and clinical integration during their training ⁽⁴⁾. In contrast, research conducted by Aljazi et al. in Saudi Arabia in 2018 revealed a mixed picture of satisfaction among dental interns. While many thrived in clinical settings such as the Operative Department, 15.5% expressed dissatisfaction with their research skills, indicating a desire for improvement ⁽⁵⁾. In England, a survey of dentists indicated overall good job satisfaction; however, stress levels raised concerns about long-term happiness in the profession, particularly among those practicing in rural areas. The quest for work-life balance emerged as a crucial theme amidst these challenges ⁽⁶⁾. In 2021 a study by Molina-Hernández et al. investigated the relationship between work environment, job satisfaction, and burnout among dentists in Spain. The study found that while most dentists reported high job satisfaction, burnout remained a concern for 3.8% of participants. Importantly, dentists with more years of experience and longer working hours showed higher levels of job satisfaction, highlighting the role of professional experience in mitigating burnout ⁽²⁾.

In Sudan, there is limited research evaluating undergraduate dental education; however, Dr. Nazik Nurelhuda conducted a study documenting significant challenges faced by the dental profession due to political and economic instability, civil wars, and corruption. These issues impact all levels of the profession—from students to practicing dentists—leading to widespread frustration. Specific challenges include inadequate regulation of dental practices and insufficient educational resources ⁽⁷⁾. Yet, no local study has effectively demonstrated how the undergraduate period influences dentists' professional careers or their perceptions of this critical phase in their development. Together, these studies illuminate the complex relationship between dental education and job satisfaction. They reveal how experiences, challenges, and aspirations intertwine to shape the future of the dental profession.

This study specifically evaluates the experiences of seven graduating cohorts from Karary University, investigating the perceptions and satisfaction levels of dental alumni regarding their undergraduate education. Notably, the curriculum was updated in 2017 and has since undergone several revisions. This variability may impact career satisfaction and opportunities for alumni alongside their judgment toward undergraduate period.

METHODOLOGY

Study Design and Area

This descriptive, cross-sectional, institutional-based study was conducted at the College of Oral and Dental Medicine at Karary University in Sudan. Established in 1996 as a government institution with a military background, Karary University comprises various medical colleges. The first cohort of dental students graduated in 2015, and by 2022, a total of seven batches had completed their studies. The university hosts a diverse student body that includes both military and civilian students, providing a unique context for evaluating alumni perceptions and satisfaction.

Sample Size and Stratification

The total population of dental alumni was 449. A sample size of 211 alumni was calculated using a precision formula to ensure statistical validity. A stratified random sampling technique was employed to ensure representation across key demographics, including military versus civilian backgrounds and male versus female alumni, as well as across different graduating batches.

Below is the table describing the stratification and selection process:

Sample was collected using Yamane formula: $n = N / 1 + N(e)^2$

Data Collection plan

Data were collected using a self-administered questionnaire adapted from previous research conducted by Bengmark, Nilner, & Rohlin ⁽⁴⁾. The questionnaire was modified to include additional variables pertinent to this study. The customized English version of the adapted questionnaire is provided as a supplementary file (Additional file 1), it consisted of the following sections:

- **Demographic Information:** This section aimed to gather essential data on participants' gender, batch number, and military or civilian background.
- **Assessment of career status:** This section captured alumni's academic qualifications, preferred specialties, current job type and sector, workplace location, and factors influencing career shifts. Collecting this information allowed us to explore the relationship between alumni's professional trajectories and their perceptions regarding the undergraduate dental curriculum.
- **Perception toward Dental Education:** This section measured alumni perspectives on how well their education prepared them for professional practice, the challenges they faced in their careers, and their overall job satisfaction.
- The questionnaire was distributed online via Google Forms to facilitate easy access for all alumni and encourage higher response rates.
- **Satisfaction of dental Alumni:** This part focused on evaluating alumni satisfaction with various aspects of their dental education, including the curriculum, facilities, and faculty support

Data Management and Analysis Plan

Prior to data collection, coding was established to ensure consistency in responses. All data were entered into SPSS (version 26) for analysis. The data management process included:

1. *Descriptive Statistics:* Frequencies were calculated and presented in both tabular and graphical formats to summarize demographic characteristics and responses.
2. *Mean Scores:* Overall satisfaction levels were assessed by calculating mean scores for various aspects of the dental education experience.
3. *Association Testing:* Chi-square tests were conducted to explore associations between alumni satisfaction



and perceptions with key variables such as military/civilian status and gender.

4. *Statistical Significance*: A significance level of 0.05 and a 95% confidence interval were applied in all statistical tests to determine the relevance of findings.

Ethical Considerations

Ethical approval for this study was obtained from the Ethics Committee of the College of Oral and Dental Medicine, Karary University (**EA-129 BDS- B8-G5**) Informed electronic consent was obtained from all participants prior to data collection.

- **Informed Consent**: Participants were fully informed about the objectives of the study before participation. Consent was obtained prior to data collection, ensuring that participants understood their involvement was voluntary and that they could withdraw at any time without any repercussions.

- **Confidentiality**: Participants' identities were kept anonymous throughout the study, with all collected data treated as confidential. No information will be used in future studies without explicit consent from participants.

This methodology aligns with the study's aim to comprehensively evaluate the perceptions and satisfaction levels of dental alumni from Karary University regarding their undergraduate education, thereby contributing valuable insights into the relationship between educational experiences and professional outcomes in dentistry.

THE RESULTS

A total of 162 dental alumni from Karary University participated in this cross-sectional study, with a response rate of 76.4% out of the total sample size of 211. The study involved participants from batches 1 to 7, with the majority being civilian (63%) meanwhile the rest were military alumni, also there were a dominant female's participation with average of (63%), moreover 43% of the participant were fully licensed for dental practice while the others make up more than help of the participants were temporarily registered. The participants' academic performance varied, with 43.2% having a Cumulative Grade Point Average (CGPA) between 3.00 and 3.49. Most participants had graduated within the past two years, and a large proportion (79%) held only a Bachelor of Dental Surgery (BDS) degree as a qualification as shown (Fig 1). A significant number of participants had expressed interest in pursuing postgraduate studies, with some already enrolled in Master's programs, particularly in public health (Fig 2). According to the findings, females participated at the study in a higher rate than males. It also clarifies why 66.7% of participants choose dental school in order to pursue their goal of becoming a dentist while others students have selected dentistry due to family interest or other social factors. Participants gave different explanations for why they selected Karary University's College of Oral and Dental Medicine, with the most common ones being that they chose it because they lived nearby (25.3%), couldn't get into another university (21.1%), or had financial difficulties (24.2%). Regarding current GPAs, 43.2% of participants had an average of 3.00–3.49. This indicates that most participants graduated with good grades.

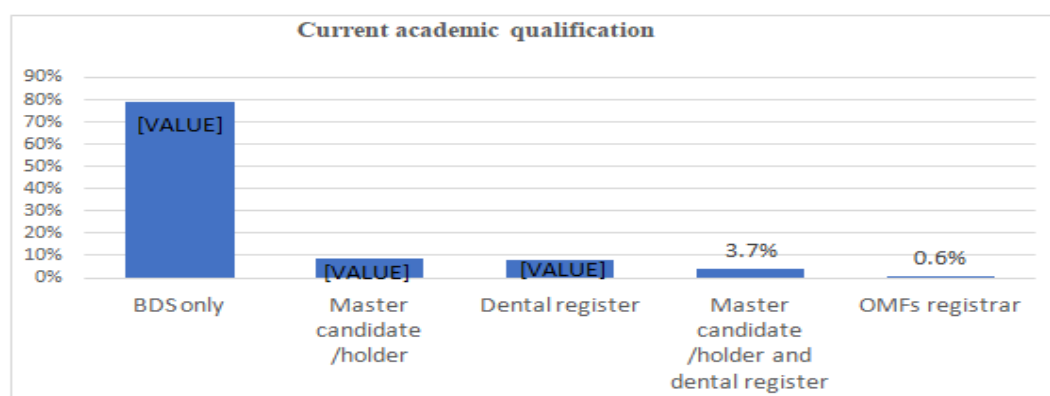


Figure (1) Current academic qualification of participants

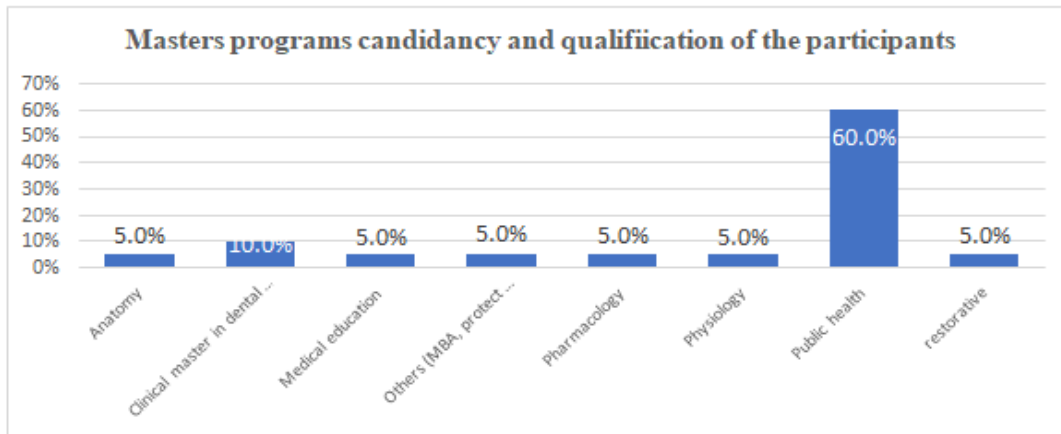


Figure (2) shows different qualifications of the participants

Career Shift Consideration

Approximately 51.9% of participants reported having considered a career shift from dentistry (Fig 3), while Figure 4 is showing the primary reasons. Financial reasons were the most cited factor (35.4%), followed by loss of interest (28.3%). This indicates that many alumni are considering alternate career paths, driven by economic challenges and declining interest in the dental profession.

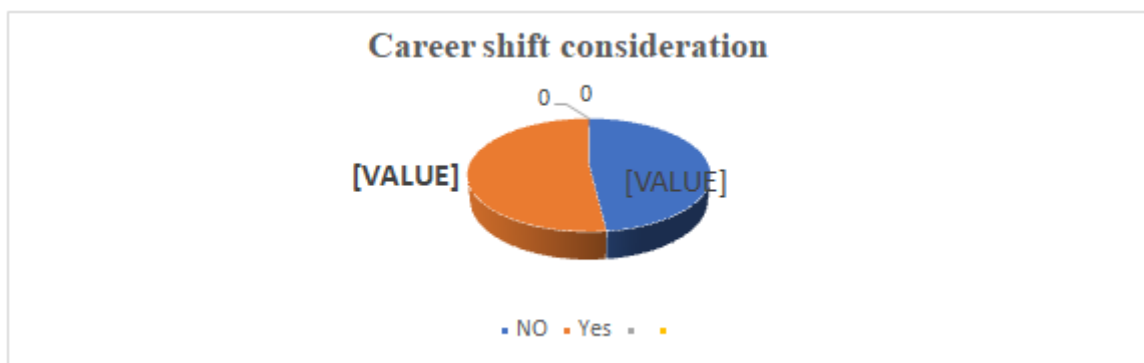


Figure (3) participants considering career shift.

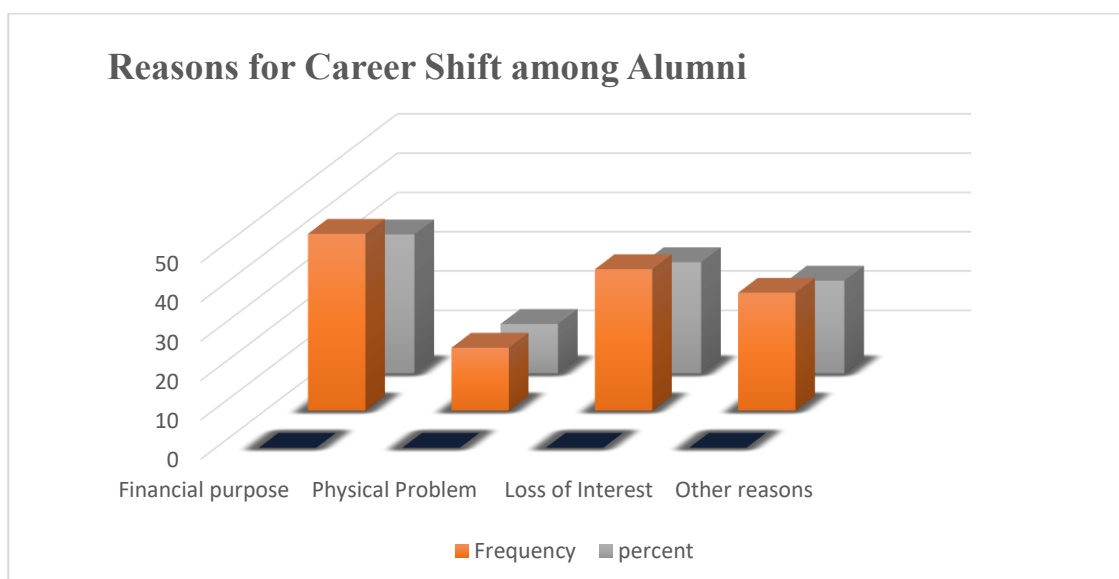


Figure (4) Reasons for career shift Among Alumni

Competence compared to other dental graduates and their judgment of dental education:

The perception of competence was notably positive, with 74.7% of participants (Fig 5) strongly agreeing that they felt more competent compared to graduates from other universities. This self-reported confidence is a strong indicator of satisfaction with Karary University's clinical training. However, as Figure 6 shows, there is room for improvement in the research aspects of the curriculum, with only 29% satisfied with research links, meanwhile 53.1% are satisfied with oral health principle's adopted by college.

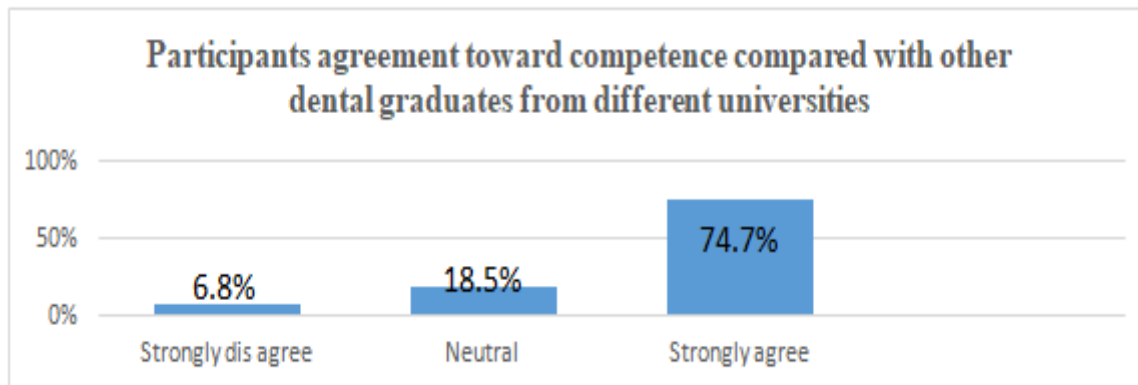


Figure (5) participant's agreement toward competence compared with other dental graduates from different universities

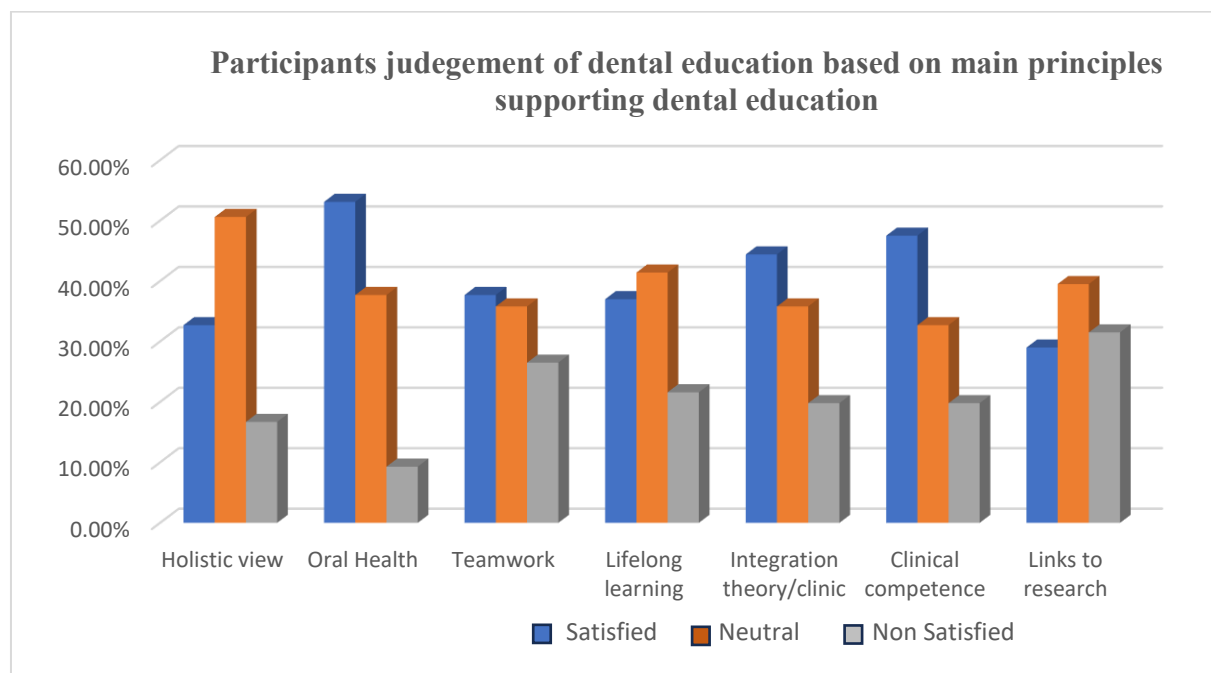


Figure (6) participants subjective judgement of dental education based on main principles supporting dental education.

* Significant association at the 0.005 level (2-tailed).

Satisfaction with Teaching, Clinical Skills and educational elements:

As seen in (Fig 7), the majority of participants (54.9%) agreed that they were satisfied with the teaching and clinical skills acquired during their undergraduate education. However, a significant minority (35.2%) was neutral, and 9.8% expressed dissatisfaction. Table 1 reinforces this finding, with 47.5% of participants satisfied with clinical settings, though 17.3% were not satisfied, indicating the need for better clinical preparation and infrastructure, considering that half of the participants have shown satisfaction with the curriculum content.

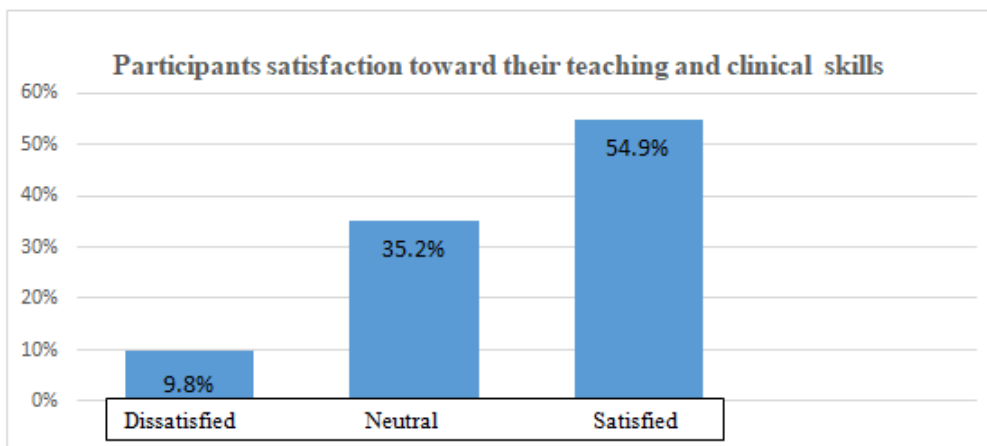


Figure (7) Satisfaction with Teaching and clinical skills at karary University.

Preparation for Professional Practice

Table 1 shows 57.8% satisfaction with the curriculum itself, though 24.7% of participants were dissatisfied with lecture rooms and labs, indicating infrastructural gaps at time of study.

Most participants (69.8%) felt their dental education prepared them adequately for professional practice, as illustrated in (Fig 8). A minority (6.8%) strongly disagreed with this statement, which points to the overall positive impact of Karary University's dental curriculum.

Table (1): Participants general satisfaction toward educational elements

Concerning undergraduate period, participant general satisfaction toward educational elements.				
	Curriculum	Lecturing Methods	Clinical settings and preparations	lecturing room, labs
Satisfied	57.8	47.5	47.5	40.1
Neutral	31.5	34.6	35.2	35.2
Dissatisfied	10.7	17.9	17.3	24.7
Total	100	100	100	100

Table (1) shows that almost half of participants satisfied about curriculum, lecturing method, clinical setting and preparation and lecturing rooms and labs.

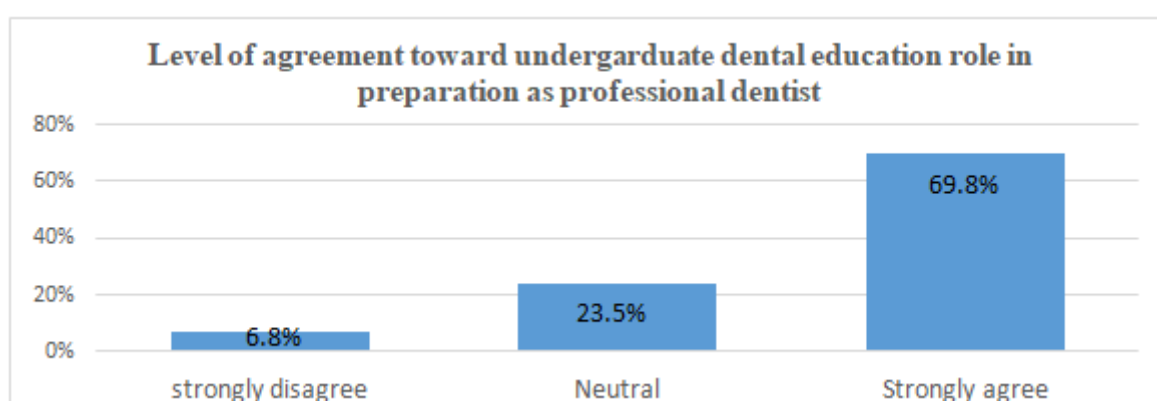


Figure (8) Perception toward dental education preparation for the profession as a dentist

Satisfaction with Research-Based Education

There was a significant relationship between alumni satisfaction with research-based education and their graduating batch, as highlighted in figure 9 ($P = 0.05$). More recent graduates reported higher satisfaction, likely reflecting curriculum improvements over time, furthermore; Batch 3 reveals the highest level of satisfaction in regard of total number of participants. Figure 10 also revealed a significant relationship ($P = 0.004$) between academic qualifications and the batches, with Batch 3 having the highest proportion of master's degree holders, highlighting the growing interest in further education.

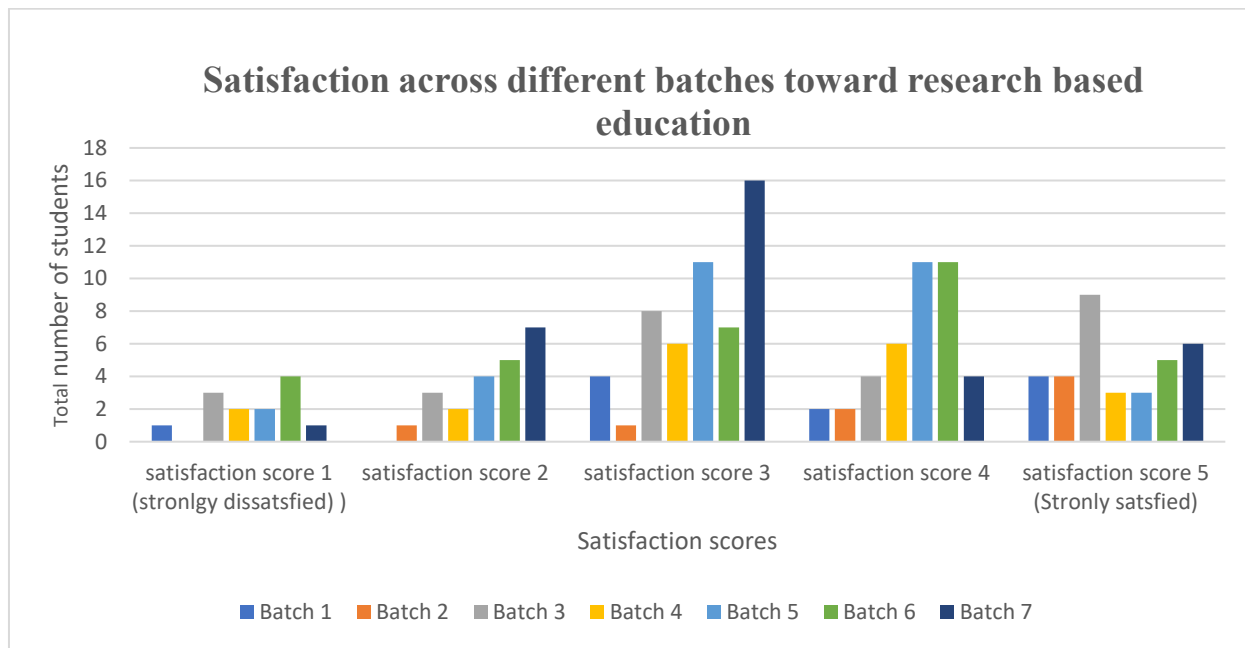


Figure (9) Level of Satisfaction across different batches toward research-based education

* Significant association at the 0.05 level (2-tailed).

Figure (9) shows that there is significant association between satisfactions toward research-based education and different batches.

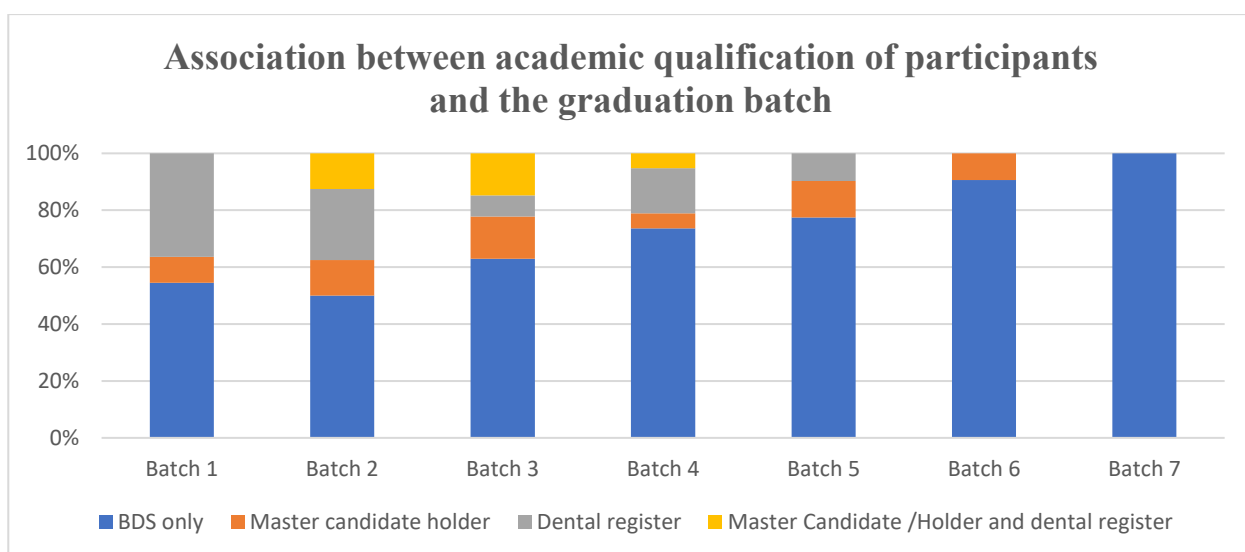


Figure (10) Association between academic qualification across different batches

* Significant association at the 0.004 level (2-tailed).

Figure (10) shows that batch (3) have higher number of participants who got master degree or enrolled in master programs at the time of the study, while more than half of participants are BDS holders only. Meanwhile Batch 7 at the time of study demonstrated only BDS holders due to their recent graduation. A significant level of p value at 0.004 was observed proving the association between the batch and the level of obtained qualification.

Preclinical Knowledge and Curriculum Assessment

Table 2 shows that 50.6% of participants agreed they gained enough knowledge in preclinical prosthodontics, and 66.7% felt adequately prepared in endodontic. However, only 45.05% felt they gained sufficient knowledge in General surgery/Medicine, indicating areas where the curriculum could be strengthened.

Table (2): Students perception toward certain preclinical subjects' sufficiency in terms of curriculum content and practical work

Perception toward different preclinical subjects' sufficiency in terms of curriculum content and practical work							
	Preclinical Prosthodontics	Preclinical Conservative/Endodontic	Preclinical Pedodontics	General Surgery and Medicine	Community Dentistry	Dental Radiology	Oral Pathology
Agree	50.6%	66.7%	57.4%	45.05%	48.1%	51.2%	61.1%
Neutral	22.8%	16.7%	22.2%	26.8%	28.4%	24.1%	17.9%
Disagree	26.5%	16.7%	20.4%	28.1%	23.5%	24.7%	21.0%
Total	100%	100%	100%	100%	100%	100%	100%

Table (2) shows that equally half of participants thought that they gain enough knowledge during their preclinical periods on subjects mentioned.

Clinical Knowledge and Curriculum Assessment

Figure 11 demonstrates high level of satisfaction among dental alumni across different subjects in terms of theoretical lectures and clinical practice, meanwhile periodontics predominates as the highest subject shows satisfaction among dental alumni, followed by Pedodontics and OMFS, nevertheless the periodontics showed the lowest clinical career choice preference among dental alumni as seen in (Fig 12) which may be attributed to another factors related to dental market demands , moreover there is a significant association of 0.001 p value between difference of batches and general satisfaction toward clinical setting and preparation which is attributed to variation in setting through different years as shown in Table 3.

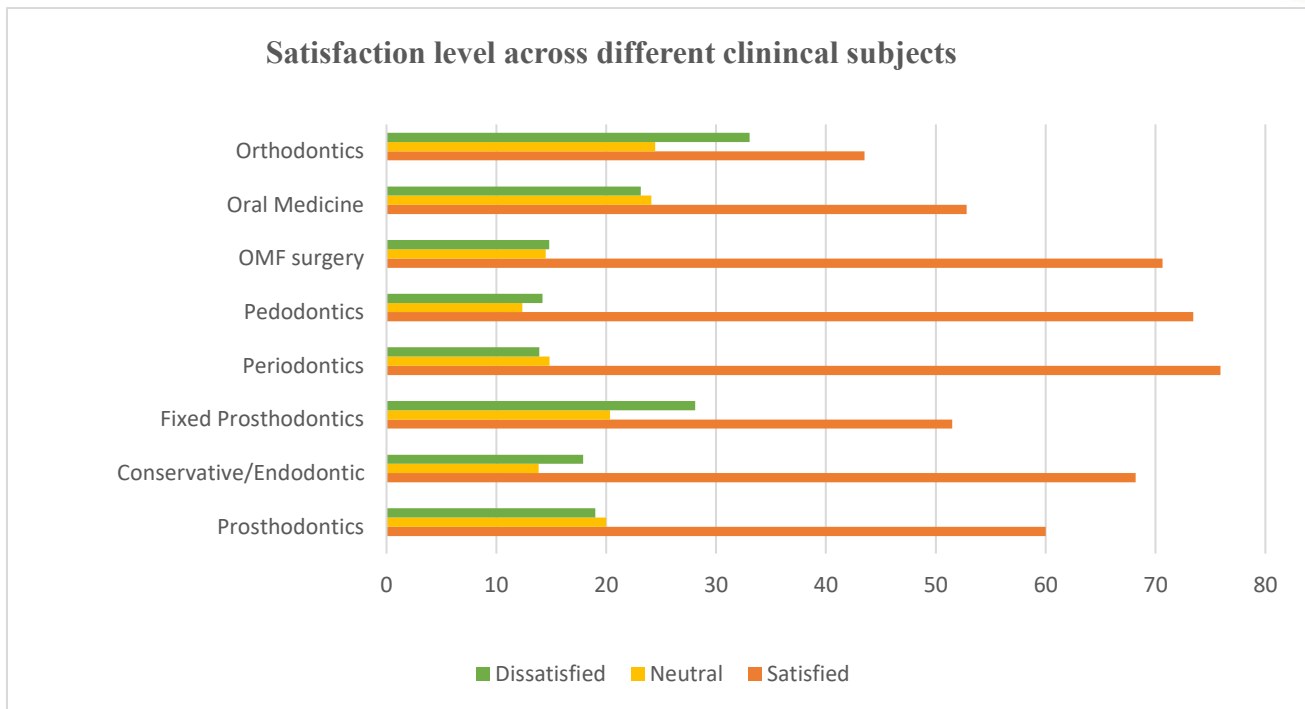


Figure (11) participants satisfaction with gained knowledge in clinical period, based on the curriculum contents lecturing methods and clinical practice.

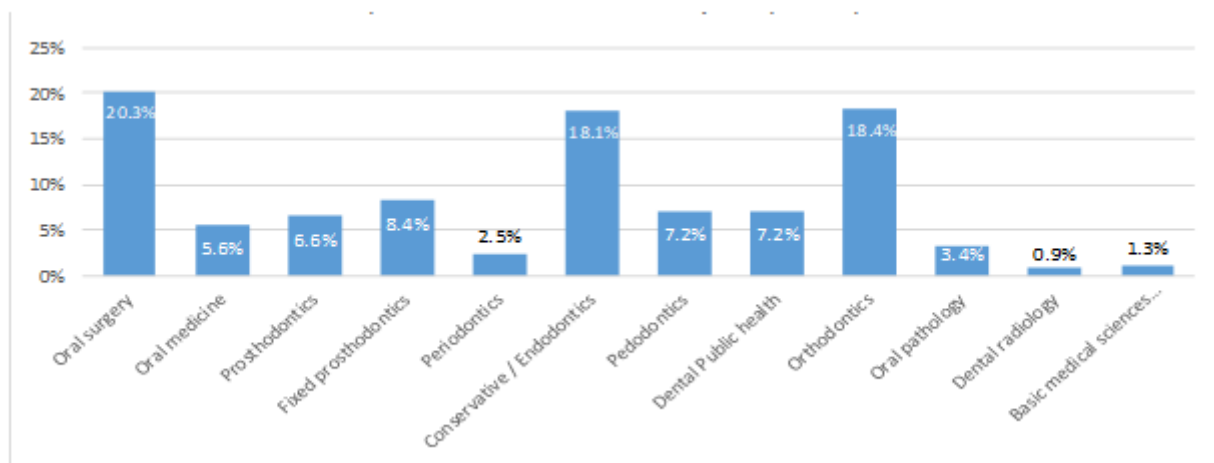


Figure (12) Career line preference among dental alumni

Table (3) Participants level of general satisfaction toward Clinical settings & preparations

		Level of satisfaction toward undergraduate period [Clinical settings and preparations]			Total alumni number / Proportion	P Value
		Satisfied	Neutral	Not satisfied		
Batch	Batch 1	4	5	2	11	0.001** (Significant)
	Batch 2	6	1	1	8	
	Batch 3	19	5	3	27	
	Batch 4	13	3	3	19	
	Batch 5	15	14	2	31	
	Batch 6	15	11	6	32	
	Batch 7	5	18	11	34	
Total		77 (47.5%)	57 (35.1%)	28 (17.4%)	162 (100%)	



Table (3) shows that significant association between batches and satisfaction toward clinical settings and preparation.

DISCUSSION

This study aimed to evaluate the perceptions and satisfaction of Karary University dental alumni regarding their undergraduate education. The findings provide important insights into alumni experiences, highlighting both strengths and areas for improvement in the program. Comparisons with international studies offer further context to these results, particularly regarding career satisfaction, clinical competence, and research preparation.

Career Shift Consideration: A significant proportion of the participants (51.9%) reported having considered shifting careers, primarily due to financial difficulties (35.4%) and loss of interest (28.3%). These findings align with international data, such as the study by Molina-Hernández et al. in Spain, which found that financial pressures were a key contributor to job dissatisfaction among dentists ⁽²⁾. Similarly, Aljazi et al. (2018) found that dissatisfaction with career prospects was common among dental graduates in Saudi Arabia, particularly due to inadequate financial compensation and limited opportunities for professional growth ⁽⁵⁾. The prevalence of career shift considerations among Karary University alumni underscores the broader challenges within the Sudanese dental profession, including economic instability and insufficient infrastructure. Addressing these issues is crucial for improving retention and satisfaction in the dental field.

Competence Compared to Other Graduates: The majority of participants (74.7%) felt confident that their education prepared them well, rating their competence higher than graduates from other universities. This self-reported confidence is similar to findings from Bengmark et al.'s study of Malmö University graduates, where 90% rated their education as adequately preparing them for their profession ⁽⁴⁾. The high level of satisfaction with clinical competence among Karary University alumni is a testament to the strength of the program's clinical training, which aligns with Bengmark et al.'s emphasis on early and continuous clinical exposure as a critical factor in graduate confidence. However, the relatively lower satisfaction with research preparation (29%) points to a gap in research-oriented training, an issue also highlighted in international studies. For example, Aljazi et al. noted that 15.5% of Saudi dental interns were dissatisfied with their research skills, suggesting that research education remains a common area for improvement across different institutions ⁽⁵⁾.

Satisfaction with Teaching and Clinical Skills: A majority of participants (54.9%) expressed satisfaction with their clinical and teaching experiences, though a significant portion (35.2%) remained neutral, indicating areas for improvement. These results are comparable to the findings from Molina-Hernández et al., where most participants expressed satisfaction with their work environment and job performance ⁽²⁾. Additionally, similar trends were observed in Bengmark et al.'s study, where clinical competence and holistic care principles were highly rated by graduates ⁽⁴⁾. However, infrastructure challenges—such as the dissatisfaction with lecture rooms and clinical settings reported by 24.7% of participants—reflect broader issues within the Sudanese educational system. Improving facilities and resources could significantly enhance student experiences and satisfaction levels.

Research-Based Education: The study revealed a significant relationship ($p = 0.05$) between satisfaction with research-based education and the batch of graduates, with more recent batches reporting higher satisfaction levels. This likely reflects improvements in the curriculum over time, but the overall satisfaction with research links remained low (29%), probably due to changing of research teaching methods among different batches before settling on specific research teaching strategy. This mirrors the findings of the Malmö University study, where research preparation was rated lower compared to clinical training ⁽⁴⁾. Similar dissatisfaction was reported by Molina-Hernández et al., where research engagement was also seen as a weak point in dental education ⁽²⁾. Addressing this issue is crucial for fostering a stronger research culture among dental students, which can contribute to both professional development and the broader dental field in Sudan.



Preclinical and Clinical Curriculum Assessment: Regarding preclinical education, 50.6% of participants felt they gained sufficient knowledge in prosthodontics, with higher satisfaction reported in endodontics (66 %) which indicates that this area of the curriculum may require further attention. Comparatively, similar findings have been observed in other educational contexts. For example, Bengmark et al. noted that while Malmö University's graduates felt well-prepared clinically, there were gaps in certain specialized areas, such as oral surgery. In contrast, the high satisfaction reported in areas like endodontics reflects the strong emphasis on clinical skill development ⁽⁴⁾, which has been a consistent strength of Karary University's dental program.

On the clinical side, participants expressed higher satisfaction with periodontics (75.9%) and oral and maxillofacial surgery (70.65%), indicating that these areas are particularly well-covered in the curriculum.

Preparation for Professional Practice: Most participants (69.8%) believed their dental education adequately prepared them for their profession, a sentiment that is consistent with findings from international studies. Bengmark et al. found that Malmö University graduates rated their professional readiness highly, with over 90% feeling prepared for clinical practice ⁽⁴⁾. However, Karary University alumni's lower satisfaction levels with infrastructure (e.g., lecture rooms and labs) highlight the need for investment in educational facilities. Improving the learning environment is likely to enhance both the perceived and actual preparedness of future graduates.

Professional career Preference: In spite of 50% of participants consider career changing from dentistry, the majority of dental alumni (an average of 56%) favour OMFS, conservative dentistry & endodontics, and orthodontics as preferred career choices. The fact that 70% and 68% of participants were satisfied with the educational process of OMFS and Conservative & Endodontics, respectively, is consistent with their preferences. Interestingly, despite the high satisfaction in periodontics, it was one of the least favored career paths, as reflected in the career line preferences of alumni. This suggests that market demands and other external factors may influence career choices more than satisfaction with training in specific disciplines. This trend was similarly noted in Molina-Hernández et al.'s study, where dentists often opted for specializations not because of training satisfaction but due to external career opportunities ⁽²⁾.

Overall Satisfaction and Areas for Improvement: Overall, the results suggest that Karary University's dental education program has strengths in clinical competence and teaching but faces challenges in infrastructure. The comparison with international studies, such as those from Sweden ⁽⁴⁾ and Spain ⁽²⁾, highlights both the commonalities and unique aspects of dental education across different regions. While global studies frequently point to issues like burnout, job dissatisfaction, and the need for better research training, Karary University's graduates also face additional challenges related to economic instability and limited local opportunities. Addressing these broader systemic issues, alongside targeted improvements in research education and infrastructure, could significantly enhance the overall satisfaction and career outcomes of future dental professionals.

CONCLUSION AND RECOMMENDATIONS

In conclusion, this study sheds light on the overall satisfaction and perceptions of Karary University dental alumni regarding their undergraduate education. The findings show that while many alumni feel confident in their clinical skills and overall competence compared to graduates from other institutions, significant challenges persist. Key areas for improvement include research preparation, infrastructure, and addressing the financial stress that pushes many alumni to consider shifting careers. These insights are consistent with global trends in dental education but also highlight unique challenges faced by Sudanese dental professionals, particularly related to economic instability and limited opportunities for postgraduate education.

Moving forward, it is essential that Karary University and similar institutions invest in improving research opportunities and infrastructure, such as clinical settings and lecture facilities, to better support student learning. Additionally, initiatives that provide financial support, mentorship, and career development



programs would greatly enhance student and graduate satisfaction. Strengthening ties with professional bodies and creating more pathways for postgraduate education could also help graduates feel more equipped and supported in their professional journey. Addressing these key issues can significantly improve the professional outlook for future dental graduates in Sudan, retaining talent within the field and ensuring high-quality oral health services for the wider community. The inclusion of a career status assessment enabled us to contextualize alumni satisfaction within their professional trajectories. However, as career outcomes may be influenced by external socioeconomic and personal factors, interpretation of these findings should be made with caution.

DECLARATIONS

Abbreviations:

SPSS – Statistical Package for the Social Sciences

CGPA – Cumulative Grade Point Average

BDS – Bachelor of Dental Surgery

OMFs / OMF – Oral and Maxillofacial Surgery

Availability of Data and Materials:

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request. The adapted English version of the questionnaire is included as a supplementary file (Additional file 1).

Funding:

We hereby declare that; No external funding sources we used for this study. The research was self-funded, and institutional support were provided by the primary affiliation of Karary University, College of Oral and Dental Medicine.

Conflict of Interests:

The authors decelerate that they have no potential conflict of interests relevant to this article was reported.

Authors Contribution:

Conceptualization: Motaz Ibrahim Suliman

Methodology: Motaz Ibrahim Suliman, Tibyan Ibrahim ALtahir, Kholisa Abdo Zaroug, Eman Ahmed Hassan.

Data curation and Analysis: Amer Alrashed Mohamed, Mohamed Adil Merghani.

Project Management: Amer Alrashed Mohamed, Mohamed Adil Merghani.

Writing the original draft: Tibyan Ibrahim ALtahir, Kholisa Abdo Zaroug, Eman Ahmed Hassan, Amer Alrashed Mohamed, Mohamed Adil Merghani.

Administrative Approvals and Endorsement: Alaa Abuelgasim Ibrahim.

Editing and Reviewing: Motaz Ibrahim Suliman, Alaa Abuelgasim Ibrahim.



REFERENCES

1. FDI World Dental Federation. FDI policy statement on dental education. Adopted by the FDI General Assembly; 2003 Sep; Sydney, Australia. Revised by the FDI General Assembly; 2015 Sep; Bangkok, Thailand.
2. Molina-Hernández J, Fernández-Estevan L, Montero J, González-García L. Work environment, job satisfaction and burnout among Spanish dentists: a cross-sectional study. *BMC Oral Health*. 2021 Mar 24;21(1):156. doi: 10.1186/s12903-021-01480-9. PMID: 33761913; PMCID: PMC7992322.
3. Suliman et al.; The assessment of the relationship between dental College's intake and management of dental human resources in Sudan .*Asian J. Den. Sci.*, vol. 6, no. 2, pp. 25-35, 2023; Article no.AJDS.96961
4. Bengmark D, Nilner M, Rohlin M. Dentists reflect on their problem-based education and professional satisfaction. *Eur J Dent Educ*. 2012 Feb;16(1):e137-45. doi: 10.1111/j.1600-0579.2011.00688.x. Epub 2011 Apr 19. PMID: 22251337.
5. Aldweesh AH, Aldhubaiban M, Alqahtani A, Almohammad IE, Al-Sehaibany FS, Albarakati SF. Students' Perceptions of their Dental Curriculum and Education. *Pak J Med Sci*. 2022 Jul-Aug;38(6):1441-1446. doi: 10.12669/pjms.38.6.5183. PMID: 355991258; PMCID: PMC9378411.
6. Gilmour J, Stewardson DA, Shugars DA, Burke FJ. An assessment of career satisfaction among a group of general dental practitioners in Staffordshire. *Br Dent J*. 2005 Jun 11;2198(11):701-4, discussion 693. doi: 10.1038/sj.bdj.4812387. PMID: 15951785.
7. Nurelhuda, Nazik . Challenges facing dentistry in sudan (University of Khartoum , Khartoum North , Khartoum , Sudan) Meeting:2016 IADR/APR General Session (Seoul, Korea.).