

Knowledge and interest in Forensic Dentistry among undergraduate dental students at the Universidade Federal da Paraíba

Rayle Diniz Andrade¹

 0000-0002-9852-6005

Tainá Nascimento Falcão¹

 0000-0002-3326-063X

Láise Nascimento Correia Lima¹

 0000-0002-1773-847X

Bianca Marques Santiago¹

 0000-0001-9559-913X

¹Universidade Federal da Paraíba (UFPB), Departamento de Clínica e Odontologia Social, João Pessoa, Paraíba, Brasil.

Correspondence:

Bianca Marques Santiago

E-mail: bianca.santiago@yahoo.com.br

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Abstract This study aimed to identify the knowledge and interest in Forensic Dentistry among undergraduate dental students at the Universidade Federal da Paraíba (UFPB). Furthermore, we aimed to compare the results between undergraduate students who had not studied Forensic Dentistry and Ethics and Legislation and those who had. This study comprises field research with an inductive approach and a direct and extensive documentation technique with descriptive statistical procedures of the correlational type. We analyzed the responses to the online questionnaires regarding knowledge and interest in Forensic Dentistry by students who did not take Dental Ethics and Legislation and Forensic Dentistry (G1; n=45) and those who did (G2; n=29). Data analysis was descriptive and by chi-square test ($\alpha=5\%$). We observed that 44.4% (n=20) of G1 students pointed to Forensic Dentistry as a human identification and investigation method. Meanwhile, 48.27% (n=14) of G2 students said it was "Focused on criminal identification". In the students' self-evaluation regarding knowledge, 44.4% (n=20) of G1 students rated their knowledge as "Very Low". Whereas, G2 students rated "Very Low", "Low", and "Medium" at the same percentage of 24.1% (n=7). Statistical difference was significant ($p=0.002$). Regarding the interest in a professional career, 37.8% of the G1 students were positive, while 48.3% were positive in G2. In the objective questions, the success indexes did not exceed 51% in G1 and 56% in G2. Moreover, the area most indicated in both groups (97.7% and 100%) as related to Forensic Dentistry was "Human Identification". After applying the questionnaire, both groups indicated the interest in the area as "Very High" in a higher percentage. Students showed average knowledge and great interest in Forensic Dentistry, regardless of the student group. Furthermore, we found that less than 50% are interested in pursuing a career in Forensic Dentistry.

Descriptors: Educational Measurement. Forensic Dentistry. Education, Dental.

Conocimiento e interés en Odontología Forense de estudiantes de graduación en Odontología de la Universidad Federal de Paraíba

Resumen El objetivo del estudio fue identificar el conocimiento y el interés de los estudiantes de odontología de la Universidad Federal de Paraíba (UFPB) y comparar los resultados entre los estudiantes que no habían cursado las asignaturas de Odontología Forense y Ética y Legislación con los que ya habían cursado. Es una investigación de campo con enfoque inductivo y técnica de documentación directa y extensiva con procedimientos estadísticos descriptivos del tipo correlacional. Se evaluaron cuestionarios online sobre conocimientos e interés en Odontología Forense, de estudiantes que no cursaron Ética y Legislación en Odontología ni Odontología Forense (G1; n = 45), y de los que cursaron dichas asignaturas (G2; n = 29). Los datos se analizaron de forma descriptiva y mediante prueba de Chi-cuadrado ($\alpha = 5\%$). De los estudiantes de G1, 44,4% (n = 20) señaló a la Odontología Forense como medio de identificación e investigación humana, y de los de G2, 48,27% (n = 14) la consideró "orientada a la identificación criminal". En la autoevaluación acerca de su grado de conocimiento, 44,4% (n=20) de G1 lo catalogó como "Muy bajo", al tiempo que, G2 presentó "Muy bajo", "Bajo" y "Medio", con el mismo porcentaje, 24,1% (n = 7), constatándose diferencia estadísticamente significativa ($p = 0,002$). Sobre el interés por la carrera profesional, 37,8% de G1 y 48,3% de G2 respondieron positivamente. En relación a las preguntas estructuradas, 51% de G1 y 56% de G2 fueron correctas, mencionando a la "Identificación Humana" como el área más relacionada con la Odontología Forense (97,7% y 100%, respectivamente). Con respecto al interés por el área, el mayor porcentaje de ambos grupos, señaló "Muy



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Alto". Se verificó un grado "Medio" de conocimiento y "Alto" de interés, en ambos grupos. En contrapartida, menos del 50% pretende especializarse en Odontología Forense.

Descritores: Evaluación Educacional. Odontología Forense. Educación en Odontología.

Conhecimento e interesse em Odontologia Legal dos graduandos em Odontologia da Universidade Federal da Paraíba

Resumo O estudo objetivou identificar o conhecimento e interesse em Odontologia Legal dos estudantes de Odontologia da Universidade Federal da Paraíba (UFPB) e comparar os resultados entre os graduandos que não haviam cursado as disciplinas de Odontologia Legal e Ética e Legislação e aqueles que já tivessem cursado. Trata-se de uma pesquisa de campo com abordagem indutiva e técnica de documentação direta e extensiva com procedimentos estatísticos descritivos do tipo correlacional. Foram analisadas as respostas aos questionários online acerca do conhecimento e do interesse na Odontologia Legal pelos estudantes que não cursaram as disciplinas de Ética e Legislação Odontológica e Odontologia Legal (G1; n=45) daqueles que cursaram tais disciplinas (G2; n=29). Os dados foram analisados descritivamente e pelo teste qui-quadrado ($\alpha=5\%$). Observou-se que dos estudantes do G1, 44,4% (n= 20) apontaram a Odontologia Legal como meio de identificação humana e investigação e o G2 teve 48,27% (n=14) relacionando ser "Voltada para identificação criminal". Na autoavaliação dos estudantes acerca do conhecimento, o G1 teve 44,4% (n=20) avaliando em "Muito Baixo" e o G2 apresentou "Muito Baixo", "Baixo" e "Médio" com mesma porcentagem 24,1% (n=7), havendo diferença estatisticamente significativa ($p=0,002$). Quanto ao interesse na carreira profissional, 37,8% dos estudantes do G1 positivaram e do G2, 48,3%. Nas questões objetivas os índices de acerto não passaram de 51% no G1 e 56% no G2 e a área mais apontada como relacionada à Odontologia Legal foi "Identificação Humana" (97,7% e 100%) em ambos os grupos. Em relação ao interesse na área após aplicação do questionário, ambos os grupos apontaram "Muito Alto" em maior porcentagem. Constatou-se conhecimento mediano dos estudantes e grande interesse em Odontologia Legal, independentemente do grupo de estudantes. Verificou-se também que menos de 50% tem interesse em seguir carreira na área da Odontologia Legal.

Descritores: Avaliação Educacional. Odontologia Legal. Educação em Odontologia.

INTRODUCTION

Dentistry is a constantly evolving field¹. Furthermore, it provides interdisciplinarity with other areas, which contributes to greater professional perspectives since it articulates practice and theory. It develops the critical-rational sense autonomously, increasing individual or collective possibilities and capacities, which overcomes the fragmentation of education². Thus, the curricular integration of Forensic Dentistry in the Dentistry program corresponds to such perspectives.

The dental surgeon's activity in forensics is provided by competent federal legislation (law no. 5,081, of August 24, 1966³), which regulates dentistry practice in Brazil. It ensures the dental surgeon's autonomy in matters involving Forensic Dentistry practice. According to the Federal Council of Dentistry (CFO), by resolution number 63, of June 30, 2005⁴, Forensic Dentistry is a dental specialty not limited to analyzing dental traces. It includes anthropology, genetics, biochemistry, forensic ballistics, thanatology and forensic traumatology, radiology, computing, and photographic images.

The official implementation of the Forensic Dentistry course took place on April 11, 1931, with the curricular modifications proposed by Decree No. 19,852 in art. 218². According to CFO statistics, in 2021, the specialty had 810 professionals in a universe of 123,441 dental surgeons regularly registered in the councils. Meanwhile, Dentistry had 28,542 and Implant Dentistry 17,082, with the latter having the largest number of specialists⁶. Thus, Forensic Dentistry is still an expanding specialty with market potential yet to be explored. Moreover, it may create job opportunities, considering the relevant services it provides to justice and society⁷.

According to the Brazilian Association of Ethics and Forensic Dentistry (ABOL)⁸, teaching Forensic Dentistry should take place in two periods. The first would include Deontology and Diceology, which would be taught in conjunction with the beginning of the clinical courses. Meanwhile, the second would cover applied Forensic Dentistry, focused on the area of expertise of the forensic dentist and the contents pertinent to forensic practice⁹.

It is worth commenting that such a division is a recommendation. Therefore, not all programs apply this separation¹⁰. Thus, some setbacks can be faced in the Forensic Dentistry learning process, favoring gaps in students' education regarding these courses.

Given the extent and the many possibilities for action, the main purpose of Forensic Dentistry is the application of dental science knowledge in the service of justice¹¹. The CFO recognizes it in Resolution 63/2005, updated in 2012:

SECTION VIII - Forensic Dentistry Art. 63. Forensic Dentistry is the specialty aimed at researching psychic, physical, chemical, and biological phenomena that can reach or have reached man, living, dead, or ossified, and even fragments or remains, resulting in partial or total reversible or irreversible injuries.

Single paragraph. Forensic Dentistry is restricted to analyzing, forensics, and evaluating events related to the dental surgeon's area of expertise. Furthermore, if circumstances require, it may extend into other areas if the search for the truth depends on it, in the strict interest of justice and administration.

Forensic Dentistry teaching provides the learning of ethical and legal principles that lead to the moral formation of future professional dentists, regardless of the career they follow^{12,13}. However, students treat this course with a certain contempt because they already prefer other specialties⁹.

In the context of the Universidade Federal da Paraíba (UFPB), in 2002, a Political Pedagogical Project (PPP) was created and approved for the Dentistry program. It implemented significant changes, including the creation of the curricular components "Dental Ethics and Legislation" and "Forensic Dentistry". Both were previously addressed in the Social Dentistry course (4th semester) in a more condensed way¹⁴. From then on, they became independent courses with a workload of 60 hours each. This separation allowed the contents to be approached didactically and independently, improving the learning process since they have diverging application and focus.

At first, in the classes admitted between 2012 and 2015, the Dental Ethics and Legislation course was offered in the 8th semester. Meanwhile, Forensic Dentistry was provided in the 9th semester. Following the ABOL recommendations mentioned above, the professors in this area requested an earlier course on the Ethics and Legislation contents. Such a request was contemplated with the new curricular change of 2016, which anticipated the course to the 6th semester.

Since the students' contact with the applied part of Forensic Dentistry is in the last year of the program, low interest in this professional area can be expected, which may reflect ethical setbacks in their profession^{10,15}. Therefore, this study aimed to identify the knowledge and interest of UFPB's dental students in Forensic Dentistry. Furthermore, we aimed to compare the results between students who had not studied "Dental Ethics and Legislation" and "Forensic Dentistry" and those who had.

This study's hypothesis suggests that, due to the practical course being offered at the end of the program, the limited contact with the area triggers less knowledge and, consequently, less interest in the labor market related to Forensic Dentistry.

METHOD

This study comprised field research with an inductive approach of direct and extensive observation with descriptive statistical procedures of the correlational type¹⁶, which evaluated the students' responses to the questionnaires regarding their knowledge and interest in Forensic Dentistry. This survey complied with the ethical aspects prescribed in Resolution 466/12 of the National Health Council (CNS). It was approved by the Research Ethics Committee (CEP) of the School of Health Sciences (CCS) of UFPB under opinion no. 3,349,107 (CAAE: 95701418.3.0000.5188).

This study comprised undergraduate dental students from UFPB who were regularly enrolled in eight academic semesters. The first until the fifth semester included students who did not take Dental Ethics and Legislation or Forensic Dentistry. Finally, the seventh, eighth, and tenth semesters comprised those who had already taken at least one or both of these courses. According to the pre-enrollment of the semesters of interest (2019.1 and 2019.2), the universe comprised 234 students.

We selected the sample in a non-probabilistic way by convenience. We included in the sample students regularly enrolled in the Dentistry program who agreed to participate in the study by signing the Informed Consent Form. We excluded from the sample those students who were taking one or both courses during the research period. The sample comprised 74 students, who were divided into two groups: G1, related to students who had neither taken Dental Ethics and Legislation nor Forensic Dentistry, and G2, related to those who had already taken one or both of these courses.

Data collection involved an online questionnaire prepared on the *Google Forms* (Google LLC, Mountain View, California) platform formulated by the research team. It contained questions related to aptitude tests for admission in the Forensic Dentistry area and questions related to professional interests in this field. We tabulated and analyzed the data descriptively in the statistical software SPSS®, version 22.0 (IBM, Armonk, NY, USA). Furthermore, we used inferential statistics (Chi-square and/or Fisher's exact test) to verify possible relationships among the variables. Therefore, we adopted a 5% significance level.

RESULTS

The sample comprised 74 students from the first, second, third, fourth, fifth, seventh, eighth, and tenth semesters (Table 1), with a mean age of 21.44 ± 3.21 years. Group 1 comprised 47 students (63.5%), while Group 2 included 27 students (39.2%), as shown in Figure 1.

Regarding their understanding of forensic dentistry, G1 had 42.55% (n=20) describing that "It uses dental aspects for investigation and identification", and 38.29% (n=18) said that "It focuses on criminal identification". Group 2 had 51.85% (n=14) saying that "It focuses on criminal identification" (Table 2).

Regarding self-knowledge in Forensic Dentistry, G1 had a higher percentage of "Very Low" with 44.4% (n=20). Meanwhile, G2 had "Very Low", "Low", and "Medium" with the same percentage, 24.1% (n=7) (Figure 2). There were statistical differences between the groups (Pearson's Chi-square test; $p=0.002$).

Regarding the level of interest in Forensic Dentistry, both groups reported "Very high" with a higher index. In G1, 37.8% (n=17), and in G2, 37.9% (n=11). There were no statistical differences between the groups ($p>0.05$) (Figure 3).

Regarding the interest in pursuing a professional career, G1 showed interest in 37.8% of the sample, no interest in 42.2%, 17.8% said they did not know it, and 2.2% did not answer. Group 2 showed interest in 48.3%, no interest in 37.9%, and 13.8% said they did not know it (Figure 4). Those who showed interest justified it by saying they "Like Forensic Dentistry and identify with it" (56.25%; n=9) in G1 and "Good wages" (46.15%; n=6) in G2 (Table 3).

Table 1. Frequency distribution of students according to the semesters of interest for the survey.

Semester	n (%)
First	34 (45.9)
Second	06 (8.1)
Third	01 (1.4)
Fourth	01 (1.4)
Fifth	05 (6.8)
Seventh	13 (17.6)
Eighth	03 (4.1)
Tenth	11 (14.9)
Total	74 (100.00)

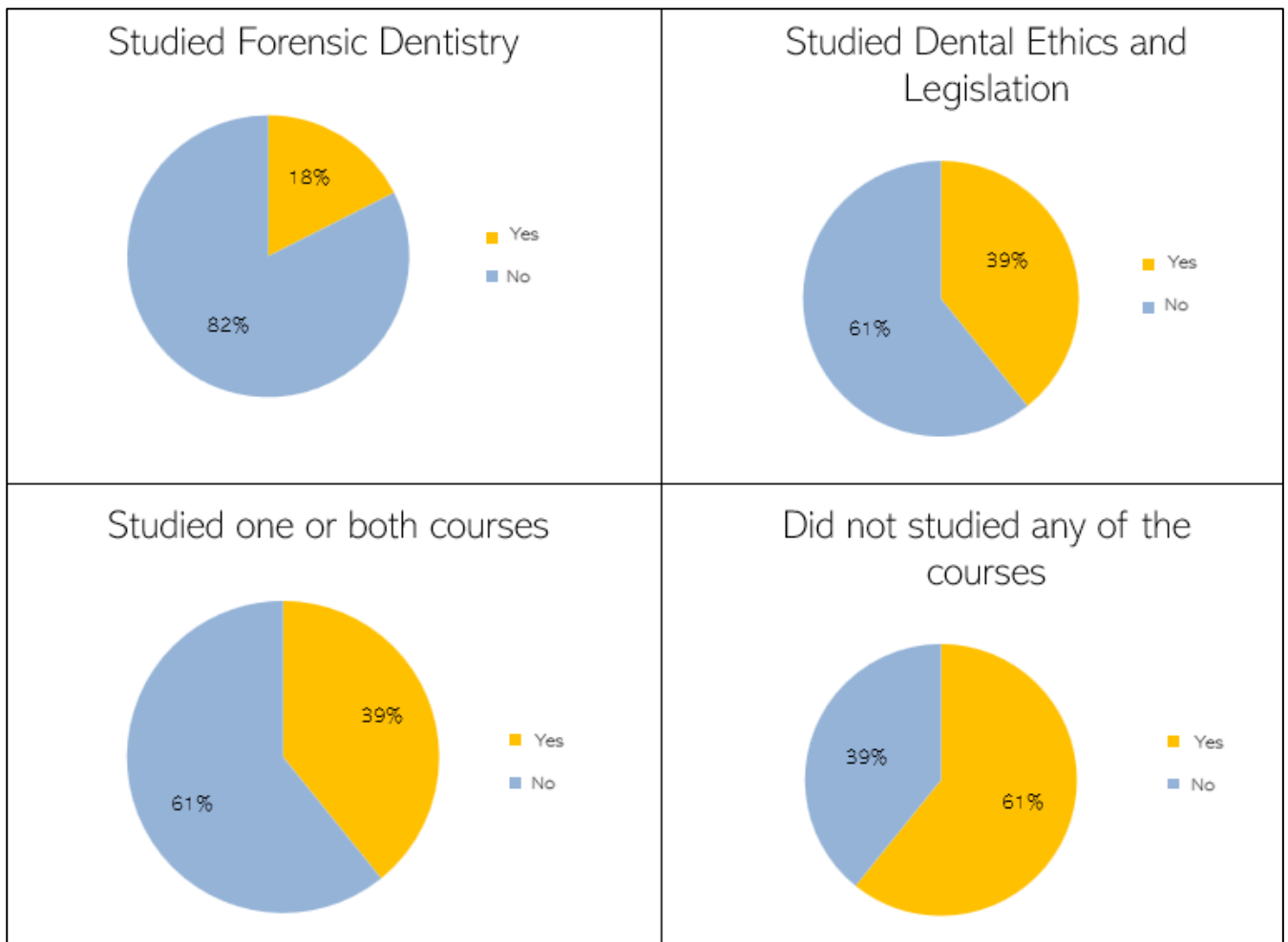


Figure 1. Student distribution regarding contact or not with Dental Ethics and Legislation, Forensic Dentistry, or both courses.

Table 2. Disposition of student responses regarding their understanding of Forensic Dentistry..

Student responses	Group 1		Group 2	
	n	%	n	%
"It uses dental aspects for investigation and identification"	20	42.55	04	14.81
It relates to law and justice	05	10.63	09	33.33
Focused on criminal identification	18	38.29	14	51.85
Does not know	04	8.51	-	-
Total	47	100.00	27	100.00

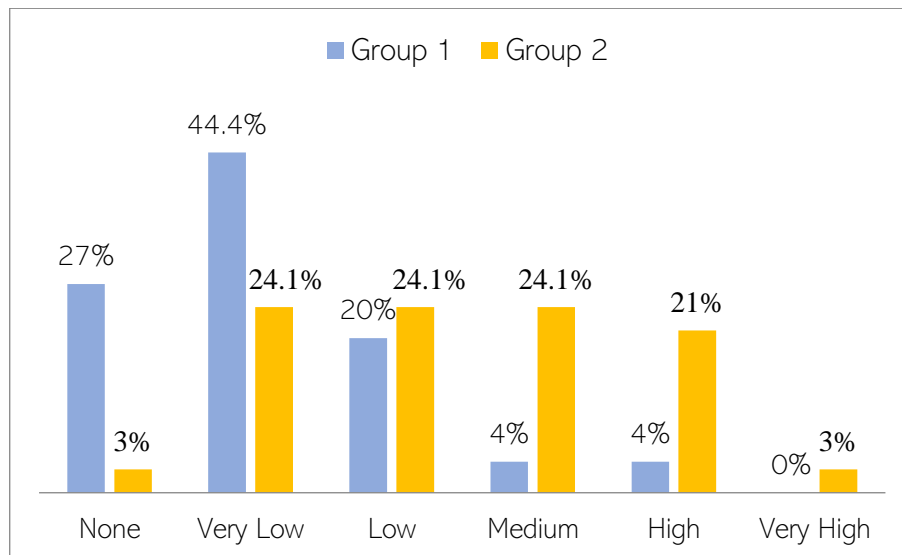


Figure 2. Data percentage distribution between the groups regarding knowledge of Forensic Dentistry.

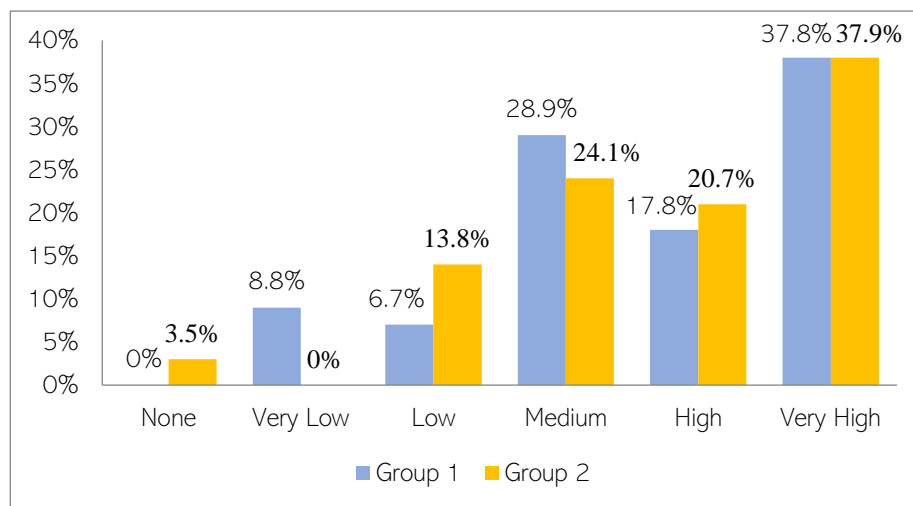


Figure 3. Data percentage distribution between the groups regarding interest in Forensic Dentistry.

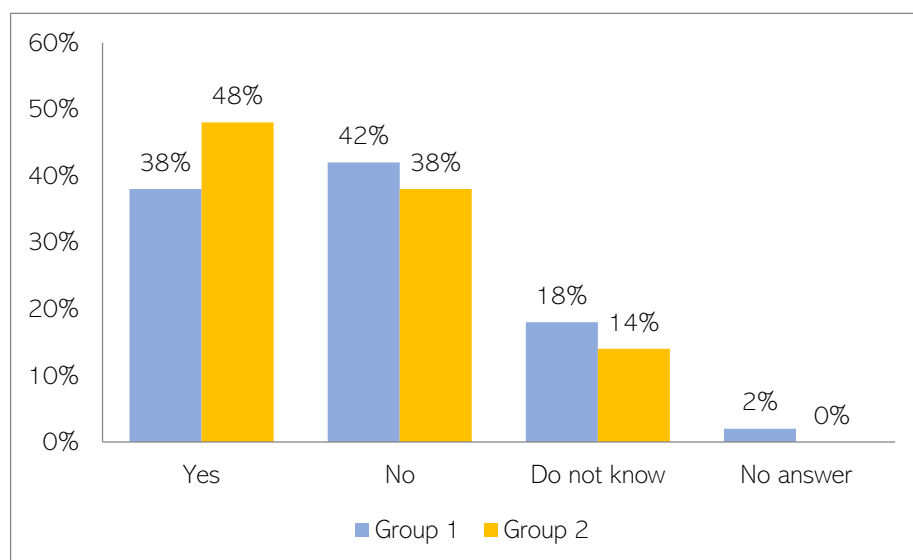


Figure 4. Degree of interest between the groups in the Forensic Dentistry professional career.

Table 3. Justification of students who presented interest in pursuing a professional career in the Forensic Dentistry area.

Student responses	Group 1		Group 2	
	n	%	n	%
Like Forensic Dentistry and identify with it	09	56.25	03	23.07
Relates Dentistry only to criminal investigations	03	18.75	03	23.07
Good wages	02	12.5	06	46.15
Like the area but do not have much knowledge of it	02	12.5	01	7.71
Total	16	100.00	13	100.00

The most mentioned areas of Forensic Dentistry in Group 1 included: Human Identification (97.7%), Age Estimation (82.2%), DNA (80%), and Ethics (80%). Group 2 pointed out Human Identification (100%), Age Estimation and Ethics (96.5%), DNA (93.1%), and General Anatomy (93.1%).

In the objective questions dealing with diceology, types of Forensic Dentistry expertise, traumatology, and forensic anthropology, the success indexes of G1 were 11.11%, 37.7%, 35.5%, and 51.1%, respectively, while G2's were 13.7%, 48.3%, 27.5%, and 48.27%. There were no statistical differences in the success rates of the questions between the groups (Table 4).

After applying the questionnaire, both groups indicated the degree of interest in Forensic Dentistry as "Very High" in a higher percentage. For example, G1 showed 35.6% (n=16), and G2 44.8% (n=13). When relating the degree of interest at the beginning and after completing the questionnaire, we observed a statistical difference between the groups (p<0, 001) (Figure 5).

Table 4. Success index and comparison between groups for the objective questions on diceology, types of Forensic Dentistry expertise, traumatology, and forensic anthropology.

Addressed Theme	Success Index – n (%)	
	Group 1 (n=47)	Group 2 (n=27)
Diceology	05 (11.11)	04 (13.7)
Types of Forensic Dentistry Expertise	17 (37.7)	14 (48.27)
Forensic Traumatology	16 (35.5)	08 (27.5)
Forensic Anthropology	23 (51.1)	14 (48.27)

* No statistically significant differences (Pearson's Chi-square test; p>0.05).

DISCUSSION

Law No. 5,081 of August 24, 1966³, regulates the professional dentistry practice in Brazil. According to the Federal Council of Dentistry, there are several regulated specialties, and Forensic Dentistry stands out. It has shown dedication in conducting and adding information from dental science to employ justice by addressing issues related to dental ethics, legislation applied to the dentistry practice, expertise, and technical assistance in administrative and judicial areas (civil, criminal, labor), among others^{17,18}.

However, it is often portrayed in television series only in the criminal realm, which causes the "CS/Effect" in viewers¹⁹. Similarly, this effect is evident in the students. For example, we observed this effect in the answers of both groups to the question regarding the understanding of Forensic Dentistry since most students from G1 and G2 define it as being focused only on solving crimes.

Following ABOL guidelines, the undergraduate program in Dentistry at UFPB offers the Forensic Dentistry course in two different semesters, with a minimum of 60 hours per semester. The first course, "Dental Ethics and Legislation", focuses on Deontology and Diceology. Meanwhile, the second, "Forensic Dentistry", presents content that contemplates the most specific parts of the profession's practice. Thus, the presence of very low knowledge in Group 1 is due to the lack of contact with both courses. On the other hand, Group 2, for this same issue, presented "Very Low", "Low", and "Medium" in their answers. This variation in the result may have been due to the presence of students who had contact with only one of the courses.

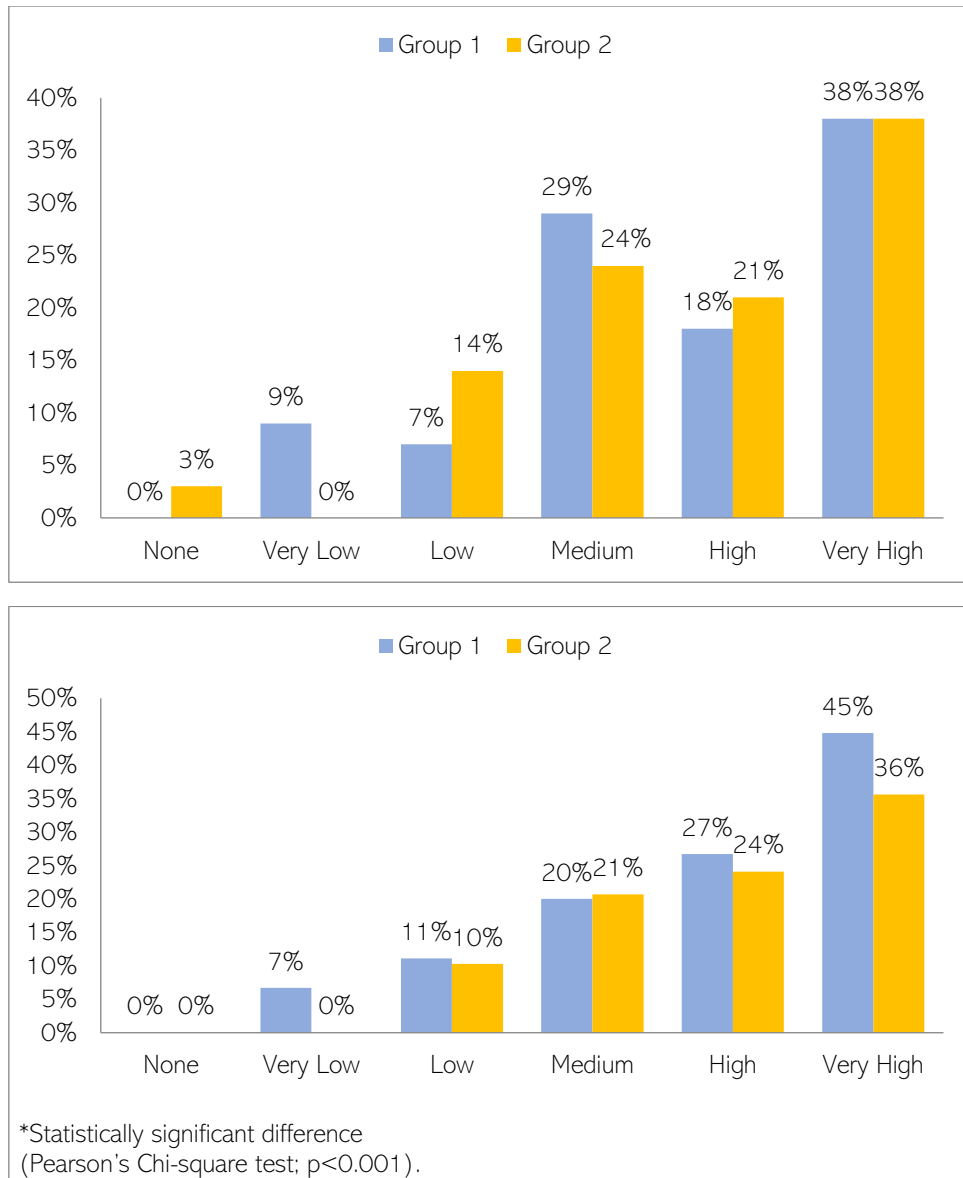


Figure 5. Degree of interest in Forensic Dentistry before (above) and after (below) applying the questionnaire.

Forensic Dentistry has a broad practice scope in the civil, labor, criminal, and administrative spheres³. Therefore, this specialty has a promising labor market and good perspectives for teaching and judicial expertise in all its areas^{20,21}.

Meanwhile, both groups showed significant interest in pursuing such a career. Group 2 showed the highest percentage. The students' justifications for their interest were based on "affinity with the area" and because of "high wages". It is a matter of concern because the main interest is in the financial return and not in the career practice itself. Such a fact supports Marques *et al.* (2015)²², who demonstrate the ideas of undergraduate dental students at the Universidade Federal de Pernambuco regarding the main important aspect of professional fulfillment. According to the authors, 41% of the students said it would be "to be well paid".

Regarding the objective questions related to Diceology, types of Forensic Dentistry expertise, forensic traumatology, and forensic anthropology, we observed that the students' success index was lower than 51% in Group 1 and lower than 48.27% in Group 2. Furthermore, Diceology and forensic traumatology presented lower success indexes in both groups. Regarding the low success index in the Diceology theme in the first group, we suggest that this is a reflection of the lack of contact with this content in the other curricular components of the program, with this subject being approached almost exclusively, only in the Dental Ethics and Legislation and Forensic Dentistry courses. However, in the second group, this answer may be related to the students' preference for the applied part of the specialty.

The multiple-choice questions demonstrated median knowledge and showed very similar results between the groups. In addition, there were no statistical differences between them. Thus, it is clear that the training of dental surgeons still focuses on the valorization of curative activities, focusing on technical-scientific development and leaving aside ethical discussions, which generates great concern in the area²³.

Therefore, Forensic Dentistry is fundamental for the dental surgeon's education because it shows students the importance of legal responsibility and professional ethics. Furthermore, the valorization of this area of training is of great importance so that undergraduate students have, in addition to technical-scientific knowledge, awareness of the ethical and legal precepts that should be applied during their professional life¹⁵.

Thus, it is necessary to analyze how the Forensic Dentistry course is taught in the program according to the suggestions and guidelines provided by ABOL. Moreover, it is essential to verify if the course is satisfactory in the students' incorporation of the content. Furthermore, as shown in our results, the subjects related to diceology and forensic traumatology present a deficit of knowledge among students. Therefore, a greater examination of such issues would be of great relevance. Such a statement agrees with Silva *et al.* (2018)²⁴, who demonstrated the need for a more complete and comprehensive approach to teaching ethics during the undergraduate program since, in this study, the students had a low success index percentage regarding complex situations involving the issue.

Comparing the students' answers regarding their interest in Forensic Dentistry before and after applying the questionnaires showed a statistical difference, with a greater interest in the specialty after the questionnaires were applied to both groups. Thus, by showing that the questionnaire activity dynamically promoted contact with the Forensic Dentistry issue, students showed motivation and appreciation of the subject. Hence, corroborating the results of Tavares (2019)²⁵, in which dynamic activity was used, and after it, there was better course integration and encouragement among students. Therefore, active methodologies should be increasingly present in classrooms because they stimulate critical-reflective learning and interaction between students and teachers^{26,27}.

Furthermore, the late contact with the practical context of Forensic Dentistry, only addressed in the ninth semester of the program, may be associated with the little knowledge and interest in this field in the labor market since it takes a long time for the student to be stimulated to search for this area. Thus, such knowledge may not have been shared with the student body at an opportune moment in the program. Therefore, we understand the need to adapt the contents related to this theme so that they can be taught in curricular components in earlier semesters of the curricular structure.

This study has limitations. We chose *online* questionnaires due to the participants' convenience, low cost, and practicality in collecting and tabulating the data and automatically transforming it into a database^{28,29}. However, the number of participants was notoriously low. One of the disadvantages of surveys through *online* platforms is the low response rate^{30,31}. However, this study's strength lies in the contribution of the incentive to improve the teaching and dissemination of Forensic Dentistry concepts.

Thus, further studies should invest in dynamic activities regarding the teaching of Forensic Dentistry in undergraduate programs. Furthermore, this course interacts with other courses available at the beginning of the Dentistry program so that the contact with Forensic Dentistry is not delayed, contributing to awakening the students' interest and search for knowledge in this area.

CONCLUSION

The surveyed students' knowledge regarding Forensic Dentistry was low to medium. Furthermore, there were significant differences between students who had already taken Dental Ethics and Legislation or Forensic Dentistry and those who had yet to have had contact with either or both of these courses. Even though there was a high interest in the area, in both groups, a minority showed a desire to pursue a career in the Forensic Dentistry area.

REFERENCES

1. Martin ASS, Chisini LA, Martelli S, Sartori LRM, Ramos EC, Demarco FF. Distribuição dos cursos de Odontologia e de cirurgões-dentistas no Brasil: uma visão do mercado de trabalho. *Rev ABENO* [Internet]. 2018;18(1):63-73. doi: <https://doi.org/10.30979/rev.abeno.v18i1.399>
2. Mafi A, Moretto C, Texeira MFN, Saldanha OMFL, Rados ARV. A interdisciplinaridade e seus reflexos na formação do cirurgião-dentista. *Rev ABENO* [Internet]. 2017(1):62-73. doi: <https://doi.org/10.30979/rev.abeno.v17i1.300>
3. Brasil. Lei nº 5.081 de 24 de agosto de 1966. Regulamenta o exercício da odontologia no Brasil. Brasília: DOU; 1966 [cited 2023 Apr 10]. Available from: https://www.planalto.gov.br/ccivil_03/leis/l5081.html
4. Brasil. Resolução nº 63 de 30 de junho de 2005. Consolidação das normas para procedimentos nos conselhos de odontologia. Conselho Federal de Odontologia; 2005 [cited 2023 Apr 10]. Available from: https://www.forp.usp.br/restauradora/etica/res_cfo_63_05_consol.pdf
5. Brasil. Decreto nº 19.852 de 11 de abril de 1931. Dispõe sobre a organização da UFRJ. Rio de Janeiro: Presidência da República; 1931 [cited 2023 Apr 10]. Available from: [http://www.planalto.gov.br/ccivil_03/decreto/1930-1949/d19852.htm#:~:text=DECRETO%20No%2019.852%2C%20DE%2011%20DE%20ABRIL%20DE%201931.&text=h\)%20Escola%20Nacional%20de%20Belas,atuais%20condi%C3%A7%C3%B5es%20de%20organiza%C3%A7%C3%A3o%20financeira](http://www.planalto.gov.br/ccivil_03/decreto/1930-1949/d19852.htm#:~:text=DECRETO%20No%2019.852%2C%20DE%2011%20DE%20ABRIL%20DE%201931.&text=h)%20Escola%20Nacional%20de%20Belas,atuais%20condi%C3%A7%C3%B5es%20de%20organiza%C3%A7%C3%A3o%20financeira)
6. Brasil. Dados Estatísticos. Conselho Federal de Odontologia; 2021 [cited 2023 Apr 10]. Available from: <https://website.cfo.org.br/estatisticas/>
7. Monteiro SL, Oliveira IS, Carvalho TAA. Análise transdisciplinar do Banco Nacional de Perfis Genéticos: técnicas moleculares e aspectos jurídicos, *Rev Bras Crimin* [Internet]. 2019 [cited 2023 Apr 10];8(1):48-53. Available from: <https://revista.rbc.org.br/index.php/rbc/article/view/347/pdf>
8. Associação Brasileira de Ensino Odontológico. ABOL orienta sobre conteúdos da disciplina de Odontologia Legal [Internet]. [Acesso em 21 de abril de 2020]. Available from: <http://www.abeno.org.br/noticias/noticia020.php>
9. Lino-júnior HL, Gabriel M, Daruge Júnior E, Silva RHA. Ensino de Odontologia Legal no Brasil: um convite à reflexão. *Rev ABENO* [Internet]. 2015;15(2):38-46. doi: <https://doi.org/10.30979/rev.abeno.v15i2.161>
10. Costa GLG, Martins BPA, Oliveira CAS. Odontologia Legal: Avaliação dos currículos dos cursos de graduação das faculdades de Minas Gerais. *Rev Bras Odontol Leg* [Internet]. 2019;6(2):31-40. doi: <https://doi.org/10.21117/rbol.v6i2.245>
11. Vanrell JP. *Odontologia legal e Antropologia Forense*. 3th. Rio de Janeiro: Guanabara Koogan; 2019.
12. Fernandes MM, Plana JACP, Bouchardet FCH, Sakaguti NM, Rosa GC, Baldasso RP, et al. Maquiagem como estratégia de ensino e pesquisa em Odontologia Legal: relato de experiência. *Rev ABENO* [Internet]. 2017;17(2):32-38. doi: <https://doi.org/10.30979/rev.abeno.v17i2.410>
13. Pereira JGD, Lima KF, Romano FB, Costa PB, Jacometti V, Silva RHA. Atividades práticas no ensino de odontologia legal nos cursos de graduação em odontologia. *Rev ABENO* [Internet]. 2017 [cited 2023 Apr 10];17(2):88-96. Available from: http://revodontobvsalud.org/scielo.php?script=sci_arttext&pid=S1679-59542017000200011
14. Santiago BM, Barbosa AS, Rabello PM. Educação Permanente em Saúde (EPS): Ferramenta para Reestruturação de Componente Curricular do Curso de Graduação em Odontologia da UFPB. *Rev Bras Ciênc Saúde* [Internet]. 2010 [cited 2023 Apr 10];14(3):83-88. Available from: <https://periodicos.ufpb.br/index.php/rbcs/article/view/9823>
15. Brites AN, Pithan AS, Nunes MF, Brites IF. Odontologia Legal no Ensino Superior do Estado do Rio Grande do Sul. *Rev ABENO* [Internet], 2017;16(3):36-45. doi: <https://doi.org/10.30979/rev.abeno.v16i3.276>
16. Lakatos EM, Marconi MA. *Metodologia Científica*. 8th. São Paulo: Atlas; 2017.
17. Fonseca FLMA, Holanda FAL, Andrade FBM. O respaldo da odontologia legal na aplicabilidade do direito. *Rev Derecho y Cambio Social* [Internet]. 2017 [cited 2023 Apr 13]:1-9. Available from: https://www.derechocambiosocial.com/revista049/O_RESPALDO_DA_ODONTOLOGIA_LEGAL.pdf
18. Bouchardet FCH, Barroso CLGA, Silva RF. O estabelecimento de nexos causal por meio de perícia odontológica trabalhista implica em indenização ao trabalhador? Relato de caso pericial. *Rev Bras Odontol Leg* [Internet]. 2016;3(2):100-109. doi: <https://doi.org/10.21117/rbol.v3i2.10>
19. Amorim A. Identificação genética através de análises de DNA. *Rev Ciênc Elem* [Internet]. 2019;7(4):1-5. doi: <http://doi.org/10.24927/rce2019.066>
20. Silva RF, Franco A, Oliveira RN, Daruge Júnior E, Silva RHA. A história da Odontologia Legal no Brasil. Parte 1: Origem enquanto técnica e ciência. *Rev Bras Odontol Leg* [Internet]. 2017;4(2):87-103. doi: <https://doi.org/10.21117/rbol.v4i2.139>
21. Silva FE, Zaitter WM, Fernandes MM. Perspectivas de atuação como docente e em foro civil para o especialista em Odontologia Legal. *Rev ABENO* [Internet]. 2016;16(4):95-106. doi: <https://doi.org/10.30979/rev.abeno.v16i4.351>

22. Marques MD, Souza CA, Pazos CTP, Amaral DS, Vieira EG, Campos WCS, Carvalho EJA. Expectativas dos estudantes de Odontologia quanto ao futuro profissional. *Rev ABENO* [Internet]. 2015;15(3):60-68. doi: <https://doi.org/10.30979/rev.abeno.v15i3.225>
23. Miguel LCM, Pericolo S, Oliveira S, Gaedke A, Molina CG, Michels B. Atuação do cirurgião-dentista no Instituto Geral de Perícias de Joinville, SC. *Rev ABENO* [Internet]. 2017;17(2):51-59. doi: <https://doi.org/10.30979/rev.abeno.v17i2.357>
24. Silva TP, Sousa JPP, Rabello PM, Santiago BM. Avaliação do conhecimento de graduandos de Odontologia de uma instituição de ensino superior quanto a ética profissional. *Rev Bras Odont Leg* [Internet]. 2018 [cited 2023 Apr 13];5(2):28-38. Available from: <https://portalabol.com.br/rbol/index.php/RBOL/article/view/168/168>
25. Tavares CLS. O ensino investigativo como ferramenta para despertar interesse em alunos por disciplinas profissionalizantes: relato de experiência. *Rev Bras Educ Prof Tec* [Internet]. 2019;2(17). doi: <https://doi.org/10.15628/rbept.2019.7967>
26. Valente JA. Tecnologia e educação a distância no ensino superior: uso de metodologia ativas na graduação. *Rev Trab Educ* [Internet]. 2019;28(1):97-113. doi: <https://doi.org/10.35699/2238-037X.2019.9871>
27. Queiroz JRC, Oliveira MFJ, Souza DMC, Araújo ALLS, Fuscilla MAP. Aprendizagem por projeto e inovação tecnológica: união por competências. *Rev ABENO* [Internet]. 2016;16(2):243. doi: <https://doi.org/10.30979/rev.abeno.v16i2.243>
28. Santo EE, Cardoso AL, Santos AG, Barros DMV, Moreira JAM. Perfil de Uso do Espaço Virtual como Estratégia Pedagógica para a Práxis Educativa Online. *EAD Foco* [Internet]. 2019 [cited 2023 Apr 13];9(1):e781. Available from: <https://repositorioaberto.uab.pt/handle/10400.2/13365>
29. Faleiros F, K pppler C, Pontes FAR, Silva SSC, Goes FSN, Cucick CD. Uso de question rio virtual e divulga o como estrat gia de coleta de dados em estudos cient ficos. *Text Cont Enferm* [Internet]. 2016;25(4):e3880014. doi: <https://doi.org/10.1590/0104-07072016003880014>
30. Carlos NS. Futuro das pesquisas de satisfa o via telefone frente   inser o de pesquisas no m todo online no Brasil. S o Paulo: Universidade Federal de S o Paulo; 2015 [cited 2023 Apr 13]. Available from: <https://pospesquisa.eca.usp.br/monografias/Natasha.pdf>
31. Vieira HC, Castro AE, Schuch VFJ. O uso de question rios via e-mail em pesquisas acad micas sob a  tica dos respondentes. In: XIII SEMEAD, 2010 [cited 2023 Apr 13];17(1):1-13. Available from: <https://sistema.semead.com.br/13semead/resultado/trabalhosPDF/612.pdf>

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