

The Role Of Dental Practitioners In Addressing DIY (Do It Yourself) Oral Hygiene Practices: A Knowledge, Attitude, And Practice Assessment

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ABSTRACT

Introduction:

Inspired by online trends, social media, and the seeming economy, do-it-yourself (DIY) dental hygiene methods are becoming more and more popular. Among these sometimes used techniques are oil pulling, charcoal brushing, saltwater rinses, and the use of lemon and baking soda. Some are helpful, while others, when abused, can be fatal. The emphasis of this paper is on the knowledge, attitudes, and practices (KAP) of dental practitioners on do-it-yourself oral hygiene trends.

Methods:

Aiming at 250 participants, including academic professors, private practitioners, and dentistry students—a cross-sectional study using a standardised, self-administered questionnaire was conducted. Three sections made up the survey: knowledge, attitude, and behaviour. descriptive statistical data analysis.

Results:

Although 59.2% of respondents admitted probable risks, awareness of do-it-yourself methods was rather high (81.6%). 48.4% had not, however, looked at do-it-yourself projects incorporating patient participation. Just 24.8% had expressly addressed patient use of treatments containing either lemon application or charcoal brushing. While most of the respondents were aware of likely dangerous situations, 62% claimed they lacked the tools to question misleading information.

Conclusion:

Though few actively involve patients on the subject, do-it-yourself dental care techniques are known to dentists. Including modern self-care trends into dental education and treatment can help to improve patient safety and oral health literacy.

Keywords: *DIY Dentistry, Oral Hygiene, Dental Awareness, Home Remedies, Preventive Care.*

INTRODUCTION

General health depends rather much on oral hygiene since it helps to prevent periodontal diseases, tooth cavities, and systemic infections [1]. Professional guidance has always been on oral health; daily brushing with fluoride toothpaste, flossing, and regular dental visits make up part of it. Still, do-it-yourself (DIY) dental hygiene practices among the general public have most likely lately become increasingly common [2]. Often considered as better, safer, and less costly substitutes for conventional dental treatment, these methods combining lemon treatments, herbal therapies, baking soda use, oil pulling and activated charcoal brushing combine [3].

DIY oral hygiene practices are rather common thanks in great part to social media, health gurus, and anecdotal recommendations instead of academically proven studies [4]. Mostly due to While some of these techniques like oil pulling or saltwater rinses had historical or cultural roots and could have some limited benefits, others involved great risk [5]. Trends that promise whiter teeth, better breath, and more gum health have been extensively documented on YouTube, Instagram, using household items or natural remedies. Long use of lemon or baking soda, for example, could erode enamel; therapies based on charcoal could cause abrasion or concealment of underlying dental problems [6].

Public health-wise, depending more and more on do-it-yourself oral care has both opportunities and negatives. One may contend that it shows a purposeful effort at personal oral hygiene as well as rising consciousness of it. On the other hand, the lack of professional advice and standardising raise doubts about long-term consequences, especially in circumstances when evidence-based treatments are applied instead of supplements [7].

Knowledge of DIY oral hygiene trends is not only important for dental professionals who counsel patients about possible hazards but also for those who fit their professional recommendations with their values and likes. Although these techniques are rather common, not much research on how dentists view and use them exists. By means of an extensive evaluation of dental professionals' knowledge, attitudes, and practices (KAP) on DIY oral hygiene, one can learn about present gaps and influence the development of more efficient patient counseling [8].

This study intends to assess dental professionals' knowledge, attitudes, and practical involvement in do-it-yourself oral hygiene activities thereby facilitating a more educated and patient-centered approach in modern dental treatment.

METHODOLOGY

Study Design

A descriptive cross-sectional study was conducted using an online questionnaire and a paper-based one.

Participants

There were 250 members overall, 65 dental students, 65 private practitioners, and 60 academic professors. Among them were registered dentists and simply licensed practitioners. Professionals from outside of dentistry were left out.

Data Collection

There was distribution of a validated, self-administered questionnaire with twenty items. It separated into three spheres:

1. Knowledge (awareness of DIY practices and their effects)
2. Attitude (perception of safety and role of professionals)
3. Practice (engagement with patients regarding DIY trends)

Participants responded using a 5-point Likert scale (Strongly Disagree to Strongly Agree) or Yes/No/Maybe formats.

Data Analysis

SPSS Version 25 was used for responses' analysis. One computed ratios and percentages, built tables and figures to show results.

Ethical Considerations

One was authorised with informed knowledge. Answers were private, and involvement was free will. Approved ethical clearance from the institution review board.

Results

Demographic Details

❖ Gender: Male (54.8%), Female (45.2%)

❖ Age distribution:

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- 20–29 years: 44%
 - 30–39 years: 35%
 - 40–49 years: 14%
 - 50+ years: 7%

❖ Roles:

- Students: 130 (52%)
- Practitioners: 60 (24%)
- Academic Faculty: 60 (24%)

Knowledge Assessment

Among the 81.6% of respondents who agreed or strongly agreed, most of them showed rather high degree of awareness about popular do-it-yourself oral hygiene methods. Of the responses, about 71.2% knew the clinical

value of saltwater rinses (84%), and the hazards related to charcoal use. Still, there are misunderstandings; 18% of respondents said lemon and baking soda are safe substitutes for toothpaste, suggesting more awareness of possible dangerous do-it-yourself projects is needed. Answers to oil pulling showed intermediate knowledge of its inadequate scientific basis, with 60.8% of respondents in agreement.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am aware of popular DIY oral hygiene practices.	8 (3.2%)	14 (5.6%)	24 (9.6%)	151 (60.4%)	53 (21.2%)
I know that charcoal can erode enamel with prolonged use.	12 (4.8%)	19 (7.6%)	41 (16.4%)	137 (54.8%)	41 (16.4%)
Lemon and baking soda are safe alternatives to toothpaste.	66 (26.4%)	107 (42.8%)	32 (12.8%)	34 (13.6%)	11 (4.4%)
Saltwater rinses have clinical utility in oral care.	4 (1.6%)	10 (4.0%)	26 (10.4%)	153 (61.2%)	57 (22.8%)
Oil pulling has limited scientific backing for plaque control.	18 (7.2%)	33 (13.2%)	47 (18.8%)	105 (42.0%)	47 (18.8%)

TABLE 1: Knowledge awareness of DIY practices and their effects

Attitude Assessment

Regarding do-it-yourself projects, most respondents had a negative opinion; 61.2% of them disagree that they are safer than commercially provided products. 92.8% of respondents backed dental practitioners advising their patients about do-it-yourself hazards; 90.8 % of them claimed that internet resources influence patients. Though opinions of these techniques differed, just 45.6% felt confident, 30% disagreed, and 24.4% were unsure.

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
DIY oral practices are generally safer than commercial products.	61 (24.4%)	92 (36.8%)	38 (15.2%)	47 (18.8%)	12 (4.8%)
I believe patients are influenced by online content promoting DIY hacks.	3 (1.2%)	5 (2.0%)	10 (4.0%)	146 (58.4%)	86 (34.4%)

Dental professionals should educate patients on risks of DIY trends.	2 (0.8%)	6 (2.4%)	15 (6.0%)	128 (51.2%)	99 (39.6%)
I feel confident discussing DIY methods with patients.	29 (11.6%)	46 (18.4%)	61 (24.4%)	84 (33.6%)	30 (12.0%)

TABLE 2: Attitude perception of safety and role of professionals

Practice Assessment

Practically, do-it-yourself trends are growing in relevance. About half (48.4%) have already discussed these techniques with patients; 56.8% have been asked questions on the usage of charcoal or lemon. Most (71.2%) want direction on such changes in patient treatment. Only 38% of respondents, however, indicate they are ready to question false information, implying a training deficit.

Question	Yes	No	Maybe
Have you addressed DIY oral practices with your patients?	121 (48.4%)	95 (38.0%)	34 (13.6%)
Have you ever had patients ask you about charcoal or lemon brushing?	142 (56.8%)	108 (43.2%)	-
Do you plan to incorporate guidance on DIY practices into patient care?	178 (71.2%)	72 (28.8%)	-
Do you feel prepared to counter misinformation about DIY trends?	95 (38.0%)	155 (62.0%)	-

TABLE 3: Practice engagement with patients regarding DIY trends

DISCUSSION

Mostly motivated by social media, personal experience, and perceived cost, a growing trend reveals here complete knowledge, attitudes, and practices of dental professionals on do-it-yourself (DIY) oral hygiene treatments [9]. Although 81.6% of respondents said they knew about simple do-it-yourself techniques including oil pulling, charcoal brushing, lemon application, and using baking soda use, our results show a difference between knowledge and clinical involvement which relates with trends observed in similar KAP research done by. Muteb Algharbi et al. (2025) [10]

Remarkably, most (92.8%) of dentists said that health blogs encouraging do-it-yourself treatments truly influence their patients. This underlines how much the digital environment shapes patient behaviour and why clinicians need even more be continually sources of evidence-based knowledge similar to studies done by Freire, Y. et al. (2023) [11].

Future studies could, however, look at whether such traits relate with more active patient education or better counter-unverified trend preparation. Based on earlier studies in both developed and underdeveloped nations, more often than not healthcare professionals with more years of clinical experience or specialized training in preventative care would discuss lifestyle and non-clinical behaviors, such smoking cessation or diet, with patients in the study done by James M Rippe et al. (2018) [12]. One may use a similar strategy to control the dissemination of do-it-yourself dental trends.

In terms of practice patterns, while 71.2% of participants expressed willingness to incorporate guidance on DIY trends into patient care, this has not yet translated into routine clinical conversations. This inconsistency may be attributed to several factors, including lack of time during consultations, perceived irrelevance, or insufficient training in communication strategies. It may also reflect a broader issue within dental education, where curriculum content often fails to evolve as rapidly as popular health trends.

Particularly, our research also revealed a concerning lack of particular policies or procedures to regulate the misleading information patients come across the internet. This disparity requires quick inclusion of courses on digital literacy and counseling for patients into both undergraduate and continuing dental education (CDE) programs which has been supported by Louise Forsetlund et al. (2021) [13]. Dental professionals have to be ready to assess such strategies and provide acceptable, evidence-based suggestions as DIY health products get more accessible.

This study basically emphasises the enormous need to close the awareness-to-action gap even if it demonstrates a typically good degree of knowledge on DIY oral hygiene habits among dental professionals. Including patient misinterpretations and training on new trends into professional development programs would allow dental professionals to become more successful teachers and champions of evidence-based, safe, oral health practices.

CONCLUSION

This study reveals a significant discrepancy between the knowledge of DIY oral hygiene practices by dental professionals and their confidence or adaptability in clinical environments. Although most participants are aware of at-home remedies and their hazards, many lack the knowledge to sufficiently counsel patients or challenge false information. Though less than half of the professionals questioned include patients in strategy discussions, social media and internet information obviously influences patient conduct.

To close this difference, dental education and professional growth ought to concentrate on DIY trends, their scientific validity, and good patient communication. Better knowledge-practice link will enable dentists to advice patients, control damage, and promote good oral hygiene. Modern self-care trends incorporated into dental treatment help to foster better, evidence-based oral hygiene, patient trust, and preventative care.

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