



International Journal of Scientific Research in Dental and Medical Sciences

www.ijstdms.com



Infection Control Measures Concerning Knowledge and Behavior among Bangladeshi Dental Professionals

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ARTICLE INFO

Article history:

Received 21 July 2023

Received in revised form 30 August 2023

Accepted 05 September 2023

Available online 07 September 2023

Keywords:

Behavior

Dentists

Infection Control

Knowledge

ABSTRACT

Background and aim: Maintenance of universal infection protocol in all dental care processes in the dental office before, during, and immediately after dental care is of utmost importance. Very few studies were found to identify the bio-security standards for dental care. This study aimed to determine the knowledge and behavior of Bangladeshi dental professionals on the infection control system during clinical case management.

Material and methods: This descriptive cross-sectional study was conducted among 110 dental professionals in the Khulna district, Bangladesh. Semi-structured data were collected in this study through the face-to-face interview method. Univariate multivariate techniques followed by regression modeling have been used for analysis.

Results: About 67% of dental surgeons knew about infection prevention measures well, whereas only 33% had poor knowledge. However, instead of having good knowledge of infection control measures, 33% of dental surgeons were found to have poor behavior in their dental setting, and the rest, 34%, followed all the preventive measures to control infection. Binary regression analysis of this study revealed significant predictors associated with poor knowledge and behavior on infection control measures.

Conclusions: This study revealed a depressive scenario regarding knowledge and behavior on infection control measures among dental professionals. A large-scale study is required to generalize the information and to improve the situation. Moreover, this study will provide a concrete base for further study and will significantly assist the policymakers of the pertinent arena.

1. Introduction

Healthcare providers are constantly exposed to microorganisms, most of which can be affected by severe and lethal infections. The estimations show that the risk of nosocomial Infection is 2 to 20 times higher in developing countries than in developed countries. Infection is one of the most crucial problems in healthcare services worldwide. The cause of mortality and morbidity associated with clinical, diagnostic, and therapeutic procedures constitute it.^[1,2] Infection control is defined as "Measures practiced by health care personnel to reduce the risk of transmission of infectious agents to patients and employees (e.g., proper hand hygiene, scrupulous work practices, use of personal protective equipment (PPE), such as masks or respirators, gloves, gowns, and eye protection)." Based on how an infectious agent is transmitted, we can control Infection, including contact, droplet, and airborne precautions.^[3] Healthcare workers are at a high risk of needle stick injuries and bloodborne pathogens as they perform clinical activities in hospitals.^[4,5] The Dental Clinic is an environment where disease transmission occurs quickly.^[6] Since the treatment involves intrusive procedures with a high

possibility of contamination by microorganisms from blood or saliva, dental care providers are at particular risk. A paper by Laheij et al. 2012 determined the risk of Infection and cross-transmission by bacteria and viruses that are particularly relevant in the dental practice environment (e.g., Hepatitis B, C, and D viruses, HSV, VZV, HIV). The transmission of Infection with the Hepatitis B virus poses the most significant risk for the dental team and the patients. However, the transmission of other viruses and bacteria is scarce, and the risk for transmission resulting in Infection with these microorganisms seems low.^[7] During dental procedures, the transmission of infections could occur either through direct contact with blood, saliva, contaminated treatment water from dental units, or injury with an anesthetic needle. Splash exposure of the mucous membranes, droplets, and aerosols, or indirect contact with contaminated instruments and surfaces, is also the reason for infection transmission. Accidental exposure to infections in dental settings can be avoided by using workplace safety precautions and implementing infection control guidelines.^[8,9] According to Abou El's study in 2019, 94% of dentists incorrectly know how to protect themselves from contamination. 47% of

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<https://doi.org/10.30485/IJSDMS.2023.405704.1523>



respondents believed that saliva is a vehicle for HIV/AIDS transmission, and only 33% perceived themselves as knowledgeable enough to serve oral care to such patients.^[10] Strategies to protect health workers include implementation of standard precautions, immunization against infectious diseases of concern, provision of personal protective equipment, correct cleaning and disinfection of surfaces and equipment to remove pathogens, sterilization of instruments, and proper techniques for handling sharp instruments and the management of exposure that are recommended by WHO.^[11] Some studies from developing countries show that adherence rates to infection control measures in dental practice were much lower than in developed countries. For resource-constrained settings like Bangladesh, significant deficits in IPC (Infection, prevention, and control) lie in the limited availability of essential resources, insufficiently trained personnel, and lack of infection control policies.^[12] THE WHO DEVELOPED several IPC (Infection, prevention, and control) guidelines and tools for assessing IPC (Infection, prevention, and control) practices. Quality Improvement Secretariat (QIS), an initiative under the Directorate General of Health Services (DGHS), Bangladesh, tailored those guidelines and tools for hospital infection control in Bangladesh.^[13] However, very few IPC programs have been implemented due to a lack of familiarity with IPC (Infection, prevention, and control) and inconsistent compliance monitoring with this directive.

Studies of Dentists' infection control practices have investigated compliance with specific procedures such as using gloves and masks, eye protection, vaccination of hepatitis B virus (HBV), and heat sterilization of dental handpieces.^[14] Exposure to blood through percutaneous injury, contact with mucous membranes of the eyes, nose, or mouth, or contact with non-intact skin is the primary method in this practice.^[15] A study suggested a need to implement educational activities to permit a balance between theory and professional practice concerning hospital infection preventive measures aiming to improve knowledge and behavior.^[16] Dental education can play an essential role in dental professionals' training, helping them to adopt adequate knowledge and behavior related to infection control.^[17] Identifying the real scenario related to knowledge and behavior on infection control measures among Bangladeshi dental professionals is mandatory to justify whether they fulfill the standard guidelines. This research was carried out to describe a universal infection protocol in all dental care processes after the appearance of COVID-19, especially since the full practice of dentistry has been reopened in different cities and because dental urgencies and emergencies cannot be postponed in most cases. Protective measures have been recommended for health personnel, including dentists and dental auxiliary personnel, who have more direct contact with patients and require the implementation of protective measures in the dental office before, during, and immediately after dental care. Many articles have been published on the topic of infection control. However, there is a scarcity portraying knowledge and behavior about infection control measures of Bangladeshi dental professionals and their support systems for the dental chamber, including the patients. This study aimed to address these issues, which would be helpful to fill in some of the gaps not addressed by other articles. More studies on this topic are required to update and standardize the universal infection control protocol, which is safe for dental surgeons and professionals. In addition, national and local regulations or guidance should be documented and followed where appropriate.

2. Material and methods

Study design

This was a descriptive type of cross-sectional study followed by a quantitative approach. Semi-structured data were collected in this study from

March to June 2022. Information on knowledge and behavior on infection control measures, including characteristics related to their demography, profession, and service, were extracted from Bangladeshi dental professionals.

Study participants, sample size, and sampling

This study included 110 dental professionals working in the Khulna district of Bangladesh. Quantitative information of this study was collected from the respondents' signified active dental surgeons who had at least a Bachelor of Dental Surgery (BDS) degree registered by Bangladesh Medical and Dental Council (BMDC), were practicing in any of the hospitals or clinics of Khulna district and provided their consent to participate in this study. A total of 11350 dental professionals from eight divisions (Dhaka, Chittagong, Rajshahi, Khulna, Rangpur, Mymensingh, Sylhet, and Barisal) of Bangladesh were considered the study population.^[18] Khulna division was selected through multi-stage random sampling as a study place. It was assumed that one-eighth of the Bangladeshi dental professionals would be in each division, and accordingly, 1418 participants were calculated for the Khulna division. This Khulna district was considered for this study among ten districts under the Khulna division concerning as divisional district of Khulna. Therefore, 141 samples were calculated for the Khulna district, considering one-tenth of 1418 professionals. However, the calculated samples were directed to 120 by deducting 15%, considering the nonresponse of the respondents. After data cleaning and initial management, the final samples were fixed at 110. The study was conducted in Khulna city, considering the greatest availability of dental professionals compared to the other areas of the Khulna district.

Data collection

A pre-tested and semi-structured questionnaire was used to gather data from the dental professionals using the interviewer-administered method. Respondents were recruited in April 2022 in this study and accessed primarily through phone calls and later they were interviewed according to their convenient schedule. The survey took only 10 to 15 minutes for the interviewer to complete. All authors had access to the collection and preserving participants' information during or after data collection. The survey was administered in the Bengali language with the utmost support of the hospital's authority.

Ethical considerations

This study was approved by the Ethical Review Committee of the Department of Public Health of Northern University Bangladesh (NUB/DPH/EC/2022/16) and conformed to the Declaration of Helsinki. Participation of the respondents was anonymous and voluntary. Written informed consent was taken from the respondents at the beginning of the survey, and participants could withdraw from the survey at any time.

Questionnaire design

The questionnaire was pre-validated by two independent reviewers and pre-tested among five respondents. The quality of the questionnaire addressed the responses of the pre-test. The questionnaire comprised several segments: (1) Knowledge and behavior on infection control measures: [i. Maintenance of personal hygiene (mask-wearing, hand washing, mouth rinsing, and nasal spray), ii. Infection control materials provided by the clinic authority (disposable gloves, mask, gown, shoe cover, wrapping paper, toothbrush, and mouthwash), iii. Infection control measures are taken by dental surgeons (disinfection by chemical, fogging, UV light), iv. Maintenance of sterilization procedure (autoclave, boiling/steaming, chemical, radiation), v. Patient

evaluation and screening before providing service, vi. Personal hygiene support for the patients (hand sanitizer, mouth wash, disposable gown);(2) Professional and service-related information of the dental surgeons: professional qualifications, experience (in years), infection control guidelines maintained by the authority of health facilities, number of dental assistants per dental chamber, number of patients treated per day (3) Demography information of the dental surgeons: age, gender, marital status, monthly income (BDT), organization type and working duration per day.

Data analysis

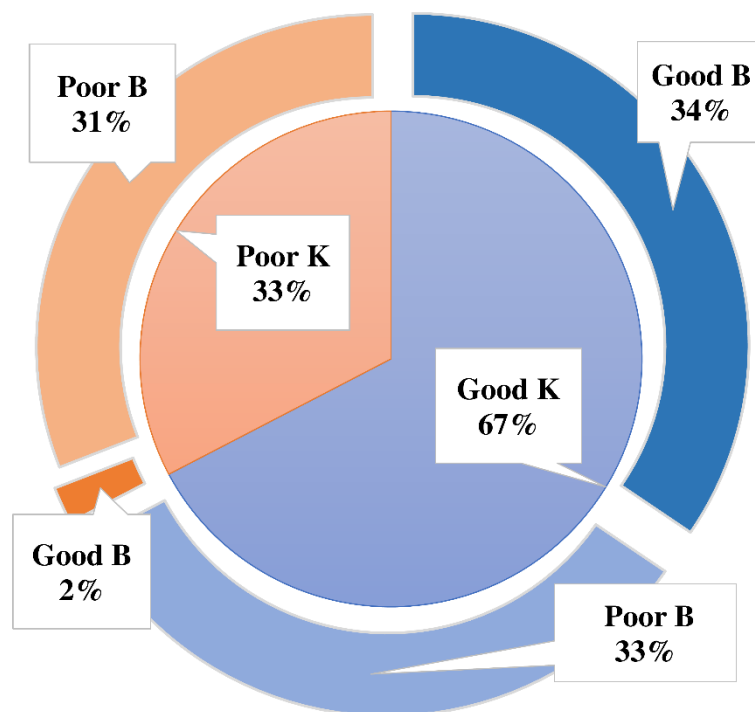
The Statistical Package for the Social Sciences (SPSS) software checks and analyzes collected data. Study characteristics were subjected to descriptive statistics (frequency and proportions) for summarizing the obtained data. A scoring system was developed to categorize the participant's knowledge and behaviors on infection control measures. The score calculation included all the components related to knowledge and behaviors. Only the correct answers to each knowledge question are listed. Each correct response was assigned a score of 1; each incorrect response was assigned a score of 0. For multiple answers, the score of 1 was divided by the number

of answers. Afterward, the total score was converted into percentages and classified into two categories. Poor knowledge corresponded to a score of (<60%) and good knowledge corresponded to a score of (>60%).^[6] A multinomial logistic regression analysis was followed by a modeling procedure considering the ng backward elimination process, including pre-specified confounders. Odds Ratios with 95% confidence intervals concerning ideal and prolonged standing duration per day were calculated for the specified exposures.

3. Results

Knowledge and behavior on infection control measures

As indicated in Fig. 1, about 67% (n=74) of dental surgeons showed good knowledge of infection prevention measures, whereas only 33% (n=36) had poor knowledge. However, instead of having good knowledge of infection control measures, 33% (n=36/74) of dental surgeons were found to have poor practice in their dental setting, and the rest (n= 38/74) followed all the preventive measures to control infection. On the other hand, due to poor knowledge, a greater part of dentists showed poor behavior (31%, n=34/36) on infection control during their practice. (Fig. 1).



K= Knowledge; B= Behavior; OR/p= 17.94/0.01; 95% CI= (4.02- 80.19); Reference category= good knowledge

Fig. 1. Correlation between Knowledge and behavior on infection control measures among dentists. (n= 110).

Association between knowledge and behavior related to infection control measures

Table 1 which intends to explore the correlation between knowledge behavior on different components of infection control measures, is shown in Table 1. In other words, how significantly knowledge level influences the behavior of the respondents on various components of infection control

measures are being represented here. Regarding basic infection control measures, higher odds for behavior on disinfectant use such as chemical, fogging, and UV light were observed among dentists with poor knowledge (OR/p= 6.79/0.01; 95% CI: 2.91- 15.85) and maximum dentist (32%, n= 36/48) with poor knowledge found to have poor behavior related to disinfection.

Table 1. Association between different components of knowledge and behavior related to infection control measures (n=110).

Characteristics	Behavior on Different Components of Infection Control Measures						
	Number of Participants, n (%)	Good, n (%)	Poor, n (%)	OR (Poor vs Good)	95% CI	P-value (≤0.05)	
Knowledge of different components of infection control measures	Maintenance of personal hygiene materials (mask-wearing, hand washing, mouth rinsing, nasal spray).						
	Poor	43 (39.1)	30 (27.3)	13 (11.8)	0.15	0.06- 0.35	0.01*
	Good	67 (60.9)	17 (15.5)	50 (45.5)	Ref		
	Infection control materials provided by the clinic authority (disposable gloves, mask, gown, shoe cover, wrapping paper, toothbrush, mouth-wash).						
	Poor	58 (52.7)	2 (1.8)	56 (50.9)	24.00	5.29-108.88	0.01*
	Good	52 (47.3)	24 (21.8)	28 (25.5)	Ref		
	Disinfectant used by dental surgeons (disinfection by chemical, fogging, UV light).						
	Poor	48 (43.6)	12 (10.9)	36 (32.7)	6.79	2.91- 15.85	0.01*
	Good	62 (54.4)	43 (39.1)	19 (17.3)	Ref		
	Patient evaluation and screening prior to providing service.						
	Poor	69 (62.7)	10 (9.1)	59 (53.6)	2.44	0.95- 6.31	0.07
	Good	41 (37.3)	12 (10.9)	29 (26.4)	Ref		
	Personal hygiene support for the patients (hand sanitizer, mouthwash, disposable gown).						
	Poor	12 (10.9)	8 (7.3)	4 (3.6)	3.58	0.94- 13.74	0.06
	Good	98 (89.1)	86 (78.2)	12 (10.9)	Ref		

Data are presented as frequency (n), percentage (%). *Statistical significance at p-value ≤0.05. The Chi-square test was used to observe the association; risk was estimated by Odds Ratio calculation and reference category considered good knowledge and good behavior for all the variables.

In addition, regarding maintenance of personal hygiene for the patient, like hand sanitization, using mouthwash, disposable gown shows that nearly significantly greater odds for practicing personal hygiene were found again among dentists who had poor knowledge (OR/p= 3.58/0.06; 95% CI: 0.94-13.74). Furthermore, regarding the evaluation and screening of a patient before providing service maximum dentist got poor knowledge (62.7%, n=69/110), and also, odds of behavior were significantly high among those dentists (OR/p= 2.44/0.07; 95% CI: 0.95- 6.31), but surprisingly it was found that dentist who had good knowledge on evaluation and screening, maximum of them had poor practice level (26.4%, n=29/41). Moving towards behavior related to maintenance of personal hygiene material by the dentist, significantly higher odds (OR/p= 0.15/0.01; 95% CI: 0.06- 0.35) were found among study subjects who had poor knowledge of it, but surprisingly, it was seen that instead of having poor knowledge, they showed a good level of practice (27.3%, n= 30/43), which may reflect authorities or peer pressure. It is necessary to mention that the maximum number of dentists with good knowledge of personal hygiene maintenance surprisingly showed poor practice levels (45.5%, n=50/67). (Table 1).

Characteristics of the respondents according to the knowledge and behavior on infection control measures

Table 2 intended a multivariate (cross-table) analysis of this study, revealing significant service and profession-related characteristics of respondents that influence their knowledge and behavior level. Regarding service-related information, it was observed that maximum dentists who had full support from authority consistent with infection control guidelines revealed significantly good knowledge (63.6%, 70/97; p<0.01) about infection control measures, but unfortunately, instead of having good knowledge and complete authority support, maximum respondents showed a significantly poor level of behavior (51.8%, 57/97; p=0.01) in terms taking infection control measures. Likewise, maximum dentists who had less than two assistants in their chamber got significantly better knowledge (48.2%, 53/86; p=0.02) on infection control, but sadly, even with good knowledge, they showed poor behavior (58.2%, 64/86; p=0.01) upon taking any measures to prevent infection. On the other hand, the study also revealed that among dentists who attend to patients less than ten times a day, a good proportion of them showed significantly poor knowledge (19.1%, n=21/49; p=0.04) of infection control measures during their patient handling they showed the poor level of practice (32.7%, 36/49; p=0.01). Now, moving toward the professional background, it was seen that the maximum number of graduate dentists had good knowledge (53.6%, 59/91; p=0.23). On infection control measures, a maximum of them showed a significantly poor level of behavior (57.3%, 63/91; p=0.01) during patient handling, possibly due to a lack of

excellence and professional experience. Similarly, the majority of dentists with professional experience of fewer than ten years revealed good knowledge (47.3%, 52/77; $p=0.93$) on infection prevention, but again

although having good knowledge, they showed significantly poor practice level (49.1%, 54/77; $p=0.01$) to control infection. (Table 2).

Table 2. Characteristics of the respondents according to the knowledge and behavior on infection control measures (n=110).

Characteristics	Knowledge				Behavior			
	Number of Participants, n (%)	Good, n (%)	Poor, n (%)	P-value (≤ 0.05)	Number of Participants, n (%)	Good, n (%)	Poor, n (%)	P-value (≤ 0.05)
Service-related information								
Infection control guidelines maintained by the authority of health facilities								
Yes	97 (88.2)	70 (63.6)	27 (24.5)	<0.01*	97 (88.2)	40 (36.4)	57 (51.8)	0.01*
No	13 (11.8)	4 (3.6)	9 (8.2)		13 (11.8)	0 (0)	13 (11.8)	
Number of patients treated per day								
<10	49 (44.5)	28 (25.5)	21 (19.1)	0.04*	49 (44.5)	13 (11.8)	36 (32.7)	0.01*
>10	61 (55.5)	46 (41.8)	15 (13.6)		61 (55.5)	27 (24.5)	34 (30.9)	
Number of dental assistants per dental chamber								
<2	86 (78.2)	53 (48.2)	33 (30.0)	0.02*	86 (78.2)	22 (20)	64 (58.2)	0.01*
>2	24 (21.8)	21 (19.1)	3 (2.7)		24 (21.8)	18 (16.4)	6 (5.5)	
Profession related information								
Professional qualification								
Dental graduate	91 (82.7)	59 (53.6)	32 (29.1)	0.23	91 (82.7)	28 (25.5)	63 (57.3)	0.01*
Dental postgraduate	19 (17.3)	15 (13.6)	4 (3.6)		19 (17.3)	12 (10.9)	7 (6.4)	
Experience (in years)								
≤ 10	77 (70.0)	52 (47.3)	25 (22.7)	0.93	77 (70.0)	23 (20.9)	54 (49.1)	0.01*
>10	33 (30.0)	22 (20.0)	11 (10.0)		33 (30.0)	17 (15.5)	16 (14.5)	

Predictors Influencing poor knowledge of Infection Control measures

In Figure 2, binary regression analysis of the study revealed significant predictors associated with poor knowledge of infection control measures. Initially, predictors for poor knowledge were identified as dentists who attend to patients less than 10 in a day (COR= 2.30; 95% CI: 1.02–5.18), with the help of fewer than two assistants (COR= 4.36; 95% CI: 1.66–20.54) and those who do not receive any kind of support from authority concerning to infection control (COR= 5.83; 95% CI: 1.21–15.76). Then, finally, by adjusted modeling and elimination of all the possible confounders, the study revealed

few significant predictors associated with poor knowledge of infection control. Dental service providers with fewer than two assistants per day (AOR= 4.59; 95% CI: 0.93-12.64) were found to be a major predictor for poor knowledge among dentists about infection control measures, which suggests that having a good team environment at work is important to enrich the knowledge. Likewise, lack of support from authorities concerning infection control (AOR= 3.43; 95% CI: 1.28-16.44) was identified as a significant predictor for the poor level of knowledge among dentists. (Fig. 2).

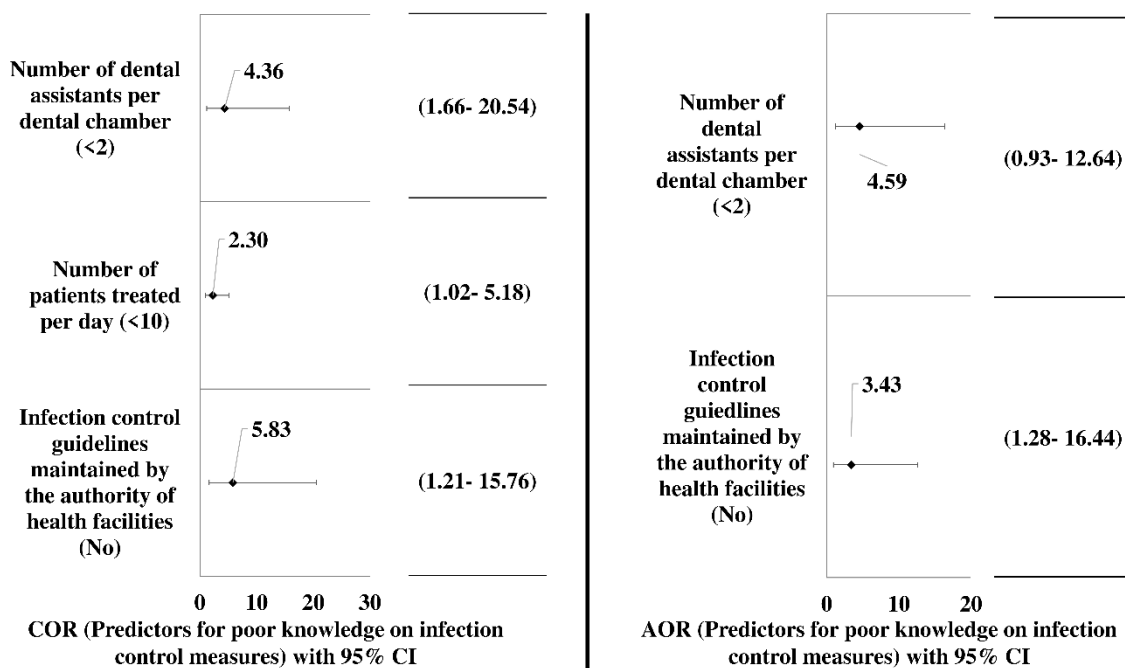


Fig. 2. Predictors influencing poor knowledge of infection control measures among the respondents (n=110).

Predictors influencing poor behavior on infection control measures

In Figure 3, binary regression analysis of the study revealed significant predictors associated with poor behavior on infection control measures. Initially, as a predictor for poor behavior were identified as a dentist with graduation only (COR= 3.86; 95% CI: 3.08–24.77), who attended less than ten patients in a day (COR= 2.19; 95% CI: 1.08–5.77) with the help of less than two assistance (COR= 8.73; 95% CI: 1.37–10.84) and who had professional experience less than ten years (COR= 2.49; 95% CI: 0.98–4.95). Later, after adjusted modeling and elimination of confounders, the study revealed significant predictors associated with poor infection control

behavior. Finally, it was observed that dentists who execute their daily practice with the support of fewer than two assistants (AOR= 9.49; 95% CI: 1.45–13.71) had higher odds and were identified as a significant predictor for poor behavior. It recommends that dental professionals require delegation support during dentistry to maintain proper infection control measures. On the other hand, it was obvious that dentists who were only graduates (AOR= 4.45; 95% CI: 3.22–27.96) were identified as a significant predictor for poor behavior regarding infection prevention. This finding again proved that professional excellence is a matter of time and experience. (Fig. 3).

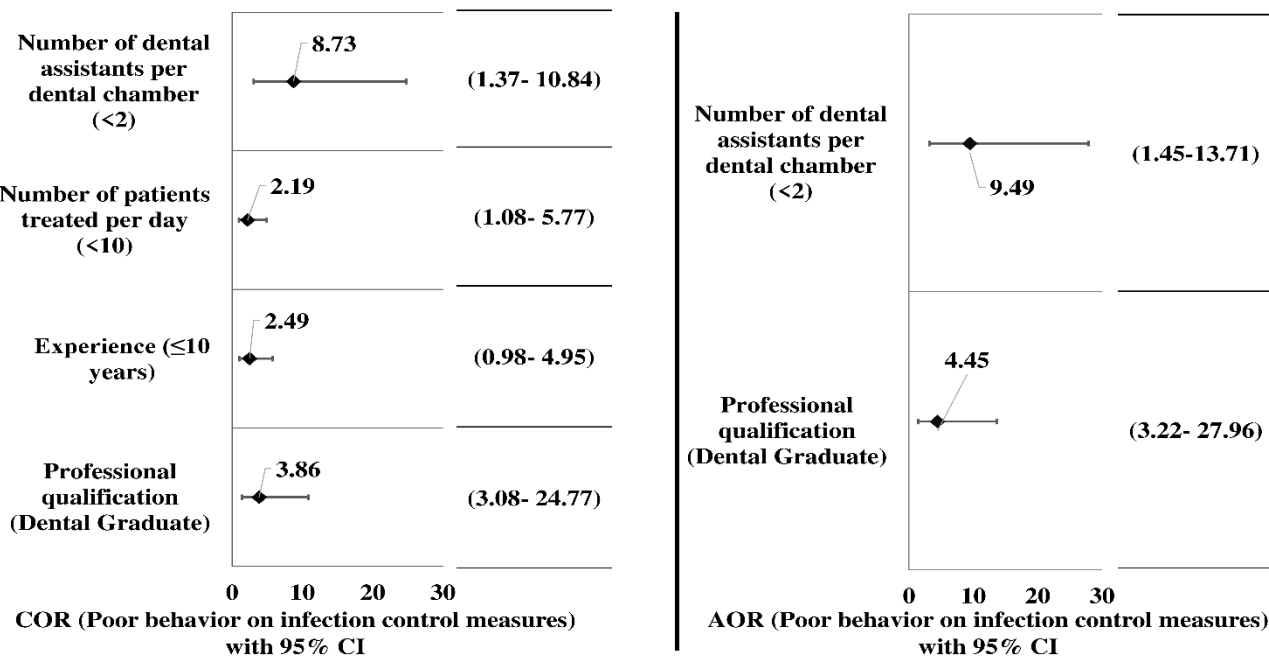


Fig. 3. Predictors influencing poor behavior on infection control measures among the respondents (n=110).

4. Discussion

Our study focused on infection control measures in the context of Bangladesh, which is a pressing public health issue. We sought to explore knowledge and behavior concerning infection control measures among Bangladeshi dental professionals and factors related to infection. Our findings were extremely pertinent to policymakers working in healthcare sectors. Our findings can also be valuable to scholars and practitioners working as dental surgeons. Our study revealed good knowledge among the dental surgeons (67%) on infection prevention measures, whereas only 33% had poor knowledge. In the context of practice, 33% of dental practitioners were found to have poor practice in their dental setting, and the remaining 34% maintain all the preventive measures in practice to control infection. A similar study in Pakistan reported that 73.3% of respondents used to wash their hands regularly after providing treatment to every patient and opined that using PPE has an inevitable role in preventing cross-contamination.^[6] Our study findings represent the deficiency of infection prevention measures and behaviors among dental professionals in Bangladesh. Our study found that the maximum number of dentists (32%, n= 36/48) with poor knowledge have similar behavior related to disinfection. On the other hand, behavior related to the maintenance of personal hygiene materials by dentists was significantly higher among study subjects who had poor knowledge of it. However, the interesting matter was that they showed good practice instead of having poor knowledge (27.3%, n= 30/43). A study showed that disinfection and use of a dental chair barrier were done correctly by a minority of students in 1995 (2.8%, n=10/350).^[18] This contrast was due to different groups of people not being experienced as registered practitioners and health authorities' negligence. Our study observed several significant predictors associated with poor knowledge of infection control after eliminating all the possible confounders. Dental surgeons with fewer than two assistants per day were a major predictor of poor knowledge among dentists about infection control measures. Besides, lack of support from authorities was identified as one of the significant predictors of the poor level of knowledge among professional dentists. As no study was found regarding predictors after that, a systematic review from Iran supported our findings, indicating inappropriate knowledge, attitude, and practice with negligence regarding infection control among Iranian dentists and dental students. The issue of personal protection devices and measures required for infection control were not by global standards in hospitals/clinics private chambers in Iran.^[19] These similarities suggest that special programs and campaigns should be in place to monitor all kinds of dental settings to observe infection control standards. On the other hand, our analysis indicates that only graduate dentists (AOR= 4.45; 95% CI: 3.22–27.96) were identified as significant predictors for poor behavior regarding infection control and prevention. A study of private dental clinics in Lebanon found they also sought professional excellence and long experience in this matter.^[20] Due to some limitations, the sample size and time frame of this study are very short, but this is not the overall scenario of the country. Finally, in case of strength, this study sorts out many predictors, which will be helpful for policymakers in rethinking new dimensions for infection control measures among dental professionals. These findings and associated factors can also be valuable to researchers and dental practitioners in dental clinics, hospitals, and private chambers.

5. Conclusion

This cross-sectional study reveals a negative scenario regarding knowledge and behavior regarding infection control measures among dental professionals. A study was conducted in 110 Khulna district, Bangladesh dental professionals. Maximum dental surgeons showed good knowledge of

infection prevention measures, whereas some had poor knowledge. However, instead of having good knowledge of infection control measures, some dental surgeons were found to have poor behavior in their dental setting, and the rest followed all the preventive measures to control infection. Binary regression analysis of this study revealed significant predictors associated with poor knowledge and behavior on infection control measures. Initially, predictors for poor knowledge were identified as dentists who attend to patients less than ten times a day and those who do not receive any kind of support from authority concerning infection control. On the other side, as a predictor for poor behavior, a dentist with graduation only attended less than ten patients in a day with the help of less than two assistants and who had professional experience less than ten years. Dental service providers with less than two assistants per day and a lack of support from authorities concerning infection control were significant predictors of poor knowledge.

Furthermore, dentists who executed their daily practice with the support of less than two and who were only graduates were identified as a significant predictor for poor behavior regarding infection prevention. We have poor knowledge and behavior. However, this study will provide future field researchers with a concrete base for further study and will assist the policymakers of the pertinent arena.

Recommendation

Surprisingly, it was found that most dentists with good knowledge of evaluation and screening had poor practice levels. It recommends that dental professionals require delegate support during dentistry to maintain proper infection control measures. Dental staff should have the most up-to-date knowledge about the procedures required to prevent the transmission of Infection. Health policymakers should consider Infection control a major health issue in the nation. The policymakers should form a policy to collect the record of the infection control measures and associated diseases from dental clinics to find the real burden and incidence of the disease. There should be adequate infection control facilities, including private dental clinics. Infection control practice should be enhanced in all levels of health care settings. Awareness programs should be increased as much as possible in the communities.

Conflict of Interest

The authors declared that there is no conflict of interest.

Acknowledgements

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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How to Cite this Article: Begum A, Banu B, Nasrin A, Chowdhury SH, Shardar MS, Nobí N. Infection Control Measures Concerning Knowledge and Behavior among Bangladeshi Dental Professionals. *International Journal of Scientific Research in Dental and Medical Sciences*. 2023;5(3):127-134. <https://doi.org/10.30485/IJSRDMS.2023.405704.1523>.