

Original Research

Knowledge, Attitude and Practice (KAP) among patients attending dental clinic towards cross infections and infection control measures

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ABSTRACT:

Background: The goals of the crucial medical field of patient safety are to increase safety, reduce treatment errors, and enhance the standard of patient care. The present study was conducted to assess the level of Knowledge, Attitude and Practice (KAP) among patients attending dental clinic towards cross infections and infection control measures. **Materials & Methods:** 520 patients of both genders were selected. A questionnaire containing 10 questions was given to all. Each question had a score of "1" for the right response and "0" for the wrong or unclear response. **Results:** Out of 520 patients, 215 were males and 305 were females. 19% believed that dentist should be vaccinated against HBV, 51% said dentists should replace gloves after receiving phone call, 16% thought dentist can treat more than one patient with the same glove, 20% replied that dentists need to give prophylactic antibiotics prior to procedures to systemically compromised patients, 94% said dentists should always wear gloves while treating patients, 82% think that dentists should always wear eye goggles when treating patients, 95% said dentists should always wear face mask when treating patients, 46% ask dentist about the way they sterilize instruments, 23% ask the dentist to wear a face mask if one is not wearing it and 38% ask the dentist to wear gloves if isn't wearing it. The difference was significant ($P < 0.05$). **Conclusion:** Patients visiting dental clinics exhibited a positive attitude and self-reported practices about infection prevention in dentistry. There is room for development in knowledge. Through educational initiatives, banners, ads, and rallies, dental clinic patients should be better informed of cross-infection in dentistry.

Keywords: cross-infection, Question, Survey

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INTRODUCTION

The goals of the crucial medical field of patient safety are to increase safety, reduce treatment errors, and enhance the standard of patient care. The spread of infectious agents between patients and staff in a clinical setting is known as cross-infection.¹ An American dentist was reported to have spread the Human Immunodeficiency Virus (HIV) to five of his patients, raising serious concerns about infection management in both dentists and patients.² Cross-infection has become a serious concern for dentists, dental staff, and patients due to the prevalence of individuals with HIV and hepatitis B and C.³

In contrast to an estimated 0.4% after comparable exposure to HIV, a number of surveys and studies have demonstrated that the incidence of Hepatitis B developing after needle stick injuries from

HbsAg patients is roughly 20%.⁴ Because many infections can be spread via blood or saliva through direct or indirect contact, droplets, aerosols, or contaminated instruments and equipment between patients and dentists, research has demonstrated that infectious dangers exist in dental practice.⁵ The majority of research on infection management in dentistry was carried out on dental professionals or students. Only a few research involving dental hospital patients were conducted. It is crucial to put in place efficient infection control programs involving dental patients in order to increase public knowledge of the advantages of safety standards.^{6,7} The present study was conducted to assess the level of Knowledge, Attitude and Practice (KAP) among patients attending dental clinic towards cross infections and infection control measures.

MATERIALS & METHODS

The study was carried out on 520 patients of both genders. All gave their written consent to participate in the study.

Data such as name, age, gender etc. was recorded. A questionnaire containing 10 questions was given to all. Each question had a score of "1" for the right response and "0" for the wrong or unclear response. A total

score between 0 and 10 was determined. After that, it was divided into three tertiles: Low score: less than half the right answers (less than five out of ten questions), 50% of the right answers (5/10 questions) is a fair score and > 50% of the right answers (>5/10 questions) indicates a satisfactory result. Results thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 520		
Gender	Male	Female
Number	215	305

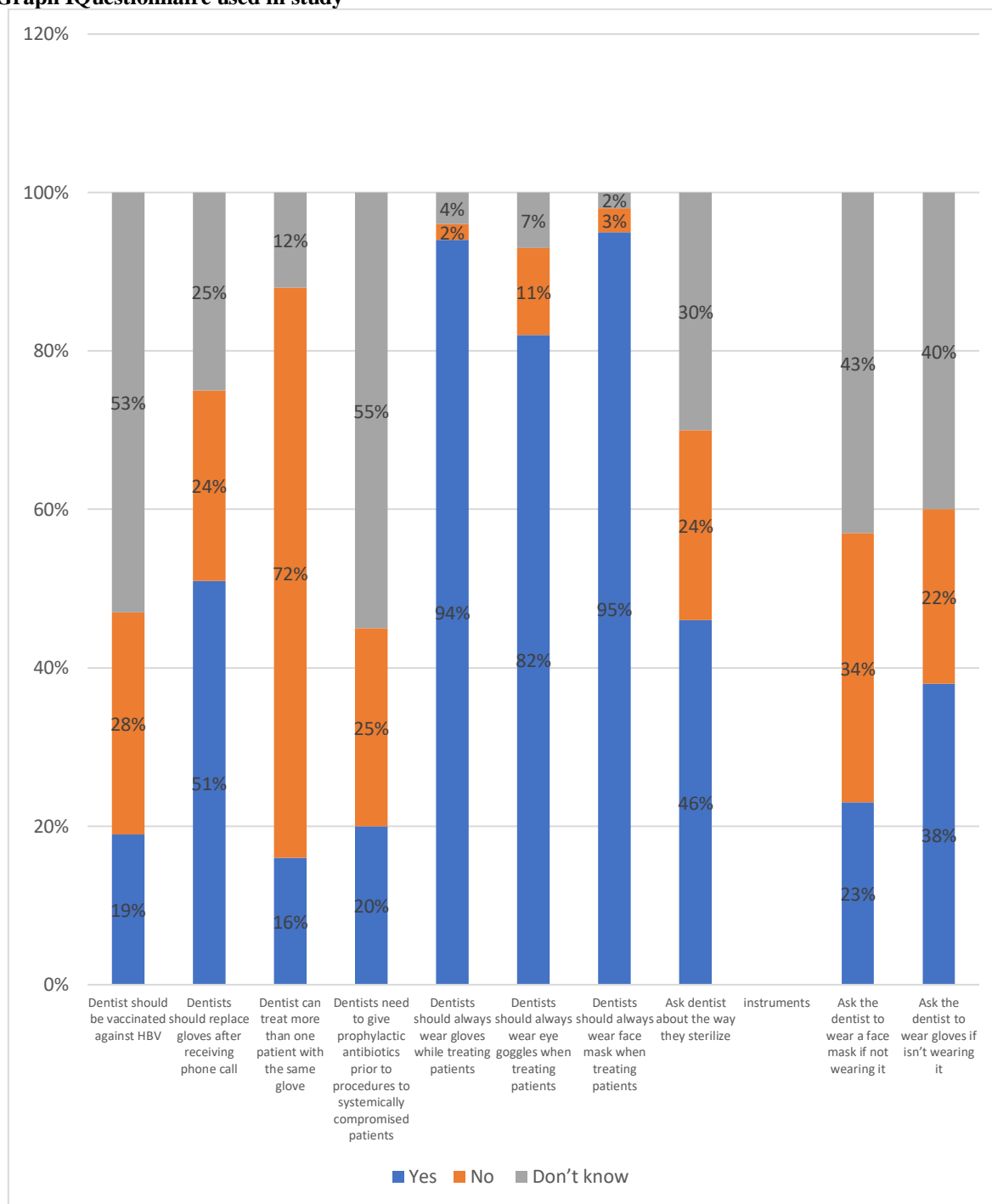
Table I shows that out of 520 patients, 215 were males and 305 were females.

Table II Questionnaire used in study

Question	Yes	No	Don't know	P value
Dentist should be vaccinated against HBV	19%	28%	53%	0.05
Dentists should replace gloves after receiving phone call	51%	24%	25%	0.13
Dentist can treat more than one patient with the same glove	16%	72%	12%	0.01
Dentists need to give prophylactic antibiotics prior to procedures to systemically compromised patients	20%	25%	55%	0.94
Dentists should always wear gloves while treating patients	94%	2%	4%	0.03
Dentists should always wear eye goggles when treating patients	82%	11%	7%	0.05
Dentists should always wear face mask when treating patients	95%	3%	2%	0.02
Ask dentist about the way they sterilize instruments	46%	24%	30%	0.11
Ask the dentist to wear a face mask if not wearing it	23%	34%	43%	0.18
Ask the dentist to wear gloves if isn't wearing it	38%	22%	40%	0.29

Table II, graph I shows that 19% believed that dentist should be vaccinated against HBV, 51% said dentists should replace gloves after receiving phone call, 16% thought dentist can treat more than one patient with the same glove, 20% replied that dentists need to give prophylactic antibiotics prior to procedures to systemically compromised patients, 94% said dentists should always wear gloves while treating patients, 82% think that dentists should always wear eye goggles when treating patients, 95% said dentists should always wear face mask when treating patients, 46% ask dentist about the way they sterilize instruments, 23% ask the dentist to wear a face mask if not wearing it and 38% ask the dentist to wear gloves if one isn't wearing it. The difference was significant (P< 0.05).

Graph I Questionnaire used in study



DISCUSSION

Following infection control guidelines and applying the required protection can prevent most of the unintentional exposure in dental care.^{8,9} Standard practices and use of proper precautions, pre-exposure immunization and post-exposure prophylaxis are also vital for preventing transmission of blood-borne infections and other dentally acquired cross-infection.^{10,11} The present study was conducted to assess the level of Knowledge, Attitude and Practice (KAP) among patients attending dental clinic towards cross infections and infection control measures.

We found that out of 520 patients, 215 were males and 305 were females. Mahajan et al¹² determined the level of Knowledge, Attitude and Practice (KAP) of patients attended dental clinics. The Knowledge, Attitude and Practice (KAP) of patients were assessed by answering 10 statements on a three-point Likert scale. Patient's self-reported practices were also evaluated. The descriptive and inferential statistics was done. The study revealed that 48.6%, 29.3% and 22.1% of the participants had poor, fair and satisfactory levels of knowledge about infection and infection control in dentistry, respectively.

Participant's educational level was significantly associated with the level of knowledge about dental infection. Patients had positive attitudes towards infection control in dentistry. Regarding self-reported practice, almost half of the participants had asked dentists about sterilization of dental instruments (45.8%), wearing a face mask (24.5%) and gloves (32.3%).

We found that 19% believed that dentist should be vaccinated against HBV, 51% said dentists should replace gloves after receiving phone call, 16% thought dentist can treat more than one patient with the same glove, 20% replied that dentists need to give prophylactic antibiotics prior to procedures to systemically compromised patients, 94% said dentists should always wear gloves while treating patients, 82% think that dentists should always wear eye goggles when treating patients, 95% said dentists should always wear face mask when treating patients, 46% ask dentist about the way they sterilize instruments, 23% ask the dentist to wear a face mask if not wearing it and 38% ask the dentist to wear gloves if isn't wearing it. Ibrahim et al¹³ determined the level of Knowledge, Attitude and Practice (KAP) of patients attended dental clinics. The attitudes were assessed through answering seven statements on a three-point Likert scale. Patients' self-reported practices were also evaluated. Descriptive and inferential statistics were done. Results of the study revealed that 39.5%, 38.7% and 21.8% of the participants obtained poor, fair and satisfactory level of knowledge about infections and infection control in dentistry, respectively. Social media was the commonest source of information about dental infection. Participant's educational level was significantly associated with the level of knowledge about dental infection. Patients had positive attitudes towards infection control in dentistry. Regarding self-reported practice, only few participants would ask dentists about sterilization of dental instruments (9.3%), wearing face mask (13.3%) and gloves (16.4%) if they don't do so.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that patients visiting dental clinics exhibited a positive attitude and self-reported practices about infection prevention in dentistry. There is room for development in knowledge. Through educational initiatives, banners, ads, and rallies, dental clinic patients should be better informed of cross-infection in dentistry.

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