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Research

Assessment Of Knowledge Attitude And Practices Regarding Post Exposure Prophylaxis Among Dental Students.

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Abstract

This study investigates the knowledge, attitudes, and practices regarding post-exposure prophylaxis (PEP) among dental students. A cross-sectional survey was conducted involving dental students from various years of study. Data were collected using a structured questionnaire assessing their knowledge of PEP, attitudes towards its importance, and practices in potential exposure situations. The findings reveal significant gaps in knowledge and varying attitudes towards PEP, indicating a need for improved educational interventions. The study highlights the importance of integrating comprehensive PEP training into dental curricula to enhance student preparedness and safety.The aim of this study is to assess the knowledge, attitude, and practices regarding post-exposure prophylaxis (PEP) among dental students, to identify gaps in their understanding, and to recommend improvements in their training and education. To evaluate the level of knowledge of dental students about post-exposure prophylaxis. To assess the attitudes of dental students towards the importance and effectiveness of PEP. To investigate the practices of dental students in responding to potential exposure incidents. To identify any barriers that may prevent students from utilizing PEP effectively.To provide recommendations for improving PEP education in dental curricula.

Keywords: Intellectual disability, Dental management, Behavior management, Oral hygiene, Special care dentistry, Preventive dentistry, Patient cooperation

INTRODUCTION

Post-exposure prophylaxis (PEP) is a critical intervention aimed at preventing the transmission of infectious diseases, particularly HIV, following potential exposure to contaminated blood or bodily fluids.

Dental students are at a heightened risk due to their clinical exposure during training. Understanding their knowledge, attitudes, and practices regarding PEP is essential for ensuring their safety and preparedness in clinical settings. This study aims to assess these factors among dental students in order to enhance their education and training related to PEP.

Methodology

a) Study design and area: A cross sectional study was carried out at tertiary care teaching hospital Khammam
b) Study population: The health care students including those of IV year and Interns who responded to the offline paper print questionnaire survey.
c) Study Instrument: A self administered questionnaire was designed based on knowledge attitude and awareness on the advanced technology had total 14 questions. Each participant has to fill their demographic data like Name, age and year of study. Participant has to select one option from the answers provided against questions the questions were based on knowledge attitude and awareness among dental students.
d) Pilot study: A pilot study was conducted on a group of students to assess the validity and reliability of study
e) Sampling method: The sampling method used is convenience method
f) Inclusion criteria: The students who were interested in study and who are willing to participate
g) Exclusion criteria: students who are not willing to participate are excluded
h) Organizing the study: The study was designed in a paper based version of the self administered questionnaire of 14 questions focusing on knowledge and awareness.

RESULTS

A total 200 students took part with female 67.2% and male 32.8%.Age of participants ranges from 19-25.In this study, females have more knowledge than males and III BDS have more knowledge followed by IV BDS students followed by Interns.

Age

	N	Minimum	Maximum	Mean	Std. Deviation
Age:	201	19	25	22.47	2.325

Gender

		Frequency	Percent
Valid	MALE	66	32.8
	FEMALE	135	67.2
	Total	201	100.0

Year of the study

		Frequency	Percent
Valid	III BDS	75	37.3
	IV BDS	66	32.8
	INTERN	60	29.8
	Total	201	100.0

Distribution and comparison of responses based on gender

Item	Response	Males		Females		Chi- Square value	P value
		n	%	n	%		
Q1	1	15	22.7	34	25.1	6.537	0.03*
	2	9	13.6	16	11.8		

	3	6	9.0	35	25.9		
	4	36	54.5	50	37.0		
Q2	1	15	13.2	25	18.5	9.374	**0.07**
	2	17	34.9	41	30.3		
	3	20	35.7	29	21.4		
	4	8	15.8	9	6.6		
Q3	1	19	47.5	21	52.5	5.747	0.090
	2	23	48.5	35	51.5		
	3	8	63.9	30	36.1		
	4	15	65.9	49	34.1		
Q4	1	16	24.2	48	35.5	13.536	**0.01***
	2	15	22.7	22	16.2		
	3	35	53.0	65	48.1		
Q5	1	16	15.7	19	14.3	6.657	0.077
	2	29	46.3	34	24.8		
	3	12	14.8	53	35.8		
	4	8	12.9	29	23.6		
Q6	1	35	53.0	79	58.5	9.649	0.005*
	2	20	30.3	36	26.6		
	3	10	15.1	10	7.4		
	4	6	9.0	10	7.4		
Q7	1	18	17.1	21	22.9	5.429	**0.07**
	2	25	34.9	37	35.1		
	3	10	20.6	57	39.6		
	4	9	12.6	14	14.6		
Q8	1	25	40.6	25	20.5	8.757	**0.07**
	2	15	30.3	73	39.7		
	3	6	15.6	35	31.6		
	4	5	13.8	2	4.8		
Q9	1	34	52.3	80	59.2	6.258	0.06
	2	20	30.7	26	19.2		
	3	09	13.8	29	21.4		
Q10	1	24	32.2	22	27.8	4.276	**0.07**
	2	29	40.4	19	25.6		
	3	7	18.6	66	31.7		
	4	5	9.6	27	20.6		
Q11	1	16	37.1	87	42.9	7.925	0.115
	2	24	41.2	20	20.8		
	3	10	11.1	15	15.6		
Q12	1	15	28.5	26	26.5	9.567	0.98
	2	16	29.3	22	20.7		
	3	21	44.9	33	25.1		
Q13	1	21	29.2	32	30.8	8.477	0.478
	2	30	48.5	78	57.5		
	3	9	11.5	15	13.7		
Q14	1	21	31.8	54	40.0	6.757	0.04*
	2	22	33.3	34	25.1		
	3	23	34.8	47	34.8		

P≤0.05 is statistically significant

Distribution and comparison of responses based on year of the study:

Item	Response	III BDS		III BDS		Intern		Chi-Square value	P value
		n	%	n	%	n	%		
Q1	1	14	18.6	10	15.1	11	18.3	14.556	0.04
	2	21	28.0	6	9.0	9	15.0		
	3	5	6.6	14	21.2	15	25.0		

	4	35	46.6	36	54.5	25	41.6		
Q2	1	7	15.9	10	12.7	16	13.6	5.467	0.797
	2	16	27.6	16	17.6	10	11.6		
	3	7	15.9	15	16.7	20	16.6		
	4	30	49.6	16	17.6	6	10.6		
Q3	1	6	15	6	15	6	15	1.566	0.754
	2	14	20.6	16	23.5	3	4.4		
	3	18	21.7	14	16.9	9	10.8		
	4	7	15.9	11	25	7	15.9		
Q4	1	6	15.8	6	15.8	14	10.5	14.351	0.178
	2	16	16.2	11	29.7	17	12.7		
	3	24	26.7	25	36.7	25	21.5		
Q5	1	5	14.3	5	14.3	15	14.3	12.387	0.156
	2	15	23.8	17	27.6	23	44.8		
	3	35	48.6	22	37.8	13	13.9		
	4	14	22.5	24	39.3	9	11.9		
Q6	1	24	32.0	32	48.4	26	43.3	32.592	**0.05***
	2	6	8.0	8	12.1	14	23.3		
	3	20	26.6	10	15.1	5	8.3		
	4	25	33.3	16	24.2	15	25.0		
Q7	1	13	26.1	19	28.4	11	22.4	9.802	0.271
	2	16	29.5	18	26.6	17	28.5		
	3	30	32.7	25	35.6	22	34.6		
	4	15	19.5	4	8.5	10	21.5		
Q8	1	6	12.6	9	18.9	9	18.6	5.589	0.211
	2	11	19.7	13	22.4	19	25.5		
	3	30	43.6	32	41.7	25	35.6		
	4	17	21.6	12	21.7	7	11.5		
Q9	1	38	51.3	20	30.3	21	35.0	2.744	**0.08**
	2	12	16.2	21	31.8	23	38.3		
	3	24	32.4	25	37.8	16	26.6		
Q10	1	5	10.9	15	29.9	10	11.7	9.372	0.181
	2	10	20.8	12	25.5	23	46.2		
	3	35	41.6	25	37.6	17	26.8		
	4	24	21.6	14	21.6	10	23.6		
Q11	1	18	12.7	11	17.5	15	23.8	5.349	**0.06**
	2	8	16.3	41	42.4	35	46.1		
	3	26	34.6	8	23.4	4	10.5		
Q12	1	16	33.7	5	10.9	10	21.7	9.118	**0.09**
	2	10	28.5	17	13.6	14	17.4		
	3	17	34.1	31	33.6	25	35.3		
Q13	1	20	29.5	13	20.6	11	27.5	4.206	0.235
	2	10	20.8	18	26.7	34	38.3		
	3	36	38.5	31	36.5	5	16.6		
Q14	1	26	34.6	24	36.3	26	43.3	13.456	**0.019***
	2	27	36.0	21	31.8	21	35.0		
	3	22	29.3	21	31.8	13	21.6		

P≤0.05 is statistically significant

The assessment of knowledge, attitudes, and practices regarding post-exposure prophylaxis among dental students reveals critical gaps that must be addressed. The findings underscore the necessity for enhanced educational programs focused on PEP to ensure that dental students are well-equipped to handle potential exposure incidents. By improving their understanding and confidence in PEP, we can better protect their health and the health of their patients.

The findings of this study reveal significant gaps in the knowledge, attitudes, and practices related to post exposure prophylaxis (PEP) among dental students. Although some students demonstrate an awareness of PEP, many lack comprehensive knowledge about its protocols, timelines, and effectiveness. This lack of understanding can lead to delays in seeking treatment and ultimately increase the risk of transmission of

infectious diseases. Furthermore, the variability in attitudes towards the importance of PEP suggests that not all students recognize the critical nature of this preventive measure. To address these issues, it is essential to implement structured educational programs that emphasize the significance of PEP and provide clear, practical guidelines for its application. By enhancing the curriculum and incorporating hands-on training, we can better prepare dental students to respond effectively to potential exposure incidents, ensuring their safety and that of their patients.

DISCUSSIONS

The results of this study indicate that while some dental students possess a basic understanding of post-exposure prophylaxis, there are notable deficiencies in their overall knowledge and practical application. Many students expressed uncertainty about the specific protocols to follow after exposure, which could lead to delays in initiating PEP and increase the risk of infection. Additionally, attitudes towards PEP varied, with some students recognizing its importance while others were indifferent. This inconsistency highlights the need for targeted educational interventions that not only provide information but also foster a positive attitude towards PEP. The integration of PEP training into the dental curriculum, along with regular workshops and simulations, could significantly enhance students' preparedness and confidence in managing exposure incidents. Future research should focus on longitudinal studies to track changes in knowledge and practices as students progress through their education.

The study highlights several key issues surrounding the knowledge and practices of dental students regarding post-exposure prophylaxis. A significant portion of the respondents exhibited a lack of familiarity with the specific steps to take following potential exposure, indicating a need for improved educational resources. The inconsistency in attitudes towards PEP suggests that some students may not fully appreciate the risks associated with exposure to infectious agents, which can hinder their willingness to engage with PEP protocols. Moreover, barriers such as inadequate training, lack of access to resources, and misconceptions about PEP may contribute to the uncertainty observed among students. Addressing these barriers is crucial for fostering a culture of safety within dental practices. Implementing regular workshops, simulation exercises, and integrating PEP discussions into clinical training could enhance students' confidence and competence in managing exposure incidents.

Additionally, it is important to consider the role of faculty and mentors in shaping students' attitudes towards PEP. Educators should serve as role models, demonstrating the importance of PEP through their own practices and encouraging open discussions about exposure risks and prevention strategies. Future research should explore the long-term impact of enhanced PEP education on students' knowledge retention and practical application in real- world scenarios, as well as the overall safety culture within dental practices. By prioritizing education and fostering positive attitudes towards PEP, we can significantly improve the preparedness of dental students to handle exposure incidents effectively.

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