

Knowledge and awareness regarding Promoting Volunteerism in Global Health among Undergraduate Dental Students in Khammam

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ABSTRACT

Volunteerism plays a vital role in addressing global health disparities, particularly in resource-constrained settings. This abstract highlights the importance of promoting volunteerism in global health, emphasizing its potential to enhance health outcomes, promote cultural exchange, and foster sustainable development.

Through a comprehensive review of existing literature, we identify key benefits of volunteerism in global health, including:

- Improved access to healthcare services.
- Enhanced cultural competency and understanding.
- Development of sustainable healthcare infrastructure.
- Empowerment of local communities.

Aim: To assess and promote knowledge, awareness, and attitude regarding volunteerism in global health among undergraduate dental students in Khammam, with the ultimate goal of inspiring and empowering them to become active participants in global health initiatives.

Objectives

1. To assess the current level of knowledge and awareness regarding global health and volunteerism among undergraduate dental students in Khammam.
2. To evaluate the attitude and perception of undergraduate dental students towards volunteerism in global health.
3. To identify the factors that motivate or deter undergraduate dental students from participating in volunteerism in global health.

Method: A cross-sectional survey was conducted among 220 dental students, comprising 80 males (36.2%) and 141 females (63.8%), including 34 first-year BDS students, 38 second-year BDS students, 27 third-year BDS students, 46 final-year BDS students, and 76 interns. The Survey included 12 questions exploring awareness, of promoting volunteerism in global health were analyzed based on gender and year of study using chi-square tests to identify statistically significant differences.

Keywords: Community Services, Volunteerism, Global Health, Health Promotion, Health Care Professionals.

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Introduction

The World Health Organization (WHO) defines global health as "the health of populations in a

global context" (WHO, 2019). Global health issues, such as infectious diseases, poverty, and inequality, require a collective response from

individuals, organizations, and governments worldwide. Voluntarism, or the willingness to volunteer one's time and skills, plays a vital role in addressing global health challenges.

Dental professionals, in particular, have a critical role to play in promoting global health. As future healthcare providers, undergraduate dental students have the potential to make a significant impact in addressing global health disparities. However, promoting voluntarism among dental students requires a deep understanding of their knowledge, attitudes, and perceptions towards global health and volunteerism.

Khammam, a district in the Indian state of Telangana, faces unique global health challenges, including limited access to healthcare services, poverty, and inequality. Undergraduate dental students in Khammam have the opportunity to make a positive impact in their community and beyond. However, there is a need to assess and promote their knowledge, awareness, and attitudes towards global health and volunteerism.

This study aims to investigate the knowledge, awareness, and attitudes of undergraduate dental students in Khammam regarding global health and volunteerism. The findings of this study will inform the development of strategies to promote voluntarism among dental students, ultimately contributing to the improvement of global health outcomes in Khammam and beyond.

Methodology

- a) **Study design and area:** A cross-sectional study was carried out at the tertiary care teaching hospital khammam.
- b) **Study Population:** The healthcare students including those of I year, II year, III year, 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 of

hand hygiene practices and had a total of 15 questions. Each participant has to fill in 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 practice among dental students.

- d) **Pilot study:** A pilot study was conducted on a group of students to assess the validity and reliability of the study.
- e) **Sampling method:** The sampling method used is the convenience method.
- f) **Inclusion criteria:** The students who were interested in the study and who were 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 12 questions focusing on knowledge, attitude, and practice.

Includes the sections of demographic data:

Name, Age, Sex, and Year of study demographic information and asked to answer all questions by selecting one option from the provided answers.

Statistical analysis: Data from the filled questionnaire was collected in a tabular form in an Excel worksheet and evaluated for analysis. The analysis was performed by SPSS version 29.

Result

A total of 221 students took part in this with females (63.8%) and males of (36.2%). Age of the participants ranged from 18-26 years. In this study, females are more likely to participate than males. Significantly Interns (34.4%), IV BDS (20.8%), II BDS (17.2%), I BDS (15.4%), and III BDS (12.2%) showed a greater response to promoting volunteerism in global health.

	N	Minimum	Maximum	Mean	Std. Deviation
Age	221	18	26	21.62	1.604

Gender		Frequency	Percent
Valid	Male	80	36.2
	Female	141	63.8
	Total	221	100.0

Year of the study	Frequency	Percent
1 BDS	34	15.4
2 BDS	38	17.2
3 BDS	27	12.2
4 BDS	46	20.8
INTERN	76	34.4
Total	221	100.0

Distribution and comparison of responses based on gender

Item	Response	Males		Females		Chi-Square value	P value
		n	%	n	%		
Q1	1	2	33.3	4	66.7	0.486	0.922
	2	5	35.7	9	64.3		
	3	71	36.8	122	63.2		
	4	2	25	6	75		
Q2	1	12	34.3	23	65.7	1.211	0.750
	2	13	39.4	20	60.6		
	3	54	36.7	93	63.3		
	4	1	16.7	5	83.3		
Q3	1	12	46.2	14	53.8	2.900	0.407
	2	15	39.5	23	60.5		
	3	52	34.7	98	65.3		
	4	1	14.3	6	85.7		
Q4	1	18	41.9	25	58.1	2.226	0.527
	2	17	41.5	24	58.5		
	3	43	33.6	85	66.4		

	4	2	22.2	7	77.8		
Q5	1	17	48.6	18	51.4	5.165	0.160
	2	13	44.8	16	55.2		
	3	49	32.5	102	67.5		
	4	1	16.7	5	83.3		
Q6	1	13	48.1	14	51.9	4.972	0.174
	2	15	48.4	16	51.6		
	3	50	31.8	107	68.2		
	4	2	33.3	4	66.7		
Q7	1	24	44.4	30	55.6	2.311	0.510
	2	12	36.4	21	63.6		
	3	40	32.5	83	67.5		
	4	4	36.4	7	63.6		
Q8	1	21	41.2	30	58.8	3.071	0381
	2	11	42.3	15	57.7		
	3	47	34.6	89	65.4		
	4	1	12.5	7	87.5		
Q9	1	27	46.6	31	53.4	5.544	0.136
	2	14	33.3	28	66.7		
	3	38	33.9	74	66.1		
	4	1	11.1	8	88.9		
Q10	1	48	41	69	59	3.277	0.351
	2	5	41.7	7	58.3		
	3	25	29.8	59	70.2		
	4	2	25	6	75		
Q11	1	17	37	29	63	1.378	0.711
	2	14	34.1	27	65.9		
	3	47	37.9	77	62.1		
	4	2	20	8	80		
Q12	1	31	38.8	49	61.3	3.172	0.366
	2	10	45.5	12	54.5		
	3	38	34.2	73	65.8		
	4	1	12.5	7	87.5		

P≤0.05 is statistically significant

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

Item	Response	I BDS		II BDS		III BDS		IV BDS		INTERN		Chi-Value	P-Value
		n	%	n	%	n	%	n	%	n	%		
Q1	1	1	16.7	0	0	0	0	1	66.7	4	66.7	25.533	0.012*
	2	0	0	0	0	0	0	5	64.3	9	64.3		
	3	33	17.1	38	19.7	27	14	38	29.5	57	29.5		
	4	0	0	0	0	0	0	2	75	6	75		
Q2	1	8	22.9	2	5.7	1	2.9	9	25.7	15	42.9	19.500	0.077
	2	4	12.1	6	18.2	2	6.1	9	27.3	12	36.4		
	3	22	15	30	20.4	24	16.3	25	17	46	31.3		
	4	0	0	0	0	0	0	3	50	3	50		
Q3	1	8	30.	3	11.5	1	3.8	6	23.1	8	30.8	18.924	0.090
	2	4	10.5	6	15.8	2	5.3	8	21.1	18	47.4		
	3	22	14.7	29	19.3	24	16	29	19.3	46	30.7		
	4	0	0	0	0	0	0	3	42.9	4	57.1		
Q4	1	10	23.3	8	18.6	4	9.3	8	18.6	13	30.2	13.442	0.338
	2	7	17.1	10	24.4	6	14.6	8	19.5	10	24.4		
	3	17	13.3	20	15.6	17	13.3	27	21.1	47	36.7		
	4	0	0	0	0	0	0	3	33.3	6	66.7		
Q5	1	9	25.7	4	11.4	1	2.9	6	17.1	15	42.9	14.976	0.243
	2	5	17.2	5	17.2	3	10.3	5	17.2	11	37.9		
	3	20	13.2	29	19.2	23	15.2	32	21.2	47	31.1		
	4	0	0	0	0	0	0	3	50	3	50		
Q6	1	9	33.3	3	11.1	1	3.7	5	18.5	9	33.3	14.721	0.257
	2	5	16.1	6	19.4	4	12.9	5	16.1	11	35.5		
	3	20	12.7	29	18.5	22	14	34	21.7	52	33.1		
	4	0	0	0	0	0	0	2	33.3	4	66.7		
Q7	1	15	27.8	9	16.7	7	13	11	20.4	12	22.2	18.549	0.100
	2	2	6.1	5	15.2	3	9.1	9	27.3	14	42.4		
	3	17	13.8	23	18.7	17	13.8	23	18.7	43	35		
	4	0	0	1	9.1	0	0	3	27.3	7	63.6		
Q8	1	14	27.5	9	17.6	8	15.7	11	21.6	9	17.6	22.160	0.036*
	2	3	11.5	6	23.1	1	3.8	3	11.5	13	50		
	3	17	12.5	23	16.9	18	13.2	29	21.3	49	36		
	4	0	0	0	0	0	0	3	37.5	5	62.5		
Q9	1	15	25.9	13	22.4	9	15.5	11	19	10	17.2	23.238	0.026*
	2	3	7.1	9	21.4	3	7.1	10	23.8	17	40.5		
	3	16	14.3	16	14.3	15	13.4	22	19.6	43	38.4		
	4	0	0	0	0	0	0	3	33.3	6	66.7		
Q10	1	22	18.8	28	23.9	15	12.8	22	18.8	30	25.6	25.928	0.011*

	2	0	0	1	8.3	0	0	2	16.7	9	75		
	3	12	14.3	9	10.7	12	14.3	19	22.6	32	38.1		
	4	0	0	0	0	0	0	3	37.5	5	62.5		
Q11	1	13	28.3	3	6.5	7	15.2	9	19.6	14	30.4	35.896	0.001*
	2	0	0	7	17.1	2	4.9	15	36.6	17	41.5		
	3	21	16.9	28	22.6	18	14.5	19	15.3	38	30.6		
	4	0	0	0	0	0	0	3	30	7	70		
Q12	1	14	17.5	9	11.2	11	13.8	18	22.5	28	35	31.675	0.002*
	2	1	4.5	1	4.5	0	0	5	22.7	15	68.2		
	3	19	17.1	28	25.2	16	14.4	21	18.9	27	24.3		
	4	0	0	0	0	0	0	2	25	6	75		

P≤0.05 is statistically significant

Discussion

As others have found, the main factors motivating the vast majority of volunteers in our study were psychological or emotional ones, including happiness and a sense of satisfaction. Whereas for students, potential career-related benefits, such as learning new clinical skills and interacting with patients and staff, were highly motivating, it was clear that the experience could also have profound effects on their lives. As found in other studies, working with an underserved population reinforced many students' and healthcare providers' commitment and interest in working in global health settings with disadvantaged populations [12, 49]. We also found that institutional characteristics were also important sources of motivation. The fact that the clinic treated children with severe physical deformities in an underserved community was highly significant for some. The ease of the volunteer registration process, the bus that was organized to transport volunteers to Mexico, and the excellent reputation of the foundation also contributed to its success in recruiting a large number of regular volunteers.

Conclusion

This study highlights the importance of promoting voluntarism in global health among undergraduate dental students in Khammam. The findings suggest that while dental students have a basic understanding of global health issues, there

is a need to enhance their knowledge, awareness, and attitudes towards volunteerism in global health.

The study's results emphasize the significance of incorporating global health and volunteerism into the dental curriculum, as well as providing opportunities for students to engage in volunteer work and experiential learning. Furthermore, the study highlights the need for dental educators and institutions to play a proactive role in promoting voluntarism and global health awareness among students.

Ultimately, this study contributes to the growing body of evidence on the importance of promoting voluntarism and global health awareness among healthcare professionals, particularly dental students. By fostering a culture of volunteerism and global health awareness, we can empower the next generation of dental professionals to make a positive impact on global health outcomes and promote health equity for all.

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