

Comparing Dental and Pharmacy Students' Perceptions on Public Health and Preventive Health Care Course

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Date of Submission: Apr 14, 2011

Date of Acceptance: Oct 17, 2011

How to cite this article: Mandiracioglu A, Dogan F. Comparing dental and pharmacy students' perceptions on public health and preventive health care course. *Int J Prev Med* 2012;3:91-4.

ABSTRACT

Objectives: A Public health course has an important role in the undergraduate education of pharmacy and dentistry in terms of emphasizing preventive care. The purpose of this study is to evaluate the views of pharmacy and dentistry students on a public health course and preventive health care.

Methods: 173 students enrolled at Ege University, Faculties of Pharmacy and Dentistry completed a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis and replied to 18 Likert type question to determine their perceptions on a public health course and preventive health care. The comments of the students were reviewed and categorized into key themes.

Results: SWOT analysis and the results of quantitative Likert type questions supported each other. According to the quantitative results, there was no significant difference between the scores of students from both schools in terms of their statements about the public health course and preventive care. Both groups of students mentioned the contribution of the public health course to their professions in the future. They also appreciated the importance of preventive care in the health services.

Keywords: Education, curriculum, public health, pharmacy students, dentistry students, preventive health care.

INTRODUCTION

Public health applications require an interprofessional team of health care providers. It is required that all work forces that serve the community should be trained and made aware of their responsibilities.^[1,2] The role of pharmacists is not only to supply the drugs prescribed doctors but also to undertake important responsibilities in preventive care as an important part of the health services.^[3,4] Dental public health includes preventive care against dental diseases. Dentists are expected to know the importance of preventive care and health promotion, to be aware of the relationship between oral and dental health and general health and to present preventive care appropriate to the community.^[5]

It has been stated that universities have an important role

to play in enabling both dentists and pharmacists to become culturally sensitive and public health-oriented practitioners.^[6,7] On the other hand, it was also stated that health care professionals did not volunteer in preventive care in undergraduate education and it was not sufficiently emphasized in curricula.^[8]

The purpose of this study is to evaluate the views of dentistry and pharmacy students on public health course.

METHODS

The views of the students on public health education and preventive health care were evaluated using two methods - quantitative method and SWOT analysis as a qualitative method. The responses of 82.7% (*n*: 91) of the students at the Pharmacy Faculty and 74.4% (*n*: 82) of the students at the Dentistry Faculty and a total of 173 (78.6%) students were taken into account. During the exam in the spring term of 2009, the students who were taking the public health course were distributed the surveys, which were collected after they had been completed. Students replied the anonymous self-administered questionnaire on a 5-point 12-item scale on health education (strongly agree: 5- strongly disagree: 1) The sum of the scores described the respondents' attitudes and opinions on preventive health care and public health education.

In the qualitative part of the questionnaire, students answered four open-ended questions about their views on the strengths and weaknesses of their public health curricula and what the opportunities for improvement were, and what the threats to the quality of public health education were. All data analysis was carried out using the Statistical Package for Social Sciences (SPSS version 11).

RESULTS

The responses of the students for the questions are presented in Table 1. There was no significant difference between students from rural areas and urban areas in terms of their willingness to work in rural areas.

The responses of the students for the statements on public health education are presented in Table 2. The mean score of the pharmacy students for the

Table 1: Distribution of some of the characteristics of the students

	Dentistry	Pharmacy	Total
Gender			
Male	40.2	65.9	63.0
Female	59.8	34.1	37.0
Previous place of residence			
Rural area	12.2	21.9	16.2
Urban area	87.8	78.1	83.8
Intention of working in a rural area at any time in my life			
Throughout my professional life	3.7	3.3	3.5
For a period of my professional life	74.4	67.0	70.5
Most of my professional life	3.7	3.3	3.5
Never	14.6	15.4	15.0
Other	3.6	8.8	6.3
No idea	-	2.2	1.2
Career plan for my professional life			
Working in the public sector	22.5	4.4	12.9
Establishing my own practice	30.0	54.6	42.9
Working in the private sector	10.0	9.0	10.0
Teaching students at University and doing research	5.0	7.8	7.7
Working in industry	-	12.3	6.4
Specializing, then exercising my profession outside the University	28.8	4.4	16.0
Not decided	3.7	5.2	4.1
Reason for choosing this profession			
My parents advised me to choose it	10.4	10.1	8.7
I had a special interest	29.2	26.7	27.3
It is a profession that helps people	19.4	19.0	19.2
A profession that provides a good income	15.8	18.5	16.3
A profession that has a good social status	19.5	20.1	22.6
No particular reason	5.7	5.6	5.9

Table 2: The distribution of the students who stated that they agreed with the related statements

	Total (%)	Pharmacy (%)	Dentistry (%)	P
This course has taught me that I am a member of a team offering health services	93.3	94.2	92.4	-
This course has taught me that I have chosen an important profession for the health of the community	90.6	86.0	96.2	-
I have learned that preventive care aims at reducing diseases and injuries in the community	95.1	95.3	94.9	-
What is learned on this course will be helpful only to my colleagues working in rural areas	8.0	9.4	6.4	-
This course has taught me ways to protect against diseases	88.8	86.8	90.9	-
This course was helped me to understand the health levels of the community	73.7	69.4	78.7	0.03
This course has shown me the primary health problems of the community	76.1	78.9	73.1	-
What I were learned on this course will be helpful in my professional life	82.7	82.4	83.1	-
I have learned topics that I did not know before	77.8	91.7	62.8	<0.0001
I think I will be able to offer better health education and counseling to my patients with what I have learned on this course	82.7	83.5	81.8	-
This course has taught me that a holistic approach is required in health and health education	91.9	94.0	89.5	-
This course has contributed to my gaining critical thinking and problem-solving skills	59.0	52.9	65.8	0.03

Table 3: The distribution of students who stated that they agreed with preventive care (%)

	Total	Pharmacy	Dentistry	P
While treating diseases, many factors such as the social and economic conditions of the individual should be taken into consideration	87.8	89.5	86.1	-
I am more interested in treatment services than preventive care	25.5	21.4	29.9	0.004
Preventive care is primary for the health of community	95.5	96.3	94.8	-
I have a professional responsibility to prevent diseases	93.8	94.1	93.4	-
Preventive care will have an important place in my professional life	92.5	89.4	96.0	0.049

items on public health education was found to be 47.88 ± 5.80 and 48.42 ± 6.64 for the dentistry students. The responses of the students for preventive care are presented in Table 3. The mean

score of pharmacy students for opinions related to preventive care was found to be 20.47 ± 2.41 and of the dentistry students was 20.82 ± 2.55 . There was no difference between the mean scores of both groups of students. However, there was a significant difference between the pharmacy and dentistry students in terms of the responses given to the items 1 and 5.

In terms of positive strengths of the public health course according to the questions in SWOT analysis, it could be said that it helped students to understand the importance of preventive care, it was an important issue for their profession in the future and the instructors that taught the course were positive. As for the weaknesses of the course, it could be stated that all topics were taught didactically, no practical applications took place, and the course was sometimes boring as too many details were given. The opportunities that the course created were that it taught students how to look at health holistically and it increased sensitivity toward the problems of the community. This course was not perceived to be an obstacle or threat for the development of the students.

DISCUSSION

There are studies in literature which have

evaluated an educational program through SWOT analysis.^[9,10] In this study, the results of the qualitative SWOT analysis supported the results of the quantitative analysis. Most of the students had a positive view on the public health course as mentioned in previous studies and they were aware of the fact that this course was an important opportunity for reaching and helping the community. The data in the literature mentions that students stated that through this course they were preparing for the service they would offer to the community in the future.^[11]

It was stated by most students that the learning objectives of the public health course were accomplished. It was striking that there were some differences in the views of dentistry and pharmacy students. The fact that two different lecturers taught in these faculties and some differences in lecture content might have caused this situation for the students. Moreover, the fact that dental students took this course in the senior class might have led to them being more aware of the importance of the course. In the literature, it has been noted that knowledge alone is not sufficient for the achievement of preventive health services, it is also essential that health care professionals should be positively oriented toward prevention.^[12]

Pharmacists and dentists are an important part of the health service team and they have an important role in the preventive services.^[12,13] It is important that policy makers and institutions embrace more fully the roles of pharmacists and other health care professionals in public health and preventive care and especially that they should develop health policies which ensure that all health care professionals undertake roles in preventive care in developing countries where the sources are limited.^[14]

This study once again underlines the importance of a public health course in undergraduate education. The views of the students might contribute toward the educators offering public health education. Students seem to agree on the necessity of this course.

REFERENCES

1. Caron RM, Tutko H. Applied topics in the essentials of

public health: A skills-based course in a public health certificate program developed to enhance the competency of working health professionals. *Educ Health (Abingdon)* 2009;22:244.

2. Riegelman RK. Undergraduate public health education past, present, and future. *Am J Prev Med* 2008;35:258-63.
3. Owens P, Gibbs T. More than just a shopkeeper: Involving the community pharmacist in undergraduate medical education. *Med Teach* 2001;23:305-9.
4. Anderson AS, Goode JV. Engaging students in wellness and disease prevention services. *Am J Pharm Educ* 2006;70:40.
5. Khami MR, Virtanen JI, Jafarian M, Murtomaa M. Prevention-oriented practice of Iranian senior dental students. *Eur J Dent Educ* 2007;11:48-53.
6. Swain L, Taylor SJ. Pharmacy student education helping to improve Indigenous medication management and health. *Pharmacist* 2006;25:490-4.
7. Davis EL, Stewart DC, Guelmann M, Wee AG, Beach J, Crews KM, *et al*. Serving the public good: Challenges of dental education in the twenty-first century. *J Dent Educ* 2007;71:1009-19.
8. Mofidi M, Strauss R, Pitner LL, Sandler ES. Dental students' reflections on their community-based experiences: The use of critical incidents. *J Dent Educ* 2003;67:515-23.
9. Dixit H, Marahatta SB. Medical education and training in Nepal: SWOT analysis. *Kathmandu Univ Med J (KUMJ)* 2008;6:412-20.
10. Henzi D, Davis E, Jasinevicius R, Hendricson W. In the students' own words: what are the strengths and weaknesses of the dental school curriculum? *J Dent Educ* 2007;71:632-45.
11. Hassali MA, Shafie AA, Awaisu A, Mohamed Ibrahim MI, Ahmed SI. A public health pharmacy course at a Malaysian pharmacy school. *Am J Pharm Educ* 2009;73:136.
12. Petersen PE. *The World Oral Health Report 2003*. World Health Organization; 2003.
13. Alldredge BK, Koda-Kimble MA. Count and be counted: Preparing future pharmacists to promote a culture of safety. *Am J Pharm Educ* 2006;70:92.
14. Owusu-Daaku F, Smith F, Shah R. Addressing the workforce crisis: The professional aspirations of pharmacy students in Ghana. *Pharm World Sci* 2008;30:577-83.

Source of Support: Nil **Conflict of Interest:** None declared.