Primary Care Attitudes & Culture at the University of Arizona College of Medicine - Phoenix

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Introduction

There has been prior research that indicate perceptions health by medical students concerning the field of primary care in medicine can change over time, whether through direct intervention or naturally as a result of a medical school's curriculum. However, the currently held beliefs of medical students and faculty at the University of Arizona College of Medicine – Phoenix (UACOM-P) regarding primary care is unknown.

Research Question

This study sought to identify what beliefs, attitudes, and perceptions members of the UACOM-P community have towards primary care. The primary outcome is to identify beliefs held by students and faculty individually. The secondary outcomes identify any differences in beliefs between these two groups, and differences between sub-groups.

Materials and Methods

This cross-sectional study was performed between April and June 2019, encompassing the students and faculty at UACOM-P in Phoenix, AZ. A draft instrument was developed and distributed to members of the Department of Family and Community Medicine for initial review, feedback, and question validation beforehand. An estimated 330 students and 1,671 faculty members were sent this instrument. Consisting of 19 5-point Likert scale questions, data from the instrument was analyzed via two sample t-tests to determine strength of beliefs and perceptions, as well as identifying potentially significant differences in mean score for instrument items between groups.

Results

Of the estimated 330 students and 1,671 faculty members who were invited to complete the study instrument, 75 students (RR 22.72%) and 33 faculty (RR 1.97%) submitted responses fully and were included in this study. Characteristics of these individuals can be seen in Table 1.

The mean scores from the instrument in total, and separated between students and faculty with associated p-values, are reported in Table 2. P-values of <0.05 are considered statistically significant.

Participant Characteristics	
Group (n, %)(n=108)	
Student	75 (69.4)
Faculty	33 (30.6)
Student Class (n, %) (n=75)	
2019	18 (24.0)
2020	23 (30.7)
2021	18 (24.0)
2022	15 (20.0)
2023	1 (1.33)
Are you currently participating or enrolled in the Pathways Scholar Program, a Certificate of Distinction or Dual Degree program? (yes, %) (n=75)	31 (41.3)
Which program are you participating/enrolled in? (n, %)(n=31)	
COD	19 (61.3)
Dual Degree	12 (38.7)
Faculty Department (n, %)(n=33)	
Biomedical Sciences (BMS)	3 (9.38)
Child Health	2 (6.25)
Emergency Medicine (EM)	2(6.25)
Family and Community Medicine (FCM)	8 (25.0)
Medicine	10 (31.3)
OB/GYN	2 (6.25)
Pathology	1 (3.13)
Psychiatry	2 (6.25)
Surgery	2 (6.25)
Faculty Degree (n, %)(n=33)	
MD/DO	28 (84.9)
Phd/Other	5 (15.15)
In a typical week, how many hours do you spend on medical student education? (median, IQR)	8 (5, 18)
Faculty Involvement (n, %)(n=33)	
Admin / Leadership	13 (39.4)
Student Affairs	4 (12.1)
Clerkship	13 (39.4)
Block Director	6 (18.2)
CCE	5 (15.2)
Doctoring	7 (21.2)
Capstone	7 (21.2)
Transitions	7 (21.2)
Intersessions	8 (24.2)
Optional MD Curricula	6 (18.2)
Pathways	5 (15.2)
SP	12 (36.4)
Pal Block	3 (9.09)
CBI	5 (15.2)
Other	7 (21.2)
Hospital Affiliations (n, %)(n=33)	
None	17 (51.5)
Banner	8 (24.2)
MIHS	3 (9.09)
Honor Health	1 (3.03)
VA	1 (3.03)
Other	3 (9.09)
Primary care (correct, %)	43 (39.8)

Table 1: Participant characteristics, encompassing demographic groups for both student and faculty participants, as well as the total number of participants who correctly identified the primary care specialties, which we define as Pediatrics, Family Medicine, and Internal Medicine.

Survey Statements	Aggregate Scores	Student	Faculty	p-value
	Mean (SD)	Mean, SD	Mean, SD	
There is a need for primary care physicians.	4.84 (0.39)	4.82 (0.42)	4.87 (0.33)	0.58
Primary care doctors are essential for the optimization of health outcomes.	4.75 (0.54)	4.80 (0.46)	4.67 (0.69)	0.51
Primary care doctors contribute substantially to advancing medical knowledge.	4.11 (0.87)	4.09 (0.87)	4.15 (0.87)	0.78
Primary care physicians solve challenging diagnostic cases.	4.11 (0.87)	4.13 (0.79)	4.06 (1.03)	0.99
Primary care doctors spend the majority of their time diagnosing simple, acute conditions.	3.06 (1.04)	3.10 (0.95)	2.93 (1.22)	0.70
I've heard more negative comments about primary care specialties than other specialties.	3.16 (1.19)	3.23 (1.16)	3.00 (1.27)	0.41
Patients respect primary care physicians more than other specialties.	2.62 (0.71)	2.52 (0.64)	2.87 (0.78)	0.04
Primary care doctors make significantly less money than other specialists.	4.17 (0.70)	4.17 (0.70)	4.15 (0.71)	0.88
It is more difficult to achieve a healthy work life balance in primary care specialties.	2.17 (0.94)	2.08 (0.93)	2.39 (0.97)	0.11
The lifestyle afforded by a career in primary care is better suited to physicians who prioritize family life more highly.	3.52 (0.86)	3.72 (0.83)	3.09 (0.77)	<0.001
One of the main roles of a primary care physician is to refer to other specialties.	2.56 (1.08)	2.76 (1.06)	2.09 (1.04)	0.003
Strong applicants from my medical school go into primary care.	3.35 (1.04)	3.39 (1.03)	3.27 (1.07)	0.64
Primary care training is less rigorous than most other specialties.	2.67 (1.01)	2.80 (1.03)	2.39 (0.93)	0.06
Trends in medicine favor the use of allied health clinicians (nurse practitioners, physician assistants, etc.) for delivery of primary care.	3.71 (0.84)	3.68 (0.84)	3.78 (0.86)	0.41
Our institution should promote primary care.	4.33 (0.81)	4.24 (0.85)	4.54 (0.67)	0.08
Our institution does enough to promote primary care.	3.27 (0.97)	3.51 (0.89)	2.75 (0.96)	<0.001
Primary care physicians provide high quality teaching to medical students.	4.43 (0.70)	4.56 (0.55)	4.15 (0.90)	0.03
Primary care physicians are more likely to be sued than physicians in other specialties.	2.16 (0.76)	2.20 (0.77)	2.06 (0.74)	0.42
Primary care physicians are more prone to burn-out than other specialists.	2.75 (0.93)	2.69 (0.98)	2.90 (0.80)	0.19

Table 2: List of all 19 items respondents were asked to rate on a 5 point Likert scale, with a value of 1 corresponding to "strongly disagree" and a value of 5 corresponding to "strongly agree". Survey results separated out to include aggregate mean scores, and also compare student and faculty mean scores. Statistically significant differences in mean Likert score between groups are identified by highlighted p-values, each of which are ≤0.05.

Of note, there are some statistically significant differences of perception between students and faculty on certain items, entailing social perceptions, institutional efforts, and the clinical role of primary care physicians.

Conclusion

This data show that, in general, the UACOM-P community has a positive view towards primary care and its role in medicine. This is the first study exploring these perceptions in the UACOM-P student body and the faculty. This provides a knowledge base that can inform later research and decision making. These data are strong due to capturing a point-in-time cross-section of beliefs, however long-term predictions cannot be extrapolated from these results, requiring future studies.

Summary

- **The UACOM-P Community has an overall positive attitude towards primary care.**
- Follow-up studies can capture effects of the curriculum and the present COVID-19 pandemic.
- Longitudinal research can identify changes over time and inform leaders on future directions to take in order to support the program mission.

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