

RATIONALE/NEED

The hidden curriculum can be defined as anything that is learned but not explicitly taught. A review of the literature yields extensive research into how the hidden curriculum affects Graduate Medical Education and clinical medical students, however little research has been done to identify the effects of the hidden curriculum on pre-clinical medical students and incoming medical students. As these students are particularly vulnerable at this stage in their career, the hidden curriculum may have profound lasting effects. This study aims to examine the effects of the hidden curriculum on first year medical students, specifically the effects on students' perceptions of physicians, patients, and medical specialties. Examining this impact would allow us to determine if students need to receive more education and training regarding the hidden curriculum and how this aspect of medical education should be handled in the future.

METHODS

The protocol and procedures of this study were approved by the University Medical Center IRB. All participants were informed about the purposes and the methods of the research prior to their participation and were ensured that participation was voluntary and would not affect their grade. As part of the first-year medical student orientation, a lecture describing the hidden curriculum and its application to medical education was given. Student volunteers participated in a role-playing exercise to show an example of the hidden curriculum in action in a hospital setting with medical students, residents, and attending physicians. An optional anonymous pre-/post- survey was designed using Likert Scale responses and given before and after this lecture/exercise. Students were invited to participate in these surveys via email. The quantitative data collected was analyzed for differences in pre- and post- survey responses. A focus group session of student volunteers took place towards the end of the first-year curriculum, at which time all students had extensive shadowing experiences in the clinical environment. The focus group discussion was transcribed, coded for themes, and rated for inter-rater reliability. The inter-rater reliability was found to be 1.0 between the independent coders.

FIGURES

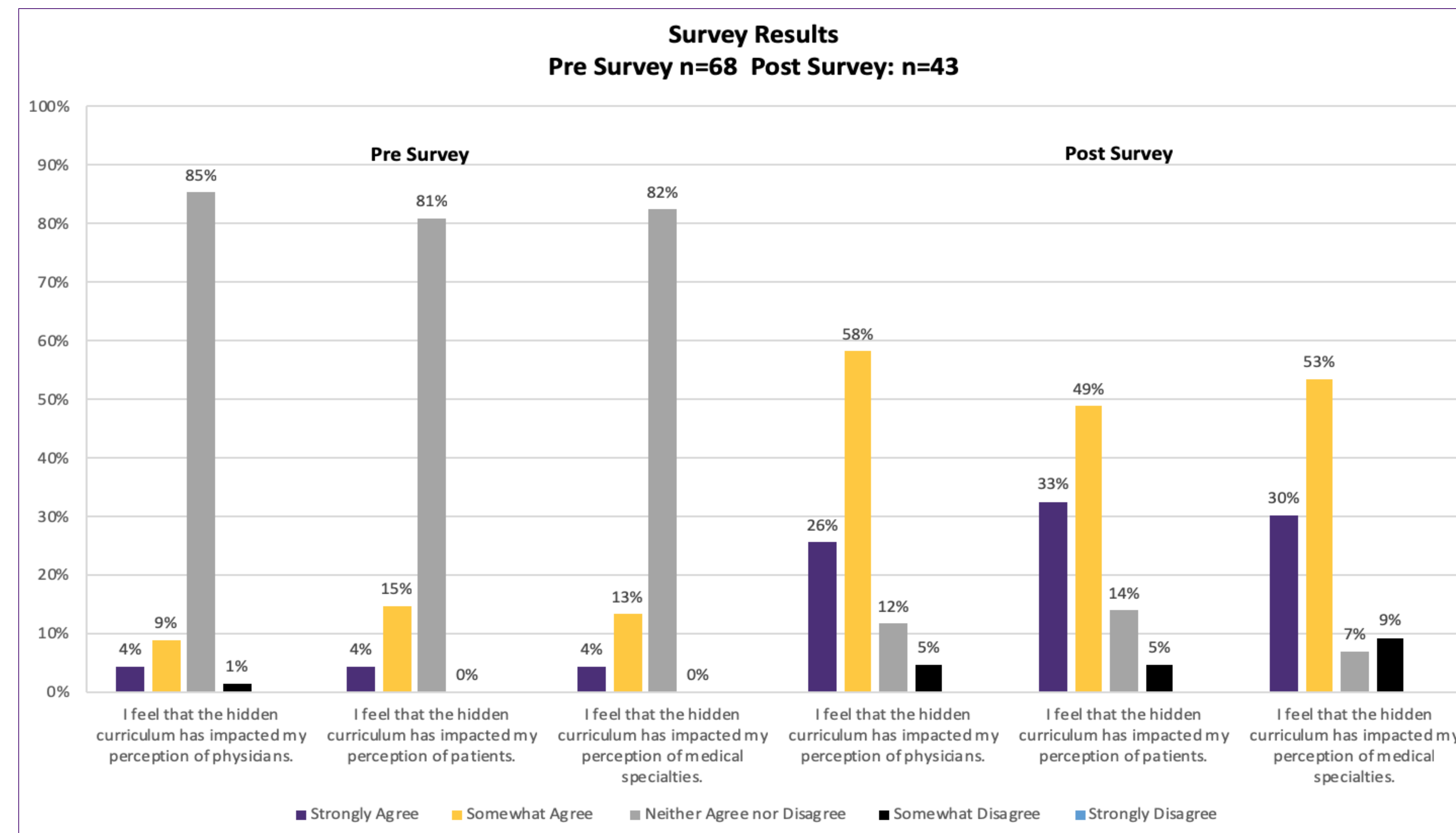


Figure 1. Student responses (percentage of total) to pre- and post-lecture survey addressing impact of hidden curriculum on their perception of physicians, patients, and medical specialties.

Code Number	Theme	Definitions	Number of times identified	Examples
1	Hierarchy affects perceptions of specialty.	Hidden Curriculum teaches hierarchy of specialties based upon money and academic abilities of student.	14	I don't know if this is hidden or media or anything, but the word hierarchy that we briefly mentioned earlier... I don't know if it stems from the fact that some specialties are perceived to be more difficult or better, or since they are more difficult they get paid more. The things of money and difficulty have kind of created a hierarchy, and that is not in the regular curriculum, but is part of the hidden curriculum I believe. There is a perception that there is this hierarchy, even though I feel like we don't like to talk about it. But it is there.
2	Students witness negative physician role models in the Hidden Curriculum.	The students witnessed negative physician role models in the Hidden Curriculum.	2	I feel like he kept cutting her off and it just seemed like he was irritated or like he didn't want to be there... the things he was saying were very direct and "don't do this", "don't do that", "you know you weren't supposed to do that" kind of stuff. So maybe that is just their relationship, but he was just bossing her around or being pushy. But it might be the thing to where doctor knows best, so if they are being not super sweet and kind it may be because they are above the patient and can talk to them like that. He just seemed mean.
3	Hidden Curriculum informs students that patients may seek medical care unnecessarily.	Hidden Curriculum informs students that patients may seek medical care unnecessarily.	3	I think in my precepting, it has been in the clinic and hospital, there have sometimes with my preceptor or other physicians in the hospital/clinic where a certain type of patient... type being if they come in a lot or the reason they come in are pretty minor... that is something I may have noticed. During my time precepting their might be a "this type of patient is coming in for this reason" and it might be either minor or its like they think it is bad and its not or something.
4	Hidden Curriculum informs students that patients may seek care for non-medical reasons.	Hidden Curriculum informs students that patients may seek care for non-medical reasons.	1	One thing I remember is the professor's wife coming in and she was a physician, and she told us a story about a boy who kept coming in for asthma. He was having asthma attacks constantly. And so they went to his house and they found that his carpet was old and they paid for him to have the carpet removed and he didn't have to come back. So there is more to the story. It makes you think about patients not just when you see them, but who they are when they leave.
5	Students are becoming aware of Hidden Curriculum.	The students through educational interventions develop knowledge about Hidden Curriculum.	4	it was definitely helpful to hear that during orientation because it is not something you consciously think about because a lot of medical school is basically objective driven (you are supposed to learn this, this, and this). I think a lot of us don't think outside of that realm, especially when it comes to testing purposes or passing stuff. But when you are presented with it, the hidden curriculum material, then you are like "Oh wow, that is definitely occurring subconsciously, consciously, whatever... it is definitely occurring".
6	Students witness positive aspects of the Hidden Curriculum.	Through the Hidden Curriculum students see positive examples of clinical behaviors.	2	I think that it is positive for the most part. I did not really experience anything that rubbed me the wrong way. I do know that this school is more primary care oriented, and it is clear in almost everything that we do, even in the classroom when you get lectures. The teachers tell you "when you are in primary care", "when you do this", or "when your patient comes to you"... kind of orienting you towards the primary care perspective.
7	Media portrays a false reality.	The Hidden Curriculum of media is not based in reality.	2	I feel like movies and TV shows make it look like so much more fun. I used to love House and Scrubs, but now when I am thinking back now, the information they had was very little, and they had a long differential. Like how did they get that from that. Thinking about it now, and how it works.
8	Hidden Curriculum needs to be discussed more.	Students request for additional time to discuss the Hidden Curriculum.	4	I think it would be good too to hear it again right before we go into rotations, because I feel like that hidden curriculum will be much different then.
9	Personality traits of physicians witnessed in the Hidden Curriculum may impact specialty selection.	The personality of the attending/clinicship director affect the specialty students select for their career.	4	What I get from interacting with the clinicians are the personality types that go into different specialties... I think that itself is part of the hidden curriculum, because I have to figure out where my personality fits in, which career path. Like at least for me, I interacted with that radiologist and thought "I did not enjoy that experience, I will probably not go into radiology". Because I do not think I interact with people who have that personality well.
10	Work-life balance of physician role models witnessed through the Hidden Curriculum may impact specialty choice of students.	The faculty perceptions of their work life balance affects Hidden Curriculum.	7	It is definitely very individualized based on each, I know one professor was lamenting about getting only 5 hours of sleep every night for 25 years. There are others who I have seen go to working part time because what they were doing wasn't quite what they were wanting out of life. So they had to find a different kind of balance. It kind of shows that there is a really good continuum of different ways to go about it.

Figure 2. Themes identified from focus group, with definition, frequency of identification, and examples.

RESULTS

Prior to learning about the hidden curriculum during the first-year medical student orientation, 13.23%, 19.12%, and 17.65% of students either "somewhat" or "strongly" agreed that the hidden curriculum had impacted their perception of physicians, patients, and medical specialties, respectively. After the lecture defining the hidden curriculum and exploring its application to medical education, 83.72%, 81.40%, and 83.72% of students either "somewhat" or "strongly" agreed that the hidden curriculum had impacted their perception of physicians, patients, and medical specialties, respectively. Students reported these influences have come in the forms of media, previous clinical experiences, witnessed patient care, etc. The focus group revealed ten themes surrounding the hidden curriculum that resonated with students. The most common theme identified was that the hidden curriculum teaches hierarchy of specialties based upon money and academic abilities of students.

CONCLUSION

Entering medical students believe they have been immune to the hidden curriculum prior to matriculation into medical school. However, once the hidden curriculum is thoroughly explained students realize their views of physicians, patients, and medical specialties have been molded by the hidden curriculum even before starting medical school. Modern Undergraduate Medical Education curricula should aim to define and explain the hidden curriculum early in the pre-clinical years in order to allow students to confront bias and unwanted influences, even in the classroom setting. This would allow the hidden curriculum to be brought to the forefront of medical education, allowing students to "un-hide" the hidden curriculum.

REFERENCES & ACKNOWLEDGEMENTS

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