

## Original Article

**PICABOO: Effects of Hidden Curriculum on student's behavior**Dr. Asma Rasheed<sup>1</sup>, Dr. Usman Mahboob<sup>2</sup>,<sup>1</sup> Associate Professor Chemical Pathology Department, Chughtai Institute of Pathology, Lahore.<sup>2</sup> Associate Professor Institute of Health Professions Education & Research (IHPER) Khyber Medical University (KMU) Peshawar,**ABSTRACT**

**Introduction:** Hidden curriculum (HC) as “a sum of influences” that exist in the educational environment. It is the set of cultures, values, safety practices and organizational structures within a school which affects student's personal, professional development, learning and behavior. HC is not documented but inferred by learners rather than delivered intentionally by faculty. In our educational system, Is the curriculum yet to be discovered or has it been hidden by someone? The curriculum remains hidden until faculty and students get aware of it.

**Objective:** To explore the effects of HC on students behavior.

**Methods:** A qualitative exploratory study was carried out in 2020 January till June in University College of medicine and dentistry. FGDs were conducted on zoom with purposive sampling of 30 students. FGD questions were validated and then piloted to ensure clarity. All FGDs were recorded on zoom and transcribed verbatim. Due to the sensitive nature of data, confidentiality and anonymity was ensured. Thematic analysis was employed to get meaning within the data set.

**Results:** Total 130 of codes were identified in the first cycle of coding that was further merged in the second cycle of coding leading to 110 codes. 19 subthemes under 4 major themes emerged from the transcripts. Main themes were effects of educational environment, peers, basic and clinical sciences teachers on student's behavior. Discipline, extracurricular activities, discussions, student's preferences, exchange of good habits, ethics, knowledge, punctuality, professionalism and role modeling were positive effects while use of social media, hangout, exchange of bad habits, favoritism, non-punctuality, haphazard teaching and hierarchy were the negative effects in terms of hidden curriculum identified through themes and subthemes.

**Conclusion:** This study revealed that there are both positive and negative effects of HC on students personal and professional behavior. Negative effects are due to unawareness of students, faculty and curriculum reformers about existence of HC. Information about problems related to HC as well as considering the viewpoints of students is mandatory. Based on current study findings certain recommendations proposed for controlling and managing the negative effects of a HC which can be useful for educating and training the students and faculty with the desired performance in any educational institution.

**KEYWORDS:**

Effects, Hidden curriculum, Students behavior, Awareness, Side effects, Recommendations.

**doi:** <https://doi.org/10.53708/hpej.v4i2.1091>

This is an Open Access article and is licensed under a creative commons attribution (4.0 international License).

**INTRODUCTION**

Education is not only piling up the information and skills or the abilities that's train or instruct but is rather to make visible what is hidden. Something might be hidden like cure of cancer is unseen by someone or in the game hide the penny, the penny is hidden. In our educational system, Is the curriculum been hidden or yet to be discovered by some one (Gaufberg, Batalden, Sands, & Bell, 2010). The curriculum remains hidden until faculty and students get aware of it. Faculty members and students are often not aware of the existence of the HC, which affects the student's personal, professional development, learning and behavior (Rajput, Mookerjee, & Cagande, 2017). Hafferty defined HC a

sum of influences, which exist in the educational environment. It is not documented not intentionally delivered by faculty, but inferred by the learners. Organizational structures, values, culture and safety practices within school that causes learner to react and function in a particular way (Verdonk, 2015). HC also refers to the unspoken learning that occurs outside the taught/formal curriculum. There are many contentious issues with in educational environment and students are receiving conflicting messages in everyday of their school life. Hidden curriculum issues are core to professional practice but difficult to teach yet (Wilkinson, 2016).

In literature review, limited studies were evaluating the effects of hidden curriculum on student's learning, their personal and professional behavior. So there is need to search and ponder the effects of hidden curriculum on students learning (Khan, 2013). Purpose of this study was to explore medical student's

**Correspondence:**

Dr. Asma Rasheed

Email address: drasmarasheed1@gmail.com, Cell: +92 321 374 0224

**Received:** January 20, 2020 **Accepted:** March 3, 2020

Funding Source: Nil

views about effects of educational environment on student's behavior especially in terms of the hidden curriculum. Main importance of this study is to call for thoughtfulness in students what is happening in classrooms and medical schools. How educational environment and values affects students learning and behavior through hidden curriculum and special measures should be taken to minimize them. The importance of speaking about the HC has been highlighted by many researchers and it has been argued that hidden aspects of the core curriculum are particularly essential in professional education which characteristically includes prolong periods of exposure to a predominant culture (Yan, Kung, & Yeh, 2019).

We believe that each school has its own HC model. I started with no predetermined thesis about hidden curriculum but wish to end with an emerged synthesis of recommendations which can help institutes to minimize the negative effects of HC on their students. Constitutive definition of Hidden curriculum, it is informal, untaught and unofficial curriculum. What values, beliefs and information students perceive and learn from their educational environment (Nargis, Talukder, & khairul Alam, 2013).

### METHODS

Study was conducted at University College of medicine and dentistry, UOL from January 2020 till June 2020. Study approvals was taken from ethical review board (ERB) of UCM/UOL. It was an exploratory qualitative study with a sample size of 30 undergraduate medical students. Six students from each class first to final year MBBS were included with non-probability/purposive sampling technique. Online focus group discussion with students were conducted. The students were asked to answer the following questions in focus group discussion.

Q1- What activities are you doing in your learning environment, which are not included in your curriculum?

Q2- What influence you are getting from your peers which influence your behavior?

Q3- What influence you are getting from your basic sciences teachers which affects your behavior?

Q4- What influence you are getting from clinical sciences teachers which affects your behavior?

Q5- Would you like to say anything else, how you learn different behaviors from your teachers and peers? In the college? In the hospital?

Before this a pilot study was done to address potential practical issues in the current research procedures and to identify flaws and limitations within the focus group discussion that allow necessary modifications to the major study. The focus group discussion was conducted online on zoom that was guided by open-ended questions that was initially reviewed by experts. Five participants from university college of medicine and

dentistry were selected by same inclusion criteria; one student was selected from each class (1st year to final year MBBS). The pilot study assisted researcher to learn the skills of focus group discussion and the flow of conversation. Researcher first built a good rapport with the participants to facilitate better responses. Thus, focus group discussion began with social conversation. All participants were given opportunity to discuss freely based on the questions asked and researcher used probing questions to elicit further in-depth information. After the pilot study has completed, researcher had the opportunity to transcribe verbatim, manage and code the data with one course mate. The lessons in transcribing and managing the data enabled researcher with some knowledge on how to summarize the transcripts and identify codes. Without a doubt, the significance of the pilot study assisted researcher to refine strategies before embarking into the major study phase. There were few modifications made in focus group discussion questions as a result of the pilot study which was further discussed with research supervisor (Majid, Othman, Mohamad, Lim, & Yusof, 2017).

### RESULTS

This study was carried out to explore the effects of HC on student's behavior. Five online focus group discussions were moderated on zoom from medical students of University College of Medicine and Dentistry, University of Lahore. Each group comprises of 6 (total 30) students. 56.6% were female and 43.3% were male participants (table I).

#### Four repeatedly emerging themes were identified:

- 1- Effects of educational environment on students behavior.
- 2- Effects of educational peers on students behavior.
- 3- Effects of basic sciences teachers on students behavior.
- 4- Effects of clinical sciences teachers on students behavior.

Each theme is different from the other, although the subthemes show slight overlap like professionalism, ethics and role modeling. Fig(1) further reveals the subthemes derived from these themes for better evaluation and discussion.

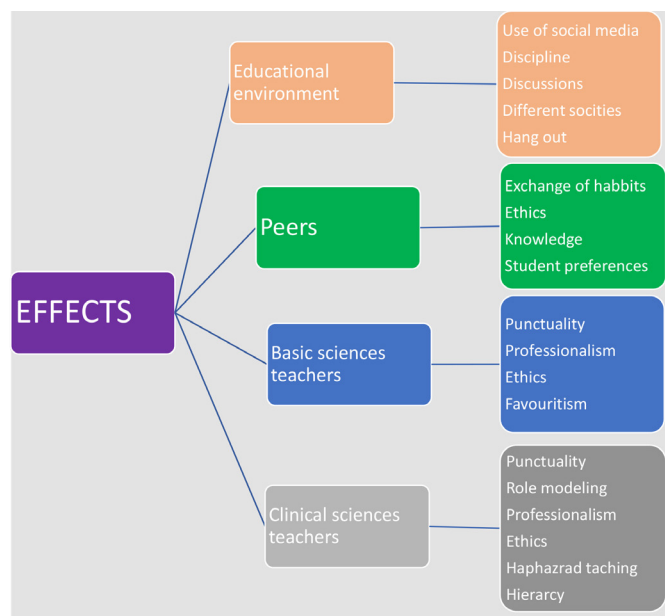


Fig I: Over arching theme and subthemes

**Table I: Characteristics of study participants**

Characteristics		Frequency	Percentage
<b>Gender</b>	<b>Male</b>	13	43.3%
	<b>Female</b>	17	56.6%
<b>Age (years)</b>	<b>18-21</b>	18	60%
	<b>22-25</b>	12	40%
<b>Years of study</b>	<b>1<sup>st</sup> year MBBS</b>	6	20%
	<b>2<sup>nd</sup> year MBBS</b>	6	20%
	<b>3<sup>rd</sup> Year MBBS</b>	6	20%
	<b>4<sup>th</sup> year MBBS</b>	6	20%
	<b>5<sup>th</sup> year MBBS</b>	6	20%

**Table II: Effects of hidden curriculum on students behavior**

Sr. no	Theme	Sub theme/categories	Anchor code/code	Frequency of students corresponds to codes	Representative quote
1	Effects of educational environment on students behavior	1-Use of social media	Effects: <ul style="list-style-type: none"> <li>• Use of Whats App, Face book.</li> <li>• Use of You tube.</li> <li>• Use to read novels.</li> <li>• Watching Dramas &amp; Seasons</li> </ul>	35%	Students mentioned that they started to use social media when they found learning activities less interesting, boring and lengthy lectures
		2-Discipline	Effects: <ul style="list-style-type: none"> <li>• Punctuality</li> <li>• Regularity</li> <li>• Followed time table</li> <li>• Reinforcement by administration</li> <li>• Rules &amp; Regulation</li> <li>• Attendance &amp;Assessment</li> <li>• Reports sent to home</li> </ul>	30.5%	Our learning environment teaches us discipline, to spend time in medical school with obedience of teachers and seniors.
		3-Discussions	Effects: <ul style="list-style-type: none"> <li>• Conversation</li> <li>• Useful discussions</li> <li>• Exchange of views</li> <li>• Talk with friends</li> <li>• Discussion about study</li> <li>• Latest trends</li> <li>• Group discussions</li> <li>• Study topics</li> </ul>	16.6%	One student said that they use to discuss personal issues with friends, they used to engage in useful discussions about study and latest world issues/ trends and group discussions on study topic
		4-Different societies	Effects: <ul style="list-style-type: none"> <li>• Extracurricular activities</li> <li>• Dramatic club</li> <li>• Character building society</li> <li>• Blood bank society</li> <li>• Healthy Competition</li> <li>• Joined for break</li> </ul>	10%	One student mentioned that to extracurricular activities provides a productive break from the study
		5-Hang out	Effects: <ul style="list-style-type: none"> <li>• Bunk classes</li> <li>• Cafeteria/ Restaurants</li> <li>• Friend groups</li> <li>• Avoid boring lectures</li> <li>• Outside lecture hall</li> </ul>	6.6%	One student said that our four friends group used to bunk boring lecture one or twice a week and we went to eat something.

2-	Effect of educational peers on students behavior	1-Exchange of habits	Effects: <ul style="list-style-type: none"> <li>• Students peers Adopt habits</li> <li>• Following Coping peer habits</li> <li>• Smoking</li> <li>• Praying</li> <li>• Dressing</li> <li>• Talking</li> <li>• Styles</li> <li>• Influence</li> <li>• Depends upon Personality Interests&amp; beliefs</li> </ul>	50% (good)  9.9% (bad)	One student admitted, I have started smoking although not do smoking during medical school timings, getting negative influence from my peers.
		2-Ethics	Effects: <ul style="list-style-type: none"> <li>• Adopt good ethics</li> <li>• Settle &amp; Sort out dispute&amp; quarrel</li> <li>• Take on etiquette</li> </ul>	16.6%	One student said adapting good ethics allow us to self regulate our selves.
		3-Exchange of Knowledge (informal PAL)	Effects: <ul style="list-style-type: none"> <li>• Study in Small groups</li> <li>• Prefer self study</li> <li>• Increases in sharing of information</li> <li>• Learning to prepare a topic</li> <li>• Dependent on motivation</li> <li>• Peer tutoring</li> </ul>	10%	One student said "There are variations in how well skills are learnt, just as there are within individual drive and motivation but as a group, we must do everything cooperatively.
		4-Student preferences	Effects: <ul style="list-style-type: none"> <li>• Useful discussions</li> <li>• Discuss Options/Opportunities</li> <li>• Career choices</li> <li>• Educational/Research advances</li> <li>• Useless things</li> <li>• Join group of students on personal interest</li> </ul>	13.3%	One student mentioned: It depends on personality of student, if someone wants to learn definitely he will join group of good students and vice versa.
3-	Effects of college teachers on students behavior	1-Punctuality	Effects: <ul style="list-style-type: none"> <li>• Deliver lecture on time</li> <li>• Time keeping during lecturing</li> <li>• Regular</li> <li>• Punctual</li> <li>• Disciplined</li> </ul>	46.6%	One student said: Teachers punctuality matter, not all teachers are punctual. We will adopt/ adjust timings according to their arrival timings. It will impart negative influence on student's behavior.
		2-Professionalism	Effects: <ul style="list-style-type: none"> <li>• Sincere to their work</li> <li>• Well dressed</li> <li>• Looks professionally commitment</li> <li>• Well prepared for lecture</li> <li>• In touch with social media</li> <li>• Extremes (Models to Casual dressing)</li> <li>• Sound knowledge.</li> </ul>	23.5%	One student said there are two extremes of dressing of teachers. Few teachers come in lecture without washing face in casual way while some teachers came like models. Both extremes are not good. Teachers should come up with decent dressing. Students quote few names of their teachers with professional dressing sense.
		3-Ethics	Effects: <ul style="list-style-type: none"> <li>• College teachers more respectful towards students</li> <li>• Kind behavior towards students</li> <li>• Teachers should not be insolent towards students</li> </ul>	13%	One student said: It depends on the cause what's the reason behind. Either student mistake or behavior? If teacher insults us for good reason we don't feel it as insult. Some times teacher punishes or insult due to invalid reasons. It has negative effect on student's behavior and we don't want to follow this behavior in future
		4-Favouritism	Effects: <ul style="list-style-type: none"> <li>• Few students more liked by college teachers</li> <li>• Front seated more liked by teachers</li> <li>• Few students got more privileges/ benefits in the forms of marks</li> <li>• Teachers polite with female students.</li> <li>• Teachers not giving equal attention</li> <li>• Different students has different Learning capabilities</li> </ul>	16.6%	Another student mentioned: All students should be equal for teacher. Each student has different learning capabilities and learning power. Some students has good listening and speaking capabilities/ skills. Those students quickly respond to teacher question in response more liked by teachers. Teacher should not suppose that the student sit quite he don't know anything

4-	Effects of clinical teachers on students behavior	1-Unpunctual	Effects: <ul style="list-style-type: none"> <li>Clinical teachers reach late and leave early</li> <li>Clinical teachers looks more busy</li> <li>For clinical teachers students unimportant</li> <li>Basic sciences justifies adequate timings</li> <li>Basic sciences more responsible</li> </ul>	20%	One student said: In comparison with basic sciences teachers, clinical teachers found more frequently to come late. May be they are busy but look more responsible. If teacher justified his late arrival by delivering good lecture, then it is acceptable.
		2-Role modeling	Effects: <ul style="list-style-type: none"> <li>Clinicians good interaction with patient</li> <li>Clinicians good interaction with attendants</li> <li>Clinicians bad interaction with patient</li> <li>Clinicians bad interaction with attendants</li> <li>Maintains confidentiality and modesty of patient</li> <li>Follow protocols and prerequisites of patient handling</li> </ul>	17%	<p>One student said few clinicians don't take consent from patient before any procedure. Don't follow proper protocol of history taking and examination e.g introducing his self to the patient first. Greet the patient. When we don't follow in exam they used to deduct our marks in exams (negative role modeling). Clinician rarely used to thanks patient at the end.</p> <p>Students mentioned two extremes of clinicians. Some clinician extremely harsh with the patient while some are soft spoken with patients.</p> <p>One student said by watching respectful clinician patient relationship, we got courage to touch and interact with patients. (Positive role modeling).</p>
		3-Professionalism	Effects: <ul style="list-style-type: none"> <li>Professional dressing</li> <li>Hard working</li> <li>Active engagement</li> <li>Well dressed</li> <li>Casual dressing</li> <li>Clinical teachers in overall</li> <li>How to balance in between patients and students</li> </ul>	16.6%	One student says: Professional dressing has positive psychological effect on patients and students
		4-Ethics	Effects: <ul style="list-style-type: none"> <li>Clinician rude behavior</li> <li>Patient humiliation</li> <li>Empathy/ Sympathy</li> <li>Take care of confidentiality</li> </ul>	13.3%	One student said I have learnt this sentence from medicine professor. Show empathy to patients not sympathy. If you put yourself in place of patient, then you treat patient as human not a client. This gives me positive vibes about clinicians.
		5-Haphazard teaching	Effects: <ul style="list-style-type: none"> <li>Learning objectives may not fulfill.</li> <li>Unequal chance to examine the patient</li> <li>Unequal chance to interact with the patient</li> <li>Students unattended during clinical rotation</li> <li>Less chance to learn from senior faculty</li> </ul>		One student said he is not satisfied with his ward rotation. Although we are fourth year students we have bookish knowledge but our application is still weak
		6-Hierarchy	Effects: <ul style="list-style-type: none"> <li>No questioning authority</li> <li>Students humiliation if asking questions</li> <li>Throw out from class</li> <li>Punishments</li> <li>Absent marking</li> <li>Negative marking</li> </ul>		Most of students mentioned that we mentally prepare that during ward rotation some insult is must, we take it light during case presentation. In that case it gives positive effect on our behavior, next time we will prepare more well with history and examination. Students named it healthy Bisti.



## DISCUSSION

The first acumen of sociology is that “The things are not what they look like. Social reality turns out to have many layers of meaning. The discovery of each new layer changes the perception as a whole” (Schilbrack, 2012). The purpose of this study was to find out the effects of hidden curriculum on students behavior and to propose few recommendations which would be incorporated in formal curriculum to give awareness to faculty and students about existence of hidden curriculum and to minimize negative side effects of HC (Nargis et al., 2013). This chapter throws light on elaborative discussion of the results in relation with findings from relevant literature. Current study moves around four main areas formulating as themes that were further categorized into subthemes. The four main themes were 1) Effects of educational environment on students behavior 2) Effects of peers on students behavior 3) Effects of basic sciences teachers on students behavior 4) Effects of clinical sciences teachers on students behavior. The results of current study were similar to results of other studies published world-wide. The findings indicated that there are some similarities between countries in some aspects of the HC in medical schools.

Regarding the theme effects of educational environment on students behavior, students point out many positive and negative effects. The subtheme discipline, healthy discussions and extracurricular activities impart a positive impact on student's behavior. Majority of the students point out that they learned discipline from their learning environment but this obedience to follow discipline is reinforced by medical college administration and faculty member because their attendances and assessments reports regularly sent to their parents but small proportion of students didn't willing to follow discipline, rules and regulation by heart because of their personal attitude and preferences, for instance few students used to bunk lectures, went to hang out with friends during school hours. Majority of students also reported the use of social media ((whats app, facebook, you tube) when they found learning activities lengthy and dull. These findings are in consistent with other studies worldwide. A study conducted at B. P Koirala institute of health sciences, Nepal. In this study researcher divided the students groups in to two. One group of students taught through didactic lecturing while other group involved interactive lecturing with active student's participation. Results of this study revealed that simple innovative teaching techniques enhances student interest and motivation (Kumar, 2003). Another study was conducted in Netherlands in 2015 in which author point out the misuse and use of lectures in higher education. Researcher pointed out the shortcomings of lecturing and proposed a solution to overcome these shortcoming of lecturing. Researcher suggested that active learning in the classroom setting fosters learning to a much larger extent than traditional large group teaching (Schmidt, Wagener, Smeets, Keemink, & van der Molen, 2015). Regarding the theme effects of peers on students behavior. Exchange of habits: (peer role modeling) subtheme emerges. Students themselves are active contributor to the hidden curriculum. Students themselves are anthropologists of medical culture. Students have to make choice to adopt or not to adopt unprofessional behaviors of their peers. Student's reactions and collective actions create the culture in which they adopt different

behaviors. Majority of students mentioned that they are getting positive influence from their peers. (Çengel & Türkoglu, 2016). They adopt good habits like praying and greetings others. They copied dressing, talking style and learning habit. Team activities and cooperation were emerges as positive points in this subtheme while competition were negative findings (Aghaee, Ehsani, Gholipour, & Seilani, 2014). Few students confess of espousing smoking habits from their peers, was the commonest negative influence students are getting from their peers. But it depends on individual own personality whether the person took positive or negative influence of peers (Makala, 2017). Majority of the researches focus on effects of peers on student's academic achievements only and some researches explore the effects of peers in cultural perspectives, (Kalsoom, Aziz, & Fatima) while few studies are specifically relevant to effects of peers on behavior in terms of hidden curriculum.

Regarding theme effects of basic sciences teachers on students behavior. The subthemes punctuality, professionalism and ethics project a positive impact on student's behavior while favoritism perceive as negative effect. (Kalsoom et al.) Majority of the students mentioned that their basic sciences teachers are punctual in attending their lectures and engaging in other teaching and learning activities while students also mentioned that basic sciences teachers are more professional and demonstrate ethical manners as compared to clinical sciences teachers while favoritism being the negative effect students getting from their college teachers. Favoritism contributes to unfair evaluations and discrimination between students even in situations in which such beliefs are challenged by means of sound reasoning. There are unconscious biases exist that are seemingly beyond the control and affects students behavior despite all intellectual beliefs. Indeed, even when teacher intentions are good, students may find it difficult to escape the pervasive effects of prejudice (Sosu, 2016).

Regarding the last theme effects of clinical sciences teachers on students behavior, majority of students mentioned that they are getting more negative influences from clinical teachers, when students talked about subthemes punctuality, haphazard teaching and hierarchy while professionalism, ethics and role modeling as positive effects. Clinical sciences teachers are less punctual in attending students in lectures and clinical rotation might be because of their busy schedules (Bazrafkan, Hayat, Tabei, & Amirsalari, 2019). Haphazard teaching also more pertinent with clinical sciences teachers that can be due to their unpreparedness for lectures, this may be attributed due to the pressure of formal curriculum (Alsubaie, 2015). The subtheme hierarchy denotes to no questioning authority of students while lecturing and clinical rotations. Few students reported humiliating experiences while asking a question during clinical rotations. The subtheme hierarchy has been also reported in other studies. It seems compulsory to break the iceberg of silence in the field of hierarchy educational settings and encourage students to report unprofessional and unethical behavior if observed around them. Regarding the sub theme role modeling, it had positive impact in most of the cases on students because majority of students want to be surgeon and good clinician in future while few students point out examples of negative role modeling also. In a qualitative study conducted in Shiraz Medial

School Iran. Researcher explore the perception of HC among undergraduate medical students. The results of that study also label hierarchy as negative effect and role modeling as positive effect on student's behavior. Researcher reveals that clinical teachers awareness of their own obvious professional elements could help to generate better learning experiences and teaching (Gardeshi, Amini, & Nabeiei, 2018).

Another study revealed that clinical attributes, teaching skills and personal qualities of clinical teachers are the essential component that medicinal students seek for a good role model (Levine, 2015). We are unaware of the HC, but even when are aware of it, we are unwilling to act. Information about issues related to the HC, as well as knowing the viewpoint of students is necessary as the focus in our educational system is content. Conversely, there is a hidden piece in school curriculum that reinforce value systems. Our modern industrialized school system imparts professional development as they prefer competition over cooperation which appreciate an objective and to the point answer and leaves little liberty for personal reflection. Fragmented disciplines are standardized and it does not value the relationships between them. We believe that attitude component is most important component of learning and that we must learn to recognize and understand our own behavior as teachers and students. Also we believe that the purpose of education must be to help students critically reflect on their world and behavior and try to help them to figure out what they are zealous about as well as how this passion can help students to acquire skills and to serve humanity (Passi et al., 2013).

**Recommendations:** In the light of current research as well as views shared by the participant's certain recommendations have been pointed out to minimize the negative effects of hidden curriculum.

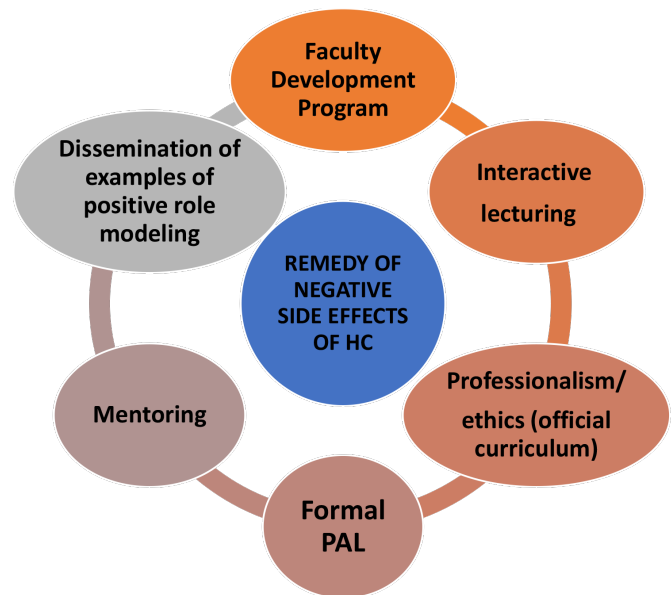
**Limitation of the study:** The limitation of current study was that the study was done, based on focus group discussion and could not involve the direct observation of participants. Another limitation was that the data was gathered from only from medical students and from one medical school (small sample size) that may not be a representative of all Pakistani medical schools. In qualitative research however we know that we are not trying to reach external validity. Further studies to explore the HC from other medical schools are needed including the view point of faculty and post graduate trainees also, to assess the generalizability of our findings.

**Future directions:** Researchers can extend study to other departments and institutions for a better overview and more samples. Longitudinal research method can be employed to observe the effects of applied recommendations. Data can also be collected from other medical colleges e.g. faculty members, post graduate students, administration etc.

### CONCLUSION

This study revealed that there are many positive and negative effects of hidden curriculum on student's personal and professional behavior. Negative effects are due to unawareness of students, faculty and curriculum reformers about existence of hidden curriculum. Information about problems related to unofficial curriculum as well as knowing the viewpoints of

students is necessary. Based on current study findings certain recommendations are proposed (fig 2) for controlling and managing the negative effects of a hidden curriculum which can be useful for educating the students and training the faculty with the desired performance in any educational institution.



**Fig II: Recommendation to reduce negative effects of hidden curriculum**

**Impact of current study:** Main impact of current study is to create awareness about the existence of HC among stake holders (curriculum reformers, faculty and students), so that negative side effects can be treated proficiently. Also awareness and reforms in official curriculum leads to attitudinal and cultural changes in educational environment with better educational outcome.

### DECLARATION

The author report no declaration of interest.

### REFERENCES

- Aghaee, F., Ehsani, M., Gholipour, R., & Seilani, K. (2014). Peer education and its positive impact on adolescent health. *Asian Academic Research Journal of Multidisciplinary*, 1 (19), 302-312.
- Alsubaie, M. A. (2015). Hidden curriculum as one of current issue of curriculum. *Journal of Education and practice*, 6(33), 125-128.
- Bazrafkan, L., Hayat, A. A., Tabei, S. Z., & Amirsalari, L. (2019). Clinical teachers as positive and negative role models: an explanatory sequential mixed method design. *Journal of medical ethics and history of medicine*, 12. <https://doi.org/10.18502/jmehm.v12i11.1448>
- Çengel, M., & Türkoglu, A. (2016). Analysis through Hidden Curriculum of Peer Relations in Two Different Classes with Positive and Negative Classroom Climates. *Educational Sciences: Theory and Practice*, 16(6), 1893-1919. <https://doi.org/10.12738/estp.2016.6.0103>

- Gardeshi, Z., Amini, M., & Nabeiei, P. (2018). The perception of hidden curriculum among undergraduate medical students: a qualitative study. *BMC research notes*, 11(1), 1-4. <https://doi.org/10.1186/s13104-018-3385-7>
- Gaufberg, E. H., Batalden, M., Sands, R., & Bell, S. K. (2010). The hidden curriculum: what can we learn from third-year medical student narrative reflections? *Academic Medicine*, 85(11), 1709-1716. <https://doi.org/10.1097/ACM.0b013e3181f57899>
- Kalsoom, T., Aziz, F., & Fatima, S. S. Effect of Peers on Academic and Personal Behavior of Students at Undergraduate Level.
- Khan, A. Z. (2013). Non-academic attributes of hidden curriculum in medical schools. *J Coll Physicians Surg Pak*, 23(1), 5-9.
- Kumar, S. (2003). An innovative method to enhance interaction during lecture sessions. *Advances in physiology education*, 27(1), 20-25. <https://doi.org/10.1152/advan.00043.2001>
- Levine, M. P. (2015). Role models' influence on medical students' professional development. *AMA journal of ethics*, 17(2), 142-146. <https://doi.org/10.1001/virtualmentor.2015.17.2.jdsc1-1502>
- Majid, M. A. A., Othman, M., Mohamad, S. F., Lim, S. A. H., & Yusof, A. (2017). Piloting for interviews in qualitative research: Operationalization and lessons learnt. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1073-1080. <https://doi.org/10.6007/IJARBS/v7-i4/2916>
- Makala, Q. (2017). Peer-assisted learning programme: Supporting students in high-risk subjects at the Mechanical Engineering Department at Walter Sisulu University. *Journal of Student Affairs in Africa*, 5(2), 17-31. <https://doi.org/10.24085/jsaa.v5i2.2700>
- Nargis, T., Talukder, M. H. K., & khairul Alam, K. (2013). The hidden curriculum in under graduate medical education in Bangladesh: medical students' perception. *Bangladesh Journal of Medical Education*, 4(1), 20-24. <https://doi.org/10.3329/bjme.v4i1.32192>
- Passi, V., Johnson, S., Peile, E., Wright, S., Hafferty, F., & Johnson, N. (2013). Doctor role modelling in medical education: BEME Guide No. 27. *Medical teacher*, 35(9), e1422-e1436. <https://doi.org/10.3109/0142159X.2013.806982>
- Rajput, V., Mookerjee, A., & Cagande, C. (2017). The contemporary hidden curriculum in medical education. *Med Ed Publish*, 6(3), 41. <https://doi.org/10.15694/mep.2017.000155>
- Schilbrack, K. (2012). The social construction of "religion" and its limits: A critical reading of Timothy Fitzgerald. *Method & Theory in the Study of Religion*, 24(2), 97-117. <https://doi.org/10.1163/157006812X634872>
- Schmidt, H. G., Wagener, S. L., Smeets, G. A., Keemink, L. M., & van der Molen, H. T. (2015). On the use and misuse of lectures in higher education. *Health Professions Education*, 1(1), 12-18. <https://doi.org/10.1016/j.hpe.2015.11.010>
- Sosu, E. S. (2016). Hidden curriculum: Does it matter in a Ghanaian school setting. *International Journal of Humanities and Social Sciences*, 7(1), 36-46.
- Wilkinson, T. J. (2016). Stereotypes and the hidden curriculum of students. *Medical education*, 50(8), 802-804. <https://doi.org/10.1111/medu.13008>
- Yan, Y.-H., Kung, C.-M., & Yeh, H.-M. (2019). The impacts of the hierarchical medical system on national health insurance on the resident's health seeking behavior in Taiwan: a case study on the policy to reduce hospital visits. *International journal of environmental research and public health*, 16(17), 3167. <https://doi.org/10.3390/ijerph16173167>

#### AUTHOR CONTRIBUTORS

- 1 Dr Asma Rasheed. Main author, conception and design of the article, interpreting the relevant literature, drafted the article, and critically re-revised it.
- 2 Dr Usman Mahboob Interpreting the relevant literature, critically re-revised the publication.