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Original Article

The Impact of Hidden Curriculum in Clinical Learning Environment: Exploring Resident's Perceptions

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ABSTRACT

Objective: To explore and identify residents' perceptions regarding the hidden curriculum in dermatology practice and make it explicit.

Study Design: Phenomenology qualitative study.

Place and Duration of Study: Department of Dermatology, Pak Emirates Military Hospital, Rawalpindi Pakistan Aug to Oct 2021.

Methodology: Data was gathered from one focus group discussion and five face-to-face semi-structured interviews and analyzed by thematic analysis of the generated themes.

Results: Residents described a hierarchical and competitive atmosphere in the department. Positive and negative role models were identified. Organized teaching and approachable seniors were appreciated, whereas favouritism and a lack of empathy were undervalued.

Conclusion: This study highlights the hidden curriculum in dermatology and attempts to recognize its important aspects. A continuous effort should be made to unravel it and align its positive aspects with the formal curriculum. This will lead to ethical and professional doctors and better health care.

Keywords: Consultants/seniors, Formal curriculum, Hidden curriculum, Peers, Residents/Trainees, Medical Education

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INTRODUCTION

The ''hidden curriculum'' (HC) in medical education describes the unwritten, unstudied curriculum that includes values, norms, beliefs, intergroup relations, and the formally planned course.[1] This information is implicitly conveyed by the institution, teachers and peers and permeates all aspects of the educational experience.[2] The HC in medical training, described by Ozlins *et al*.[3] as the 'art of medicine', describes the behaviours, attitudes, assumptions, and beliefs of medicine that are instilled in medical students beginning in the first year of training and becoming more salient throughout the residency. The undergraduate/postgraduate post-graduate medical curriculum has undergone major changes recently. However, less attention has been paid to the impact, process and structure of HC and how students experience these.[4]

Dermatology residency in our country is two and five years for MCPS and FCPS (Member and Fellow of College of Physicians and Surgeons, Pakistan), respectively. The dynamic learning and teaching processes during residency involve interaction between workload, work environment, formal training and the implicit transfer of ideas and behaviours, which can be explained as HC. The professional competence expected at the end of residency is technical knowledge, leadership, team and communication skills, ethics, and empathy. HC is thought to play an important role in developing these traits and, therefore, needs to be made explicit and aligned with the formal curriculum. To achieve the goal of curricular alignment, we must better define contributing factors to the HC within the domain of Dermatology. Residents, who face professional and ethical dilemmas daily, are the major stakeholders in the training process and can provide feedback and articulate preferences and values for consideration in curriculum innovation.[5] Negative effects of HC can replace professional values of altruism, credibility and sympathy with opportunism, pessimism and apathy in residents, thus leading to increased cynicism, medical errors and burnout.[6] Dermatology residency training appraisal in Canada showed residents desire more mentorship and teaching from their faculty.[7]

The role of HC in non-academic pursuits in medical schools has been studied in Pakistan 8; no study has been done in a clinical setting. This

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qualitative study used semi-structured interviews and focus group discussions to explore residents' perceptions of HC in dermatology at a tertiary care hospital in Pakistan.

METHODOLOGY

The phenomenology qualitative study was conducted at the Department of Dermatology, Pak Emirates Military Hospital, Rawalpindi Pakistan, from August to October 2021, after obtaining approval from the Ethical Review Board (123/ERC/340/2021).

Inclusion Criteria: Residents of either gender, and age group and years of training, undergoing FCPS or MCPS were included after written informed consent.

Exclusion Criteria: All residents working at the administrative posts, as house officers, who had completed their training or were on rotation from other departments were excluded.

The department has 40 postgraduate residents, 64% females and 36% males, 81% undergoing FCPS and 19% undergoing MCPS training. The faculty of the department was taken into confidence and was assured that the study would help uplift the speciality. Maximum variation purposive sampling was used to cover variables like gender, year of training and training program (FCPS or MCPS) of the residents.

They were assured of the authors' role as a researcher and not a faculty member; their interviews had no bearing on their work/assessments, and they had the right to refuse any question they did not like. This was also stated clearly in the consent form and was explained again before interviews and FGD.

The questionnaire was developed in English, with introductory, probing, key and summary questions. This was used to aid the five face-to-face (F2F) semi-structured interviews and the focus group discussion (FGD); however, new questions were spontaneously added as the narrative developed. Ground rules were set, participants were assured of anonymity and confidentiality, and the data was recorded cordially in a private room in the department. Each interview lasted 45-60 minutes till data saturation, while the FGD lasted 90 minutes. All participants were assigned anonymous signifiers followed by a number corresponding to the interview (F2F1-5) or FGD (FGDa-f) in which they participated.

Data was audio recorded, transcribed verbatim (4-6 hours for each interview and approx. four hours for the FGD), and integrated with field notes to capture the nonverbal communications. Thematic analysis was employed manually to identify, analyze, and report patterns and themes.

The individual interviews provided in-depth insight into the subject. The focus group discussion was conducted to utilize the residents' inter-relational dynamics and shared understanding and overcome participants' reluctance to have one-on-one interviews. Collecting data from two methods helped comprehensively understand the phenomena via triangulation. [11]

RESULT

Eleven dermatology residents (8 females (73%) and three males (27%), mean age 33 years (SD= 1.66), volunteered and consented to participate in the interviews (Table-I).

Table I Demographic characteristics of the Participants

Characteristic	Number
Females	8
Males	3
Age, in years (range)	33(29-36)
MCPS	2
FCPS	9
First year resident	2
Third year resident	2
Fourth year resident	5
Fifth year resident	2

Five face-to-face (F2F) interviews were done, while six residents participated in the focus group discussion (FGD). Most participants (82%) were undergoing FCPS training, while 18% were in MCPS training. 27% of the participants were from 2-5th year of training, while 18% were first-year residents (Table-II).

The seven themes that emerged were hierarchy, role-modelling, competitive environment, favouritism, teaching, teamwork/bonding, and personal encouragement. Each was an umbrella for multiple sub-themes, as shown in Figure.

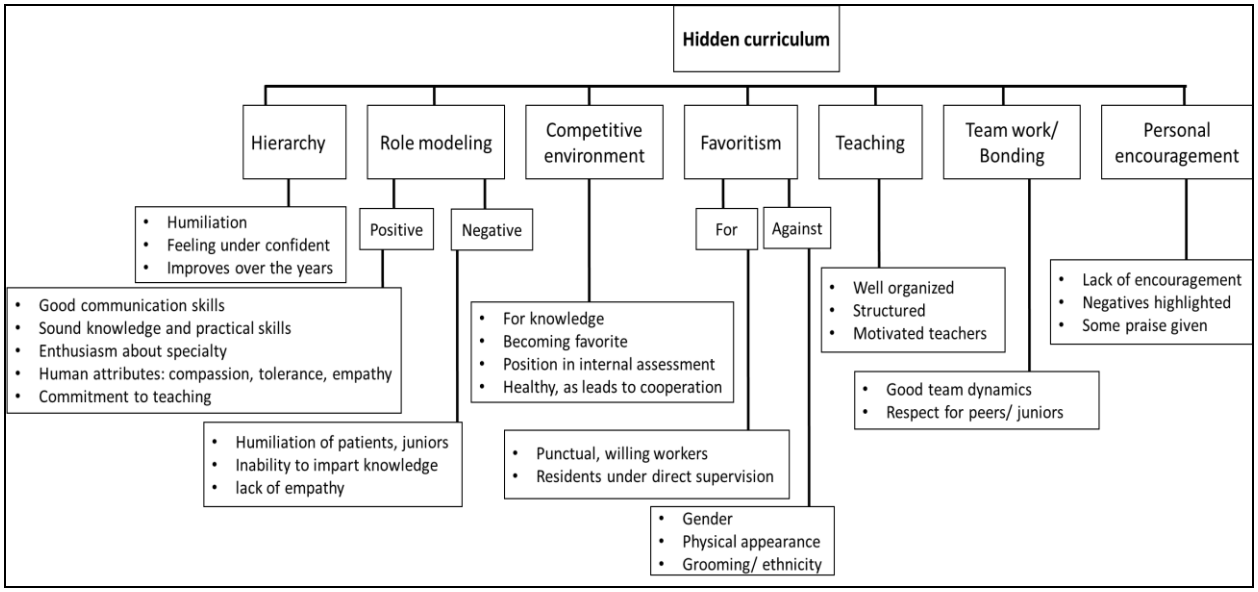
The themes and their subthemes have been discussed below using illustrative, short, verbatim quotes.

Theme- 1: Hierarchy:

The typical, omnipresent hierarchy of the medical clinical environment travels down from consultants to

Table-II Source of Data collection and number of participants

Source of data collection	Total No. of participants	Gender		Training Program				Year of training							
		Male	Female	MCPS		FCPS		1st yr		3rd yr		4th yr		5th yr	
				No	%	No	%	No	%	No	%	No	%	No	%
F2F	5	1	4	-		5		1		1		1		2	
FGD	6	2	4	2		4		1		2		2		1	
Total	11	3	8	2	18	9	82	2	18	3	27	3	27	3	27



Flow chart-I Basic and organizing themes identified from Data Analysis

the residents, across the residents, and then down to nursing staff and medical students. The majority of participants acknowledged its presence, thinking of it as an unwritten rule and for no other reason than their lower position in knowledge and training.

"We are made to do menial work like duty rosters, seniors are not answerable to anything (F2F4), -- get told that we are second-year residents and still do not know anything" (FGDd)

By and large, all of them could recall an instance where they experienced humiliation or a feeling of being underconfident. This primarily took place during case presentations, ward rounds, or in the office of one of the supervisors. It befell when they were unable to answer repeated questions, performed inadequate clinical examinations, or were not present at the place of duty. Most senior medical staff (males and females) and peers were implicated.

"I think it is a disgrace to humiliate someone in front of others (FGDa), -- was made to feel underconfident by my colleagues via their body language" (F2F5)

A small number did not implicate others but rather blamed themselves for their low confidence. Some felt humiliated, and others felt so while witnessing it happening to their colleagues.

"I felt underconfident in the beginning (F2F1), have seen juniors humiliated (FGDf), and felt hesitant to do a call in the beginning but couldn't say 'No' to senior peers or consultants" (FGDe).

Despite the ubiquitous hierarchical structure, the majority opined that their reluctance and hesitancy to approach the seniors declined over time.

"The perception of being strict changed over time; they listened to us (F2F2), and I would take my problems to a few consultants, not all (F2F4)."

Theme-2: Role-Modeling:

All the residents unanimously identified positive and negative role models of both genders. The role models primarily had an encouraging and motivating impact on them. Sound knowledge and practical skills, enthusiasm about the discipline, and 'human' attributes like compassion, tolerance, and empathy were mostly appreciated.

"I observe the way senior counsels and satisfies most patients (F2F5); have learnt that the patient is my priority" (F2F2).

Traits like commitment to teaching and good communication with residents, colleagues and patients were highly rated.

"I like the polite and gentle way of talking to patients; it calms them down(F2F2); want to be a very caring doctor like one of my consultants(F2F3), even if you do not have much knowledge"(F2F1).

Humiliation of patients and an inability to impart knowledge were considered negative attributes. Residents who recognized negative role models resolved not to imitate them.

"I shall never be impolite or non-receptive to patients" (FGDa,b).

Theme-3: Competitive Environment:

Competition is one of the driving forces of most learning environments, and we found a similar result. Most residents (9/10) found it to be the defining characteristic of our department.

"All are competitive (F2F2, 4); some are competitive by nature (F2F3); competition is healthy"(FGDa,b,c)

The competition was observed to be for knowledge, becoming a favourite, and achieving higher positions in the internal assessments. A few participants perceived it as healthy, as it led to cooperation among them.

Theme-4: Favouritism:

There was a consensus amongst all the study participants about an element of favouritism in the department, as everyone was not treated equally. When asked about the characteristics that made a resident's favourite, there was a diversity of opinions. Some pointed out punctuality, adequate clinical knowledge, and willingness to work, while others thought consultants favour those who work directly under their supervision.

"Knowledge, definitely knowledge (F2F1, 3, FGDb); natural bias towards obedient and willing workers (F2F5); personal trainees are favoured (F2F3).

"They like some residents, but I have been unable to decipher what they like?"(FGDc)

A few participants opined that personal reasons must exist; physical appearance, attire, grooming and ethnicity were not considered contributory.

"That is the good thing; they do not make favourites on this basis" (F2F2).

A couple of participants identified gender. A female resident said," No one has ever said this, but my general feeling is that they (consultants) would be happier if all trainees were males" (F2F3). However, all the others denied this, both in one-on-one discussions and focus groups.

All the participants said they wanted to become favourites, some laughingly and some seriously.

"Everyone wants to become a favourite (FGD a-f).

Theme-5: Teaching:

All the participants unanimously spoke highly of the teaching in the department. There was a general agreement that teaching schedules were well organized and structured, a pleasant change from their previous experiences. The participants further elaborated that they found all the senior staff willing to teach in lectures, small group discussions or bedside teaching.

'The teaching is very streamlined and friendly; colleagues from other departments are surprised by the teaching sessions.'

Theme-6: Teamwork and Bonding:

The majority recognised teamwork and collaboration as an integral part of medical practice. There was unanimous conformity among them that their seniors modelled good team dynamics, which taught them to respect their peers and juniors. They agreed that it leads to an effective learning environment. Peers and nursing staff were found helpful and respectful by the majority.

"I have never seen seniors talk bad about each other (F2F1, 3, 4); have seen senior consultants sending patients to a junior colleague (F2F3); got much help from my peers (F2F2); were helped in how to apply, what/how to study'(FGD a,c,d,e)."

Many emphasized that meeting informally and off-campus will increase their bonding.

"I have a very strong belief about social activities (F2F4). We should go out of the department to have dinner, etc. and make good memories" (FGDa, c, d).

Theme-7: Personal Encouragement:

Most residents (8/10) noted the lack of 'SHABASH' (praise) in the department. They were told what they had not done but did not acknowledge the good things.

"I think there is no precedence of giving shabash, and it is not/never going to happen(F2F3); we should be appreciated as it leads to personal encouragement (FGD a,e,f); what is the use of hard work as no one is ever going to be happy"(F2F3)

A couple of participants thought that the seniors realised the importance of praise and gave it to them when it was due.

"I was encouraged in the beginning; failed an assessment but was praised when prepared well next time" (FGDe).

DISCUSSION

Our study critically considers the ways in which dermatology residents understand and internalize various aspects of HC in their professionalization as consultants within a Pakistani context. Research has been done about the impact of HC on undergraduate medical students in Pakistan. [8], [12,13] but qualitative studies investigating this theme in a clinical setting are few or none, most likely making this the first piece of research exploring this topic. Unveiling residents' perceptions about HC gave them a unique oppor-tunity to better understand and address it in the clinical workplace.

The data collected supports and elaborates the presence of HC in the department of dermatology, even though residents were not aware of this term initially. Various aspects of HC were similar in the clinical environments around the world. [14] Results uncovered themes of hierarchy, role modelling, competitive environment, favouritism, teaching, teamwork and bonding and personal encouragement.

The traditional hierarchy of hospital medical practice can harm low-status individuals on the one hand and be generative for understanding the experiences of medical learners on the other. [15,16] The hierarchical culture of medical organizations has been shown to affect medical learners' attitudes, values and behaviours. It can be the underlying cause of bullying and workplace mistreatment and is often associated with feelings of shame and humiliation. [17]

Our findings resonate with the literature [15, 18] regarding both the processes and consequences of how hierarchy is used in medical education. All the participants perceived it to negatively affect their self-confidence, identified the need to 'know their place', and decoded the expectations at the start of training but did not challenge the authority. In contrast, gender and racial inequality were not noticed by any resident.[18]

Teaching by humiliation has been known to reinforce and encourage the perpetuation of hierarchy. 19 A few described this feeling, while some others felt underconfident while witnessing colleagues go through negative experiences. Crow *et al*. [20] described this process of 'professional socialization' as a feeling of embarrassment, a feeling of being ashamed of their own incompetence or learning about their place in the clinical structure. The majority, however, felt that these feelings of intimidation diminished when the professional and social distance between consultants and them diminished.

Two previous studies [20, 21] have shown hesitation on the part of students in revealing their insecurities and personal problems to their seniors from fear of appearing incompetent or being the object of their anger. However, most of our residents found their seniors to be effective and approachable for personal and professional problem-solving. The initial hesitation declined with time, with both male and female seniors being found to be helpful. HC teaches the residents early on to accept that they will sometimes or often be made to look stupid in front of colleagues, doctors and patients. They will only report this unacceptable behaviour when they are taught about it. Otherwise, they will continue to consider it an inevitable part of training. The responsibility for this huge cultural change lies with the hospitals and the medical schools.

The assumptions of Passi *et al*. 22 in 2016 that advertent and inadvertent role modelling improves students' professional behaviour have been verified by several similar studies. In line with the previously reported examples of positive role modelling, individual characteristics like punctuality, passion for chosen career, enthusiasm for teaching and compassion for the patients, as well as skill and competence, were noted to be the qualities which residents wanted to emulate in future.23 Humiliation of juniors and lack of empathy were considered negative traits. Lack of communication skills was rated worse than lack of knowledge, in accordance with a few previous studies. Clinical teachers must know their professional characteristics to generate better teaching and learning experiences.[24]

Medicine unconsciously becomes a hyper-competitive field, from entering medical school to performing well in residency.25 Competition from peers,

considered a negative aspect of HC and inadequate support from senior professionals are among the common reasons for increased stress levels of medical residents. 26 Related to this, the competition was found to be prevalent by most residents, amongst each other, and to try and impress the senior medical staff. It was thought to be directly related to 'Favoritism' expressed by the seniors. They could not put their finger on what led to becoming a favourite, but they all felt that it helped them survive the residency. However, This competitive mindset can cause great confusion and stress for the residents, especially when they find out that every physician is intrinsically reliant on others.27 It has to be changed into a collaborative one. This can be done by moving away from the number game and towards a pass-fail grading system. 28 Residents must be taught to believe that even though competition can be healthy, it can become demoralizing to worry about who got ahead all the time.

Favouritism by a teacher, considered negative, 29 leads to low morale, resentment and stunted growth of individuals and can create the perception of discrimination in a team setting, thus affecting the educational environment. 30 The first was quoted by most of the participants in our study, whereas gender and racial bias were strongly denied by all, apart from one female resident who thought that the seniors wished all residents to be males.

Participants wanted more get-togethers and extracurricular activities to make everlasting, unforgettable memories of their residency. The term ''Hidden curriculum" is rising in medical literature, but its true explanation remains cloaked in vague definitions. This study made a concerted effort to fully decode and understand the HC operations in our residency program through open discussions with the residents. Its recognition will not only help the residents but also facilitate the faculty to appreciate its impact on the professional environment and help to align the content of HC with the formal curriculum.

LIMITATIONS OF STUDY

This study examined HC from a single department of dermatology in one tertiary care hospital, which can limit transferability. Despite this, these results are relevant to most medical specialities residents. Further studies from other dermatology residency programs, including the perspectives of clinical teachers, are needed to assess the generalizability of our findings.

CONCLUSION

The present study evaluated the HC of dermatology residents. Despite being conducted at a single institution, this study identified factors such as hierarchy, role modelling, competitive environment, favouritism, teaching, teamwork/ bonding and personal encouragement. It can act as an initial framework for HC of various residency programs. Complementary research should be carried out in different contexts and disciplines to see what the residents learn during their training. It is difficult to avoid or illuminate hidden curriculum fully, but it is necessary to reveal and recognize its priority areas through open discussions and reflections. This study can act as a first step in breaking the ice of silence and getting knowledge about the benefits and harms of HC that may help emphasize or contradict formal curriculum and be able to capitalize on its beneficial positive aspects and minimize the negatives.

Conflict of Interest: None.

Authors Contribution

Following authors have made substantial contributions to the manuscript as under:

1,2: Data acquisition, data analysis, critical review, approval of the final version to be published.

3,4: Study design, data interpretation, drafting the manuscript, critical review, approval of the final version to be published.

5,6: Conception, data acquisition, drafting the manuscript, approval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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