

## ***The hidden curriculum: a tool for empowering medical students?***

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### **SUMMARY**

#### **Background**

The hidden curriculum (HC) refers to unscripted, ad hoc learning that occurs outside of the formal, taught curriculum and can have a powerful influence on students' professional development. While this learning may be positive, it may conflict with that taught in the formal curriculum. Medical schools take a range of steps to address these negative effects, however the existence and nature of the concept tends to be hidden from students.

#### **Methods**

Since 2007, our medical school has incorporated into its small group programme an educational activity exploring the concept of the hidden curriculum. We undertook a qualitative evaluation of our intervention, conducting a thematic analysis of students' wiki reflections about the HC. We also analysed students' responses to a short questionnaire about the educational approach used.

#### **Findings**

The majority of students felt the HC session was important and relevant. Most appeared able to identify positive and negative HC experiences and consider how these might influence their learning and development, although a few students found the concept of the HC hard to grasp.

#### **Discussion**

Revealing and naming the hidden curriculum can help students understand its existence and its potential impact. The hidden curriculum may also be a useful tool for triggering debate

about issues such as power, patient centredness, personal resilience and career stereotypes in medicine. Supporting students to think critically about HC experiences may empower them to make active choices about which messages to take on board.

## **INTRODUCTION**

The hidden curriculum (HC) refers to the ad hoc, often unarticulated learning, that occurs outside the formal, taught curriculum<sup>1,2</sup>. Often learned implicitly through role models, it is widely held that the HC is influential in shaping students' identity and professional development. Messages learned through the HC may support or conflict with those communicated in formal sessions contributing to the erosion of empathy,<sup>3</sup> ethical thinking<sup>4</sup> and idealism<sup>5,6</sup>. There have been many calls and proposals, for interventions to help learners resolve these conflicts<sup>6,7</sup>.

This paper describes an educational intervention which aims to support medical students to expose and explore the HC and reports on a small scale study that evaluated students' responses to this.

## **AIMS**

To explore the impact of the intervention, including:

1. HC examples, both positive and negative, identified by the students.

2. The perceived impact of 'noticing the HC' on students. How, for example, do they feel this has influenced their thinking about their HC experiences, issues in medicine and their own future practice?
3. Student perceptions as to which educational approaches best facilitated HC learning.

### **The evaluation in context**

Our UK medical school has an integrated, spiral curriculum where students have early clinical experiences. Throughout the 5 years, students take part in regular 2 hour, doctor-facilitated, groups of 8-10 students (known as 'Jigsaws'), where they share and reflect on their clinical experiences and are encouraged to apply their learning to their roles as students and future doctors. In 2007 we undertook a literature review and were unable to find any examples of medical schools revealing the HC to students. We subsequently piloted the introduction of the 'hidden curriculum' as a Year 3 Jigsaw curriculum topic. Feedback suggested that this helped students to notice the HC and consider its influence on their professional development. Explicitly naming the HC seemed to be key. As one student said: *"being told that it existed was almost enough to begin understanding it"*. The intervention was subsequently rolled out to all Year 3 students.

### **Intervention**

We trained tutors to facilitate learning and reflection on the HC through an educational activity described in Box 1.

[Box 1 here]

### **Evaluation method**

Our study took place from 2012-2013. The study used as a data sample the wiki contributions from four year 3 Jigsaw groups. Students' wiki contributions were used to gain an insight into aims 1 and 2. Data were drawn from groups whose facilitators expressed a keen interest.

The data were analysed initially using the threshold concept framework and presented in 2014<sup>8</sup>. A descriptive thematic analysis<sup>9</sup> of the data was subsequently undertaken by HN and TC. We mapped students' comments to aims 1 and 2, then identified and negotiated key themes. We also used the same students' responses to a short questionnaire to explore aim 3. The questionnaire used a Likert scale to explore the extent to which students agreed with 8 statements about elements of the session (Table 4).

### **Ethics**

The Medical School Research Ethics Committee approved the study as an evaluation project which raised no ethical concerns. Students were all provided with detailed information about the project and gave written consent. Wiki reflections and questionnaires were anonymised by facilitators before being sent to the evaluation team.

## **RESULTS**

A total of 34 Year 3 students contributed to the group wikis. Within students' written reflections we saw examples of themes identified elsewhere in the literature<sup>6,10,11,12</sup> including haphazard teaching, competition, patient dehumanisation, hierarchy and power, personal/professional balance, gender and career stereotyping and unethical practice. The quotes below have been chosen to represent the different student participants as well as the broad range of student comments.

### **HC examples that were perceived as unhelpful or helpful**

Table 1 provides examples of student reflections in relation to experiences they viewed as negative and unhelpful to their development. Notably, when critiquing negative experiences, several students suggested it was inevitable that clinicians become less professional or empathic over time.

*[Table 1 near here]*

Table 2 shows examples of experiences that were perceived as helpful. Students highlighted clinical experiences that showed them how to put into practice, extend or fine tune learning from the formal curriculum, often reflecting on how these broadened or shifted their understanding, offered a different perspective, 'added detail' or improved their self-confidence.

*[Table 2 near here]*

### **How knowing about the hidden curriculum might influence students' future practice**

Some students responded to this by considering specific experiences, while others considered HC experiences in general. A common response focused on challenging unprofessional practice. Some students felt they should take action:

*We students should actively try to discourage these gender stereotypes as we become doctors by putting a stop to such unprofessional behaviour.*

Others felt obliged to 'stand by':

*It takes a rather bold medical student to question or even report a consultant. It seems to be the norm to stand by and watch.*

*The hidden curriculum here was that I am prepared to stand by as this consultant is rude to other staff, my placement partners and patients. And standing by is the done thing.*

For most students however, taking action meant changing their own behavior.

*It is our duty to take on board how the consultant treats his [sic] patients, and modify our behaviour to ensure that we certainly do not mimic ourselves on them.*

While students frequently stated that they would now be more critical of role models, some students recognised that deciding who and who not to learn from is not always straightforward:

*Learning from the hidden curriculum essentially involves learning from role models but the problem we face is how do we pick a good role model?*

Table 3 illustrates in more detail how students drew on both negative and positive experiences, to describe what they would now do differently, particularly with respect to communicating with others, working with patients and maintaining their values and ideals.

*[Table 3 near here]*

### **Approaches for facilitating hidden curriculum learning**

A total of 21/34 students completed and returned their questionnaire. Most respondents felt the HC topic was important (81%) and relevant (81%) for medical students. Students reported that group discussion, personal reflection and relating the topic to their own experiences were most effective in helping their understanding of the HC (Table 4).

*[Table 4 near here]*

## **DISCUSSION**

This study shows how a simple educational intervention might encourage students to become more critical of their informal learning experiences and the influence of these on their own development. Students and faculty are often not aware of the existence of the HC yet in this study, explicitly naming it appeared to provide a framework for students, allowing them to reflect on experiences that might otherwise be overlooked or seem ambiguous. When recognised, such experiences could trigger a critical examination of issues related to medical power and care in context: issues that are core to professional practice yet often hard to teach.

Gaufberg et al<sup>10</sup> have also revealed the HC to students but our study, notably, takes into account the agency of students. The literature to date suggests that the solution to the HC lies in changing the attitudes and behaviours of teaching faculty and unwittingly positions students as passive. Yet if we support students to explore the HC for themselves and provide them with a conceptual tool for articulating, making sense of and critically evaluating the experiences that they are 'aware of but find difficult to explain', they may then understand the root of the problem and feel empowered to act differently. The implications are exciting: if (alongside attempts at changing existing faculty) new generations of doctors enter medicine aware of their impact on the world around them then the problem of the HC itself may ease.



The intervention incorporated a number of elements; group discussion and personal reflection about experiences were identified by students as particularly helping their understanding of the HC. HC studies often focus on students' negative experiences. We purposefully asked students to reflect on both positive and negative events. Their comments suggest that this helped them appreciate the benefits, as well as risks, of role modelling, whilst recognising the need to be discerning about who and what to model.

This was a small study in a single setting that would benefit from further research. Most students appeared to grasp the HC concept. However a few students struggled to understand the difference between formal and informal learning or to appreciate that learning through the HC is often tacit. Others misinterpreted the concept as 'hidden agenda'. Revisiting the HC at different times during the undergraduate course may help students to fully understand the concept.

In line with other studies, there was evidence of a "*culture of tolerance*"<sup>6</sup> with students at times describing unprofessional experiences as inevitable. In contrast, others were overtly judgmental about behaviours that they observed. The most reflective students critically examined the reasons for the behaviour and the differences between the text book (formally taught) medicine and medicine in the real world. This suggests that facilitators need to offer students opportunities to unpack and think through problems before making judgements.

A recent study suggests students' loss of idealism begins early in training<sup>5</sup>. We now train facilitators to discuss the HC across all years of the programme. Helping faculty appreciate the impact of their own behaviours on students may improve the informal learning environment for students and we now run training sessions for faculty, naming and exploring the HC and discussing its potential impact on student development. We use quotes from this study to illustrate how a 'snapshot' experience or the throw away remark by a role model may be misunderstood by students or judged out of its broader context, as well to demonstrate opportunities for positive role modelling. In particular, we challenge teachers to reflect on how they may stereotype medical careers and the impact of this on student career choice<sup>10</sup>.

## **CONCLUSION**

In 1998 Hafferty proposed that schools shift their focus from the curriculum (what students are taught) to education (what students are learning)<sup>1</sup>. This paper describes how a simple intervention, which encourages students to explicitly explore the HC, might contribute to this shift. Ensuring that students understand the impact of the hidden curriculum on their own development and decide which messages to take on board could be a crucial step in maintaining and developing student empathy, ethical awareness and professionalism. As HC issues apply to postgraduate learners and faculty as well as medical students<sup>6</sup>, interventions such as this may be applicable across the continuum of medical training.

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- <sup>1</sup> Hafferty FW. Beyond curriculum reform: confronting medicine's hidden curriculum. *Acad Med* 1998;**73**:403-407.
- <sup>2</sup> Cribb A & Bignold S. Towards a reflexive Medical School: the hidden curriculum and medical education research. *Studies in Higher Education* 1999;**24**:195-208.
- <sup>3</sup> Hojat M, Mangione S, Nasca TJ, Rattner S, Erdmann JB, Gonnella JS, Magee M. An empirical study of decline in empathy in medical school. *Med Educ* 2004;**38**:934-941.
- <sup>4</sup> Feudtner C et al. Do clinical clerks suffer ethical erosion? Students' perceptions of their ethical environment and personal development. *Acad Med* 1994;**69**: 670-679.
- <sup>5</sup> Mader EM, Roseamelia C, Morley CP. The temporal decline of idealism in two cohorts of medical students at one institution. *BMC Med Educ* 2014;**14**:58.
- <sup>6</sup> Doja A, Bould MD, Clarkin C, Eady K, Sutherland S, Writer H. The hidden and informal curriculum across the continuum of training: A cross-sectional qualitative study. *Medical Teacher* 2016;**38**:410-418.
- <sup>7</sup> Holmes CL, Harris IB, Schwartz AJ, Regehr G. Harnessing the hidden curriculum: a four-step approach to developing and reinforcing reflective competencies in medical clinical clerkship. *Advances in Health Sciences Education*. 2015;**20**:1355-1370.
- <sup>8</sup> Neve H & Collett T. *Revealing the hidden curriculum to medical students*. Presentation at ASME 2014 Annual Scientific Meeting, Brighton, UK. Abstract available at <https://www.ee.ucl.ac.uk/~mflanaga/abstracts/TC14Abstract32.pdf>
- <sup>9</sup> Braun V & Clarke V. Using thematic analysis in psychology. *Qualitative research in psychology*. 2006; **3**(2):77-101.
- <sup>10</sup> Gaufberg EH et al. The hidden curriculum: what can we learn from third-year medical student narrative reflections? *Acad Med* 2010;**85**:1709-1716.

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<sup>11</sup> Lemp H & Seale C. The hidden curriculum in undergraduate medical education: qualitative study of medical students' perceptions of teaching. *BMJ* 2004;**329**:770-773.

<sup>12</sup> Wilkinson TJ. Stereotypes and the hidden curriculum of students. *Med Educ* 2016;**50**:802-804.