VIEWPOINT

Pimping in Medical Education
Lacking Evidence and Under Threat

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Medical student harassment and mistreatment have become topics of increasing concern to a wide range of stakeholders in US medical education.[1,2] In this context, traditional methods of bedside teaching, particularly the time-honored "pimping" of medical students and house staff,[3] have recently come under scrutiny.[4] In this Viewpoint, we define pimping, briefly summarize the evidence base for and against pimping, discuss pimping in the context of medical student mistreatment, and outline future directions.

What Is Pimping?

The term *pimping* was popularized following a 1989 *JAMA* article by Brancati,[3] which used the term to refer to a series of difficult and often intentionally unanswerable questions posed to a medical student or house staff in quick succession.[3] The objective of pimping is to teach, motivate, and involve the learner in clinical rounds while maintaining a dominant hierarchy and cultivating humility by ridding the learner of egotism.[3] Anecdotal experience suggests that pimping is widespread in both US and European medicine, and likely elsewhere around the world, although few data are available about its extent. As pimping occurs in public and in the presence of peers, a consequence—sometimes intentional—is that the pimped learner can be humiliated.[4] This humiliation (a form of aversive conditioning) can drive self-directed learning.[5] As such, the educational intent is primarily formative. However, the consequences of pimping can be negative.[1,2] Furthermore, the student's or resident's emotional response to pimping may be inappropriately used to inform summative assessments, either consciously or subconsciously.

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Pimping as described by Brancati[3] is generally a well-intentioned practice, often considered a variant of the Socratic method,[5] designed to teach, mold imperturbability, and generate an esprit de corps. In a 2009 *JAMA* article, Detsky[6] provided an update on pimping and further suggested that faculty who pimp should publicly apologize if a student appears humiliated and should look for opportunities to provide praise on rounds, concluding that the "purpose of pimping is to increase retention of the key teaching points by being provocative." Accordingly, some medical students endorse favorable perceptions toward pimping in the benign sense.[5,7,8]

However, increasing concerns for medical student and house staff mistreatment have revealed weaknesses in the ethical underpinnings of this practice. These concerns have caused some to reevaluate pimping as a pedagogical strategy, emphasizing the malignant aspects of the practice and distinguishing pimping from the Socratic method.[4] Kost and Chen[4] recently suggested a new definition for pimping as "questioning of a learner with the explicit intent to cause discomfort such as shame or humiliation as a means of maintaining the power hierarchy in medical education."

What Is the Evidence for Pimping?

Given the long tradition and perceived widespread prevalence of pimping in medical education, it is remarkable how few published data there are on the practice. The few studies that have been published consist of small samples evaluating lower-level educational outcomes, such as students' reactions to the technique (step 1 from Kirkpatrick's model of evaluation, in which step 2 evaluates the degree to which learners acquire the intended knowledge, skills, or attitudes; step 3 evaluates whether a change in behavior occurs; and step 4 evaluates the effects on important outcomes such as patient health). For example, in 2005 Wear et al[5] surveyed 11 medical students for their opinions on pimping. All respondents had experienced pimping, which the students believed had laudable goals by identifying gaps in their knowledge that could be addressed. In a 2011 study of 74 students, 93% preferred case-based discussions, whereas 72% of the respondents endorsed pimping.[7]

More recently, Scott et al[8] reported that 83% of 146 medical students surveyed had witnessed teaching by humiliation, and despite the extreme version of pimping assessed (ie, malignant pimping as defined by Kost and Chen[4]), up to 50% of them considered this technique useful for learning. Although these studies suggest that some students support pimping, higher-level outcomes from the Kirkpatrick model have not been objectively determined. Furthermore, medical students represent a vulnerable research population, and responses recorded in surveys conducted by their teaching faculty (the sources of pimping) may be unreliable.

Is Pimping a Factor in Medical Student Mistreatment?

Currently, the practice and value of pimping are being questioned.[4] Specifically, recent medical student surveys have generated increased nationwide concern about mistreatment.[1] The Association of American Medical

Colleges (AAMC) defines mistreatment as "when behavior shows disrespect for the dignity of others and unreasonably interferes with the learning process. Examples of mistreatment include sexual harassment; discrimination or harassment based on race, religion, ethnicity, gender, or sexual orientation; humiliation; psychological or physical punishment; and the use of grading and other forms of assessment in a punitive manner."[1] Surveys by the AAMC over many years demonstrate that humiliation and belittling are frequent consequences of the institutional culture at many academic medical centers, perhaps not surprising given that pimping is often part of the local hidden curriculum during clinical rotations. Pimping by residents and faculty is thought to be a primary driver of student humiliation.[1,4] Recent numbers are particularly troubling; for example, in the July 2014 AAMC Medical School Graduation Questionnaire involving 14 877 students, 46% reported being "publicly embarrassed," 23% reported being "publicly humiliated," and 40% reported having experienced "other" forms of mistreatment (such as physical harm or discrimination based on race, gender, or sexual orientation).[9]

Several problems are associated with pimping, particularly malignant pimping as defined by Kost and Chen.[4] This form of pimping can create a hostile environment among the team members, suppress creativity or intellectual curiosity because of fear of embarrassment, and dehumanize students at the expense of maintaining medical hegemony. However, given that pimping can occur along a spectrum between the generally benign format described by Brancati[3] and the more malignant format, an important outstanding question is whether all pimping truly "shows disrespect for the dignity of others and unreasonably interferes with the learning process."[1] Specifically, it is unclear if benign pimping is disrespectful to the individual, particularly if evenly distributed among the student body, or if it interferes with learning at the bedside.

Future Directions

Will pimping as a term and an activity fall foul of political correctness (a form of social control whereby social norms are reformulated based on the imposition of a moral agenda)? This eventuality appears increasingly likely unless a better evidence base—supporting evenly distributed and benign pimping in the Socratic tradition—can be established through improved educational scholarship efforts in this area. Restricting pimping as a consequence of an otherwise appropriate agenda against student mistreatment could, in the absence of rigorous evidence demonstrating that pimping is harmful, lead to unintended negative consequences. For example, Detsky[6] suggests that pimping is worthwhile because more can be learned from incorrect answers than from correct ones. Furthermore, while humiliation must be avoided, pimping may also have longer-term clinical benefits by preparing trainees to make decisions under circumstances of intense pressure and time constraint. Therefore, studies assessing higher-level educational outcomes are needed. Standardized and codified instructions (and limits) for benign pimping that are reproducible and ethically sound should be established. Not only could such data save the art of pimping, they could also prevent the ultimate "reverse pimp," whereby the student challenges the hegemony of rounds by questioning the act of pimping.

Awareness of student mistreatment and malignant pimping also needs to increase among all stakeholders in medical education. For example, based on increasing concerns, Johns Hopkins University School of Medicine plans to set up an ombudsman office in the School of Medicine, with diverse faculty representation, with the goal of creating a trusted outlet for students to discuss mistreatment and corrective procedures. Furthermore, faculty need to recognize the critical importance of positive role models as formative forces in medical student development. After all, these medical students, in addition to being future colleagues, will define the modern culture of interprofessional health care.

Brancati[3] posited in 1989 that pimping would eventually disappear due to "increased specialization and educational reorganization." However, the real threat is increased awareness of medical student mistreatment. Unless pimping generates a better evidence base and moves to the benign end of the spectrum, this art will become lost.

ARTICLE INFORMATION

Conflict of Interest Disclosures: Both authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

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