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The social life of the dead: The role of post-mortem examinations in medical student socialisation

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ABSTRACT

Dissection has held a privileged position in medical education although the professional values it inculcates have been subject to intense debate. Claims vary from it generating a dehumanising level of emotional detachment, to promotion of rational and dispassionate decision-making, even to being a positive vehicle for ethical education. Social scientists have positioned dissection as a critical experience in the emotional socialisation of medical students.

However, curricular revision has provoked debate about the style and quantity of anatomy teaching thus threatening this 'rite of passage' of medical students. Consequently, some UK medical schools do not employ dissection at all. In its place, observation of post-mortem examinations – a long established, if underutilised, practice – has re-emerged in an attempt to recoup aspects of anatomical knowledge that are arguably lost when dissection is omitted.

Bodies for post-mortem examinations and bodies for dissection, however, have striking differences, meaning that post-mortem examinations and dissection cannot be considered comparable opportunities to learn anatomy. In this article, we explore the distinctions between dissection and post-mortem examinations. In particular, we focus on the absence of a discourse of consent, concerns about bodily integrity, how the body's shifting ontology, between object and person, disrupts students' attempts to distance themselves, and how the observation of post-mortem examinations features in the emotional socialisation of medical students.

The study of anatomy through a dissected cadaver was until recently an almost universal expectation of medical education (McLachlan and Patten, 2006). Historically, the cornerstone of medical education (Sugand et al., 2010), it held a privileged position in the teaching of anatomical knowledge, however, its pedagogical values have been subject to intense debate. Regarding the character of anatomical knowledge, dissection is seen to allow observation of the three-dimensional arrangement of structures (which is difficult to appreciate when using two-dimensional anatomical illustrations), and to forge an awareness of biological variation (in contrast to standardised anatomical models) (McLachlan et al., 2004). Regarding the professional values dissection inculcates, often cited are fears that it is a 'hazing ritual' which 'desensitises' students, (Dyer and Thorndike, 2000) and engenders a dehumanising level of emotional detachment (Sugand et al., 2010; Mclachlan and Patten, 2006). At the other extreme, it is claimed that dissection can be a positive vehicle for ethical education (Dyer and Thorndike, 2000). Nevertheless, over the last 30 years, awareness has grown in medical education around the emotional distress dissection can invoke and how this may be alleviated by better preparation of students (Arráez-Aybar et al., 2008).

Social science analyses of dissection position the practice as a critical experience in the emotional socialisation of medical students, introducing them to 'cadaver stories' which convey rules about feelings, emotions and their expression (Hafferty, 1988). The general tenor of these rules is to mute emotional expression. More recently, Dyer and Thorndike (2000: 976) argued that whilst 'cadaver stories' still circulate, they now serve to illustrate emotional sensitivity in contrast to the detachment of the past. However, medical education has not universally embraced such affect-laden attitudes; Madill and Sullivan (2010) identify how, as students become encultured, their adoption of a professional manner of speaking works to neutralise emotional discourse, and Regan de Bere and Petersen (2009) suggest that dissection still risks

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promoting a 'clinically disengaged approach' lacking in empathy.

Until 1990s, claims about the professional values dissection promotes strongly resonated with the scientific value of objectivity; emotional control being seen to serve a rational, dispassionate approach to decision-making. As Smith and Kleinman (1989:67) identify, students understand they should strive for 'affective neutrality', that excessive concern for patients can cloud their judgement. Contemporary analyses largely confirm this position; Madill and Latchford (2005) note that for medical students who described themselves as coping well with the demands of dissection, coping involved suppression of and detachment from emotions, and Prentice (2013:37) comments that 'emotional detachment does occur … but with more nuance' although she highlights that the value of emotional detachment is now more open to question than in the past.

Indeed, the landscape of medical education has changed considerably over the last 20 years with medical schools adopting 'integrated' academic and clinical learning, problem-based learning, and increasing the proportion of social, psychological and communicative content, whilst social scientists have debated how these changes affect the professional identity of doctors (Sales and Schlaff, 2010; Whitehead, 2010; Schwab, 2010). Curricular revision has also prompted deliberation about the place, style and quantity of anatomy teaching. Now, in debates about dissection, claims for an enriched anatomical understanding are balanced against arguments about the insufficiency of cadavers, and high student-cadaver ratios (McLachlan and Patten, 2006). The inefficiencies of dissection have also been criticised; dissection is time-consuming (Ramsey-Stewart et al., 2010) and the cost of preservation and storage of bodies has been considered disproportionate when balanced against the reduced amount of time now typically spent on dissection (McLachlan et al., 2004). This has led some medical schools to replace dissection with prosections (preserved body parts dissected to display certain anatomical features) (Sugand et al., 2010), and plastinated prosections which are considered to overcome drawbacks associated with traditional methods of preservation, but become more of a hybrid body/model entity (Fruhstorfer et al., 2011). Furthermore, developments in anatomical animation and visualisation software, coupled with escalating use of medical imaging in clinical practice has prompted an increasingly multifaceted approach to anatomy teaching (Sugand et al., 2010). This educational context has engendered a situation where dissection is no longer considered essential to understanding anatomy. Therefore, notwithstanding the still strong commitment within medical education to dissection (McLachlan et al., 2004), there are now a small number of medical schools in the UK that do not employ dissection at all.

As dissection recedes in prominence, observation of post-mortem examinations (PMEs) has begun to emerge as a supplement to textbooks, models and medical imaging, in an attempt to recoup aspects of anatomical learning that are arguably lost when dissection is omitted. These include: appreciation of the three-dimensional structure of the human body, the relationships between structures which recede from view when distinct systems or organs are studied in isolation, and the differences between the representation, in the form of an idealised and simplified model, and the real, with all of its diversity and variation. Unlike preserved and discoloured cadavers, newly deceased patients undergoing PMEs are considered 'advantageous', being 'more realistic', accompanied by medical histories, and capable of relating cause of death to visible pathology (Sugand et al., 2010:87).

Medical students' observation of PMEs is a long established, if neglected, educational practice (Prentice, 2013; Welsh and Kaplan, 1998; Charlton, 1994), that has largely escaped sociological scrutiny. This is important as there are marked distinctions between the experiences of viewing PMEs and dissection when learning anatomy. The difference receives brief mention by Smith and Kleinman (1989:58) who note that the autopsy is more upsetting than dissection because the body is freshly dead and accompanied by personal information of the patient's medical history. In the words of one of their students the body is "much closer to life than the smoked herring (cadaver) in gross anatomy". Interestingly, Hafferty (1991) notes that students anticipated post-mortem examinations to be more upsetting and that students used the expectation of something worse in the future as a way of minimising the current distress of dissection.

We explore in detail the distinctions between dissection and PMEs and set this discussion in the context of contemporary medical education. Our starting point has been neatly observed by Prentice (2013:41): 'The degree to which a body resembles either a dead and desiccated object or a living person – that is, the body's apparent distance from life – affects students' emotional responses'. The reason for this is clear when considering the ways in which students handle the emotions PMEs incite. 'Distancing', a well-established response (Madill and Latchford, 2005), attempts to reduce the connection between the student and the body. Smith and Kleinman (1989:60) explain how this process occurs:

> Students transform the person into a set of esoteric body parts and change their intimate contact with the body into a mechanical or analytic problem … In the process, the body loses it provocative, personal significance.

We examine how distancing is disturbed by elements of the PME that differentiate it from dissection. Moreover, we discuss how the body's shifting ontology, between object and person, troubles a developing sense of professional morality, as well as revealing concerns about bodily integrity. Consequently, we contribute to the sociological literature on the socialisation of medical students, and engage specifically with how observation of PMEs (rather than dissection) features within processes of socialisation.

1. Methods

Our study stems directly from the curricular changes outlined above. The setting is a UK medical school wherein dissection is not practiced. Instead, first year medical students attend three PMEs (at the time of data collection during 2012, these all occurred within the first term, now they are spread throughout the year). Each PME has a different anatomical focus, either the brain, thorax, or abdomen and these are timed to coincide with when these subjects are studied in PBL modules. Students may attend PMEs again if they select a special study module in the pathology department, and routinely in fourth year, where the focus is on understanding pathological changes in anatomy.

After obtaining institutional ethical approval, we advertised the study by circulating information via email to year groups 1,2,4 and 5, and presented the study at year group plenaries. We concentrated on first year students as we expected their experiences to be most vivid, however, we were curious as to whether students' views matured with a further year's study and more time in clinical practice. And, given that the senior students had returned to the post-mortem suite, we wanted to explore their experiences as well. Students interested in participating contacted either DG or LM and were sent a participant information sheet, consent form and invited to the relevant focus group. Signed consent forms were collected at beginning of each focus group. We conducted four focus groups; two with first year students (FG 1 contained 4 male, 2 female students, FG 2 contained, 4 female, 1 male students), one with second year students (FG 3 contained 8 female, 1 male students)