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The necessity of myths in medical education - what is valued and who is served...?

(Commentary building on Martimianakis et al paper: The Unbearable Necessity of Mythology in Medical Education)

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240 Character synopsis

This commentary explores educational theories as myths. More than explanatory frameworks; theories are also shared narratives sustaining particular values and political agendas. Understanding this, helps us know what values we prioritise.

The necessity of myths in medical education - what is valued and who is served…?

In their article – 'Myths and Social Structure: The Unbearable Necessity of Mythology in Medical Education', Martimianakis et al position myths as more than dated explanations of our world. They identify myths as shared narratives that fulfil social purposes well beyond simply providing explanatory interpretations. These purposes are:

- Shared meaning making
- A vehicle for values and ideologies
- A means of maintaining social power structures

They also position myth busting as an activity that is itself based on a myth held within our community of medical education. That is, the myth that places medical education as a natural

science with an objective approach to truths that are verifiable where facts are valued over meaning, and physical sciences are positioned as superior to social sciences. Martimianakis et al recommend that, when we consider tenets held by medical education as myths, we should explore their social function as well as their explanatory function. In doing this, we can subject our meaning making, values and politics to critique as well as our 'scientific' explanations.

In their article, Martimianakis et al examine four educational beliefs and one theory that have persisted despite being 'busted'. In this commentary, we explore further the position that educational theory can take as a myth in being a shared narrative within our medical education community. An educational theory is defined by Hodges and Kuper as an 'organised coherent, and systematic articulation of a set of issues…communicated as a meaningful whole'(1). This is essentially a socially shared narrative. In our recently published article, 'Theory, a lost character?', we drew on the social function of myth to frame our investigation into the function of educational theory in educational research writing(2). We drew on Joseph Campbell's work which positions myths as narrativised social metaphors that have power and persistence because they have resonated with human experience over time(3). We found that one function of theory was to be a vehicle for shared meaning making. This was particularly the case with middle range theories(4) that have strong contemporary currency. It is helpful to view such theories, functioning in this way, as shared narratives and therefore as myths. Three such middle range theories are: the *principles of adult learning*(5); *communities of practice* theory(6); and, *competency-based education theorising*(7). If we consider the function of each of these theories as myths within medical education, what then are shared meanings that they carry, the values they support and the political structures they serve?

Described by Knowles(5), the principles of adult learning align with the humanistic thinking of Rogers(8, 9). Although much has been written questioning the validity of the claims of adult learning theory(10), it persists as a frame for medical education research and practice. In medical education lexicon, 'adult learning theory' has become a shared vehicle for the idea of learner centredness(2). This theorising puts high value on individual autonomy and positions education as facilitating the individual's inherent capacity to 'self-actualise'. In doing so, it demands respect for the individual. This positioning of the individual serves both democratic and capitalist ideologies and power structures where the individual is viewed as a market and is attributed with responsibility for their situation thus exonerating those who hold power and determine social policy.

Wenger's theory of communities of practice draws on treatises of social structure and social action which are significantly influenced by socialist thinking(6). The phrase 'communities of practice' has become part of the language of medical education research and practice to carry the shared idea of groups working together with a common purpose(2). This theory takes the perspective of the social context of learning focusing on the interface between the learner and the community of practice in which they are engaged. Participation, engagement and meaning making are valued and privileged. The theory foregrounds learning as the business of communities of production which it both serves and is shaped by over time. It also offers a means to conceptualise the social nature of identity preferencing social structure over individual agency. From ideological and political perspectives, communities of practice theory gives priority to the needs of the social units of production that make up our society and serves particularly the agendas of those in charge of these units of production. This perspective gives little consideration for the object of the community's practice which in medical communities is the patient(8).

Competency-based education comes from scientific reductionism with a mechanistic view of education where the learner is an object that can be changed through targeted interventions(7, 11). In medical education discourses, 'competency-based education' carries the idea of rationality and structure. This theoretical approach values efficiency and accountability and therefore prioritises outcomes over process and the objective over the subjective. Discourse in competency-based medicine uses the Cartesian language of biomedicine. From a political perspective, this serves faculty providing a simplified mechanistic model that avoids dealing with the complexity of learner motivation and meaning making in the context of relationships. It also fits with the discourse of efficiency and cost reduction that serves the funders and providers of education(11).

Bordage(12) puts forward that different theoretical perspectives, rather than being more right or wrong in their explanatory function, each provide a different lens on different things. We suggest that as social narratives, theories also serve as different vehicles for different values and different centres of power. In these respects they are also neither right nor wrong, rather, they provide the means of a window into what is valued and whose interests are at stake. It is only when theories are held ups as truisms, rather than perspectives, that they become problematic as hegemonic tools.

In conclusion, Martimianakis et al's foregrounding of the social function of myths is important. It expands the critique of medical education beliefs, beyond what they claim, to considering what they do to support certain values and certain centres of power. We have extended their examination of

specific beliefs as myths to considering educational theories as forms of myths. Theories have an explanatory function, they also provide shared narratives that sustain particular values and particular political structures. In critiquing these functions, we can engage in a more explicit discourse about what values we choose to prioritise and whose agendas we are serving.

We contend that myths are more than an "unbearable necessity" in medical education; they are an important part of the social fabric of the medical education community. We suggest going beyond Martimianakis et al's call to tolerate myths as an "unbearable necessity" to celebrate them as valuable social tools to use, critique and modify for purposeful social ends.

1.   Hodges B, Kuper A. Theory and practice in the design and conduct of graduate medical education. Acad Med. 2012;87(1):25-33.

2.   Brown J, Bearman M, Kirby C, Molloy E, Colville D, Nestel D. Theory, a lost character? As presented in general practice education research papers. Med Educ. 2019.

3.   Campbell J. *The Hero With a Thousand Faces*. 3rd ed. Novator, CA: New World Library 2008.

4.   Merton R, Merton R. Social theory and social structure: Simon and Schuster 1968.

5.   Knowles M. The Adult Learner. Fifth ed. Woburn, MA: Butterworth-Heinemann 1998.

6.   Wenger E. *Communities of practice: Learning, meaning, and identity*: New York, NY: Cambridge university press 1998.

7.   Touchie C, ten Cate O. The promise, perils, problems and progress of competency-based medical education. Med Educ. 2016;50(1):93-100.

8.   Bleakley A, Bligh J, Browne J. *Medical education for the future: Identity, power and location*. London, UK: Springer Science & Business Media 2011.

9.   Rogers C. *Freedom to learn*. Columbus, OH: C.E. Merrill Publishing 1969.

10.   Norman G. The adult learner: a mythical species. Acad Med. 1999.

11.   Hodges BD. A tea-steeping or i-Doc model for medical education? Acad Med. 2010;85(9):S34-S44.

12.   Bordage G. Conceptual frameworks to illuminate and magnify. Med Educ. 2009;43(4):312-9.

Pull out quotes:

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