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## Conflicts of Interest in Neoliberal Times: Perspectives of Australian medical students

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### Abstract

In this paper we report on the findings from 6 focus groups conducted with Australian medical students. The focus groups discussed students' perceptions of conflicts of interest and the influence of commercial values in health care and medical education. Our research revealed that students were aware of a number of structural influences that affected the medical education they received and that had the potential to shape their attitudes and practices as they progressed in becoming a doctor. We found that the pressures of educational workload and anticipated career trajectories tended to have an individualising affect that limited the perceived possibility of collective action and response to structural influences. We interpreted these findings through the lens of neoliberal governmentality to articulate the way commercial interests are negotiated and normalised by medical students. Based on these findings, we suggest that medical education should not only explicitly alert students to effects of political and commercial influences on the health care system, but also encourage the *collective* agency of students and strategies that do not place unrealistic expectations on individuals to effect structural change.

**Keywords:** neoliberalism; conflicts of interest; medical education; medical students; ethics

### Introduction

In recent years, relationships between medical professionals and the pharmaceutical industry have been the subject of considerable scrutiny, leading to numerous policies and processes aimed at managing the

“conflicts of interest” that are believed to result from these relationships. While many people have concerns about COI—arguing that they get in the way of doctors’ “primary commitments” to their patients—others have begun to push back against efforts to curtail relationships between medicine and the pharmaceutical industry. In a recent series of articles in the *New England Journal of Medicine*, for example, cardiologist Lisa Rosenbaum questioned the need, justification and extent of conflict of interest (COI) policies in health and medicine (Rosenbaum, 2015). In response, the *British Medical Journal* published a series of editorials criticizing Rosenbaum, questioning the wisdom of the *New England Journal of Medicine* for raising doubts about COI policies, and reiterating the need for vigilance in the face of industry influence (Godlee, 2015; Steinbrook, Kassirer, & Angell, 2015).

These papers, and numerous accompanying blogs, are illustrative of the polarising, and often polemical, nature of debates surrounding conflicts of interest in health and medicine. They are also illustrative of the fact that debates about COI in health and medicine are usually opinion-based rather than being based on an empirical analysis of the ways in which individuals engaged in the practice of health and medicine understand, experience and manage COI. This is a problem because there may be little resemblance between the attitudes, values and practices of those engaged in medical practice, and those espoused in political and theoretical debates.

In seeking data on the attitudes, values and practices that may be relevant to discussions of COI, it is important that we first identify all the perspectives that are likely to be salient to these debates. While this would clearly include the perspectives of established practitioners, it is also important to understand the attitudes, values and practices of medical students, as these are in formation and in flux. By asking students about commercial norms, and the potential for these to clash with their perceptions of what it means to be a good doctor, we can understand—and potentially intervene in—the processes of professionalization.

Sociologists have long been interested in the role of professions, especially medicine (Freidson, 1989; Larson, 1979; Macdonald, 1999; Montgomery, 2014). There has also been significant attention to the socialization of medical students into professional roles and institutions (Becker, Hughes, Geer, & Strauss, 1965; Merton, Reader, & Kendall, 1957)—for example how students make sense of the collision of values surrounding the desire to care, the need to assimilate technical knowledge, and the necessity to function effectively within often rigid hierarchies of power and social control (Conrad, 1988; Hafferty, 2008; Maheux & Béland, 1987; Pitkala & Mantyranta, 2003; Wright, Wong, & Newill, 1997). And while we know something about the way debt and potential income influence speciality choice (Morra, Regehr, & Ginsburg, 2009; Newton, Grayson, & Thompson, 2010; Rosenblatt & Andrilla, 2005), we know little about the values, attitudes and practices that shape how commercial forces and conflicts of interest are perceived and managed by medical students.

A further reason why it is important to study medical students’ perspectives of COI is that they are being enculturated not only into a profession, but also into particular systems, practices and structures of health care. More specifically, they are being enculturated into a neoliberal health system in which commercial interests are inevitably manifest and frequently valorized. Despite the increasing influence of commercial norms in medical education and practice (Field & Lo, 2009; Horton, 2007; Komesaroff, Kerridge, Isaacs, & Brooks, 2015; Mackintosh & Koivusalo, 2005; Pollock, 2005; Rogers & Forman, 2013), and the large literature examining conflicts of interest in medicine (Field & Lo, 2009; Krinsky, 2004; Rodwin, 1993), it is significant that there is no substantial analysis of medical students’ perspectives on COI or the influence of commercial norms in a neoliberal context. The objective of this study was to

explore the perceptions of Australian medical students about COI and the effects of private corporate interests on patient care, health research, health policy and medical education.

### *Neoliberalism and health care*

While there is no consensus definition of neoliberalism, the term is generally used to refer to beliefs about 'the superiority of individualized, market based competition over other modes of organization' (Mudge, 2008: 706-707). Theories of neoliberalism emphasise a number of themes including: privatization of social services (Alejandro Leal, 2007; Rowe & Frewer, 2005), deregulation of private enterprise (Harvey, 2009; Lazzarato, 2009), individual choice and responsibility (Binkley, 2009; Dilts, 2011; Ilcan, 2009), and the use of market mechanisms to govern society (Mirowski, 2009; Mudge, 2008).

Origin stories of neoliberalism commonly begin with Margaret Thatcher, Ronald Reagan and the economists associated with Mont Pelerin Society, notably Friedrich von Hayek and Milton Friedman. While these stories are relevant globally, they often overshadow the local and particular manifestation of neoliberal ideas and their influence on local policy—particularly outside of the global North (Boxall & Short, 2006; Fairbrother, Svensen, & Teicher, 1997). As Raewyn Connell and Nour Dados argue, 'the most influential accounts of neoliberalism are grounded in the social experience of the global North, which is in fact only a fragment of the story' (Connell & Dados, 2014). While the theories, policies and practices of the North Atlantic have had an undeniable influence on Australia and it is also undeniable that there are unique and distinct processes through which knowledge is produced and enacted in specific locales in the Global South (Anderson, 2002, 2014; Connell, 2007).

Raewyn Connell's *Southern Theory* provides a useful framework for thinking about the production of knowledge in the global South and the importance of Southern perspectives in the self-understanding of society (Connell, 2007). She has observed, for example, that land reforms and restructuring of agriculture in Chile has produced a different expression of neoliberal governance than the stories commonly told about neoliberalism in relation to the Washington Consensus. Likewise, the role of the Australia Council of Trade Unions in assisting the Australian Labor Party under Bob Hawke and Paul Keating (1983-96) implement neoliberal reforms is counter-intuitive to the commonly accepted narrative of neoliberal hegemony emanating from conservative governments in the Global North (Humphrys, 2014).

As with neoliberalism more generally, studies of the neoliberalism of health care have focused almost exclusively on the global North (Bell & Green, 2016; Pollock, 2005; Terris, 1999), and there has been an assumption that Australia merely follows the lead of the US, UK or Europe in developing and implementing health policies. However, the production of medical and scientific knowledge in Australia has a distinct history (Anderson, 2002; Bashford, 2004), as has the development and implementation of health policies (Boxall & Gillespie, 2013; Lewis, 2003).

In Australia, the health system reforms of the centre-left Hawke-Keating Government (1983-96) and the centre-right Howard Government (1997-2007) introduced new health insurance policies inspired by neoliberal ideas that sought to 'resolve the tensions between the public and private health insurance schemes' (Boxall, 2010). As a result of these changes, patients have been transformed into consumers and there has been an increasing emphasis on user-pays or co-payment systems for health services (Horton, 2007; Irvine, 2002). This period also saw the introduction of a rhetoric that shaped the way health care policy could be thought about. Australian health policy became peppered with phrases such as: *spending cuts, dismantling, deficit cutting, downsizing, declining welfare state, competitiveness,*

*inefficiencies, inevitability, closures, chopping services, de-insured, user-pay fees, for-profit health care, escalating costs, free markets, erosion of health care, being forced to make difficult policy choices, unfortunate necessities and justifiable sacrifices* (Horton, 2007: 2). As with all political rhetoric, this language had a major effect on what could, and could not, be said in the Australian health policy domain.

A key focus of more recent neoliberal policy debates in Australia has been government funding of public institutions and services, such as education, research and healthcare, during times of economic stress (Ryan, 2015). Resulting “austerity” measures have been accompanied by pressure for public institutions to partner with private industry as a means of making up for budgetary shortfalls. In the health arena, attempts to decrease funding for health research and patient care have simultaneously been coupled with an intensification of ties between private industry (most notably pharmaceutical and medical device companies) and those conducting medical research, treating patients and making health policy. These trends are evident both at the Federal and State level. The first budget of the centre-right government led by Prime Minister Tony Abbott in 2014-15 put forward the controversial plan (since abandoned) to charge patients a \$7 co-contribution payment for GP consultations and out-of-hospital pathology, while also winding back hospital funding agreement to save the government \$50 billion over eight years. Similar trends were observed in Queensland under the centre-right Newman Government (2012-15), where jobs and services were cut (Martson, 2014).

One concern that has been raised about these kinds of neoliberal health policies is that they create the conditions for COI. The concern here is that physicians, policy makers and administrators develop reliance upon, and loyalty towards, private industry that makes them less able, or less willing, to fulfill their responsibilities to their patients, research participants, students or the general public. In this paper we present the results of six focus groups conducted with medical students from Australian universities, which were analysed with the above understanding of “neoliberalism” in mind.

## METHOD

### Research participants

Our goal in recruiting medical students to the focus groups was to achieve maximum variation in terms of school attended, stage of course and gender. Focus group participants were therefore recruited using posters that were disseminated through social media and the listservs of several student medical societies in Sydney, Australia. Forty nine medical students were recruited to six focus groups. Students in these groups represented six of the seven medical schools in New South Wales, Australia, and ranged from first through to final year of their medical degrees.

**Table 1: Demographics of Focus Group Study**

University	Year (Males : Females)						Total
	1st	2nd	3rd	4th	5th	6th	
University of Sydney Medical School	6 (3:3)	2 (1:1)	4 (4:0)	1 (1:0)	0 (0:0)	0 (0:0)	13 (9:4)
University of Notre Dame School of Medicine	4 (0:4)	6 (1:5)	3 (2:1)	0 (0:0)	0 (0:0)	0 (0:0)	13 (3:10)

University of Wollongong School of Medicine	8 (2:6)	2 (1:1)	1 (0:1)	0 (0:0)	0 (0:0)	0 (0:0)	11 (3:8)
Western Sydney University School of Medicine	0 (0:0)	1 (0:1)	0 (0:0)	0 (0:0)	0 (0:0)	1 (1:0)	2 (1:1)
University of New South Wales Medicine	0 (0:0)	0 (0:0)	0 (0:0)	4 (2:2)	4 (1:3)	1 (0:1)	9 (3:6)
University of New England School of Medicine	0 (0:0)	0 (0:0)	0 (0:0)	0 (0:0)	1 (0:1)	0 (0:0)	1 (0:1)
<b>Total</b>	<b>18 (5:13)</b>	<b>11 (3:8)</b>	<b>7 (6:2)</b>	<b>5 (3:2)</b>	<b>5 (1:4)</b>	<b>2 (1:1)</b>	<b>49 (19:30)</b>
<b>Age Characteristics (Yrs)</b>							
<b>Median</b>	24						
<b>Mean</b>	24.3						
<b>Range</b>	20 - 30						

### Focus group process

A focus group schedule was developed in advance of the sessions. The schedule began with an “ice-breaking” exercise before inviting the participants to introduce themselves. This was followed by a focused question about the definition of COI, followed by an open-ended question about general perceptions of the effects of private corporate interests on patient care, health research, health policy and medical education. Participants were then asked more specific questions about exposure to commercial influences in medicine, whether they thought some COI are more problematic than others, strategies to manage COI, whether their ethics and professional development classes had addressed COI and commercial influences, and ways in which their perspectives about medicine have changed during their education. The focus groups ran for approximately 90 minutes. Refreshments were provided and the participants were given a \$50 supermarket voucher at the end. The focus groups were digitally recorded, transcribed, anonymized and analyzed thematically until saturation was reached. These focus groups were part of a larger *National Health and Medical Research Council* project exploring different stakeholders’ views about the commercialization of health and medicine, and the management of resulting financial conflicts of interest. Ethics approval for the research was granted by (removed for peer-review purposes).

## RESULTS

### Medical students’ understanding of COI

We began the focus groups by asking students to define conflict of interest. They initially presented individualised accounts – a COI is something that an individual “has”. Although each group defined COI using different language, there was a general consensus that an individual has a COI when a secondary interest (e.g. financial gain) influences a primary interest (e.g. patient care). As noted by one of the students:

Instead of just your professional drive influencing you, you have something else beyond that that's not necessarily beneficial to what you're trying to achieve or what you should be achieving.

However, the discussions quickly moved from the individual, with one specific role or responsibility, to the complexity of individuals having multiple roles and corresponding responsibilities. The characterisation of a COI as a secondary interest undermining a primary interest was then seen as limited and as not fully accounting for the wide variety of roles, responsibilities and relationships that are typical of medical environments. One student noted:

...like different responsibilities, like your responsibility to the patient and your responsibility to your profession and your responsibility to yourself and having a conflict in ideals or the expected outcomes of all of those things.

While the participants recognized that physicians have multiple roles that can come into conflict, there remained a consensus around the idea that patient care should be a priority—albeit one challenged by the realities of time limits, budgetary constraints and personal needs of physicians.

### **Identification of structural conditions of COI**

In discussing the multiple roles of physicians, and the challenges associated with fulfilling these roles, the students revealed their awareness of broader structural influences beyond the individual clinician. Students were, for example, alert to the structural effects of the ways in which health services are organised and managed. This led one group to raise the idea of institutional COI:

I think the concept of institutional conflicts of interest is really interesting, though. The idea that, for example, that key performance indicators for, say, a hospital may not align with the objectives of the hospital...as an individual you make a decision in that environment, but actually the conflict of interest hasn't really occurred necessarily at the individual level exactly, it's rather an institutional conflict.

The Australian system of universal healthcare was also seen to have the potential to create the conditions for COI. First, there was concern about the potential for industry to influence prescribing patterns by lobbying policymakers to get certain drugs listed on the Pharmaceutical Benefit Scheme (Australia's federally-funded medicines program). Students also expressed concern that the financial pressures placed on hospitals could mean that patient care decisions are not based entirely on the interests of the patient, but rather the need to manage hospital budgets. One group viewed this as a feature of a "capitalist society", in which there is a need to ensure that hospitals and the health care system operate in a cost-efficient manner and do not financially burden society.

...obviously the hospitals run under strict budgets and they have certain quotas they have to see or patients that they have to get, so it's always weighing up the finance or the economics behind it and then patient care.

A further structural condition noted by students was the cost of medical education. Referring to the proposed plans of the current federal Government to deregulate higher education and associated speculation that the cost of medical degrees would dramatically increase, one group of students suggested that this could be a source of COI. The idea was that if medical degrees became sufficiently expensive, then doctors would be inclined to shape their medical practice with a view to paying off their debt.

If you're in debt for \$500,000 and you have to get a return on that investment, naturally it's going to factor more into your decision making than if you're on a commonwealth-supported

place here and you're talking about amount of \$20,000, \$30,000, which I'm not going to pretend is nothing at all, but it's just totally different numbers. I imagine that if you, as we transition here, if it goes ahead to more a deregulated system with much higher fees for medical students in particular, that we won't - we'll end up more in that system.

Although these figures are imprecise exaggerations, student debt was discussed by a number of the focus groups as a potential influence on the type of medical practice to pursue and the likelihood of being able to maintain an exclusive focus on patient wellbeing.

Along similar lines, participants suggested that job insecurity could make people vulnerable to financial incentives. One student explained, "So for example, financial gain, often people are struggling, financially there is something there, then they're more likely to go for it, or if, depending on where you are in your career". The desire for career development and financial security were identified as potential areas that may conflict with practicing medicine in an ethical or appropriate manner. As one student remarked, "if you're in a vulnerable position, I think this is perhaps where the conflict of interest is even more of an issue".

Finally, students expressed concern about changes in the funding of medical research and development. They were aware that the government cannot afford to fund all medical research and that pharmaceutical industry funding of both research and medical education is a necessity. Peppered throughout the focus group discussions was the idea that medical care and research costs more money than the Australian Government can afford and that private industry is a necessary partner to advance research and maintain health services. Reflecting on the prevalence of pharmaceutical representatives in the clinical environment one student said, "it's really quite different from how I was expecting it to be".

### **Resignation to the effects of structural forces**

Although acknowledging the problematic nature of these structural influences, many of these discussions concluded by suggesting a "pragmatic" approach is required. Student participants did not elaborate what they understood by pragmatism, other than the sense that the medical profession needed to work as best it could within the current system as no other system was practical or possible. For example, there was a brief discussion about the possibility of redistributing wealth in Australia to make health care and research more affordable and equitable. As the exchange below demonstrates, this proposal was dismissed as both impossible and undesirable at the same moment that it was entertained:

Student 1: So we're reallocating funds?

Student 2: Yeah.

Student 1: That would be more fair, but that's probably more of a socialist, we've got a capitalist system, trying to change the entire system completely, we may as well become a communist state if we're going to start taking now from the elite and redistributing funds to where we think we want to.

While students spoke admiringly of advocacy, such as doctors advocating against offshore detention of refugees, or female surgeons standing up against sexism and harassment, there was concern about the way such advocacy could affect career development. These concerns were typified in this exchange between two student who were discussing the impact of advocacy could have on job security.

Student 1: Idealistically I'd love to advocate against this and do that, but in reality I'm just...

Student 2: Don't want to.

Student 1:...I'm not going to do it, yeah.

There was also a disturbing acknowledgement that to protest against harassment from a superior might threaten one's career advancement. As one participant stated, medicine is "such a competitive industry" which requires favourable "references from the people above you" in order "to climb the ladder". This kind of resignation to helplessness in the face of job insecurity was repeated in a number of the focus groups.

Students also seemed resigned to the current ways in which biomedical research and development are funded. While it was considered that the ideal arrangement would be for all research and drug development to be funded publicly and serving the most pressing needs, the current situation, where the vast majority of trials in high income countries are funded by the pharmaceutical industry (Atal, Trinquart, Porcher, & Ravaud, 2015; Flacco et al., 2015), was justified according to the following logic: R&D costs a lot; the pharmaceutical industry is necessary; and the pharmaceutical industry will need to make a profit. As one student remarked:

But it's kind of like pragmatic wise, like most of the drugs nowadays, the funding all of them comes from pharmaceutical companies...unfortunately not many other people except governments have the funding to get through all the research... It is a business...no one has come up with a better solution because who else has \$10 billion to develop a drug which may or may not help?

Another student noted that: "all the tools you have in medicine basically come from these companies and so you're sort of in partnership with these people you can't trust, but you have to".

One possible explanation for students' resignation to the effects of structural forces was that they seemed to understand them primarily as abstract forces, and lacked a clear sense of how these forces actually translated into specific COI. In this regard, it was noteworthy that many students denied having learned much about COI during their medical education. If they did learn about it they felt that it was taught in an abstract manner that they could not relate to or see the relevance of. A lack of understanding of the practicalities of commercial arrangements of healthcare became apparent in this exchange.

Facilitator: ...an example could be if...you had to sign a code of conduct where it said that your primary interest was to the shareholders, would any of those sorts of issues be discussed?

Student I think 90% or more wouldn't know what a shareholder was and how that's different to a duty to your patients and things like that. I just think people generally and it's not like it's a fault of medical students, I think it's just the reality if you come up through a scientific or clinical world from high school to medicine and you've never learnt about governance or the economic side of medicine...then you're not going to just intuitively know.

### **Ways of accommodating structural forces**

While students seemed resigned to neoliberal forces in Australian healthcare, their concern was tempered somewhat by their belief that the situation in Australia was not nearly as bad as it is in the United States. Following from the discussion about student fees, this group said:

I spent some time in America and they've got a very different medical system there and it's a lot more capitalistic and individual in approach. The doctors – I don't think many Australians get into medicine for money, whereas in America people definitely get into medicine for money and individually they are trying to make a lot of money and they push services on patients a lot more and they're very surgical in their approach...So I think personally we don't have this big financial conflict of interest, which is a good thing.

By using the US as a counter-example, students sought to lessen their concerns about the influence of financial interests on Australian medical research and practice.

Another way in which students attempted to accommodate the effects of neoliberalism was by emphasising their ability as individuals to avoid being biased by commercial relationships. This view was expressed in two ways. First, through the cultivation of a character that would resist incentives to engage in questionable practices. As one student said, “I think in order to face this problem of conflicts of interest you actually need to have a mental list of the things that you prioritise most in your practice”. A second strategy was to emphasise their capacity as scientists to objectively evaluate evidence and detect bias either in the information given by pharmaceutical sales representatives or that is present in research. This was expressed through the idea of “evidence based practice” – “You go look at the data, you look at the literature and try and use that to make your decisions”. In this regard, it is noteworthy that students seemed to idealise evidence-based medicine. While students recognised that time pressures would make it difficult to systematically appraise all literature relevant to a particular clinical decision, they made no mention of other limitations of evidence based medicine, such as its lack of generalizability, its tendency to promote defensive medicine, and—most notably in this context—the extent that the pharmaceutical industry shapes the generation of evidence (Crowther, Lipworth, & Kerridge, 2011; Ioannidis, 2016; Miller & Miller, 2011). As such they concluded that listening to pharmaceutical representatives and using practice guidelines are flawed but necessary short-cuts.

### **Summary of findings**

The participants in our study were well aware of the commercial, social and political influences on medicine. With this growing awareness the students were able to identify structural conditions that were shaping the way medicine was practiced and managed. They were also highly alert to developments in the Australian political landscape, such as proposed reforms to de-regulate higher education, and were making an effort to think through general notions such as “capitalistic society”. These discussions echoed neoliberal rhetoric commonly deployed in budget debates, such as cost-saving, unnecessary waste, efficiency and viewing their degrees as an “investment”. The medical students we spoke with characterised neoliberal forces in general, and COI in particular, as negative or at least a potential threat to primary objectives of medicine and what it meant to be a medical professional. However, there was a general resignation to the fact that structural forces are pervasive; that “COI are everywhere”; and there isn't a lot that can be done about it. As such, they argued that a “pragmatic” approach is needed when it comes to the funding of research, medical practice and the health system. However (perhaps naively), they did not think the situation is hopeless—first, because it is “not as bad in Australia as it is in the United States”, and second, because they think that doctors *as individuals* can overcome any biases introduced by neoliberal forces.

## DISCUSSION

### Theoretical interpretation

Michel Foucault's lectures on governmentality and neoliberalism provide a useful framework for diagnosing and critiquing the effects of neoliberalism discussed by our participants (Foucault, 2007, 2008). Foucault's interest in governmentality was focused on the art or rationality of government in a non-statist sense (2007 120)—that is, on government not as defined by a political structure, such as the Federal Government of Australia, but government as an activity, practice and relation. This distinction is significant in the context being addressed here, as the State increasingly attempts (in rhetoric, if not reality) to withdraw from directly intervening in health care, instead encouraging private corporations and the “market” to organise the provision of health care. This, of course, is not to suggest that the State has no interest in or influence over the health system or conduct of health professionals, but rather that the techniques are less through legislation and regulation and more through norms, incentives and self-regulation. Foucault referred to this approach to governance as the “conduct of conduct” or “action upon an action” (Foucault, 1983 220). To conduct the conduct of individuals, communities or populations “is not a matter of imposing a law” but employing tactics to arrange “things so that this or that end may be achieved through a certain number of means” (Foucault, 2007 99). As such, governmentality refers to the diverse array of influences on the conduct of individuals (e.g. physicians, students, patients etc) and the operational logic of institutions (e.g. hospitals, universities, professional societies etc).

Through this theoretical lens, our findings appear to provide evidence of both the normalising effect of neoliberal governance in contemporary health and medicine, and the corresponding erosion of collective agency. The increasing commercialisation of health care, through neoliberal policies of privatisation and rhetoric of funding cuts, creates a scenario where commercial influences, and associated conflicts of interest, are simultaneously pervasive and increasingly accepted as a normal part of contemporary medical education and medical care.

The normalisation of COI at the individual level is also bound to the processes of normalising competing logics at the institutional level, namely the logics of markets and the logics of professions. The normalisation at the institutional level can be seen in the role of professional societies and codes to monitor and guide the conduct of individuals. As Freidson notes, the use of professional codes of ethics is central in the negotiations of these competing logics as they demonstrate concern and enable an evaluation of behaviour, yet the claims of these codes are rarely adhered to as intended (Freidson, 1989). When it becomes known to a public that professional conduct is not adhering to these codes of behaviour—for example by interacting with private industry—the role of the professional society or leaders is to “periodically make speeches reaffirming the profession's resolution to sustain high ethical standards of performance that justify the public's trust” (Freidson, 1989, 428). Statements of apparent ethical commitment and self-critique made by professional societies serve to normalise certain behaviours and activities and inoculate the profession against loss of public trust and protect against more drastic interventions such as external review or regulation. As medical students are socialised into the world of the medical profession and simultaneously witness the role of commercial actors in providing medicines, devices and education, they come to rationalise and normalise these differing logics. This was evident in our participants' resignation to the necessity of the pharmaceutical industry or belief that unlike the US, things are not bad in Australia and medicine has retained its professional integrity despite influence of commercial norms.

Closely related to normalisation is the individualising effect of neoliberalism. Neoliberal reforms and policies tend to undermine collective thinking, action and responsibility. Instead, the individual comes to be seen as the basic unit of society. The individual is responsible for their own actions and is encouraged to work on and develop their self as if it is an enterprise (Goldberg, 2012; Mayes, 2015; Rose, 1999). The process of individualization produces individuals who think and act in a particular way. In health care, this individualising effect operates at a variety of levels. Patients are seen as individual consumers who are capable of making an informed choice so long as they receive full disclosure. That is, rather than ban certain interactions between the pharmaceutical industry and prescribing physicians in order to protect patients, the preferred approach has been disclosure and transparency as it is believed this will allow patients to make informed decisions (DeMartino, 2012).

Individualising effects also operate at the level of medical students and health professionals, leading them to think and act in ways that adhere to the norms of the health services and the political structures that support it. While the students we spoke to were able to note the structural effects associated with a “capitalist society”, it was evident that they did not have ways to think about collective responses to the problems that they identified or examples that they could draw on, and that they assumed it was up to them, as individuals, to prevent neoliberal forces from having adverse effects on healthcare. They also seemed to think that individuals had the power to ensure that structural forces did not corrupt them.

In this study, we have observed the way Australian medical students style of thought has been shaped by personal, educational and institutional forces to regard medical and commercial interactions as an inevitable part of contemporary health care. Drawing on ideas of self-responsibility and professionalism, our participants attempted to negotiate competing sets of values and institutional norms encountered in their medical education and early clinical experiences. These students recognised certain problems with commercial influence on medical practice, yet also considered these problems as a necessary, if unfortunate, part of normal practice in the neoliberal health care setting.

### **Implications for education, policy and practice**

Over the past two decades, medical education has increasingly focused on “professionalism” as a solution to perceived problems with medical practice and health care (Veatch, 2006). While this is effective as a means of articulating existing professional values and norms, it is generally uncritical of professional power, and devalues both the social context in which medicine is practiced, and the values and perspectives of other stakeholders, including patients. With respect to COI, Kelly Holloway argues that professionalism tends to reinforce the individual physician’s relation with industry actors as the site of conflict and “does little to disrupt important structural issues and thus has not addressed the source of the conflict” (Holloway, 2015, 675).

Picking up on the importance of context, Gary Rogers and Dawn Forman have argued that Australian medical education is not adequately preparing medical students for the increasingly neoliberal context in which they learn and will eventually practice. They suggest that the role of medical education is to “ensure that learners adopt a critical posture” and “question the assumptions and culturally received knowledge that they encounter in clinical environment” (Rogers & Forman, 2013, 45). Yet, as evident in a number of the students’ responses in our focus groups, even this “critical” approach places the burden on individuals and does not provide the conditions for a collective response. Further, in addressing the neoliberal context, Rogers and Forman focus on emerging technologies, e-health, transformation of

patients into consumers and changes to the fee structures of the health system. However, they fail to give attention to the political and commercial influences behind these shifts.

With these limitations of both professionalism and “critical” medical education in mind, we suggest that medical education should not only explicitly alert students to both the positive and negative effects of political and commercial influences on the health care system, but also encourage the *collective* agency of students, and alert them to the fact that even the best-intentioned individuals cannot, on their own, overcome the effects of structural forces or achieve structural change. Whether this should occur within already full medical curricula or as part of continuing education (as suggested by some of our participants) is debatable. However, we suggest that critical awareness of neoliberal logics in health care is a condition for developing collective agency, and the capacity to critique the normalisation of conflicts of interest and resist the individualising effects of neoliberalism.

#### Limitations

As with all qualitative research, it is important to emphasise that these findings cannot be generalized to represent the perspectives of all Australian medical students. A further limitation is the potential of social desirability bias among the participants, putting pressure on students to offer responses that will be viewed favourably by others. A final limitation relates to the finding that the participants could identify structural forces but were unable to think of meaningful strategies to resist them. This was an emergent finding that became apparent during the data analysis phase. As such we were unable to ask students specifically about resistance to structural forces and there was not an opportunity for follow-up questions.

#### Conclusion

Our research revealed that the participants were aware of a number of structural influences that affected the medical education they received and that had the potential to shape their attitudes and practices as they progressed in becoming a doctor. They also noted that there were a variety of levels of influence – government policy, medical school, clinical contexts and peer groups. We found that the pressures of educational workload and anticipated career trajectories tended to have an individualizing affect that limited the possibility of collective action and response to structural influences. If conflicts of interest—and commercialisation of health and medicine more generally—are to be addressed, then there needs to be a much broader and more radical critique of medical education, of the medical profession and of the neoliberal system of health care in which they function.

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