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Envisioning a socially accountable doctor: a three-axis curriculum emerging from final-year medical student reflections

Lionel P Green-Thompson Office of Teaching and lionel.green-thompson@wits.ac.za

Learning, Faculty of Health Sciences, University of the

Witwatersrand,

Johannesburg, South Africa

Patricia A McInerney Centre for Health Science patricia.mcinerney@wits.ac.za

Education, Faculty of Health Sciences, University of the

Witwatersrand,

Johannesburg, South Africa

Robert Woollard Department of Family woollard@familymed.ubc.ca

Practice, University of British

Columbia, Vancouver,

Canada

ABSTRACT

Social accountability in health professions education is important for the reduction of health disparities. There is a need for the development of curricula which begin to produce graduates who are responsive to community needs. These curricula need to include dialogues with communities, deep reflection and a transformative perspective. This study used a grounded theory approach to explore the perceptions of social accountability amongst final-year medical students. These students grappled with the definition of social accountability but described it as the tension between obligation and a willingness to serve. Five themes regarding social accountability were drawn from the students' feedback: 'it's poorly defined'; 'web of interconnected relationships'; 'losing my heart and losing my compassion'; 'more wide-angled view of things' and 'if I don't go there, then who will go?'. These themes are connected through relational statements of three curricular axes of reflective practice, complexity and meaningful relationships. In each of these axes, participants identified catalysts and detractors for the progressive development of an accountable medical graduate.

Introduction

Social accountability is a growing international imperative for institutions engaged in the education of health professionals (Frenk *et al.* 2010). Boelen and Heck (1995) defined social accountability for such institutions as an obligation to develop their curricula to respond to the health priorities of particular communities or nations. Woollard (2006) developed a partnership pentagram which suggested that this responsiveness demanded an interaction amongst stakeholders such as the community, policy makers, health professionals, health administrators and academic institutions. These multiple and intersecting relationships create a complex interaction between the various components of both the educational and health systems with high levels of interdependence between the two (Frenk *et al.* 2010).

Complexity recognises the movement from linear solutions to more iterative and complex solutions. In this context, new visions of the structure of a socially accountable curriculum must take complexity into account. Doll (1993) offers a vision of a postmodern curriculum which is rooted in four Rs: Richness (permitting multiple layers of meaning influenced by process and context), Recursion (reflection which deepens awareness), Relations (both pedagogical and cultural interactions within a curriculum) and Rigor (creating a transformative frame for innovative connections for knowing, relating and exploring). A variety of models from the health sciences have begun to apply these principles in their curricular design (Emadzadeh, Mousavi Bazaz, Noras & Karimi 2016). As part of their curricular design, the AIDER model draws in aspects of enquiry, education and responsiveness while the CARE model promotes cultural change through advocacy, education and research (Sandhu, Garcha, Sleeth, Yeates & Walker 2013; Meili, Fuller & Lydiate 2011).

Social accountability implies a realignment of the relationships within the learning context (Woollard 2006). These relationships provoke constant dialogue, exchanging new possibilities and sharing of patterns to make meaning (Doll 1993). According to Van Merriënboer and Sweller (2010), this richness is echoed in the interaction between intrinsic load (what needs to be learnt and the expertise expected), the extraneous load (the procedures associated with learning) and the germane load (processes of learning to master the learning). Modern health science curricula, known for their excessive content, are expected to reflect the different types of cognitive load in order to ensure the richness of these curricula (Van Merriënboer & Sweller 2010; Young, Van Merrienboer, Durning & Ten Cate 2014). Medical students will develop a series of cognitive schemas as a result of the patterns developed in their learning.

The cognitive schemas are enhanced through reflection on tasks performed, leading to greater self-awareness. Schön (1987) argues that this reflection; in action, on action, and then subsequent to an action; forms the basis for the development of professional practice. Reflection is key to the improvement of competence which is enhanced when the learner is open to the critique of others — both peers and teachers. The dialogues which are implied then become the essence of the recursive or reflective process (Doll 1993).

Trumbo (2017:433) highlights the risk of "reflection fatigue" among medical students with ongoing and sometimes repetitive reflective tasks. Reflection remains an important tool for the development of a more humanistic medical graduate, but the process is enhanced through dialogue with an

appropriate mentor (Trumbo 2017). This critical reflexivity forces the learner and the teacher to identify and address the assumptions implicit in their way of thinking (Doll & Trueit 2010; Mezirow 2000).

The capacity for reflection is an important competency for the development of a professional with the requisite emotional awareness to engage in complex patient-physician relationships. The flexibility of a guided reflective writing intervention is important in professional identity formation (Wald, Anthony, Hutchinson, Liben, Smilovitch & Donato 2015). Wald (2015) argues that the reciprocal feedback between the development of resilience and reflection occurs best in an education system which promotes relationship-based education.

The collaborative relationship is an important shift from a previously individualistic concept of reflection. Naidu & Kumugai (2016) critique a narrow Western-styled reflection practice which is focused on the individual. They argue that there is a need to shift reflective practice from individual introspection towards collaborative reflective practice which allows the acknowledgement of connected relationships as part of the solution to clinical and other problems (Naidu & Kumugai 2016).

The pedagogical relations within a curriculum are about the framing and reframing of knowledge within a sequenced learning process. Cultural relations, on the other hand, allow narration of the context of history, language and place to enhance our sense of knowing. These relations expand knowledge from a personal knowing to the relational context of communal knowing (Doll 1993).

Relationships are a key component in the health professions. Patient-doctor relationships continue to form the foundation of the social accountability expected from community members when they encounter the health service (Green-Thompson, McInerney & Woollard 2017). Green-Thompson *et al.* (2017) describe a series of reciprocal relationships between the doctor, the patient and the community in which both are immersed. Ubuntu (African humanism) frames these relationships within a background of survival, dignity, respect, compassion and solidarity (Green-Thompson *et al.* 2017; Mbigi & Maree 2005).

Worley, Prideaux, Strasser, Magarey & March (2006) and Prideaux, Worley & Bligh (2007) developed a symbiosis model which demonstrated the benefit of a series of relationships which occurred when medical students were taught amongst communities during their rural placement experiences. This symbiosis is confirmed when students are able to interact with patients within communities over a sustained period of time (Poncelet, Wamsley, Hauer, Lai, Becker & O'Brien 2013). Poncelet *et al.* (2013) have reported that patients have valued their interactions with students in the community. These students often serve as bridges in a physician-like role between the patient and the often busy physician (Poncelet *et al.* 2013).

Community-based education initiatives have become the hallmark of a curriculum which is socially accountable (Kwizera & Iputo 2011; Meili *et al.* 2011; Laverack 2006). The interactions between communities and medical programmes are heterogeneous in their nature, intention and outcomes. There are different ways of defining a community, how a community is represented and, especially, whose interests are being served in the relationship that a community has with the medical education system (Ellaway *et al.* 2016). Ellaway *et al.* (2016) offer a series of learner mechanisms by which these

community relations impact learning outcomes. These include immersion within a community which adapts learner responses to community needs; the learners accessing experiences different to those in regular learning spaces; and the capacity to link formal learning with the lived experiences of patients which are often reflected in the social determinants of the patients' health (Ellaway *et al.* 2016). The curriculum proposed here implies that learning communities should be an integral part of the learners' experiences (Champaloux & Keeley 2016). Coupled with this, the teacher's role must be fully defined to support the achievement of the outcomes desired (Stoddard & Borges 2016).

The curriculum remains an important channel for the achievement of a socially accountable graduate. It interacts with many components, each of which will impact in how an institution works, what that institution does and what difference it makes (The Training for Health Equity Network 2011). McCrea and Murdoch-Eaton (2014) described the lack of understanding of social accountability by British medical students. This study explored South African final-year medical students' concepts of social accountability and the influence of the curriculum on the graduates' achievement of social accountability.

Methods

Ethical clearance for this study was obtained from the University of the Witwatersrand Human Research Ethics Committee (clearance number M120965). All participants gave informed consent to participate and be recorded during the focus group discussions. The focus group discussions were audiotaped, transcribed verbatim and analysed using the constant comparative method. The study was conducted at the University of the Witwatersrand (Wits), in Johannesburg, South Africa.

The focus groups were conducted by the first author. The discussions were held at locations convenient to participants – either at the hospitals where they were on clinical rotation, or in the central education facility which is adjacent to a central teaching hospital. The questions posed to participants are shown in Table 1. Two of the authors participated in the analysis and open coding of the data. This analysis was undertaken independently and then through discussion. Axial coding allowed the linking of codes to facilitate the identification of categories and member checking was conducted through discussion with students. This study adopted a grounded theory approach (Charmaz 2010). Demographic data were collected during the consent process in order to understand the difference between the two groups as well as identify any characteristics which may have resulted in particular opinions.

At the end of 2012, final-year medical students were invited to participate in focus group discussions on social accountability. Four focus group discussions were held over a fortnight immediately preceding graduation. Twenty-five students (13% of the class) volunteered for these focus groups. The number in each focus group varied between three and ten participants. The data from the 2012 groups were analysed using thematic analysis and constant comparison. Several themes emerged. These themes, together with the interview guide, were employed in the discussions in 2013 to deepen understanding of the meaning of social accountability by students and to achieve data saturation.

Seven focus groups were held between September and December 2013. Seventy students (38% of the class) participated in these focus groups. These students were purposively selected to ensure that

they matched the level of experience of the participants engaged a year before. They had completed the Integrated Primary Care clerkship, which had been determined by the 2012 group as having had greatest impact on their development.

Table 1: Questions used in Interview Guide

What do you understand by social accountability in medical practice?

Students were presented with the definitions from WHO (Boelen and Heck 1995) and THENet (The Training for Health Equity Network 2011), and were asked: What do you think of these definitions?

Tell me about elements of this included in your training over the years – positive or negative?

To what extent has this influenced your decisions for the future?

What are your views of and expectations for your future practice in the medical profession?

Results

In the 2012 groups, males (13) and females (12) were almost equally represented despite the class being made up of mostly females (58%). Twelve participants had engaged in community-based work (48%). This group listed work in student- or church-run clinics for underserved urban communities in the inner city of Johannesburg and nongovernmental charity organisations, e.g. Children of Fire which works amongst the victims of burns. The community engagement of this 2012 sample of volunteer participants strongly reflected a sense of doctors having a role beyond the treatment of individual patients. These groups acknowledged the individual graduate's freedom to choose the level of commitment to community, but felt a strong drive to repay the debt to the community (inclusive of the education, government and social system) through some measure of service. A clear statement emerged that there were different kinds of students in the class and these could be distinguished as those "who feel like they are going to help society and those who feel like they don't need to help society and it's all about where they [personally] are going in life" (2012:B:2).

The analysis of the 2012 data revealed five major themes regarding social accountability that are listed here in the students' words:

- "It's poorly defined" (2012:A:10) balancing expectation and obligation.
- "Web of interconnected relationships" (2012:C:4).
- "Losing my heart and losing my compassion" (2012:A:1).
- "more wide-angled view of things" (2012:C:4).
- "If I don't go there, then who will go?" (2012:D:3).

The 2013 participants' engagement with each other, in contrast to that in 2012, provided insights into a much more contested terrain about what accountability means and the extent to which the individual needs to be altruistic as a reflection of social accountability.

The gender distribution of the participants was in keeping with the demographic of the 2013 class. However, when compared to the 2012 group (48%) there was less involvement in community-based or student leadership activity amongst the 2013 group (34%).

The 2013 data were merged with the 2012 data until data saturation was achieved at the end of the seven focus groups of 2013. These data were treated as a single data set. There were no discernible differences between how male and female participants expressed themselves in the focus groups and so these have not been specifically identified in the extracts used.

	2012	2013
Total Number in class	193	186
Males n (% of class)	81(42)	63(34)
Females n (% of class)	112(58)	123(66)
Study participants n(% of class)	25(13)	70(38)
Males n(% of participants)	13(52)	24(34)
Females n(% of participants)	12(48)	46(66)
Average age of participants	25	25

Table 2. Demographic description of student participants and classes of 2012 and 2013

Participants were uncertain of the meaning of social accountability. However, they revealed their deeply reflective identities through the constant iterative engagement with the questions presented. The interaction between participants showed a high level of challenge and reflection. The five themes which were listed above are explained below.

Social accountability: "It's poorly defined" (2012:A:10); balancing expectation and obligation

Participants grappled with defining social accountability and for many it was the first occasion that they were doing so. They shared a certainty that it could not be taught in lecture theatres. Their attempts to define social accountability included statements such as:

I mean we are advocating for both patients individually as well as communities and in that sense part of our role is not only to, in short term, improve the health of Mr. X who's come with whatever is wrong with him, but it's also within our responsibility to fight for sort of general measures that will improve the state of and quality of life of the community at large (2012:A:5).

Social accountability was seen by some as advocating on behalf of the individual patient and the broader community. Advocacy might entail "being an agent for change in the micro level but I'm not going to go and picket. Well, I used to ... I was in a protest march back in the day when I was still quite idealistic" (2013:G:6).

This view of advocacy contrasted with the characterisation of the doctor community as "some of the most passive groups of people ever" (2013:F:5). Participants claimed that the complacency of the medical community is learnt while being a student. Students were reluctant to challenge anything for fear of being victimised in their assessment which reduces their learning experiences to "chasing marks,¹ and making sure that we pass" (2013:H:7). The assessment process creates a fearful environment. As one participant explained, "you would not step up to a consultant and give your opinion (about doctor behaviour), no, you wouldn't do that because it just feels like it's a place where you can't go" (2013:H:5).

However, participants acknowledged that they could make α difference and that their education gave them power to make a difference. Participants described interactions with curricular moments which directed them towards socially accountable practice without calling them to reflect on the deeper meaning of that encounter:

I mean, when we did IPC² we had to write on a five-star doctor ... the doctor as a community leader. But they've never, ever told us we're community leaders. But they expect us to be able to describe how a doctor should be a community leader. It's almost like decorating a Christmas tree just to make it look pretty but you're not actually telling us ... (2013:K:4)

These statements reinforced the idea that participants had encountered events which challenged their idea of what it is to be a socially accountable practitioner and yet they had not been equipped with the capacity to act effectively in that situation. The imagery of being a prettily decorated Christmas tree evokes the sense of doing something which looks good but has little impact on behaviour and practice.

Participants evoked an analogy of the investment process in which the investor expects a return on investment:

... do we owe society and community something back? Should we give more? And you know are we accountable to society for our actions and are we putting more into our jobs and going above what we are being remunerated for? Why and for whom are we doing that? Are we accountable to society and therefore need to do that because they are expected to do it – expected by the community? (2012:A:5)

The investment idea was carried forward with increased definition of the various parties to whom the return on investment is due and these are listed by participants as being the state who funds the education and training, the academic staff who educate, and the patients who become the source of learning during the students' education and are deserving of a good service while in their care. In fact, there was an acceptance of the noblesse oblige which comes with one's elevation on the doctor "pedestal":

... by virtue of having the doctor title now, you have a certain amount of responsibility ... like getting born in a royal blood line, you know ... there are certain privileges but there are certain obligations as well. And you can't avoid the fact that you have that title. And there's

² IPC is the Integrated Primary Care clerkship conducted in the district health system. Students in 2012 spoke of the positive impact of this clerkship in developing their consciousness.



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¹ Marks are the equivalent of grade scores in other systems.

so much impact you ... could do with it. So, I think it would be an injustice actually not to hold yourself accountable to the education that you have received and to the impact that you make, as young as you are. You know, there's so much that has been invested in you and I think it's just ... you just need to take a minute and think about what you could do. Just for the title alone. Because I know, especially in rural areas, that title ... they put you on a pedestal and you can make such a difference. So, with all the knowledge we have I feel like we are obligated to make a change. (2013:I:5)

The community's expectations of doctors often placed them on a pedestal with the expectation of certain behaviours, both within the professional space and in the social environment. To this end a participant said: "I don't think we are obliged to be perfect ... I think we are obliged as humanity, we are all obliged to do our very best" (2012:A:4).

Participants also recognised the responsibility of the university in developing social accountability:

I think it would be socially negligent if an institution did not conscientise its trainees to address those needs [in South Africa]. Wits ... Faculty of Heath Sciences is directly placed to influence what kind of doctors we become in the future as well. (2012:D:3)

This idea of responsibility was echoed by another participant's reflection on the definitions of THENet and WHO (The Training for Health Equity Network 2011; Boelen & Heck 1995): "for me it's a no brainer ... teaching ... has to reflect the communities' needs, you can't put doctors out there that don't meet the community's needs" (2013:E:2). Participants also recognised that the definitions did not include an attitudinal aspect. One participant stated that "Attitude is so important but it's also dependent on the personality" (2013:F:2) and this was a recurring expression of the role of the individual amongst the participants. This may be an important addition to these definitions to facilitate translation for individual practice.

"Web of interconnected relationships" (2013:C:4)

Participants reflected on a series of relationships both within and with the community. They defined community as being "more than just your patients and even more than just your patients' community, the country just as people" (2012:A:2). This statement captured the full range of the participants' views of community which were expressed as ranging in some cases from two or three people to larger communities which may be geographically defined. "Everyone is almost connected to everyone at the end of the day, somehow, so it can be difficult to define" (2013:E:3), represents the struggle the participants had in defining a community in both its composition and its extent. Participants suggested that the people themselves define community:

I know that you have never seen a place like that in your life, you know, and you then realise of that community, it's not what you think a community is, it's what they tell you a community is. You can't get that from teaching, you have to be there and you have to see it and people have to come to you with that information. (2012:A:4)

While many participants regarded the public health sector as their primary community, there was an acknowledgement that those who are able to afford private health care must also be regarded as 'community'. The concept of community that many students had was often formed by their

experiences within the curriculum. Some participants expressed the view that their backgrounds, particularly from a private schooling, may have limited their view of 'the community'.

The student community was seen as a space for socially accountable action as well as the place of learning, through the experiences of others, what community meant. The participants acknowledged that the lack of time in their training reduced the ability to build the extracurricular relationships which foster good community — either amongst students or beyond in broader communities.

The participants acknowledged the benefit of administrative intervention (constructing groups with predetermined demographic features) as contributing towards the building of understanding amongst students who may come from different backgrounds. The apparent benefit of these constructed groups was captured in the following extract:

For me, it was helpful because honestly, if I had to choose my group, I wouldn't have chosen this group. But after working with them for a while, you realise the benefit. It's important because in our country ... unfortunately, the race ... the background that you come from ... it's an important thing. (2013:I:6)

There was an important role for the student collective in both learning from and teaching each other, but also for development of a sense of community amongst themselves. These communities helped in developing a social conscience.

The hierarchy in the medical profession was cast as an important aspect of the community which the participants saw themselves as entering on graduation. This hierarchy appeared to have two faces. The positive face of "the old apprenticeship system I think it's really a valuable system in medicine" (2013:L:5) whose value is in the generational learning which is reflective of communities of practice. The antithesis of this was the idea that 'knowing one's place' becomes a negative in terms of advocacy on behalf of patients or in the observation of inappropriate conduct:

We keep mentioning this whole relationship and the fact that there's a hierarchy and discerning your role and discerning where you fit in this I've been watching this hierarchy more intensely and almost with a more disappointed heart that I allowed myself to slip into that role that I felt I needed to play for everything to run smoothly. You know, don't speak up too loud or whatever. each person tries to speak in a way that presents themselves a bit more importantly than the person who's a bit lower than them. You know, you really get this sense of everyone's egos basically. It's just a boxing match of egos. (2013:L:4)

As a result of this, students 'lose their voice' — especially if that voice is seen by their teachers to challenge the prevailing status quo. These ideas may adversely affect their learning of the role of advocacy and their ability to clearly articulate their patients' needs. The participants' need to 'fit in' is seen as crucial because this impacts on their assessment processes during their student years as well as in their internship. The power differential between teachers and students means that students often compromise in order to keep the peace. In many ways this is linked to the hardening of their attitudes as their learning progresses.

"Losing my heart and losing my compassion" (2012:A:1)

There was a strong feeling amongst the participants that "99 percent of you as a person with regards to morals and ethics and how you live your life is formed before you get to medical school" (2012:C:1). Morals and ethics were expressed as an integral feature of a socially accountable practitioner. However, there was an acknowledgement that certain curricular experiences may modify or develop the "premorbid personality" (2012:C:3).

There was a recurring theme of desensitisation over the course of the participants' studies. Part of this desensitisation towards social accountability was influenced by the focus on assessments. Some of them reported that it needed a specific moment of reflection to arrest this decline into a cynical attitude towards patients and their care:

And at the beginning of this year doing paediatrics, I suddenly ... I had a moment of revelation where ... I've been so scared that I had lost my heart and I've watched myself become desensitised and cynical over the years ... and I found out that I hadn't lost my heart (2012:A:1).

The 2013 group of participants expressed their cynicism far more strongly than those in 2012, accepting this desensitisation as a result of their six years of study. This cynicism was linked to the arrogance that students had experienced amongst their teachers and their peers. Students felt that the hardship endured through their studies entitled them to a certain arrogance but "not too arrogant" (2013:H:11). The development of this arrogance was, in part, blamed on the encounters through their training:

... you become arrogant because people allow you to be arrogant and also because people have such high standards of you that you actually think that you're the best person and you're powerful and that you can heal people (2013:H:11).

The balance between allowing the system to "beat any compassion out of you after a while" (2013:H:7) and being drawn into a cynicism and arrogance was a real battle for many students. The expectation that, somehow, as a medical student "you must be so used to people dying that it doesn't affect you anymore" (2013:H:9) adversely affected the students' ability to remain compassionate.

Reflection became important for students in their own personal and professional development. Some spoke of their need to harden their approach in the face of the level of suffering they had to witness. For many this was a self-preservation strategy. Inadequate resources in hospitals took its toll and created negative perceptions for the students:

I think practicing medicine in South Africa tarnishes you negatively, I think that we are less humanitarian probably than we should be when we finish medical school, just because we see so much suffering, we are so used to it (2012:C:1).

This idea of reflection enabling an arrest of the encircling cynicism and arrogance was noted:

... I just took a step back at some point because I remember trying to reason with this one person and I was just actually being ... actually shouting at them and I just realised that ...

now I am talking like this consultant who I really don't like. Now I am being this person and just thought: No, No, hang on! Something's got to change. You should, I guess, just have that reflection for yourself and ... I am happy to credit it for myself ... because that is what I did. (2013:E:3)

There was a strong recognition that there were moments of reflection which may have been crucial in determining the direction in which a particular encounter – with the health system, a teacher or a difficult patient – had taken the student. Often that reflection allowed a positive correction of a potentially damaging experience. Many participants expressed the need for structured interactions of reflection in the curriculum that are less focused on enforced submissions and assessments:

I think that there should be some sort of guidance like a periodic thing when you meet every so often for guidance ... because otherwise you just want to do it (formal reflection assignments) and get it out of the way ... half of the time you don't even think about what you're doing (2013:F:6).

Reflective spaces would allow students to reflect on their own vulnerability and reduce the "compassion fatigue" (2013:E:5) currently experienced.

"More wide-angled view of things" (2012:C:4)

The curriculum appeared to provide a broader view of society and health systems through learning events outside of central academic complexes. The activities that participants mentioned were community site visits in years three and four and the Integrated Primary Care clerkship in final year. The visits to communities developed students' views of situations in which communities find themselves:

The community service projects that we did in groups of three or four where we had to identify a problem within our (own) community and try and fix that. I think that gave me a bit of a perspective of what ... an individual ... could potentially achieve. (2012:D:5)

The exposure to alternate spaces from the participants' upbringing had a positive effect. The curriculum provided occasions for them to move beyond their own social experiences making them "far more aware of what I can say to them (communities) and whether what's actually realistic for me to say to them" (2012:A:5). This is linked to cultural safety which was a challenge for participants who argued that "we don't really touch on certain nuances and certain new cultures which may influence how we actually give health care" (2013:E:3).

This sense of being given the ability to look at things differently, and getting a sense of the influence an individual may have, pervaded many of the discussions. The IPC rotation was credited with teaching a broader perspective of the health system; as one participant said, "IPC has to be one of the greatest learning experiences ... just in general, as to how South Africa as a health care system runs" (2012:D:8).

Participants also reflected on their experiences at the patients' bedsides on a day-to-day basis. This allowed participants to enter the patients' world, understand their level of vulnerability, and recognise

that a very small humane gesture may have a profound impact on the patient's experience of the health care system.

It was also at 'the bedside' where student participants had their most abrasive encounters with inappropriate conduct. The participants experienced a disjuncture between the lectured ideal and the lived experience of clinical practice:

You can have a million lectures on how to be a good doctor and what's ethical and what's not ethical and it's one hundred percent about what you see when you go into the wards (2012:C:1).

This lived experience had the greatest impact on altering students' perspectives of care for patients:

And there are definitely also some good role models that we'd like to emulate – who actually teach us with patient care standards as well ... [who demonstrated] that soft tone, that posture you adopt to a patient (2012:D:3).

The paucity of ideal role models was evident in both samples. Participants offered insights into the pressure of going through the "meat grinder" (2013:G:6). This was perceived in both the administrative process which they claimed was "saying you must be accountable" (2013:H:4) and in the clinical academic space with the assertion that "we're theoretically trained in the bio-psycho-social practice but if you give us a patient the only thing we know how to correct is the biological problem" (2013:G:4).

"If I don't go there, then who will go?" (2012:D:3)

Sometimes the participants had decided where they would work on graduation, but for others their views had changed during their studies. In a very bold exchange in this regard, a student of rural origin stated that, "I think our training ... has only confirmed my decision in terms of where I'm working this year. I come from a rural area and in fact I did my elective as well in the local district hospital" (2012:D:3). This student had decided to return to a rural area, however, in the following quotation he reflected on the tension which appeared to exist in the class with regard to choosing a remote site for internship. The comment refers to the moment at which the allocations for the internship were announced in class:

... my friends were there and they were laughing at me: 'You're going to such a place, my goodness! You are going to the bundus!³ You are going to what?' I said to most of them, 'If I don't go there, who will go there?' (2012:D:3)

This shows that students who choose a rural area for placement may be quite sharply derided. Despite this, students of rural origin appeared more likely to make a commitment to return to rural areas:

³ Bundus is a South African term which describes rural areas. The word emphasises the remoteness of the place under discussion.



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I plan to go and change things. You know, I plan to get my degree here, I'm going to go back home. It's in Limpopo.⁴ Because I did my elective there's a lot of things that I'm going to ... go back home and try and fix it. (2013:K:1)

The same participant reflected on his feeling ill-prepared to effect the change that would be needed (2013:K:1).

Despite the feeling that preparation for work in remote areas may be inadequate, for many participants, their encounter with the curriculum was a moment of reflection on their future careers. Participants acknowledged that the curriculum often clarified the areas of greatest need and the work that needed to be done. For example, one participant stated, "The thing that drives me is community upliftment. It's pretty much stayed the same, just reinforced the recognition that there is a dire need out there" (2012:A:1).

Participants wrestled with whether the practice of social accountability was limited to generalist practice. Participants reported that a negative attitude to general practice was expressed by the consultants who taught 'at the bedside' in tertiary hospitals where most of the teaching occurs. There was a general acceptance that the encounters in the curriculum had influence on both spheres of possible practice.

There was an appreciation of the curricular experiences in primary care settings. The IPC clerkship appeared to provide many students with a positive perspective:

I thought that I would do my comm serve⁵ at Bara,⁶ I thought I would be at an academic hospital for comm serve but after being at Alex Clinic, and we were never rushed to do a consult even if it was just those chronic people all we had to do was just rewrite the script. We sat with them, we talked with them, it was just a less stressful environment. You had that time with your patient, you didn't feel rushed and I mean I actually considered it's not a bad thing to go into primary health. (2012:B:3)

A doctor's responsibility in relation to community was described as follows:

So that they [the community] can empower themselves to just change their own life in a realistic way you know. The greater good will just come of itself if you just take care of a small little thing. (2012:A:9)

Flowing from this idea of the doctor as an active agent in the society, participants expressed a broad view of the role of the doctor in this regard. There was an appreciation of the expectations which communities had of the individual practitioner and accepted that this came from the fact that 'the community' "come from a much more vulnerable position when they come to us" (2012:A:5). The power differential in the relationship between doctor and patient emphasised the vulnerability of patients in the dyad:

⁶ Bara is an abbreviated reference to one of the major central teaching hospitals in the academic complex. It's full name is the Chris Hani Baragwanath Hospital in Soweto.



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⁴ Limpopo is the northernmost province of South Africa with large rural environments.

⁵ 'Comm serve' is a colloquial reference to the year of community service medical officer time which is expected from each medical graduate before they are able to register for independent practice in South Africa.

... there is a bigger gap in power between a doctor and patient than there is in anything else, ... the gap between the two and the power imbalance between the two is wider in medicine than in any other field, I think that's why we need to be more morally restrictive of ourselves. (2012:C:1)

The comment reinforces the idea that social accountability is a manifestation of the values base of morality and professionalism.

Discussion

Social accountability emerges as a sense of duty in tension with a willingness to serve.

This study has confirmed findings that students often cannot define social accountability (McCrea & Murdoch-Eaton 2014). However, they have demonstrated deeply reflective constructions of what social accountability might be and the extent to which a curriculum might contribute to a graduate who is socially accountable. Three relational statements connect the emergent themes: reflective practice (balancing expectations and obligation; "losing my heart and losing my compassion"), relationships ("web of interconnected relationships") and understanding complexity ("more wideangled view of things"; "if I don't go there, then who will go?"). The participants describe elements which act as catalysts for social accountability enabling "how we practice to serve the community in the best way possible" (2013:L:2). This desire for service is in constant tension with power dynamics which limit this achievement described as "it's a place where you can't go" (2013:H:5).

The three relational statements, presented as curricular axes in Figure 1, are discussed below:

Reflective practice

Reflective moments during students' learning appeared to arrest the ongoing decline of the compassion with which they entered the degree. Reflection has been a central practice for their professional identity formation (Schön 1987; Wald 2015; Wald *et al.* 2015). The creation of nurturing education environments builds the sense of communities of practice in which the more senior colleagues guide students through contextual reflection following significant clinical encounters (Wald 2015; Champaloux & Keeley 2016; Wenger, McDermott & Snyder 2002). The intimate engagement of teachers with learners creates important roles for teachers (Stoddard & Borges 2016) which begin to model the challenges towards collaborative reflection (Naidu & Kumugai 2016). This also avoids reflection becoming strategic for assessment or a repetitive activity-assessment tool (Trumbo 2017). This process legitimises the entry of the novice into established contexts. The closer the mentor is to the student in reflection, the more likely they are to harness its full benefit.

Understanding Complexity

One of the participants in this study suggests that the curriculum offers the chance for a "more wide-angled view of things" (2012:C:4). It is perhaps this broadened perspective which leads to the understanding that every action has an impact on the lives of other people and none more so than in

the actions taken in relation to a patient and their experience of the health system. This is in contrast with current medical practice in which we are "very good at living in silos" (2012:A:3).

All actions impact lives. Students' lives were impacted deeply when they were immersed in communities and they learnt directly from them the meaning of community. Taking students out of the hospital context enhanced their learning experience (Prideaux et al. 2007; Worley et al. 2006). In these varied contexts, the imperative for teachers to address the social needs of these communities engenders the spirit of responsivity and advocacy amongst the students. The nurturing of advocacy implies the broadening of the students' responsibilities, both for the individual patients as well as for the community which surrounds them.

Complexity implies a curriculum in which richness (multifaceted), recursion (reflective), relations (cultural and pedagogic) and rigor (transformative) are interacting constantly (Doll 1993). In direct contrast to and detracting from this ideal is the culture of learning and living in silos in which the doctor's connection to the patient and society is lost. Linked to this is students' limited exposure to positive role models who show them how to be good to patients by adopting "that soft tone, that posture" (2012:D:3).

Relationships

Suchman (2006) introduces relationship-centred care as "a clinical philosophy that stresses partnership, careful attention to relational process, shared decision-making, and self-awareness". The axis of relationships is characterised by the tension between, on the one hand, ensuring compassionate encounters while, on the other, working to reduce the impact of inequality and the power differential on clinical relationships.

Compassionate encounters occur in three dimensions: entering the world of the patient and community (reciprocal relationships), building educational intimacy (guru teachers in partnership with learners) and keeping one's heart (self-awareness to combat erosion of compassion) (Green-Thompson, McInerney, Manning, Mapukata-Sondzaba, Chipamaunga & Maswanganyi 2012; Green-Thompson *et al.* 2017; Stoddard & Borges 2016).

These three dimensions begin to address the asymmetries of power of an unequal society which contribute to the social gradients which contribute to ill health (CSDH 2008; the Marmot Review 2010). These asymmetries are exacerbated by the professional power and status afforded to doctors: "you become arrogant because people allow you to be arrogant" (2013:H:11). In the learning environment, this arrogance is played out as a hidden curriculum in which students are in a constant battle with those who are senior to them.

The interaction of reflective practice (individually based and guided by mentors), relationships (with patients, communities and teachers) and understanding complexity (building responsibility through advocacy in different learning environments) creates an environment which supports the development of social accountability as represented in Figure 1:

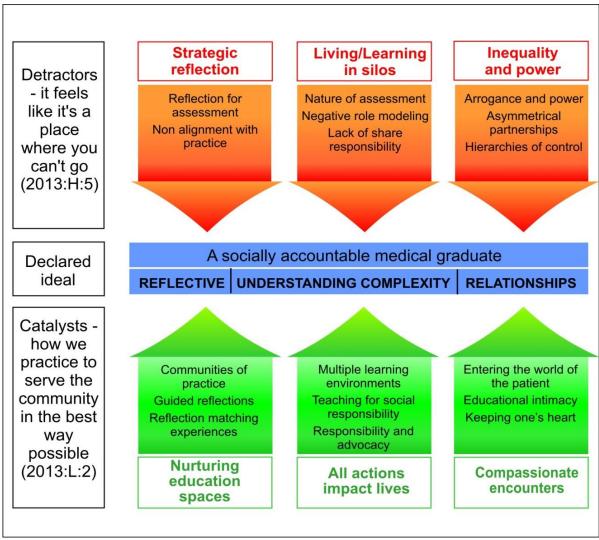


Figure 1: Three interacting curricular axes for the education of a socially accountable doctor. (Three axes are represented around a central ideal of accountable graduates. Green arrows are catalysts and orange arrows represent detractors).

Limitations of this study

This study was limited to students at the threshold of graduation. Social accountability may be perceived differently after a period spent in the workplace.

This data emerged from a single university with a particular history in South Africa. The model requires further interrogation across different environments.

Conclusion

Final-year medical students have a varied view of social accountability but offer perspectives which may enhance medical curriculum development. Reflective practice, understanding complexity and meaningful relationships form three significant axes for the development of the curriculum. The reflections of students suggest that curriculum development should explicitly acknowledge the forces which may act as catalysts supporting a socially accountable curriculum and those detractors which may act against this aim.

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