

Developing social accountability in 1st-year medical students: A case study from the Nelson R Mandela School of Medicine, Durban, South Africa

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Background. Medical schools need to be more socially accountable. The Making a Difference group community service activity (MaD), which is part of the 1st-year medical curriculum at the University of KwaZulu-Natal, Durban, South Africa, aims to make students more responsible, responsive and accountable to community needs. Small groups of students engage with an organisation of their choice that works with a disadvantaged community. They spend 16 hours in appropriate community service, which includes an HIV and AIDS education activity.

Objective. To describe and categorise the MaD process of developing social accountability in medical students.

Methods. This case study draws on routinely collected administrative and qualitative data obtained from reflective journals kept by each student. A document analysis was undertaken of the posters produced by each group that described their reciprocal learning from this experience. Ethical approval for the ongoing evaluation of the undergraduate programme was obtained.

Results. The MaD gave students exposure to authentic experiences through socially accountable activities. Enabled by the structured and stepwise MaD approach, groups demonstrated responsibility in identifying and engaging a local community. They developed a simple plan of action that was responsive to community needs. At each stage, they demonstrated accountability to the various stakeholders. Students reflected on the social determinants of health and disease and described MaD as a 'humbling and huge learning experience'.

Conclusion. Through MaD, 1st-year medical students engaged in practical, socially accountable activities with members of disadvantaged communities. They developed some understanding of a population perspective on health and the social determinants that influence health and disease in a community.

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South Africa (SA)'s racially divided past is evident in the inequitable delivery of health services, which still reflects in inferior care to the poor and those living in underserved communities. Apart from the disparity between healthcare delivery in the public and private sectors, the country faces a quadruple burden of disease that includes the HIV, AIDS and tuberculosis epidemics, non-communicable diseases, injury and violence, as well as the silent epidemic of maternal, neonatal and child mortality.

The Frenk report^[1] indicts medical schools for having failed disadvantaged communities, as health services, research and education offered by these institutions have not translated into actions to address the health needs of these communities. While the problems are complex and multisectoral, medical education should incorporate community-based learning in decentralised training platforms to create awareness of inequities in health provision and to prepare graduates more appropriately for the needs of the disadvantaged communities they will serve.^[2]

Community-orientated education requires a review of the roles and responsibilities of all stakeholders, access to resources and innovative use of teaching methodologies to maximise learning. Creating opportunities for greater community participation by medical students will culminate in professional behaviour and learning that cannot be simulated in the classroom.

Early exposure to experiential learning for medical students enhances their understanding of the social determinants of health and the needs of a population, helping them in the development of the interpersonal skills that facilitate empathetic attitudes towards their patients.^[3] Early experiences also nurture professional identities and promote social responsiveness among

medical students; responsiveness, in turn, fosters doctors' accountability to the communities they serve.^[4]

Socially accountable medical schools are required to direct their education, research and service activities to address priority health concerns in collaboration with stakeholders of the communities they serve.^[5] The challenge for SA health educators is to make learning meaningful and ensure that students become socially responsible, responsive and accountable in the ailing healthcare system. Medical students, however, may become alienated and disengaged during their extended study away from their own communities. With students often burdened with informative learning and regarded as not sufficiently knowledgeable to make substantial service contributions, the Making a Difference group community service activity (MaD) was conceived to facilitate greater involvement of 1st-year students with organisations that serve local disadvantaged communities. Early community and clinical exposures also aid students' learning, increase the recruitment of graduates to work in underserved primary healthcare settings and impact on graduates' competencies as health advocates through the development of appropriate knowledge and attitudes.^[6]

Boelen *et al.*^[7,8] define a socially accountable medical school as demonstrating the most desirable level of social obligation by using education, research and service to address priority health needs. In collaboration with government and other health service organisations, they should influence people's health positively at a local level. Social obligation, through its component parts – responsibility, responsiveness and accountability – can increase the relevance of medical education. Therefore, these programmes should adhere to principles that anticipate society's health needs, and include education that fosters an understanding of the social context and

partners with stakeholders in the health system.^[7,9] Medical graduates, as competent and capable clinicians, should be willing change agents in contributing to and improving the health system in which they work.^[2]

The MaD at the University of KwaZulu-Natal (UKZN), Durban, SA requires groups consisting of three or four students to identify and perform 16 hours of a group community service with a local organisation dedicated to serving a disadvantaged community (Fig. 1). This educational activity forms part of the Becoming a Professional module offered in the 1st year of the 6-year undergraduate medical programme and is preceded by a series of workshops called 'HIV and Me'.

For the MaD to be completed during term time, the identified community must be within the Ethekwini municipal area and close to students' term-time residence. Each group must initiate and organise their own MaD with the host organisation. The students are allocated an afternoon per week of curriculum time over a 3-month period to complete the activity. Groups have four meetings with a trained faculty member who facilitates the process, assists with planning and debriefing and supports reflection on challenges encountered during the implementation of the educational activity.

The nature of the service activities that groups undertake in MaD is planned in consultation with the host organisation and depends on the needs of the hosts. For the final activity, each group has to deliver an appropriate HIV prevention session in the selected community. Each student keeps a diary and log of the time and activity at the organisation, and completes a set of structured reflective learning entries on an electronic journal. Their first

journal entry describes their chosen disadvantaged community and reasons for selecting the site. The second journal entry comprises a reflection on the meaning of health, after discussion with community members. The final journal entry involves a structured reflection on their reciprocal learning during the entire MaD experience.

At completion of the MaD, each group prepares and presents a poster to their peers, community stakeholders and faculty academics at a 'Poster Day' session. The poster demonstrates reciprocal learning as a group and the goals achieved during MaD, and the presentation reflects their individual and collective learning. Each step (Fig. 1) of the process is assessed, with greater weighting allocated to the third reflective journal entry and the poster presentation.

In this article, we use Boelen's^[10] social accountability framework to describe a case study of the development of social accountability in 1st-year learners at UKZN. The article reports on a document analysis undertaken to identify the type of sites chosen by student groups, scope of activities undertaken and challenges encountered during the MaD experience. We also provide an overview of the steps and process (Fig. 1) that guide and support the 1st-year cohort towards demonstrating responsibility, responsiveness and accountability in a community setting.

Methods

Origin of the study

The study was conceived in response to the need for educators from the School of Nursing and Public Health, UKZN to evaluate students' learning

		Group/ individual activity	Social accountability category
Step 17	Facilitator meeting register	Individual	Accountable
Step 16	On-site register and photo of poster at site	Group	Accountable
Step 15	Poster presentation	Group	Accountable
Step 14	Submission of poster for printing	Group	Responsible
Step 13	Journalling/reflection 03	Individual	Responsive
Step 12	Journalling/diary	Individual	Accountable
Step 11	Group meeting 04 with facilitator	Group	Accountable
Step 10	Journalling/reflection 02	Individual	Responsive
Step 9	Final plan of action	Group	Responsive
Step 8	Draft activity plan for 16 hours of community service	Group	Responsive
Step 7	Group meeting 02 with facilitator	Group	Accountable
Step 6	Journalling/reflection 01	Individual	Responsive
Step 5	Introductory site visit and obtain signed permission from organisation	Group	Responsive
Step 4	Identify two possible Making a Difference sites	Group	Responsible
Step 3	Group meeting 01 with facilitator	Group	Accountable
Step 2	Plagiarism and collusion declaration form	Individual	Accountable
Step 1	Introduction to Making a Difference: a group community service activity	Individual	Responsible

Fig. 1. Steps in MaD that foster the development of responsibility, responsiveness and accountability.

from the MaD. It had already been established that students' knowledge had increased from the exposure and a decision was taken to explore the extent to which the MaD had contributed towards achieving the School's mission of increasing social accountability among students.

In this observational, descriptive case study, both quantitative and qualitative data were collected from the 2013 1st-year MB ChB student cohort (N=249) enrolled at the Nelson R Mandela School of Medicine, UKZN. Each step in the MaD process (Fig.1) was analysed and categorised with reference to Boelen's^[10] social accountability framework to determine how each component aided the development of students' sense of responsibility, responsiveness or accountability.

In addition, we collected basic quantitative demographic information including schooling, home location and MaD site data from each student as part of the first journal entry. Students used the Gibbs^[11] reflective cycle to reflect on positive and negative disorientating experiences encountered during MaD. Finally, an audit of the 63 posters and students' final reflective journal entries was undertaken. The analysis sought the reasons why students had chosen a specific site, as well as information on the nature of the activities performed by the student groups. All the posters and reflective journals were analysed to ensure trustworthiness. Students are routinely invited to evaluate educational activities such as the MaD. The documents used to extract the data were collected throughout the year, which served to triangulate the data sources.^[12]

Approval to conduct ongoing evaluation of specific educational exposure, including the MaD of the MB ChB degree, was sought and received from the Biomedical Research Ethics Committee at UKZN (ref. no. BREC 201/04).

Results

Demographic student profile

Most (77%) 1st-year medical students at UKZN in 2013 were black and 58% were female. The average age of the cohort was 20 years. Eighty percent had entered the medical programme straight from school and 13% had completed a prior tertiary qualification in a science discipline. Nearly half (40%) were from quintile 1 and 2 (non-fee-paying) schools.

Types of services and reasons for selecting a site

The types of services performed by the student group are represented in Fig. 2. Most groups chose to work with organisations that provided services to children. These included orphanages, children's homes, places of safety, street children's shelters, and organisations working with AIDS orphans and children living with disabilities.

The reasons for choosing the selected sites included that students 'liked working with children'. Some thought that children were 'more vulnerable to abuse and neglect', and that the 'impact of HIV is greatest in this age group'.

Homes for the aged and the mentally and physically challenged were also identified as sites where students preferred to spend their MaD time. Other organisations included those that worked with communities of refugees, the homeless, and people living with HIV/AIDS. The reasons for selecting these sites were pragmatic in that they were easy to travel to, or students thought that these organisations were not well supported:

'It is close to where I live so I'm making a difference in my community. Charity begins at home ... They need as much help as they can get as they are shorthanded.'

'... there are less people who volunteer in that place [children's home] without wanting money ...'

'This school is for the mentally challenged children that cannot cope in mainstream schools. The students come from poor backgrounds and are subjected to various challenges within the community such as drugs, alcohol, unsafe sex.'

'They come from poor homes and many have weak support systems.'

Types of activities and challenges

The activities undertaken by students at the MaD sites included assisting with homework; feeding and caring for the disabled; occupational therapy activities; appropriate educational activities (e.g. tooth brushing, basic hygiene, back exercises); career guidance and motivation for senior pupils; reading and playing games with children; artwork; collecting books for a children's library; planting vegetable gardens and basic facility maintenance.

One of the challenges experienced by the groups included finding appropriate, common time to travel to sites. As students fund the activity themselves, some mentioned travel costs and obtaining resources for educational and other activities as a challenge. Some students found it difficult to connect with learners who were not as trusting:

'[It was difficult] getting pupils to be open with us during group work.'

'Some did not participate eagerly, especially girls in sporting activities.'

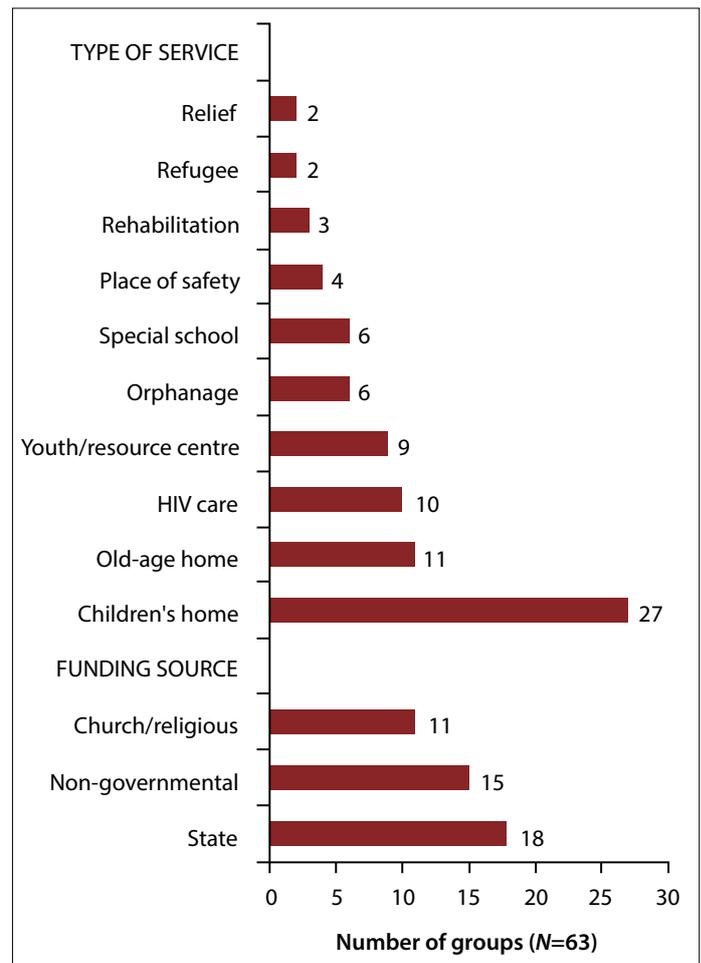


Fig. 2. Types of communities served by 1st-year medical students during the 2013 UKZN MaD.

Students' overall learning during MaD

Despite the challenges, many reported enjoyment during the MaD. They found that it was '... a humbling and huge learning experience' and that they could '... see children find happiness in life's simplest gifts'. The experience fostered team spirit among the students, who may have only known each other for a brief period. They reported being '... able to work together successfully and ... sharing responsibility to work with multiple personalities'.

Some students' interactions during the activity left a lasting impression. Some captured the ways in which they learned in the following entries:

'You learn to discover things by yourself, it opens [a] window of discovery – from the day we started looking for sites. Also teaches us – no situation is the same. Can't expect same results in every situation ... make the most of that situation.'

Another reflected on his/her personal development in taking responsibility during MaD:

'It promotes creative thinking – no one tells you what to do – put in [the] ocean and develop own skills – does not let you relax – there is no-one else to blame.'

The involvement in the community led some students to decisions to continue their participation at the chosen site beyond the initially stipulated period:

'Personally, I will continue to help out at this organisation in future because it is close to home and it provides self-fulfillment to know that you are making a difference in someone else's life.'

Some students realised the relevance of public health and how the experience had helped to value the perspectives of others:

'The public health lectures started to become real for me – the upstream and downstream factors.'

'We have views that are not always right, till we go and see for ourselves. "Go and see" and we can relate better to what they [are] going through.'

Discussion

This article was conceived in an attempt to explore the development of social accountability in a cohort of 1st-year medical students through engagement in an experiential learning activity. Through the various component steps of the MaD, students demonstrated an increase in responsibility, responsiveness and accountability for their own learning and the plight of people in a disadvantaged community.

Students took *responsibility* for themselves and others through the setting of high expectations to 'make a difference'. Group members combined their strengths to gain and negotiate entry to an organisation of their choice where they planned appropriate activities in response to needs identified by community stakeholders.^[13] They identified the sites, made contact and were involved in age-appropriate activities, including HIV/AIDS education in a community setting. Their engagement in early authentic community-based exposures increased the relevance of their learning, as these settings reflected a realistic picture of their future work environment.^[13]

Many students were not residents of the city and were initially unfamiliar with the environment in which they were to live and work for the duration of their medical education. The MaD allowed students opportunities to

work in small but diverse groups of peers who were not known to each other at first. The common experiences, however, facilitated the formation of strong bonds among peers as a result of mutual dependence on the strengths and skills of the diverse group.

The students also learned from real first-hand experiences and reflected on the social determinants of health and disease, especially HIV/AIDS, in the supportive group environments. The support of the peer group, as reported by Kubo *et al.*,^[14] can greatly assist collaborative learning; this has been demonstrated in this case study where students gained insight into both the subject matter and how their course was preparing them in a relevant manner for their future career.

Medical student educators find it challenging to guide the development of professionalism during medical students' lengthy period of training. This time-tabled activity helped students improve their communication with community stakeholders and understand their role as responsible caregivers. This educational experience facilitates early exposure to a community setting, which provided the experiences and foundations for learning and reflection on which to build in subsequent years. It also served as an important motivator to instil empathy in medical students in preparation for the future.^[15]

Various steps in the process encouraged *responsiveness*. Groups developed their service action plans in response to an identified need and in collaboration with their chosen organisation. Reflection on the planned activities occurred in group meetings and through journaling. The effectiveness of the plans and the relationship of these plans to the expected outcomes and challenges experienced enabled reflection on the outcomes, and the modification needed during the process. Responsive community engagement reinforces the real benefits to the communities and lends authenticity to students' learning in the setting.^[4]

The MaD boosted students' *accountability* (steps 2, 3, 7, 11, 12, 15, 16 and 17 – Fig. 1). They set and attended group meetings with their facilitators, kept a diary of time spent on MaD, submitted formal documents as evidence of the agreements made, kept registers of visits, showed evidence that the poster had been displayed at the site, and presented the poster to their peers, stakeholders and examiners.

Finally, the programme emphasised commitment to public service, showing that students were starting on a journey towards transformation, with many making commitments to maintain their contact, even after the completion of the project. While many made strides in understanding their own learning, others became aware of their future responsibilities and the needs of marginalised communities.

Conclusion

This case study demonstrated the guidance provided to 1st-year medical students to engage them in socially accountable service learning activities. Authentic early community-based experiences were offered in curriculum time and involved all students enrolled in the medical programme. Through the activity, the institution was able to engage communities in low-resource settings and at minimal cost to the faculty. The MaD boosted students' sense of responsibility and their responsiveness, and they learned aspects of accountability through engagement in the community. The students' awareness of disadvantaged communities and the social determinants of health increased and they committed to playing a more active role in making a difference in local communities.

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