

# SOCIAL ACCOUNTABILITY: INTRODUCING A NEW DIMENSION IN OPTOMETRIC EDUCATION

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## ABSTRACT

Optometry globally has undergone major developments yet poor eye health statistics remain. The World Health Organization (WHO) cites social accountability as key to addressing health challenges, urging the education sector to be more socially accountable and train according to the needs of society. A qualitative, descriptive study was used to determine the integration of social accountability within optometric education in sub-Saharan Africa. Eleven academic leaders and two student groups participated in key stakeholder interviews and focus group discussions respectively. Data was thematically analysed using interpretive content analysis. The study found that social accountability policies or practices were not formally integrated across any academic area in the represented optometry education programmes. Optometric education needs to embrace and implement social accountability at country, regional and global levels. The World Council for Optometry is urged to provide leadership in this process by developing a *Global Framework for Social Accountability in Optometric Education* to guide regions and countries towards the adoption of social accountability.

**Key Words:** optometric education; social accountability; World Council for Optometry; global framework; social determinants; eye care education.

## INTRODUCTION

The historical archives of the American Optometric Association document a series of developments, applications and dissemination of new knowledge, interspersed throughout the decades, in the fields of eye and vision care (AOA 2014). The profession of optometry has made unprecedented strides in expanding the scope of practice from originally focussing largely on correcting refractive errors and prescribing spectacles to optometrists in Oklahoma, New Mexico and Kentucky in the United States being legislated to perform minor surgery (Isaacs and Jellinek 2012; Nowak 2007). Additionally, technological advancements in optical equipment have progressed to an extent that previously would have been considered as science fiction.

India, it is reported, was the first country to implement a blindness control programme which focused on a model to address blinding eye disease (De Souza et al. 2012). Initiatives aimed at addressing blindness and vision impairment have gained momentum, as evidenced in the global commitment and formal approval of the *Global Action Plan for the Prevention of Avoidable Blindness and Visual Impairment 2014–2019 – Towards Universal Eye Health* (IAPB 2014) by the world health assembly in 2013. Further, optometry has progressed in receiving professional status and being enacted into health legislation in many parts of the world (Leasher and Pike 2009; HPCSA 2015; Padilla and Di Stefano 2009). Optometric education, too, has a long, rich history dating back to the first reported school, the Illinois College of Optometry, which began in 1872 (ICO 2014). These professional accomplishments would reasonably be expected to have translated into significant improvements in eye health care.

However, Woollard (2006, 301) lamented that ‘notwithstanding the considerable accomplishments of the 20<sup>th</sup> century in medicine, the gap between the wealthiest and the poorest and between the healthiest and the sickest of populations has sadly widened’. These health inequities are also identified by Frenk et al. (2010, 1923), who highlight the struggle health systems worldwide have in keeping up with the ever increasing health challenges. They suggest that this is largely because of ‘fragmented, outdated, and static curricula that produce ill-equipped graduates’.

The late Harvard philosopher John Rawls equated social justice with fairness (Harvard Press, 2001) whilst health inequities are defined as avoidable or modifiable differences in opportunity or in health that are unnecessary, unfair and unjust (Whitehead 1992; Jamieson et al. 2011). Ignoring modifiable health inequities perpetuates a socially unjust system and, in demonstrating accountability to the societies within which they exist, higher education

institutions are obliged to both note and respond appropriately to the existing inequities in health care.

Despite the numerous professional developments and long history of educating optometrists, the discipline cannot show a clear trajectory of development in alleviating global blindness and visual impairment. As recently as 2010, 65 per cent of the 32.4 million blind people and 76 per cent of the 191 million people with moderate to severe visual impairment (MSVI) worldwide had a preventable or treatable cause. The leading causes of blindness are cataract (33%) and uncorrected refractive error (21%), while for MSVI, the same two conditions are again leading causes (uncorrected refractive error (53%), cataract (18%)), both of which are readily and cost-effectively treatable (Bourne et al. 2013, 339; WHO 2013). These statistics cannot be viewed in isolation, however, as both blindness and visual impairment have been found to be inextricably linked to poverty (Jaggernath et al. 2014; Naidoo 2007; Khanna 2007). In a case-control study in three low-income countries, Kuper et al. (2008) highlighted the need for increased provision of cataract surgery to poor people, who are particularly vulnerable to visual impairment from cataract. The authors suggest that the link between poverty and health is central to the Millennium Development Goals (MDGs), as poverty can be both a cause and consequence of poor health.

Health professions such as optometry, by virtue of acquiring professional rights, are accountable to society for contributing to the eradication of the burden of eye health diseases, particularly plaguing poor nations, and for the provision of adequate numbers of optometrists. The huge absolute deficits in the numbers of optometrists serving populations in sub-Saharan Africa are exacerbated by the rural-urban divide. As a means to begin to address the human resource challenges facing eye health care in sub-Saharan Africa and to work towards meeting the Sustainable Development Goals (SDGs) and VISION 2020 goals, new optometry programmes are being set up in many countries in the region. However, there is little documented evidence that the existing, long standing optometry education programmes in sub-Saharan Africa have made a meaningful impact on the blindness and visual impairment statistics in their respective countries. Therefore, the concern remains that the new programmes, if modelled exactly on existing programmes, may fail to eradicate preventable blindness and vision impairment. There may be a need to transform optometry education as advised in the 2010 Lancet Commission, which indicated that the redesign of professional health education is necessary and timely and called for institutions to be 'socially accountable' (Frenk et al. 2010).

Social accountability in medical education has been defined by the World Health Organization as 'the obligation to orient education, research, and service activities towards

priority health concerns of the local communities, the region and/or nation one has a mandate to serve and that the priority health concerns must be defined jointly by government, health care organizations, health professionals and the public' (Boelen and Heck 1995). This call for medical schools to improve their response to health-related needs and challenges in society and to orient their research and service delivery activities accordingly was echoed by the 130 contributors to the Global Consensus for Social Accountability of Medical Schools (GCSA, 2010). Other authors (Frenk et al. 2010; Gibbs and McLean 2011; Sahni 1977) have made similar calls for the medical and nursing professions to embrace a global social accountability model. Boelen (2008) urged schools to go beyond pedagogical innovations and search for optimal integration of their graduates into health systems. Woolard (2006) strongly supported Boelen's appeal by emphasising that the 21st century challenge is not only to create skilled learners and competent practitioners, but practitioners capable of transmitting a profound ethos of service to the welfare of others. Dentistry (Davis et al. 2007) and pharmacy (Anderson et al. 2011) are other health professions that show some evidence, through scholarly articles, of engaging with the discourse of transforming education towards greater social accountability. There is however, a dearth of published literature on social accountability from sub-Saharan Africa across all health professions.

Additionally, an exhaustive literature search failed to reveal any evidence of organised optometry having engaged with the concept of social accountability. Unless the lack of evidence simply reflects poor reporting on this topic, the paucity of literature from the optometric education fraternity on such a critical paradigm suggests that this is an under-prioritised area that should be addressed. Accordingly, we undertook to investigate the extent to which social accountability policies and practices are integrated into optometric education in schools in sub-Saharan Africa.

## **METHODOLOGY**

A qualitative, descriptive study, framed in a phenomenology (Groenewald 2004) was used in this study. This method is useful in order to gather 'deep' information as well as perceptions through inductive, qualitative methods such as interviews and discussions, as represented from the perspective of the research participant (Lester 1999, 1). Academic leaders from 11 optometry schools across six sub-Saharan African countries (University of KwaZulu-Natal, University of Johannesburg, University of Limpopo, Free State University, Cape Peninsula University of Technology (South Africa), Universidade Lurio (Mozambique), Mzuzu University, Malawi College of Health Sciences (Malawi), Kwame Nkrumah University of

Science and Technology (Ghana), Kilimanjaro Christian Medical Centre (Tanzania), University of Gondar (Ethiopia)) participated in the study. Eleven heads (five females and six males) and three faculty administrative leaders, representing six of the nine countries offering optometry programmes at the time, were interviewed. Their respective terms of office in current leadership positions ranged from 10 months to 20 years with a mean of 7.2 years.

Semi-structured interviews were conducted telephonically, via skype or face-to-face in accordance with the participant's convenience. The semi-structured interviews utilized a set of key questions in the areas explored but were flexible in that the interviewer or interviewee could diverge in order to pursue an idea or response in more detail (Britten 1999, 11). All interviewees responded to the same questions which were formulated by the first author after reviewing, synthesising and adapting existing frameworks. These comprised the WHO's (2005) Social Accountability Framework, THENets (2011) Evaluation Framework for Socially Accountable Health Professional Education, the World Federation for Medical Education's Global Standards for Quality Improvement (WFME 2012), the South African Professional Board for Optometry and Dispensing Opticians Accreditation Framework (HPCSA 2014), the Conceptualization, Production and Utilization (CPU) Model (Boelen and Woollard 2009) and the World Council for Optometry (WCO) Global Scope of Practice Competency Standards Framework (WCO 2014). The frameworks and the first author's professional experience led to a focus on specific areas of enquiry and the set of key questions. The areas of enquiry concentrated on the core components an academic programme as guided by the literature (THENet 2011; HPCSA 2014; WCO 2014; Boelen et al. 2012; CHE 2004). These areas include governance, recruitment and selection, teaching and learning, curriculum design, staff development, research, community based training and student support. Each interviewee responded in relation to their own institution's or programme's application of social accountability policies and practices.

A sample of 63 students from the Malawi College of Health Sciences (MCHS) (training optometry technicians) and Mzuzu University (training optometrists) were purposively selected and invited to participate in student focus group discussions. The MCHS was chosen because it has a unique two-tier training model with two levels of exiting graduates. Academic heads of departments informed students of the details of the study and sought consent from students to be interviewed and engage in focus group discussions. Students from all levels of study present on the days of the interviews (n=63) participated in the study, 34 from MCHS and 29 from Mzuzu University. The small numbers of females in the programmes was reflected in the student sample which was made up of 51 male and 12 female participants. Half of the student sample came from rural areas and half from urban areas. The number of students in each year

of study in the two institutions ranged between 9 and 18 which made the participation of each class in a focus group manageable. The same core areas of enquiry used in the interviews with the academic leaders formed the guide for the student focus group discussions. The researcher made efforts to ensure that all students had equal opportunity to participate. Data was recorded in the form of research notes taken by the researcher as well as audio recordings where feasible. The researcher transcribed the recordings and then collated and coded the notes according to the major areas of enquiry in preparation for analysis (Patton 2002). Collated data was then grouped and iteratively analysed in order to identify emergent themes. As this was a qualitative study, the goal was to identify and understand themes rather than to quantify the number of times a theme was reported (Davis et al. 2007, 1009).

## RESULTS

The main finding to emerge from the results of the study, as shown in Table 1, was that none of the represented institutions had formal policies and processes that specifically addressed social accountability at either institutional or programme level. Although a few institutions engaged in some social responsibility and socially responsive practices, none of the participating institutions met the majority of the social accountability criteria as defined in the WHO's social accountability framework (Boelen and Heck 1995), the CPU Model as defined by Boelen and Woolard (2009) or the Global Consensus for Social Accountability of Medical Schools (2010).

**Table 1:** Reported social accountability measures at represented institutions

Social accountability measures in place	Number of institutions
A specific policy on social accountability.	None
Community nominated representatives serve on governance structures of the university/ programme.	None
Programme leadership have <i>designated</i> positions on community based eye health structures or boards of public health institutions.	None
Community based up-skilling programme to help educationally disadvantaged secondary school students prepare towards gaining access into the optometry programme.	None
Access policy with stratified admission criteria specifically addressing students from marginalised sectors of the community.	Two
A bridging programme for ill-prepared students to undertake to improve results before applying for health sciences/optometry.	One
Communities selecting and funding students in the optometry programme to meet their respective community eye health needs.	Four
Programme development and design informed by studies/surveys to determine the general and eye health determinants in the country.	None
Students and staff have in-depth understanding of national health policies, national and regional health structures and systems.	None
Involvement of community stakeholders, students, graduates, industry and graduate employers in designing curriculum content.	None
Curriculum reflects priority general and eye health and social needs and is aligned to the national health system.	None

<b>Social accountability measures in place</b>	<b>Number of institutions</b>
Formalized community partnerships with students commencing community based clinical education in the first year of training	One
Students trained throughout programme in multidisciplinary/ inter-professional health teams and in partnership with community structures.	None
Academics representative of and specifically recruited from local communities.	None
Academic reward system includes measures of adoption of principles and practices of social accountability.	None
Research policy articulates commitment to engage in Essential National Health Research.	None
Formal continued engagement with community based organisations to determine the health and social challenges requiring research and interventions.	None
Evidence of research produced/published contributing to health policy, increased access and greater cost effectiveness of eye care services in the country.	None
Formal system for employees/alumni to provide feedback into the academic programme.	One
Periodic review of overall impact of graduates in the society mandated to serve.	None

Students and academic leaders felt that implementation of the initiatives listed in Table 1 would strengthen the academic programme and contribute to the overall improvement in eye health care in their respective countries. Other issues emanating from interviews and focus group discussions were:

### **Programme development**

The schools represented in this study were not developed in response to epidemiological studies being conducted to determine the extent and impact of vision and eye health problems. New programmes have been introduced, in response to a perceived lack of general eye care services by governments, in partnership with NGOs, international and local higher education institutions and funding agencies.

### **Governance**

Institutions reported having community representation on university councils but highlighted that they are generally not nominated by the communities that the graduates will serve. Participants felt that communities should elect members to represent their needs on university structures and that academic leaders in optometry should serve on community health structures and boards of local health institutions to enhance awareness of their programmes. One student stressed that ‘the word optometrist will not ever have been heard by anyone in my community’.

### **Curriculum**

Academic leaders of new optometry schools reported adopting internationally designed programmes or utilizing the Global Competency Standards (WCO 2014) of the WCO for their curriculum content whilst one from a well-established programme stated ‘we merely inherited

a curriculum adopted from a British model many years ago'. Students expressed the view that the curriculum does not fully equip them to practice within their local contexts. In the words of one, 'some of the conditions that lecturers spend much time teaching us will never be seen in this country and others, more relevant to us, are not included in the course'. The majority of lecturers in new programmes are foreigners.

### **Student recruitment and student preparedness**

Only two programmes used a stratified recruitment policy that can be designed to address inequities based on gender, race, social status or geographic criteria. Recruitment initiatives were largely limited to urban areas. Academic leaders reported that poor secondary school results were a huge barrier to access. One academic leader stated that 'increasingly, applicants arrive from secondary school poorly prepared for the academic rigour of the optometry programme'. The poor standard of mathematics and science at schools were reported, by both academics and students, as being most problematic. An academic leader in Malawi stressed that 'teaching ophthalmic optics is such a frustrating challenge for lecturers as many students have difficulty performing simple mathematical tasks such as addition and subtraction'. Only the University of KwaZulu-Natal in South Africa reported having a bridging programme to help educationally disadvantaged students upgrade their mathematics and science knowledge before entering the optometry programme. In countries such as Malawi, female students reported cultural and academic barriers as being the reasons for their low representation in health science programmes.

### **Knowledge of national health needs**

Neither academic leaders nor students reported being aware of what the major health and social imperatives were in their respective countries. None of the participants was ever involved in national research projects with other sectors (policy makers, service providers, environmental health and other community organisations) to ascertain this information.

### **Community based training**

There was a lack of comprehensive formalized contracts between optometry departments and communities. Clinical training is conducted in professional groups and not in multidisciplinary/inter-professional integrated teams. Although all universities send students out to community clinics to provide clinical services, only UniLurio students in Mozambique engage in home-based community outreach programmes. In this 'One Student One Family



Project', students discuss eye care issues with people in their homes. None of the other institutions actively engaged with community committees/households outside the clinic nor has any programme signed a formal social contract with local communities.

### **Programme impact in the community**

Only one (Cape University of Technology in South Africa) of the 11 schools represented reported getting formal feedback from the employers of graduates, a practice important to measuring the relevance of programmes.

### **Research**

None of the academics have undertaken and published research that has been used by government in eye care policy development. The research agenda is not informed by regional or national eye health priorities, with no institution having contracts with government to conduct research that will inform planning.

## **DISCUSSION**

The World Health Report (2006) states that health indices on the African continent are amongst the worst in the world and that shortfalls of health workers are greatest in sub-Saharan Africa (GHW 2003). According to Boelen (2008), the roots of ill health lie in poverty, discrimination, lack of education and the maldistribution and misuse of scarce resources. He asks 'Which responsibilities should medical schools shoulder to contribute to the development of healthier societies?', and self-answers by declaring that being aware of these overarching issues is the first step towards social accountability.

This study has served to emphasize the need for higher education in Africa, through inter-sectoral collaboration, to more closely engage with communities and offer programmes relevant to the health and human resource needs of their respective reference populations. Although new education programmes in optometry will help to increase the number of optometrists addressing Africa's eye problems, none of the institutions included in the study reported having a social accountability policy to address injustices and inequities in eye health care. Equity used in the higher education context can be defined as equality of opportunities: to enrol in higher education institutions (equity of access) and to complete higher education studies (equity of results) (Kodelja 2014). Thus, to meaningfully address inequities in sub-Saharan Africa, institutions offering optometry programmes should ideally apply the principle of social justice in all institutional policies and procedures from recruitment through to post-graduation. A

policy on social accountability should be adopted and included in institutional vision and mission statements and mechanisms put in place to make staff and students aware of and to explicitly practice social accountability at all levels of training.

The results of the study highlight that the participating countries had not conducted any national epidemiological studies before deciding to introduce their optometry programmes. It is imperative that schools initiate and/or participate in studies that shape national health and social profiles. The lack of such studies could also explain why academic leaders and students reported not being informed about what the major health and social determinants were. For optometry programmes to align to priority health concerns, it is important that students and academics be integrally involved in studies undertaken in the communities served. Results of these studies have the potential to inform the human resource needs, the numbers of education programmes required in the country, curriculum content and clinical programme design.

Academic leaders reported that although institutions may have community members serving on university councils, they are generally not nominated by the communities that the graduates will serve. Communities should be invited by the university to elect members who will represent their needs on university committees. Recruitment could be via calls in national and regional newspapers and engagement with community based civic organisations to nominate representatives. Additionally, academic leaders in optometry could serve on community health structures and boards of local health institutions to enhance the programme's impact in the community. These initiatives will help to increase the awareness of the profession within the local communities, addressing the concern raised by students. In being more aware, the community may recognize the value of having trained professionals serving them, resulting in study bursaries for students from within their respective communities.

The adoption of internationally designed curricula or Global Competency Standards (WCO 2014) was reported by all schools. A review of this framework reveals little on social accountability, making its adoption without amendments inappropriate for schools in this study. In 2010, the Independent Global Commission on Education of Health Professionals for the 21st Century noted that, in view of the huge diversity of health and educational systems, the challenge is to adapt competency-based goals for local effectiveness rather than to adopt models from other contexts that might not be relevant (Frenk et al. 2010, 1923). Therefore, whilst benchmarking is critical in a global context, it is important that programmes be informed by the priority health concerns which are jointly defined by governments, health care organisations, health professionals and the public (Boelen and Woollard 2009). Additionally, cognisance must also be taken of the educational background of learners, and appropriate teaching and learning

strategies should be adopted to maximize the student's learning potential and accommodate pre-tertiary educational deficiencies.

This research challenges universities to redefine the exit-level competencies of the graduates that they need to produce. Optometry programmes should ensure that the teaching and learning is informed by the knowledge, competencies, clinical skills and attributes that will enable graduates to be relevant to the African health context. The reality is that the health and social contexts within which graduates from Africa are required to work differs significantly from that of developed nations. The majority will enter the public health sector with poor infrastructures, minimal resources, working in isolation as the only professional delivering eye care services and serving impoverished communities. In stark contrast, the programmes in developed nations are designed for graduate optometrists who will work predominantly in private practice, within an established health system that is usually well resourced, utilising clinical protocols tested in those countries and, in most instances, integrated into an existing eye care team with all its associated support systems. These differences explain the call by THEnet (2011) for the programme design and curricula to reflect the priority health and social needs of the local community.

Additionally, as raised by students, neglecting local health and social needs will lead to graduates being largely ill equipped for their work, lacking critical appropriate knowledge and skills to practice efficiently in their own countries. The reported hospi-centric focus of clinical training limits students' understanding of the broader health and social determinants that impact on patients' general and ocular health. The UniLurio programme could be considered for adoption by other institutions as it serves to provide an opportunity for students to gain insight into other factors which may impact on the health of the family to which they are assigned.

The disjuncture of the training with the needs of the communities served may also contribute to graduates choosing to emigrate so as to practice in environments more closely aligned with the training they received. The retention of graduates is an ongoing challenge and it is often the reality that poor countries develop graduates at great expense for export to global markets (Mills et al. 2011). In a roundtable discussion of health sciences Deans, the Dean of the University of the Philippines-Manila School of Health Sciences declared that 'in the end, the school's success will be measured by the number of graduates serving in areas of most need and the quality of service they provide' (Neusy and Palsdottir 2011, 6). The fact that only one of the participating schools obtained formal feedback on the impact of their graduates within the communities does not allow measurement of the institutions' success in this regard.

To strengthen local human resource capacity, institutions should attempt to retain high

performing local students to be developed as faculty members as done in Mozambique. This will begin to provide sustainable academic capacity within the country and address the issues raised by students of lecturers sometimes spending inordinate periods lecturing on information which is not relevant to their respective contexts.

The finding that none of the academics have conducted research to influence government policy reflects the inherent lack of focus on social accountability within the respective programmes. If optometry is to influence policy and practice in relation to eye health, then academic institutions should enter into social contracts with governments and industry. An indicator of success, according to Boelen et al. (2012), will be research funds that are specifically earmarked to explore alternative ways for the school to contribute to improved quality, equity, relevance and cost effectiveness in the respective health care system. Additionally, by participating in essential national health research projects involving relevant community stakeholders, schools of optometry can more closely align their programmes to meet jointly identified priority health concerns.

Programme review is limited, as demonstrated by the fact that only one of the 11 schools represented received formal feedback from the employers of graduates. This is an important practice to measure a programme's impact in the community. The feedback from the employers could provide information on relevance of curriculum, knowledge and clinical competence of graduates as well as their ability to understand and work at community level. Advisory committees, as utilized at the Cape University of Technology in South Africa, could comprise of representatives from community organisations, hospitals, clinics, employers as well as other relevant health and social services disciplines e.g. occupational therapists and social workers. In the absence of obtaining formal feedback on the impact of their graduates, institutions are thus unable to effectively measure or report on their respective programme's success in this regard.

The engagement of the participating institutions with their respective communities was minimal. For example, institutions typically failed to conduct upskilling programmes for entering students, despite both students and academics reporting that the poor academic standards in secondary schools was a challenge. If resources are not available to assist learners before they reach university, then a bridging programme such as that of the University of KwaZulu-Natal could be considered for adoption as a pre-admission programme. This will help to ensure that learners who attended schools that were academically disadvantaged are given an opportunity to improve their mathematics and physics results. Improving the results in these subjects, core to optometry education, will enhance the chances of getting into the programme

and the chances of success when admitted. Community engagement programmes could also raise awareness of barriers to access to optometry education.

This study has highlighted the lack of a coherent social accountability policy framework or evidence of practices across institutions offering optometric education in sub-Saharan Africa. However, the literature review also revealed that the adoption of the concept of social accountability in optometric education globally appears to have been very slow, as compared to other health professions such as medicine where, the past two decades have witnessed nothing short of a major revolution in medical education (Gibbs and McLean 2011, 620).

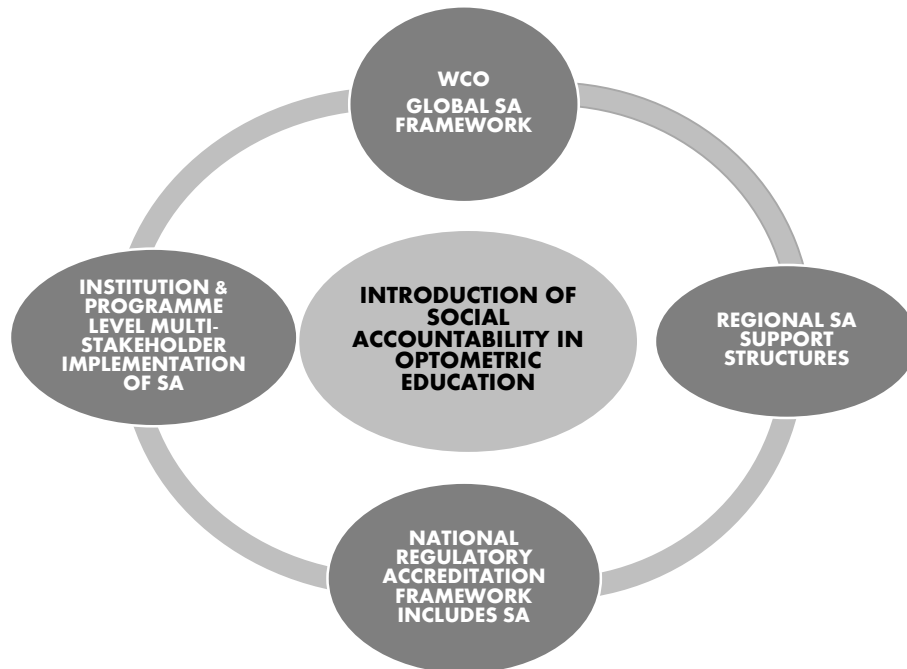
It is thus necessary to extend the call for the transformation of optometric education beyond the sub-Saharan African schools that participated in this study. A suggested way forward will be for stakeholders at all levels of optometric education to make the initial commitment to heed to the 1995 WHO call for transformation and develop strategies for implementation of social accountability in accordance with their respective roles and mandates.

The WCO, as the global co-ordinating structure, could provide leadership through facilitation, advocacy and broad stakeholder engagement. The process may be geared towards the development of a *Global Framework for Social Accountability in Optometric Education*, underpinned in the four values of healthcare: relevance, quality; cost effectiveness and equity (Boelen and Heck 1995). Regional organisations under the WCO can provide input into the development of the global framework yet have the freedom to tailor aspects as required when implementing it on their respective continents. Organised optometry at country levels should provide strong leadership and support to their respective membership in the quest to transform the roles of eye care education institutions.

Optometry schools themselves will need guidance to introduce the concept of social accountability. It is suggested in medicine (Boelen 2008, 52) that schools could take three steps towards being recognised as socially accountable. First, the school must provide ample and appropriate learning opportunities for students to grasp the complexity of socio-economic determinants of health by adopting a model of practice that integrates the biomedical aspects of disease into a holistic approach to health and well-being. Second, it must share the responsibility for ensuring equitable and quality health service delivery to an entire population within a geographical area. Public health and health services research should be declared priority. Third, the school must recognise accountability as a mark of excellence.

As universities strive for excellence, it is important to remember that an educational institution that fully assumes the position of a responsible partner in the health care system and is dedicated to the public interest, deserves the label of excellence (Boelen and Woollard 2009,

887). Therefore, national accreditation bodies too should amend their evaluation criteria to assess the school's application of social accountability in all aspects of the programme. Figure 1 shows initiatives that will need to be put in place to contribute to the introduction of social accountability into optometric education.



**Figure 1:** Supportive initiatives required to introduce social accountability (SA) into optometry education

## CONCLUSION

Although universities may recognize the need to align their programmes towards priority health needs of society, there is little evidence of its integration into their respective optometric education programmes. This research article serves to advance the adoption of social accountability in optometric education as a strategy to address the global eye care challenges. It further urges new optometry programmes being introduced in sub-Saharan Africa to take the bold step of embracing the principles of social accountability, rather than attempting to mirror existing western education models. This approach, underpinned by a theoretical framework of social justice, may help to ensure a meaningful, measurable impact on eye health and ultimately improve the lives of the mainly poverty stricken communities that many graduates are mandated to serve.

Additionally, long standing optometry education programs can engage in reflective exercises that assess the impact of both their programmes and graduates on the communities served and, where necessary, make the paradigm shifts needed to transform themselves, giving greater priority to social accountability. Globally, organized optometry is called upon to follow

the example of other health professions and drive the agenda for engagement in the discourse of embedding social accountability into professional education and practice.

## REFERENCES

- American Optometric Association. 2014. Optometry archives. <http://fs.aoa.org/optometry-archives/optometry-timeline.html> (accessed 20 December 2014).
- Anderson, C., T. Brock, I. Bates, M. Rouse, J. Marriott, H. Manasse, B. Futter, S. Bhojraj, A. Brown and D. Gal. 2011. Transforming Health Professional Education. *American Journal of Pharmaceutical Education* 75(2): Article 22.
- Boelen, C. and J. E. Heck. 1995. Defining and measuring the social accountability of medical schools. Geneva: World Health organization. [http://whqlibdoc.who.int/hq/1995/WHO\\_HRH\\_95.7.pdf](http://whqlibdoc.who.int/hq/1995/WHO_HRH_95.7.pdf) (accessed 3 January 2015).
- Boelen, C. 2008. Social accountability: Medical education's boldest challenge. *MEDICC Review* 10(4): 52.
- Boelen, C., S. Dharamsi and T. Gibbs. 2012. The social accountability of medical schools and its indicators. *Education for Health* 25(3): 180–194.
- Boellen, C. and B. Woollard. 2009. Social accountability and accreditation: A new frontier for educational institutions. *Medical Education* 43: 887–894.
- Bourne, R. R. A., G. A. Stevens, R. A. White, J. L. Smith, S. R. Flaxman, H. Price, J. B. Jonas, J. Keeffe, J. Leasher, K. Naidoo, K. Pesudovs, S. Resnikoff and H. R. Taylor. 2013. Causes of vision loss worldwide, 1990–2010: A systematic analysis. *Lancet Glob Health* 1: e339–49.
- Britten, N. 1999. Qualitative interviews in healthcare. In *Qualitative research in health care*, ed. C. Pope and N. Mays, 11–19. 2nd ed. London: BMJ Books.
- Council on Higher Education/Higher Education Quality Committee. 2004. *Framework for programme accreditation*. Pretoria. Council on Higher Education.
- Davis, E. L., D. C. L. Stewart, M. Guelmann, A. G. Wee, J. L. Beach, K. M. Crews and R. S. Callan. 2007. Serving the public good: Challenges of dental education in the twenty-first century. *Journal of Dental Education* 71(8): 1009–1019.
- De Souza, N., Yu Cui, S. Looi, P. Paudel, L. Shinde, K. Kumar, R. Berwa, R. Wadhwa, V. Daniel, J. Flanagan and B. Holden. 2012. The role of optometrists in India: An integral part of an eye health team. *Indian J. Ophthalmol* 60(5): 401–405.
- Frenk, J., L. Chen, Z. A. Bhutta, J. Cohen, N. Crisp, T. Evans, H. Fineberg, P. Garcia, Y. Ke, P. Kelly, B. Kistnasamy, A. Meleis, D. Naylor, A. Pablos-Mendez, S. Reddy, S. Scrimshaw, J. Sepulveda and D. Serwadda. 2010. Health professionals for a new century transforming education to strengthen health systems in an interdependent world. *Lancet* 376(9756): 1923–1958. doi: 10.1016/S0140-6736(10)61854-5. Epub Nov 26. (Accessed 1 January 2015).
- Gibbs, T. and M. McLean. 2011. Creating equal opportunities: The social accountability of medical education. *Medical Teacher* 33: 620–625.
- Global Consensus for Social Accountability of Medical Schools. 2010. Global consensus for social accountability of medical schools: Position statement. <http://healthsocialaccountability.org/> (accessed 28 December 2014).
- Global Health Workforce Alliance. 2013. Global health workforce crisis: Global key messages. [http://www.who.int/workforcealliance/media/key\\_messages\\_2014.pdf](http://www.who.int/workforcealliance/media/key_messages_2014.pdf) (accessed 1 January 2015).
- Groenewald, T. A. 2004. Phenomenological research design illustrated. *International Journal of Qualitative Methods* 3(1): Article 4.
- Health Professions Council of South Africa. 2014. Framework for accreditation of optometric education. [www.hpcsa.co.za](http://www.hpcsa.co.za) (accessed 16 December 2014).

- Health Professions Council of South Africa. 2015. <http://www.hpcsa.co.za/PBOptometry/Rules> (accessed 11 January 2015).
- Illinois College of Optometry. 2014. About Illinois. <http://www.ico.edu/about-ico/> (accessed 26 December 2014).
- International Association for the Prevention of Blindness. 2010. Global Action Plan 2014–2019. ‘Universal Eye Health’ – the WHO Global Action Plan. <http://www.iapb.org/advocacy/who-action-plan> (accessed 11 January 2015).
- Isaacs, S. and P. Jellinek. 2012. Accept no substitute: A report on scope of practice. *The Physicians Foundation*: 7.
- Jaggernath, J., L. Øverland, P. Ramson, V. Kovai, V. F. Chan and K. S. Naidoo. 2014. Poverty and eye health. *Health* 6: 1849–1860. <http://dx.doi.org/10.4236/health.2014.614217> (accessed 6 March 2015).
- Jamieson, J., D. Snadden, S. Dobson, H. Frost and S. Voyer. 2011. *Health disparities, social accountability and post graduate medical education*. Members of the FMEC PG consortium.
- Khanna, R., U. Raman and G. Rao. 2007. Blindness and poverty in India: The way forward. *Clinical and Experimental Optometry* 90: 406–414.
- Kodelja, Z. 2014. How is equity in higher education understood? <http://www.equinet.info/events/equnetceps-symposium/abstracts/how-is-equity-in-higher-education-understood/> (accessed 7 August 2014).
- Kuper, H., C. Eusebio, W. Mathenge, Z. Wadud and A. A. Foster. 2008. Case-control study to assess the relationship between poverty and visual impairment from cataract in Kenya, the Philippines, and Bangladesh. *PLoS Med* 5(12): e244.
- Larkins, S. L., R. Preston, M. C. Matte, I. C. Lindemann, S. Samson, F. D. Tandinco, D. Buso, S. J. Ross, B. Palsdottir and A. Neusy. 2013. Measuring social accountability in health professional education: Development and international pilot testing of an evaluation framework. *Medical Teacher* 35: 32–45.
- Leasher, J. L. and S. Pike. 2009. Optometric care within the public health community. Section 5. *Optometry in the Americas*. Old Post Publishing, NY 12918.
- Lester, S. 1999. An introduction to phenomenological research. Taunton UK, Stan Lester Developments. [www.sld.demon.co.uk/resmethy.pdf](http://www.sld.demon.co.uk/resmethy.pdf) (accessed 28 February 2015).
- Mills, E. J., S. Kanters, A. Hagopian, et al. 2011. The financial cost of doctors emigrating from sub-Saharan Africa: Human capital analysis. *BMJ* 343: d7031.
- Neusy, A-J. and B. Palsdottir. 2011. Roundtable: Revisiting innovative leaders in medical education. *MEDICC Review* 13(3): 6–11.
- Naidoo, K. 2007. Poverty and blindness in Africa. *Clinical and Experimental Optometry* 90: 415–421.
- Nowak, J. S. 2007. NM ODs can perform minor surgical procedures. *Primary Care Optometry News*. <http://www.healio.com/optometry/regulatory-legislative/news/print/primary-care-optometry-news/%7Bb6ab9e63-72a7-4db9-a0aa-3d1b8b13a815%7D/nm-ods-can-perform-minor-surgical-procedures> (accessed 4 January 2015).
- Oduntan, O. A., K. P. Mashige, F. E. Kio and S. B. Boadi-Kusi. 2014. Optometric education in Africa: Historical perspective and challenges. *Optometry and Vision Science* 91(3): 359–365.
- Padilla, M. A. and A. F. Di Stefano. 2009. A snapshot of optometry around the world. *Review of Optometry* 46: 06.
- Patton, M. Q. 2002. *Qualitative research and evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage Publications.
- Rawls J. 2001. *Justice as fairness. A restatement*, 43–44. Harvard University Press, Cambridge. Mass.
- Sahni, A. 2005. Social accountability of educational institutions. *Health Administrator* XVII(1): 86–87.
- The Training for Health Equity Network. 2001. *THEnet’s Social Accountability Evaluation Framework*



- Version 1. Monograph 1.* 1st ed. The Training for Health Equity Network.
- Whitehead, M. 1992. The concepts and principles of equity in health. *Int. J. Health Serv.* 22: 429–445.
- WHO *see* World Health Organization.
- Woollard, R. F. 2006. Caring for a common future: Medical schools' social accountability. *Medical Education* 40: 301–313.
- World Federation for Medical Education. 2015. Global standards for quality improvement in basic medical education. <http://wfme.org/standards/bme/78-new-version-2012-quality-improvement-in-basic-medical-education-english/file> (accessed 6 March 2015).
- World Health Organization. 1995. *Defining and measuring the social accountability of medical schools.* World Health Organization, Geneva.
- World Health Organization. 1995. *Reorientation of medical education and medical practice for health for all.* Resolution 48.8. Resolution of the World Health Assembly. WHO Geneva.
- World Health Organization. 2006. *The world health report 2006: Working together for health.* ISBN 92 4 156317 6 (NLM classification: WA 530.1).
- World Health Organization. 2008. *Commission on the social determinants of health, closing the gap in a generation: Health equity through action on the social determinants of health.* Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization.
- World Health Organization. 2013. World Health Statistics 2013: Global Health Indicators Part 111. [http://www.who.int/gho/publications/world\\_health\\_statistics/EN\\_WHS2013\\_Part3.pdf?ua=1](http://www.who.int/gho/publications/world_health_statistics/EN_WHS2013_Part3.pdf?ua=1) (accessed 11 January 2015).
- World Optometry. 2005. Global Competency Based Model of Scope of Practice of Optometry. [http://www.worldoptometry.org/filemanager/root/site\\_assets/governance\\_documents/global\\_competencies\\_model.pdf](http://www.worldoptometry.org/filemanager/root/site_assets/governance_documents/global_competencies_model.pdf) (accessed 15 December 2014).