

REFLECTIVE PRACTICE

Holistic Health, Disadvantage, Higher Education Access and Success: A Reflection

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Abstract

The objective of this article is to reflect upon the relationships amongst health, disadvantage, educational opportunities, and higher education access and success. This is a reflective article taken from the literature review of a doctoral study on the relationship between health, access to, and success within, higher education. The importance of health in education and the practical implementation of programmes resulting in enhanced health and academic success amongst higher education students is reviewed. Literature for the doctoral study on which this reflection was based was sourced predominantly from Pub-Med Central, the U.S. National Institute of Health National Library of Medicine and The South African South-East Academic Library Services. From this discussion, the rationale for a holistic health promotion programme within the higher education setting, for students from socioeconomically deprived backgrounds, is given. The problem of educational failure of students from socioeconomically disadvantaged backgrounds in higher education could be lessened by instituting a holistic health promotion programme within the first year of study. Evidence suggests that such a programme would have both health and educational advantages.

Keywords

disadvantage; health; higher education; holistic health promotion; student success

Introduction

Educational opportunities have been greatly expanded globally, and there is no more powerful a force for the eradication of poverty and the deepening of sustainability than to build a better future for all (UNESCO, 2015). Unfortunately, educational attrition, especially at the tertiary educational level, is a global problem that increases unemployment, decreases economic stability and compromises sustainable development (UNESCO, 2015). This problem of educational attrition compromises especially the middle- and lower-income countries who cannot afford the wasted expenditure and curtailed development arising from it. Research

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findings indicate that education confers better health which, in turn, increases educational opportunities (Cohen, Rai, Rehkopf & Abrams, 2013). An individual's level of health, in turn, affects educational development (Ansari & Stock, 2010). The relationship between holistic health, access to and outcomes of educational development is the focus of this reflective article, which has been taken from a doctoral study into the relationship between health and educational outcomes of disadvantaged students. All attempts to mitigate the problem of educational attrition and promote global educational and economic success benefits all concerned, from the individual learner through to regional, national and global socioeconomic well-being and long-term stability. For the purposes of this reflection health takes the holistic definition of the World Health Organization (WHO) in that:

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition. (World Health Organization, 2006)

The purpose of this reflection is to draw attention to the fact that in the current practice in higher education, educational opportunities may have been adversely affected due to compromised levels of health, both in the wider and localised contexts. This results in high educational attrition amongst those who are disadvantaged, resulting in further socioeconomic disadvantage. The authors put forward the view that improving health in higher education students may improve both health and education outcomes.

A discussion of the overall relationship between health and education globally, beginning with the link between socioeconomic disadvantage and poor health, will follow. These circumstances translate into insufficient education which, in turn, leads to the inability to make appropriate health-related decisions, or inability to improve one's overall level of health and lifestyle circumstances. Additionally, there are complex health-related problems experienced by populations in socioeconomic developmental transition, which applies to Southern Africa in general and South Africa in particular (Allender, Wickramasinghe, Goldacre, Matthews & Prasad, 2011; Campbell & Campbell, 2007; Day et al., 2014; Williams, Grier & Seidel, 2008). These issues are discussed before moving on to how such transitional health-related problems affect the population in the local area of the Eastern Cape Province.

The authors continue with a discussion of how we mitigate this problem and the relationship between education and health; in addition, how health promotion and better health can translate into academic success, will be reviewed. Thereafter, the outcome of studies relating to the impact of health on education within the Southern African region will be discussed. To conclude, the authors rationalise the use of a holistic health promotion programme in the first year of higher education learning to promote both health and academic success. Literature for the doctoral study on which this reflection was based was sourced predominantly from Pub-Med Central, the U.S. National Institute of Health National Library of Medicine and The South African South-East Academic Library Services.

The Relationship amongst Health, Education and Disadvantage in the International Context

The Millennium Development Goals (MDGs) in respect of health, which were agreed upon by the United Nations member states, were supposed to be met by 2015; however, for most of the lower-income developing countries and many of the middle-income countries, including South Africa, many of these goals have not been met (Buse & Hawkes, 2014; Day et al., 2014; Shaikh, 2014). For some lower-income states and in poorer areas of wealthier nations, the goals are unlikely to be met in the near future (Shaikh, 2014). Additionally, the MDGs did not set specific goals for non-communicable diseases (Buse & Hawkes, 2014). In developing nations and poorer areas of middle-income countries, the finance, manpower and technology required to support a health system that has a disease-focused approach, are far less than those of developed nations, which have greater resources (Shaikh, 2014). In the opinion of Shaikh, a re-think is perhaps required, in terms of how health-related resources are utilised (Shaikh, 2014). Shaikh maintains that a more holistic and decentralised approach to community health may serve to improve well-being sufficiently for it to positively affect the other MDGs, such as improvement in education, HIV management and the eradication of poverty (Shaikh, 2014). Day and her colleagues (Day et al., 2014) contend that, with respect to South Africa, what is needed to maintain the MDGs met so far, and to meet those unmet goals with respect to health, is a post-2015 workable disease-prevention plan.

Although compromised levels of health in childhood is often a consequence of socioeconomic disadvantage; repeated illness and chronic conditions during childhood and adolescence have lasting educational and socioeconomic effects (Jackson, 2009). Those with health-related problems may be disadvantaged with respect to receiving adequate education (Cohen et al., 2013). Young people from disadvantaged backgrounds, in particular, those from homes where there is financial hardship, or whose parents have not had a tertiary education, do not have an equal chance of entering university due to socioeconomic-related conditions, and compromised levels of health and nutritional status (Baraldi & Conde, 2014; Guimaraes, Werneck, Faerstein, Lopes & Chor, 2014; Jackson, 2009; Kestilä, Martelin, Rahkonen, Härkänen & Koskinen, 2009; Koivusilta, West, Saaristo, Nummi & Rimpelä, 2013; Labadarios et al., 2011). Moreover, when students from deprived backgrounds do attain sufficient secondary education to permit entry into the higher education environment, their participation is compromised due to socioeconomic and health-related disadvantages (Jackson, 2009; Scott, Yeld & Hendry, 2007; Stephens, Hamedani & Destin, 2014).

Conversely, students who enter higher education and succeed, tend to come from a background where parents have been better educated, have skilled employment and more positive health behaviours (Jackson, 2009; Kestilä et al., 2009; Koivusilta et al., 2013; Stephens et al., 2014). Ultimately, this leads to better health and higher than average living conditions (Jackson, 2009; Kestilä et al., 2009; Koivusilta et al., 2013; Stephens et al., 2014). Getting learners into education is not enough; the playing field has to be levelled and learners, regardless of socioeconomic background, must be aided to succeed in the

compulsory and post-compulsory education system if the long-term global goals of education, development and sustainability are to be achieved (UNESCO, 2015).

The link between disadvantage and poor health

In poverty-stricken and under-resourced developing countries where most of the population lacks access to higher education, there appears to be a strong link between poverty, lack of education and chronic disease (Ignacio et al., 2015). This problem, however, is not a new one: from as early as 2002 the links between lifestyle-related behaviour, disease and poverty were identified in the WHO report of that year (World Health Organization, 2002). The main factors that were linked to poor health were those of malnutrition (including under-nutrition, obesity and nutrition-related hypertension), unsafe sex, unsafe water consumption, insufficient hygiene, indoor air pollution, tobacco and alcohol consumption (World Health Organization, 2002). These same factors were directly linked to both poor health and poverty because of poor choices regarding expenditure and reduced income due to poor health (World Health Organization, 2002). The catchphrase “enemies of health, allies of poverty” was coined in the report (World Health Organization, 2002, p. 8). In a report the following year, inappropriate dietary patterns and an increase in nutrition-related diseases of lifestyle were identified as a major health threat to both developed and developing countries, which the developing economies could not afford (World Health Organization, 2003). This is due, in part, to governmental inability to fund health-promotion programmes adequately in developing economies (World Health Organization, 2003, 2013). Given that these very same countries, in general, have the lowest household incomes and the largest out-of-pocket health expenses, in terms of the WHO, this situation constitutes ‘catastrophic health expenditure’ exacerbating existing poverty (World Health Organization, 2013, pp. 13, 18).

In developed countries, the poorer sectors of society may not fare better than those in developing countries, as they tend towards health-compromising behaviour, which negatively affects education and further compromises socioeconomic status (Koivusilta et al., 2013). A study conducted in Finland found that young people from single-parent families, whose parents had not attained higher education, demonstrated higher levels of health-compromising behaviour (Koivusilta et al., 2013). These adolescents also fared less well in the educational system (Koivusilta et al., 2013). This, in turn, perpetuates a lower socioeconomic standard, and further health-compromising behaviour in adulthood (Koivusilta et al., 2013). A study conducted in Spain revealed similar results amongst adults of lower socioeconomic status, who were found to have higher rates of Non-Insulin Dependent Diabetes Mellitus (NIDDM) and Cardiovascular Disease (CVD) than those who were educated and regularly employed (Palomo et al., 2014). An identical situation played out in New Zealand, where the poorer sectors of society with lower socioeconomic status and financial restraints had poor diets, poor lifestyle and poor health outcomes in the long term (Wilson, Gearty, Grant, Pearson & Skidmore, 2014). Deprivation, lack of good health, insufficient education and their combined consequences result in a vicious

cycle that always leads back to poverty and deprivation (Jackson, 2009). The morbidity and mortality statistics do not always correlate with self-rated health when the latter is skewed by higher or lower expectations of the population concerned (Delpierre et al., 2012). In essence, the poor expect less when it comes to health, report better subjective health and often fail to ask for, or receive, preventative care or educational information, whilst those with a better education and higher socioeconomic position may be more demanding (Delpierre et al., 2012).

Insufficient education and the inability to make health-related decisions

As much as poor health behaviour and poor health-related decision-making are a cause of socioeconomic disparity, the same socioeconomic disparity is also a cause of poor health-behaviour (Mulder, De Bruin, Schreurs, Van Ameijden & Van Woerkum, 2011). People with lower levels of education, higher levels of daily stress and fewer resources, including perceived lack of life-control, tend towards more health-compromising behaviours and do not have the psychosocial resources to manage health-related change (Mulder et al., 2011). Breaking this cycle of poor health and poor education may not have the desired results if the benefactors are not able to make appropriate economic and health-related decisions (Kestilä et al., 2009). Those with reduced educational and economic opportunities may also have lower expectations of educational attainment, or may believe, due to a health-related condition such as asthma or depression, that they cannot be expected to achieve academically (Jackson, 2009). Increasing the perception of an internal locus of control, alongside social support and social cohesion, is important in building the capacity to make appropriate health-behaviour decisions (Mulder et al., 2011).

The effect of education on health disparities

Narrowing the gap in health disparities between the better-off and poorer populations may be achieved by placing a higher premium on health as a contributor to increased socioeconomic status (Cohen et al., 2013). Health literacy and health behaviour, however, along with empowerment and change in the locus of control from health information provider to health information consumer, may also be determining factors in health outcomes (Cohen et al., 2013). To be acknowledged, there is the problem of poverty accompanied by insufficient knowledge and impetus to improve health (Cohen et al., 2013). For those who have managed to break the poverty-low-education-illness cycle, however, there lies a better future.

There is evidence that adolescents from two-parent families, whose parents had skilled white-collar employment, were more likely to engage in health-enhancing behaviour (Koivusilta et al., 2013). These adolescents were more likely to successfully complete their own education, attain a higher level of socioeconomic status and better health as adults (Koivusilta et al., 2013). In the U.S. it was also found that those who had a better education and higher socioeconomic status had higher expectations of life in general and health in particular (Delpierre et al., 2012). In short, education has been positively linked to

health outcomes in developed countries (Baker, Leon, Greenaway, Collins & Movit, 2011; Cohen et al., 2013; Rosenbaum, 2012). The vast majority of research findings on the link between health and education have indicated that education itself is a strong and enduring mediator of health (Baker et al., 2011). With the institution of community colleges, further education colleges and other intermediary educational opportunities, for those who would not normally enter higher education, health disparities may be mitigated by the opportunity to obtain a higher qualification, thus changing the socioeconomic perception and identification of those taking part (Rosenbaum, 2012).

The relationship amongst health, educational outcomes and disadvantage in the Southern African region

Within the Southern African region, there has been little research on the effect of poor health on education in general, or within the university setting. Adverse effects of ill health on the socioeconomic development of the population appear to follow similar patterns to those of other developing and rapidly urbanising countries (Delisle, Agueh & Fayomi, 2011; Kengne, Awah, Fezeu & Mbanya, 2007; Kirigia, Sambo, Sambo & Barry, 2009; Micklesfield et al., 2013; Vorster, Kruger, Venter, Margetts & Macintyre, 2007). These health-related problems, such as obesity, hypertension, cardiovascular disease and type 2 diabetes are increasing, more so in late adolescence and early adulthood (Kengne et al., 2007; Kirigia et al., 2009; Sodjinou, Agueh, Fayomi & Delisle, 2008; Vorster et al., 2007).

In Southern Africa the health and education systems have to contend with both the emerging problems of lifestyle-related disease, as well as enduring problems of lack of food security and disparities in access to health care (World Health Organization, 2010). Additionally, this region has the world's highest incidence of infection with HIV and TB often occurring concurrently (World Health Organization, 2009). The predominant adverse effect of ill-health on education in Southern Africa concerns the dual burden of HIV with other opportunistic infections and the concurrently rising, opportunistic TB infections¹ (Boutayeb, 2009). Survival to older childhood with vertically acquired HIV infection is rapidly becoming the norm rather than the exception (Ferrand et al., 2010). Additionally, these youngsters may have developmental and educational challenges that are unique to their situation (Pufall et al., 2014). As these young people progress through the education system, the system itself may find itself ill prepared for their needs (Ferrand et al., 2010; Pufall et al., 2014).

The relationship between health, educational outcomes and disadvantage in South Africa

South Africa has many higher education students who come from socioeconomically disadvantaged backgrounds. Poverty and the resultant poor health experienced during

1 TB infections may be single-site bacterial, or multi-site bacterial, either of which may be treatable by conventional means; or possibly single-drug-resistant, or multi-drug-resistant.

childhood and adolescence have far-reaching economic and educational consequences (Guimaraes et al., 2014; Jackson, 2009). There appears to be a relationship between early life levels of health and later educational success. There is emerging evidence which suggests that the use of a holistic health education programme in the first year of higher education learning, could serve to address the problem of ill health, which negatively affects students' academic development (Ansari & Stock, 2010; Ansari et al., 2011).

South Africa follows a similar pattern of both health and the relationship between health (or lack thereof) and education to that of many other emerging middle-income, rapidly urbanising economies (Allender et al., 2010; Campbell & Campbell, 2007; Day et al., 2014; Delisle et al., 2011; Kengne et al., 2007). Non-communicable chronic diseases of lifestyle are on the increase, requiring both national planning and national educational interventions (Day et al., 2014; De Villiers et al., 2012). Contrary to the previous two decades where HIV was the predominant cause of death in Sub-Saharan Africa, in some areas, years of life lost due to preventable lifestyle-related diseases have overtaken those of HIV and TB combined (Day et al., 2014). This is especially the case where antiretroviral therapy has been instituted at a relatively early stage and the long-term outcome of the HIV infection is now one of chronic disease management (Degroote, Vogelaers & Vandijck, 2014). In this emerging scenario, the health care focus needs to be the long-term maintenance of quality of life (Degroote et al., 2014). Against this background, socioeconomic determinants of self-rated health play a major role in South Africa (Cramm & Nieboer, 2011). The disadvantaged members of society have the most to lose with respect to poor levels of health and inadequate education (Cramm & Nieboer, 2011; De Villiers et al., 2012). In turn, poor levels of education and unemployment contribute to poor health outcomes, thus creating a cycle of poor health, poor education outcomes, ongoing poverty and low standards of living (Cramm & Nieboer, 2011).

Despite being a middle-income country² with many aspects of first-world development, there are nonetheless pockets of poverty in South Africa and a wide disparity between the haves and have-nots, that manifests in adverse outcomes in respect of health (Ataguba, Akazili & McIntyre, 2011). This is similar to other middle-income and southern hemisphere countries, as well as minority groups within developed countries, in respect of both demographics of the population that experience the disadvantage and the nature of the disadvantage itself (Friel et al., 2011; Guimaraes et al., 2014). Education has the potential to mediate this problem and a better education has been linked to better health outcomes (Baker et al., 2011; Cohen et al., 2013; Rosenbaum, 2012). International research has demonstrated that the educational aspirations of adolescents from disadvantaged backgrounds, if accommodated, could compensate over the longer term for the socioeconomic disadvantage (Madarasova Geckova, Tavel, van Dijk, Abel & Reijneveld, 2010; Noble & Henderson, 2011). As socioeconomic status is generally linked

2 Per the World Bank data indicators for 2014 South Africa's GNI was US\$ 6800 per capita against a world average of US\$ 10787. South Africa is listed as a middle-income country. <http://data.worldbank.org/indicator/NY.GNPPCAP.CD>

to health status and long-term health outcomes, providing a means for adolescents to realise their academic aspirations can improve both the socioeconomic standing and the health prospects of a disadvantaged population (Madarasova Geckova et al., 2010; Noble & Henderson, 2011). In this respect, the need to improve higher educational outcomes amongst those from disadvantaged backgrounds has become paramount in South Africa (Scott et al., 2007).

The relationship amongst health educational outcomes and disadvantage in the Eastern Cape

The Eastern Cape Province is the second-poorest province in South Africa; additionally the Wild Coast and surrounding rural area, which is the main catchment area for students attending two of the province's three universities, is one of the most socioeconomically deprived in the province (Mitchell & Andersson, 2011). As of 2016, 18.7% of the population of the Eastern Cape higher education catchment area was living on or below the poverty line (Statistics South Africa, 2016). Students from this area are less likely to have secure or clean water sources, household food security or parents who are educated beyond secondary school (Mitchell & Andersson, 2011). Despite the disadvantages, there were indications of a correlation between higher scores on a wellness questionnaire and better academic outcomes (Van Lingen, Douman & Wannenburg, 2011). In this respect, an undergraduate nursing programme in the Eastern Cape that incorporated counselling on holistic health improved student scores on a wellness questionnaire and academic outcomes overall (Van Lingen et al., 2011).

Current policy and practice in health education in South Africa

In 2003, South Africa instituted a national policy on school health services; this focused, however, on the provision of a school nurse for basic education institutions, and in the higher education sector, the provision of an on-site health clinic (Subedar, 2011). In the re-engineering of the primary health care sector in South Africa, these services will be strengthened in the poorest areas and will be specifically focused on the needs of the area concerned (Subedar, 2011). There is no provision in the primary health care sector for educational policies, although secondary education incorporates life skills, which focuses predominantly on psychosocial health and HIV education (Lai et al., 2013). To date there is no statute policy on health education beyond secondary school in South Africa. The Department of Higher Education and Training (DHET) makes provision for continuing life skills/health promotion in the new four-year extended curricular programme (DHET, 2012). As there is no national policy on the educational content of life skills education, universities that offer life skills or health-promotion programmes have generally tailored the content to their respective institutional requirements. The authors could find no evidence of comparative research on university health-promotion offerings in South Africa.

The rationale for holistic health promotion in higher education in South Africa

The higher education system in South Africa has increasingly attempted to redress the high level of attrition with regard to students from disadvantaged backgrounds, by instituting an additional year of study for those who seek to further their education, thereby improving their future socioeconomic standing (DHET, 2012, 2013). Changes in policy and the introduction of four-year extended programmes led to a widening of higher education access (DHET, 2012). Due to the widening of access to university even more students will enter the system with a double set of challenges – those of educational disadvantage and a concomitant health disadvantage (DHET, 2012; Scott et al., 2007). Higher Education brings with it its own stressors such as living away from home, dealing with financial constraints and taking more personal responsibility, over and above those of academic challenges (Welle & Graf, 2011).

Students who possess better coping skills are less likely to drop out of higher education and have a greater chance of overall success (Welle & Graf, 2011). Stress intervention programmes for those struggling to cope may not be as effective as imparting the skills required to understand and personalise one's own stress-management strategy (Welle & Graf, 2011). There is evidence that a holistic health-promotion programme offered to students in higher education has the potential to build the fundamental skills required for voluntary, positive and successful health behaviour change (Ansari & Stock, 2010; Brookins-Fisher, O'Boyle & Ivanitskaya, 2010) and with that, as will be discussed below, a marked increase in academic success.

Few studies have been conducted within the higher education sector on the effects of health education and health-management programmes. These studies have demonstrated that health per se, and health-promotion programmes in particular, have had a positive effect on academic outcomes (Ansari & Stock, 2010; Ansari et al., 2011; Deasy, Coughlan, Pironom, Jourdan & Mannix-McNamara, 2014; Fernandez, Salamonsen & Griffiths, 2012; Flueckiger, Lieb & Meyer, 2014; Gwandure, 2010; Van Lingen et al., 2011). Given the opportunity to engage in a health-promotion programme, higher education students have the potential to develop the skills required to make their own decisions with respect to health and bring about the kind of positive change that enhances their individual chance of success (Brookins-Fisher et al., 2010; Gwandure, 2010).

Inequity of access to preventative measures and health promotion has been identified as one cause of inequity in health outcomes (Mitchell & Andersson, 2011; Vearey, 2011). Ignorance may well have a negative effect on the statistical outcome of preventable disorders of lifestyle; however, lack of knowledge is not the sole problem. The way knowledge is imparted plays a major role in its implementation. Provision of written material, individualised goal-setting and opportunities for monitoring and counselling, appear to be more successful than information alone (Berry & Mirabito, 2011). Restructuring information to allow the recipient to become part of the decision-making process can be more successful if a concordance model is applied (Fraser, 2010; Gucciardi, Cameron, Liao, Palmer & Stewart, 2007; Hoddinott, Allan, Avenell & Britten, 2010). In the opinion of the

authors embedding a holistic health-promotion programme within the higher education curriculum could potentially contribute towards improved health, educational success and socioeconomic enhancement in South Africa.

Conclusion

This reflection drew attention to the fact that in the current practice in higher education, educational opportunities may have been adversely affected due to compromised levels of health, resulting in a high educational attrition amongst those who are disadvantaged. The relationship amongst health, disadvantage and education is unequivocal as an increased standard of education has been found to lead to higher levels of health and better health affords greater participation in the education system, which in turn affords better socioeconomic opportunities. Prospective students who come from compromised backgrounds, however, may fail to access higher education and, when they do, they may be less well prepared than their better-off middle-class counterparts. Evidence suggests that the use of a holistic health education programme in the first year of higher education learning could serve not only as a health-enhancing intervention but also to improve students' holistic development and academic success.

The authors put forward the view that improving health in higher education students may improve both health and education outcomes. The higher education system itself may benefit disadvantaged students by providing holistic health-promotion courses within the university's first-year curriculum. A built-in compulsory credit-bearing holistic health-promotion course stands a better chance of being effective due to the increased opportunity for participation and retention. In the Eastern Cape Province, which is particularly disadvantaged, evidence suggests that such a programme would have both health and educational advantages.

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Conflict of Interest

The authors declare that there was no conflict of interest.

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