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Commentary

The business of medicine and surgery with medical aid: Time for regulation and legislation?



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ABSTRACT

The medical and surgical professions have dominated the health sciences for the past few centuries. As these disciplines evolve with practice, new methods, research, and the cost implications for both the healthcare practitioner and patient have increased substantially. The practice of medicine and other health science occupations have also evolved over the years due to the escalation of various diseases and mortality rates. It is however common knowledge that inadequate lifestyles coupled with a lack of movement; inadequate diet and mindsets have contributed to this debilitating epidemic we are currently plagued with. Due to this rapid evolvement, one cannot oversee the business involvement behind medicine and surgery. From one perspective, there is a majority of people in third world countries that cannot afford medical aid rates while the other shows the minority of patients that continue their treatment and live an inadequate lifestyle. Furthermore, one could argue that medical aid companies have capitalized on the notion of people affected by ill health in order to acquire monetary goals. The aim of this article is to showcase the business involvement of medicine and surgery with medical aid and to motivate the reasons for regulation and legislation across varied sectors. We would advocate a need to facilitate and streamline appropriate healthcare practice through transparency, patient awareness and ethical behaviours from all stakeholders involved.

1. Introduction

The medical and surgical professions have dominated the health sciences for the past few centuries. As these disciplines evolve with practice, new methods, research, the cost implications for both the healthcare practitioner and patient have increased substantially [1,2]. The aim of this article is to showcase the business aspect of medicine and surgery and to understand why regulation and legislation is needed across varied sectors.

1.1. Evolution of diseases

The practice of medicine and other health science occupations have increased over the years due to the escalation of various diseases and mortality rates. It is however common knowledge that inadequate lifestyles coupled with a lack of movement; inadequate diet and mindsets have contributed to this debilitating epidemic we are currently plagued with today [3].

According to the SANHANES-1 report in 2013, physical inactivity and alcohol use was the leading risk factors for lifestyle diseases

including non-communicable diseases (NCDs) [4]. A specific disease is that of obesity which is a pandemic that will continue to spread for the foreseeable future if these risk factors are not addressed in South Africa and globally [5]. As a way forward, public health approaches that advocate for health education and physical activity can be utililized effectively as a possible solution [3].

Though public health interventions have shown to be effective in first world countries, third world countries will have few effective programmes despite various attempts [4]. This is due to economic development and the wide gap between the different countries. Therefore, economic development may be one of the best solutions to alleviating NCDs by uplifting populations beyond the poverty-obesity links as described by Stunkard (1996) [6].

1.2. The business behind medicine and surgery

Due to the rapid evolvement of medicine and surgery, one cannot oversee the business associated with these professions. Furthermore, this issue of business involvement and medical ethics has been a concern for the past 20 years [7], wherein 1996, the concern was raised

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that business and medicine are not homogeneous. The challenge for the nation and organisations for managed care was the ability to reconcile business and medical ethics within a healthcare framework [8]. The fundamental question though is: after nearly 20 years, have the two disciplines been reconciled or has there been some form of ethical transparency?

Mariner (1995) attempts to aid in addressing this question by stating that ethical principles that promote complimentary and fair competition differ from ethical principles that preserve the integrity of the physician-patient relationship [7]. Interestingly, those ethical principles that protect patient welfare can lead to different outcomes. Therefore, even at present, healthcare professionals need to be aware of the outcomes' that may result in positivity should certain principles be applied.

A study conducted by Long et al. (2006) in the United States of America aimed to provide a resource to employers interested in lifestyle health initiatives to estimate their members' obesity-related costs stratified by demographics and business sector. The findings from the study showed that obesity is a costly lifestyle health risk and self-insured employers should take action with or without policy [9]. Based on this example which is observed through common practice today, we can establish why most patients would be at risk and why most medical professionals and surgeons, are remunerated more favourably by medical aid companies for treating or operating on obese and chronically ill health patients (Fig. 1).

One could argue that it is more challenging for a health professional to treat or operate on an obese patient as there are associated technical difficulties apart from the underlying risk factors. Such difficulties include: traversing the larger abdominal wall (increased fat distribution), intra-operative fat distribution, intra-operative imaging is less dependable, more tedious retraction, bone autograft harvesting is more difficult and the use of longer bariatric ports [10].

Another example is a recent study conducted in Sweden that investigated how bariatric surgery can prevent and induce remission of type 2 diabetes in patients. The effect of preoperative glucose status on long-term health-care costs is unknown and they aimed to assess health-care costs over 15 years for patients with obesity treated conventionally or with bariatric surgery and who had either euglycaemia, prediabetes, or type 2 diabetes before intervention [1]. Results showed that the total health-care costs were higher for patients with euglycaemia or prediabetes in the surgery group than in the conventional treatment group. It was able to conclude that long-term health-care cost results in support for prioritisation of patients with obesity and type 2 diabetes for bariatric surgery [1].

In contrast, Schauer et al. (2015) conducted a study to create a decision analytic model to estimate the balance between treatment risks and benefits for severely obese patients with diabetes. The study showed that for most severely obese patients with diabetes, bariatric surgery seemed to improve life expectancy [2]. However, surgery may reduce life expectancy for clinically obese patients with a body mass index (BMI) over 62 kg/m^2 [2].

Therefore, collectively with the above-mentioned studies, it would appear that the business aspect behind obesity, diabetes and heart disease is more profitable than any other health ailment or disease. Furthermore, according to Wilkins et al. (2011), obesity is the second highest health and productivity costs for employers with depression being the highest due to it being under-treated and under-diagnosed [11,12].

1.3. Medical aid and healthcare costs

Medical aid companies have capitalized on the notion of people affected with obesity and ill health in order to acquire monetary goals. On the one aspect, we have a majority of people in third world countries that cannot afford medical aid rates while the minorities of patients continue their treatment and live an inadequate lifestyle [5,12].

In South Africa, the healthcare delivery system has two functionally separate and distinct components, the public and private sectors (Veriava (2015). It was found that the public sector serves 83% of the population whilst the private sector, which is better-resourced, only served 17% of the population [13]. In essence, one could argue that this crucial statistic has contributed to the alarming health status of South Africans.

Most middle to upper-class South African citizens can afford medical aid and it proves beneficial for them in a long term or in case of an emergency [12]. However, a majority of those citizens who are ill are at risk for disease and mortality and therefore have higher premiums per month. Essentially, medical aid companies therefore benefit more from these patients as opposed to healthy or non-ill citizens [12,13].

On the contrary, some medical aid companies will not encourage patients to live healthily. They would rather increase their clients' understandings as to why their premiums are high due to their unusual health condition, which poses them at higher risk for disease and/or death [12]. In the United States of America, there are signs that federal/state programmes are moving towards reimbursement by improving quality measures to track obesity outcomes and reduce healthcare costs [14]. Although the pandemic of obesity is also exorbitant in the west, it would be particularly challenging for a similar model to be replicated in South Africa due to economical, socio-economic and cultural limitations.

Kahn (2015) reported that amendments have been undertaken by higher authorities with regulation 8 of the South African Medical Schemes act in order to roll back consumers' rights and leave them vulnerable to potentially catastrophic medical expenses [15]. This amendment does not solve the problem but rather, there should be a call for effective regulations and legislations which speaks to the needs of the consumers and their health.

1.4. Way forward

The business aspect of medicine, surgery and medical aid is prevalent in modern day health. Regulations and legislations are therefore

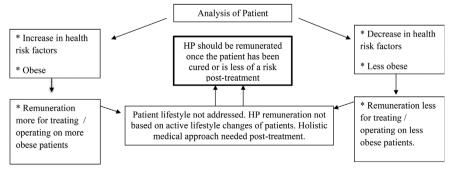


Fig. 1. Rearticulating the remuneration provided to health professionals by medical aid companies HP = health professionals.

needed across varied sectors in order to facilitate and streamline appropriate healthcare practice through transparency, patient awareness and ethical behaviours from all stakeholders involved.

Ethical approval

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The authors declare that they have no conflict of interest.

Author contribution

Both MH Noorbhai and MA Noorbhai conceptualised and wrote the

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References

[1] C. Keating, M. Neovius, K. Sjöholm, M. Peltonen, K. Narbro, J.K. Eriksson,

- L. Sjöström, L.M. Carlsson, Health-care costs over 15 years after bariatric surgery for patients with different baseline glucose status: results from the Swedish Obese Subjects study, Lancet Diabetes Endocrinol (2015 Sep 16), https://doi.org/10.1016/\$2213-8587(15)00290-9.
- [2] D.P. Schauer, D.E. Arterburn, E.H. Livingston, Impact of bariatric surgery on life expectancy in severely obese patients with diabetes: a decision analysis, Ann. Surg. 261 (5) (2015) 914–919.
- [3] M.H. Noorbhai, A public health approach to increase physical activity and health education: the Biokinetic Humanitarian Project, Afr. J. Phys. Health Educ. Recreat. Dance (AJPHERD) 19 (4:2) (2013) 993–998.
- [4] O. Hisana, D. Labadarios, T. Rehle, L. Simbayi, K. Zuma, A. Dhansay, P. Reddy, W. Parker, E. Hoosain, P. Naidoo, C. Hongoro, Z. Mchiza, N.P. Steyn, N. Dwane, M. Makoae, T. Maluleke, S. Ramlagan, N. Zungu, M.G. Evans, L. Jacobs, M. FaberSANHANES-1 Team, South African National Health and Nutrition Examination Survey (SANHANES-1), HSRC Press, Cape Town, 2013.
- [5] A.M. Prentice, The emerging epidemic of obesity in developing countries, Int. J. Epidemiol. 35 (2006) 93–99.
- [6] A.J. Stunkard, Socioeconomic status and obesity, Ciba Found. Symp. 201 (1996) 174–182.
- [7] W.K. Mariner, Business vs. Medical ethics: conflicting standards for managed care, J. Law Med. Ethics 23 (3) (1995) 236–246.
- [8] A.C. Regan, Regulating the business of medicine: models for integrating ethics and managed care 30 colum, J.L. & Soc. Probs. 635 (1996-1997).
- [9] D.A. Long, R. Reed, G. Lehman, The cost of lifestyle health risks: obesity, J. Occup. Environ. Med. 48 (3) (2006) 244–251.
- [10] H.E. Rosenfeld, R. Limb, P. Chan, M. Fitzgerald, W.P.L. Bradley, J.V. Rosenfeld, Challenges in the surgical management of spine trauma in the morbidly obese patient: a case series, J. Neurosurg. (2013), https://doi.org/10.3171/2013.4. SPINE12876.
- [11] What-medical-condition-is-the-most-costly-to-employers, Accessed on 23 June2018 http://getbetterhealth.com/what-medical-condition-is-the-most-costly-to-employers/2011.04.30.
- [12] S. Cohen, The Concentration of Health Care Expenditures and Related Expenses for Costly Medical Conditions, Agency for Healthcare Research and Quality, Rockville, MD, 2009 Statistical Brief #359. February 2012 http://www.meps.ahrq.gov/ mepsweb/data_files/publications/st359/stat359.shtml, Accessed date: 25 June 2018
- [13] Private health sector only serves 17% of SA http://www.fin24.com/Money/Health/ Private-health-sector-only-serves-17-of-SA-20150901 [Accessed 23 June 2018].
- [14] C. Baum, K. Andino, E. Wittbrodt, The challenges and opportunities associated with reimbursement for obesity pharmacotherapy in the USA, Pharmacoeconomics 33 (2015) 643–653.
- [15] Medical Aid Change to benefit funders. http://www.bdlive.co.za/national/health/ 2015/07/20/medical-aid-change-to-benefit-funders [Accessed 23 June 2018].