

National Health Insurance: A lofty ideal in need of cautious, planned implementation

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The implementation of the National Health Insurance in South Africa is a noble attempt to address the inequities and scarcities of healthcare resources in the country. However, while South Africa's status as a developing country does not preclude the success of universal healthcare, as evidenced by certain international models, its success is threatened by corruption, mismanagement of resources, and poor-quality institutions. Rather than build a new system on poor foundations, existing facilities need to be overhauled. Increased transparency, as well as improvement in challenges such as cleanliness, personnel attitudes, and long waiting times may secure public 'buy-in'. Without these and other changes, public confidence will not be inspired – and, even more importantly, the system may fail in its goal of bringing about equitable resource allocation and improved healthcare.

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Introduction to the winning entry of the 2012 University of the Witwatersrand's Medical Protection Society Bioethics Competition

Hats off to the University of the Witwatersrand Medical School for encouraging their students to address the thorny issue of National Health Insurance. While we, the old guard, will be confronted by the changes, today's students will live with the consequences – all the more reason for them to reflect upon the issues now, prior to implementation.

There is a plethora of articles, letters and editorials that address the subject, and virtually all represent underlying vested interests. I know when my pre-teenage daughter is about to criticise somebody when she introduces a statement with the words, 'No offense, but ...'. On reading articles about the NHI, I am always on the look-out for that 'but'. Inevitably, articles lead with the current disparities or the anticipated advantages of NHI; however, the inevitable 'but' inevitably exposes the author's sentiments.

All the more important to hear from tomorrow's healthcare workers; while they may have idealistic aspirations, they may have less vested interests, and the importance of them thinking about the consequences of this far-reaching legislation cannot be underestimated. For them, it is not about the 'ifs' and 'buts' but the realities of implementation, both positive and negative. Raising the potential

problems allows the problems to be considered prior to being confronted by them – possibly even averting them. *Praemonitus, praemunitus* [Forewarned is forearmed].

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The issue of resource scarcity applies to all countries – burgeoning need for healthcare is fast overtaking the availability of services.¹ This hiatus is widened by social inequity and disproportionate access to healthcare² – two of South Africa's most glaring issues. Our current two-tiered hospital system has been described as unsustainable, very costly and highly curative-oriented (or hospice-centric).² The government's proposed solution is to implement universal coverage in the form of national health insurance (NHI). The lofty goals of this new system have been overshadowed by public outcry. We argue that significant change is necessary to achieve the justifiable aim of universal healthcare in South Africa.

Ethical considerations

The central ethical principle underlying problems of resource allocation is that of justice.¹ Distributive justice has already been addressed in South African legislation in the form of section 27 of the Bill of Rights (the right to access to healthcare).¹ This right is one of the core principles of the proposed NHI, which will also centre

on social solidarity, more effective healthcare delivery (necessitating a radical change in management and administration), appropriateness (a re-engineered primary health care system focusing on health promotion and preventative medicine), affordability, efficiency and – importantly – equity.²

Past attempts to bring about more equitable resource allocation have included legislation such as the Pharmacy Amendment Act;³ the Medical, Dental and Supplementary Health Services Amendment Act⁴ (enforcing community service for doctors, increasing the number of doctors in underserved areas); and the National Health Act itself, in its provision for vulnerable groups (women, children, the elderly and the disabled), as well as its 'certificate of need' requirement.¹ However, these Acts have not been effectual in solving the major challenges of the current system: a worsening burden of disease and a shortage of key human resources.² Legislation alone cannot combat poor management, underfunding and deteriorating infrastructure, which together result in underperforming institutions.⁵ The poor quality of these institutions has proven to be a major barrier to access⁵ – and could be a major obstacle in the successful implementation of NHI.

Benefits of universal healthcare

A healthier population translates into a productive and effective workforce. Each year of additional life expectancy raises a country's GDP per capita by 4%.⁶ Therefore, broader access to healthcare in South Africa could bolster our economy.

In addition, universal coverage might reduce medical costs. Inflated costs for tests, hospital stays and procedures could be avoided by government monitoring, and drug prices could be negotiated as they would be purchased in greater bulk.^{2,7} Not only are there no bills, co-payments or deductibles, but doctors can also focus on patient care, rather than waste hours dealing with insurance companies. Patients too may modify their help-seeking behaviour, i.e. consult a doctor more readily – when obstacles such as administrative red tape and high consultation fees are absent.^{7,8}

Criticisms of universal healthcare

Universal healthcare essentially removes competition in the public sector, a disadvantage of which is that it can stifle innovation.^{7,9} The financial incentive to arrive at a breakthrough product, or develop a particularly good rapport with patients, drives growth and promotes quality.⁷ Stagnation in the development of biotechnology and pharmaceuticals, and poor quality of care by doctors struggling to attend to large numbers of patients, could result under a system of universal healthcare. In addition, waiting times may be longer, particularly for specialist diagnostics such as MRI scans,⁹ which is already a problem in the public health system.

Arguably, one of the greatest obstacles to the implementation of universal medical coverage is that it is under government control – and therefore requires that government enjoys the confidence of the public. Corruption, bloated bureaucracies and the inability to handle social programmes, are issues faced by many governments⁷ but could be a particular barrier to public acceptance of

NHI in South Africa, given our institutions' track record of scandal, bribery and mismanagement.

When questioning how South Africa might fare under National Health Insurance, it may be useful to examine, and learn from, international experience.

The global picture

All developed countries, with the interesting exception of the USA, implement some form of universal health care.^{10,11} Focusing on the development, successes and failures of the UK's National Health Service (NHS) – arguably the best-known example of universal healthcare, and one which has certainly sparked contentious debate – provides interesting points of comparison for the South African who might be curious as to where the NHI could take us.

The NHS was implemented by Aneurin Bevin, Secretary of State for Health, after World War II, prior to which Britain's healthcare could be described as a *mélange* of private, municipal and charity schemes.^{12,13} The idea behind the NHS was to reduce inequality by converting regional health systems into a national one. However, in much the same way as the proposed NHI in South Africa has been met with resistance, British doctors were also opposed to the change at the time. Bevin won practitioners over with lucrative payments for their co-operation, later stating that he had 'stuffed their mouths with gold', and the reform was passed.^{11,13} Over the following decades, NHS issues such as prescription charges split political parties and brought about electoral successes and defeats, further illustrating the profound impact that the system has had on the nation's politics and economic stability – or lack thereof.¹¹

Contemplation of this fact might lead one to wonder how the NHS is funded. Money is derived by taxation, with a 2008 - 2009 budget contributing approximately £1 980 for every man, woman and child in the UK.¹⁴ Additional funding comes from charitable organisations, and 0.25% of the budget (a surprising £78 million) is from parking charges.^{15,16}

Principal fundholders at the NHS (known as Primary Care Trusts) use a commissioning system, allocating funds to practitioners via a capitation system.¹³ As practitioners are required to 'break even' by seeing a certain number of patients daily, this approach could affect the quality of care as doctors are forced to act as accountants and ration already limited resources, causing some patients not to get the necessary care, and diluting the effectiveness of the system. This is a possible weakness of the NHS, especially considering that, for a system that theoretically should always break even, overspending results in enormous annual deficits.¹⁷ If this is a concern for a developed country with a third of South Africa's unemployment rate (7.7% as at April 2011),¹⁸ and without South Africa's levels of corruption, then it is not unreasonable to assume we will have the same issues, probably on an even greater scale.

Another issue, particularly if one compares the NHS with South Africa's proposed NHI, is that eligibility for free services is based on having 'permanent residence status' – either a birthright or a status

granted to immigrants or foreigners of being resident for at least 6 months.¹³ All such people are given a special card, and may only visit their designated practitioner.¹³ This might prove problematic in a country such as ours, where we have a large number of foreign nationals and a migrant population which makes use of several different doctors in many different locations. These concerns are harped on by Americans opposed to President Obama's proposed reforms to move at last towards a universal healthcare system.

Apart from the government-funded, tax-run NHS system of the UK, universal healthcare has been achieved in other developed countries in other ways; for example, privately run systems, predominantly funded by government, exist in France, and Switzerland has private insurance companies with government regulation and subsidies to ensure wide coverage and non-discrimination based on medical history or pre-existing conditions.¹¹

These systems function successfully enough – but is this perhaps due to the large amounts of money pumped into them? It is important to now consider universal healthcare in developing countries so as to gauge whether finances will hinder South Africa's proposed NHI before it is even implemented.

Health systems in developing countries

The Cuban Health System provides universal healthcare, implemented through state hospitals, as there are no private hospitals.^{28,29} Although Cuba is ranked 156th in the world in terms of under-5 mortality rate, this represents an improvement on the situation before the introduction of the current system.³⁷ There are also African countries with universal health care, e.g. Tanzania. In 1975, the government nationalised all hospitals, and in 1980 they abolished private medical practice; subsequently, medical treatment has been free.^{30,31} Under-5 infant mortality dropped from 155 (1990) to 76 (2010).³⁸ Ghana introduced a national health insurance scheme (NHIS) in 2005 to increase accessibility to healthcare by alleviating the costs. This is a tax-based scheme and covers the services offered at district hospital level.³²⁻³⁴ Under-5 infant mortality dropped from 122 in 1990 to 74 in 2010.³⁹ Another African country, Zambia, implemented the National Health Service Act of 1995 which created an independent health service delivery system. They have in place a private sector (which is profit-based) and a public sector (which is supported by the government and donations) scheme.³⁵ However, according to the WHO, health indicators have not improved in Zambia since 1980.³⁶

BRICS

In recent years, a group of emerging economies known as BRICS has developed.¹⁹ The political organisation is made up of 5 countries at similar stages of economic development: Brazil, Russia, India, China and South Africa.

The South African picture in more detail – the context in which the NHI would be introduced

South Africa has been termed a middle-income country based on GDP for a population of around 50 million. The current financing sys-

tem of healthcare is two-tiered with both a public and private sector, with a relatively large proportion of funding allocated through medical schemes, various hospital care plans and out-of-pocket payments.⁴⁰ The current system is inequitable, with a minority having disproportionate access to health services within the private sector.

The current burden of disease which South Africa faces is said to be fourfold and has been termed a quadruple burden of disease. This burden of disease includes high rates of communicable diseases such as HIV and TB, high maternal and under-5 mortality, a rising burden of non-communicable diseases, and the burden associated with high rates of violence and injury.

The currently proposed NHI is an attempt to address the inequalities in healthcare and to provide access to appropriate, efficient and quality healthcare services.

Health expenditure and financing

The World Health Organization has recommended that countries spend at least 5% of their total GDP on healthcare each year; South Africa already spends 8.3% on health, which is well above the majority of middle-income countries. On average, the latter spend 5.8% of their GDP on health. Although South Africa spends a higher proportion of its GDP on health, it still has a high burden of disease and poor health outcomes. This is mainly attributed to the manner in which South Africa spends its contribution towards health. Of the 8.3% of GDP, only 4.2% is spent on the public sector, which supports 84% of the population (42 million individuals). This means that the remainder (4.1%) is spent on the private sector, which supports only 16.2% of the population (8.2 million individuals). This situation has resulted in a large and inequitable disproportion between the two sectors.²

In South Africa, healthcare is financed in three ways. The public sector is funded by the State, while the private sector generates funding through medical schemes and out-of-pocket spending. Private sector costs have increased substantially over the past decade, with the costs of private hospital care and specialist care rising by over 120%, causing medical aid scheme contributions to double over the past 7 years. The per capita expenditure for health is also evidence of this inequity, with a public sector per capita expenditure of R2 766 and a private sector expenditure of R11 150 per capita. Furthermore, the inequality in terms of distribution of resources and funding has resulted in healthcare professionals favouring the private sector, which has resulted in an inequitable distribution of patients to healthcare providers, with the private sector having a smaller ratio of patients to healthcare professionals. The uncontrolled commercialism of healthcare in the private sector has resulted in an inequitable distribution of services and funding within the healthcare sector. This is unjustifiable and defeats the principles of social justice that the proposed NHI aims to address.²

Problems in implementing the NHI

The proposed NHI, while being an idealistic proposition, has many challenges to overcome that are specific to the South Af-

Table 1. BRICS countries and their healthcare systems

Brazil	Russia	India	China	South Africa
<p>The Brazilian health system comprises public and private health institutions. The Unified Health System (UHS or Sistema Único de Saúde (SUS)) is a publicly funded healthcare system that provides health coverage to 78.8% of the Brazilian population. The remaining 21.2% of the population are covered by the Supplementary System; however, they are also granted access to UHS-provided health services.²⁰ Under-5 infant mortality dropped from 59 (1990) to 19 (2010).*</p>	<p>The Russian government oversees the health services; as a result, healthcare is free and available to all citizens and registered long-term residents by means of the State healthcare fund. Social tax is paid by members of the population (2 - 3% of received wages); a small portion of this social tax goes to the healthcare fund. Dependent family members can also utilise this healthcare as their contributions are covered by the employed family members. The state also covers the contribution of those who are unemployed, on pension or with long-term sickness benefit. Private healthcare is also available in the country to those who can afford it.²¹ Under-5 infant mortality dropped from 27 (1990) to 12 (2010).*</p>	<p>India's Constitution allocates jurisdiction over public health, sanitation and hospitals to the state governments, with medical education the responsibility of the Central Government. However, the latter (according to the constitution) is responsible for financing national disease control, family welfare as well as reproductive and child health programmes. The Indian Health Sector is made up of public and private health institutions. However, there is also a small private non-profit sector which includes health services provided by volunteers.²² India has a universal healthcare system. Government hospitals provide treatment at taxpayer expense. Most essential drugs are offered free of charge in these hospitals.²³ Under-5 infant mortality dropped from 115 (1990) to 63 (2010).*</p>	<p>China undertook a reform of its healthcare system from the previous, only, New Rural Co-operative Medical Care System (NRC-MCS) to improve the affordability of healthcare for the rural population, and Urban Employee Basic Medical Insurance (UEBMI) for the employed urban population. However, this left a large gap in coverage, and China has introduced the Urban Resident Basic Medical Insurance (URBMI) to cover those who are unemployed but still living in urban areas. These three schemes have the combined aim of providing universal coverage for citizens of China.^{24,25} The under-5 infant mortality dropped from 48 (1990) to 18 (2010).*</p>	<p>South Africa currently has both a private and public sector. Most of the population is served by the public sector, while only about 20%²⁶ of the population is served by the private sector. However, South Africa is in the process of migrating towards a universal healthcare system, with the National Health Insurance Act.²⁷ Under-5 infant mortality dropped from 60 (1990) to 57 (2010).* This will be discussed in more detail later in this article.</p>

*Statistics according to unicef.org updated as at March 2010 and indicate an improvement in under-5 infant mortality rates throughout all the developing countries.

rican situation. The first of these issues is corruption. Corruption has been said to account for the waste of 10% of all healthcare expenditure in the country, and accounts for an estimated R5 - 15 billion within the private sector alone.⁴⁰ While much has been done in recent years to curtail corruption, it remains a major concern in South Africa. Corruption and corrupt officials may interfere with the implementation and working of the proposed NHI. While difficult to overcome, the issue of corruption needs to be addressed prior to implementation, and there must be strict supervision over its running. Lack of transparency is an important issue within the country and has resulted in many public outcries in the past. Without complete transparency throughout the implementation process and running of the NHI, corruption cannot be excluded.

The second challenge is healthcare resource availability. The current healthcare infrastructure is poor, with great inequality between public and private healthcare facilities. To implement the proposal, much work must be done to correct this inequality and standardise healthcare facilities. The small number of medical personnel and healthcare professions in the public sector also needs to be addressed to correct the inequality of the number of patients per healthcare providers. Accordingly, remuneration of professionals and allied workers needs to be rethought, with strategies to attract and retain them. To correct the inequalities, more healthcare providers are needed without sacrificing the quality of workers. For this to occur, medical schools and nursing colleges need to be involved with the planning and implementation of new practices.

Financing is another issue. Funding may come from (yet more) taxation. This alone may not be enough, and other approaches be considered. The public need to be educated on how the healthcare system will change, and misconceptions have to be dispelled. For smooth implementation of the NHI, positive attitudes among the public and healthcare professionals need to prevail, which will expedite smooth implementation.

The current problems faced by the healthcare system are vast, but many of these may be overcome by successful implementation of the NHI. The great disparity between quality of healthcare in the private and public sectors, and that private healthcare funding is largely from medical aid schemes and out-of-pocket payments, has resulted in high service tariffs and higher costs, owing to ongoing over-servicing of patients on a fee-for-service basis. As a result, private healthcare is highly unaffordable for most of the population.² NHI, *if implemented correctly*, must address these concerns and the many other problems within the healthcare system if NHI is to function adequately – problems such as corruption, cleanliness, safety and security, long waiting times, staff attitudes, infection control and drug stock-outs result in the current public healthcare system being unsustainable and resource-limited.

Discussion

The NHI is a vastly ambitious project that calls for public and private health services to work together to ensure that all South Africans receive the best of the most basic of treatments. The aims of this project are not unique to South Africa, and we can learn much from other countries, programmes and methods of implementation.

Equitable approaches to financing health services should involve some form of pooling of revenue from the population in relation to their ability to pay. Payment for services, from this pool, should be related to need.⁴¹ Most developed countries have evolved health-financing mechanisms on this principle, either through tax or insurance-financed health systems or a combination of these.⁴² The combination of equitable financing and reasonable levels of service quality and availability has ensured more-or-less universal health coverage.

Poor countries abound with difficulties inherent in establishing healthcare financing and delivery.⁴¹ Although the South African context certainly entails many problems, several countries facing similar issues have implemented a national healthcare system. African examples are Ghana and Tanzania; a low- to middle-income country outside Africa is Thailand.⁴³

In 2003, Ghana enacted the National Health Insurance Act mandating the establishment of district-level insurance schemes. This was one of the first health insurance programmes implemented on a national scale in Africa.⁴⁴ With the goal of increasing access to healthcare, the government saw the potential of prepayment schemes that eliminated user fees. A preliminary evaluation of the Ghanaian NHI Scheme (NHIS) found that Ghanaians have mixed

views about the programme; all interviewees agreed that the NHIS was a good idea, but 60% expressed various frustration with its implementation.⁴⁵ More ominously, a newer report by international agency Oxfam and Ghanaian NGOs found the programme to be 'seriously flawed and not working for most Ghanaians'.⁴⁶ Bishop Akolgo, of the Ghanaian NGO Integrated Social Development Centre (ISODEC), stated: 'Government's clear political commitment to health is very welcome, but bolder changes are now urgently required to accelerate progress. The government must move to a national health system free at the point of delivery for all – a service based on need and rights and not ability to pay. Ghana can still build a universal health care system that delivers for all and is the envy of Africa.'⁴⁶

There are potential dangers in ideologically and politically driven debates in health sector reforms in low- and middle-income countries. Rather, these should be evidence-informed. There are also problems in prescribing ideal solutions without factoring in a clear understanding of what is feasible, given the country context.⁴¹

It is not unreasonable to believe that most good-willed people agree that the NHI is ethically correct. We have to be realistic, however, and also agree that the NHI does not guarantee success or a better quality of healthcare for South Africans as a whole. The people of South Africa are too often taken advantage of and let down by the very officials appointed to protect and uplift them. So should we back a plan based solely on it being the 'right thing to do', irrespective of its serious pitfalls and flaws? We suggest not.

Recommendations

We propose the application of problem-solving approaches involving informed debate on the optimal ways to solve our country's health-financing woes. These should be open to all possible options rather than vested in particular positions. Before implementing a policy with such significant implications, the issues of corruption, poor governance and political transparency must be addressed and corrected. We also need to realise the limitations of our country and remain realistic in our approach. Adopting a blueprint for health reform from developed countries, without regard to local challenges, would probably result in failure. Massive reform is a journey that should not be confused with the destination. Unfortunately, the NHI Green Paper lacks clarity on much of this journey that we are expected to embark on, and therefore we are at huge risk of losing our way.

Impressive plans have been made for overhauling the present healthcare system, including various hospitals and clinics. Perhaps this upgrade, seen as an interim measure, should be critically analysed for not only success of the overhaul but also for maintaining this large-scale plan. Implementing the NHI should be a step-wise process, and moving forward should be based strictly on successfully accomplishing the previous steps. If success is not achieved at any stage of development, how can we move forward?

We need to learn from and engage with countries that have been successful in instituting a national healthcare system. We need an attitude change in our health sector that verges on a cultural revolution. All this requires a holistic approach to human resource management, and includes, but is not restricted to:

- improved working conditions
- improved wages and package structuring
- improved staff interaction and teamwork
- *ubuntu* should be practised, not only mentioned on posters (*ubuntu* means a spirit of kinship that unites mankind)
- innovation, creativity and resourcefulness
- the spirit, care and ethical practice that the healthcare profession so deserves.

The spirit of the above measures should be exemplified by making the public sector the prime choice for employment in South Africa.

Moreover, the Department of Health needs to consolidate and settle the current pile of unpaid bills before embarking on a massive structural overhaul. The government should lead by example and make use of the public sector as its first choice for healthcare. As long as the rich and wealthy utilise the private sector as their first choice because they can afford to, the divide between the 'haves' and the 'have-nots' will continue to grow.

Good corporate governance should form the basis of excellent public health services. The issue is not simply where do we get the money from, but who will spend it wisely. Emphasis needs to be made on the skills required to run the heart of our health system.

Conclusion

The true viability of the NHI scheme will be tested by the government's ability to improve the delivery of medical services to the general public. The fulfilment of its promise may remove a fundamental difference between the poor and rich people of South Africa. Failure will almost certainly lead to massive costs for the South African people, monetarily, medically and existentially.

The World Health Organization described the social determinants of health as: 'the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices'.⁵¹ The NHI would serve as such a policy choice to allow commitment to the notion that all persons are entitled to protection against the hazards of this world, and to minimise death and disability in society, so that social injustice will not be held responsible for killing people on a grand scale, and the principle of *ubuntu* may be practised.^{52,53}

Krieger and Birn said, 'Social justice is the foundation of public health'.⁴⁷ Social justice refers to the idea of creating a society or institution based on the principles of equality and solidarity,⁴⁸ that understands and values human rights and recognises the dignity of every human being.⁴⁹ Social equity refers to a social state of affairs where all people within a specific society or isolated group have the same status and therefore receive what is specifically right for them

to achieve fair outcomes in, for example, healthcare, education and other social securities.⁵⁰ These concepts present a vision of society in which institutions are justly arranged, resources and power are equally distributed, and rights and responsibilities are observed. It includes elements of distributive justice, fulfilling both deontology and utilitarian outlooks. While these remain important ethical concepts, they are currently poorly upheld in South Africa.

One would find difficulty in denying the raft of inequalities so rife in South Africa's healthcare system; to think that we can continue regardless of the lack of equity and accessibility is naïve; to pretend that nothing need be done to rectify the current situation is shallow and evasive. Only a fool would drive in the dark at high speed with no lights, drunk on the assumption that we do not need to succeed; and only a weak person would follow a plan so devoid of detail and assurance that it cannot possibly succeed. So we implore our leaders to invest in a transparent plan full of detail, clarification and explanation. We wish to make a case for honesty, safety nets and assurance. We would like to read a White Paper characterised by ingenuity, innovation and purpose. Most of all, we would love to see South Africa achieve its potential, free from corruption, poor governance and neglect.

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References

1. Dhali A, Etheredge H. Resource Allocation. In: Dhali A, McQuoid-Mason D. Bioethics, Human Rights and Health Law: Principles and Practice. Cape Town: Juta, 2011:143-150.
2. Department of Health. National Health Insurance in South Africa: Policy Paper. Pretoria: Department of Health, 2011. <http://images.businessday.co.za/NHI.pdf> (accessed 17 November 2011).
3. Act 88 of 1997 as cited in (1) above.
4. Act 18 of 1995 as cited in (1) above.
5. Bennet S, Gilson L. Pro-poor policies – Health financing: designing and implementing. 2011. HSRC-DFIC Health Systems Resource Centre, cited in Department of Health policy paper (ref. 2 above).
6. Bloom DE, Canning D, Sevilla J. The effect of health on economic growth: A production function approach. World Development 2003;32(1):1-13.
7. Philip TW. The pros and cons of universal healthcare in the United States. The Brazen Careerist 2009. <http://www.brazencareerist.com/2009/06/08/the-pros-and-cons-of-universal-health-care-in-the-united-states> (accessed 17 November 2011).
8. White D. Pros and cons of government healthcare. About.com US Liberal Politics 2011. http://usliberals.about.com/od/healthcare/i/GovHealthCare_2.htm (accessed 17 November 2011).
9. Ireland J. Pros and Cons of Free Universal Healthcare. Lance Armstrong Foundation 2011. <http://www.livestrong.com/article/30692-pros-cons-universal-health/> (accessed 17 November 2011).
10. Shah A. Health Care around the World. Global Issues: Social, political, economic and environmental issues that affect us all 2011. <http://www.globalissues.org/article/774/health-care-around-the-world> (accessed 17 November 2011).
11. Democratic Policy and Communications Centre, United States Senate. Patient Protection and Affordable Care Act: Detailed Summary 2010. <http://dpc.senate.gov/healthreformbill/healthbill04.pdf> (accessed 9 February 2012).
12. Neve M. Stuffing their mouths with gold: A history of the NHS as recalled by some who were there at the beginning. 1982. BBC archives. <http://www.bbc.co.uk/archive/nhs/5159.shtml> (accessed 17 November 2011).
13. Department of Health, United Kingdom. NHS Constitution 2010. <http://www.nhs.uk> (accessed 17 November 2011).
14. Department of Health, United Kingdom. About the NHS 2010. <http://www.nhs.uk/NHSEngland/thenhs/about/Pages/overview.aspx> (accessed 17 November 2011).
15. Trigg N. NHS car park charges - a necessary evil? BBC News (BBC) 2008. <http://news.bbc.co.uk/2/hi/health/7274968.stm> (accessed 18 November 2011).

16. Charter D. Hospitals making £78m a year from car park charges. London: The Times, 18 July 2006. <http://www.thetimes.co.uk> (accessed 18 November 2011).
17. House of Commons Health Committee. NHS Deficits: First Report Session 2006 – 07. Volume II – Oral and Written Evidence. London: House of Commons, 2007. <http://www.publications.parliament.uk/pa/cm200607/cmselect/cmhealth/7373ii.pdf> (accessed 19 November 2011).
18. Fedec A. United Kingdom Unemployment Rate. New York City: Trading Economics 2010. <http://www.tradingeconomics.com/united-kingdom/unemployment-rate> (accessed 19 November 2011).
19. SouthAfrica.info 2011. New era as South Africa joins BRICS. <http://www.southafrica.info/global/brics/brics-080411.htm> (accessed 25 October 2011).
20. World Health Organization. Country Cooperation Strategy at a Glance – Brazil. http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_bra_en.pdf (accessed 25 October 2011).
21. Europe-cities. Russia by Europe-cities; Healthcare in Russia. <http://www.europe-cities.com/en/633/russia/health/> (accessed 25 October 2011).
22. World Health Organization. Country Cooperation Strategy 2006 - 2011 – India. http://www.who.int/countryfocus/cooperation_strategy/ccs_ind_en.pdf (accessed 25 October 2011).
23. Indian Health Care.in Indian Health Care – The growth story. http://www.indianhealthcare.in/index.php?option=com_content&view=article&catid=131&id=168%3AIndian+Healthcare:+The+Growth+Story (accessed 25 October 2011).
24. Lin W, Liu G, Chen G. Urban resident basic medical insurance: A landmark reform toward universal coverage in China. *Health Econ* 2009;18 Suppl 2:S83-96. [<http://dx.doi.org/10.1002/hec.1500>] [PMID: 19551750]
25. Library of Congress – Federal Reserve Division. Country Profile: Taiwan. <http://lcweb2.loc.gov/frd/cs/profiles/Taiwan.pdf> (accessed 25 October 2011).
26. Statistics South Africa. General household survey 2010 http://www.statssa.gov.za/PublicationsHTML/P0318June2010/html/P0318June2010_1.html?gInitialPosX=10px&gInitialPosY=10px&gZoomValue=100 (accessed 25 October 2011).
27. World Health Organization. South Africa. <http://www.who.int/countries/zaf/en/> (accessed 25 October 2011).
28. Bethell L. Cuba: A Short History. Cambridge: Cambridge University Press, 1993.
29. World Health Organization. Country Cooperation Strategy at a Glance – Cuba. http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_cub_en.pdf (accessed 25 October 2011).
30. Encyclopedia of the Nations. Tanzania – Health. <http://www.nationsencyclopedia.com/Africa/Tanzania-HEALTH.html> (accessed 25 October 2011).
31. Professional and lay care in the Tanzanian village of Illembula. *Tanzanian Health Care System* <http://herkules.oulu.fi/isbn9514264312/html/x325.html> (accessed 25 October 2011).
32. Salisu A, Prinz V. Austria: ACCORD (Austrian Centre for Country of Origin and Asylum Research and Documentation). 2009;11-27.
33. World Health Organization. Country Cooperation Strategy at a Glance – Ghana. http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_gha_en.pdf (accessed 25 October 2011).
34. World Health Organization. Ghana. <http://www.who.int/countries/gha/en/> (accessed 25 October 2011).
35. World Health Organization. Zambia. <http://www.who.int/countries/zmb/en/> (accessed 25 October 2011).
36. World Health Organization. Country Cooperation Strategy at a Glance – Zambia. http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_zmb_en.pdf (accessed 25 October 2011).
37. UNICEF. Cuba. <http://www.unicef.org/search/search.php?q=Cuba&type=Main> (accessed 25 October 2011).
38. UNICEF. Tanzania. http://www.unicef.org/infobycountry/tanzania_statistics.html (accessed 25 October 2011).
39. UNICEF. Ghana. http://www.unicef.org/infobycountry/ghana_statistics.html (accessed 25 October 2011).
40. Dhali A. Healthcare reform in South Africa: a step in the right direction of social justice. *South African Journal of Bioethics and Law* 2011;4:2.
41. Agyepong IA, Orem JN, Hercot D. Viewpoint: When the 'non-workable ideological best' becomes the enemy of the 'imperfect but workable good'. *Trop Med Int Health* 2011;16:105-109.
42. Evans RG. The Canadian Health Care Financing and Health System: its experience and lessons for other nations. *Yale Law and Policy Review* 1992;10:362-396.
43. Viroj T, Pongpisut J, eds. From Policy to Implementation: Historical Events during 2001–2004 of Universal Coverage in Thailand. Bangkok: National Health Security Office, 2004.
44. Republic of Ghana. Act 650. Accra: Republic of Ghana, 2003.
45. Wahab H. Paper prepared for the Workshop in Political Theory and Policy Analysis Mini Conference. Bloomington, USA: Indiana University, 2008.
46. Oxfam International. Don't copy Ghana's health insurance – Oxfam warns poor countries. 2011. <http://oxfamlibrary.openrepository.com/oxfam/bitstream/10546/125306/1/achieving-shared-goal-healthcare-ghana-090311-en.pdf> (accessed 11 February 2012).
47. Krieger N, Birn A. A vision of social justice as the foundation of public health: commemorating 150 years of the spirit of 1848. *Am J Public Health* 1998; 88:1603-1606.
48. Zajda J, Majhanovich S, Rust V. Education and Social Justice. Netherlands: Springer Publishers, 2006.
49. Butts JB, Rich K. Nursing Ethics: Across the Curriculum and into Practice. Sudbury: Jones and Bartlett Publishers, 2005.
50. Gylfason T, Zoega G. Education, social equality and economic growth: a view of the landscape. *CESifo Economic Studies* 2003;49:557-579.
51. World Health Organization. WHO: social determinants of health: key concepts. Geneva, World Health Organisation, 2010. www.who.int/social_determinants/thecommission/finalreport/key_concepts/en/index.html (accessed 11 February 2012).
52. Beauchamp DE. Public health as social justice. *Inquiry* 1976;13:1-14.
53. Commission on Social Determinants of Health – Final Report, Executive Summary. Geneva: WHO, 2008.