



Surgery in the developing and developed world: A comparison between the healthcare systems of South Africa and the United States of America

Gurdeep S. Mannu

Academic General Surgery, Oxford University Hospitals, Oxford, U.K.

ARTICLE INFO

Received : 23/07/2012
Accepted : 23/09/2012
Published : 01/03/2013

KEYWORD

Surgery
Healthcare system
United States of America
South Africa

ABSTRACT

It is often said that 'medicine is a passport to the world'. The same basic needs are universal worldwide; however the disparity between systems of delivering them is immense. This article focuses on the authors personal experiences from working in the surgical field in South Africa and in the United States of America. These countries are used to demonstrate the differences between the healthcare culture and delivery in developing and developed countries. Both situations are related to our current setting in the United Kingdom with the aim of analysing the possible advantages and disadvantages of our contemporary National Health Service system.

© Medical Education Department, School of Medical Sciences, Universiti Sains Malaysia. All rights reserved.

CORRESPONDING AUTHOR: Dr Gurdeep Singh Mannu, C/o Level 2 MFE Offices, Norfolk and Norwich University Hospital, Colney Lane, Norwich, NR4 7UY
E-mail: gurdeepmannu@gmail.com

Introduction

The cliché of the world becoming smaller with the advent of information technology and improved transport is more valid these days than ever before. This has influenced the practice of medicine as much as any other field and doctors are able to gain experience and knowledge from colleagues freely across international borders. I had originally travelled abroad in order to improve my clinical skills in the assessment and management of surgical patients. Amongst my personal objectives, I had hoped to gain a better understanding of the differences between the practice of medicine and surgery in the developing and developed world. The notable observations and comments from my travels are described in this article, in addition to the impact they have had on my personal opinions of the healthcare system of the United Kingdom (U.K.) where I currently work.

The role of the doctor

In South Africa the doctor is considered to be a highly respected individual in society, as is the case in most developing countries. Doctors are greatly appreciated and respected by all levels of the community. The lack of widespread education and the preponderance of witch doctors and village medicine potentiate a more paternalistic approach to contemporary medicine than in the U.K. On the converse, in the US, patients tended to be highly educated and since they are in effect paying for medical consultations they would arrive well versed on their symptoms and possible diagnoses from the internet and personal research. In the U.S., a much more level doctor-patient relationship is seen. In the realms of private practice, a satisfied patient is more likely to make recommendations to friends and as a result, word of mouth is key for a successful future practise. It was by virtue of this 'service nature' of the U.S. healthcare system that the patient often procured the pedestal in extreme cases and the doctor-patient relationship was much more skewed to the patient side when compared to the UK.

A doctor's lifestyle and working hours are much harder in South Africa than in the US or the UK. The level of skill and wide ranging expertise is considerable but the opportunity for training and developing skills is great. There are few medico-legal repercussions in the less affluent areas where there is a low level of medico-legal awareness in the population. However, this simply demands greater emphasis on the medical profession to patrol mistakes and critique failures from within. In the USA, although doctors are considered a privileged profession, they are placed in a service role similar to other high level workers. Patients routinely 'shop around' for various opinions and subsequently physicians are placed in direct competition with one-another for business.

Whether grassroots competition between doctors (for patient consult) drives national level healthcare progression or hinders it is an age-old debate. This is a topical area at the moment with the current political climate in the U.S. and the intense debate regarding the future of country's healthcare. The massive medico-legal framework of the U.S. healthcare system places a massive emphasis on legal proof of decisions, with many patients receiving numerous investigations, occasionally for medico-legal purposes.

Financial/equipment/technological differences

The availability of technology in South Africa is not the problem. The problem is in the financial restrictions involved in obtaining it. Corruption is still prevalent in many sectors of the country and theft and damage are serious problems facing any investment in technological infrastructure. During my time in the burns unit I saw several cases of severe electrical burns from young men attempting to steal electrical cables from electricity silos.

It is widely accepted that implementation of better technology has a direct relationship with greater investment in local security. Financial restraints may limit the former or the later and subsequently prevent either. Although there are many affluent areas in South Africa, such as Cape Town where this is not such a problem,

much of the country still has difficulty. In the U.S, I have seen quite the contrary being the case. The latest technology is used at great expense with marginal improvement in clinical prognosis of diagnosis.

In the U.K the economical culture of healthcare is somewhat invisible from the patient's prospective. The managerial levels of the National Health Service and organisations such as the National Institute for Clinical Excellence (NICE) rarely have a direct face to face impact on the patients. The business culture in healthcare is not apparent to the patient who receives healthcare 'free at the point of delivery'. There is a large private sector of healthcare in the U.K but this does not replace a patient's option of being treated under the NHS.

In South Africa, healthcare is free for patients of a sufficiently low annual income and daily costs are subsidised there after with affluent members of the community paying the full price of hospital stay. However, these individuals rarely chose to be treated in a state hospital and usually see private hospitals. In the US, private healthcare is the norm and health insurance in a massive industry with many individuals having more than one health insurance company. The leading cause of bankruptcy is healthcare costs despite of health insurance [1]. As a result, I was somewhat surprised at the reaction of the healthcare system to patients lacking the means to pay for it (i.e. not having health insurance).

The same situation seemed acceptable to me in South Africa where financial restraint forcibly resulted in triage of patients with the greatest need being treated preferentially, but it seemed almost immoral to disqualify patients because of their financial circumstances and not on need. This indeed is perhaps the greatest strength of the NHS when compared to the U.S. healthcare system. It was not foreseeable to me that in such a prosperous country like the U.S.A, that such blatant deficiencies might exist [2-5].

In south Africa, clinical research is an area that is particularly restricted by financial limitations [6]. Lack of technology and the deficiency of

computerised systems make epidemiological and scientific research very difficult. Audits are an unnecessarily tedious area due to the lack of computerised systems. It is necessary to troll through hundreds of dusty, hand-written and poorly maintained patient notes in order to obtain the basic data for research or audit. However, the difficulties involved in implementing computerised systems and the security required to prevent their theft is discussed in the finances section above.

Patient differences

In South Africa the patients were very grateful and respectful. However, there were many differences between the healthcare delivery there compared with the U.K. by virtue of the patient's level of education and knowledge. It was difficult to explain basic concepts regarding the aetiology or cause of various diseases and often I was forced to adopt a paternalistic approach in order to explain treatment regimes. I also got the impression that many patients here expected and desired a paternalistic approach to the medical consultation and were surprised and confused when I sought their input into the treatment options available.

In the U.S, the strong medico-legal business drives certain traits out of the healthcare system, and ultimately empowers patients. To first impressions as a healthcare practitioner it appeared as a doctor-beware system. This was most evident in clinical decision making. In the U.K., the budgeting and rationing of the national health system places a moral duty on us to be prudent and intelligent on the investigations and management we instigate. Similarities to this type of rationing are not any more so demonstrated in South Africa where financial restrictions are a serious problem. The problem in South Africa is not only the cost of ordering investigations, but also the quality of equipment used to obtain them. An old four- section CT scanner is amongst the most expensive investigations one could request. (This is considered archaic considering most U.K standard hospitals having on average at least a 32 slice scanner). In the USA, a physician is

pressured by the medico-legal framework, such that if a patient has a persistent headache, the threshold for MRI investigation is much lower than in the U.K. Having been trained in the U.K., I often felt such cases were wasteful of resources, but I soon realised that from the patient's prospective, the insurance companies meant that resources are abundant here. Additionally, from the physician's viewpoint, additional investigations at an early stage in a patient's presenting complaint may prevent expensive legal fees at a later stage from missing a diagnosis.

Disease presentation differences

I quickly realised a large discordance between the stage of disease presentation between patients of different countries and of different socioeconomic classes within each country. Patients from privileged backgrounds with excellent medical insurance presented earlier with illnesses in both the USA and South Africa. However, predictably those patients with little or no health insurance presented late or did not present in both countries. It is this inconsistency that the current U.S. federal administration has posed to address.

Generally patients in South Africa presented later with disease than those in the USA or in UK and I felt this was mostly due to a combination of poor contemporary healthcare awareness, education and the number of local herbal remedies and witch doctors. In South Africa, late presentations of disease to local hospitals were a common occurrence. This often resulted in grotesque and debilitating pathologies which were occasionally detected once the patient presented with something totally unrelated (for instance a pedestrian-vehicle accident). I felt the late presentation of patients from the low socioeconomic groups of both of these countries was chiefly due to concern regarding the healthcare fees. The virtue of the U.K. national health system free of monetary cost at patient presentation can be fully appreciated in the midst of both these contrasting systems.

Multidisciplinary team differences between South Africa, U.S.A. and the UK

The multidisciplinary team set up in the USA and South Africa is very different. In South Africa many nurses are well trained however there is still a hypothetical pedestal for doctors and there is a clear hierarchy of information flow. The doctor will make the plan and it will be performed by the nursing staff in a much more formal way than in the U.K. In the USA, nurses are very highly trained and involve themselves to a greater degree in decision making.

I found the position of physician assistants (PA) within the healthcare team hierarchy something difficult to understand.

This is something which is very topical for us in the United Kingdom at the moment since the new batch of PA's to be introduced into our health care system are just graduating and St. George's, University of London which is pioneering the course. As a medical student from overseas who was eager to immerse himself in surgery, I was very keen to scrub into theatre operations and get involved in the ward rounds however I noted physician's assistants equally keen for these opportunities. This is very topical subject in the UK and it will be interesting to see how the PA will be implemented in to the ward-based healthcare team. A PA in the US is chiefly involved in ward work, doing much of the work of a junior doctor in the UK. PA's are able to take a history, examine the patient, diagnose and initiate management. They can prescribe and assist in operating theatres. They are highly paid and have flexible working hours. They are considered part of the medical team and not the nursing team.

Although they can only work under the supervision of a qualified physician, it was my observation that they are usually able to work and manage patients with a great deal of freedom from supervision. In the U.K., where there are many competencies for junior doctors to prove each year, it will be interesting to see whether procedural skill opportunities would be affected by this new profession. There was no such role in South Africa simply due to the high level of

training and experience required there and the lack of staff to supervise such a position. The intense workload requires one to work independently.

Conclusion

It is true that the same basic needs are universal worldwide; however the disparity between systems of delivering them is immense. Within this article I have discussed my personal experiences from working in the surgical field in South Africa and in the United States of America. These countries were used to demonstrate the differences between the healthcare culture and delivery in developing and developed countries.

After much deliberation regarding the advantages and disadvantages of each, I have reached the conclusion that despite what the media and politicians would have us believe, the NHS is amongst the best health services in the world and one of this country's greatest assets. During my travels I feel I have successfully accomplished my original objectives of improving my clinical skills in the assessment and management of the surgical patient. I have appreciated the differences between the practice of medicine and surgery in the developing and developed world. I feel fortunate to be starting my junior house officer job in the coming months in the National Health Service.

Reference

1. Himmelstein DU et al. Medical bankruptcy in the United States, 2007: results of a national study. *Am J Med*, 2009. 122(8): p. 741-6.
2. Gottlieb S. Medical bills account for 40% of bankruptcies. *BMJ*, 2000. 320(7245): p. 1295.
3. Dranove, D, Millenson ML. Medical bankruptcy: myth versus fact. *Health Aff (Millwood)*, 2006. 25(2): p. w74-83.
4. Seifert RW, Rukavina M. Bankruptcy is the tip of a medical-debt iceberg. *Health Aff (Millwood)*, 2006. 25(2): p. w89-92.
5. May JH, Cunningham PJ. Tough trade-offs: medical bills, family finances and access to care. *Issue Brief Cent Stud Health Syst Change*, 2004(85): p. 1-4.
6. Gevers W. Clinical research in South Africa: a core asset under pressure. *Lancet*, 2009. 374(9692): p. 760-2.
7. Doherty RB. The Certitudes and Uncertainties of Health Care Reform. *Ann Intern Med*, 2010.
8. Bristol N. Obama attempts to push through health reform bill. *Lancet*, 2010. 375(9718): p. 879.