### **REVIEW ARTICLE**



# Effects of dual job practices on professionalism amongst doctors - A critical literature review

Malik Muhammad Hanif<sup>1,\*</sup>, Usman Mahboob<sup>2</sup>

<sup>1</sup>Department of Dermatology, Sheikh Zayed Medical College/Hospital, Rahim Yar Khan, University of Health Sciences, Lahore 54600, Pakistan

<sup>2</sup>Institute of Health Professions Education and Research, Khyber medical University, Peshawar 23301, Pakistan

### ABSTRACT

Professionalism in medicine is a trust based social contract between professionals and public wherein professionals are expected to subordinate all their interests to the larger interests of patients and public. Recent commercialization trends have eroded ethical as well as scientific underpinnings of this sacred profession. This situation calls for immediate and planned resuscitative measures to reverse it. Healthcare professionals particularly dual job holding doctors are the key persons in this regards. To systematically examine literature on perceptions of doctors about dual jobs and its effects on professionalism in resource limited settings, through systematic searches of Medline, Ovid, ERIC and Science Direct combined with grey search from Google Scholar and hand search from reference lists and selected journals, eighteen articles were found appropriate to be included in this review. Six themes were identified: dual job and motives behind private practice; monetary gains and non-professional behavior; threats to professionalism and professionals; medical education's role in building up professionalism; economic principles, law & medical professionalism and governance in healthcare development. The results suggest a clear paucity of qualitative studies on perceptions of doctors with dual jobs about the practices of professionalism in both public and private sectors and their views about remedial measures in low income settings. The review highlighted the need to explore the perceptions of the key elements *i.e.* doctors; particularly those with dual jobs about the practices of professionalism in public and private sectors along with their proposals about remedial measures in resource limited settings.

Key words: doctor, professionalism, altruism, attitude, patient-doctor relationship, corruption, policy, public sector, private sector, dual jobs

### INTRODUCTION

Respectability conferred upon doctors is because of the care they provide to the finest creature on the face of earth - "We create man in the finest state" (Qur'an 95:4, Oxford World's Classic edition). It is, therefore, morally expected that those engaged in this noble profession will continue to prove to be trustworthy and the authority granted to them through licensing and credentialing shall consistently be reciprocated with high standards of competence and accomplishment of moral responsibilities. As such, they will subordinate all their interests, monetary and others, to the higher values of responsibility to patients and public interests.<sup>[1]</sup>

Gradual intrusion of commercialism in healthcare throughout the world<sup>[2–4]</sup> has transformed the mutually trusting and rewarding<sup>[5–7]</sup> traditional doctor–patient relationship of care and trust into questions of cost and benefit.<sup>[8]</sup> Money has become the main objective of life and public perceives that the doctors with dual jobs pay more attention to and are more altruistic towards their private patients.<sup>[9–14]</sup> The question, "what are the perceptions of such doctors themselves about the

#### \*Corresponding Author:

Malik Muhammad Hanif, E-mail: muhammadhanifmalik68@gmail.com; https://orcid.org/0000-0002-9077-2447 Received: 28 April 2023; Revised: 28 June 2023; Accepted: 30 June 2023; Published: 24 July 2023 https://doi.org/10.54844/hper.2023.0389

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Figure 1. Screen shot of the search results.

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Figure 2. Screen shot of the search results.

practices of professionalism in the two sectors" forms the basis of present review.

## **METHODOLOGY**

We followed the protocols and methods of Haig and Dozier<sup>[15,16]</sup> in our systematic search through Medline, Ovid, ERIC, Science Direct and grey search from Google Scholar (Figures 1 and 2) conducted between Jan to March 2016. To enhance search sensitivity, selected medical education journals (*Medical Education* AND *Medical Teacher*) and the reference list of the studies so selected were hand searched. A total of eighteen articles were found appropriate for inclusion in review

process.

Key search terms relating to "Professionalism", "Dual jobs", "Doctor" and "Perceptions" were identified and piloted to enhance scope for the search (Table 1). Similar search terms were employed through all databases. Boolean commands (OR and AND) were used as required to combine search terms to form appropriate strings for search topics.

Peer-reviewed journal publications written in English focusing on Professionalism, Attitude, Medical Education, Public sector, Dual job, Healthcare Economic Policies and Ethics were included in the review. There were no restrictions on study designs, or

### Table 1: Search terms by topic area

Торіс	Search terms
Professionalism	Attitude OR Patient-Doctor relationship, OR Altruism OR Clinical Competence OR Expertise OR dedication OR Excellence OR Humanism OR Accountability AND Altruism OR Communication Skills OR Ethics
Doctor	Physicians OR Healthcare Professional OR Medical Practitioner OR healer OR Medical Person OR Medical Scientist OR Practitioner of Medicine
Dual jobs	Public Sector Hospitals AND Private Sector Hospitals OR Public Sector OR Private sector OR Low Income Setting OR Resource Constrained Setting OR Bifold Binary OR Coupled Practice OR Paired Practice
Perceptions	Perceptions OR Understanding OR Idea OR View Point OR Insight OR Judgment OR Observation OR Opinion
Medical education	Medical Education OR Medical Literacy OR Teaching and Learning in medicine OR Medical Teaching OR Health Profession Education

### Table 2: Summary of review articles/opinion and debates/critical commentary

Author(s)/Year	Title	Key features				
Gadit 2011 <sup>[14]</sup>	Corruption in medical practice: How far have we gone	Authors accurately portray the true picture of corruption in healthcare system for the sake of monetary gains in low income settings				
Bansal and Das 2005 <sup>[10]</sup>	Unethical relationship between doctors and Drugs companies					
Mahajan 2010 <sup>[18]</sup>	White coated corruption					
Benatar 1998 <sup>[19]</sup>	Global disparities in health and human rights: a critical commentary	Deteriorating professionalism in public sector with inequities and disparities in healthcare nationally and globally with the resultant threat to laissez faire pattern, security of career and				
Sullivan 2000 <sup>[1]</sup>	Medicine under threat: professionalism and professional identity	socioeconomic mobility of the professionals Basic principle is that financial motives are incompatible to promoting altruism and that professionalism is to be inculcated as a virtue				
Voo 2015 <sup>[20]</sup>	Altruism and reward: motivational compatibility in deceased organ donation					
Donohoe 2004 <sup>[9]</sup>	Luxury primary care, academic medical centers, and the erosion of science and professional ethics	Erosions of scientific and moral underpinnings of the professionalism to meet financial crisis at institutional level and its impact on training of the future doctors. Measures to economically manage the healthcare system so as to economize the patient care yet respecting the patients' requirements and their preferences while avoiding un-necessary risks and				
Porzsolt 2010 <sup>[21]</sup>	Implementing economic principles in medicine while maintaining medical professionalism	expanses				
García-Prado and González 2007 <sup>[22]</sup>	Policy and regulatory responses to dual practice in the health sector	Pros and cons of various policy measures designed to undermine the adverse consequences of dual practice. Healthcare market and institutional arrangements are crucial for the designing and implementing				
		these strategies				
Stephen <i>et al.</i> 2005 <sup>[11]</sup>	Dual job holding by public sector health professionals in highly resource- constrained settings: problem or solution	Policy options for the regulation of dual job holding by medical professionals in highly resource constrained settings Dual job holding is viewed as one of the solution system to issues such as limited public sector resources and incomes, low governmental capacity to implement regulations and the interplay between market forces and skilled human resource are analyzed Allowance is suggested for the official recognition of such activity and concept of professional self-regulation is introduced				
Cohen 2006 <sup>[23]</sup>	Professionalism in medical education, an American perspective: from evidence to accountability	Clearly defines professionalism and its central role in sustaining the public's trust in the medical professionals and that medical education plays a key role of in inculcating the deep rooted professionalism Assessment tools which focus only upon superficially observable behaviors but not on moral				
Brody and Doukas 2014 <sup>[24]</sup>	Professionalism: a framework to guide medical Education	values and attitudes are identified Focuses upon certain key factors which help students to avoid unreflective mis-understandings about professionalism, and guides both faculty and students to address the deeper issues required for forming a successful professional identity				

countries. Quantitative, qualitative, mixed method research studies, discussions/reviews and debates all were included in the study. In fact, inclusion criteria included almost every aspect of the research question. Duplicate and non-specific articles were excluded from review.

# RESULTS

Flow chart in Figure 3 below shows application of inclusion and exclusion criteria as per guidelines for presenting results of systematic reviews.<sup>[17]</sup> Key features of the review articles/opinion and debates/critical

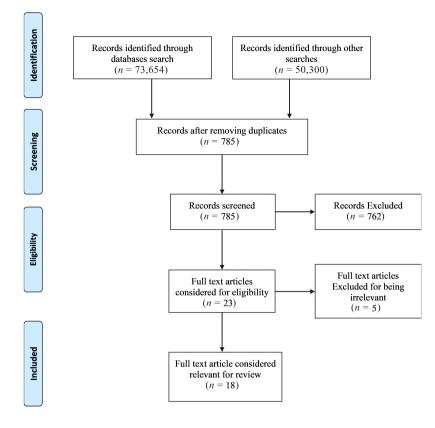


Figure 3. Flowchart of search result.

commentary are summarized in Table 2 while those of quantitative/qualitative and mixed method studies in Table 3.

# **SYNTHESIS**

Six Dominant Themes were identified in the selected articles: dual job and motives behind private practice; monetary gains and non-professional behavior; threats to professionalism and professionals; medical education's role in professionalism; economic principles, law & medical professionalism and governance in healthcare development. They are presented in Table 4 and discussed separately.

# DISCUSSION

Themes identified through meta-synthesis:

# Dual job and motives behind private practice in healthcare

Monetary gains remain the most important source of power and a means of living in the minds and hearts of mankind ever since its birth. There is no doubt that time in one's life & properly earned and genuinely spent wealth are the only two assets which can make his/her life in this world and in hereafter (for those who believe in it) either an ultimate success or a permanent total failure. A qualitative study<sup>[12]</sup> identifies monetary motives behind dual jobs and that dual job holding doctors are a net benefit so long as they handle conflicts of interests properly. A review<sup>[11]</sup> examines the policy options for regulating dual job and its potential as a possible solution system in resource limited settings. Authors support a public recognition of dual job holding and introduce a strategy of professional self-regulation through this.

# Non-professional behavior in healthcare for monetary gains

True to the proverbial mirage, "Money makes the mare go" one is naturally inclined towards monetary gains and doctors are no exception to it. It is only when monetary benefits become the sole objective of one's life that nonprofessional attitudes come up. Money minded professional, being master of his job, finds no limit to maneuver their monetary objectives<sup>[10,14,18]</sup> and the pharmaceutical industry unfortunately has played a catalytic role in this regards.<sup>[2–4,20,29–34]</sup>

# Threats to healthcare professionalism and professionals

"Financial motives are incompatible to promoting altruism"<sup>[20]</sup>

### Table 3: Summary of qualitative/quantitative/mixed method studies

Author(s)/Year	Title	Method	Sample size	Key feature
Pappas 2008 et al. <sup>[25]</sup>	Governance and health sector development: a case study of pakistan	Case reports	2	Importance of the role of regulatory measures and political stability of the country in improving healthcare
De Costa and Diwan 2007 <sup>[26]</sup>	"Where is the public health sector" Public and private sector healthcare provision in Madhya Pradesh, India	Quantitative field survey	-	Redefines role of public health sector on the face of disparity in providing healthcare to rural and urban areas <i>i.e.</i> a constructive oversight on the entire healthcare system (public and private) coupled with direct provision of services where required. Reflects need to build strong public-private partnership in order to ensure equitable access to healthcare for all
Humphrey and Russell 2004 <sup>[12]</sup>	Motivation and values of hospital consultants in south-east England who work in the national health service and do private practice	Qualitative research (Interpretative phenomenological analysis)	60	The presence of private sector and dual job holding doctors is a net benefit, not only to doctors as financial gain but also to their private patients and public sector, so long as they properly handle conflicts of interests in the larger interests of patients and the nation
Schlesinger 2002 <sup>[27]</sup>	A loss of faith: The sources of reduced political legitimacy for the American medical profession	Mixed methods research	1868	Public's and elites' perspectives of factors leading to loss of faith in medical professionals and threats to their laissez faire pattern, security of career and socioeconomic mobility
Perry 2012 <sup>[8]</sup>	Physician-owned specialty hospitals and the patient protection and affordable care act: health care reform at the intersection of law and ethics	Case study	-	While making any reforms to healthcare policies, ethical considerations have to be given top priority.
Bhatti 2011 <sup>[28]</sup>	Administrative professionals and the diffusion of innovations: the case of citizen service centers	Mixed methods research	271	Importance of the role of administrators and executives in implementing the policies and innovations in all fields of the society

is a basic principle. So with commercialism, the profession is transforming from mutually rewarding and trusting<sup>[5–7]</sup> philanthropic services delivered with dedication, compassion and concern, to the sale of a commodity in a commercial market. This has led to the transformation of traditional doctor–patient relationship of care and trust in to questions of cost and benefit. The public is losing faith in medical professionals and rightly perceive that attitude of the doctors working in both sectors is better with their private clients.<sup>[27]</sup> This has posed threats to laissez faire pattern, security of career and socioeconomic mobility of the professionals.<sup>[1,19]</sup>

# Medical education's role in healthcare professionalism

Whenever in the history of mankind, materialism would come up as a killer of humanity and the moral values deteriorated, prophets from within the same people with divine guidance would be deputed by Almighty to educate the people in faith and moralities. This golden strategy holds true even today and the prophetly activity of education still has and shall continue to have the full potential to reverse the deteriorating moralities. Hence medical education is of paramount importance<sup>[23]</sup> to inculcate deep rooted professionalism which is central to sustaining the public's trust in the medical professionals. Certain key precepts<sup>[24]</sup> in this regards are helpful to guide both faculty staff and students for successful professional identity formation.

# Economic principles, law & medical professionalism

Legalities guide internally motivated ones and penalties are only for minority of people. No law can gear up non motivated, disgruntled lot and no society can afford to disable majority of its people through penalties. For the motivated ones too, society needs to have a code of ethical<sup>[8]</sup> and professional norms which standardize the attitudes and interpersonal relations yet not compromising upon the scientific and moral underpinnings of professionalism to meet the financial crisis.<sup>[9,21]</sup>

### Governance and healthcare development

No matter how excellent a code and /or reforms thereof may be; they need strong yet flexible governance and its mechanics for implementation. Internal motivation, however, remains the most important driving force. Role of the public health sector in the face of overall inequity and disparity in providing healthcare to rural and urban areas needs to be redefined.<sup>[35]</sup> Policy measures to regulate dual jobs have their own pros and cons<sup>[26]</sup> and need to be analyzed in a broader context. Role of regulatory measures and political stability<sup>[22]</sup> in improving healthcare system, however, is important as is the role of administrators and executives in

#### Table 4: Themes from the articles included in the review

Author(s)/Year	Themes/Findings
Stephen <i>et al.</i> 2005 <sup>[11]</sup> Humphrey and Russell 2004 <sup>[12]</sup>	Dual jobs and motives behind private practice Self-regulated Dual job holding can be a possible solution system to problems such as limited public sector resources and incomes as well as low regulatory capacity of government. Private sector and the dual job holding are beneficial, for doctors, private patients and public sector, as long as conflicts of interests are properly handled in the larger interests of the patients and the nation
Gadit 2011 <sup>[14]</sup> Bansal and Das 2005 <sup>[10]</sup> Mahajan 2010 <sup>[18]</sup>	Monetary gains and corruption When financial gains become the sole objective of one's life, corruption is bound to occur
Benatar 1998 <sup>[19]</sup> Sullivan 2000 <sup>[1]</sup> Schlesinger 2002 <sup>[27]</sup> Voo 2015 <sup>[20]</sup>	Threats to professionalism Deteriorating professionalism results in inequities and disparities in healthcare nationally and globally giving rise to loss of faith in medical professionals among public and elites. This in turn results in threats to laissez faire pattern, security of career and socioeconomic mobility of the professionals. Financial motives are incompatible to promoting altruism and professionalism has to be inculcated as a virtue
Cohen 2006 <sup>[23]</sup> Brody and Doukas 2014 <sup>[24]</sup>	Medical education's role in professionalism Professionalism has central role in resuscitating the public's trust in healthcare professionals and is of paramount importance in inculcating the deep rooted professionalism Some assessment tools assess only observable behavior but not the moral values and attitudes. Certain key precepts help students to avoid common and unreflective misunderstandings about professionalism guiding both faculty and students to address the deeper issues required for formation of successful professional identity
Donohoe 2004 <sup>[9]</sup> Franz Porzsolt <sup>[21]</sup> Perry 2012 <sup>[8]</sup>	Economic principles, law & medical professionalism Ethics should have its chair on the table while making any reforms in health care policies. Temptations to erode scientific and moral underpinnings of the professionalism in order to meet financial crisis even at institutional level have negative impact on training of the future doctors. One can manage to economize the patient care yet respecting the patients' requirements and their preferences while avoiding un-necessary risks and expanses
De Costa 2007 <sup>[26]</sup> Garc´ıa-Prado and Gonz´alez 2007 <sup>[22]</sup> Pappas <i>et al.</i> <sup>[25]</sup> Bhatti 2011 <sup>[28]</sup>	Governance and healthcare development On the face of dominant & heterogeneous private healthcare sector and disparity in healthcare provision in rural and urban areas, public sector can assume a new role <i>i.e.</i> a constructive oversight on entire healthcare system (both private and public) balanced with provision of services where necessary. Such a public-private partnership will ensure equity of access to healthcare facilities for all Private healthcare setup and strong institutional arrangements are both crucial for the design and implementation of strategies to undermine the adverse consequences of dual practice. Political stability and administrators/executives are all important in implementing the policies and innovations

implementing the policies and innovations in all fields of the social life.<sup>[25]</sup>

# CONCLUSION

All studies have adequately portrayed the overall state of professionalism in healthcare; public's concern about it and suggested appropriate measures for its reversal. Since the practitioners, particularly the dual job holders, are the key persons in this regards, their involvement as study participants in all such studies seems essential. None but only one study<sup>[12]</sup> identifies dual job holding healthcare practitioners as its study participants wherein main focus of interview has been on their motivation for dual job and NOT on attitude, role of education and internal motivation in attitude building and their perspective on making policies to regulate such practices. Same is true where policy measures regulating dual job<sup>[8,9,18,21,26,35]</sup> and public-private partnership or coalition<sup>[35]</sup> are discussed.

Moreover, educational aspects of professionalism<sup>[23,24]</sup> and lack of a holistic view of the picture because it is the combined perspectives of practitioners, educators, administrators & executives, politicians and the society that is required to address the issues of declining professionalism and its corrective measures appear to be the significant gaps in the studies reviewed. Most of the reviews originate from and the studies have been c on d u c t e d in USA / C a n a d a a n d Europe<sup>[1,8,9,11,12,19–21,23,24,26,35]</sup> which do not represent the low income and resource limited contexts.<sup>[10,18,22]</sup> Hence they are limited in their scope.

Synthesis and interpretation of the results in this review is likely to have been influenced by the researcher's own experience of being a dual job practitioner, his regular interaction with the public about moralities and his knowledge of divine teachings of Holy Qur'an.

### RECOMMENDATIONS

Foregoing in view, it is suggested that qualitative studies exploring perceptions of doctors with dual jobs as health care professionals about the practices of professionalism in both public and private sector along with their views about factors leading to such a state and their proposals for improvement in a low income and resource limited settings should be done and continued.

## DECLARATION

### Author contributions

Co-author significantly contributed throughout the

literature review process and in reviewing/editing the script.

### Ethics approval

Not applicable.

### Source of funding

None declared.

### **Conflict of interest**

Malik Muhammad Hanif is an Editorial Board Member of the journal. The article was subject to the journal's standard procedures, with peer review handled independently of this editor and his research groups.

### Data availability statement

Not applicable.

# REFERENCES

- Sullivan WM. Medicine under threat: professionalism and professional identity. CMAJ. 2000;162(5):673–675.
- Altom LK, Churchill LR. Pay, pride, and public purpose: why America's doctors should support universal healthcare. *Med Gen Med.* 2007;9(1):40.
- Flood CM, Archibald T. The illegality of private health care in Canada. CMAJ. 2001;164(6):825–830.
- Gruen R, Anwar R, Begum T, Killingsworth JR, Normand C. Dual job holding practitioners in Bangladesh: an exploration. *Soc Sci Med.* 2002;54(2):267–279.
- Iglehart JK. The American health care system. Managed care. N Engl J Med. 1992;327(10):742–747.
- Relman AS. Shattuck Lecture—the health care industry: where is it taking us? N Engl J Med. 1991;325(12):854–859.
- Lundberg GD. Countdown to millennium—balancing the professionalism and business of medicine. Medicine's Rocking Horse. JAMA. 1990;263(1):86–87.
- Perry JE. Physician-owned specialty hospitals and the patient protection and affordable care act: health care reform at the intersection of law and ethics. *Am Bus Law J.* 2012;49(2):369–417.
- Donohoe M. Luxury primary care, academic medical centers, and the erosion of science and professional ethics. J GEN INTERN MED. 2004;19(1):90–94.
- Bansal R, Das S. Unethical relationship between doctors and drugs companies. J Indian Acad Forensic Med. 2005;27:40–42.
- Stephen J, Bian Y, Manuel J, *et al.* Dual job holding by public sector health professionals in highly resource-constrained settings: problem or solution? *Bull World Health Organ.* 2005;83(10):771–776.
- Humphrey C, Russell J. Motivation and values of hospital consultants in south-east England who work in the national health service and do private practice. *Soc Sci Med.* 2004;59(6):1241–1250.
- Marcia Angell. Drug Companies and Doctors: A story of corruption Source. Accessed 30 June, 2023. https://www.nybooks.com/articles/ 2009/01/15/drug-companies-doctorsa-story-of-corruption

- Gadit AA. Corruption in medical practice: how far have we gone? J Pak Med Assoc. 2011;61(1):93–94.
- Haig A, Dozier M. BEME Guide No<sub>3</sub>: Systematic searching for evidence in medical education—Part 1: sources of information. *Med Teach.* 2003;25(4):352–363.
- Haig A, Dozier M. BEME guide no. 3: systematic searching for evidence in medical education--part 2: constructing searches. *Med Teach*. 2003;25(5):463–484.
- Liberati A, Altman DG, Tetzlaff J, et al. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. PLoS Med. 2009;6(7):e1000100.
- Mahajan V. White coated corruption. Indian J Med Ethics. 2010;7(1):18–20.
- Benatar SR. Global disparities in health and human rights: a critical commentary. *Am J Public Health*. 1998;88(2):295–300.
- Voo TC. Altruism and reward: motivational compatibility in deceased organ donation. *Bioethics*. 2015;29(3):190–202.
- Porzsolt F. Implementing economic principles in medicine while maintaining medical professionalism. J Public Health. 2010;18(2):199-203.
- García-Prado A, González P. Policy and regulatory responses to dual practice in the health sector. *Health Policy*. 2007;84(2/3):142–152.
- Cohen JJ. Professionalism in medical education, an American perspective: from evidence to accountability. *Med Educ.* 2006;40(7):607-617.
- Brody H, Doukas D. Professionalism: a framework to guide medical education. *Med Educ.* 2014;48(10):980–987.
- Pappas AG, Masud T, Hyder A, Siddiqi S. Governance and health sector development. *Internet J World Health Soc Polit.* 2008;7:1.
- Costa A, Diwan V. 'Where is the public health sector?' Public and private sector healthcare provision in Madhya Pradesh, India. *Health Policy*. 2007;84:269–276.
- Schlesinger M. A loss of faith: the sources of reduced political legitimacy for the American medical profession. *Milbank Q.* 2002;80(2):185–235.
- Bhatti Y, Olsen AL, Pedersen LH. Administrative professionals and the diffusion of innovations: the case of citizen service centres. *Public Adm.* 2011;89(2):577–594.
- 29. Transparency International (TI). Pakistan's health sector: does corruption lurk?.
- Transparency International. Corruption in public services; perceived corruption in health sector. Accessed 30 April, 2023. https:// www.transparency.org/en/cpi/2002
- Veracity D. Natural News. Physicians and bribery: a closer look at this common.
- Angell M. Drug Companies and Doctors: A story of corruption 2009. Accessed 30 April, 2023. https://www.nybooks.com/articles/2009/01/ 15/drug-companies-doctorsa-story-of-corruption
- Chen XY. Defensive medicine or economically motivated corruption? A Confucian reflection on physician care in China today. J Med Philos. 2007;32(6):635–648.
- Vian T, Burak LJ. Beliefs about informal payments in Albania. *Health Policy Plan.* 2006;21(5):392–401.
- Diwan ADCV. Where is the public health sector? Public and private sector healthcare provision. *Health Policy*. 2007;84:269–276.