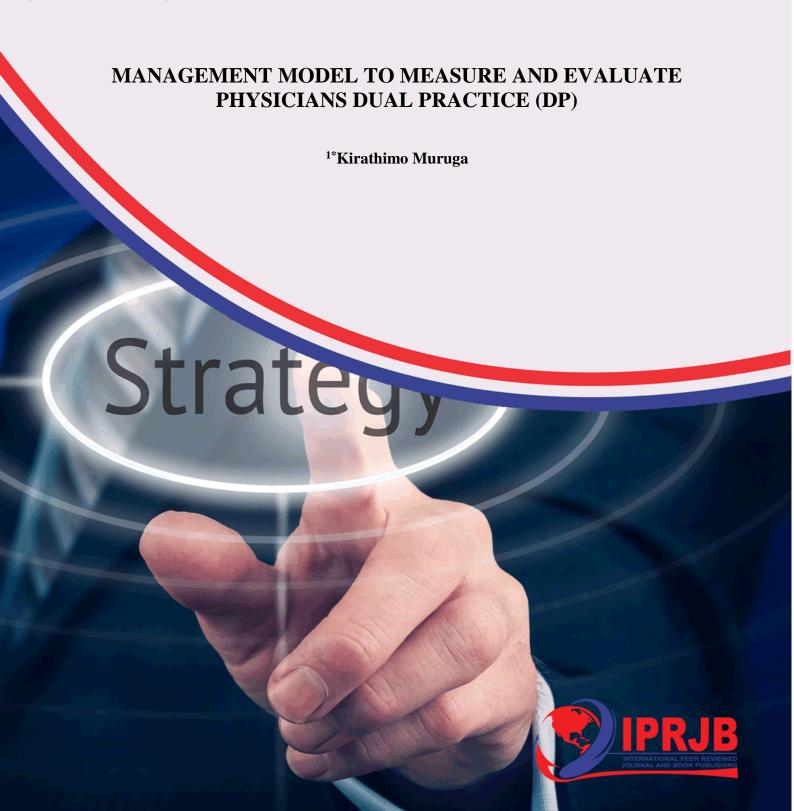
# European Journal of **Business and Strategic Management** (EJBSM)



# MANAGEMENT MODEL TO MEASURE AND EVALUATE PHYSICIANS DUAL PRACTICE (DP)

<sup>1\*</sup>Kirathimo Muruga

RISEBA University of Applied Sciences, Meza iela 3, Riga, Latvia.

Corresponding Authors Email: kirathimo.muruga@gmail.com

### **Abstract**

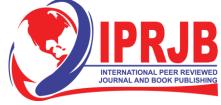
**Purpose:** The aim of this study was to develop a Management model that can measure and evaluate physicians Dual Practice in the Kenyan health sector.

**Methodology:** The paper adopted a desk top research design. The design involves a review of existing studies relating to the research topic. Desk top research is usually considered as a low cost technique compared to other research designs (Beal et al., 2012). In this case, the researcher collected information relating to physicians Dual Practice.

**Results:** Based on past literature, the study concluded that several factors are vital in influencing physicians having Dual Practice. These factors included; infrastructure, working environment, doctor's promotion and income level. The cost/value of DP was also highlighted as an important determinant. Further, the study concluded that legal framework has a significant moderating influence on physicians having Dual Practice. In addition, the study concluded that the level of physicians' satisfaction determined their tendency to engage in Dual Practice.

Unique Contribution to Theory, Practice and Policy: Based on the findings, the study recommended the need for stakeholders in the health sector to understand the concept of Dual Practice. In particular, there is need to understand the causes and implications of Dual Practice. The study also recommended the need to develop a management model that can measure and evaluate physicians Dual Practice. It is not advisable to completely ban Dual Practice since it has some positive impact. At the same time, excessive Dual Practice can be counterproductive and could be a threat to the efficiency, quality and equity of health services, especially in the public sector. Hence, the need to develop a management approach and management model that can ensure improved cost-benefit of physicians having Dual Practice.

Keywords: Management Model, Physicians, Dual Practice



www.iprjb.org

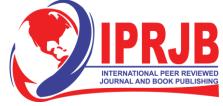
### INTRODUCTION

Dual practice (DP) is the widespread phenomenon of government employees working concurrently both within and outside the public-sector environment. The private work may be undertaken physically within or outside public facilities, but is conducted either entirely for personal profit or as part of a profit-sharing arrangement with the relevant government authority. DP is common within but not restricted to the health professions; teachers, academics, public security staff and conceivably any salaried professional may undertake private work additional to their government employment. Nonetheless, DP in the health sector attracts the most interest because it concerns an issue of universal importance that can be extremely costly, is inherently unpredictable, and assumes the availability of skilled care (Bloom et al. 2008). Furthermore, with the high profile of recent donor- and publicly funded efforts to improve population health (Ravishankar et al. 2009), and burgeoning research interest in human resources for health (Ranson et al. 2010), high-level attention has been paid to DP by public-sector health workers, doctors in particular (Kiwanuka et al. 2011).

DP is common all over the world, and is found in countries whose development and economic status, political system and demographic and health situations vary widely. The United States (where it is rare) and Canada (where it is officially not permitted) are two exceptions, but even in nations or states where it is officially banned, overt or covert DP is common. The frequency of health sector DP varies widely; in some nations, a majority of public-sector doctors also work privately, while in others only senior doctors or specialists do so (Garcia-Prado & Gonzalez, 2011). Accounts of health workforce practices in many South and East Asian nations including India, Bangladesh Thailand and China confirm DP by doctors in this region (Garcia-Prado & Gonzalez, 2011). However, there is less evidence on its impact. Their concern is on the risk that DP may reduce health service access, quality and efficiency, but there are both theoretical and practical reasons why DP might be of overall benefit.

A combination of public and private clinical practice by physicians, referred to as physician dual practice, is present in numerous health care systems. The phenomenon has been receiving attention in connection with arguments about its negative impact for the public provision of health care. A ban or restrictions on dual practice is widely advocated. Socha (2010) reviewed and critically discussed the empirical and theoretical findings on the subject of physician dual practice and its effects for the provision of public health care. The researcher noted that there is scanty empirical evidence on the impact of dual practice on health care provision. However, the theoretical analysis revealed that dual practice might bring about both positive and negative effects. The researcher concluded that further was needed into why physicians engage in dual practice and whether potential costs of dual practice outweigh the costs of enforcing restrictions on dual practice.

The private providers capture a significant and growing share of the service delivery market for health care, and ensure an important part of the uptake of services. For instance, of 40 developing countries, an average of 55% of physicians worked in the private sector and average of 28% of health care beds were private beds (Ferrinho et al., 2004). Asia had over 60% of private sector contributions to healthcare financing (excluding China and India) and is the part of the world where the private sector normally plays the dominant role. In Malaysia, for example, the proportion of physicians in private practice increased from 43% in 1975 to 70% in 1990. In Indonesia half of the hospitals are privately run. In Thailand the share of beds in private hospitals grew from 5% in 1970 to 17% in 1989.



www.iprjb.org

Chen, Li, Dai, Deng and Zhang (2016) in their study analyzed factors influencing the perception of medical staff and outpatients of dual practice in China. The study aimed to examine the perception and acceptance of medical staff and outpatients of dual practice and explore the possible factors affecting people's perception. The study findings revealed that 63.0% of the respondents supported dual practice. Medical staff who belonged to the surgical department or held positive belief of dual practice were more willing to participate in dual practice. Moreover, the publicity activities of dual practice and hospitals' human resource management system were important factors affecting the willingness of the medical staff. The results of outpatient survey showed that 44.5% of respondents believed that dual practice could reduce difficulty in consulting a doctor. Additionally, demographic characteristics significantly influenced the perception of outpatients. The study was conducted in China and not Kenya and, therefore, it would be impractical to generalize its findings to the Kenyan context.

Abera, Alemayehu and Herrin (2017) studied public-on-private dual practice among physicians in public hospitals of Tigray National Regional State, North Ethiopia: perspectives of physicians, patients and managers. A cross-sectional study using mixed methods was conducted from February to March 2011 in six geographically representative public hospitals of Tigray National Regional State. Data were collected from 31 physicians and 449 patients in the six study hospitals. Six focus group discussions were conducted. The findings showed that 90.3% of the physicians were engaged in dual practice to some extent, 51.6% owned private clinics outside the public hospital, 16.1% worked part-time in outside private clinics, and 22.6% worked in the private wing of public hospitals. Income supplementation was the primary reason for engaging in dual practice, as reported by 100% of the physicians. The positive effects of dual practice from both managers' and physicians' perspectives were physician retention in the public sector. 20.3% had been referred from a private clinic immediately prior to their current admission-a circular diversion pattern while 19.8% of the diverted patients reported that health workers in the public hospitals diverted them. The study was not carried out in Kenya.

In the last decade in Kenya between December 2011 and September 2012, there has been two major longest Nationwide Doctors' strike with devastating lives and economic losses (Muhudhia, 2017). Between January 2015 and March 2017 many patients died or suffered disability because they could not access care (Masika, 2017). During the same period, many patients were forced to seek health care services from private hospitals, incurring catastrophic financial liability. During the strikes, health practitioners were advocating for better salaries, working environment, promotions and adequate infrastructure. The scenarios exhibit a unique factor in the Kenyan health sector that requires such a study. A management model is critical so as to establish a balance between public and private health sectors.

Hipgrave and Hort (2013) examined dual practice by doctors working in South and East Asia: a review of its origins, scope and impact, and the options for regulation. A mixed health systems in South and East Asia is rapidly expanding. Although adequate data is lacking, health service update in South and East Asia is increasing, particularly in the private sector. In their findings, Hipgrave and Hort pointed out that if appropriately regulated, DP can improve health service access, the range of services offered and doctors' satisfaction. On the other hand, weakly regulated DP can negatively affect public health service access, quality, efficiency and equity, as doctors often pursue the balance of public and private work that maximizes their income and other benefits. Though the study focuses on regulation/legal framework as the possible cause of positive/negative effects of dual practice, however, the study was conducted in a different region and not Kenya. The proposed study will target health practitioners working in the



www.iprjb.org

Kenyan health sector. A management model will ensure that practitioners who engage in dual practice are effective in both public and private sectors.

### **Problem Statement**

Physician dual practice is a widespread phenomenon and it is commonly believed to have direct implications for physicians' labour supply, volume of health care production, and quality of health care services (García-Prado & González, 2007). Particular attention is paid to dual practice effects for the public provision of health care. The fact that a single physician provides health care in both the public and the private sector is the main source of controversy in the policy debate, where the existence of physician dual practice is perceived as being at odds with the optimal labour market arrangements regarding employer-employee relation. Consequently, a need for regulatory measures towards physician dual practice is commonly stressed (WHO, 2000). The economic literature on the subject of physician dual practice and its effects for the public health care sector is relatively young and not voluminous. The general conclusion from literature appears to be that dual practice has both positive and negative effects for the public health care provision, and the net effect is difficult to determine (Eggleston & Bir, 2006).

Several negative impacts of dual practice have been pointed out including absenteeism and shirking during official work hours, patients are forced into the private sector by dual practitioners preferring private work, manipulation of quality of care or wait-times to encourage private care, doctors refer healthier or wealthier patients to the private sector, leaving the poor with less access to better care, decreased service access in rural areas, as dual practitioners are incentivized to live in urban areas, free-riding or outright theft of supplies from public facilities or use of public administration or nursing staff or equipment for private patients, treating private patients in public wards and providing poorer care in the public sector to incentivize patients to go private (Garcia-Prado & Gonzalez, 2011).

In the last decade in Kenya between December 2011 and September 2012, there has been two major longest Nationwide Doctors' strike with devastating lives and economic losses (Muhudhia, 2017). Between January 2015 and March 2017 many patients died or suffered disability because they could not access care (Masika, 2017). During the same period, many patients were forced to seek health care services from private hospitals, incurring catastrophic financial liability. There is lack of quality evaluative evidence regarding the consequences of dual practice on the delivery of services of healthcare and management organizations (Muhudhia, 2017). The overall impact of dual practice remains an open question that warrants more attention from researchers and policy makers alike (García-Prado & González, 2011).

There is a need for a management model to enhance cost benefit of dual practice, which past literature has not managed to accomplish. It is on this premise that this study seeks to analyze the Management model that can measure and evaluate physicians moonlighting (dual practice) to determine the cost/value benefits of the practice to taxpayer-patient, government and all the multiple stakeholders at the individual, facility, and health system levels. The study will contribute to the evidence in understanding the public-private physician practice impact on Kenyan health system, towards contributing to the national dialogue to address related issue with its evaluation, management, governance and review.

### **Main Research Question**

What management approach and management model can ensure improved cost-benefit of physicians having Dual Practice?



## **Specific Research Questions**

- 1. How do resources (infrastructure), working environment, promotion, income and costbenefit of DP influence physicians' dual practice in Kenya?
- 2. To what extent do resources (infrastructure), working environment, promotion, income and cost-benefit of DP influence physicians satisfaction in Kenya?
- 3. Does legal framework moderate the relationship between resources (infrastructure), working environment, promotion, income, cost-benefit of DP and physicians dual practice in Kenya?
- 4. To what extent does physician satisfaction mediate the relationship between resources (infrastructure), working environment, promotion, income, cost-benefit of DP and physicians dual practice in Kenya?

### LITERATURE REVIEW

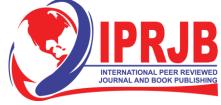
### **Literature Review**

A systematic literature review, using electronic search was used. The key search words and phrases included; dual practice, dual practice in health sector, determinants of dual practice in health sector, regulations on dual practice, practitioners' satisfaction and dual practice, implications of Dual Practice on Universal Health Coverage, Cost-Benefit Analysis of Dual Practice.

El Koussa, Atun, Bowser and Kruk (2016) assessed factors influencing physicians' choice of workplace, and policy interventions for retaining physicians in the public sector. The study findings revealed that the use of financial incentives was a motivator in retaining physicians in the public sector. The review also identified policy interventions including: regulatory controls, incentives and management reforms. Regulatory controls and incentives were the two most frequently reported policy interventions. While factors affecting physicians' choice of workplace are country specific, financial incentives and professional development are core factors. Other factors are highly influenced by context, and thus, it would be useful for future cross—country research to use standardized data collection tools, allowing comparison of contextual factors as well as the examination of how context affects physician retention in the public sector.

Ojakaa, Olango and Jarvis (2014) examined factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya. A cross-sectional cluster sample design was used to select 59 health facilities that yielded interviews with 404 health care workers, grouped into 10 different types of service providers. Data were collected in November 2011 using structured questionnaires and a Focus Group Discussion guide. The results indicated that work environment, inadequate access to electricity, equipment, transport, housing, and the physical state of the health facility were most critical, particularly in Turkana. The working environment was rated as better in private facilities. Adequate training, job security, salary, supervisor support, and manageable workload were identified as critical satisfaction factors. The study recommended the need for the establishment of a model HRH community.

Ferrinho et al. (2004) evaluated dual practice in the health sector: review of the evidence. This paper reports on income generation practices among civil servants in the health sector, with a particular emphasis on dual practice. It first approaches the subject of public—private overlap. Thereafter it focuses on coping strategies in general and then on dual practice in particular. I



www.iprjb.org

was noted that, to compensate for unrealistically low salaries, health workers rely on individual coping strategies. Many clinicians combine salaried, public-sector clinical work with a fee-for-service private clientele. The authors observed dual practice is often a means by which health workers try to meet their survival needs, reflecting the inability of health ministries to ensure adequate salaries and working conditions.

Russo, McPake, Fronteira and Ferrinhon (2013) study considered dual practice patterns in three African cities and the respective markets for physician services, with the objective of understanding the influence of local determinants on the practice. Forty-eight semi-structured qualitative interviews were conducted in the three cities to understand features of the practice and the respective markets. The analysis suggests that physicians' decisions to engage in dual practice are influenced by supply and demand factors, but also by how clearly separated public and private markets are. Where it is possible to provide little-regulated services within public infrastructure, less incentive seems to exist to engage in the formal private sector, with equity and efficiency implications for service provision.

Alaref, Awwad, Araujo, Lemiere, Hillis and Özaltin (2017) paper provides evidence on the potential impact of banning dual practice in Palestine. We apply theoretical evidence and international experience, together with context-specific primary and secondary data, to assess the policy's enforceability, implications, and sustainability in the Palestinian context. In this setting, though the risk of losing health workers to the private sector is low, banning dual practice will most likely lead to the "brain drain" of rare specialists from the public sector. Moreover, though there is some evidence that dual practice is negatively impacting quality of care, poor quality in public facilities associated with shortages in supplies and equipment, poor organizational and management practices, low motivation, and absence of monitoring and accountability systems are unlikely to change by banning dual practice. Finally, the ban, as conceptualized, is fiscally unsustainable in a strained health budget and may be challenging to enforce due to a weak monitoring system. Overall, it was found that an outright ban on dual practice would not reduce the financial burden on patients and enhance their access to quality services in the public sector.

Socha, (2010) paper reviews and critically discusses the empirical and theoretical findings on the subject of physician dual practice and its effects for the provision of public health care. Theoretical analyses of dual practice impact on public health care provision shows that dual practice might bring about both positive and negative effects. Some of the conclusions on the negative effects of dual practice, however, depend on assumptions, which are questioned in broader economic literature. Moreover, while it seems that dual practitioners take up private practice predominantly to increase their income, it does not automatically imply that dual practice as a whole is a profit-maximising combination. Physicians seem to face promising opportunities in the private market. Still, they spend relatively little time in the private practice and supply labour to the lower paid public sector job. Eventually, the potential costs and effectiveness of dual practice regulation are rarely considered.

### **Conceptual Model**

This study will be guided by the following conceptual framework.

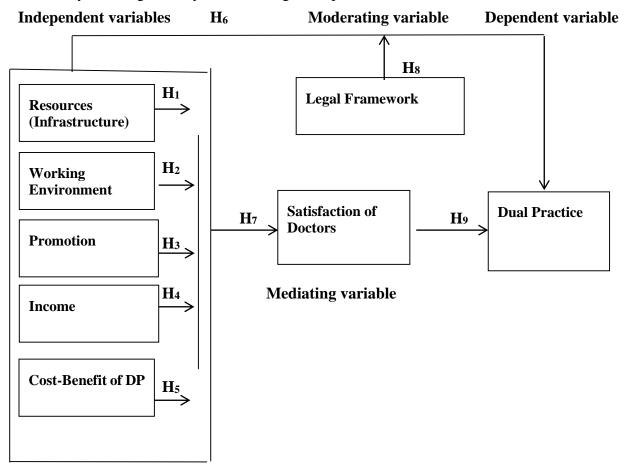


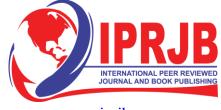
Figure 1: Conceptual Framework

# **METHODOLOGY**

The paper adopted a desk top research design. The design involves a review of existing studies relating to the research topic. Desk top research is usually considered as a low cost technique compared to other research designs (Beal et al., 2012). In this case, the researcher collected information relating to physicians Dual Practice. The aim of the study was to develop a Management model that can measure and evaluate physicians Dual Practice in the Kenyan health sector.

### **Knowledge Gaps**

From the reviewed literature relating to physicians Dual Practice, several knowledge gaps emerged. El Koussa, Atun, Bowser and Kruk (2016) assessed factors influencing physicians' choice of workplace, and policy interventions for retaining physicians in the public sector. Ferrinho et al. (2004) evaluated Dual Practice in the health sector: review of the evidence. Alaref, Awwad, Araujo, Lemiere, Hillis and Özaltin (2017) paper provides evidence on the potential impact of banning dual practice in Palestine. Socha, (2010) paper reviews and critically discusses the empirical and theoretical findings on the subject of physician dual practice and its effects for the provision of public health care. These studies present a contextual



www.iprjb.org

gap since they were conducted in different economic environments. It would therefore, be impractical to generalize their findings to the Kenyan context.

### CONCLUSIONS AND RECOMMENDATIONS

### **Conclusions**

Based on past literature, the study concluded that several factors are vital in influencing physicians having Dual Practice. These factors included; infrastructure, working environment, doctor's promotion and income level. The cost/value of DP was also highlighted as an important determinant. Further, the study concluded that legal framework has a significant moderating influence on physicians having Dual Practice. In addition, the study concluded that the level of physicians' satisfaction determined their tendency to engage in Dual Practice.

### **Recommendations**

Based on the findings, the study recommended the need for stakeholders in the health sector to understand the concept of Dual Practice. In particular, there is need to understand the causes and implications of Dual Practice. The study also recommended the need to develop a management model that can measure and evaluate physicians Dual Practice. It is not advisable to completely ban Dual Practice since it has some positive impact. At the same time, excessive Dual Practice can be counterproductive and could be a threat to the efficiency, quality and equity of health services, especially in the public sector. Hence, the need to develop a management approach and management model that can ensure improved cost-benefit of physicians having Dual Practice.

### **Areas for Further Studies**

The current study looked at Dual Practice in the Health sector. Other scholars could focus on Dual Practice in other sectors such as education. Just like physicians, education professionals are also likely to engage in Dual Practice. As such, further studies could attempt to find out the causes and implications of Dual Practice in those other professions.

### REFERENCES

- Abera, G. G., Alemayehu, Y. K., & Herrin, J. (2017). Public-on-private dual practice among physicians in public hospitals of Tigray National Regional State, North Ethiopia: perspectives of physicians, patients and managers. *BMC health services research*, *17*(1), 713. https://bmchealthservres.biomedcentral.com/track/pdf/10.1186/s12913-017-2701-6
- Alaref, J., Awwad, J., Araujo, E., Lemiere, C., Hillis, S. A., & Özaltin, E. (2017). To Ban or Not to Ban? Regulating Dual Practice in Palestine. *Health Systems & Reform*, *3*(1), 42-55. <a href="https://www.tandfonline.com/doi/full/10.1080/23288604.2016.1272980">https://www.tandfonline.com/doi/full/10.1080/23288604.2016.1272980</a>
- Bazyar, M., Rashidian, A., Jahanmehr, N., Behzadi, F., Moghri, J., & Doshmangir, L. (2018). Prohibiting physicians' dual practice in Iran: Policy options for implementation. *The International journal of health planning and management*. https://onlinelibrary.wiley.com/doi/abs/10.1002/hpm.2524
- Bloom, G., & Standing, H. (2008). Future health systems: Why future? Why now?. *Social science & medicine*, 66(10), 2067-2075.
- Chen, H., Li, M., Dai, Z., Deng, Q., & Zhang, L. (2016). Factors influencing the perception of medical staff and outpatients of dual practice in Shanghai, People's republic of china. *Patient preference and adherence*, 10, 1667.
- Chue, P. (2007). Incentives to Dual Practice New Institutional Economic analysis of Canada's mixed public-private health sector. https://soundideas.pugetsound.edu/economics\_theses/44/
- Eggleston, K., & Bir, A. (2006). Physician dual practice. Health policy, 78(2-3), 157-166. https://www.ncbi.nlm.nih.gov/pubmed/16253383
- El Koussa, M., Atun, R., Bowser, D., & Kruk, M. E. (2016). Factors influencing physicians' choice of workplace: systematic review of drivers of attrition and policy interventions to address them. *Journal of global health*, 6(2).
- Ferrinho, P., Van Lerberghe, W., Fronteira, I., Hipólito, F., & Biscaia, A. (2004). Dual practice in the health sector: review of the evidence. *Human resources for health*, 2(1), 14. https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-2-14
- Ferrinho, P., Van Lerberghe, W., Fronteira, I., Hipólito, F., & Biscaia, A. (2004). Dual practice in the health sector: review of the evidence. *Human resources for health*, 2(1), 14.
- García-Prado, A., & González, P. (2011). Whom do physicians work for? An analysis of dual practice in the health sector. *Journal of health politics, policy and law*, *36*(2), 265-294. https://www.ncbi.nlm.nih.gov/pubmed/21543706
- Hipgrave, D. B., & Hort, K. (2013). Dual practice by doctors working in South and East Asia: a review of its origins, scope and impact, and the options for regulation. *Health policy and planning*, 29(6), 703-716. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5010167/
- Kiwanuka SN, Rutebemberwa E, Nalwadda C et al. (2011). Interventions to manage dual practice among health workers. The Cochrane Database of Systematic Reviews 7: CD008405, doi: 10.1002/14651858.CD008405.pub2. https://www.ncbi.nlm.nih.gov/pubmed/21735429

- Kiwanuka, S. N. (2011). Dual practice regulatory mechanisms in the health sector: a systematic review of approaches and implementation. <a href="http://www.who.int/alliance-hpsr/projects/alliancehpsr\_ugandasystematicreviewdualpractice.pdf">http://www.who.int/alliance-hpsr/projects/alliancehpsr\_ugandasystematicreviewdualpractice.pdf</a>
- Moghri, J., Mohammad, A. R. A. B., Rashidian, A., & Sari, A. A. (2016). Physician dual practice: a descriptive mapping review of literature. *Iranian journal of public health*, 45(3), 278. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4851741/
- Muhudhia, S. O. (2017). Ethico-legal inquiry into strike action by doctors in Kenya (Doctoral dissertation).
- Ojakaa, D., Olango, S., & Jarvis, J. (2014). Factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya. *Human resources for health*, 12(1), 33.
- Ranson MK, Chopra M, Atkins S, Dal Poz MR, Bennett S. (2010). Priorities for research into human resources for health in low- and middleincome countries. Bulletin of World Health Organization 88: 435–43.
- Ravishankar N, Gubbins P, Cooley RJ et al. (2009). Financing of global health: tracking development assistance for health from 1990 to 2007. Lancet 373: 2113–24.
- Russo, G., McPake, B., Fronteira, I., & Ferrinho, P. (2013). Negotiating markets for health: an exploration of physicians' engagement in dual practice in three African capital cities. *Health policy and planning*, 29(6), 774-783.
- Socha, K. (2010). Physician dual practice and the public health care provision. Health Economics Papers, 4.
- Socha, K. (2010). *Physician dual practice and the public health care provision. Review of the literature* (No. 2010: 4). University of Southern Denmark, COHERE-Centre of Health Economics Research.
- World Health Organization. (2000). The effects of economic and policy incentives on provider practice.