

**BRAIN-DRAIN IN GHANA'S HEALTH SECTOR:
A CASE STUDY OF WHY DOCTORS AND NURSES EMIGRATE**

By

OWUSU-ANSAH, Joseph

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
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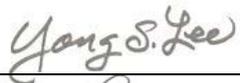
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Committee in charge:

Professor Yong Shik LEE, Supervisor



Professor Hun Joo PARK



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ABSTRACT

BRAIN-DRAIN IN GHANA'S HEALTH SECTOR: A CASE STUDY OF WHY DOCTORS AND NURSES EMIGRATE

By

Joseph Owusu-Ansah

Two Hundred and Twenty medical doctors and Two Hundred and Twenty Nurses from the Korle-Bu Teaching Hospital, the 37 Military Hospital and the Ridge Hospital, all in Accra, Ghana were sampled using simple random sampling to examine why medical doctors and nurses emigrate to developed countries. Cross-Tabulation was used to analyze two of the three hypothesis of structured questionnaire filled by participants. The effect of the age of young-aged medical doctors (approximately 41.82%) on emigration was not significant from the effect of the age of old-aged medical doctors (approximately 55.46%) on emigration. The effect of the age of young-aged nurses (approximately 41%) on emigration was not statistically significant from the effect of the age of old-aged nurses (approximately 45%) on emigration. The effect of short-period medical practice did not statistically differ significantly from the effect of long-period medical practice. The effect of short-period nursing practice did not also statistically differ significantly from the effect of long-period nursing practice. The effect the overall satisfaction of medical doctors on their interest in emigrating was statistically found to be significant. The effect the overall satisfaction of nurses on their interest in emigrating was also statistically found to be significant. Motivation for achievement by medical doctors and nurses was found to be significant. It was concluded that providing medical doctors and nurses with achievement incentives alongside salaries would reduce their emigration to developed countries.

Dedicated to Gordon and Beatrice Owusu-Ansah

ACKNOWLEDGEMENT

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SECTION ONE

INTRODUCTION

The healthcare system in Ghana has greatly improved in the last three decades. This improvement can be attributed to two main factors; the annual addition of more medical doctors and nurses to the pool of the nation's health care professionals as well as the supply of the needed medical equipment at the health centers. On the average, about six-hundred (600) young doctors and nurses graduate from the Medical School of the University of Ghana and nursing training colleges every year. Such are subsequently absorbed into the healthcare system. The Ghanaian government then provides health centers with basic logistics to help diagnose diseases more effectively. Consequently, reported cases of common diseases such as yellow and typhoid fevers, malaria, measles, polio and bilharzias have dropped significantly across the country.

Despite this optimistic outlook in the healthcare system, the physician-patient ratio in Ghana is still very high. For example, the Ghana Health Service (2007) disclosed that the physician-patient ratio stood at 1 to 13,683, very high compared with that of other countries such as Togo, Benin and Nigeria. The Ministry of Health has blamed this problem on the continuous emigration of health personnel to developed economies, notably the United States of America, Australia and Western European countries. To the Ghanaian government, the emigration presents a serious threat to its attempts to improve the healthcare system in the country.

Table 1.2.1 and Table 1.2.2 below show statistical tables of doctor to population ratio and nurse to population ratio from year 2000 to year 2011 respectively, as outlined by the Ghana Ministry of Health.

Table 1.2.1	
DOCTOR-TO-PATIENT RATIO BY YEAR (Source: Ministry of Health)	
2000	1 : 18,522
2001	1 : 18,503
2002	1 : 20,954
2003	1 : 16,759
2004	1 : 17,733
2005	1 : 17,899
2006	1 : 14,732
2007	1 : 13,683
2008	1 : 13,074
2009	1 : 11,929
2010	1 : 11,494
2011	1 : 8,529

Table 1.2.2	
NURSE-TO-PATIENT RATIO BY YEAR (Source: Ministry of Health)	
2000	1: 2,686
2001	1: 2,598
2002	1: 1,820
2003	1: 1,649
2004	1: 1,510
2005	1: 1,508
2006	1: 1,537
2007	1: 1,454
2008	1: 1,109
2009	1: 1 210
2010	1: 1,162
2011	1: 988

The Ghanaian Chronicle (2009) also concludes that health facilities in Ghana suffer from inadequate supply of doctors and nurses. The seriousness of this problem is further underscored in the research findings of Price (2004) who maintained that sixty-eight percent (68%) of Ghanaian doctors and nurses emigrated between 1993 and 2000. A similar report from the Ghanaian Statistical Service also chimed in to say that 54% of doctors and nurses trained between 1998 and 2005 had left the country to work abroad. The research findings of Tsikata (2011) reveal that between the years of 2000 and 2002, 51 Ghanaian practicing doctors emigrated, representing \$ 7 million loss to the country. These statistics mean that the medical workforce in Ghana is in serious trouble and requires an urgent policy attention.

When the emigration of medical doctors and nurses began in the early 1970s, healthcare delivery suffered greatly because there were very few doctors and nurses to staff the health centers. The problem was not because Ghana could not train her own health professionals at the time, but because more than half of these health professionals emigrated to seek greener pastures abroad, leaving healthcare posts vacant. As a matter of grave public and national concern, a national debate on the emigration problem ensued with many calling on the government to bond all medical professionals trained with the taxpayer's money. The government in response to the many public outcries swung into action with several interventions to address the problem but with a human face. The government had to ensure that the national cake (national purse) was evenly distributed among all sectors of the economy and not just on the health sector.

Compare with other countries in the West-African sub-region, Ghana's healthcare system has contributed to the improvement in infrastructure and increase a pool of medical expertise.

The annual influx of patients from neighboring countries to Ghana is a testament to the quality of care available in Ghana. My personal observation at the University of Ghana Dental School, where I used to go for dental care, also testify to this assertion. In 2003, for example, the dental school had only three pieces of equipment for dental hygiene. Patients were required to book appointments for weeks ahead for this service. By 2006 I was happily surprised at the improvement in service delivery furnished flush with modern equipment. Not only were patients now attended to immediately upon arrival at the medical facility without having to book an appointment, but also I could count as many as 11 new dental equipment that had been installed and were in use for dental hygiene. Clearly these are among the positive signs that public hospitals in Ghana were having a facelift. Yet I was shocked to discover amid these positive developments that doctors and nurses continue to emigrate to other countries in large numbers, bringing to the fore the question of “why?”

In this paper, I take issue with the previous claims that low salary, better conditions of service, and the medical doctors and nurses in Ghana. A casual observation of the emigration problem shows that some doctors and nurses choose to remain in their native country and serve their country regardless of the situation. This leaves us a puzzle: “why have some doctors and nurses decided to leave?” and “why has others chosen to stay?” I believe that an answer to these questions will help us seize up the emigration issue more systematically and look for ways to address the underlying causes.

In this paper I examine the following research questions:

- i. To what extent does the age of a health professional predict the tendency to emigrate?

- ii. Do the years of medical practice explain whether or not a health professional would emigrate?
- iii. Does the level of professional satisfaction predict the likelihood of a medical personnel to emigrate abroad?

OPERATIONAL DEFINITION OF TERMS

Satisfaction (Satisfied) for the purpose of this study represents the total score obtained by a health professional on a 4-point Likert-Scale (which range from “Very Satisfied”, “Satisfied”, “Fairly Satisfied” to “Not Satisfied”) of thirteen (13) open-ended questions. It describes how satisfied a health professional is with their lives as health professionals. The open-ended questions border on monetary compensation, social respect accorded health professionals, retirement package, fringe benefits available, the availability of modern medical facilities, helping and assisting patients as a health professional among others.

Working Hypotheses

- i. Young-aged health professionals are more likely to emigrate than old-aged health professionals.
- ii. Health professionals who have practiced for a short-period are more likely to take the opportunity for emigration than those who have practiced for a long-period.
- iii. Highly satisfied health professionals are less likely to emigrate than less satisfied health professionals.

Research Procedure

To examine these hypotheses, I administered a survey questionnaire to a sample of 220 practicing physicians and 220 practicing nurses in Ghana. Data were collected from the two groups: Doctors and Nurses. The questionnaires were administered at the Korle-Bu Teaching Hospital, the 37 Military Hospital and the Ridge Hospital, all in Accra. The reason is that these government medical facilities have characteristics (medical logistics and professionals) similar to government hospitals in the other regions of Ghana, example the Komfo Anokye Teaching Hospital in Kumasi and the Tamale General Hospital. It is therefore expected that data gathered from these hospitals can be inferred to represent the response of all medical professionals in Ghana. The data I used to examine the hypotheses were the age, number of years of practice experience, motivation for achievement and the overall satisfaction level of doctors and nurses in Ghana. The third variable which measures the overall satisfaction level of practicing nurses and doctors in Ghana is expected to tell the willingness of doctors and nurses to emigrate abroad.

SECTION TWO

MOTIVATION FOR THIS STUDY

For the past 10 years, there have been several labour agitations by the Ghana Medical Association and the Ghana Registered Nurses Association for higher salaries and better conditions of service. Often times, these labour agitations have ended up in sit-down strike action by doctors and nurses usually for weeks, leaving many unfortunate patients to die in their hundreds at health facilities nationwide. If the government decides to drag her feet in the hope that the doctors and nurses would empathize with patients and return to work for negotiations to commence, she was labeled as been insensitive to the plight and welfare of health personnel.

The most recent of such labour strikes occurred whilst I was conducting this research in August of 2011. The Ghana Medical Association on Friday 7th October 2011 announced a nation-wide sit-down strike action to press home their demand for what they termed was the delay by the Fair Wages and Salaries Commission to integrate them onto the Single Spine Salary Structure. The Single Spine Salary Structure was a new and a better salary software designed and commissioned by the government to pay public sector workers salaries comparable to those paid to private sector workers. With this new pay policy the government aimed to administer a competitive pay policy that would be attractive enough to woo expertise from the private sector to the public sector. To satisfy the doctors and get them back to work, the government had to engage the leadership of the doctors to reach consensus.

By February 2013, the government had succeeded in migrating all 600,000 public sector workers on its payroll unto the Single Spine Salary Structure platform, but with catastrophic

consequences to the entire Ghana economy. After full implementation of the new salary policy in February 2013, public sector salaries alone constituted 70% of total government revenue. This unfortunate development doubled total government expenditure and forced it to seek a three-year \$ 960 million financial bailout from the International Monetary Fund (IMF) to balance its fiscal deficit (The Wall Street Journal, 2014).

Again on 5th February, 2014 Joy FM, a Ghanaian privately owned radio station published at its website a caption titled “Doctors and Nurses Serve Strike Notice”, in which doctors and nurses threatened to abandon their posts and emigrate abroad if government failed to respond to their request for improved conditions of service and increased salaries. It was only through the intervention of the Honourable Minister of Health and representatives of the National Labour Commission to engage with the leadership of the medical doctors and nurses in negotiations that the health professionals to agree to resume work. By this time, many innocent lives had been lost because of the strike action. Quansah, R. (the chronicle newspaper, 2014).

As these events unfolded, I asked myself why there seemed to be no end to the labour agitations by medical doctors and nurses even when their salaries continued to surge upwards. This was where my interest in the emigration of health professionals in Ghana grew even more, culminating in this research paper.

SECTION THREE (3)

LITERATURE REVIEW

The emigration of health professionals is not peculiar to Ghana alone. It is a global phenomenon that has attracted the attention of researchers from different cultural backgrounds. These researchers have conducted many studies into the health professional emigration problem in their quest to find lasting solutions that would not only help reverse the trend, but also help countries worse affected by the mass exodus of their health professionals to identify areas in their healthcare systems that require attention. The publications by researchers often come with a raft of policy recommendations for governments to consider for adoption (Helliwell 1999). Ghana is one such country that has attempted implementing some of the recommendations to curtail the emigration problem, but has so far failed to address it (Johnson, 1965).

Akbar and Don (1993) indicate in their research that the demand by developed countries for doctors and nurses trained and certified in developing countries has aggravated the already bad healthcare systems of affected countries, leaving them with very high doctor-to-patient ratios (1:7,733 for Ghana in 2010, 1:2,000 for India in 2008, 1:6,400 for Nigeria in 2013 and 1:20,057 for Togo in 2012). Their findings note instances where, in the 1980s and early 1990s, countries (particularly Australia, Canada, New Zealand, the United Kingdom, Qatar, Germany, France, and Finland) simplified their immigration requirements and procedures in a bid to attract doctors and nurses from the developing world (Chandran and Lyn 2008). This development led to a mass emigration of medical personnel from Africa and Asia to these developed countries in search for better lives. With considerably low financial remuneration in the losing countries, developing

countries stood the risk of never minimizing their doctor-to-patient ratios unless something was done (Jonas 1965).

In his study Adams (2010) found that over ten thousand (10,000) nurses educated in Africa got registered in the United States in 2009 to practice. This figure, the research indicated, was an increase of about thirty-eight (38%) percent from 2001 and exceeded the combined workforce of nurses practicing in Ghana, Uganda, Zambia, Liberia, Zimbabwe, Ethiopia and Tanzania. The study recommended a provision of enhanced medical education and improvement of salaries as some of the measures needed to contain the mass emigration of the nurses from developing countries. It also advised universities in Ghana and Nigeria that were in the habit of encouraging emigration of doctors and nurses to stop the practice as it tended to supply medical personnel to developed economies at cheap rates.

In a study conducted by Agarwal and Winkler (1985), the number of medical doctors and nurses from many countries in sub-Saharan Africa (Ghana, Malawi, Ethiopia, Cote D'Ivoire, Nigeria, etc.) who are working in the United States alone outnumber those working back home. This mass emigration has created a shortage of medical personnel at health facilities in affected countries, making it extremely impossible to improve health facilities in those countries.

According to the World Health Organization (WHO, 2010) – the health think tank of the United Nations – “many health workers emigrate to high-income countries for greater income, job satisfaction, career opportunities and management quality”. This results in financial loss and ends up weakening the health systems in the source countries. An earlier report from the World

Health Organization (2006) indicated a staggering global shortfall of 4.3 million doctors, nurses, and midwives, mostly in developing countries. They attribute the emigration of medical personnel to developed countries to the poaching policies being implemented by the latter.

The British Medical Journal (2005) regards the emigration of medical personnel to developed countries as a deliberate robbery of health staff from African countries. They found it difficult to understand why developing countries would subsidize the medical training of their citizens, with the hope of engaging them after their training to improve their health systems, only to lose them to Europe and the West. The Journal asserted that this development had been made possible because the hiring of medical staff from developing countries was relatively cheaper, compared with hiring indigenes.

In a report published by the British Broadcasting Corporation (BBC report, 2005), the British Medical Association and the Royal College of Nursing described the influx of foreign medical staff into the United Kingdom (UK) as “poaching”. The report cited Dr. James Johnson, Chairman of the British Medical Association to have stated that available statistics suggested that a third of all medical personnel working in the United Kingdom were from abroad. UK doctors had warned that the continuous poaching of health workers from Africa was seriously grinding healthcare systems in the latter to a halt. Dr. Johnson called on the UK government to help halt the trend by pushing the agenda at the next G8 Summit.

Dovlo (2002) argues that “push” and “pull” factors account for the emigration problem. The research explains that “Push” factors constitute factors that health professionals see to be

unfavorable for which reason they are left with no other option than to emigrate, for instance low remuneration, poor working conditions, low job satisfaction and poor security. Examples of “pull” factors that attract health professionals to developed countries include better work compensation and working conditions, opportunities for intellectual growth and the high demand for foreign health workers in the receiving country.

Kirigia *et al.* (2006) also attribute the emigration problem to “push” and “pull” factors. The research names the “push” factors that drive health professionals out to include “weak health systems in the home country, insecurity including violence at the workplace, poor living conditions, low remunerations, lack of further training opportunities, lack of clear career development paths and poor governance.

Tsikata (2011), provides more in-depth analysis into the "push" factors argument (comprising poor salaries and conditions of service) earlier advanced in the research findings of Dovlo (2002) and Kirigia *et al.* (2006). Sixty-six percent (66%) of practicing doctors and nurses who participated in his study cited low salaries as the main compelling reason behind the mass emigration from the health sector. The research also revealed that even though in 2005 a doctor earned between \$ 1,800 and \$ 2,900 per month and a nurse between \$900 and \$ 1,500 per month the health practitioner regarded the earning as insufficient. They arrived at this decision by comparing their earnings and other benefits with that of their counterparts abroad offering the same services but earning higher salaries. For the health professional aspiring to emigrate to the United Kingdom for instance, the temptation to join the bandwagon of emigrating health professionals consequently becomes inevitable, and at this time he or she would stop at nothing

to raise and pay recruitment agencies in Ghana or the United Kingdom who specialize in fast-tracking the emigration process of highly skilled health practitioners amounts ranging between \$ 4,000 and \$ 6,000 as processing fees with the hope of recouping their investment within months of providing medical services with their employer abroad (Zey 2006).

In a similar vein, IRIN (2003) also threw more light on the low salaries of doctors and nurses as the main reason for the emigration. They argued that until the government of Ghana reviewed the basic salaries of health professionals upwards (considered to be among the lowest in the world) and controlled the activities of foreign-based employment agencies who often times promise health professionals salaries twenty times higher than what they earned in Ghana, all efforts to minimize the emigration would continue to be a mirage. According to the report, general doctors in 2002 earned \$ 575 dollars per month whereas nurses earned \$ 172 over the same period. Dr. Jacob Plange-Rhule, President of the Ghana Medical Association, conceded that the salaries, which were an increment of what was previously paid to the health practitioners, had helped to lower the rate of the emigration of the doctors and nurses.

The research publication of Clemens and Pettersson (2006), names nine (9) developed countries that serve as destination for emigrant doctors and nurses trained and certified in Africa. The countries in question include the United Kingdom, the United States of America, France, Australia and Portugal. The rest are Spain, Belgium, Canada and South Africa. Tables 1.10 and 2.10 below show year 2000 census data the researchers obtained from the receiving countries on doctors and nurses trained and certified in Africa who had emigrated and were working in those developed countries.

Taking Ghana's case for example, the total number of medical doctors resident and practicing in Ghana as at the year 2000 stood at 1,294. Meanwhile, there were a total of 1,639 Ghanaian doctors practicing in developed countries. Out of this number, 590 doctors were practicing in the United Kingdom, 850 in the United States of America, 16 in France, 95 in Canada, 4 in Spain, 2 in Belgium and 82 doctors in South Africa. If these doctors had stayed in Ghana and practiced their profession, Ghana in year 2000 would have had not 1,294 doctors, but rather 2,933 doctors.

The same interpretation holds for the emigrated Ghanaian nurses as well as illustrated in Table 2.10 below. In year 2000 there were a total of 14,972 nurses practicing in Ghana. However, 4,766 Ghanaian nurses were practicing in developed countries. Ghana's health nurse strength in the year 2000 would have been 19,738 if the 4,766 nurses had not emigrated.

Table 1.10

PHYSICIANS born in African countries appearing in censuses of nine receiving countries circa 2000												
Center for Global Development, http://www.cgdev.org												
Source: Michael Clemens and Gunilla Pettersson (2006), "Medical Leave: A new database of health professional emigration from Africa", CGD Note (Washington, DC: Center for Global Development).												
Receiving country												
Sending Country	Domes tic*	UK	USA	France	Canada	Australia	Portugal	Spain	Belgium	So. Africa	Total Abroad	Frac.*
Algeria	13,639	45	50	10,594	10	0	2	60	99	0	10,860	44%
Angola	881	16	0	5	25	0	2,006	14	5	31	2,102	70%
Benin	405	0	4	206	0	0	0	1	13	0	224	36%
Botswana	530	28	10	0	0	3	0	0	1	26	68	11%
Burkina Faso	314	0	0	77	0	0	0	0	1	0	78	20%
Burundi	230	5	0	53	10	3	0	1	55	9	136	37%
Cameroon	1,007	49	170	332	20	0	0	4	267	3	845	46%
Cape Verde	202	0	15	10	0	0	186	0	0	0	211	51%

Cent. Afr. Rep.	120	0	0	79	0	0	2	1	5	0	87	42%
Chad	248	0	0	69	0	0	0	0	1	0	70	22%
Comoros	50	0	0	20	0	0	0	0	1	3	24	32%
Congo, DR	5,647	37	90	139	35	0	42	4	107	98	552	9%
Congo, Rep.	670	11	15	468	0	0	49	4	65	135	747	53%
Cote d'Ivoire	1,763	0	10	262	0	0	0	1	8	3	284	14%
Djibouti	86	0	0	25	0	0	0	0	1	0	26	23%
Egypt	1,43,555	1,465	3,830	471	750	535	1	17	31	19	7,119	5%
Eq. Guinea	47	0	0	4	0	0	1	76	0	0	81	63%
Eritrea	173	18	55	0	20	5	0	0	0	0	98	36%
Ethiopia	1,310	65	420	16	30	9	1	1	2	9	553	30%
Gabon	368	0	0	61	0	0	0	0	4	0	65	15%
Gambia	40	16	30	0	0	0	0	0	0	0	46	53%
Ghana	1,294	590	850	16	95	0	0	4	2	82	1,639	56%
Guinea	898	3	15	69	10	0	0	11	7	0	115	11%
Guinea-Bissau	103	0	15	75	0	0	160	0	1	0	251	71%
Kenya	3,855	2,733	865	0	180	110	1	4	1	81	3,975	51%
Lesotho	114	8	0	0	0	0	0	0	0	49	57	33%
Liberia	73	10	105	5	0	0	0	5	1	0	126	63%
Libya	6,371	349	120	20	75	5	0	9	7	0	585	8%
Madagascar	1,428	6	30	878	0	0	0	0	6	0	920	39%
Malawi	200	191	40	0	0	10	2	1	1	48	293	59%
Mali	529	0	15	138	0	0	0	0	4	0	157	23%
Mauritania	333	0	10	28	0	0	0	4	1	0	43	11%
Mauritius	960	294	35	307	110	36	1	0	20	19	822	46%
Morocco	14,293	33	225	5,113	70	4	9	833	213	6	6,506	31%
Mozambique	435	16	20	0	10	3	1,218	4	2	61	1,334	75%
Namibia	466	37	15	0	30	9	0	0	0	291	382	45%
Niger	386	0	10	23	0	0	0	1	3	0	37	9%
Nigeria	30,885	1,997	2,510	29	120	0	1	13	6	180	4,856	14%
Rwanda	155	4	25	8	0	0	1	0	70	10	118	43%
Sao Tome & P.	63	0	0	0	0	0	96	1	0	0	97	61%
Senegal	640	0	40	603	10	0	1	9	12	3	678	51%
Seychelles	120	29	0	4	10	3	0	0	0	4	50	29%
Sierra Leone	338	118	115	9	0	0	0	0	3	4	249	42%
Somalia	310	53	70	0	25	3	0	0	0	0	151	33%
South Africa	27,551	3,509	1,950	16	1,545	1,111	61	5	0	-834†	7,363	21%
Sudan	4,973	606	65	17	15	40	0	1	4	10	758	13%
Swaziland	133	4	4	0	0	0	1	0	0	44	53	28%

Tanzania	1,264	743	270	4	240	54	1	1	3	40	1,356	52%
Togo	265	0	10	168	0	0	0	0	2	0	180	40%
Tunisia	6,459	16	30	3,072	10	0	0	4	60	0	3,192	33%
Uganda	2,429	1,136	290	1	165	61	1	1	3	179	1,837	43%
Zambia	670	465	130	0	40	39	3	0	3	203	883	57%
Zimbabwe	1,530	553	235	0	55	97	12	1	6	643	1,602	51%
Africa	280,808	15,258	12,813	23,494	3,715	2,140	3,859	1,096	1,107	1,459	64,941	19%
Sub-Saharan	96,405	13,350	8,558	4,199	2,800	1,596	3,847	173	696	1,434	36,653	28%

Table 2.10

PROFESSIONAL NURSES born in African countries appearing in censuses of nine receiving countries circa 2000

Center for Global Development, <http://www.cgdev.org>

Source: Michael Clemens and Gunilla Pettersson (2006), "Medical Leave: A new database of health professional emigration from Africa", CGD Note (Washington, DC: Center for Global Development).

Receiving Country

Sending Country	Domes- tic*	UK	USA	France	Canada	Australia	Portugal	Spain	Belgium	S. Africa	Total Abroad	Frac.* *
Algeria	83,022	37	138	7,953	40	6	1	26	44	0	8,245	9%
Angola	13,135	22	135	12	10	4	1,639	8	11	0	1,841	12%
Benin	1,315	4	28	155	0	0	0	0	0	0	187	12%
Botswana	3,556	47	28	0	0	0	0	0	0	5	80	2%
Burkina Faso	3,097	0	14	50	0	0	0	1	11	0	76	2%
Burundi	38	10	14	1	25	0	0	0	83	0	134	78%
Cameroon	4,998	118	664	343	0	0	0	5	33	0	1,163	19%
Cape Verde	355	0	91	25	0	0	128	0	0	0	244	41%
Cent. Afr. Rep.	300	3	6	85	0	0	0	0	6	0	99	25%
Chad	1,054	0	21	110	0	0	0	0	0	0	131	11%
Comoros	231	0	6	64	0	0	0	0	0	0	70	23%
Congo, DR	16,969	44	207	206	50	0	9	4	1,761	7	2,288	12%
Congo, Rep.	4,933	28	114	369	0	0	14	4	122	9	660	12%
Cote d'Ivoire	7,233	0	185	302	0	0	0	0	22	0	509	7%
Djibouti	424	0	0	9	0	0	0	0	0	0	9	2%
Egypt	1,87,017	108	661	89	45	87	0	2	0	0	992	1%

Eq. Guinea	162	0	0	0	0	0	0	98	0	0	98	38%
Eritrea	811	27	384	0	75	11	0	0	0	0	497	38%
Ethiopia	5,342	61	888	16	75	37	0	0	0	0	1,077	17%
Gabon	1,554	0	14	93	0	0	0	0	0	0	107	6%
Gambia	144	57	221	4	0	0	0	0	0	0	282	66%
Ghana	14,972	2,381	2,101	1	275	0	0	2	0	6	4,766	24%
Guinea	3,847	0	171	53	10	0	0	27	6	0	267	6%
Guinea-Bissau	799	5	0	45	0	0	212	0	0	0	262	25%
Kenya	26,267	1,336	765	4	135	110	0	0	0	22	2,372	8%
Lesotho	1,266	5	6	0	0	0	0	0	0	25	36	3%
Liberia	185	28	773	5	0	0	0	1	0	0	807	81%
Libya	17,779	72	299	1	10	7	0	2	0	0	391	2%
Madagascar	3,088	4	43	1,096	10	0	1	1	17	0	1,171	28%
Malawi	1,871	171	171	0	10	14	0	0	0	11	377	17%
Mali	1,501	0	57	208	0	0	0	0	0	0	265	15%
Mauritania	1,580	0	21	94	0	0	0	2	0	0	117	7%
Mauritius	2,629	4,042	107	86	75	195	1	0	22	3	4,531	63%
Morocco	29,462	47	276	3,707	60	4	5	560	517	0	5,176	15%
Mozambique	3,664	12	64	0	10	0	748	2	6	11	853	19%
Namibia	2,654	18	6	0	0	4	1	0	6	118	152	5%
Niger	2,668	0	28	38	0	0	0	0	0	0	66	2%
Nigeria	94,747	3,415	8,954	24	160	0	0	8	6	12	12,579	12%
Rwanda	1,805	13	85	24	20	3	1	1	144	0	292	14%
Sao Tome & P.	172	0	0	8	0	0	141	0	0	0	149	46%
Senegal	1,887	3	102	584	0	0	0	0	6	0	695	27%
Seychelles	422	80	28	8	30	29	0	0	0	0	175	29%
Sierra Leone	1,524	747	696	4	10	0	0	0	0	0	1,457	49%
Somalia	1,486	76	47	8	30	3	0	0	0	0	164	10%
South Africa	90,986	2,884	877	20	275	955	58	3	33	261	4,844	5%
Sudan	26,730	42	85	12	20	7	0	0	0	0	166	1%
Swaziland	3,345	21	36	0	10	4	0	0	0	25	96	3%
Tanzania	26,023	446	228	0	240	32	2	1	0	4	953	4%
Togo	782	10	36	140	0	0	0	0	0	0	186	19%
Tunisia	26,389	11	64	1,365	20	0	0	1	17	0	1,478	5%
Uganda	9,851	714	291	0	75	29	0	1	0	12	1,122	10%
Zambia	10,987	664	299	0	25	68	2	0	0	52	1,110	9%
Zimbabwe	11,640	2,834	440	0	35	219	14	3	0	178	3,723	24%

Africa	758,698	20,647	20,983	17,421	1,865	1,828	2,977	763	2,872	239	69,589	8%
Sub-Saharan	414,605	20,372	19,545	4,297	1,690	1,724	2,971	172	2,294	239	53,298	11%

Smith (2007) presents a different picture on the emigration issue. He describes the emigration problem as brain gain rather than brain drain, arguing that emigrants contribute significantly to the development of their home economies through remittances to their families back home. The author argued, for example, that Ghanaians living and working abroad contributed about US\$ 400 million annually to Ghana's economic development through remittances, hence making remittances Ghana's fourth highest source of foreign exchange. This argument, however, was refuted by Kirigia *et al.* (2010), to say that the price that developing countries pay through the loss of their medical personnel to developed countries was far more than any so-called benefits they could gain from the emigration. The research disclosed that apart from depriving the governments of developing countries of reaping from the huge investments (running into several millions of United States dollars) they make to train their medical personnel, the emigration problem tend to reward developed countries even more through the sending of patients to these benefitting countries for medical treatment. This unfortunate scenario, in their view, would not have happened had the specialized doctors not emigrated abroad.

According to Mills E.J et al (2011), the loss of investment from training health professionals in sub-Saharan Africa through emigration is considerably high. To compensate African countries, Mills E.J et al (2011) recommends investment by developed countries in offering measurable training programmes to losing countries as a way of strengthening their health systems.

From available literature, it is important to emphasize at this point that some developed countries have instituted rigorous medical certification procedures that is biased towards emigrant doctors and nurses. The United States (US) is one such country that has over the years used this strategy to ward off many foreign-trained medical professionals because they hold the view that US-trained doctors are a product of the US taxpayer. Explaining the process, Giovannelli (2011) opines that foreign-trained doctors desiring to practice in the United States need a medical license from the State in which they intend to practice. Getting the license first requires the emigrant doctor to take the United States Board Examination as well as the English Language Test, followed by certification by the Education Commission for Foreign Medical Graduates (ECFMG), and then finally the US medical residency program which often times is extremely difficult for emigrant doctors to secure (Giovannelli, 2011). According to Giovannelli, difficult as the processes might seem some foreign-trained migrant doctors succeed in getting a license to practice in the US. In fact available records indicate that about a quarter of doctors practicing in the US are foreign-trained (Giovannelli, 2011).

The State of Minnesota, according to Baier (2015), could soon earn the accolade of being the first US State to simplify the certification procedure of foreign trained doctors. Among the proposed strategies that the State is considering include the dedication of space for foreign-trained doctors engaged in medical residency programs. If authorities at the Minnesota Department of Health should carry out this plan, Baier (2015) posits that the initiative could help minimize the projected 91,500 shortfall of medical doctors expected to hit the healthcare system of the US by the year 2020, as highlighted in the research findings of Sopher (2014).

In its 2005 Annual World Health Report, the World Health Organization (2005) warned governments of the United Kingdom, Canada and New Zealand to desist from poaching foreign-trained doctors and nurses to augment healthcare delivery in their countries since the practice deprived developing countries of benefiting from the investment made into the training of the health professionals and further worsens healthcare delivery in the affected counties. The report estimated that a quarter of all doctors in the United Kingdom, Canada and New Zealand had been imported from developing countries.

In the case of the United Kingdom (UK) for example, Laurance (2006) reported that some health facilities in the National Health Service as well as private hospitals had found a way around an earlier ban placed on the poaching of medical doctors and nurses in 2001. This poaching strategy by the UK was further highlighted in a 2005 report by Save the Children which estimated that the UK had since 1999 saved £65 million on the training cost of doctors and £38 million on training nurses through poaching of health professionals from Ghana alone.

Considering the debilitating effects that emigration of health professionals has on developing countries, one could suggest that the recruitment of health professionals from developing countries by developed countries be banned to bring the problem under control. However, this move would violate the health professional's fundamental human rights of "choice", "free movement", and "free association", thus making the whole initiative unethical.

In seizing up the problems of mass exodus among health care professionals, literature so far has provided recommendations which they believe constitute the solution to the problem. Yet

it can be seen, at least from Ghana's experience, that for over three (3) decades, the recommendations have not helped to reduce the health worker emigration pandemic. Often times one finds it difficult to identify any positive impact that these research findings have had on the emigration problem, which brings us back to the question table to pose the not-very-pleasant question of "why?"

From the literature I also find that past research has put the blame on extrinsic materialistic motivational factors such as low remuneration, poor working conditions, and so forth. But clearly changes in these extrinsic factors have not helped to stem the emigration. We now know, at least to a large extent, that past studies have overlooked factors I consider as equally important: motivational dimensions of "job satisfaction level" and "self-actualization".

In this paper I argue that the job satisfaction dimension will help us unlock the puzzle of emigration among health care professionals. These factors all seem to point at one direction – that to the nurse or medical doctor, the factors only address one fundamental problem (job dissatisfaction) out of several other problems that need to be addressed. If indeed these factors explain the emigration problem well enough, it is easy then to conclude that the emigration of doctors and nurses must be hundred percent (100%) – since every doctor and nurse would want to emigrate – and not just only sixty-eight (68%) as has been reported so far.

We, however, see that not all doctors and nurses in developing countries have emigrated to developed countries though job dissatisfaction exists. This is where I think researchers should begin to ask their questions from. They have failed to look at the issue in the context of

the “age”, “the length of practice as a health professional”, and whether the health professional is truly satisfied. I believe that if we look at the emigration problem again from this perspective, we may be able to provide a better explanation to the emigration problem. This research is conceived with an aim to examine the intrinsic motivational dimension of health care professionals as an additional explanation to the emigration problem.

RESEARCH METHODOLOGY

SAMPLE AND SAMPLE SELECTION

The population of this study is doctors and nurses in Ghana. Simple random sampling method was used to select 400 health professionals: 200 doctors and two hundred 200 nurses. Primary data was collected using two sets of questionnaires administered to the two sample groups (doctors and nurses). The original plan was to administer the questionnaires to the respondents online. However, the labour strike launched by the doctors in September of 2011 made it difficult to administer the surveys online, even after several reminders to them. An alternative to this arrangement was to administer the questionnaire in hardcopy to the respondents at the Korle-Bu Teaching Hospital, the 37 Military Hospital and the Ridge Hospital, all in Accra. Respondents from these government hospitals were selected because they had the same characteristics as their colleagues in other government hospitals across the country. Doctors and nurses are transferred to different hospitals every five years; hence data gathered from this research can be generalized to a larger population.

INSTRUMENTS/MATERIALS

Two sets of questionnaires were used to collect data. As shown in Appendix 1, each questionnaire was divided into three sections: A, B and C. Section A was used to collect data on the employment history and the medical/nursing training of the respondents. Questions related to the length of medical/nursing practice and place of medical training were asked in this section.

Section B asked respondents to answer two seemingly different sets of open-ended questions regarding how satisfied they were with their lives as health professionals. The first sets of questions were scored on a 4-point Likert-type scale (Likert R., 1932), which ranged from “Very Satisfied”, “Satisfied”, “Fairly Satisfied” to “Not Satisfied”. The second sets of questions,

which were also scored on a 4-point Likert-type scale, had answer choices that ranged from “Definitely Interested”, “Interested”, “Maybe Interested” to “Not Interested”.

The Section C part of the questionnaire was use to gather demographic data (age, marital status and gender) of respondents.

SECTION FOUR (4)

FINDINGS

This study aimed to establish why medical doctors and nurses in Ghana emigrate to developed countries. The measure employed to test the hypotheses included the age of health professionals, the time spent in medical practice, the overall satisfaction of the health professional in terms of other commitments and benefits they enjoyed in Ghana and motivation for achievement. Three hypotheses were tested. They included: H1: Young-aged health professionals are more likely to emigrate than old-aged health professionals; H2: Health professionals who have practiced for a short-period are more likely to take the opportunity for emigration than those who have practiced for a long-period; and H3: Highly satisfied health professionals are less likely to emigrate than less satisfied health professionals.

Cross-tabulation was used to analyse and test whether the age of the medical doctor and nurse in Ghana can predict their chances of emigrating. The results are shown in Table 1 below:

DOCTORS

Table 1a: Cross-tabulation of the age of medical doctors versus their interest in emigrating.

What is your age? * Your interest in leaving Ghana after many years of medical practice.

Cross-tabulation

Count

		Your interest in leaving Ghana after many years of medical practice.			Total
		Not Interested	Maybe Interested	Interested	
What is your age?	21-30	3	8	2	13
	31-40	38	43	3	84
	41-50	49	24	1	74
	51-60	41	8	0	49
Total		131	83	6	220

Table 1b: Chi-Square test of age of medical doctors versus their interest in emigrating

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.329 ^a	6	.000
Likelihood Ratio	32.276	6	.000
Linear-by-Linear Association	29.513	1	.000
N of Valid Cases	220		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .35.

Table 1c: Frequency distribution of the age of doctors versus interest in emigrating

Your interest in leaving Ghana after many years of medical practice				
AGE		Not Interested	Maybe Interested	Interested
YOUNGER DOCTORS	21 - 30	3	8	2
	31 - 40	38	43	3
	Sub-Total	41	51	5
	GRAND TOTAL	92		5
OLDER DOCTORS	41 - 50	49	24	1
	51 - 60	41	8	0
	Sub-Total	90	32	1
	GRAND TOTAL	122		1

Table 1d: Symmetric presentation of the age of doctors versus interest in emigrating.

Symmetric Measures					
		Value	Asymp. Std. Error^a	Approx. T^b	Approx. Sig.
Ordinal by Ordinal	Gamma	-.548	.081	-5.897	.000
	Spearman Correlation	-.361	.059	-5.708	.000 ^c
Interval by Interval	Pearson's R	-.367	.058	-5.827	.000 ^c
N of Valid Cases		220			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

From Tables 1a, 1c and 1d above, the effect of the age of medical doctors on emigration was not significant, contrary to the expectation of the study. Hypothesis for medical doctors was,

therefore, not supported indicating that young-aged doctors “approximately 41.82%” were not interested in emigrating compared with old-aged doctors “approximately 55.46%”.

NURSES

Table 2a: Cross tabulation of the age of nurses versus interest in emigrating.

What is your age? * Your interest in leaving Ghana after many years of nursing practice.

Cross tabulation

Count

		Your interest in leaving Ghana after many years of nursing practice.				Total
		Not Interested	Maybe Interested	Interested	Definitely Interested	
What is your age?	21-30	0	3	35	25	63
	31-40	0	0	11	20	31
	41-50	0	3	22	33	58
	51-60	3	4	29	16	52
Total		3	10	97	94	204

Table 2b: Chi-Square test of age of nurses versus their interest in emigrating

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.756 ^a	9	.010
Likelihood Ratio	22.701	9	.007
Linear-by-Linear Association	2.672	1	.102
N of Valid Cases	204		

a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .46.

Table 2c: Frequency distribution table of the age of nurses versus interest in emigrating

Your interest in leaving Ghana after many years of nursing practice					
AGE		Not Interested	Maybe Interested	Interested	Definitely Interested
YOUNGER NURSES	21 – 30	0	3	35	25
	31 - 40	0	0	11	20
	Sub-Total	0	3	46	45
	GRAND TOTAL	3		91	
OLDER NURSES	41 – 50	0	3	22	33
	51 - 60	3	4	29	16
	Sub-Total	3	7	51	49
	GRAND TOTAL	10		100	

Table 2d: Symmetric presentation of the age of nurses versus interest in emigrating.

Symmetric Measures					
		Value	Asymp. Std. Error^a	Approx. T^b	Approx. Sig.
Ordinal by Ordinal	Gamma	-.116	.097	-1.182	.237
	Spearman Correlation	-.087	.071	-1.243	.215 ^c
Interval by Interval	Pearson's R	-.115	.070	-1.642	.102 ^c
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

From Tables 2a, 2c and 2d above, the effect of the age of nurses on emigration was not significant, contrary to the expectation that young-aged nurses are more likely to emigrate than

old-aged nurses. Hypothesis for nurses was not supported. Young-aged nurses (representing 41.%) were not interested in emigrating compared with forty-five percent (45%) of old-aged nurses who were also not interested in emigrating.

Cross tabulation was used to ascertain whether health professionals who have practiced for a few years were more likely to emigrate than those who have practiced for many years. Tables 3a, 3b, and 3c show the results of medical doctors:

DOCTORS

Table 3a: Cross tabulation of the length of medical practice versus interest in emigrating.

How long have you been practicing medicine in Ghana? * To practice medicine abroad should an attractive opportunity come along. Cross tabulation

Count		To practice medicine abroad should an attractive opportunity come along.				Total
		Not Interested	Maybe Interested	Interested	Definitely Interested	
How long have you been practicing medicine in Ghana?	1-3 yrs	23	10	11	3	47
	4-6 yrs	18	32	10	1	61
	7-9 yrs	12	22	20	1	55
	10 yrs and above	5	38	12	2	57
Total		58	102	53	7	220

Table 3b: Chi-Square test of the length of medical practice versus interest in emigrating

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	36.328 ^a	9	.000
Likelihood Ratio	37.418	9	.000
Linear-by-Linear Association	6.561	1	.010
N of Valid Cases	220		

a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is 1.50.

Table 3c: Frequency distribution of the length of medical practice versus interest in emigrating

To practice medicine abroad should an attractive opportunity come along					
LENGTH OF MEDICAL PRACTISE		Not Interested	Maybe Interested	Interested	Definitely Interested
SHORT-TERM	1 - 3yrs	23	10	11	3
	4 - 6yrs	18	32	10	1
	Sub-Total	41	42	21	4
	GRAND TOTAL	83		25	
LONG-TERM	7 - 9yrs	12	22	20	1
	10yrs - above	5	38	12	2
	Sub-Total	17	60	32	3
	GRAND TOTAL	77		35	

Table 3d: Symmetric presentation of the length of medical practice versus interest in emigrating.

		Symmetric Measures			
		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal	Gamma	.230	.081	2.813	.005
	Spearman Correlation	.193	.068	2.900	.004 ^c
Interval by Interval	Pearson's R	.173	.069	2.595	.010 ^c
N of Valid Cases		220			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

From Tables 3a, 3c and 3d above, the effect of the length of medical practice on emigration was not significant. This was contrary to the earlier expectation that health professionals who have practised for a short-period were more likely to take the opportunity for emigration than those who have practised for a long-period. For medical doctors, the hypothesis was not supported.

NURSES

Table 4a: Cross tabulation of the length of nursing practice versus interest in emigrating.

How long have you been practicing nursing in Ghana? * To practice nursing abroad should an attractive opportunity come along. Cross tabulation

Count

		To practice nursing abroad should an attractive opportunity come along.			Total
		Maybe Interested	Interested	Definitely Interested	
How long have you been practicing nursing in Ghana?	1-3 yrs	2	37	17	56
	4-6 yrs	0	7	23	30
	7-9 yrs	1	34	24	59
	10 yrs or above	1	23	35	59
Total		4	101	99	204

Table 4b: Chi-Square test of the length of nursing practice versus interest in emigrating

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.602 ^a	6	.001
Likelihood Ratio	22.636	6	.001
Linear-by-Linear Association	4.778	1	.029
N of Valid Cases	204		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .59.

Table 4c: Frequency distribution of the length of nursing practice versus interest in emigrating

To practice nursing abroad should an attractive opportunity come along				
LENGTH OF MEDICAL PRACTISE		Maybe Interested	Interested	Definitely Interested
SHORT-TERM	1 - 3yrs	2	37	17
	4 - 6yrs	0	7	23
	Sub-Total	2	44	40
GRAND TOTAL		2	84	
LONG-TERM	7 - 9yrs	1	34	24
	10yrs - above	1	23	35
	Sub-Total	2	57	59
	GRAND TOTAL	2	116	

Table 4d: Symmetric presentation of the length of nursing practice versus interest in emigrating.

		Symmetric Measures			
		Value	Asymp. Std. Error^a	Approx. T^b	Approx. Sig.
Ordinal by Ordinal	Gamma	.222	.098	2.230	.026
	Spearman Correlation	.155	.069	2.229	.027 ^c
Interval by Interval	Pearson's R	.153	.069	2.207	.028 ^c
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

From Tables 4a, 4b and 4c above, the effect of the length of nursing practice on emigration was not significant. This is contrary to the expectation that health professionals who have practised for a short-period are more likely to take the opportunity for emigration than those who have practised for a long-period. The hypothesis was, therefore, not supported.

A set of thirteen questions that measured the overall satisfaction of health professionals in respect of their relations with family, the company of other categories of health personnel at medical centers, societal respect that health professionals earn, access to state-of-the-art medical tools and so on were used to test hypothesis 3. A reliability analysis was conducted on the thirteen questions to test their efficacy to measure the overall satisfaction of medical doctors and nurses against their willingness to emigrate should they get the opportunity. Results of the reliability analysis are shown in Table 5 below:

DOCTORS

Table 5a: Reliability statistics showing how reliable a set of thirteen questions could measure the overall satisfaction of medical doctors.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.550	.555	13

Table 5b: One way Analysis of Variance(ANOVA) of a population of medical doctors
(between highly satisfied and low satisfied groups)

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Between People	129.055	219	.589		
Within People					
Between Items	2040.159	12	170.013	641.101	.000
Residual	696.918	2628	.265		
Total	2737.077	2640	1.037		
Total	2866.131	2859	1.002		

Grand Mean = 2.30

The ANOVA table showed the mean squares value of **0.589** obtained by the population (medical doctors) against the mean squares value of **170.013**, representing overall satisfaction of doctors. The F-statistics recorded a value of **641.101** against the F-critical value of **0.000**. Therefore, considering that **F(12,219)=641.101** against **P < .05**, the means are statistically different, thus highly satisfied doctors are less likely to emigrate than less satisfied doctors.

Table 5c: Multivariate Test showing the overall satisfaction of medical doctors versus interest in emigrating.

Multivariate Tests ^c						
Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.985	1030.537 ^a	13.000	204.000	.000
	Wilks' Lambda	.015	1030.537 ^a	13.000	204.000	.000
	Hotelling's Trace	65.671	1030.537 ^a	13.000	204.000	.000
	Roy's Largest Root	65.671	1030.537 ^a	13.000	204.000	.000
prac_med_abroad	Pillai's Trace	.383	2.320	39.000	618.000	.000
	Wilks' Lambda	.655	2.383	39.000	604.835	.000
	Hotelling's Trace	.471	2.445	39.000	608.000	.000
	Roy's Largest Root	.316	5.008 ^b	13.000	206.000	.000

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + prac_med_abroad

From Tables 5a, 5b and 5c the effect of the overall satisfaction of medical doctors on their interest in emigrating was found to be significant, meaning highly satisfied doctors are less likely to emigrate than less satisfied doctors. Hypothesis 3 was thus supported for medical doctors. In practical terms, it means that if a doctor is respected in the community he operates, gets the opportunity to further train abroad, enjoys good working relationship with his fellow colleague doctors and other hospital/clinical staff, is guaranteed of a good pension package, receives a relatively good salary, gets good equipment to work with, among other essentials, he will feel satisfied and this will minimize chances that he will emigrate. The absence of these will make the doctor less satisfied which will ultimately increase chances that he will emigrate when the opportunity presents itself.

NURSES

Table 6a: Reliability statistics showing how reliable a set of thirteen questions could measure the overall satisfaction of nurses.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.716	.701	13

Table 6b: One way Analysis of Variance(ANOVA) of a population of nurses
(between highly satisfied and low satisfied groups)

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between People	367.167	203	1.809		
Within People					
Between Items	1036.835	12	86.403	168.432	.000
Residual	1249.627	2436	.513		
Total	2286.462	2448	.934		
Total	2653.629	2651	1.001		

Grand Mean = 2.16

The ANOVA table showed the mean squares value of **1.809** obtained by the population (nurses) against the mean squares value of **86.403**, representing overall satisfaction of nurses. The F-statistics recorded a value of **168.432** against the F-critical value of **0.000**. Therefore, considering that $F(12,203)=168.432$ against $P < .05$, the means are statistically different, thus highly satisfied nurses are less likely to emigrate than less satisfied nurses.

Table 6c: Multivariate Test showing the overall satisfaction of nurses versus interest in emigrating

Multivariate Tests ^c						
Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.920	166.548 ^a	13.000	189.000	.000
	Wilks' Lambda	.080	166.548 ^a	13.000	189.000	.000
	Hotelling's Trace	11.456	166.548 ^a	13.000	189.000	.000
	Roy's Largest Root	11.456	166.548 ^a	13.000	189.000	.000
prac_nur_abroad	Pillai's Trace	.264	2.227	26.000	380.000	.001
	Wilks' Lambda	.750	2.247 ^a	26.000	378.000	.001
	Hotelling's Trace	.313	2.266	26.000	376.000	.000
	Roy's Largest Root	.227	3.323 ^b	13.000	190.000	.000

- a. Exact statistic
- b. The statistic is an upper bound on F that yields a lower bound on the significance level.
- c. Design: Intercept + prac_nur_abroad

From Tables 6a, 6b and 6c above the effect of the overall satisfaction of nurses on their interest in emigrating was found to be significant, meaning highly satisfied nurses in Ghana are less likely to emigrate than their less satisfied counterparts. Hypothesis 3 was thus supported for nurses. In practical terms, it means that if society accords a nurse respect, if he/she gets opportunity to further train abroad, enjoys good working relationship with his/her fellow colleague nurses and other hospital/clinical staff, is guaranteed of a good pension package, receives a relatively good salary, gets good equipment to work with, among other essentials, he will feel satisfied and this will minimize chances that he will emigrate. The absence of these will make the nurse less satisfied which will ultimately increase chances that he/she will emigrate when the opportunity presents itself.

FIELD OBSERVATIONS – QUALITATIVE DIMENSION OF THE STUDY

On the 3rd of December, 2003, a Senior Nursing Officer at the Komfo-Anokye Teaching Hospital in Kumasi, Mrs. Margaret Marfo-Atiemo, bemoaned that “improved remuneration and the provision of cars to doctors and nurses alone were not enough to halt the massive emigration in the health sector.” She said this during an interaction with journalists concerning factors that contribute to the emigration of nurses. The conclusion that I drew from her comments was that until the government instituted measures that would ensure that health professionals in Ghana were satisfied, all other interventions would be temporary. It therefore came as no surprise to me that hypothesis 3 was supported both for doctors and nurses, implying that ensuring that the health professional was highly satisfied was one sure way of guaranteeing that they will not emigrate. In other words the higher the number of factors that satisfied the medical personnel, the lower the emigration rate. The reverse is also true.

Perhaps, what is more surprising to me in this whole health professional emigration saga is the return of some Ghanaian medical specialists to the country after several years of practicing abroad. Compared with developing countries like Ghana, one can say that healthcare delivery in developed countries is much better in many respects: the availability of advanced technology, better salary and good conditions of service just to mention a few. The question now is “why are these health professionals returning?” “What is motivating them to return?” “Have these health professionals discovered benefits that their colleagues working in Ghana are oblivious of? If yes, what is the motivation?” “Could patriotism be the motivation behind their return?” These intriguing questions invariably form the basis for the inclusion of hypothesis four which seeks to find out the effect of motivation for achievement on the emigration of health professionals. Two

separate interviews were conducted for two Ghanaian special doctors who returned home after practicing abroad.

Prof. Kwabena Frimpong-Boateng, a cardio specialist was the first to be interviewed. After receiving his Bachelor of Medicine and Bachelor of Surgery Degrees at the Ghana Medical School in 1975, he travelled to Germany where he obtained advanced medical training to qualify as a general, cardiothoracic and vascular surgeon. He was one of the pioneers of the heart transplant programme in Hannover, Germany. When asked why he chose to return to Ghana in 1991 when he had reached the pinnacle of his career abroad, Prof. Kwabena Frimpong-Boateng intimated that several reasons had urged him to return. First, he wanted to set up a Cardiothoracic Centre that would be the first of its kind in Ghana and, indeed, in West Africa. Second, Prof. Frimpong-Boateng felt that the joy and national pride that he would feel when he trained other Ghanaian surgeons to perform heart surgery would satisfy him more than any success he ever had while practicing in Germany. His dream materialized. Today, Ghana is the only country in West Africa with a cardiothoracic center that offers medical training services to Ghanaians and non-Ghanaians. Clearly, the interview with Prof. Kwabena Frimpong-Boateng is an indication that satisfaction could be a possible factor to examine more closely to see if it could offer some explanation to the emigration of health professional in Ghana.

Another interviewee, Prof. Agyeman-Badu Akosa, a former Director of the Ghana Health Service and currently a Professor of Pathology at the University of Ghana Medical School, confirmed that he decided to return to Ghana in 1998 because of two primary reasons. The first reason was that he felt obliged to give back to Ghana for the free education he received in the

1960s before going to the United Kingdom for specialized medical training. He admitted that Ghana had given him and his family so much, and that returning to serve his people was the least he could do to show appreciation to his country. In addition, Professor Akosa emphasized that the Ghanaian culture which is a social collective system in which people cared about each other was unique in many respects, and as he put it he had “declined and given up many good offers and positions abroad, just so he could serve this country with knowledge acquired in medicine”.

From the interviews granted Professor Agyeman-Badu Akosa and Professor Kwabena Frimpong-Boateng, motivation for achievement and self-actualization that were devoid of monetary benefits spurred them to return to Ghana. If in the face of these positive developments more than fifty percent (50%) of doctors and nurses in Ghana emigrate within ten years of medical practice, it is a clear indication that motivation for achievement also plays a major role in explaining the emigration of health professional problem.

In the past five decades, motivation for achievement has been regarded by experts of psychology and sociology as a valid tool to understanding human motivation. Social psychology expert Abraham Maslow is one such expert who has contributed to understanding human motivation. His ground-breaking Hierarchy of Needs Theory (Maslow 1954) has helped explain why financial compensation is not the only panacea for rewarding people. In his paper, Maslow argues that humans are motivated by needs: basic needs that are inborn and which satisfy their emotional and physical well-being; and higher needs which influence our personal development. Until the basic needs (survival needs) are satisfied, Maslow posits that one cannot progress to

satisfy higher needs: such as develop friendship, family, self-esteem, confidence, respect by others, morality, spontaneity and creativity, just to mention but a few (Maslow 1954).

Frederick Herzberg's motivation-hygiene theory presents us with a deeper explanation to human satisfaction needs. Building on the foundations laid by his predecessor Abraham Maslow, Frederick Herzberg posits that certain aspects of an employee's job have a direct effect on their job satisfaction while others have an indirect effect on them being dissatisfied on the job. Factors that affect employees' satisfaction level include recognition, advancement, growth, responsibility, and achievement. Herzberg argues that the presence of these factors propel employees to give their best to an organisation, regardless of whether they receive high salaries.

Segueing into the interview granted the two Ghanaian returnee doctors, it is evident that their basic needs have been duly satisfied. Professors Kwabena Frimpong-Boateng and Agyeman-Badu Akosa were inspired to reach their highest potential (a stage that Maslow called Self-Actualization) after having satisfied their basic needs. At this stage financial motivation (which is lower on Maslow's hierarchy of needs) ceases to satisfy them. They wanted to be recognized in Ghana as having contributed to major successes in the health sector. As it turned out, both doctors used the fame acquired to contest for presidency during the 2012 presidential elections in Ghana. Unfortunately both lost.

It is also obvious that Herzberg's motivation theory explains why Professor Kwabena Frimpong-Boateng and Professor Agyeman-Badu Akosa returned to Ghana to serve in the health

sector even when they did not have anything to lose. With their wealth of experience, what satisfied them was not high salary, but rather recognition and respect.

SECTION FIVE (5)

DISCUSSION

This study examined why medical doctors and nurses in Ghana emigrated to developed countries. It looked at the extent to which the age of a medical practitioner, the length of medical practice and the over-all level of satisfaction can predict the likelihood that a health professional would emigrate. Two separate interviews were also conducted on two Ghanaian specialised medical doctors who returned home to practice. Findings from those interviews gave birth to the inclusion of motivation for achievement as a variable that offers insightful explanations to the emigration of health professional problem.

The Korle-Bu Teaching Hospital, the 37 Military Hospital and the Ridge Hospital, all in Accra, were used to gather the necessary data. Overall, three hypotheses were tested:

Young-aged and Old-aged health professionals and Emigration

It was hypothesized that young-aged health professionals were more likely to emigrate than old-aged health professionals. For medical doctors, the symmetric analysis from the cross-tabulation used to test the hypothesis produced an insignificant spearman's correlation value of -0.361, while that of nurses produced an insignificant spearman's correlation value of -0.087 between young and old-aged health professionals and the possibility of emigrating. This means that young-aged health professionals were less likely to emigrate than old-aged health professionals, contrary to the initial hypothesis.

Even though the hypothesis neither accepted nor refuted any existing literature on the age of health professional and emigration, it adds a new dimension to existing literature on the emigration of health professionals, and further paves the way for further research into this new area. It is also pertinent to state that apart from the “Pull” and “Push” factors identified by Dovlo (2002) and Kirigia et al. (2006) as being major explanations to the emigration of health professionals (particularly in Africa), the age of the health professional, though proved to be insignificant in explaining the emigration problem in this research offers interesting insights into the issue that could produce startling revelations if looked into more closely.

Length of Medical Practice and Emigration

It was hypothesized that health professionals who have practiced for a short-period were more likely to take the opportunity for emigration than those who have practiced for a long-period.

For medical doctors, the symmetric analysis from the cross-tabulation used to test the hypothesis produced an insignificant spearman’s correlation value of 0.193, while that of nurses produced an insignificant spearman’s correlation value of 0.155 between short and long-period health professionals and emigration. This means that health professionals who have practiced for a short-period were less likely to emigrate than those who have practiced for a long-period, contrary to the hypothesis.

Similar to hypothesis one (1) above, no research as yet been conducted into the emigration of health professionals from the perspective of the length of practice of a health professional. Nonetheless, it provides some insight into how close the results were. For instance

out of the 220 medical doctors who participated in this research, 11.36% of doctors who have practiced for a short-period were interested in emigrating given the opportunity against 37.73% who were not interested in emigrating. 15.90% of doctors who have practiced for a long-period were interested in emigrating against 35% who were not interested in emigrating.

Level of Over-all Satisfaction and Emigration

In hypothesis 3, it was hypothesized that highly satisfied health professionals were less likely to emigrate than less satisfied health professionals. The variables of this hypothesis consisted of thirteen 13 questions that were combined to measure the overall satisfaction of a health professional on indicators such as monetary compensation, societal respect as health professionals, opportunities to attend conferences abroad, access to state-of-the-art medical working tools, retirement package among others.

To be sure that a combination of the thirteen (13) questions would produce meaningful results, they were subjected to a Alpha Cronbach's reliability test. A Alpha Cronbach's reliability score of 0.555 was recorded for medical doctors while 0.716 was recorded for nurses. This hypothesis recorded significant results for doctors [$F(12, 641.101)$] and nurses [$F(12, 168.432)$], thereby confirming the hypothesis as true.

From the results obtained, it can be argued that health professionals in Ghana would feel satisfied with life and would most certainly not consider emigrating if the conditions of service available to them were favorable and if society regarded them as valuable contributors to national development.

Summary and Conclusion

The research was on Brain-Drain in Ghana's Health Sector. It sought to find out why Medical Doctors and Nurses trained with public funds emigrate to practice in developed countries. The first hypothesis stated that young-aged health professionals were more likely to emigrate than old-aged health professionals. This hypothesis was not supported on grounds that the age of the health professional could not produce significant evidence to be able to predict the possibility of a health professional (doctor or nurse) in Ghana emigrating abroad.

The second hypothesis stated that health professionals who have practiced for a short-period were more likely to take the opportunity for emigration than those who have practiced for a long-period. This hypothesis was also refuted, meaning health professionals who have practiced for a short-period were less likely to take the opportunity for emigration than those who have practiced for a long-period.

Hypothesis 3 stated that highly satisfied health professionals were less likely to emigrate than less satisfied health professionals. This hypothesis was supported for both medical doctors and nurses.

Based on two separate interviews conducted on two Ghanaian specialized doctors (Professor Frimpong-Boateng and Professor Agyeman-Badu Akosa), it came to light that motivation for achievement also played a role in determining whether or not a health professional would emigrate.

In conclusion, it can be said that while the age and the length of medical practice in Ghana do not explain why health professionals continue to emigrate, the overall satisfaction of the health professional and motivation to achieve provides some meaningful explanations to why many Ghanaian health professionals continue to emigrate despite several government interventions to retain them.

From the results obtained from measuring the overall satisfaction life of the health professional, it was observed that some satisfaction indicators such as high monetary compensation, provision of amenities such as personal cars and opportunities to attend conferences abroad by the government could help retain the Ghanaian health professional in the short-term, whereas guaranteeing the Ghanaian health professional a good retirement package (such as end-of-service benefits, housing loan, etc.), ensuring the availability of adequate state-of-the-art working tools, and society giving much respect to people in the medical profession may go a long way to retain Ghanaian health professionals in the long-term.

What is more, the comments by Mrs Margaret Marfo-Atiemo, Director of Nursing Services at the Komfo Anokye Teaching (KATH) who was quoted as saying that “*improved remuneration and the provision of cars to doctors and nurses alone is not enough to halt the brain drain that had characterised the health sector in recent times*” can in this instance not be overemphasized. Her comments were supported by hypothesis 3 as it was revealed that providing the health professional with work incentives that guaranteed good retirement was strong indication that the health professional would be highly satisfied and would not consider emigrating. To confirm that she did not mince words with her comments, Mrs. Margaret Marfo-

Atiemo was further quoted as saying that *“the main factor propelling the exodus of nurses is not just the desire for making big monies, but rather about their future security in terms of where to lay their heads when they eventually go on pension”*.

Limitations of the Research

1. It was difficult obtaining literature that directly related to the variables tested in this research. This illustrates that not much study has been conducted into this area of health professional emigration.

Recommendations

1. Researchers should further conduct studies into the variables considered in this research in order to throw more light and to provide more explanation on why health professionals react to those variables;
2. The government should come up with welfare interventions that would guarantee health professionals in Ghana of a good life after retirement. This could go a long way to reduce the mass emigration of health professionals from Ghana.
3. To mitigate the effects of the emigration of health professionals from Ghana on Ghana’s health sector, the government may wish to resource the universities to enable them train more medical doctors and nurses than the universities are currently doing.

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