

The Net Benefit of Migration: The Case of Migrant Nurses from Ghana to the United Kingdom

PETER QUARTEY¹ and EVELYN KWAKYE²

Abstract

Skilled worker migration from Ghana to Europe and the USA has been on the increase in recent years. These out-migrations bring enormous benefits as well as costs but the net effect is yet to be ascertained. Using survey data from 100 nurses practising in Ghana and a similar number practising in the UK, this paper investigates their reasons for migrating and attempts to capture the net benefit of migration. The paper concludes that migration of nurses brings positive net private benefit but this excludes social cost such as the rise in mortality rates due to shortage of nurses, and other social costs which do not easily lend themselves to valuation in monetary terms.

Key Words: Migration, Nurses, Poverty

Introduction

International migration from developing countries has assumed an increasing trend in recent times. The UN estimates that migrants account

¹ PhD, Research Fellow, Institute of Statistics, Social and Economic Research (ISSER), University of Ghana & Deputy Head, Centre for Migration Studies, University of Ghana. I wish to express my sincere gratitude to the Global Development Network (GDN) for supporting this study. This paper was finalized during my visit to the International Monetary Fund (IMF) Headquarters in Washington over the period July 16 to August 24, 2007. I also thank all those who have provided comments to help improve the quality of the paper. Errors and omissions are mine.

² Principal Research Assistant, ISSER. Ph.D student in Economics, University of Massachusetts, Amherst.

for about 3% of the world's population. According to the World Bank's Global Economic Prospects 2006, the stock of immigrants to high income countries increased at about 3% per year from 1980 to 2000; up from the 2.4% rate of growth in the 1970s. On the other hand, migration to developing countries rose by 1.3% per year over the same period. Immigrants have had a significant impact on population growth of several high income countries such as Germany, Italy and Sweden. Without them these Countries would have experienced a decline in population over the past few decades (OECD, 2006). The increase in migration to high income countries reflected, in part, an increase in demand for services due to high incomes worldwide, global competition, technological advancement, the growth of networks of immigrants among others (World Bank, 2006).

Ghana's migration history is both dynamic and complex and rooted in historical antecedents and a long tradition of population mobility. Internally, movement to towns has been an important part of livelihood strategies. Four distinct phases with respect to international migration in Ghana have been identified (Anarfi and Kwankye, 2003). The first phase has been referred to as the period of minimal emigration (from pre-colonial times to the late 1960s). During this period, Ghana was the destination of choice for many migrants especially from West African countries. The second phase has been described as the period of initial emigration from late 1960s to the 1970s followed by the phase of large-scale emigration from the beginning of the 1980s. By the 1980s migration of both the skilled and unskilled had become a coping strategy for individuals and families. The last stage of Ghana's migration history from the 1990s is classified as the period of intensification and diasporisation of Ghanaians.

Despite a trend towards greater diversity, statistics from the Ghana Immigration Service clearly indicate that most migrations into or out of Ghana have involved a few countries with special historical, cultural and geographic ties. For both arrivals and departures, African nationals form the majority, ranging from 51% to 76% between 1999 and 2002, with about 98% of the African migration being within West Africa. Migration between African countries occurs mostly between countries with common boundaries, ethnic affiliation and common colonial history, and in this case, the role played by the ECOWAS protocol has been a factor.

Outside Africa, political and historical ties continue to influence the direction of Ghanaian migration flows. United Kingdom (UK) citizens form the majority of European arrivals and departures in Ghana (Twum-Baah, 2005) although this is changing. On the other hand the United States, Netherlands, Germany, Italy and other non EU countries are increasingly becoming important destination points for Ghanaians.

The traditional pattern of migration within and from Africa has been male-dominated but increasingly it is becoming feminized. Women now move independently, and not simply to join a husband or other family members. The proportion of female migrants increased from 41% in 1960 to 47% in 1990. Subsequent studies put the proportion of female migrants around 40% (Twum-Baah et al, 1995, 2005). Women dominate short distance emigration to nearby countries, and are often younger than male migrants. Increasingly professional women now engage in international migration often leaving their spouses at home, thus providing opportunities for gender role changes within the Ghanaian family.

Ghana used to be a destination country for migrants from other West African countries. This seems to be changing for Ghana and other developing countries, migration of skilled labour out of developing countries including Ghana had become an integral part of the survival strategies of many households. Recently, migration of skilled personnel particularly from the health sector is occurring at an increasing rate (World Bank, 2006). It is reported by Stillwell (2003) that in 1998-9, the share of overseas trained nurses registered in the UK as a proportion of the total nurse stock were 1.2%, 17.4% and 1.5% for Ghana, South Africa and Zimbabwe respectively. In 2002-3, the proportion of nurses from these countries has increased except for South Africa where a decline was recorded; it was 2.1%, 12.0% and 4.0% for Ghana, South Africa and Zimbabwe respectively. (also refer to Buchanan and Dovlo, 2004). Similarly, the share of Overseas-trained nurses registered in the UK in 1998-9 was 1.1%, 16.5%, and 1.4% for the three countries respectively. In 2002-3 the figure rose to 1.7% and 3.2% for Ghana and Zimbabwe but declined to 9.7% in the case of South Africa (Table 1). Health worker migrations from Ghana have focused mainly on two types of professions within the health sector, namely, doctors and nurses (Table 2). Whereas doctors find it easier to

migrate to the USA, nurses find it more convenient to migrate to the UK because of the ease of absorption into the UK's health sector.

**TABLE 1: Overseas-trained nurses registered per annum in the UK 1998-2003
(Excluding the European Union)**

Country	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
India	30	96	289	994	1830	3073	3690
Philippines	52	1052	3396	7235	5593	4338	2521
Australia	1335	1209	1046	1342	920	1326	981
South Africa	599	1460	1086	2114	1368	1689	933
Nigeria	179	208	347	432	509	511	466
West Indies	221	425	261	248	208	397	352
Zimbabwe	52	221	382	473	485	391	311
New Zealand	527	461	393	443	282	348	289
Ghana	40	74	140	195	251	354	272
Pakistan	3	13	44	207	172	140	205
Zambia	15	40	88	183	133	109	162
USA	139	168	147	122	88	141	105
Mauritius	6	15	41	62	59	95	102
Kenya	19	29	50	155	152	146	99
Botswana	4	-	87	100	39	90	81
Canada	196	130	89	79	52	89	88
Nepal					71	43	73
Swaziland						81	69
China							60
Malawi	1	15	45	75	57	64	52
Sri Lanka					23	36	47
Lesotho						50	43
Japan					20	37	34
Singapore							28
Sierra Leone							24
Others	203	329	472	605	418	514	380
TOTAL ALL OVERSEAS	3,621	5,945	8,403	15,064	12,730	14,122	11,477

Source: Nursing and Midwifery Council (NMC) www.nmc-uk.org, August 2005 Register

The choice of destination depends on the recruitment process and more particularly the ease of registration with the host country's professional bodies. According to DFID (2004), nurses prefer the UK: because it only requires adaptation once registration and qualification in Ghana have been verified. In the USA, nurses from Ghana have to write a qualifying examination which adds to the cost of migrating there, and makes the USA an expensive destination and therefore a less attractive. For doctors, the USA is the most preferred destination and those working currently in the UK have the intention of later migrating to the USA (DFID, 2004). Similarly, some Ghanaian nurses working in the UK even-

tually settle in the USA because they are sure to receive higher remuneration compared to the UK. Table 2 shows the preferred countries of destination by Ghanaian nurses according to the number of verifications requests made to the Ghana Medical Council.

Although health worker migration continues to be a challenge to the country's health system, at the same time, remittances sent home by them have become an important source of direct private transfers and a major source of foreign exchange for Ghana. The Bank of Ghana estimates that private inward remittances increased from \$1.52 billion in 2005 to \$1.7 billion in 2006. Migrant remittances currently account for about 15% of GDP (Bank of Ghana, 2006). Despite the significant increase in migration and remittances the net impact of these has not been empirically investigated. The effect of health worker migrations on the well being of the poor could be positive or negative depending on the net impact. The general focus of the study is to ascertain the net impact of health worker migrations out of Ghana focusing on migrant nurses from Ghana to the UK. The study finds that migration of nurses from Ghana brings net positive private benefit which may have significantly positive effects on poverty.

The rest of the paper is organized as follows: Section two discusses the trend in health worker migration from Ghana and how this has been influenced by OECD countries policies on migration. Section three outlines the methodology employed in the study. The next section analyses the survey data, while the final section concludes.

Stylized Facts on Health Worker Migration

There has not been any formal test of the net impact of the migration of health workers but there has been abundant literature examining the magnitude and trends in health worker migration from Ghana. According to Obuobi et al (1999), *more than 50% of physicians in Ghana are concentrated in the capital city where less than 20% of the population lives.* Also 55% of pharmacists in Ghana work in the Greater Accra region, which has only 16% of the total population. In the other hand, only 2% of Ghanaian pharmacists work in the Northern Region which accounts for 10% of Ghana's population (Ghana Ministry of Health, 2002).

TABLE 2: Ghanaian Nurses Verification – Country Verified for and Year³

Country of Destination	Year of Seeking Verification						Total
	1998	1999	2000	2001	2002	2003 ^r	
USA	50	42	44	129	81	80	426
UK	97	265	646	738	405	317	2468
CANADA	12	13	26	46	33	10	140
S-AFRICA	9	4	3	2	6	-	24
OTHERS	4	4	8	8	5	-	29
TOTAL	172	328	727	923	530	407	3087

Source: Ghana National Medical Council (cited in DFID 2004)

This problem of skewed distribution of health workers is compounded by a massive exodus⁴. The University of Ghana Medical School, the School of Medical Sciences of the Kwame Nkrumah University of Science and Technology and the University of Development Studies Medical School train approximately 150 medical officers annually (ISSER State of Ghanaian Economy, 2003). However, 50% of every graduating class leaves the country within the second year, while 80% (cumulative) leave by the fifth year (Safo, 2003). Out of 944 pharmacists trained from 1995-2002, a total of 410 had left the country by the end of 2002 and out of the 10,145 nurses trained between that same period, 1,996 left Ghana by the end of 2002 (Safo, 2003; ISSER, 2003; also see Table 3). On the average, only 12 medical laboratory technologists were being produced annually as of 2002 without any guarantee that they will remain in Ghana after graduation (Ghana MoH, 2002). Also, a survey of private providers in

³ Verification of nursing certificates are normally requested for by the UK Nurses and Midwifery Council and records on this is documented by the Ghana Health Service. However, it is possible for a Ghanaian nurse to have his/her certificate verified but that does not necessarily mean he/she actually migrated.

^r Until May 2003 only

⁴ Obuobi et al (1999) report that out of over 2000 registered doctors, half the number is out of the country.

Accra showed that the population of medical practitioners in private practice is *aging* (Ghana MoH, 2002).

TABLE 3: Brain Drain of Health Workers, 1999-2004

<i>Main Cadres</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>Total</i>
Doctors	72	52	62	105	117	40	448
Pharmacists	49	24	58	84	95	30	340
Allied Health Workers	9	16	14	12	10	8	69
Nurses/Midwives	215	207	235	246	252	82	1237

Source: Ministry of Health, 2006

Liesse et al, (2003) report that the propensity among health workers to migrate is still quite high. For instance, Ghanaian health workers interviewed showed a level of intention to migrate of 61.6% compared with 26% among Ugandan health workers; 37.9% of Senegalese workers; 49% of Cameroonians; 58% of South African and 68% of Zimbabwean health workers. It is difficult to ascertain the reasons why people migrate as most do not report their intention to emigrate; they simply vacate their posts, resign, or ask for leave without pay for an indefinite period of time (Awases et al., 2003). However, the most common factors responsible for health worker migration include poor remuneration, lack of facilities to work professionally, lack of opportunities for continuing education and training, inadequate day care facilities for their children, availability of good schools in the rural areas, bureaucracy within the health administration and accommodation problems. Other factors include work in extraordinary circumstances, for example, the stress from having too many patients daily increases stress levels and leads to poor quality of care.

While these problems adversely affect the health system in Ghana, OECD countries were making policies and improving incentives to attract

health workers⁵. There are 30 OECD countries and their policies on migration have been different; varying between regions, differences in colonial ties, skills, gender, and type of profession, to mention but a few. The differences in immigration policies can be categorized into strict and liberal policies. The strict policies were targeted at both skilled and unskilled migrants in the 1980s and 1990s. However, the skilled labour shortage within many OECD countries led to the formulation of liberal policies towards skilled migrants. Examples of such liberal policies include the highly skilled migrant programme in the UK, the skilled worker programme in Canada, US Visa Lottery, the skilled worker programme in Australia and New Zealand.

Although factors such as poor working conditions in sending countries account for health worker migration from Ghana, liberal immigration policies of the developed countries significantly account for the rising tide of health worker migrations. Arguably in response to criticisms against the aggressive recruitment of nurses from developing countries, the authorities of the UK Department of Health issued a code of practice to guide international recruitment in 1999 (Department of Health, 1999 and 2001). However the UK remains the preferred destination of Ghanaian nurses; because nurses only have to undergo a 3-6 months adaptation to qualify for a 4 year residence permit, after which they qualify for permanent residence.

For this reason, data on the number of nurses and midwives who have registered with the UK Nursing and Midwifery Council indicates an upward trend in registration figures even after Ghana was listed among the developing countries to be exempted from active recruitment by both the NHS trusts and private recruitment agencies in the UK. For instance, in 2001/2 195 nurses and midwives were registered while in 2003/4, 354 nurses and midwives got registered. Between January and August 2005, 272 nurses and midwives were accepted into the Council's register (Table 1). The verification data in Table 2 also show that the code of practice had no significant impact on recruit from Ghana. This is typified by the increase in verification requests of about 144% in 2000 and almost a

⁵ Until April 2003 when the OECD policy on direct recruitment became operational in Ghana

threefold increase in this number from 1999 to 2001. While in 2002, 405 verification requests were received, between January and May 2003, as many as 317 verification requests were received-i.e in a period of 5 months.

The exodus of Ghanaian nurses has not gone unnoticed by the Ghanaian authorities. The government has instituted certain domestic interventions to complement the restrictive policies of the UK government as a way of increasing the rate of retention of trained nurses. This has mostly taken the form of incentives such as the Additional Duty Hours Allowance (ADHA) and the purchase of cars under the 'Cars for Health Workers Scheme'. Even though no formal evaluation has been conducted on these interventions, Buchan and Dovlo (2004) report that, contrary to the expected outcome of these interventions, the perceived imbalance in the distribution of these incentives in favour of doctors in the country encouraged more nurses to seek verification with external employers since the introduction of ADHA. Recently, a study conducted by the Oxford Policy Management (2007) indicated that the ADHA has been stopped because of abuse. Also, other allowances such as Deprived Area Allowance were irregular and in most cases were never received by beneficiaries. Besides, what constitutes a 'deprived area' is still not clearly defined. As suggested by Bach (2003), there are enough reasons to believe that the migration of health workers, especially nurses, can be expected to increase.

Methodology

Analytical Approach

Two distinct but highly complementary approaches were used to capture the net benefit of migration of health professionals to the UK and its impact on poverty in Ghana. First descriptive statistics was used to ascertain the shares of household expenditure (education, health, and food) financed through remittances. Second, a cost-benefit analysis of emigration was conducted to compute the effect of migration on poverty. The 'migration model' (see Drinkwater, 2002) was extended and used to estimate the net benefit of migration. In the model, the decision to migrate is often represented within a human capital framework since mobility can be

viewed as an investment decision, in which costs are borne in the initial period(s) and returns accrue over time. The cost of migration was explicitly incorporated into the potential migrant's decision in a model initially developed by Sjaastad (1962) as follows:

$$V_{EW}(t) = \int_{t_0}^T e^{-\rho t} (W_W(t) - W_{EW}(t))dt - C_{EW}(t_0) \dots \dots \dots (1)$$

Where, V_{EW} is the present value of the net benefit of moving from Country A to Country B. the W 's are the expected income levels in the two countries and P the subjective rate of time preference or discount rate. The cost of a health worker migrating from Ghana to the UK is split into pecuniary (C_{EW}) and non-pecuniary cost (P_{EW}). C_{EW} consist of the direct cost of migration, e.g. moving possessions to a new location, while P_{EW} is often referred to as the indirect or psychic cost of migration since it is associated with moving away from friends, family and familiar environment. Time (t) runs from the current period (t_0) to the period that migrants stop working in the host country (T). The end period could be due to retirement or a shorter period of residence. It is assumed here that C_{EW} is only incurred in the initial period but P_{EW} can persist (but probably decay) over time⁶. Evidence of the latter is provided by Vanderkamp (1971) who suggests that one of the main reasons for return migration is that the psychic cost was higher than initially expected. In this framework the individual will migrate if $V_{EW} > 0$ and if more than one possible destination offers a positive net benefit, they will choose the location that offers the highest net benefit.

Following Herzog and Schlottmann (1983), the basic human capital specification shown in (1) can be amended to include search costs:

$$V_{EW}(t) = \int_{t_0}^T e^{-\rho t} (W_W(t) - W_E(t))dt - C_{EW}(t_0) - S_W(t_0) \dots \dots \dots (2)$$

where S_W are the search cost of associated with finding a job match in the destination country and is assumed, for simplification, to be incurred

⁶ P_{EW} is left out of this because it is difficult to capture

only in period t_0 . *SW* includes the cost of establishing where job opportunities exist and then evaluating how good they are. However, in the case of migrant nurses, search cost can be zero as the majority of them are recruited from Ghana by recruitment agencies.

Equation (2) will be the empirical model to be estimated. In the empirical model, the following cost can be estimated depending on data availability: the total cost of training these health professionals, how long they served their countries before leaving, how much benefit is their period of service, how much remittances they have sent to Ghana over the period, the implicit value of experiences or training gained, whether they intend to return to Ghana, when they intend to do so, the cost of equipments they have sent home, (on average), how much each professional returnee brings to Ghana, how much taxes they pay to the UK government including other gains to the UK government. The cost and benefit from each class of workers will be computed and also projected into the future on the basis of the rising trend in migrant health workers.

Data Sources and Analysis

The analysis involves estimating the costs and benefits associated with health worker migration from Ghana between 1990 and 2004. This involves using both micro and macro data sources. The macro data was obtained from the Ministry of Education and the Ministry of Health, Ghana. This comprised data on the cost of training a nurse, nurse patient ratios etc. The micro data was obtained by administering questionnaires to skilled migrant health workers in the UK and also their counterparts in Ghana. The study covered a sample of 100 nurses currently working in Ghana and 100 Ghanaian trained nurses who have migrated to the UK. The focus was on nurses because of the liberal migration policies of the UK Government and the ease with which Ghanaian nurses get absorbed into the UK medical system compared to Ghanaian medical doctors and other paramedics.

The survey in Ghana was conducted in Accra, Kumasi and Tamale and nurses in both private and public health facilities were interviewed. The objective was to also interview Nurses working in the rural and ur-

ban health institutions in the country to enable us make regional, rural and urban comparisons.

Data Analysis

The interviews were conducted between the months of February and August 2005. Between 1998 and August 2005, there were about 1326 registered Ghanaian trained nurses and midwives who had migrated to the UK; 100 of them were interviewed. Similarly, a total of 100 nurses working in the Greater Accra, Ashanti and the Northern regions of Ghana were interviewed. About 14.4 percent were working in private institutions and 85.6 percent in public institutions. A descriptive analysis of the data is provided below

Profile of Ghanaian Nurses Surveyed (Ghana & the UK)

A large proportion of the nurses interviewed in Ghana were females aged between 30 and 59 years and married with less than 3 children. The majority of the nurses surveyed in the UK were also female, aged between 30 and 45 years with 12% below 30 years and 23% above 45 years (Table 4). About 71.7% of nurses interviewed in the UK were married, 18.2% were single, 4% widowed; the majority of them had between one and three children with those having three children forming the majority (28.6%), followed by those with two children (27.5%). A related finding was that a greater proportion of spouses of nurses surveyed in the UK were working in a related profession; 16% of such spouses were nurses and 10.1% were medical doctors. Some of the spouses were either teachers (8.9%) or accountants (5.1%). On the other hand, a significant proportion of respondents from the Ghana survey had spouses who were professionals. This group accounted for 59.7 percent of the nurses interviewed. About 6.5 percent of the spouses of the nurses interviewed were engaged in technical work; 10.4 percent were engaged in trading; 5.2 percent were religious leaders, and 1.3 percent had no jobs. The rest (16.9 %) were involved in other occupations.

It is also worth mentioning that the educational qualifications of the nurses interviewed in the UK varied between certificate in nursing and postgraduate qualifications. About 47.5 percent of the sampled nurses

had Certificates in Nursing/Midwifery while 22.0 percent had Diplomas in Nursing. Those with degrees in Nursing constituted 5.1 percent while 1.7 percent had post-graduate qualifications and 6.8 percent of them had other qualifications (Table 5). Similarly, the majority of nurses working in Ghana had certificates from nursing training colleges (55.6%), while 24.2% possessed undergraduate degrees in nursing and 15.2% held post graduate diplomas or degrees in nursing.

TABLE 4: Biographical Data

No.	Characteristic	Variable	Percentage (UK Survey)	Percentage (Ghana)
1.	Sex	Male	11.0	16.1
		Female	89.0	83.9
		Total	100	100
2.	Age Group	<30	12.0	19.5
		30-59	79.0	72.0
		60+	9.0	8.5
		Total	100	100.0
3.	Marital Status	Married	71.7	70.3
		Single	18.2	20.3
		Separated	6.1	2.5
		Widowed/Divorced	4.0	6.8
		Total	100	100.0
4.	Number of children	<3	27.5	69.3
		3-5	72.5	7.9
		Not stated	-	22.8
		Total	100	100

Source: Survey Data, 2006

TABLE 5: Distribution of Educational Qualifications of Nurses

Entry Qualification	Nurses Working in Ghana (%)	Nurses Working in the UK (%)
Certificate*	55.6	47.5
Diploma*	15.2	22.0
Degree (Nursing)	24.2	5.1
Postgraduate	-	1.7
Other	5.0	23.7
Total	100	100

*nursing/midwifery

Source: Nurses Survey Data, 2006

Table 6 presents perceptions on the level of satisfaction with present occupation. It can be inferred that on the average, nurses interviewed in Ghana were satisfied with their job (53.6%), 33% were not satisfied. The majority were satisfied with existing opportunities both to acquire skills and to be promoted; and but they consider staff morale to be at least medium. It appears that the level of job satisfaction and staff morale was higher for Ghanaian nurses working in the UK. A majority of sampled respondents (92.9%) indicated that they were satisfied with their current job, with 53% indicating 'very satisfied'. Only 5.1% mentioned that they were not satisfied with their current job. Also, over 95% of sampled Ghanaian nurses in the UK indicated that they had the opportunity to upgrade themselves or acquire new skills in their current job. About 93.9% of respondents mentioned that the opportunity existed for one to have a salary increment or rise through the ranks. Interestingly, 34% of sampled Ghanaian nurses working in the UK indicated they had satisfactory spousal relationships, while 65% indicated they have 'very good' relationship.

TABLE 6: Job Satisfaction

No.	Characteristic	Variable	Nurses in Ghana	Nurses in UK
1.	Job Satisfaction	Not Satisfied	33.0	5.1
		Satisfied	53.6	41.9
		Very Satisfied	13.4	53.0
		Total	100.0	100.0
2.	Opportunity to acquire skills?	Yes	87.5	95.0
		No	12.5	15.0
		Total	100.0	100.0
3.	Opportunity for promotion?	Yes	91.7	93.9
		No	8.3	6.1
		Total	100.0	100.0
4.	Staff Morale	Low	18.6	1.0
		Medium	53.1	34.0
		High	26.5	65.0
		Unsure	1.8	-
		Total	100.0	100.0

Source: Nurses Survey Data, 2006

It appears that migration of Ghanaian nurses to the UK gained much more recently. Only 2.9% of sampled nurses migrated to the UK between 1970-79, while 2.9% migrated to the UK between 1980 and 1989, 25% migrated over the period 1990-99; the majority (52.9%) migrated over the period 2000-2005. The reasons for migrating were varied but the major one was better conditions of service. About 89% of the sample indicated that they migrated mainly to the UK to enjoy better conditions of service, which is supported by the wage disparity between the two countries and the opportunities for upgrading skills. It is important to note that the majority (95%) of nurses who have migrated are the very experienced ones who have worked in hospitals in Ghana for an average of 7.5 years, with a range of between six months and 21 years.

In terms of the average number of hours worked per week, 48.5 percent of nurses in Ghana worked between 20-48 hours inclusive, 45.6 percent worked between 49-96 hours inclusive. Also, 59.1 percent of the nurses interviewed were allowed to work overtime while 40.9 percent were not allowed to do so. Only 7 nurses indicated that they worked on a part-time basis in addition to their regular work while 28.6 percent worked less than 25 hours. The average amount of money earned per month from part-time work was ₵1,410,000 (\$156 or £90). A related issue was that 29.7 percent of the respondents indicated that they were able to make ends meet from their income while 70.3 percent indicated otherwise. Only 26.4 percent of the nurses interviewed said that they were able to save part of their income while the rest indicated otherwise.

Wage disparity between nurses working in Ghana and their counterparts in the UK explains the exodus of Ghanaian nurses to the UK. The average monthly salary for the sampled nurses working in the UK was £1590 with a minimum value of £1200 and the maximum of £1800 per month. The average normal working hours per week was 37.5 but very few nurses worked 40 hours per week. Equally interesting; is the finding that over 88% of sampled nurses allowed to work overtime; only 10% indicated that they were not allowed to do so. Overtime earnings were between £300 and £600 for those who could work overtime.

The survey also revealed that the cost of migrating to the UK was high when compared to how much nurses received in wages in Ghana. On the average, it cost £463 in air fare, £292 for documentation, and £261

in respect of luggage and internal transport. Other additional expenses include job search cost, living expenses prior to obtaining a job, the cost of warm clothing and so on. The volume of remittances sent by these migrants supports the point that these migrants may have been assisted by their relations in Ghana⁷. About 50% of the sample indicated that they sent remittances bi-weekly or monthly, whereas the rest sent it quarterly, annually or irregularly.

It can be inferred from Table 7 that while only 13.3 percent of the respondents (Ghanaian nurses working in Ghana) had migrated before, the majority had not. However, 62.4 percent had considered migrating and 61.2 percent were still interested in migrating. This is very striking considering the fact that the majority of the respondents indicated they were satisfied with their current jobs (Table 8). In terms of the preferred destination of the prospective migrants, majority of the nurses interviewed mentioned the USA or the UK (38.2 percent and 42.6 percent respectively). Thus, as indicated earlier, the UK is the preferred destination for Ghanaian nurses while the USA is the preference of doctors.

Various motives accounted for the choice of destination countries: 41.7 percent of the nurses interviewed preferred one destination over another because it would afford them the opportunity to improve their financial conditions. Similarly, 30.0 percent chose a country because of the better health and educational facilities as well as the opportunities that exist there. A smaller proportion of nurses interviewed (10.0 percent) made the choice based on family considerations or because they had family members there; 18.3 percent had other motives such as their love for the country, because it was an English speaking country, the desire to visit there, got admission there, just to mention a few.

The study also ascertained from the nurses what incentives would discourage them from emigrating. While 63.6 percent stated financial incentives, 4.5 percent stated educational opportunities to develop professionally and 3.0 percent mentioned technology. About 6.1 percent of the nurses mentioned finance and technology while 1.5 percent indicated finance and education.

⁷ Figures obtained from the 100 nurses interviewed in the UK are provided in the next section of the article which presents estimates of the net impact of migration.

TABLE 7: Migration Expectations (Nurses Working in Ghana)

<i>No.</i>	<i>Characteristic</i>	<i>Variable</i>	<i>Re- spondent s</i>	<i>Percentage</i>
1.	Ever migrated?	Yes	15	13.3
		No	98	86.7
		Total	113	100.0
2.	Ever considered migrating?	Yes	68	62.4
		No	41	37.6
		Total	109	100.0
3.	Still interested in emigrating?	Yes	63	61.2
		No	40	38.8
		Total	103	100.0
4.	Preferred destination of emigration.	USA	26	38.2
		UK	29	42.6
		Canada	3	4.4
		Other European countries	3	4.4
		Other African Countries	1	1.5
		Any other country	6	8.8
		Total	68	100.0

Source: Survey Data, 2005

Similarly, 16.7 percent indicated that nothing could possibly stop them from emigrating; 4.5 percent had other incentives in mind. A related issue is that an overwhelming majority of 91.8 percent of the nurses interviewed had colleagues who had emigrated and this probably accounts for the high intention to migrate. Besides, 85.3 percent of those with colleagues who had migrated thought their colleagues who had done so were better off financially than before.

Estimating the Net Impact of Migration on Poverty in Ghana

Migrants sent remittances to their relations; and this could positively impact on poverty. This is evident from the proportions of migrant remittances spent on health, education, and consumption. These are clear-

ly useful indicators for measuring livelihood impacts. Figures obtained from the 100 nurses interviewed in the UK indicated that the average amount of monthly remittances sent to finance education was £140.9, while on average, £87.0 was sent monthly for health and health related expenditures. Remittances sent to cover living expenses averaged about £121 per month while monies sent home for other expenditures amounted to £203 on the average.

A survey of 166 recipients of migrant remittances in Accra conducted by Quartey (2006) indicated that a significant proportion of the monies were invested in ventures which had a positive impact on poverty. Similarly, the survey of nurses in the UK showed that 26.3% of remittances sent to Ghana were meant for education purposes, 15.4% on health, 23.8% in respect of consumption and 34.5% in respect of investments in real estate and related expenditures. These ratios clearly indicate the importance of migration for poverty reduction in Ghana.

The Empirical Model

We estimate the net impact of migration using equation (2) above as the empirical model. In the empirical model, the following costs are estimated: the total cost of training the health professionals, how long they served their countries before leaving, how much remittances they have sent to Ghana over the period, the cost of equipment they have sent home; on the average, how much each professional returnee brought to Ghana. The cost and benefits from each class of workers is computed and projected into the future on the basis of the rising trend of migration by health workers. The discount rate used is the 91-day Treasury bill rate. The wage rate is the average wage for a nurse in full time employment which is computed from the respondent questionnaires

From the estimations, the total net benefit for 76 out of the 100 sampled nurses who have migrated to the UK is £33.3 million. This implies that from the date of the interview to the time the migrant retires (assuming migrant works in the UK till retiring age), migration brings a private net benefit of £33.3 million to the migrants. This was arrived at after discounting the total wage differential between Ghana and the UK and subtracting the discounted value of the cost of training a nurse in Ghana

(£16,500)⁸, air ticket, luggage and documentation. T refers to the difference between the age of the respondent at the time of the interview and the retiring age. It must be pointed out that this is net private benefit which does not measure aggregate welfare change because it excludes social costs such as the cost of training. According to the UK Nursing and Midwifery Council 1326 Ghanaian Nurses and Midwives registered between 1998 and August 2005. The net benefit will therefore be equal to £580.9 million (ie $[33.3 \times 1326]/100$). This is net private benefit and excludes other social costs, such as the cost loss of lives due to shortage of nurses, strikes etc.

Conclusion

The focus of the study was to examine the net impact of skilled worker migrations, particularly, the outflow of Ghanaian nurses from Ghana to the UK due to relaxed migration policies of the receiving country. The key findings from the study include: first, the majority of nurses surveyed in the UK were from three ethnic groups in Ghana, namely, Akan, Ewe and Ga-Adangbe. They were mostly married and their spouses worked as doctors, nurses, teachers or accounting personnel. The respondents were mostly aged between 30-45 years, and on the average had 2-3 children. A greater number of them had graduated between 1990 and 2005. It is therefore not surprising that the majority of them migrated between 2000 and 2005 to enjoy better conditions of service. The respondents indicated that they were satisfied with their current job and had the opportunity to upgrade themselves. Similarly, their counterparts in Ghana were mostly female, married and had up to three children. Staff morale was low compared to their counterparts in the UK and they worked for longer hours with less remuneration

Migration has positive net private and aggregate welfare gains and it was also evident that there was no significant difference in outcomes between liberal and strict regimes since the NHS code of conduct had little effect on the outflow of nurses. It must be emphasized that the aggregate

⁸ This value is added or excluded depending on whether nurses pay the fees or it is paid for by the Government. This is excluded since nurses do not pay for tuition in Ghana

net benefit excludes social cost arising from deaths due to nurse migration to the UK which results in shortage of nurses in the Ghanaian medical system. If it was possible to estimate this cost, the net social benefit could be negative. Hence, the impact of rich countries policies on poverty in Ghana is analyzed in terms of its impact on health outcomes in Ghana. The study concludes that the outflow of nurses has had an impact on health outcomes in Ghana and this is evidenced by the shortfall in nurses within some of the regional health Centres in Ghana although the aggregate population per nurse and out-patient per nurse ratios had improved between 2001 and 2004. This has been possible because of the increased enrolment of nurses to fill the vacancies created by the influx, in addition to the establishment of private nursing training institutions. For instance, between 1999 and 2005, the number of trained nurses and mid-wives increased by about 70%. This obviously had serious implications on government expenditure and poverty in Ghana. Also, the upsurge in nurse migration from the country coincided with significant increases in the infant mortality rates at the national level, even though most of the regions had had larger share of the available nurses in the country in the period under consideration.

In conclusion, migration of nurses from Ghana has had a positive net impact but this excludes deaths associated with out-migration of nurses. If one could cost the deaths due to staff shortage etc, the net benefit of nurse migrations from Ghana could be negative; and it can be concluded that migration of skilled labour worsens livelihood (poverty).

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