The impact of an emergency hiring plan on the shortage and distribution of nurses in Kenya: the importance of information systems

JM Gross,[a] PL Riley,[b] R Kiriinya,[c] C Rakuom,[d] R Willy,[d] A Kamenju,[c] E Oywer,[e] D Wambua,[e] A Waudo[c] & MF Rogers[a]

Objective To analyse the effect of Kenya's Emergency Hiring Plan for nurses on their inequitable distribution in rural and underserved areas.

Methods We used data from the Kenya Health Workforce Informatics System on the nursing workforce to determine the effect of the Emergency Hiring Plan on nurse shortages and maldistribution. The total number of nurses, the number of nurses per 100 000 population and the opening of previously closed or new heath facilities were recorded.

Findings Of the 18 181 nurses employed in Kenya's public sector in 2009, 1836 (10%) had been recruited since 2005 through the Emergency Hiring Plan. Nursing staff increased by 7% in hospitals, 13% in health centres and 15% in dispensaries. North Eastern province, which includes some of the most remote areas, benefited most: the number of nurses per 100 000 population increased by 37%. The next greatest increase was in Nyanza province, which has the highest prevalence of HIV infection in Kenya. Emergency Hiring Plan nurses enabled the number of functioning public health facilities to increase by 29%. By February 2010, 94% of the nurses hired under pre-recruitment absorption agreements had entered the civil service.

Conclusion The Emergency Hiring Plan for nurses significantly increased health services in Kenya's rural and underserved areas over the short term. Preliminary indicators of sustainability are promising, as most nurses hired are now civil servants. However, continued monitoring will be necessary over the long term to evaluate future nurse retention. The accurate workforce data provided by the Kenya Health Workforce Informatics System were essential for evaluating the effect of the Emergency Hiring Plan.

Une traduction en français de ce résumé figure à la fin de l'article. *Al final del artículo se facilita una traducción al español.* الترجمة العربية لهذه الخلاصة في نهاية النص الكامل لهذه المقالة.

Introduction

The inequitable level of health-care provision in low- to middle-income countries compared with high-income countries has been well documented.[1–5] A variety of reports, including *The world health report 2006* from the World Health Organization (WHO), *Human resources for health: overcoming the crisis* from the Joint Learning Initiative and the proceedings of the 2004 High-Level Forum on the United Nations Health Millennium Development Goals have described the correlation between the size of the health-care workforce and the health of a country's population.[2,6–8] With more than 24% of the global burden of disease and only 3% of the world's health-care providers, sub-Saharan Africa is facing an especially acute health worker shortage.[2,5] Hence, there is some concern about whether this region can even come close to the Millennium Development Goals for 2015.[1,7]

The shortage of health-care workers in low-income countries is complicated by problems with motivation and retention and by unemployment among health-care providers who are professionally qualified but unable to find jobs.[9–12] Many low-income countries face fiscal restraints on hiring within the public sector[13] due to macroeconomic policies[2] that cap salaries, freeze hiring and neglect education and training.[6] Prolonged application of these policies has resulted in a severe erosion of the human infrastructure for health from which many countries are only now emerging.[6] In Kenya, the hiring freezes that began in 1994 eventually led to the unemployment of trained nurses.[14] Public–private partnerships, such as those described in this paper, can facilitate the hiring of trained but unemployed health-care workers while national governments create the budgetary space necessary to increase hiring in the public sector.

The maldistribution of employed health-care workers between urban and rural areas exacerbates inequitable health-care provision.[15,16] Like many countries in Africa, Kenya has a maldistribution of health-care workers that has a negative impact on achieving global health-care goals, including goals for rural primary health services and for the prevention and treatment of human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS).[17–19] Whereas international migration and the "brain drain" have received considerable attention,[20–23] there is less awareness about the negative impact of internal health workforce migration from rural to urban areas.[12,24,25] Among the factors contributing to staff imbalances in the rural workforce are individual preferences for particular working and living conditions, the desire for professional opportunities not typically found in remote areas, financial incentives and weak deployment practices.[15,25] Recently, Kenya's National Health Sector Strategic Plan II noted disparities in health services among the country's eight provinces and stated an inten-

[a] Emory University School of Nursing, 325 Swanton Way, Decatur, GA, 30030, United States of America (USA).
[b] National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease and Tuberculosis Prevention, Centers for Disease Control and Prevention, Atlanta, USA.
[c] Kenya Health Workforce Project, Nairobi, Kenya.
[d] Ministry of Medical Services, Government of Kenya, Nairobi, Kenya.
[e] Nursing Council of Kenya, Nairobi, Kenya.
Correspondence to MF Rogers (e-mail: mrogers@taskforce.org).
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tion to rectify these disparities and "shift resources from relatively well-served areas to areas of extreme poverty".[25]

One way the Government of Kenya is attempting to remediate acute nursing shortages in remote and underserved areas is through an emergency hiring programme. This programme, referred to as the Emergency Hiring Plan (EHP), focuses on speeding up hiring and deployment and upgrading training. It is supported by five donor organizations: the Clinton Foundation jointly with the Danish International Development Agency (DANIDA); the United States Agency for International Development (USAID)-funded Capacity Project; the Global Fund to Fight AIDS, Tuberculosis and Malaria; the International Center for AIDS Care and Treatment Programs (ICAP); and the United Nations Children's Fund (UNICEF). The aim of the EHP is to increase nursing staff in public health facilities through donor-supported 1- to 3-year contracts.[26] Donors' support covers workforce recruitment, employment contracts, salary subsidies and staff deployment.[26]

While implementation models vary between donors, the overarching goal remains the same: to increase the number of public sector nurses provided by the government.[12] The Clinton Foundation, the Global Fund and the Capacity Project recruited and hired nurses at the national level in partnership with the Government of Kenya.[14] The government signed pre-recruitment agreements with these partners which stipulated, as a precondition to funding, that nurses would be absorbed into the civil service. In contrast, ICAP and UNICEF did not sign pre-recruitment absorption agreements with the government. Instead, they independently recruited and hired nurses at the regional level by offering 1- to 2-year renewable contracts. The differences in EHP implementation models arose because donors collaborated directly with the Government of Kenya and independently of each other. Incentives offered to nurses recruited under the EHP included a gratuity or retention bonus to be paid on completion of the EHP contract and eligibility for entry into the civil service, which is often difficult for younger nurses during hiring freezes. The latter incentive was offered to nurses hired through partners who had pre-recruitment absorption agreements with the Government of Kenya.

Given the current strong desire of international institutions to identify successful strategies for increasing workforce retention, especially in underserved areas,[27] it is important to ascertain the extent to which public–private partnerships can quickly address staff shortages and have a long-term impact on mitigating health-service inequity. Researchers at WHO and other organizations have investigated several rural workforce retention strategies that are being implemented by several countries,[2,28] including educational interventions, continuous professional development, regulatory initiatives, financial incentives[29] and interventions that address the working and living environment. Because Kenya's EHP offers an additional strategy, namely the use of public–private partnerships to fund and increase health-care worker deployment, an analysis of the impact of the EHP will contribute to the evidence available on policy options for human resources in health, especially on schemes for increasing and retaining workers in rural and remote areas. Accordingly, the objective of this paper was to provide a descriptive analysis of the effect of Kenya's EHP on the country's health-care system over the short term, particularly on remediating the inequitable distribution of nurses to remote and underserved areas.

Methods

Study context

This study involved an analysis of information from the Kenya Health Workforce Informatics System.[30] The Informatics System encompasses databases from the Nursing Council of Kenya, which is Kenya's regulatory body for nursing practice, and the Department of Nursing in the Ministry of Medical Services, which is one of Kenya's two health ministries; the other is the Ministry of Public Health and Sanitation. These two health ministries oversee the public health-care sector, which supplies about 50% of all health care in Kenya, while private and faith-based sectors cover the remainder.[10] Although the Kenya Health Workforce Informatics System is based in the Ministry of Medical Services, it collects staffing data from facilities under the supervision of both of Kenya's health ministries. The Informatics System was developed through a collaborative initiative of the Department of Nursing, the Nursing Council of Kenya, the Centers for Disease Control and Prevention in the United States of America (USA) and the Lillian Carter Center for International Nursing at Emory University, Atlanta, Georgia, USA.

The Kenyan Department of Nursing requires quarterly staffing reports from all public health facilities run by the Government of Kenya, from provincial hospitals down to health dispensaries. These data are documented electronically at the provincial level and comprise the deployment tracking information for all Government of Kenya nurses. The Department of Nursing deployment database is periodically matched to the human resource payroll database at the Ministry of Medical Services and the Ministry of Public Health and Sanitation using each nurse's personnel number, thereby enabling deployment information to be cross-checked. By using this mechanism and reviewing a national master facility list whose content is verified by district-level health managers, the Department of Nursing was able to confirm that over 90% of health facilities run by the Government of Kenya were submitting staffing reports on a regular basis. Although the EHP began in 2005, before the inception of the Kenya Health Workforce Informatics System in 2007, data on the majority of EHP nurses would have been captured by the system while they fulfilled their 3-year contracts.

This study was approved by the Nursing Council of Kenya and the Kenyan Ministry of Medical Services, and it was exempted from human subjects' review by the Emory University Institutional Review Board since the data used in the analysis did not contain personal identifying information.

Study population

The study population included all public sector nurses employed by the Government of Kenya through the two health ministries and the two large national referral hospitals. This analysis was performed using the information available in August 2009 and included data on EHP nurses who had completed their EHP contract and been absorbed into the civil service and on nurses who had been hired more recently and were still working under their EHP contracts. Kenya's EHP began in 2005 with a pilot initiative funded by the Clinton Foundation to recruit and deploy nurses and clinical officers whose task was to improve access to comprehensive HIV/AIDS care.[31]

Subsequently, the EHP was expanded in 2007 with the help of investments from four other donors: the Global Fund, the Capacity Project, ICAP and UNICEF.

A Kenyan Ministry of Public Health and Sanitation publication, the *Report on human resources mapping and verification exercise*,[18] was used to determine the number of EHP nurse placements before 2007 since the Kenya Health Workforce Informatics System only began collecting nurse deployment data after that date. A priority for the EHP was to deploy nurses in provinces with a high burden of disease and staff shortages. For example, the prevalence of HIV infection in Nyanza province was 15.1%, more than twice the national figure.[32] In North Eastern province, 46% of children aged 12–23 months received no vaccinations compared to 7% nationally.[32] According to the Government of Kenya report mentioned above, the size of the population served by each health facility in North Eastern, Nyanza and Western provinces exceeded the norms set by the Ministry of Medical Services and the Ministry of Public Health and Sanitation for dispensaries, health centres and district hospitals.[18] Consequently, most EHP nurses were assigned to these provinces.

Data analysis

The impact of the EHP on nurse staffing in the public sector was determined by comparing the nurse-to-population ratio, i.e. the number of nurses per 100 000 population, with and without the inclusion of nurses recruited under the EHP. The ratio was calculated using population estimates for 2009 obtained from the Kenyan National Bureau of Statistics in 2008. Key demographic and deployment information for EHP nurses, including their age and educational level and the location and type of facility where they were deployed, were analysed. Nurses were described as either registered or enrolled: a registered nurse was educated at the diploma level and had received specialized training that enabled him or her to practice autonomously and to take on supervisory responsibilities, while an enrolled nurse was educated at the certificate level and practised under the supervision of a registered nurse.[33]

The study also involved an analysis of the impact of the EHP on the expansion of health facilities, including the reopening of facilities that had been closed and the opening of new facilities. A facility that was staffed exclusively by EHP nurses was regarded as either a facility that was closed before the EHP or a new facility that opened as a result of the EHP. Each health facility was classified as a hospital, health centre, health dispensary or health ministry office. Each province in Kenya has a single, large referral hospital that provides intensive care facilities, medical specialists and comprehensive care services. Districts within provinces usually contain district and subdistrict hospitals. Rural areas are covered by health centres that provide preventive treatment and maternity care and are equipped with observation wards. Health dispensaries are located in the most remote areas and provide the lowest level of health service delivery. The offices oversee public health programmes, health service delivery and staff deployment.

The impact of the EHP on the expansion of health-care services in open facilities over the short term was evaluated by calculating the percentage increase in staffing that resulted from the addition of EHP nurses. The facilities assessed included hospitals, health centres and dispensaries. Health ministry offices were excluded because they do not provide patient services directly.

Results

In August 2009, 18 181 nurses were actively deployed in Kenya: 14 140 (78%) by the Ministry of Medical Services and the Ministry of Public Health and Sanitation, 2205 (12%) by parastatal organizations and 1836 (10%) through the EHP. Of the 18 181, 52% were enrolled nurses, 47% were registered nurses and 1% had a Bachelor of Science in Nursing (BScN). Some 46% of deployed nurses were aged between 21 and 40 years, while the remaining 54% were aged between 41 and 60 years.

Of the 1836 deployed through the EHP, 734 (40%) were funded by the Clinton Foundation and DANIDA, 496 (27%) by USAID's Capacity Project, 463 (25%) by the Global Fund, 78 (4%) by ICAP and 65 (4%) by UNICEF. Nurses deployed through the EHP were considerably younger than nurses in general: 91% of EHP nurses were aged between 21 and 40 years and 9% were aged between 41 and 60 years. In addition, 60% were enrolled nurses and 40% were registered or BScN-prepared nurses. Nurses funded by the Global Fund were deployed through the Kenyan National AIDS and Sexually Transmitted Infection Control Programme. Nurses working with AIDS patients were among the most educated: 70% of those funded by the Global Fund and 69% funded by ICAP were either registered or BScN-prepared.

If all EHP nurses were absorbed into the civil service, these nurses would account for a 12% expansion in the nursing staff deployed by the Ministry of Medical Services and the Ministry of Public Health and Sanitation.

Expansion of services

The deployment of EHP nurses enabled some previously closed health facilities to re-open and some new facilities to be established. In fact, 204 of the 2349 facilities run by the Government of Kenya that filed staff returns employed only EHP nurses, with a resulting increase of 9% in the number of functioning health facilities. The EHP also expanded nursing services in health facilities throughout Kenya: nursing staff increased by 7% in hospitals, by 13% in health centres and by 15% in dispensaries.

Staffing data from the Kenya Health Workforce Informatics System for the second quarter of 2009 document that 94% of the 1693 EHP nurses hired under pre-recruitment absorption agreements through public–private partnerships had been absorbed by the Ministry of Medical Services and the Ministry of Public Health and Sanitation by February 2010. The remaining EHP nurses hired under these agreements were still completing their original donor contracts and were scheduled to begin the process of assimilation into the civil service in May 2010.

Geographical distribution

Nurses recruited under the EHP came from all of Kenya's eight provinces. Table 1 lists details of the nurses' home provinces, the provinces hosting the nursing schools where they trained and the provinces where they were deployed. The largest numbers came from Rift Valley, Nyanza, Eastern and Central provinces, which were also the most common locations for training.

Quarterly staffing reports from the Department of Nursing provide details of where nurses funded by the different donor organizations were deployed (Table 2). No EHP nurse was assigned to either of Kenya's two national referral hospitals.

The deployment of EHP nurses increased the nurse-to-population ratio for public sector facilities in Kenya from 46 to 51 per 100 000 population. North Eastern province, which includes some of the most remote areas in Kenya, benefited most: there was a 37% increase in the number of nurses per 100 000 population. Nyanza province, which has the highest prevalence of HIV infection in Kenya, was the second greatest beneficiary, with a 29% increase. In contrast, Nairobi province, a predominantly urban province that already had 95 nurses per 100 000 population, twice the national average, received only 7 EHP nurses. Table 3 provides details of the number of nurses employed in the eight Kenyan provinces, including and excluding those recruited under the EHP.

Table 1. **Home, training and deployment provinces of nurses recruited under the Emergency Hiring Plan in Kenya, 2005–2009**

Province	Number of nurses by province					
	Home		Training		Deployment	
	No.	%	No.	%	No.	%
Nairobi	92	5	75	4	7	0
Central	276	15	312	17	140	8
Coast	74	4	75	4	218	12
Eastern	331	18	312	17	329	18
North Eastern	18	1	70	4	160	9
Nyanza	367	20	349	19	629	34
Rift Valley	477	26	441	24	224	12
Western	201	11	202	11	129	7
Total	**1836**	**100**	**1836**	**100**	**1836**	**100**

Verification of numbers

Data on the number of EHP nurses used in the study were verified by comparing them with figures from human resources departments and officials at the donor agencies. In general, donor agencies gave higher figures for the initial number of EHP nurses: for example, the Clinton Foundation and DANIDA reported 1020 EHP nurses, the Capacity Project reported 595 and the Global Fund reported 575, compared with the figures of 734, 496 and 463, respectively, listed in Table 2. The reason for the discrepancy may be that health-care facilities underreported the number of EHP nurses or that some contract nurses left before completing their contract or took up civil service positions outside of the absorption process before the Kenya Health Workforce Informatics System was implemented. Consequently, the results of this study reflect the minimum impact of the EHP, since not all EHP nurses were included.

Discussion

Our analysis of the deployment of EHP nurses documents the significant impact this programme has had in increasing health service capacity in Kenya's rural and underserved areas over the short term. Overall, the number of functioning health-care facilities increased by 9%, nursing staff working for the Ministry of Medical Services and the Ministry of Public Health and Sanitation increased by 12% and health-care provision in rural and remote areas of the country was expanded. The fact that over 1800 EHP nurses were recruited and integrated into Kenya's public sector health-care facilities within a relatively short period of time underscores the success of the programme. This rapid increase in the hiring and deployment of nurses exemplifies how public–private partnerships can enhance workforce deployment and distribution.

This study also demonstrates that the recruitment and deployment of nurses was achieved more rapidly under the EHP than through regular government processes, which require years for budgetary planning and several months for hiring. The donor organizations adopted two approaches to recruiting nurses: one included a pre-recruitment absorption agreement with the Kenyan government while the other used short-term renewable contracts without a

Table 2. **Deployment province of nurses recruited under the Emergency Hiring Plan in Kenya and funded by different donor organizations, 2005–2009**

Province	Number of nurses by donor organization									
	Clinton Foundation and DANIDA		USAID Capacity Project		Global Fund		ICAP		UNICEF	
	No.	%	No.	%	No.	%	No.	%	No.	%
Nairobi	0	0	0	0	7	2	0	0	0	0
Central	0	0	10	2	52	11	78	100	0	0
Coast	104	14	77	16	37	8	0	0	0	0
Eastern	134	18	83	17	79	17	0	0	33	51
North Eastern	47	7	61	12	23	5	0	0	29	44
Nyanza	449	61	81	16	99	21	0	0	0	0
Rift Valley	0	0	91	18	132	29	0	0	1	2
Western	0	0	93	19	34	7	0	0	2	3
Total	**734**	**100**	**496**	**100**	**463**	**100**	**78**	**100**	**65**	**100**

DANIDA, Danish International Development Agency; Global Fund, Global Fund to Fight AIDS, Tuberculosis and Malaria; ICAP, International Center for AIDS Care and Treatment Programs; UNICEF, United Nations Children's Fund; USAID, United States Agency for International Development.

Table 3. **Nurses employed in Kenyan provinces, excluding and including those recruited under the Emergency Hiring Plan (EHP), 2009**

Province	Population	No. of nurses				
		Non-EHP	EHP	No. per 100 000 population, excluding EHP	No. per 100 000 population, including EHP	% increase in no. per 100 000 population
Nairobi	3 138 296	2988	7	95	95	0
Central	4 110 087	2312	140	56	60	7
Coast	3 160 851	1344	218	43	49	12
Eastern	5 289 059	2391	329	45	51	12
North Eastern	1 776 661	269	160	15	24	37
Nyanza	5 125 180	1658	629	32	45	29
Rift Valley	9 137 616	3924	224	43	45	4
Western	4 146 106	1458	129	35	38	8
Total	**35 883 856**	**16 344**	**1836**	**46**	**51**	**10**

pre-recruitment absorption agreement. Nurses recruited by donor organizations that did not establish a pre-recruitment absorption agreement were less likely to be recruited into civil service positions after the completion of their contracts. Nevertheless, a recruitment model based on temporary short-term contracts is useful for rapidly expanding human resources for health while governments adjust fiscal policy to enable health-care workers to be hired over the long term.

The Chief Nursing Officer of the Department of Nursing in the Ministry of Medical Services was optimistic about the long-term impact of the EHP on nurse retention in rural, remote and underserved areas, especially since the majority of EHP nurses who were eligible for absorption into the civil service had been absorbed by February 2010. Subsequently, personal factors will have a greater influence on the retention of EHP nurses over the long term. Although nurses may request transfers away from their initial assignment in a rural or remote area, the Government of Kenya takes into account the need for replacements and staffing norms in individual health-care facilities when assessing transfer requests. Changes in the deployment of EHP nurses will have to be monitored continuously to evaluate their retention in rural and remote areas over the long term. Encouragingly, the Chief Nursing Officer at the Clinton Foundation reported that 97% of the first 120 nurses hired through their initiative were still in their original posts after 16 months of employment (A Sliney, personal communication, 2009).

The cost of absorbing EHP nurses into the civil service is an important consideration. The Clinton Foundation estimated that US$ 4292.50 were required annually for each nurse to cover salary, retention bonuses and uniform allowances.[31] Using this figure, the total cost to the Kenyan civil service of re-hiring the approximately 1700 donor EHP nurses would be US$ 7 297 250 per annum. Pre-recruitment agreements between the Government of Kenya and some EHP donors stipulated that these expansion costs should be factored into the government's budgetary planning process. Based on current estimates, the cost of absorbing EHP nurses into Kenya's civil service will account for approximately 1.5% of the government's health budget.[12]

In general, data on human resources for health form an essential component of global health metrics[34] without which norms and standards of good practice cannot evolve.[35,36] In particular, the availability of workforce data is critical for evaluating retention schemes and, in this study, the Kenya Health Workforce Informatics System played a key role in assessing the impact of the EHP in Kenya. The system's ability to link data from Kenya's nursing regulatory board with government data on worksite staffing ensured that information on workforce supply and demand was accurate and enabled health policy-makers in Kenya to make evidenced-based decisions about the health-care workforce. The Kenya Health Workforce Informatics System and its successful development and implementation provide a model for other countries wishing to measure the impact of health-care initiatives designed to address workforce maldistribution and illustrate how workforce data can be used to guide the evidenced-based decisions essential for ensuring the equitable delivery of health care. ■

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ملخص

تأثير الخطة الطارئة للتعيين التي تعالج عدم توافر هيئات التمريض وتوزيعهم في كينيا: أهمية نظم المعلومات

الهدف تحليل أثر الخطة الكينية الطارئة للتعيين والمعنية بالعاملين في مجال التمريض وذلك على التوزيع غير العادل في المناطق الريفية والمناطق المحرومة من الخدمات.

الطريقة استخدم الباحثون معطيات من النظام المعلوماتي الخاص بالقوى العاملة الصحية في كينيا حول العاملين في مجال التمريض من أجل تحديد أثر الخطة الطارئة للتعيين على النقص في العاملين في مجال التمريض وسوء توزيعهم. وقد تم تسجيل العدد الإجمالي للعاملين في مجال التمريض وعددهم لكل مئة الف نسمة، والمرافق الصحية القائمة أو الجديدة أو تلك التي تم إغلاقها.

الموجودات من إجمالي العاملين في التمريض في القطاع العام في كينيا عام 2009، والبالغ عددهم 18,181، كان هناك 1836 (أي 10%) تم تعيينهم منذ عام 2005 من خلال الخطة الطارئة للتعيين. ولقد ارتفع عدد العاملين بالتمريض 7% في المستشفيات، و13% في المراكز الصحية، و15% في المستوصفات. أما في المنطقة الشمالية الشرقية والتي تحوي بعض أكثر المناطق النائية، فقد كانت هي الأكثر استفادة حيث بلغ عدد العاملين بالتمريض لكل مئة الف نسمة 37%. أما الزيادة التالية والأكبر فكانت في إقليم نوازا، الذي يعاني من أعلى نسبة انتشار لفيروس الأيدز في كينيا. ولقد نجحت الخطة الطارئة للتعيين في زيادة مرافق الصحة العمومية العاملة بنسبة بلغت 9%. ومن المتوقع أن يكون 94% من العاملين بالتمريض الذين عينوا حتى شهر شباط/فبراير 2010 بعقود مبدئية قد تم إلحاقهم بالخدمة المدنية.

الاستنتاج رفعت الخطة الطارئة لتعيين العاملين بالتمريض مستوى الخدمات الصحية بصورة ملموسة في المناطق الريفية والمحرومة من الخدمات في كينيا على مدى فترة قصيرة من الوقت. وتشير المؤشرات الأولية بصورة متفائلة إلى ضمان استمرارية هذا النظام حيث أن غالبية العاملين بالتمريض الذين تم تعيينهم قد التحقوا في الوقت الحالي بالنظام المدني. ويحتاج الأمر إلى مواصلة الرصد على مدى فترة زمنية أخرى من أجل تقييم مدى استبقاء هؤلاء العاملين في المستقبل. ولقد كانت المعطيات الدقيقة للقوى العاملة التي قدمها النظام المعلوماتي لكينيا حول القوى العاملة في المجال الصحي، معطيات أساسية وجوهرية ساهمت في تقييم تأثير الخطة الطارئة للتعيين.

Resumé

L'impact d'un plan de recrutement d'urgence sur le manque et la répartition des infirmiers et infirmières au Kenya: l'importance des systèmes d'information

Objectif Analyser l'effet du plan d'urgence de recrutement du personnel infirmier kényan sur sa répartition inéquitable dans les zones rurales et mal desservies.

Méthodes Nous avons utilisé les données du système informatique des professionnels de la santé du Kenya relatives au personnel infirmier afin de déterminer l'effet du plan de recrutement d'urgence sur l'insuffisance et la mauvaise répartition des infirmiers et infirmières. Nous avons enregistré l'effectif total du personnel infirmier, le nombre d'infirmiers et d'infirmières pour 100 000 habitants et l'ouverture de nouveaux centres de soins ou de centres de soins qui étaient auparavant fermés.

Résultats Sur les 18 181 infirmiers et infirmières employés en 2009 par le secteur public kenyan, 1 836 d'entre eux (10%) avaient été recrutées depuis 2005 dans le cadre du plan de recrutement d'urgence. Le personnel infirmier a augmenté de 7% dans les hôpitaux, de 13% dans les centres de soins et de 15% dans les dispensaires. La province du Nord-est, qui abrite certaines des zones les plus isolées du pays, est celle qui en a le plus bénéficié : le personnel infirmier pour 100 000 habitants a augmenté de 37%. La seconde province où l'on constate la plus importante augmentation est celle de Nyanza, qui enregistre également la plus forte prévalence d'infection par le VIH du Kenya. Le plan d'urgence de recrutement d'infirmiers et d'infirmières a permis d'augmenter de 9% le nombre de centres de soins de santé publics en activité. En février 2010, 94% du personnel infirmier recruté dans le cadre des accords sur l'intégration du pré-recrutement étaient engagés en tant qu'agents de la fonction publique.

Conclusion Sur le court terme, le plan d'urgence de recrutement de personnel infirmier a considérablement augmenté les services de santé dans les zones rurales et mal desservies du Kenya. Les premiers indicateurs de durabilité sont prometteurs car la plupart des infirmiers et infirmières recrutés sont désormais des fonctionnaires. Cependant, une surveillance continue sera nécessaire sur le long terme afin d'évaluer la rétention future de ce personnel. Les données précises d'effectif fournies par le système informatique des professionnels de la santé du Kenya ont été essentielles pour évaluer l'effet du plan de recrutement d'urgence.

Resumen

El efecto de un programa de urgencia para la contratación sobre la escasez y la distribución del personal de enfermería en Kenya: la importancia de los sistemas de información

Objetivo Analizar el efecto del Programa de urgencia para la contratación del personal de enfermería de Kenya sobre la distribución desigual de dicho personal en las zonas rurales y desatendidas.

Métodos Se utilizaron los datos del personal de enfermería del Sistema informático para la gestión del personal sanitario de Kenya con el fin de determinar el efecto del Programa de urgencia para la contratación sobre la escasez del personal y su mala distribución. Se registró el número total de enfermeras, el número de enfermeras por cada 100 000 habitantes y la apertura de centros sanitarios de nueva creación o cerrados previamente.

Resultados De las 18 181 enfermeras empleadas en el sector público de Kenya en 2009, 1836 (el 10%) habían sido contratadas desde 2005 a través del Programa de urgencia para la contratación. El personal de enfermería aumentó un 7% en los hospitales, un 13% en los centros de salud y un 15% en los dispensarios. La provincia del Noreste, que cuenta con algunas de las zonas más alejadas, fue la más beneficiada: el número de enfermeras por cada 100 000 habitantes aumentó un 37%. El siguiente incremento destacable se produjo en la provincia de Nyanza, donde se registra la mayor prevalencia de infección por el VIH de Kenya. El Programa de urgencia para la contratación de personal de enfermería hizo posible que el número de centros sanitarios públicos aumentara un 9%. En febrero de 2010, el 94% del personal de enfermería contratado bajo acuerdos de absorción previos a la contratación había ingresado en la administración pública.

Conclusión El Programa de urgencia para la contratación del personal de enfermería aumentó los servicios sanitarios de forma significativa en las zonas rurales y desatendidas de Kenya a corto plazo. Los indicadores preliminares sobre la sostenibilidad son prometedores, ya que la mayoría del personal contratado pertenece ahora al cuerpo de funcionarios. Sin embargo, será necesaria una vigilancia continua a largo plazo para evaluar la permanencia del personal en el futuro. Los datos laborales precisos del Sistema informático para la gestión del personal sanitario de Kenya resultaron imprescindibles para evaluar el efecto del Programa de urgencia para la contratación.

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