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Nurse retention and recruitment: developing a motivated workforce

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The authors alone are responsible for the contents of the report and conclusions.

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Barbara Stilwell has worked in health systems and human resources development at WHO since 1998, and before that was in the Expanded Programme of Immunization from January 1997 to July 1998. She holds a recent master's degree in development management, which included substantial input on systems work and stakeholder involvement as well as components on business planning and management. In addition, she holds a postgraduate research degree and a first degree in social psychology, all obtained in the United Kingdom (UK). She is a nurse practitioner, educated in the UK and United States of America (USA), and has practised with isolated populations in Australia, the Caribbean and Africa. It is from her clinical work in remote areas and with underserved populations in both the USA and UK that her interest in capacity development arose. Before coming to WHO, Barbara Stilwell was head of department in an academic and policy unit specializing in developing practice among health professionals. In this capacity, she was responsible for introducing large-scale changes within the National Health Service in the UK. She has published widely on human resources issues, especially in nursing and primary health care, and while a research fellow at Birmingham University in the 1980s, co-authored a book on prevention of heart disease with Julian Tudor-Hart – perhaps a foundation for a lifelong interest in rectifying health inequalities.

Executive Summary

Background

Recruiting and keeping the right staff are key challenges for health policy-makers. The performance and quality of a health system ultimately depend on the quality and motivation of health human resources. Therefore, recruitment and retention problems should be appropriately addressed, as nursing staff shortages and low motivation are likely to have adverse effects on the delivery of health services and the outcome of care.

Objective

The main objective of this paper is to examine how to develop and retain a motivated nursing workforce.

Recruitment and retention problems

Data from both developed and developing countries tend to indicate that nursing recruitment and retention are serious issues. Vacancies are reported in many countries, including developing countries such as South Africa, which had 30,000 vacant posts for nurses in 2003.

An alternative indicator to vacancy is job turnover, which is often used to evaluate retention difficulties. In countries such as the United Kingdom (UK) and the United States of America (USA), turnover rates are quite significant, as they are estimated to be around 20%.

Various consequences are associated with the inability to recruit and retain nursing staff. Closure of, or reduced access to, clinics and wards, as well as lower quality of care and productivity, are common examples of nursing shortages. In addition, high turnover is likely to lead to higher provider costs, such as in recruitment and training of new staff and increased overtime and use of temporary agency staff to fill gaps. Turnover costs also include the initial reduction in the efficiency of new staff and decreased staff morale and group productivity. The literature shows that the costs associated with recruitment and retention problems are substantial.

Factors affecting motivation and performance

From a policy perspective, keeping the "right nurses in the right place" requires identifying and understanding the factors affecting nurses' motivation and performance. In that context, linking incentives and performance is crucial. Incentives are important because they can influence key determinants of performance.

Motivation at work is widely believed to be a key factor for performance of individuals and organisations and is also a significant predictor of intention to quit the workplace. There is empirical support for the link between job dissatisfaction, lack of motivation and intention to quit. Health managers need to understand the crucial importance of motivation for the performance of health workers in the context of scarce resources. Three factors play a key role in nursing performance:

- the ability of staff to do their job; (their knowledge, skills and experience to perform the job: the capacity or "can do" factors);
- the motivation of staff to put in effort to do the job (the ability or "will do" factors);
- the organisational support or opportunity to do the job well (availability of resources, the presence of policies and practices conducive to performance, physical and social environment).

In other words, performance depends on whether the staff perceive themselves as able to do things, whether they are willing to do things and whether they have the means to do them.

Policy interventions

A range of relevant policy interventions is crucial to keep nurses in the workforce and to improve recruitment. There are three main approaches to developing the nursing labour market:

- increase input, e.g. increase the number of nursing students;
- decrease the attrition rate, e.g. improve retention of students and promote retention of existing nursing staff;
- attract nurses who are not in the national nursing workforce, e.g. attract nurses otherwise employed, retired or out of the labour force, or nurses from other countries.

To retain and develop the nursing workforce, different policy options can be considered to operationalise the approaches.

1. Policies targeting personal characteristics of nurses

Personal characteristics relate mainly to age, sex and education. The weakness of empirical data and the ethics of targeting specific personal characteristics explain why such a policy has not been systematically implemented. Nevertheless, there could be benefits in recognising that younger, well-educated nurses are likely to want to develop their careers and that this is likely to mean they may change their employer or even their profession. Offering good professional development opportunities, reflected in career structure and pay enhancement, may reduce turnover. Older nurses are likely to be a more stable workforce; policies to attract them back to work (e.g. retraining, flexible shifts or child care facilities) should be considered.

2. Monetary incentives

Monetary incentives are certainly the most common approaches used to improve recruitment, retention, motivation and performance. Financial incentives include direct or indirect payment such as wages or salary, bonuses, pension, insurance, allowances, fellowships, loans and tuition reimbursement. Providing adequate and timely remuneration is important to guarantee the recruitment of motivated and qualified staff.

The impact of wages appears to be mixed. An increase in wages will not lead to a substantial increase in labour participation. However, it should be noted that most studies on wages were performed in developed countries, in particular the USA and the UK, and that the wage context is quite different in developing countries. For instance, wage differentials between developed and developing countries, between public and private sectors and the long delays in salary payment in the public sector, are all likely to influence recruitment and retention of the nursing workforce in developing countries. Therefore, it is likely that a wage increase in developing countries will have a greater impact on nursing retention and recruitment than in developed countries. Other financial benefits that are commonly used include bonus, pension, insurance, allowances, fellowship, loans, tuition reimbursement, etc.

3. Non-monetary incentives

Promoting work autonomy

Work autonomy can be defined as control over one's own work, and is among the key variables explaining job satisfaction.

Encouraging career development

The possibility of career development for nurses is crucial, especially in an environment characterised by a phenomenal growth in knowledge related to health sciences, coupled with technological advances. Evidence suggests that career development opportunities encourage the retention of nurses.

Adapting working time and shift work

Limitations on working hours and the provision of rest periods have a direct impact on the quality of services and therefore are of particular importance to nurses. Moreover, redesigning shifts to allow more off-time, allowing flexibility in shifts and more choice of shifts are all ways of improving satisfaction with working hours, and enhancing both recruitment and retention of nurses.

4. Reducing violence in the workplace

Violence against nurses seems to be a growing problem. Some findings suggest a direct link between aggression and increases in sick leave, burnout and staff turnover. Therefore, reducing violence in the workplace must be considered in order to reduce attrition.

5. Leadership

Many studies have found that leadership is positively correlated with nurses' job satisfaction and commitment towards institutional goals. The challenge for leaders in the health sector is to be able to build and sustain a long-term vision, to build teams and increase commitment to effect organisational change. Leaders will have therefore to focus on motivating, inspiring and empowering their employees.

6. Policy targeting contextual factors

Contextual factors, such as job market, family support and location of work, play a significant role in recruitment. In particular, working in a rural area can be challenging for a number of reasons – for example, lack of social life and amenities, difficulties of travelling and lack of accommodation. Such challenges will be greatly enhanced in resource-poor settings, where the infrastructure is likely to be undeveloped, so that roads, transport, schools and housing are not adequate. Investing in improving these basic amenities pays dividends in terms of improved motivation, retention and recruitment, since poor working conditions, including lack of equipment, are often reported as a major element affecting staff motivation.

Effectiveness and costs

From a policy perspective, one essential question is how to select the most appropriate incentives. One approach to answering that question is to assess the cost and the effectiveness of each policy option. It has been observed that some hospitals are more successful in recruiting and retaining health care staff than others. Those hospitals have been designated as "magnet hospitals". Research shows superior outcomes for magnet hospitals, such as lower risk-adjusted hospital mortality, higher ratings of quality of care, higher patient satisfaction, lower rates of nurse burnout and higher rates of nurse job satisfaction.

In addition, one should also account for the cost of each policy, in particular the implementation costs. Measures favouring financial incentives are likely to face different financial and implementation constraints than non-financial incentives.

However, currently, there is not much information regarding both effectiveness and costs of incentives. More studies should be performed that combine both effectiveness and costs, in order to facilitate decision-making and contribute to better decisions from a social perspective.

Summation

The challenge for each health system is to identify and implement a package of different types of incentives that will meet its needs; it is unlikely that one package of incentives will be right for all organisations or contexts. Most of the research on increasing motivation and job satisfaction in health workers has been undertaken in developed countries, where the resources for such activities are available. However, situations in developing countries are markedly different. Health workers function in situations of resource scarcity of all kinds: salaries are likely to be low, and may not even be at subsistence level; instruments and equipment may be missing or broken; workers in remote areas may be alone for much of the time; and there may be little or no budget for staff development. The link between policy development and personal motivation of health workers is complex and requires recognition of the importance of individual, organisation and societal factors in motivation.

Introduction

Recruiting and keeping the right staff are key challenges for health policy-makers. In effect, the performance and quality of a health system ultimately depend on the quality and motivation of health human resources (HHR) (Martinez et al. 1998; Zurn et al. 2004). In any health system, HHR is a central component and is essential for the delivery of care to patients. Therefore, recruitment and retention problems should be appropriately addressed, as staff shortages or an unmotivated health workforce are likely to have adverse effects on the delivery of health services and outcome of care.

The focus of this paper is how to develop and retain a motivated nursing workforce. In the first section, the recruitment and retention problems are examined; and, in the second section, factors affecting motivation and performance are discussed. Policy options to improve recruitment, retention and performance are reviewed in the third section; and a discussion based on the previous sections is developed in section four.

Section One: Nursing Shortages – Recruitment and Retention Problems

Many countries face difficulties in recruiting new health staff and retaining existing ones. Accordingly, there is worldwide interest in retaining health workers, in particular nurses. This is demonstrated by studies on job satisfaction, absenteeism, turnover and intention to emigrate in countries with few resources such as Cameroon, Ghana and South Africa (Awases et al. 2003). It is also true in richer countries, such as Canada, Germany, Norway, Sweden, Taiwan, Thailand, the UK and the USA (Aiken et al. 2001; Holmas 2002; Tzeng 2002; Goodin 2003; Hasselhorn et al. 2003).

Scope of the recruitment and retention problems

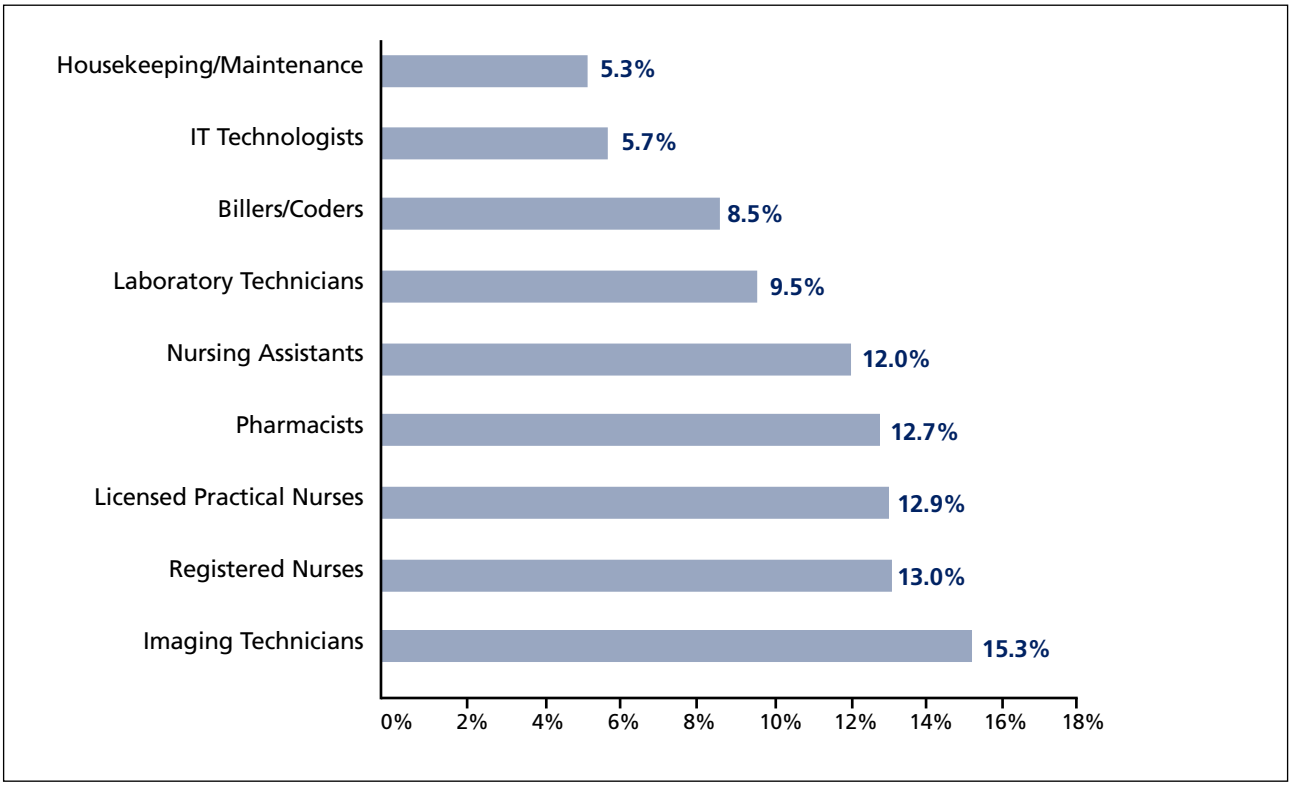
Shortages in the health workforce represent a major challenge for health policy-makers. There are various approaches to defining shortages (Zurn et al. 2004). From an economic perspective, a shortage occurs when the quantity of a given skill supplied by the workforce and the quantity demanded by employers diverge at the existing market conditions. Non-economic definitions are usually normative, i.e. there is a shortage of labour relative to defined norms. In the case of health personnel, these definitions are based either on a value judgment – for instance, how much care people should receive – or on a professional determination – such as deciding what is the appropriate number of physicians for the general population.

On the basis of those criteria, staff shortages are reported in most countries of the world, although the severity varies. The shortage seems most severe in Africa. For instance, serious staff shortages in all health professions categories are reported in Zimbabwe, including 2,000 vacancies for nurses (Mutizwa-Mangiza 1998). In Asia, Viet Nam experienced a 57% decline in the number of nurses between 1986 and 1996 (World Bank 1998). Shortages appear to have been accentuated by the migration of health personnel. Migration is a particularly important issue in Africa, as large numbers of health personnel have left African countries in recent years (Dovlo 1999).

Shortages are a symptom of inadequate policies on recruitment and retention of health workers. Various indicators can be used to assess the magnitude of shortages, related to both recruitment and retention issues, such as absenteeism, retention rates, vacancy rates and turnover. A review by Wai Chi Tai et al. (1998) shows that there are problems with the definition of indicators. An attempt to systematise the various indicators used in HHR policy and planning has been made by Hornby and Forte (2002). In this paper, we shall focus on the main indicators: the vacancy, turnover and retention rates.

Vacancy rates can be defined as the number of unfilled established posts at a particular time. Much of the evidence about vacancy rates comes from developed countries. In the USA, a national survey undertaken by the First Consulting Group in American hospitals, depicted in Figure 1, reported the highest vacancy rates for imaging technicians, 15.3%, followed by registered nurses, licensed nurse practitioners and pharmacists, with vacancy rates of 13%, 12.9% and 12.7%, respectively (First Consulting Group 2001).

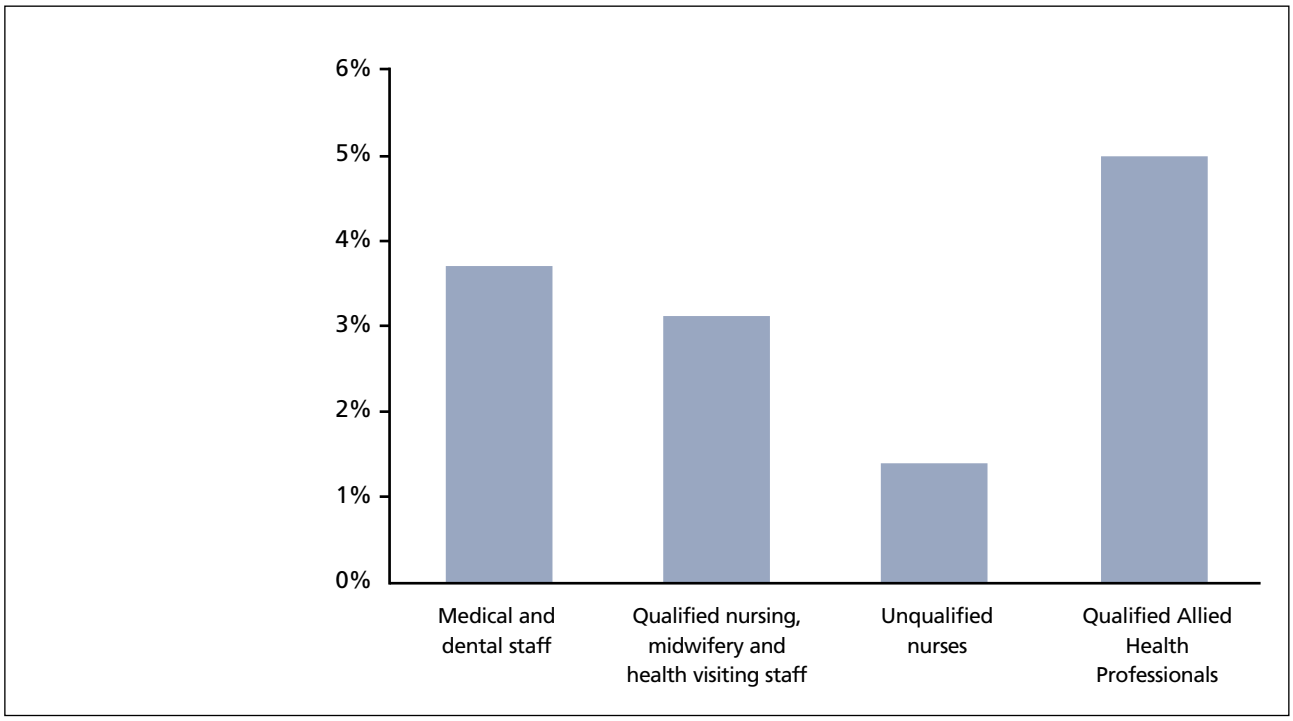
Figure 1: Vacancy rates in USA hospitals by occupation, 2001



Source: First Consulting Group (2001).

An alternative indicator is the three-month vacancy rate, which represents "hard to fill" posts that health care managers have actively tried to fill for three months or more. In England, the Department of Health Vacancies Survey estimated the three-month vacancy rate for qualified nurses at 3.7% in March 2003, which was slightly lower than the vacancy rate in March 2002. The 2003 rate was 3.1% for qualified Allied Health Professionals, which was higher than the previous year. The three-month vacancy rate in England is depicted in Figure 2.

Figure 2: Three-month vacancy rate in the UK, 2003



Source: Department of Health, vacancy surveys (2003).

Data on HHR are notoriously difficult to obtain from developing countries, but from the limited information available, vacancy rates appear to be significant. For example, in South Africa in 2003, there were allegedly 30,000 vacant posts for nurses, which represents around 17% of total posts (Organisation for Economic Cooperation and Development, OECD 2004). In two rural districts in Tanzania, almost 61% of posts for personnel with nursing skills were vacant (Wyss 2003). In Malawi, according to the government, only 28% of nursing posts were filled in 2003, compared with 47% in 1998 (Aitken and Kemp 2003). In Uganda, the current proportion of approved posts filled with health workers (including nurses) was 42% in 2001/2002, a slight improvement from 33% in 1999/2000 (Matsiko et al. 2003).

There are, however, a number of limitations in using vacancy data. In general, vacancy rates may understate the extent of shortages. There may be "suppressed" vacancies (where a post is not advertised because management has no expectation of successful recruitment), and "hidden" vacancies (where a post is filled, but by an individual with insufficient skills or experience to successfully meet the requirements of the job) (Buchan et al. 2004).

Job "turnover" is also often used as an indicator of recruitment or retention difficulties. Turnover expresses the percentage of a defined labour force that is lost each year through retirement, death, international migration or moving to work in another sector of the economy. "Controlled" turnover (e.g. retirement, redundancy and redeployment) must be distinguished from "voluntary" turnover, which is due to employees leaving for their own reasons (e.g. career progression, better pay in a new job, dissatisfaction in the current job, etc.).

Most studies combine both types of turnover. For instance, in the USA, turnover rates for the health workforce in general – and for nursing in particular – were estimated to be between 20% and 30 % in 2002. Although high, this represents a fall from the late 1950s, when turnover rates were close to 50% (Wai Chi Tai et al. 1998; McCarty et al. 2002). By comparison, in the UK, turnover rates are estimated to be between 15% and 20 %, whereas they are below 10 % in Taiwan (Rambur et al. 2001; Shields et al. 2001).

Turnover rates among institutions in the same country may differ. It was shown that turnover rates for registered nurses in adult care in National Health Service trusts in the UK is higher among teaching trusts (Finlayson et al. 2002). This may be because teaching hospitals are a training ground for nursing students, who are often recruited at the lowest grade of salary, which might explain why retention is poor. A more positive reason may be that these are new graduates and they move on quickly to develop their career.

Turnover rates are also likely to differ between geographical regions. It is well recognised that these problems are more acute in rural and poor areas. A study on retention patterns of health workers in British Columbia, Canada, found that communities with the lowest population have the lowest year-to-year retention rates (Thommasen 2000). Retention rates for communities with a population of less than 7,000 were estimated to be between 70% and 80 %, whereas retention was between 85% and 90 % for communities with more than 7,000 individuals. The mean length of stay in communities with a population of less than 3,500 individuals was estimated at four years, whereas it was almost seven years for communities of between 20,000 and 30,000.

Focusing on "voluntary turnover", a recent analysis of health human resources in Lesotho revealed high annual occupational turnover rates for all health professions. The occupational turnover was defined as the percentage of employees within a given occupation that leaves that occupation each year to work in another occupation within the health sector. Evaluating occupational turnover is essential, because it measures the component of overall employment loss over which the government or other employers have the most direct control. In the medical profession, the specialists had the highest turnover rate (16.7%), while house officers had only 9.2%. In nursing, nursing sisters had the higher rate (7.9%), while nursing officers had a turnover rate of 4.4% (Schwabe et al. 2004).

Finally, it should be noted that the level of turnover and variations in that level could be affected by factors such as age and length of service. As such, turnover may be related to factors other than changes in job satisfaction, job opportunity or labour market conditions. This means that turnover rates must be compared with caution, since different studies, systems and organisations may be using different definitions (Wai Chi Tai et al. 1998; Buchan and Calman 2004).

Consequences of recruitment and retention problems

The inability to recruit and retain the right staff is likely to have some adverse effects on the delivery of health services, particularly on quality of care and costs. In Zimbabwe, high vacancy rates resulted in the closure of, or reduced access to, clinics and wards (Stilwell 2001). In the USA, the impact of the perceived shortage in hospitals is felt at different levels. Approximately 38% of hospitals report emergency department overcrowding, 25% mention that they have to divert emergency department patients, 23% have had to reduce the number of beds, and 19% report an increased waiting time for surgery (First Consulting Group 2001).

Shortages may lower quality and productivity (Haskel et al. 1999). In terms of quality of nursing care, Needleman et al. (2001) estimated that higher nurse:patient ratios were associated with a 3% to 12% reduction in the rates of outcomes potentially sensitive to nursing (OPSNs), such as urinary tract infections and hospital-acquired pneumonia. A study of approximately 10,000 nurses in 168 hospitals in the USA found that, in hospitals with low nurse:physician ratios, surgical patients experienced higher risk-adjusted 30-day mortality and failure-to-rescue rates, and nurses were more likely to experience burnout and job dissatisfaction (Aiken et al. 2001). Shortage is also likely to reduce productivity levels if, for example, nurses must perform tasks for which they were not well prepared or if hospitals must recruit and place lower-skilled workers in skilled positions.

Moreover, high turnover rates may lead to higher provider costs and affect the quality of care, due to the loss of work group efficiency and disruption of organisational performance. Direct provider costs of turnover include recruitment and training of new staff, overtime and use of temporary agency staff to fill gaps. Indirect costs associated with turnover include an initial reduction in the efficiency of new staff and decreased staff morale and group productivity.

The literature shows that the costs associated with recruitment and retention problems can be substantial. In the USA, the National Association for Health Care Recruitment estimated direct costs of recruiting and hiring a nurse at US$ 2,396. In the UK, administrative costs associated with the recruitment of a nurse were estimated to be between £401 and £637 (Gray et al. 1996). An early study estimated the initial productivity losses occurring as recruits learn on the job at between £1,422 and £6,166 per staff nurse (Buchan et al. 1991). In an attempt to account for those indirect costs, Johnston evaluated total turnover costs at around US$ 25,000 per nurse (Johnston 1991). These figures illustrate the significant impact of recruitment and retention problems on the health system. One recent study in the USA estimated that total turnover costs for a hospital system employing 5,000 employees was between US$ 17 million and US$ 29 million, with nurse turnover costs being the single largest contributor to total costs (Waldman et al. 2004).

Section Two: Factors Affecting Motivation and Performance

From a policy perspective, keeping the "right nurses in the right place" requires identifying and understanding the factors affecting nurses' motivation and performance. Health managers need to understand the crucial importance of motivation for the performance of health workers in the context of scarce resources.

Theoretical considerations

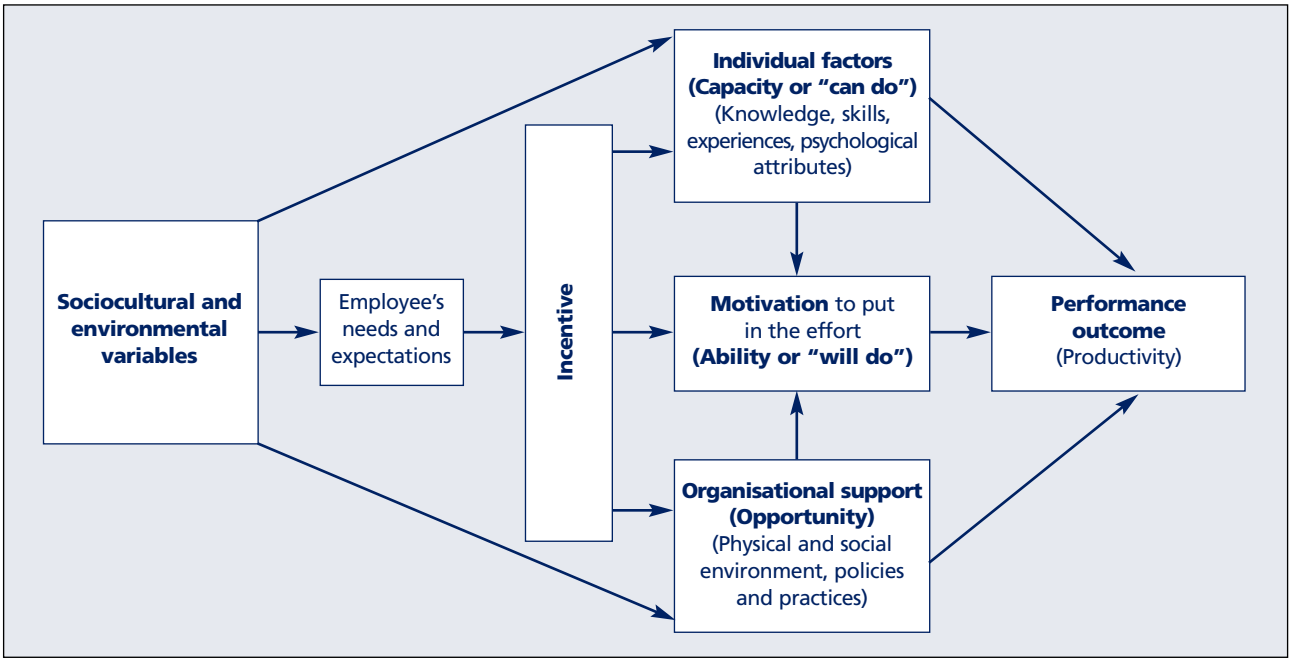
Motivation at work is widely believed to be a key factor in the performance of individuals and organisations and is also a significant predictor of intention to quit the workplace (Hornby et al. 1988; Alihonou et al. 1998; Bennett et al. 1999; Tzeng 2002; Hasselhorn et al. 2004). For policy-makers and health care managers, the challenge is to be able to motivate people to join a workplace, remain there and perform to a certain standard.

It was noted that worker performance is a consequence of three factors (Kanungo et al. 1994; Bennett et al. 1999), which are the following:

- the ability of staff to do their job: (their knowledge, skills, and experience to perform the job; in other words the capacity or "can do" factors);
- the motivation of staff to put in effort to do the job (the ability or "will do" factors);
- the organisational support or opportunity to do the job well (availability of resources and the presence of policies and practices conducive to performance, physical and social environment).

In other words, performance will depend on whether the staff perceive themselves as able to do things, whether they are willing to do things and whether they have the means to do them.

Figure 3: Relationship between incentives, motivation and performance of health workers



Source: Adapted from Kanungo and Mendonca (1994).

In that context, linking incentives and performance is crucial. An incentive, strictly defined, is an explicit or implicit financial or non-financial reward for performing a particular act (Saltman 2002). It can be applied to groups and organisations as well as to individuals. The World Health Report 2000 defines incentives as all the rewards and punishments that providers face as a consequence of the organisations in which they work and the specific intervention they provide. They may be positive or negative, monetary or non-monetary, tangible or intangible. Common incentives include pay, bonuses, allowances, vacation, work autonomy, transportation and flexible working hours.

Incentives are used as a means to favour certain behaviours in order to reached defined objectives such as improving performance (Hicks and Adams 2003). As illustrated in Figure 3, incentives are important because they can influence key determinants of performance. In effect, incentives favouring behaviour that increases individual capacity, strengthens motivation or facilitates the organisational support of the work will lead to better performance.

Worker performance clearly depends on their level of motivation, which stimulates them to come to work regularly, work diligently, be flexible and be willing to carry out the necessary tasks. However, motivation affects only those aspects of performance that can be brought under the worker's personal control. For example, when organisations fail to provide workers with essential equipment, workers may not be able to accomplish their jobs for reasons beyond their control.

It thus appears that the productivity of health workers is not just a matter of how motivated they are for the job; it is also a matter of how well trained and prepared they are for the job (this being a consequence of training, appropriate recruitment and deployment policies). It also depends on whether workers are provided with the necessary equipment, drugs and technology to do their work. Therefore, motivation is not synonymous with performance, nor is performance unequivocally determined by motivation (Kanfer 1999). Motivation affects performance, although the latter also depends on organisational infrastructure and environments.

For health managers, it is important to understand what drives people to initiate action, what influences their choice of action, and why they persist in an action over time. There are many theories to explain motivation at work such as the needs theory (Maslow 1954; Herzberg et al. 1959), expectancy theory (Vroom 1964), equity theory (Adams 1965) and goal setting theory (Campbell and Pritchard 1976). These theories use a set of concepts and constructs in order to link the reasons why people work with the outcome of their work, and then analyse the needs, values, goals, efforts, rewards and expectations of health workers in relation to their work. Not all of these theories have been supported by empirical evidence, particularly in the health sector, but they are still appealing for managers, because of the possibilities that they offer for designing effective workplace strategies (Dolea 2004).

For example, Hertzberg et al. (1959) contend that factors that motivate workers to do a good job, rather than just turn up at the workplace, are intrinsic to the job and include achievement, recognition, the work itself, responsibility and growth. Factors that act as dissatisfiers, which workers seek to avoid, are extrinsic to the job and include salary and working conditions. Having fewer dissatisfiers, Herzberg says, does not motivate a worker to do a good job, but only to stay in it.

Herzberg's theory seems to be supported by studies in motivation and its effects in nursing, where there is a serious staff retention problem, but the staff who remains are committed to achieving a high standard of care. In general, the limited number of studies on motivation in the health care sector that have used Herzberg's theory as an underlying framework seem to support it (Rantz et al. 1996; Fischer et al. 2000; Stilwell 2001; Dieleman et al. 2003; Dunbar 2003).

However, there are some inconsistencies in terms of clarity of the concepts and constructs. This is mainly because the theory was developed in the industrial sector, the context of which is very different from that of the health care sector. Also, broader socioeconomic and cultural contextual factors that clearly influence workers' behaviour are not fully captured by Herzberg's theory (Dolea 2004). To better understand the factors influencing the motivation and performance of nursing in developing countries, it is therefore imperative to develop and test relevant methods of assessment, which will better help to design context-specific strategies for improvement.

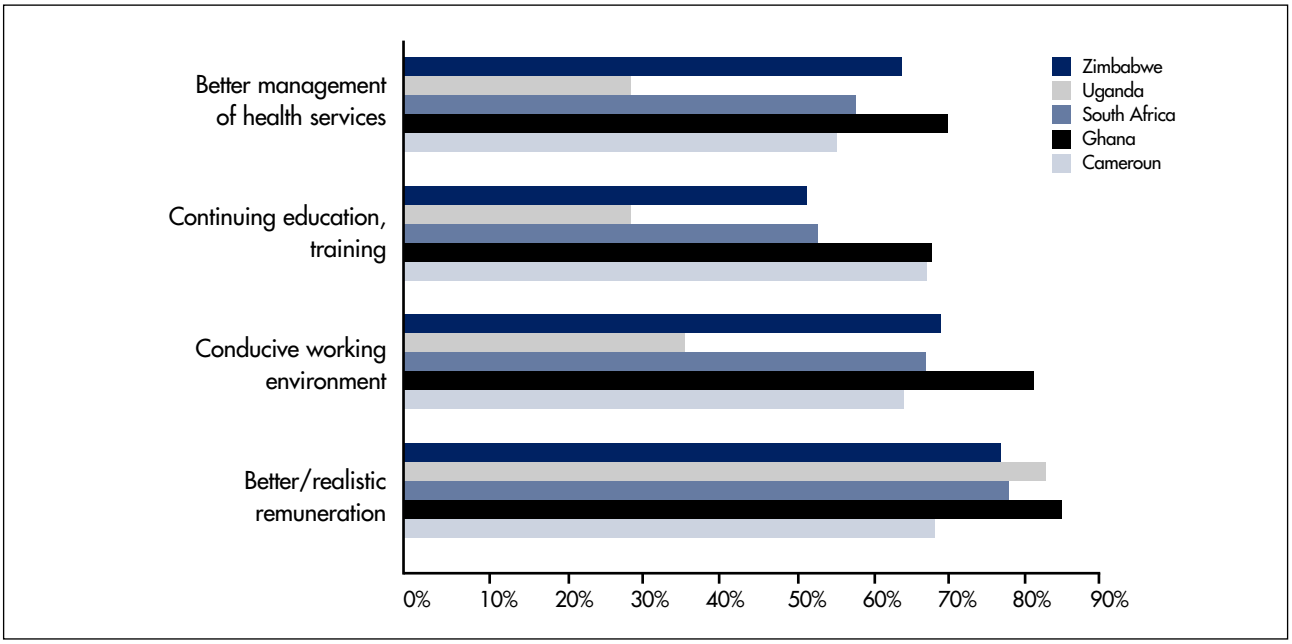
Empirical evidence

There is clear evidence that incentives represent one of the key factors affecting performance. In their study of factors affecting performance of maternal care providers in Armenia, Fort and Voltero (2004) found that incentives were one of the five key factors influencing performance.

There is also empirical support for the link between job dissatisfaction, lack of motivation and intention to quit (Carlson et al. 1992). Low job satisfaction is a concern in many resource-poor countries. In Lesotho, Schwabe et al. (2004) found that, overall, 37% of the nurses are not satisfied with their current job. This percentage varies by the occupation of the nurse; it reaches 80% for mental health nurses, for example.

According to this study, the main factors causing job dissatisfaction are inadequate remuneration and poor working conditions. These factors encompass inadequate pay, deficient benefits and deficiencies in the working environment, such as lack of equipment. Inadequate training or qualifications are also mentioned as a significant problem. These findings are supported by a survey undertaken in five African countries, where low motivation resulted in migration of the health worker out of the country (Awases et al. 2003).

Figure 4: Factors affecting the motivation of health workers in five African countries, 2002



Source: Awases et al. (2003).

In Senegal, the lack of motivation of health personnel is a major concern for the Ministry of Health (ADIRA Etudes et Conseils 2003). There, low motivation and poor job satisfaction have a negative impact on the health sector, adversely affecting job performance as well as the quality of care. Low wages, the inadequacy of other financial benefits (e.g. housing loans), as well as poor working conditions, are believed to explain the lack of motivation of the nurses. Poor working conditions include, among other things, lack of recognition for good work, poor career development opportunities, poor communication, the absence of a link between wages and work performance, and the lack of equipment (ADIRA Etudes et Conseils 2003). The Ministry of Health in Senegal has also noted that poor job satisfaction favours the development of parallel activities during official hours, increases turnover and results in dissatisfied patients.

In Swaziland, feelings of demotivation are widely reported among health staff (Stilwell and Mthethwa 2004). The reasons given are poor working conditions, poor pay and non-pay incentives and the stress of working with people living with HIV/AIDS. Absenteeism is also often associated with low job satisfaction. In health facilities in Bangladesh, the rate of absenteeism for nurses is estimated at 27% (Chaudhury et al. 2004).

Issues of job dissatisfaction are common in developing countries and developed countries alike. A recent cross-national study on 43,000 nurses from more than 700 hospitals (USA, Canada, England, Scotland and Germany) by Aiken et al. (2001) shows that the rate of nurses' dissatisfaction with their job ranges from 17% in Germany to 41% in the USA. The percentage of nurses planning to leave their present job varied from 17% in Germany to 39% in England.

A survey by the United States Federation of Nurses and Health Professionals (FNHP 2001) showed that half of the currently employed registered nurses who were surveyed had considered leaving the patient care field for reasons other than retirement over the past two years. Inadequate staffing, heavy workloads and the increased use of overtime are frequently cited as key areas of job dissatisfaction among nurses. While surveys indicate that increased wages might encourage nurses to stay at their job, money is not always cited as the primary reason for job dissatisfaction.

In the UK, a survey of London National Health Service staff showed that, when health workers were asked for suggestions to improve their working lives, "better pay" ranked only fourth on their "wish list", behind "more staff", "better working conditions" and "better facilities". It is true, however, that pay was higher on the list for people who reported an intention to leave the system, but it still only ranked second or third (Pearson et al. 2004).

The NEXT study (nurses' exit study), performed in 11 European countries on around 40,000 nurses, showed an obvious relationship between job satisfaction and intention to leave the profession: the lower the satisfaction, the higher the intention to leave (Hasselhorn et al. 2004). In their analysis of the National Sample Survey of Registered Nurses in the USA, Spratley et al. (2001) examined the reasons for which nurses are leaving nursing work. They found that the main reasons were related to deteriorating working conditions. It appeared that nurses were leaving the nursing sector to find an occupation with more convenient hours, to earn more, to have greater safety than in the health care environment, to enjoy a more professionally rewarding occupation, or to take care of home and family.

Section Three: Policy Interventions

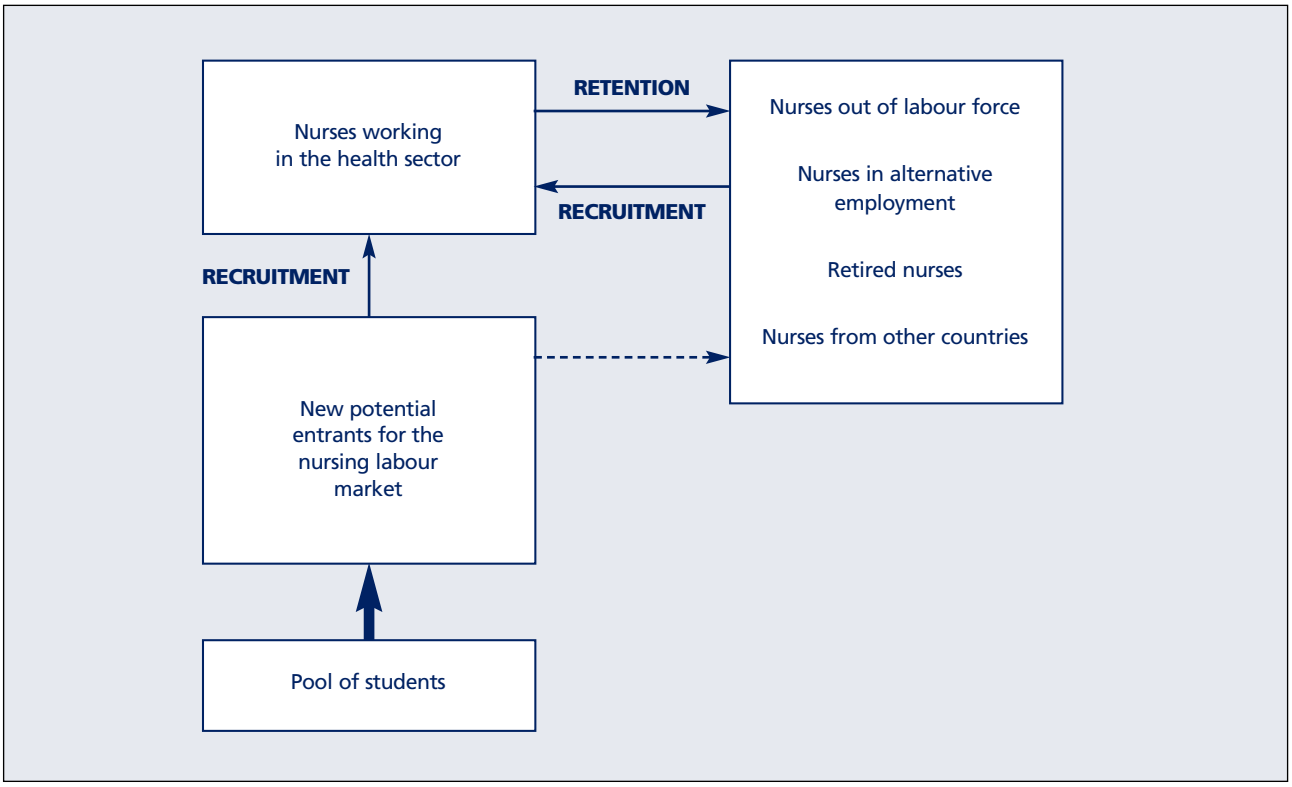
A range of relevant policy interventions is crucial to keep nurses in the workforce and to improve recruitment.

Potential approaches

Different approaches to improve recruitment, retention and performance are illustrated in Figure 5. There are three major policy levers to increasing the nursing labour market:

- increase input, i.e. increase the number of nursing students;
- decrease the attrition rate, i.e. improve the retention of students and promote retention of existing nursing staff;
- attract nurses who are not in the national nursing workforce, i.e. attract nurses who are otherwise employed, retired, out of the labour force, or attract nurses from other countries.

Figure 5: Approaches for improving recruitment, retention and job performance



Increasing the number of nursing students is an attractive long-term solution, but there will not be immediate benefits of this policy. The apparent declining interest in a nursing career, especially in developed countries, can be partly explained by the expansion of career opportunities over the last three decades (Staiger et al. 2000). The number of young women entering the Registered Nurse workforce has declined because many women who would have entered nursing in the past, particularly those with high academic ability, are now entering managerial and professional occupations that used to be traditionally male. In addition, the decline in the number of individuals choosing nursing as a career might also be explained by the fact that this profession is now less socially valued than before (Dussault et al. 2000).

The scope of the retention problems in the nursing workforce demonstrates the importance of developing policies aimed at improving retention. In addition, there is also a potential to attract nurses back to the health workforce. In the USA, examining the results of the National Sample Survey of Registered Nurses, Spratley et al. (2001) indicate that almost 18% of the Registered Nursing population was not employed in 2000.

Altogether, there were approximately 500,000 Registered Nurses in 2000 in the USA who were not in the nursing labour market. Among those, 36,000 were seeking employment in nursing, 136,000 were working in non-nursing occupations, and 323,000 were not employed at all (Lafer 2003). Comparing those figures with the total number of vacant positions for Registered Nurses, which is between 126,000 and 153,000, shows the strong potential of a policy aimed at attracting back to nursing those who have left the nursing sector, even though a fraction of them would be unable or unwilling to practise again.

Similarly, the Irish Nurses Organisation commissioned a survey of non-practising nurses in Ireland, in order to assess the potential numbers of nurse "returnees" and to evaluate the likely effectiveness of different strategies to encourage nurses to return to nursing employment. The research highlighted the need to focus on providing flexible working hours and increased pay (Egan et al. 2003). Finally, one should also consider the "pool of migrant nurses", which is important in countries such as the UK.

Policy options

To retain and develop the nursing workforce, different policy options can be considered to operationalise the approaches depicted in Figure 5.

1. Policies targeting personal characteristics of nurses

Personal characteristics mainly relate to age, sex and education. In most studies, turnover rates are higher among younger workers (Gray et al. 1996; Murray 1999; McCarty et al. 2002). Murray's study on Dublin Maternity Hospital shows that more than 70% of those leaving nursing were aged between 26 and 35 years. However, the turnover rates may also be related to length of service.

As for education, some studies suggest that nurses who are more educated would tend to consider other employment more than those who are less educated (Krausz et al. 1995; Kirshenbaum et al. 1999). This relationship could be explained by the fact that it is easier for better-educated people to consider other employment possibilities. However, these findings have not been systematically confirmed. Sex showed a consistent, non-significant relationship with staff turnover, while results are less clear for race and marital status (Wai Chi Tai et al. 1998). The weakness of empirical data and the ethics of a policy targeting some specific personal characteristics certainly explain why such a policy has not been systematically implemented.

Nevertheless, there could be a benefit in recognising that younger, well-educated nurses are likely to want to develop their careers and this is likely to mean changing employers, or even professions. Offering good professional development opportunities, reflected in career structure and pay enhancement, may reduce turnover. Older nurses are likely to be a more stable workforce; policies to attract them back to work (for example, retraining, flexible shifts or child care facilities) should be considered.

2. Monetary incentives

Remuneration and financial incentives are certainly the most common approaches used to improve recruitment, retention, motivation and performance. Financial incentives include direct or indirect payment such as wages or salary, bonuses, pension, insurance, allowances, fellowships, loans and tuition reimbursement. Providing adequate and timely remuneration is important to guarantee the recruitment of motivated and qualified staff (Martinez et al. 1998).

Wages

The impact of wage appears to be mixed. In their literature review of wage elasticity in the nursing labour supply, Chiha et al. (2002) and Antonazzo et al. (2003) found that most of the studies indicate a weak positive relationship between wages and labour supply. In other words, an increase in the wage will not lead to a substantial increase in labour participation. It should be noted that most studies on wages were performed in developed countries, in particular the USA and the UK, and that the wage context is quite different in developing countries.

For instance, wage differentials between developed and developing countries, between the public and private sectors and the long delays in salary payment in the public sector, are all likely to have an influence on recruitment and retention of the nursing workforce in developing countries (Awases et al. 2003). Therefore, it is likely that a wage increase in developing countries will have a greater impact on nursing retention and recruitment than in developed countries.

The mode of remuneration is also likely to have an impact on recruitment, retention and job performance. Countries have tried different ways of paying health workers, with different impacts on health services. Fee for service, capitation and salary are the usual modes of payment.

Salary. This is the system within which the majority of nurses are paid. Under this system, the nurse is paid a fixed salary per unit of time, regardless of the amount of work done. One advantage of this system is that it makes health care planning easier, as nurses' salaries are known in advance.

Fee-for-service. Under fee-for-service, nurses are compensated retrospectively. Nurses itemise their services on a bill, and the sickness fund pays the nurse or reimburses the patient. The usual approach is that the nursing association and health insurance organisation negotiate the fee schedule, and the government provides guidelines to limit costs (Ensor et al. 1997). Remunerating nurses by fees for each item of service rewards nurses according to the amount of work performed. This method of payment allows nurses a large degree of autonomy. It mainly concerns nurses working as independent practitioners.

Capitation. Under a capitation system, the provider is paid a negotiated amount for each patient registered with her, regardless of how much treatment the patient requires during a year (Ensor et al. 1997). However, this mode of payment is rarely used for nurses.

A summary of the key incentives associated with these payment mechanisms is provided in Table 1 below.

Table 1: Summary of key incentives

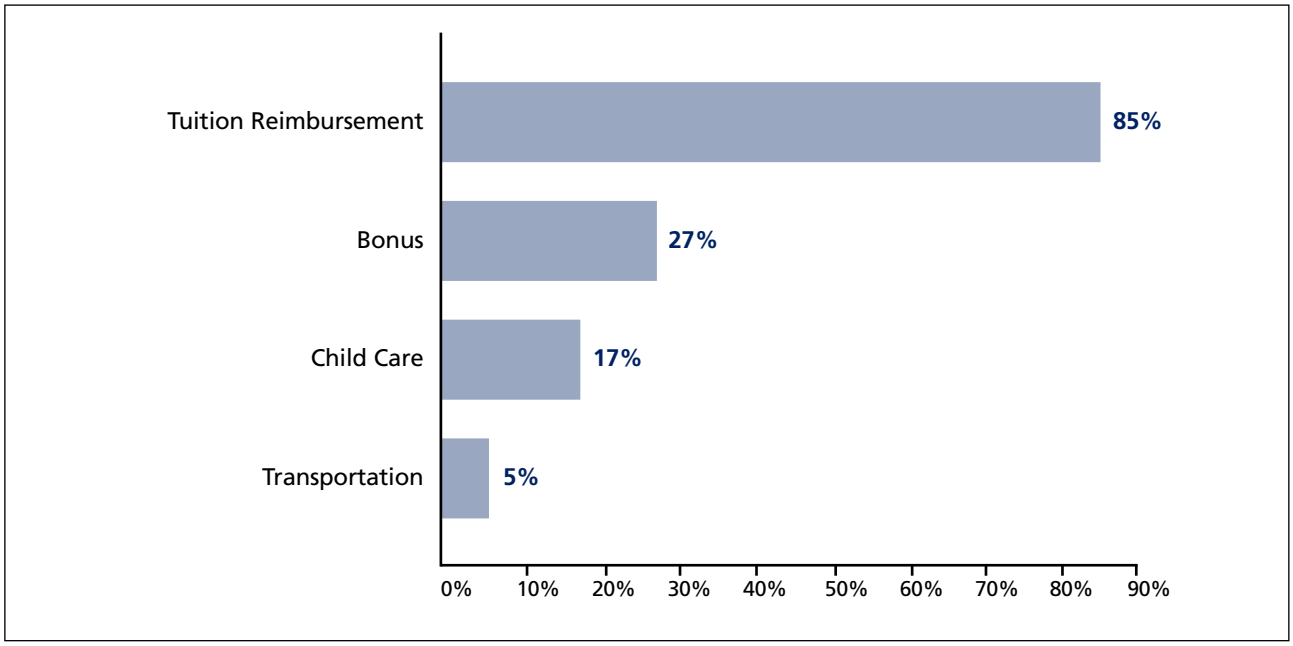
Payment mechanism	Key incentives for providers
Salary	Reduces the number of patients and the number of services provided.
Fee-for-service	Increases the number of cases seen and the service intensity.
Capitation	Attracts more patients to register while minimising the number of contacts with each patient.

Source: Hicks and Adams (2003).

Other financial benefits

Other financial benefits include bonuses, pension, insurance, allowances, fellowships, loans and tuition reimbursement. A survey of hospitals in the USA shows that financial benefits such as tuition reimbursement or contract-signing bonuses are commonly used as incentives to attract nurses (American Hospital Association, 2001), as illustrated in Figure 6.

Figure 6: Percentage of USA hospitals offering recruitment and retention incentives, 2001

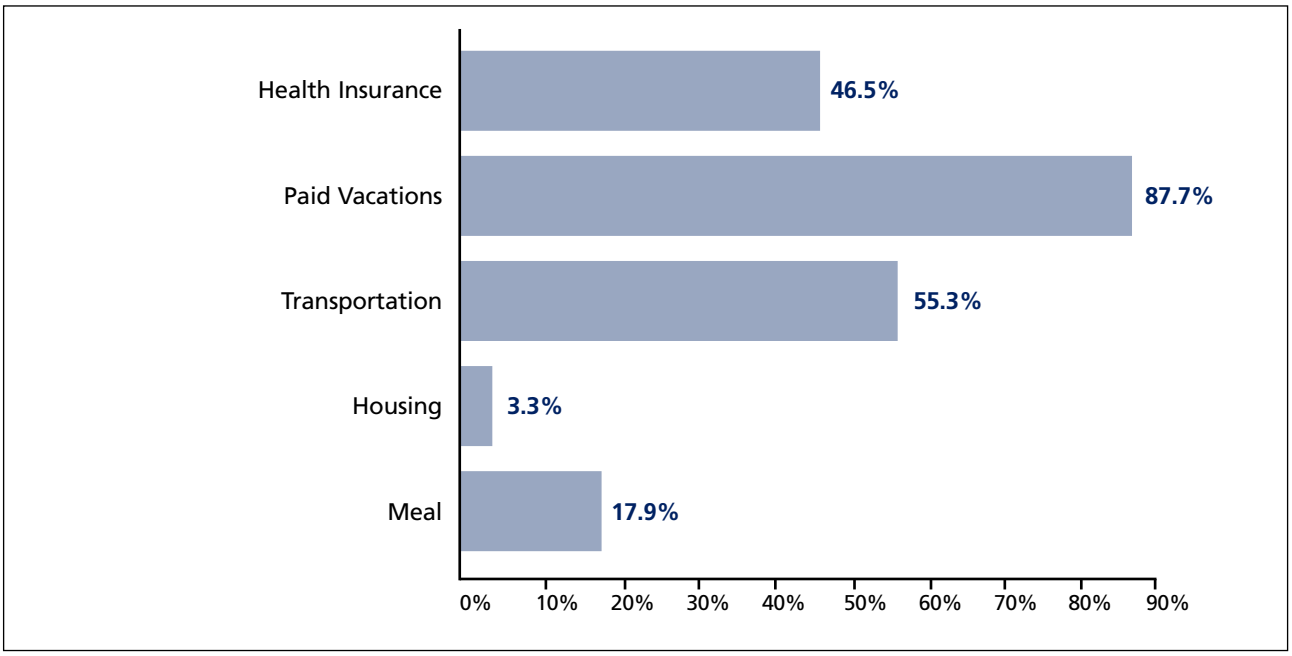


Source: American Hospital Association (2001).

In Africa, a number of countries, including Botswana and Namibia, have introduced monetary incentives. Namibia introduced a 30% overtime allowance for nurses, whereas Botswana has a set of benefits including housing, car loans and medical aid (Commonwealth Secretariat and South Africa Department of Health 2003).

In Jamaica, health insurance, paid vacation and transportation are among the most common financial incentives offered to nurses, as illustrated in Figure 7.

Figure 7: Percentage of nurses benefiting from monetary incentives, Jamaica, 2003



Source: WHO (2004).

However, the beneficial effect of financial incentives is questioned by Kingma (2003), who reports that nurses tend to respond negatively or indifferently to economic incentives. Kingma says of the nurse respondents in her research: "Financial incentives were never recognized as being positive and at best were received with ambiguous reactions. Indifference however clearly dominated the recorded perceptions of monetary rewards" (Kingma 2003: 8). On the other hand, direct and indirect financial rewards, such as professional development opportunities and continuing education, were positively perceived and motivating.

3. Non-monetary incentives

Buchan et al. (2000) and McCarty et al. (2002) have formulated different types of non-monetary incentives, such as work autonomy, career development and shift work.

Promoting work autonomy

Work autonomy can be defined as control over one's own work, and is among the key variables explaining job satisfaction. Autonomy was reported to be significant in explaining nurses' job satisfaction in a study reviewing nursing in hospitals (Gleason-Scott et al. 1999). It has also been shown that hospitals with supportive managers and favouring greater latitude in decision-making by staff experience lower turnover rates (Mason 2000; Aiken et al. 2000).

Encouraging career development
The possibility of career development for nurses is crucial, especially in an environment characterized by a phenomenal growth in knowledge related to health sciences, coupled with technological advances. Evidence suggests that career development opportunities encourage the retention of nurses, as shown by (Rambur et al. 2001). Kingma (2003) also mentions the positive effects of professional development opportunities. In addition, the provision of internal promotion opportunities has been shown as a means to reduce turnover of nurses in large hospitals (Kirshenbaum & Mano-Negrin 1999).

Adapting working time and shift work
Limitations on working hours and the provision of rest periods have a direct impact on the quality of services and, therefore, are of particular importance to nurses (International Labour Organisation 1998). The increased use of overtime is frequently cited as a key area of job dissatisfaction among nurses (Federation of Nurses and Health Professionals 2001) and part-time working is often considered as a means of improving recruitment and retention. Although problems of recruitment and retention of nurses in Britain and France persist, there are some quantitative indications of a growth in part-time work (Arrowsmith et al. 1999).

Frijters et al. (2003) compared the average number of working hours between nurses in the UK's National Health Service (NHS) and those who left the NHS (for nursing or another occupation in the private sector, or other occupation in the public sector). They found that those nurses who left the NHS work more hours, although work is more likely to be non-shift based. These results show that dissatisfaction from working hours tends to be related to shift-work rather than to the length of the workweek. Redesigning shifts to allow more off-time, more flexibility and more choice in shifts are all ways of improving satisfaction with working hours and enhancing both recruitment and retention of nurses.

4. Reducing violence in the workplace

Violence against nurses seems to be a growing phenomenon and has become a significant problem (Dalphond et al. 2000). Violent acts against nurses may come from patients, relatives of patients, other nurses or other professional groups. The most frequent violent acts include bullying, physical violence and assaults (Jackson et al. 2002). Some findings suggest a direct link between aggression and increases in sick leave, burnout and staff turnover (Farrell 1999; O'Connel et al. 2000). Therefore, reducing violence in the workplace is likely to reduce attrition. The costs of improving nursing protection in the workplace should be balanced against the costs associated with the lost hours and turnover resulting from violence against nurses.

5. Leadership

Leadership is defined as the process whereby one individual influences a group of individuals to achieve a common goal (Northouse 1997). In the health care sector, many studies have found that leadership is positively correlated with nurses' job satisfaction and commitment towards institutional goals (Stordeur et al. 2001; Stilwell 2001; Larrabee et al. 2003; Hasselhorn et al. 2003).

A study by Boyle et al. (1999:370) examined the direct and indirect effects of nurse-managers' characteristics of power, influence and leadership style on critical care nurses' intent to stay in their employment positions. The study was conducted on 255 staff nurses in intensive care units at four urban hospitals in the USA. The findings suggested that managers' positional power and influence over work coordination had a direct link to intent to stay. Also, job satisfaction was directly linked with intent to stay. The study concluded that managers with leadership styles that seek and value contributions from staff, "promote a climate in which information is shared effectively,

promote decision-making at the staff nurse level, and influence coordination of work to provide a milieu that maintains a stable cadre of nurses".

The challenge for leaders in the health sector is to be able to build and sustain a long-term vision, to build teams and increase commitment to effect organisational change. Leaders will have therefore to focus on motivating, inspiring and empowering their employees.

6. Policy targeting contextual factors

Contextual factors, such as job market, family support and location of work play a significant role in recruitment. Macroeconomic policies influence the labour market in nursing. In resource-poor settings, the labour market in health may be affected by the linking of the health sector with the civil service, and with posts in the civil service being capped because of broader fiscal policies. This may result in shortages of nurses coexisting with unemployment of nurses (OECD 2004). As a result, nurses (and other health professionals) migrate to places where the labour market is more buoyant. Improving the labour market clearly affects more than the health sector, but in terms of convincing nurses that they can be recruited into posts, it is a key investment.

Working in a rural area can be challenging for a number of reasons, including lack of social life and amenities, difficulties of travelling and lack of accommodation. Such challenges will be greatly enhanced in resource-poor settings, where the infrastructure is likely to be undeveloped, so that roads, transport, schools and housing are not adequate. Investing in improving these basic amenities could pay dividends in terms of improved motivation, retention and recruitment (Mutizwa-Mangiza 1998). Poor working conditions, including lack of equipment, are often reported as a major elements affecting staff motivation, preventing health staff from performing tasks and creating frustration (Commonwealth Secretariat and South Africa Department of Health 2003).

Effectiveness and costs

From a policy perspective, one essential question is how to select the most appropriate incentives. One approach to answering that question is to assess the cost and the effectiveness of each policy option.

Effectiveness

A general review of the effectiveness of different policy options has been presented in this section. Various indicators have been used to assess the effectiveness of the different incentives, such as the additional number of health workers recruited, the degree of job satisfaction, the level of motivation, the number of patients seen and the level of work quality.

The validity of the conclusion regarding the effectiveness of such incentives is confirmed, to a large extent, by observing policies implemented in hospitals that are more successful in recruiting and retaining health care staff. These hospitals have been designated as "magnet hospitals". The American Academy of Nursing published the original magnet hospitals study in 1983. Hospitals with "magnet" status experience fewer problems with recruitment and retention, and have excellent patient outcomes.

According to the American Nurses Credentialing Center, magnet hospitals possess 14 "forces of magnetism" that are influential in retaining and recruiting nursing:

1. high-quality nursing leadership;
2. flat organisational structure;
3. open management style;
4. supportive, individual personnel policies and processes;
5. high-quality care;
6. professional models of care;
7. high level of autonomy of nurses;
8. quality assurance initiatives;
9. consultation and other resources available;
10. positive relationships between community and hospital;
11. support role of nurse as teacher;
12. positive image of nursing;
13. positive nurse–physician relationship;
14. professional career development.

Research shows superior outcomes for magnet hospitals, such as lower risk-adjusted hospital mortality, higher ratings of quality of care, higher patient satisfaction, lower rates of nurse burnout and higher rates of nurse job satisfaction. Also, they show fewer adverse patient outcomes, such as infections, falls with injuries, and medication errors. It appears that developing some of the features of a "magnet hospital" is certainly a promising strategy to improve retention.

Costs

In addition, one should also account for the cost of each policy, in particular the implementation costs. Measures favouring financial incentives are likely to face different financial and implementation constraints than non-financial incentives. For instance, the feasibility of increasing nurses' wages should be thoroughly assessed, since wage costs account for between 65% and 80% of the recurrent health system expenditure (Saltman et al. 1995; Kolehamainen-Aiken 1997). Although nurses tend to earn significantly less than doctors, around one half and one fifth in countries like the UK and the USA (Gupta et al. 2003), the nursing workforce represents a large share of those recurrent costs, since nursing constitutes an important part of the health workforce.

Accordingly, increasing nursing wages in the public sector has consequences from a public finance perspective, particularly when the health care workforce is linked to other public sector workers. Where there is little elasticity of funding for the health sector, across-the-board wage raises may be prohibitive; in this case, pay incentives, linked perhaps to workforce deployment (unattractive shifts, work in rural areas) makes better fiscal sense.

In contrast, the implementation of non-financial incentives might face fewer financial constraints but the institutional changes required for those incentives might represent big challenges. For instance, introducing incentives such as flexible working hours or increasing work autonomy is likely to meet some resistance and face bureaucratic difficulties in many organisations. This might be one of the reasons why only a limited number of hospitals, around 100, currently benefit from the "magnet hospital" designation in the USA and UK.

Finally, one should be cautious when comparing the cost or effectiveness of various policy options or inferring general conclusions regarding the pertinence of policy options, as measurement units or local context might differ quite significantly.

Section Four: Discussion and Concluding Remarks

The challenge for each health system is to identify and implement a package of different types of incentives that will meet its needs (Buchan et al. 2000), and it is unlikely that one package of incentives will be right for all organisations or contexts. For example, the importance of financial rewards will depend on the regular provision of enough money to meet basic living needs. In resource-poor countries, financial reward is likely to assume more importance than in richer countries where salary is almost taken for granted (Kingma 2003).

Most research studies on increasing motivation and job satisfaction in health workers have been undertaken in developed countries, where the resources that can be invested in such activities are available (Bennett and Franco 1999). Much of this research focuses on strengthening positive attitudes towards work through intrinsic rewards, such as increased autonomy and developing supportive leadership. Developing teamwork has been acknowledged as important (Sihvonen et al. 1991; Marquis et al. 1992; Kekki 1994; Vinokur-Kaplan et al. 1994). All these activities use models of self-actualization through increasing the meaningfulness of work, strengthening group cohesiveness and increasing the understanding between workers and managers of expectations from work and from colleagues.

However, situations in developing countries are markedly different. Health workers function in situations of resource scarcity of all kinds: salaries are likely to be low, and may not even be at subsistence level; instruments and equipment may be missing or broken; workers in remote areas may be alone for much of the time; and there may be little or no budget for staff development (Martinez and Martineau 1998; Bennett and Franco 1999).

Ferrinho and Van Lerberghe (2000) discuss coping strategies adopted by underpaid health workers in developing countries . They raise the issue of the relation between pay and performance, and suggest that nurses in the public sector, especially in resource-poor settings, are "demotivated" by "unfair public salaries". Ferrinho and Van Lerberghe go on to say that they recognise there are sources of motivation other than money: they suggest that social responsibility, self-realisation, professional satisfaction and prestige must also play a role.

Policies applied to other health worker categories, such as community health workers or doctors, in order to improve performance tend to be relatively similar. A review of community health worker incentives and discentives also shows that successful programmes use multiple incentives over time (Bhattacharyya et al. 2001). However, the respective impact of each policy may vary across professions. Hicks and Adams (2003) discuss financial and non-financial incentives in relation to performance and motivation of health workers. They found that, while there is ample evidence that financial incentives affect physician performance, there is less evidence relating to other health workers and to the effects of financial incentives on motivation.

It should also be noted that some policies have received more attention than others. For instance, policies relying on community factors are commonly used to motivate community health workers. The feasibility and the potential benefits to nursing of such policies, especially for nurses in rural areas, should be further examined.

Adams and Hicks (2003) also conclude that the link between policy development and personal motivation of health workers is complex and requires recognition of the importance of individual, organisation and societal factors in motivation.

One important area for further work relates to the selection of pertinent incentives as policy tools. Currently, there is little information regarding both effectiveness and costs of incentives. More studies should be performed that combine both effectiveness and costs, in order to facilitate decision-making and contribute to better decisions from a social perspective.

Also, in designing specific policies and strategies to improve recruitment and retention of staff, it is important to analyse and factor in the broader contextual factors that may influence the design and implementation of these strategies. Organisational policies and provisions, economic constraints, cultural and social differences and regulatory and legal frameworks should all be considered in the development of effective policy options. There is still limited knowledge on the enabling environment for various strategies on recruitment and retention of health workers, as well as on the tools for monitoring and evaluating the effective implementation of these strategies.

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Abbreviations

3 x 5	Global Initiative Strategic and Operational Framework
AC	Audit Commission
ACETERA	Argentinean Civil Association of Non-University Schools of Nursing in Argentina
ACHIEEN	Chilenean Association of Nursing Education
ACOFAEN	Colombian Association of Schools of Nursing
ADHA	Additional Duty Hour Allowances
AEUERA	Argentinean Association of University Schools of Nursing
AFRO	AFRICA Regional Office
AHRQ	American Health Research and Quality
AHSN	Africa Honour Society for Nurses
ALADEFE	Latin American Association of Faculties and Nursing Schools
ANA	American Nurses Association
APE	Paraguayan Association of Nursing
ARVs	Anti Retroviral drugs
ASEDEFE	Ecuatorian Association of Schools of Nursing
ASOVESE	Association of Schools of Nursing of Venezuela
ASPEFEN	Peruvian Association of Schools of Nursing
AU	Africa Union
AWG	Africa Working Group
CEDU	Uruguay College of Nurses
CHI	Commission for Health Improvement
CHN	Community Health Nurse
CHSRF	Canadian Health Services Research Foundation
CIPD	Chartered Institute of Personnel and Development
CM	Community Midwifery
CN	Community Nursing
CNO	Caribbean Nurses Organization
COFEN	Federal Council of Nursing, Brazil
CREM	Mercosur Regional Council of Nursing
CRHCS	Commonwealth Regional Health Community Secretariat
DENOSA	Democratic Nursing Organization of South Africa
DFID	Department for International Development
DH	Department of Health
DJCC	Directors Joint Consultative Committee
DOT	Directly Observed Treatment
ECN	Enrolled Community Nurse
ECSA	East, Central and Southern Africa
ECSACON	East, Central and Southern Africa College of Nursing
ECSA-HC	East, Central and Southern Africa Health Community
EN	Enrolled Nurse
EPI	Expanded Programme on Immunisation
EU	European Union
FAE	Argentinean Federation of Nursing
FEMAFEN	Mexican Federation of Associations of Schools of Nursing
FEPPEN	Pan American Federation of Nursing Professionals
FIM	Functional Independence Measure
FNHP	Federation of Nurses and Health Professionals (USA)
FP	Family Planning
FTE	Full-Time Equivalents
FUDEN	Nursing Development Foundation (Spain)
GATS	General Agreement on Trade in Services
GAVI	Global Alliance for Vaccines and Immunizations
GDP	Gross Domestic Product
GNP	Gross National Product
GP	General Practitioner
GRNA	Ghana Registered Nurses Association
HC	Healthcare Commission
HIPC	Highly Indebted Poor Countries
HPCA	Health Professionals' Competency Asssurance Act
HPPD	Hours per Patient Day
HR	Human Resource
HHR	Health Human Resource
HRM	Human Resource Management
HSR	Health Sector Reform
ICN	International Council of Nurses
ICNP®	International Classification of Nursing Practice
ICU	Intensive Care Units

IDB	Inter-American Development Bank
IES	Institute for Employment Studies
ILO	International Labour Office
IMR	Infant Mortality Rate
IOM	International Organization for Migration
IOM	Institute of Medicine (USA)
IPC	Infection, Prevention and Control
IUCD	Intra Uterine Contraceptive Device
IWL	'Improving Working Lives'
JLI	Joint Learning Initiative
LPNs	Licensed Practical Nurses
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
MMR	Maternal Mortality Rate
MoH	Ministry of Health
MSF	Médecins Sans Frontières
MTEF	Medium Term Expenditure Framework
NAFTA	North Atlantic Free Trade Agreement
NCDs	Non Communicable Diseases
NDNQI	National Database of Nursing Quality Indicators
NEPAD	New Partnership for Africa's Development
NGOs	Non-governmental Organisations
NHA	National Health Accounts
NHS	National Health Service
NNAs	National Nurses Associations
OAS	Organization of American States
OCB	Organisational Citizenship Behaviour
OECD	Organization for Economic Co-Operation and Development
OPSNs	Outcomes Potentially Sensitive to Nursing
OWWA	Office of Workers Welfare Administration
PAHO	Pan American Health Organization
PBN	Post Basic Nursing
PDP	Performance Development Plan
PEPFAR	President's Emergency Program for AIDs Relief
PHC	Primary Health Care
POEA	Philippine Overseas Employment Authority
PPP	Purchase Parity Pay
PRODEC	Nursing Development Programme in Central America and the Caribbean
PRSCs	Poverty Reduction Support Credits
PRSP	Poverty Reduction Strategy Papers
QA	Quality Assurance
RBM	Roll Back Malaria
RC	Regional Committee
RCHN	Registered Community Health Nurse
REAL	Latin American Nursing Network
RHMC	Regional Health Ministers Conference
RM	Registered Midwife
RN	Registered Nurse
RPN	Registered Psychiatry Nurse
RSA	Republic of South Africa
SADC	Southern Africa Development Community
SANC	South African Nursing Council
S&T	Science and Technology
SARA-AED	Support for Analysis and Research in Africa - Academy for Educational Development
SEW	Socio-economic Welfare
SSA	Sub-Saharan Africa
TB	Tuberculosis
UAP	Unlicensed Assistive Personnel
UK	United Kingdom
UNAM	Autonomous National University of Mexico
UNESCO	United Nations for Education, Science and Culture Organization
USA	United States of America
UWI	University of West Indies
VCT	Voluntary Counselling and Testing
VF	The Vaccine Fund
WHO	World Health Organization

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