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RETENTION OF HEALTH WORKERS IN RURAL HOSPITALS IN ZIMBABWE: A CASE STUDY OF MAKONDE DISTRICT, MASHONALAND WEST PROVINCE

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ABSTRACT

The study explores the factors that influence the retention of health workers in rural areas in Zimbabwe. Critical shortages of health workers in developing countries have been widely researched and a plethora of strategies proffered however the situation remains unabated in the face of evolving dynamic factors. A sample of thirty-four (34) health workers based in Makonde Rural District in Mashonaland West Province were interviewed using self-administered questionnaires. Data were analysed using descriptive statistics. The key study findings showed the main factors influencing the retention of health workers in rural areas as inter alia: poor salaries and incentives, inadequate, obsolete and often unavailable work-related infrastructure, medical supplies and drugs, inadequate career prospects, poor living conditions and lack of basic recreational amenities. The key recommendations are that to attract and retain health workers in rural areas the government and key stakeholders should continuously review and improve salaries and incentives, career developmental opportunities and socio-economic needs of health workers.

KEYWORDS: Health Workers, Retention, Rural Workers, Zimbabwe

INTRODUCTION

Human resources are the crucial core of the health system (Hongoro and McPake, 2004).Notwithstanding the evidence that the global deficit of health workers was estimated at 7.2 million in 2013 and projected to increase to 12.9 million by the year 2035, widening the gap for meeting the recommended minimum threshold densities of 2.28 health care professionals per 1,000 of the population (WHO 2010a).The rural-urban dichotomy of health professionals is growing globally (Dieleman et al., 2006, Dal Poz et al 2007), with approximately 50% of the global population residing in rural areas where health services are provided by 38% of nurses and 24% of physicians worldwide (WHO, 2013).A study by Vujicic et al (2011) showed that 53% of physicians in Vietnam were concentrated in urban areas where 28% of the population resides. Similarly, Rao et al (2009) reported that 60% of health workers in India live in urban areas yet approximately 74% of the population resides in rural areas. Buchan et al (2013) highlight that the global maldistribution of health workers between rural and urban areas prevents equitable access to health services and inevitably increases health costs, under-utilisation of health workers and diminishes access to universal health coverage. Despite the accumulating body of research evidence on inter alia, recruitment and retention of health workers in rural areas (eg Buchan et al, 2013; Couper et al, 2007; Chaudhury et al, 2003), incentives and motivation (eg., Munga et al, 2013; Barninghausen et al.,

2009;Manongi et al., 2006; Dieleman et al., 2003), retention strategies (eg., Henderson et al., 2008; Humphreys et al, 2004; Government of Lesotho, 2010; Freywot et al, 2010, Gibbon and Hales, 2006; Koot and Martineau, 2005); workers with a rural origin (eg., Laven and Wilkinson, 2003; Dunbabin and Levitt, 2003; De Vries and Reid, 2003; Chomitz, 1998; Humphreys et al. 2002, Serneels et al. 2007, Wilson et al. 2009). Overall, the acute shortage of health workers in rural areas continues in virtually all the countries (Dussault and Franceschini 2006, Serneels et al 2010). The situation is exacerbated by the mismatch between individual health workers' location preferences and the population distribution health needs (Wyss, 2004). Lehman et al (2008) highlight the concomitant conundrum of the *pull* factorsthat attract health workers for a given post or location and *push* factors that discourage individuals from certain locations that even drive them to leave their homes and jobs.Push factors from rural areas include poor infrastructure and services, high workloads and poorly aligned incentive systems that disadvantage health workers based in rural areas (WHO 2013; DalPoz et al 2007; Rao et al, 2013; Vujicic et al (2011). In the case of Zimbabwe, an estimated 67% of the population is based in rural areas (ZimStat, 2013) while 25% of the health workers are estimated to be working in rural areas. As a result, vacancy rates for health workers in rural areas is as high as 60% for both physicians and nursing positions, compared to 20% for physicians and 43% for nurses in urban areas, respectively (MoHCW 2013, MacKinnon and MacLaren, 2012).According to Osika et al. (2010), Zimbabwe had a density of 0.88 health care professionals per 1,000 people in 2010, way below the WHO (2010b) recommended 2.28 ratio. The resultant situation severely diminishes Zimbabwe's ability to meet the health-related Millennium Development Goals (MDGs) post 2015 and the Sustainable Development Goals (SDGs) and well as its post 2013 Zimbabwe Agenda for Sustainable Socio-Economic Transformation (Zim-Asset) health-related national economic development projections. This study, therefore, seeks to address the following research questions: (a) what are the factors influencing the deployment and retention of health care professionals in rural areas? (b) What can interventions can government and stakeholders adopt to improve the retention of health care professionals in rural areas in Zimbabwe?

LITERATURE REVIEW

Human Resource Management (HRM)

Armstrong and Taylor (2013) define human resource management (HRM) as a strategic, integrated and coherent approach to the employment, development and well-being of the people working in an organisation. In turn, Storey (1995:5) points out that human resource management is a distinctive approach to employment which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce using an array of cultural, structural and personnel techniques. In turn, the resource-based view (RBV) school of thought, attributes the achievement of sustainable competitive advantage by organisations to possession of unique bundles of resources that competitors cannot, or find hard to imitate (Barney, 1991; Wernerfelt, 1984). In line with his perspective, human resources are viewed as the critical resource that embody the dynamic capabilities and strategic mind-sets imperative in innovation-oriented economies (Davenport et al., 2006). On the other hand, the human capital theory postulates that people in organisations contribute their knowledge, skills and abilities critical for enhancing organisational capabilities (Armstrong and Taylor, 2014).

The key goals of HRM in organisations according to Armstrong and Taylor (2014) involve inter alia:supporting the achievement of organisational objectives through the integration of the human resource and the business strategies; contributing to the development of high performance cultures; ensuring that the organisation has talented, skilled and

engaged people it needs, creating a positive employment relationship between management and fostering a climate of trust while encouraging the application of an ethical approach to people management. Similarly, Storey (2001:7) asserts that the HRM philosophy should be underpinned by assumptions that place human resources as the core for attainment of competitive advantage or in the case of the public sector efficient and effective delivery of their mandates. It can therefore, be inferred that the human resources management process should focus on achievement of organisational effectiveness through the development of integrated policies which enhance the quality of working life while encouraging high commitment, flexibility and high performance from employees (Buchanan & Huczynski, 2004:679).

EMPLOYEE MOTIVATION

Buchannan & Huczynski (2004:244) define motivation as a 'cognitive, decision-making process through which goal-directed behaviour is initiated, energized, directed and maintained'. From this perspective, motivation represents psychological processes that cause the arousal, direction and persistence of voluntary actions that are goal-directed (Mitchel, 1982:81). In turn Mullins (2005) attributes the motivation process to the existence of driving forces within individuals through which they attempt to achieve some goal in order to fulfil some need or expectation. However, motivation theories offer different explanations on the sources of the driving forces and the types of needs individuals attempt to fulfil at work. Mullins (2005) suggests that driving forces behind employee needs and expectations at work can be categorised in terms of extrinsic and intrinsic motivation. Thus, extrinsic motivation is linked to 'tangible' rewards such as salary and fringe benefits, security, promotion, contract of service, the work environment and conditions of service. In contrast, intrinsic motivation is related to 'psychological' rewards such as the opportunity to use one's ability, a sense of challenge and achievement, receiving appreciation, positive recognition, and being treated in a caring and considerate manner (Mullins, 2005:472). Kets de Vries (2001) suggests that getting the most out of people requires a motivational system that is anchored on attachment/affiliation and exploration. Where the former refers to the need for engagement and sharing, feelings of community and a sense of belonging to the company while the latter is concerned with the ability to play and work, a sense of fun and enjoyment, the need for self-assertion and the ability to choose.

EMPLOYEE RETENTION

Philips and Connell (2003) define retention as the percentage of employees remaining in an organisation over a given time period in contrast to turnover that indicates the percentage of employees leaving the organisation. Steel et al. (2002) while acknowledging that employees leave organisations for different reasons highlight that management should create retention policies that reduce employee turnover. They point out that negative consequences of high employee turnover as follows: high financial costs, poor service quality, productivity losses and interruptions to the workflow, loss of expertise, administrative problems, disruption of social and communication networks, job dissatisfaction among the remaining employees and the poor corporate image of the organisation (Philips and Connell, 2003).World-at-Work (2010) point out that work attitudes such as job satisfaction and work-related characteristics such as salary, work-life conflict and supervisor relations are important determinants of employee turnover and by default employee retention.

The significance of monetary and non-monetary incentives and job satisfaction in retaining health workers in rural areas have been widely reported (see Zurn et al 2004; Mbofanaet al. 2012). In general, incentives refer to one particular form of payment that is intended to achieve some specific change in behaviour (Buchanan and Huczynski, 2009; Samuel and Chipunza, 2009). In particular, financial incentives are important in attracting, motivating and retaining health workers

to work in rural areas (Mbofanaet al, 2012). Incentives are dependent on the availability of unemployed health workers in urban areas and are likely to be successful if used in conjunction with other strategies (Mbofana et al 2012). However, the impact of financial incentives on the motivation and retention of rural health workers is varied (Gibbon and Hales 2006). The introduction of rural allowances in South Africa led to the retention of between 28-35% of rural health workers in rural areas and positively altered career plans and expectations among some of the workers (Reid 2010). Similarly, the introduction of the Health Workers Retention Scheme in Zambia positively influenced the attraction and retention of doctors in rural areas including in areas which previously had not had any doctor (Koot and Martineau 2010). In many ways, the provision of non-monetary incentives such as medical coverage, life insurance, educational loans, paid study leave, paid leave and compensation packages are important in retaining executive-level workers (Dunford et al 2005). There are positive effects arising from linking non-monetary benefits with developmental opportunities, timely performance feedback (Griffeth et al 2000) and promotion of work-life balance (Boyar et al 2003; Good et al 1996). Snow et al (2011) reported that promotion prospects were affected by the absence of higher grade posts in rural areas and slower career progression lead to feelings of "professional imprisonment" among health professionals in rural and remote posts.

Access tocontinuous professional development, training and development opportunities enhances the sharing of knowledge, better professional networking and reduces professional isolation among health workers in rural areas (Araujo and Maeda 2013; Mbofana et al. 2012; WHO 2010). Similarly, the importance of distance learning, library access, traineeships and tele-health was cited by Araujo and Maeda (2013). Duplantie (2007) points out the importance of harnessing emerging technologies in meeting the professional development needs of health workers based in rural areas. This is supported by Haythornthwaite (2002) who highlights the impact of provision of video-conference training facilities in improving job satisfaction and reducing feelings of professional isolation among health workers in rural areas in Australia. In turn, Lynch and Happell (2008) point out that professional development and support activities such as the provision of clinical supervision and mentoring enhances the retention for rural based health workers. Notwithstanding the reported significance of the different programmes on the retention of health workers in rural areas (Humphreys et al 2007; Wilson, et al 2009), there is limited direct evidence on the influence of access to continuous professional education programmes (Araujo and Maeda 2013).

WHO (2011) highlight the significance of family ties on the retention of health workers in rural areas. In particular, they point out that married nurses tend to transfer to rural areas to join their husbands although the latter are often reluctant to relocate to remote areas, especially if it is not their home area (WHO 2011). In Mozambique, the Family Act prohibits the separation of married couples employed in the public sector (Mbofanaet al. 2012). This resonates with the concept of job embeddedness proposed by Mitchell et al (2001) who postulates the existence of a web or net that encompasses various aspects of a person's life. Thus, the job embeddedness construct distinguishes the following dimensions of embeddedness: *links, fit and sacrifice*. Where *links* refer to the extent of individuals' formal or informal connections to other people and institutions in the community and/or organisations, while *fit* refers to an employee's perceived compatibility or comfort with his/her organisation or community, and *sacrifice* refers to the perceived cost of material or psychological benefits that would be forfeited by leaving the organisation or community (Mitchell et al 2001). From this perspective, the more complex the web a person has, the more likely he/she has more responsibilities, active roles and important relationships leading to greater levels of job-embeddedness (World-at-Work 2010) that potentially influences a person's choice in remaining in a particular organisation and job location such as a rural setting.

On another hand, Dieleman et al (2003) and Wright (1999) report on the importance of access to agricultural land in the retention of health workers in rural areas. Dieleman et al (2003) reported that approximately 84% of public health workers working in rural areas in North Vietnam where 80% of the population lives were attracted by access to agricultural land. They attribute the high retention levels as a result of access to agricultural land which enables health workers to engage in agricultural activities in order to supplement the low salaries averaging US$29 per month. The evidence on the influence of the rural origin of health workers and their willingness to work in rural areas has been cited by a number of studies (eg. (eg., Laven and Wilkinson, 2003; Dunbabin and Levitt, 2003; De Vries and Reid, 2003; Chomitz, 1998; Humphreys et al. 2002, Serneels et al. 2007, Wilson et al. 2009).Dunbabin and Levitt (2003) reported on the phenomenon in Australia with respect to doctors who had some rural origin and worked in rural areas for longer periods than their contemporaries with an urban background. Laven and Wilkinson (2003) corroborated the findings in South Australia.

The influence of macro-level health system factors has been cited as critical in determining whether health workers stay or leave a post in the rural areas. Araujo and Maeda (2013) reported the significance of health care funding, regulations and the management on the provisions of quality health systems as important factors which influenced health worker's choices for employment and location in rural areas.Rabinowitz et al (2005) showed some direct relationship between the shortage of doctors in rural areas with health policies in the United States of America (USA).They pointed out that despite the fact that 20% of the population resided in rural areas only 9% of physicians were practicing in these areas, a situation that negatively impacted on access to quality of care, and the overall health of individuals living in rural areas (Rabinowitz et al 2005). On the other hand, the implementation of the macro-health policy in Zambia, referred to as the Zambian Health Workers Retention Scheme (ZHWRS) directly influenced the recruitment and retention of doctors in rural and remote districts (Kootet al 2003). They point out that the initiative revolved around the following conditions: offering doctors three (3) year contracts which guaranteed doctors' the contractual obligations, provision of functional basic infrastructure (operating theatre, x-ray department and laboratory facilities); housing subsidies up to a maximum one-off payment of US$3,000.00; monthly hardship allowances dependent upon the remoteness of the area which varied between US$250 - $300 per month; education for up to four children; access to loans of up to 90% of the value of the contract, or US$7,500 - $9,500 which ever was higher; an end-of-contract incentive pay-out of between US$2,000 - $2,600, and priority consideration for post-graduate training. The benefits offered under the scheme were dependent upon satisfactory performance assessment (Koot et al 2003). By the end of 2003, a total of forty (40) doctors had been posted to rural areas and by 2005 the scheme had positively impacted the retention levels of medical doctors in rural areas (Koot et al, 2003). Further, the scheme attracted and retained fifty-four (54) doctors in rural areas and in areas which previously had not been served by doctors (Koot and Martineau 2005). Overall, the policy improved the doctor-population ratio in the respective rural districts with some districts attracting as many as four (4) doctors (Koot and Martineau 2005). By the end of 2005, the Zambian Ministry of Health had managed to attract sixty-six (66) doctors to work in rural areas(Miti, 2006).

Relatedly, national and international trends influence the job mobility of health workers across international boundaries (Araujo and Maeda, 2013). Glassman et al (2008) point out the effects of labour market dynamics such as wage differentials on the choices and decisions by health workers. Similarly, Dussault and Franceschini (2006) and Lehmann et al (2008) note that improving salary levels increase the likelihood of health professionals entering the health care labour market at the global, regional and national levels. In many ways, these trends affect the distribution of health personnel in urban and rural areas in the long-term. In many ways, broader external environment factors such as trends in the global

economy, global health initiatives and regional interventions including standardization of remuneration packages potentially influence the decision-making process of health workers. Araujo and Maeda (2013) points out that national level factors such as political stability, socio-economic climate, infrastructure, communication and rural development programmes significantly influence the attraction and retention of health workers. Further, the external macro environment factors are distorted by asymmetric information, unfavorable labour market regulations, and the failure of health services markets (Araujo and Maeda 2013).

The backcloth to this study is to understand the nature of the factors that are influencing the retention of health workers in rural areas where the majority of the population resides in Zimbabwe (ZimStats, 2013). Secondly, the research is justified in the light of the reported density of 1.6 physicians and 7.2 nurses for every 10 000 people (Zimbabwe Ministry of Health and Child Welfare (MoHCW, 2010) and high vacancy rates for doctors, environmental health workers and laboratory personnel (DFID 2012). Overall, the equitable distribution of health care professionals in rural and remote areas impacts on the Government's ability to make good the entrenched Right to Health Care as enshrined by Section 76 of the Zimbabwean Constitution. Thirdly, the research evidence seeks to assess the implications of the recruitment freeze of health professionals by the Civil Service Commission due to fiscal budgetary constraints (MoHCW, 2010)**.** There is need, therefore, for empirical evidence that will inform on the current challenges and draw the insights for policy makers and stakeholders on interventions for addressing the maldistribution of health care workers in rural areas in Zimbabwe.

METHODOLOGY

A survey design was used in this study to collect information on the factors influencing the retention of health care professionals in rural areas in Zimbabwe. The design was used because of its convenience in capturing the opinions of respondents on a phenomenon (Leedy and Ormond, 2001). The population of the study comprised all trained and qualified health workers and administrators in Makonde District, Mashonaland West during the period July 2015-December 2015.

Thirty-four (18 males and 16 females) health care professionals in employment in Makonde District, Mashonaland West, participated in this study. Theages ranged from under 30 years to over 50 years. All the respondents were qualified and had working experience at the respective rural facility during the study period ranging from less than a year to over ten (10) years. The researchers believed that this purposeful sample was in a position to provide insights on the factors influencing the retention of health workers in rural areas.

A self-administered questionnaire was used to collect data in this study. The questionnaire comprised both closed and open-ended items. Questionnaires are widely used in collecting survey information (Saunders et al., 2009; Bryman and Bell, 2007; Erikson and Kovalainen, 2008). The questionnaires were pilot-tested to check on the relevance and usability of the items. All the questions were found to be clear to participant. Permission to carry out the study was sought from the Provincial Medical District authorities. Participation in the study was voluntary and in order to ensure anonymity participants were asked not to write their names on the questionnaire. In addition, participants were assured that their responses will be kept confidential and used only for the purpose of this study.

Descriptive statistics were used to analyse the data. Frequencies and percentages were used to present the data. The data are presented in Tables 1-2 below.

RESULTS

The findings of this study are presented in Tables 1-2.

Table 1: Demographic Data (n=34)

Characteristics of Respondents	Frequency	Percentage %
Gender		
Male	18	53%
Female	16	47%
Age		
Under 30 years	3	9%
30-40	20	59%
40-50	10	29%
Over 50	1	3%
Marital Status		
Single	4	12%
Married	30	88%
Years at the Rural Facility		
<1 year	3	9%
1-3 years	7	21%
3-5 years	15	44%
5-10 years	5	15%
>10 years	4	12%
Professional Status		
Administrators	4	12%
Nursing staff	27	79%
Support staff	3	9%

Table 1 shows that 53% of the respondents were male, 59% were between 30-40 years old while 44% had based at rural facilities for periods between 3-5 years. In turn, nursing staff comprised 79% of the respondents while (88%) were married.

Table 2: Attracting and Retaining Health Workers in Rural Areas

Factor	Frequency	Percentage
Provision of recreational facilities	30	88%
Childcare: pre-schools and good schools and teachers for children	32	94%
Good accommodation & free amenities (water and electricity)	29	85%
Ensure adequate, safe and appropriate infrastructure	34	100%
Provision of adequate, safe and well maintained equipment and drugs	32	94%
Stimulating career progression of rural health workers	30	88%
Improve financial position of rural health workers	34	100%
Rural allowance	32	94%
Strengthen relationships between communities and rural health workers	16	47%

Table 3 shows the ranking of the factors that influence the retention of health workers as follows: improved financial benefits (100%), rural allowance (94%), childcare facilities (94%), provision of adequate, safe and appropriate medical infrastructure (94%), well-maintained equipment and drugs (94%), stimulating career progression (88%), provision of recreational facilities (88%) and free amenities such as water and electricity (85%). The factor with the lowest frequency is the factor relating to strengthening relationships with local communities (47%).

DISCUSSIONS

We have shown that financial incentives are one of the most important factors influencing the retention of health workers in rural areas. All the respondents (100%) cited financial incentives. These findings are comparable to those reported in a study by Munga et al. (2013) in Tanzania; Koot and Martineau (2005, 2010) in Zambia and Lehmann et al (2008) in low-income countries. Respondents in this study cited both direct and indirect incentives such as rural allowances, retention allowance, housing allowance and loans. Similar studies reporting the significance of financial and non-financial in attracting and retaining health professionals in rural areas include Mbofana and Machatine, (2012) in Mozambique, Araujo and Maeda (2013, Gibbon and Hales (2006) in Australia. Futher, the importance of rural allowances was highlighted Reid (2010) in a study in South Africa and Koot and Martineau (2010) in Zambia. With respect to work-related factors such as provision of adequate, safe and appropriate medical infrastructure, well-maintained equipment and drugs we have shown that this was identified by the majority of respondents in this study. These findings support the empirical evidence by a number of studies (eg., Munga et al, 2013; Adzei and Atinga, 2012; Mbofana and Machatine, 2012; De Villiers, 2004). In Lesotho, the GOL (2010) Health Worker Retention Strategy emphasised the provision of adequate, safe, well-maintained equipment and timely supply of drugs as critical in attracting and retaining health workers in rural areas of Lesotho. This study finding on expectations of stimulating career progressions among rural based health workers support observations by Dieleman, et al., (2009); Kotzee and Couper (2006), and Lehmann et al (2008). While, the issues relating to career progression cited by respondents in this study reiterate the recommendations by WHO (2010) for the need to establish senior posts for rural areas with clear terms of promotion and career development guidelines which enable them to progress in tandem with their contemporaries in urban areas. Factors relating to living conditions were cited as important in this study, in particular, descent accommodation facilities and free amenities, childcare, and recreational facilities underline observations by Freywot et al (2010) who noted the importance of offering government housing to health workers, and provision of free amenities (Dolea, 2009; Lehmann et al 2008). It is poignant to note that the Government of Lesotho (GOL) provides free amenities as part of its retention strategy for health workers in rural areas (GOL 2010). Relatedly the findings in this study on the importance of child care, support observations by Dolea (2009) who reported the significance of providing schools for children as an important incentive for health workers serving in rural areas, in particular for married couples. Further to supporting Hays et al (1997) who highlighted the importance of educational subsidies for the children of health practitioners to attend boarding schools as a strategy to attract and retain health workers in rural areas. Relatedly findings in this study on the significance of basic recreational facilities for health workers in rural areas support observations by Kotzee and Couper (2006) who reported the importance of recreation facilities, provision of entertainment systems, including TV/Video, internet, and sport facilities in areas that are under-served that were found served to attract and retain health workers in rural areas (GOL 2010). The significance for coherent strategies for retaining health workers is highlighted by the impact of the Zambian Health Worker Retention Strategy in attracting and retaining health workers in rural areas reported by Koot and Martineau (2005).It is, therefore, imperative for governments and stakeholders to review the interventions focused on the retention of health workers in order to redress the inequitable distribution of health workers in rural areas (Wilson, 2009).

CONCLUSIONS

The study findings highlight the need for proactive measures, interventions and strategies that address pertinent factors that are important to health professionals at varies stage of their careers in order to attract and retain them in rural areas. There is need, therefore, for the government and key stakeholders to craft and implement strategies that address the critical factors in tandem with the employee career and socio-economic expectations. Broadly, there is need for consultations with the relevant health professionals' representatives and best practice in formulating policies and intervention strategies that redress the inequitable distribution in rural areas. Overall, the availability of health care professionals in rural areas where the majority of the population reside is critical for the attainment of equity in health care provision, human capital development and attainment global MDGs & SDGs for health for all targets and national human capital development goals espoused in the national economic development strategy.

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