

Career development and the retention of health workers in rural dispensaries in Chamwino District, Tanzania

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Abstract

Career development is crucial for employee retention, as it enhances skills, knowledge, and expertise, ultimately leading to increased job satisfaction and enhanced organizational commitment among employees. However, the retention of health workers in rural areas remains a recurring problem that significantly impairs the quality and availability of healthcare services. This study examines the influence of career development on the retention of healthcare workers in rural dispensaries in Tanzania. Specifically, it assesses the awareness of career development opportunities for retention of health workers in rural dispensaries in Chamwino District, Tanzania. A mixed-method approach, involving both quantitative and qualitative approaches, was employed. It also utilizes a cross-sectional design to collect data from healthcare workers in rural dispensaries. The study employed interviews and survey methods for data collection, and subsequently used content analysis, descriptive statistics, and multiple linear regression analysis. The findings revealed significant awareness of career development opportunities among health workers in the study area. The study concludes that health workers in the study area are aware of career development opportunities available; however, it highlights the importance of strategizing ongoing communication and information-sharing related to career development opportunities. It contributes to the knowledge that awareness of career development opportunities significantly helps to retaining rural health workers. The study recommends the establishment of online platforms for easy sharing and access to staff career development opportunities.

Keywords: *career advancement, employees retention, rural health workers, healthcare services*

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1. Introduction

Globally, health worker retention in rural areas has remained an ongoing challenge, as most of these areas continue to experience persistent shortages of the healthcare workforce. The shortage of healthcare workers continues to be a critical barrier to achieving universal health coverage, especially in underdeveloped areas (World Health Organization, 2021). Specifically, rural areas face inadequate infrastructure, insufficient professional support, limited access to resources, and a lack of career development opportunities, factors that are considered a worldwide concern.

In developed countries such as Canada and the United States, the retention of rural healthcare workers remains a significant challenge. Despite these countries' advanced healthcare systems, there is still a struggle to retain health workers in rural areas. For example, the United States continues to face difficulties in retaining health workers in rural areas where career development opportunities are limited (Weichelt et al., 2025). Such situations make rural health workers feel professionally isolated. Consequently, this condition underscores the need to motivate rural staff through training and further studies to support their career growth. Scholars have shown that factors such as inadequate infrastructure, limited resources, and social isolation significantly influence retention decisions (Twineamatsiko et al., 2023; Kiptulon et al., 2025). Therefore, improving the retention of rural health workers requires additional efforts, including the provision of career development opportunities such as training and further studies to motivate staff to remain in their positions (Augossy et al., 2024; Bihu & Dachi, 2025).

The African region is not exempt from the challenge of retaining health workers in rural areas due to obstacles such as poor infrastructure, economic challenges, and limited professional development opportunities. For instance, Okoroafor et al. (2022) noted that underserved rural areas face challenges in retaining health workers, a situation that contributes to poor healthcare services in these areas. Similarly, Tarimo and Swai (2024) reported that inadequate professional networking opportunities increase staff turnover rates, as staff are not motivated to stay. In addressing this situation, countries such as Kenya and Uganda have adopted new strategies to retain health workers. These include the establishment of incentive policies to support the management of rural hardship environments. However, these strategies have not been fully successful due to inconsistent implementation and insufficient financial resources.

Considering that rural health worker retention is a global concern, Tanzania is also experiencing a similar challenge. Data show an increased turnover rate among health workers in rural settings due to inadequate rural healthcare facilities and limited career growth opportunities (MoH, 2023). To address this challenge, the Government of the United Republic of Tanzania has introduced strategies to retain rural health workers, including financial incentive schemes and rural placement schemes. However, these strategies have not adequately addressed the retention problem (MoH, 2023). Studies have found that a lack of awareness regarding career opportunities, such as training programs and career guidance, negatively impedes career development (Hendriati et al., 2024; Augossy et al., 2024; Bihu & Dachi, 2025). From this perspective, it is important to disseminate information regarding available professional opportunities to enhance staff retention, especially in rural contexts such as Tanzania.

To enhance career growth and staff retention in rural areas, it is necessary to provide accessible career development opportunities. In recognition of this need, the Government of Tanzania has introduced policies such as the Health Sector Strategic Plan V (2021–2026) and the National Health Workforce Strategy (2020–2024) to support rural health staff. The intention is to address the challenges faced by rural health workers in the country. However, these efforts have not yielded the desired results because many workers are unaware of the career opportunities available in rural areas and therefore continue to feel isolated in their career growth (MoH, 2023).

Similarly, Chamwino District Council experiences health worker retention issues due to its rural location in Tanzania. Statistics show that the district faces high turnover of health workers due to factors related to limited career advancement opportunities and disadvantaged rural working conditions (Kiiza, 2020). Such conditions make rural workers feel professionally isolated, thereby discouraging them from remaining in their positions. The situation is further exacerbated by the limited networking opportunities that disconnect rural health workers from their urban counterparts. Despite the establishment of supportive policies, such as the Health Sector Strategic Plan V (2021–2026), their implementation in Chamwino District remains inconsistent and slow. The Government of Tanzania, through the Employment and Labour Relations Act of 2004, emphasizes the need for each sector to retain workers by improving working conditions and providing career development and networking opportunities. Although the government has implemented strategies to address staff retention, career networking

opportunities remain insufficiently addressed among rural health workers. There are still inadequate career advancement opportunities, which impede the retention of rural workers in these areas (Sirili & Simba, 2021).

Despite efforts to improve the situation of rural health workers in Tanzania, there is limited research examining the contribution of career development opportunities to retaining rural health workers. Studies such as Sirili and Simba (2021) and Twineamatsiko et al. (2023) have focused primarily on financial issues and healthcare infrastructure, often emphasizing urban settings while giving less attention to career development opportunities in enhancing retention in rural dispensaries. This suggests that rural settings remain underexplored. Furthermore, existing studies have inadequately addressed career development within the context of rural health worker retention. Statistics indicate a low retention rate of rural health workers in Tanzania, standing at 45% after two years of employment, which is lower than the recommended global average of 60–70% (Sirili & Simba, 2021; MOHCDGEC, 2021). If the challenge of rural health worker retention persists, it will negatively affect healthcare service delivery in these areas. Individuals with health problems may receive inadequate medical services. For instance, health workers who remain in rural health centers may become overworked and dissatisfied, thereby compromising the quality of rural healthcare services (Chikanda et al., 2023; Babawarun et al., 2024).

This study assesses the influence of career development on the retention of health workers in rural dispensaries in Chamwino District, Tanzania. Specifically, it examines awareness of career development opportunities and their role in retaining health workers in rural dispensaries. The study aims to provide insight into how awareness of career development opportunities can enhance health worker retention in rural areas and guide policymakers and healthcare administrators in formulating strategies to strengthen workforce stability in rural health settings.

2. Literature Review

2.1. Career Development Opportunities

In understanding career development opportunities, various concepts related to the study, such as career development and staff retention, emerge. For example, Chaaban et al. (2023, p.1) conceptualize career development as a process that involves procedures such as

“recruitment, preparation, induction, and continuous professional development.” These procedures serve as stepping stones that enable individuals to acquire the knowledge, skills, and experience needed to succeed in their profession. From a healthcare perspective, career development includes further studies, training, seminars, workshops, and career guidance opportunities (WHO, 2021).

This study defines career development as a process of self-assessment through which individuals understand their strengths, interests, and values while exploring various career options and setting realistic goals. It also involves developing workers’ careers by promoting professional growth, continuous training, and educational opportunities to adapt to the changing demands of the industry. Career development opportunities represent an essential first step in enabling professionals to progress in their careers, improve service delivery, and enhance job performance.

Career development opportunities, as noted by Gitonga et al. (2024), include formal training programs, mentoring, coaching, job rotation, and clear paths for promotion. These opportunities not only enhance employees’ skills and competencies but also signal that the organization is invested in their long-term success and career progression. Staff often take advantage of career development opportunities to grow in their careers; however, findings remain inconsistent. For instance, it has been argued that if employees are not promoted or given opportunities to utilize their newly acquired skills and abilities, training may become a pull factor, creating dissatisfaction among staff (Allen et al., 2017). Such situations can trigger turnover among potential and existing staff. Nevertheless, it is important to note that career development opportunities generally boost engagement and commitment among staff, including health workers.

2.2. Retention of Health Workers in Rural Dispensaries

Retention of health workers refers to the efforts and strategies employed to encourage healthcare professionals to remain in their current positions or within the healthcare workforce (Völker & Kanchanachitra, 2021). Employee retention is a voluntary initiative by an organization to create an environment that engages employees for the long term. Long et al. (2023) perceive retention as the initiatives taken by management to prevent employees from leaving the organization. In the context of this study, retention refers to the ability of rural health workers to remain in their positions for a minimum of two years. It encompasses both

the individual decision of health workers to stay and the organizational factors that influence their ability to do so. This definition underscores the need to build a sustainable healthcare workforce in non-urban areas that experience persistent staff turnover challenges.

Various studies have addressed the relationship between career development opportunities and health worker retention, focusing on experiences in specific African contexts. For instance, in Ethiopia, Asres (2020) and Asegedom and Weldemariyam (2024) revealed limited awareness of career development opportunities among staff, a situation that calls for strategic career planning to enhance staff retention. The studies recommended establishing structured training and mentorship programs to improve retention and job satisfaction among rural health workers. In Ghana, a study revealed the absence of a clear career development guide, which negatively affects motivation and retention rates among rural health workers (Bonenberger et al., 2014). To improve staff retention, the study recommended the development of a well-planned and visionary career development framework. In Tanzania, researchers found minimal awareness of available career advancement opportunities, such as training and mentorship programs (Balozi et al., 2018). Emphasis was placed on the continued dissemination of information regarding training and mentorship opportunities for health staff working in rural areas. Furthermore, scholars have found that limited funding and poor rural infrastructure constrain career growth opportunities in Kenya and Uganda (McGivern et al., 2023). The study emphasized the need for collaboration between the government and the private sector in planning and establishing opportunities for career advancement.

2.3. Effect of Career Development on Health Worker Retention

For a long time, organizations across various sectors have strived to retain employees, and career development is considered one of the key factors that positively influence worker retention. Studies show that employees feel more motivated when given career development opportunities, thereby increasing the likelihood that they will remain longer with the same employer. For example, Junejo et al. (2025) noted positive effects on employee performance after attending training, as employees feel more motivated. In the context of this study, this implies the need to address career development issues to enhance the retention of health workers. Tarimo and Swai (2024) also noted that high staff turnover rates due to inadequate professional networking opportunities require special attention and strategic career development initiatives to retain staff, including health workers. Scholars have further

observed that career development increases staff motivation and job satisfaction (Augossy et al., 2024), builds stronger staff commitment to their institutions (Bihu & Dachi, 2025), enhances employee engagement (Junejo et al., 2025), and improves job performance capacity (Sendawula et al., 2018). Generally, all these factors contribute to achieving staff retention within institutions, including health organizations.

2.4. The Perceived Organizational Support Theory

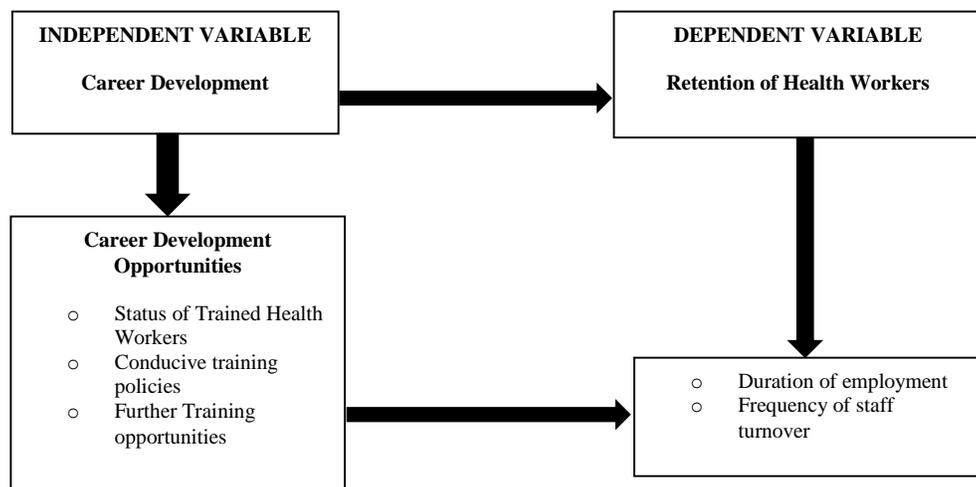
To provide a theoretical foundation for this study, the researchers applied the Perceived Organizational Support Theory developed by Eisenberger et al. (1986). The theory posits that individuals are more likely to remain in an organization when they perceive that they are supported. It emphasizes that individuals who feel well-treated and whose commitments and contributions are valued are more likely to remain longer in the organization. Such organizational support increases staff commitment and improves work attendance (Eisenberger et al., 1986).

From the perspective of this study, the theory helps explain that organizational support is crucial in influencing staff to remain at their workstations for longer periods. For example, offering opportunities such as training, further studies, and other professional development initiatives, including career growth awareness, can increase the likelihood of staff retention. Thus, this theory provides a foundation for understanding the relationship between career development and staff retention in the study area.

2.5. Conceptual Framework

The conceptual framework of this study explains the relationship between the independent and dependent variables, where career development serves as the independent variable and staff retention as the dependent variable. The independent variable is specifically described in terms of career development opportunities and is measured by indicators such as the status of trained health workers, the presence of conducive training policies, and the availability of further training opportunities to advance staff careers and develop skills. These indicators are assumed to enhance staff retention as the dependent variable.

Staff retention, as the dependent variable, is measured using indicators such as duration of employment and staff turnover frequency. The conceptual framework therefore assumes the existence of a relationship between career development and staff retention.

Figure 1*Conceptual framework**Source:* researcher's own idea

3. Methodology

3.1. Research Design

This research was designed using a mixed-methods approach involving both quantitative and qualitative techniques. It employed a cross-sectional research design to allow the collection of a wide range of data from rural health workers at a single point in time.

Quantitative data were collected through a survey method. A total of 127 self-administered questionnaires were distributed to health workers in rural dispensaries aged 18 to 60 years and above. The majority of respondents were within the 18–35 age range (46.5%). The questionnaires were used to gather data on staff awareness of career development opportunities and their influence on retention in rural dispensaries.

Qualitative data were collected through interviews with key informants, including District Medical Officers, Human Resource Officers, heads of departments, dispensary coordinators, and experienced health workers, to obtain in-depth insights into career development opportunities and staff retention. Key informants were selected based on their positions and administrative experience in handling human resource issues within the study area.

3.2. Study Area

The study was conducted in Chamwino District, a rural district in Tanzania where the majority of residents live in poverty and experience staff shortages across various sectors, including the health sector. Chamwino District was selected due to a healthcare workforce shortage of approximately 66%, which is the highest among all districts in the Dodoma Region (Yusuph et al., 2024). This significant shortage justifies the selection of Chamwino as an appropriate location for investigating the influence of career development on the retention of health workers in rural dispensaries in Dodoma, Tanzania. The study adopted a mixed-methods approach, combining surveys and interviews as quantitative and qualitative methods, respectively.

3.3. Study Population and Sampling

The target population comprised all health workers in rural dispensaries within Chamwino District Council. A total of 185 health workers were identified from nine dispensaries with high staff turnover rates: Ikowa, Msanga, Fufu, Hanet, Chilonwa, Mvumi, Buigiri, Chamwino, and Manchali (URT, 2023). To ensure representativeness and reliability of the findings, a sample size of 127 participants was determined using Yamane's formula (Yamane, 1967). Using a margin of error of 0.05 (5%) and a population size of 185, the required sample size for this study was rounded to 127 participants.

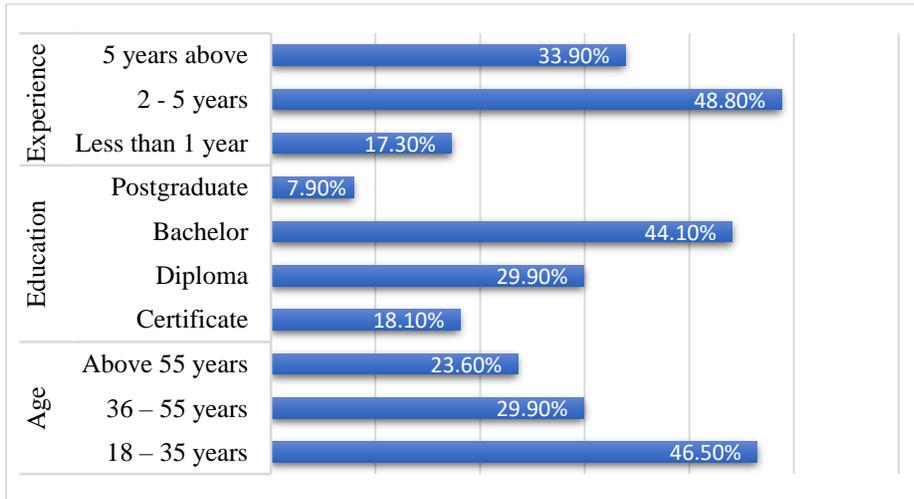
Simple random sampling was used to select rural health workers for the survey, while purposive sampling was applied to select key informants. Questionnaires were administered to health workers to collect data regarding staff awareness of career development opportunities and their influence on retention in rural dispensaries. After completing the survey, qualitative data were collected through interviews with key informants to obtain in-depth insights and a deeper understanding of career development opportunities for staff retention.

As shown in Figure 2, the respondents' profile on the age distribution show that the majority of participants fall within the 18 to 35 years range (46.5%), with the lowest representation from individuals above 55 years (23.6%). The age range is where most organisations recruit fresh, young, and energetic staff, who are starting to build their career and looking forward to growing, which implies that demographically, in most of the developing countries, youth dominate the workforce composition. In fact, in 2023, the youth employment-

to-population ratio in the Sub-Saharan Africa Subregion was 40.5% which was above the global average of 35% (Horne, 2024).

Figure 2

Respondents' profile



Source: Field Data (2024)

In terms of education levels, most participants have attained a bachelor's degree (44%), while only a small percentage hold a postgraduate degree (7.9%). This implies minimal qualifications required to enter the job market, particularly for healthcare workers, and may reflect the early career requirements in which graduates secure employment easily than non-graduates. Mpangeva and De Braine (2024) note that graduate programmes, in most colleges and universities, are structured well enough to offer the development of skills, technical capability, and provide both intrapersonal and interpersonal skills to prepare youths professionally. In Tanzanian colleges and universities, there is a need to review the curricular to enhance skills and competence that aligns with the employer needs (Koboli et al., 2024; Mtallo & Churk, 2025).

Regarding working experience, the majority of participants (48.8%) have 2 to 5 years of experience, whereas a smaller portion (17.3%) of health workers have less than 1 year of experience. This implies that staff use their first few years to build their career in terms of gaining skills and experience in their profession; thereafter, they move to a better location, especially urban areas, or to look for better-paying jobs when they feel not valued enough. It also implies limited growth, thus influencing shifting location and expanding career profile.

According to Augossy et al. (2024), recognizing and valuing employees' performance through various means is essential for maintaining their commitment and continued dedication to their duties.

3.4. Reliability and Validity of Statistics

The reliability of the study was measured using Cronbach's alpha to assess the internal consistency of the scales or questionnaires used to measure various factors influencing retention among health workers. Cronbach's alpha values of 0.876 and 0.802 (both above the acceptable threshold of 0.70) indicate that the items in the scales consistently measure the same underlying construct, thereby enhancing the reliability of the instrument (St Clair-Thompson et al., 2015), as shown in Table 1.

Table 1

Reliability test results

Variable	Cronbach Alpha	No of Items
Awareness of Career Development Opportunities	0.876	3
Networking Opportunities	0.802	4

Furthermore, descriptive and inferential statistics were both used to summarize the data. A mathematical equation of the multiple linear regression equation that was utilized: $Y = \beta_0 + \beta_1 X_1 + e$. Where: Y= Dependent Variable (retention), β = Beta coefficient, X_1 = Awareness, β_1 = Regression coefficient for X_1 , and e = error term. Qualitative data obtained through semi-structured interview were analysed through the use of content analysis.

3.5. Ethical Considerations

The study adhered to all ethical requirements to protect and respect participants' rights and welfare. At first, the study sought ethical approval from the College of Business Education. Then, the study sought research permission from the Chamwino District Council, where the data was collected. However, before data collection, researchers explained the purpose of the study, and were given the right to withdraw from the study at any time they wished to do so. Moreover, to ensure confidentiality, data was handled with integrity by hiding the real names of participants. Also, the authors ensured data accuracy and honesty in reporting findings.

4. Findings and Discussion

In investigating awareness of career development opportunities among health workers in rural dispensaries in Chamwino District, the study employed descriptive statistical analysis. Indicators such as the status of trained health workers, the availability of conducive training policies and programs for staff retention, and opportunities for further studies to advance careers were analyzed. This approach enabled the examination of variations in awareness and their implications for retention outcomes.

When assessing the number of health workers trained in Chamwino District, the findings revealed that respondents were aware that the “organization provides adequate training opportunities yearly,” which recorded the highest mean score of 4.14 (SD = 0.784). In contrast, the statement that “the organization provides information on critical areas that require additional training for health workers” recorded the lowest mean score of 3.13 (SD = 1.416), as shown in Table 2.

Table 2

Number of health workers trained each year (n = 127)

Statement	Min	Max	Mean	Std. Deviation
The organization provides adequate training opportunities each year	2	5	4.14	.784
The organization provides information on the number of health workers to be sent for further studies every year.	1	5	3.91	1.244
The organization provides information on critical areas that require additional training for health workers	1	5	3.13	1.416
The organization provides annual training that meet the healthcare demands effectively	1	5	3.50	1.315
The organization shares the challenge and ways to improve the number of health workers to be trained every year	1	5	3.76	1.226

Source: Field Data (2024)

In assessing the status of health workers trained each year, the findings revealed a high mean score for the statement, “The organization provides adequate training opportunities each year,” with a mean of 4.14 for training initiatives. This finding reflects a positive perception among rural dispensaries regarding their responsibility to provide career development opportunities and suggests a potential link to improved retention rates among health workers

in the study area. This result aligns with recent research emphasizing the importance of training programs in fostering job satisfaction and professional growth, crucial factors in retaining health workers in underserved areas (Mampuru et al., 2024; Kisasilla & Mutarubukwa, 2024). Furthermore, Asamani et al. (2024) emphasize that career advancement opportunities are a key factor in encouraging health workers to remain in rural areas, although robust training programs alone are not sufficient. Training programs that are not adequately structured to meet the needs of health workers may compromise both the effectiveness of healthcare service delivery and staff retention. To address this issue, Chen et al. (2020) advise that training programs should be designed in collaboration with relevant stakeholders to ensure they meet key professional requirements. This approach would help provide relevant training that equips health workers with updated skills. Nevertheless, career development training is not the sole solution to staff retention; rather, it is one contributing factor among many. Therefore, there is a need for a comprehensive analysis of strategies to retain health workers in rural areas.

Additionally, findings from the key informant interviews revealed that health workers receive training opportunities annually in accordance with institutional guidelines, as illustrated by the key informant:

“For example, our department has set clear career development opportunities for all health staff in the dispensary. Regular training programs, workshops, and seminars are available to enhance our career skills and career progression. This practice encourages most of us because it increases our commitment to continuous learning and development, thus helping to positively impact our ability to provide quality healthcare services.” (Interviewee No 02, June 2024)

The above key informant findings complement the perceived effectiveness of the institution in providing awareness and equitable training opportunities among health workers. As highlighted by the interviewee (Interview No. 02, June 2024), the availability of regular training programs enhances staff awareness of existing career development opportunities, thereby improving skills and supporting career progression. This practice is of paramount importance in promoting continuous learning, maintaining high standards of healthcare services, and supporting staff retention.

This study reveals that structured training frameworks are essential in motivating health workers; however, they should not be regarded as the sole solution for improving health worker retention. This apparent contradiction suggests that while training programs are important in

motivating staff, they are insufficient to address the complex challenges associated with rural health worker retention. Similar findings by Kisasilla and Mutarubukwa (2024) indicate that creating awareness, together with providing access to career development opportunities, is crucial in promoting job satisfaction and staff retention. These findings suggest that offering career development plans and training programs is essential. However, career development awareness alone is insufficient to address staff retention challenges comprehensively. While both quantitative and qualitative findings from this study demonstrate that the establishment and implementation of training policies, as well as the provision of training opportunities, positively influence the retention of health workers in Chamwino, it is evident that additional measures are necessary to enhance rural healthcare retention.

There is a need to examine broader institutional policies that promote improved rural working conditions, equitable resource allocation, and structured career advancement opportunities to ensure the long-term retention of health workers in rural areas. Furthermore, another key informant emphasized the status of trained health workers:

“In the department where I work, there is an active practice of structured career development opportunities, whereas a number of health workers are planned to attend training programs yearly. The department is committed to equipping our team with as much knowledge and skills as possible. At least 1-3 staff attend either training, workshop, or seminar, a commitment that influences professional development, hence contributes to the improvement of healthcare services in the institution.” (Interviewee No 01, June 2024)

The findings reveal that training efforts help the team remain updated with contemporary professional knowledge and skills, which contributes to staff motivation, enhanced professional capabilities, and improved healthcare services in the study area. However, these findings also imply that institutions need to think beyond training opportunities alone as a strategy for staff retention. For instance, to boost employee commitment and job satisfaction, Augossy et al. (2024, p.115) noted that “the organisation should enhance its recognition programs by incorporating awards, appreciation, and public acknowledgements, such as during Workers’ Day ceremonies,” a strategy that could also be adopted in rural dispensaries. The practice of selecting a few individuals annually for advanced training aligns with the findings of Twineamatsiko et al. (2023) and Mampuru et al. (2024), who highlighted the importance of continuous training programs in improving service delivery and retaining

health workers. Continuous training enhances workforce competence and confidence in performing job roles, leading to better outcomes. As observed in the study area, the implementation of a training action plan serves as a strategic approach to skill enhancement and retention in Chamwino District. Such an approach is crucial for sustaining institutional career development initiatives, which ultimately contribute to improved healthcare services and increased staff retention in the study area.

Table 3

Conducive training policies and programs for staff retention (n = 127)

Statement	Min	Max	Mean	Std. Deviation
The organization provides clear understanding of the training policies available for health workers	1	5	4.15	.960
The organization provides awareness of the present career development opportunities	1	5	3.78	1.007
Training programs are very helpful in improving skills to provide healthcare services	2	5	4.3150	.76325
I have participated in training workshops related to healthcare in the past three years	1	5	4.2441	.91475
I am satisfied with the present training policy and programs	2.00	5.00	4.3386	.90168

Source: Field Data (2024)

When assessing staff awareness of conducive training policies available for retaining health workers in rural dispensaries in Chamwino District, the findings indicate that health workers reported being “satisfied with the present training policies” at their workstations, with the highest mean score of 4.3386 (SD = 0.90168). This was followed by the statement that “training programs are very helpful in improving skills for providing healthcare services,” which recorded a mean score of 4.315. Additionally, the statement “I have participated in training sessions or workshops related to healthcare in the past three years” recorded a mean score of 4.244. In comparison, the lowest mean score of 3.78 (SD = 1.007) reflected relatively lower agreement with the statement that “the organization provides awareness of present career development opportunities,” as shown in Table 3.

The findings reveal that health workers are aware of and generally satisfied with the training policy, as indicated by the high mean score (4.3386) for the statement, “I am satisfied with the present training policy.” This reflects positively on the current training policies and

initiatives, suggesting that health workers are aware of these policies and perceive them as effective in enhancing job satisfaction and professional development in the study area. However, awareness of and satisfaction with the training policy do not necessarily guarantee that health workers will remain in rural dispensaries. The statement of the problem highlights persistent retention challenges in rural areas, suggesting that factors beyond conducive training policies and programs play a significant role in health workers' decisions to stay. While structured training opportunities and clear career development pathways are instrumental in motivating health workers, improving retention rates requires a more comprehensive approach.

Scholars have emphasized the importance of career awareness and access to career development opportunities in enhancing job satisfaction and staff retention (Augossy et al., 2024; Kisasilla & Mutarubukwa, 2024). These findings point to the need to complement training programs by addressing broader issues such as poor rural working conditions, inadequate resources, and limited career advancement opportunities.

Regarding the retention of health workers in the study area, both quantitative and qualitative findings demonstrate the importance of providing intensive and equitable training opportunities. Nevertheless, additional measures are required. For instance, institutional policies that promote continuous learning and structured career development should be accompanied by improvements in the overall working environment, including addressing key rural challenges, as a strategy to ensure the long-term retention of health workers. Additionally, interview findings indicate that the existing training policies and programs provide a supportive environment for career development and skill enhancement, as illustrated by the key informant:

“Normally, a training opportunity is not a secret information; the annual roster is prepared and shared among all. Usually, the organization communicates the available training programs through staff meetings to ensure that the information reaches all. This approach creates a conducive environment for career development among staff.” (Interviewee No 03, March 2024)

The findings from key informants indicate that health workers are aware that the existing training policy is sufficiently conducive to supporting career development and skill enrichment among health workers. For instance, Interviewee No. 03 (March 2024) points out the existence of a structured approach to career advancement, which prioritizes specialized training in critical areas. This structured career plan, which offers special training

opportunities, reflects the presence of a conducive environment in which health workers can acquire the necessary career skills to support continuous learning and development, particularly among rural health workers.

These findings are consistent with those of Attah et al. (2023) and Olaniyan et al. (2025), who found that clear communication and structured career development plans improve job satisfaction and enhance staff retention. The emphasis on offering special training opportunities underscores the need for targeted interventions to address required skill gaps, as Mampuru et al. (2024) highlight the positive impact of tailored training on motivating health workers' performance. Importantly, institutions should consider offering training programmes that are relevant to professional capacity building. Additionally, Kadiri-Eneh et al. (2021) emphasize the importance of customized training programs, as these lead to improved competency and a greater sense of professional fulfillment among health workers. Furthermore, Chikanda et al. (2023) reveal that sharing updates with trainees improves engagement and leads to better learning outcomes. This practice of offering customized training motivates learning and builds competence and confidence among staff.

In support of the descriptive findings, the key informant interviews further reveal the importance of well-structured and effectively communicated training programs and policies for the retention of health workers. Thus, fostering such a supportive environment for career and skill development promotes professional growth and enhances the quality of healthcare services in rural areas. Additionally, another respondent added that,

“We have internal policies and training programs established to support career development and skill enhancement. We transparently communicate this information through management and staff meetings to publicize training opportunities to avoid complaints and allow staff become satisfied with the shared training roster.” (Interviewee No 04, March 2024)

The finding reveals the organization's compliance in supporting career growth through career skills development. It emphasizes the importance of two-way communication in creating career growth opportunities. This finding implies the need for organizations to establish a platform for openly sharing career development plans in order to influence staff retention. With effective communication, all health workers become aware of the available career development opportunities, while feedback mechanisms help them understand their status and prepare to grasp these opportunities.

This finding is consistent with the study by Bayu et al. (2024), which found that effective communication between health workers and supervisors increases job satisfaction and reduces turnover rates. Additionally, Hendriati et al. (2024) highlighted the need for consistent feedback in retaining staff by making them feel valued and supported. These qualitative findings underscore the necessity for transparent communication and regular feedback concerning career development and skill enhancement among health workers in the study area. Thus, this practice requires fostering a culture that provides continuous learning opportunities to enhance healthcare service delivery. Maintaining these training practices ultimately improves job satisfaction and staff retention.

Table 4

Further training opportunities (n = 127)

Statement	Min	Max	Mean	Std. Deviation
The organization provides awareness on advancing careers and developing skills to health workers	1.00	5.00	3.9213	.93100
The organization provides adequate training with the necessary skills to perform job effectively	1.00	5.00	4.4173	.88588
I have participated in skill development programs over the past three years	1.00	5.00	3.9055	.86770
The organization provides full support in terms of career development	2.00	5.00	4.3228	.78560
The organization shares the challenge towards the implementation of training programs	1.00	5.00	4.2520	.90824

Source: Field Data (2024)

In assessing awareness of further training opportunities, the findings in Table 4 revealed that health workers in the study area are aware of and have opportunities to advance their careers and develop their skills. The highest mean score was recorded for the statement, “The organization provides adequate training with the necessary skills to perform the job effectively,” which scored 4.4173 (SD = 0.88588). Additionally, the statement, “The organization provides full support in career development,” recorded a mean score of 4.3228 (SD = 0.78560). This was followed by the statement, “The organization shares challenges related to the implementation of the training program,” which scored a mean of 4.2520 (SD = 0.90824). In comparison, the lowest mean score, indicating a moderate level of awareness, was

recorded for the statement, “The organization provides awareness on advancing careers and developing skills for health workers,” which scored 3.9213 (SD = 0.93100).

In assessing awareness of career advancement and skill development for staff retention, a high score was observed for the effectiveness of training programs, as indicated by the statement, “The organization provides adequate training with the necessary skills to perform your job effectively,” which recorded a mean of 4.4173. This demonstrates that the current initiatives are successful in equipping health workers with essential skills, which likely contributes to increased job satisfaction and retention. Similarly, Augossy et al. (2024) and Kiptulon et al. (2025) found that training initiatives aimed at enhancing professional capabilities significantly improve worker retention rates. It is important to understand that when an institution offers adequate and relevant professional training opportunities, it increases the likelihood that staff will choose to remain longer in their work stations.

The finding shows that “the organization provides full support in career development,” which scored a mean of 4.3228 (SD = 0.78560), implies readiness to support career growth and a willingness to enhance professional capacity building among staff to improve service delivery. This finding aligns with Organizational Support Theory, which suggests that staff feel more valued when the organization supports them, thereby increasing their decision to remain in their work stations (Eisenberger et al., 1986). A similar finding noted that when staff receive few opportunities for career development and minimal institutional support throughout their career trajectory, they are more likely to move to more promising jobs (Chaaban et al., 2023). Therefore, having an adequate resource plan to support career growth and making this information available to staff is a key strategy for enhancing job satisfaction and staff retention.

Furthermore, the finding that “the organization shares the challenges related to the implementation of training programs,” which scored 4.2520 (SD = 0.90824), implies openness and transparency in career development opportunities within the institution. Similarly, Bihu and Dachi (2025) argue that staff need to be aware of their career path expectations in order to build trust and develop realistic career aspirations, including the positions they can aspire to attain. This practice motivates staff to build trust in their career progression. Additionally, Erasmus (2020) identified a lack of openness regarding career paths as a significant challenge for staff retention in South Africa. This implies the need for management to be realistic about career advancement prospects and to share potential career challenges in order to provide

flexibility for staff decision-making regarding their continued employment within the institution.

However, the descriptive finding indicates a relatively low mean of 3.9213 (SD = 0.93100) for the statement, “The organization provides awareness on advancing careers and developing skills to health workers.” This suggests that health workers are not fully informed about the available opportunities for career advancement and skill development. It also implies that the organization provides limited opportunities for staff to become familiar with their career paths, a situation that may impede effective career planning. Openness in sharing information regarding career development opportunities should therefore be regarded as a powerful strategy for career growth and staff retention. Bayu et al. (2024) highlighted the need for effective communication and information sharing among health workers to enable them to take advantage of career development opportunities. While it is noted that Chamwino District excels in delivering effective training programs that equip health workers with the necessary skills, there is still a need to improve awareness of these opportunities. Strengthening communication and awareness about career development opportunities can further enhance job satisfaction and retention rates. Therefore, there remains a need to improve the communication and dissemination of information regarding these career opportunities.

Table 5

Coefficient regression results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.678	.370		1.832	.069	-.054	1.411
Awareness	.199	.075	.192	2.638	.009	.050	.348
Role of Networking Opportunities	.470	.065	.509	7.258	.000	.342	.598

a. Dependent Variable: Retention of Health Workers

The multiple linear regression model indicates significant predictors influencing health worker retention in rural dispensaries in Chamwino District. The constant term, representing the estimated intercept when all predictors are zero, is not statistically significant (B = 0.678, SE = 0.370, t = 1.832, p = 0.069). Among the predictors, Awareness of Career Development Opportunities shows a positive and significant effect on retention (B = 0.199, SE = 0.075, Beta

= 0.192, $t = 2.638$, $p = 0.009$), suggesting that increased awareness is associated with higher retention rates. The 95% confidence intervals for the significant predictor exclude zero, confirming the statistical significance of this coefficient. Overall, the regression results highlight the unique and positive contribution of awareness of career development opportunities to health worker retention in the studied context.

The finding demonstrates that awareness of career development opportunities has a significantly positive impact on the staff retention rate ($\beta = 0.119$, $p = 0.009$). This implies that a one-unit increase in awareness of career development opportunities increases the staff retention rate by 19.9%. This finding is consistent with Augossy et al. (2024, p. 116), who significantly noted that “providing employees with various career development opportunities helps enhance job retention.” They further advocate that “if employees perceive that they have opportunities for career advancement, they will have a stronger intention to stay.” This evidence suggests the need to create greater awareness of career development opportunities in order to encourage staff to remain longer in their job positions.

5. Conclusion and Recommendations

The study assessed the influence of career development on the retention of health workers in rural dispensaries in Chamwino District, Tanzania. It concluded that health workers in the study area are aware of the available career development opportunities; however, it highlights the importance of strengthening ongoing communication and information-sharing strategies related to these opportunities. The study emphasizes the necessity of maintaining consistent awareness of career development initiatives among healthcare workers in order to promote a stable workforce in rural areas. It also concludes that although a significant number of health workers have received training, there are limited tailored training programmes designed to meet the specific professional requirements within the study area.

The study recommends strengthening information-sharing strategies regarding planned training sessions, workshops, seminars, and outreach programs to better inform health workers about available career advancement opportunities, including professional training, mentorship programs, and skill development workshops. It also recommends establishing online platforms to facilitate easy sharing of and access to career development opportunities for staff. By fostering continuous learning and professional growth initiatives among health workers, job satisfaction can be enhanced and retention rates in rural settings can be increased. Additionally,

the study recommends implementing participatory and tailored training programmes to better address the professional requirements necessary for health worker retention.

This study focused on only one district in Tanzania. It could be extended to other districts to explore disparities in challenges across rural dispensaries and to propose more comprehensive and context-specific solutions for retaining health workers in rural areas of Tanzania.

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