



ORIGINAL ARTICLE

Assessing the Job Satisfaction of Some Physicians in Rwanda and the Associated Factors

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ABSTRACT

Background: Previous studies have shown poor job satisfaction is a major reason causing physicians to leave their jobs. Poor job satisfaction among physicians can also affect patient health outcomes and discourage young students from pursuing a medical career. This study assessed the level of physician job satisfaction in Rwanda and the associated factors.

Methods: This was a descriptive cross-sectional study. An online survey was conducted to assess the level of physician job satisfaction using the Physician Worklife Survey (PWS) tool. Our sample size was 189. The tool has 41 Likert scale 5-point statements divided into ten domains. Job satisfaction was classified as low if the average survey score was less than 3. Ethical approval was obtained from the University of Global Health Equity IRB committee (Reference no: 0156).

Results: Out of 100 respondents who filled the tool, 50% reported poor job satisfaction. The four domains with the most reported poor satisfaction were related to low income (87.6%), lack of personal time (76.8%), dissatisfaction with work (75.5%), and lack of resources at the workplace (74.5%). Other causes include poor infrastructure, lack of education opportunities, and ignored physicians' rights. Physicians who were married, specialists, had more than two years of experience and had a second job had better satisfaction levels.

Conclusion: Overall, satisfaction among physicians in Rwanda is low. The factors significantly associated with lower satisfaction were salaries, workloads, and resources. The findings suggest that addressing financial incentives, workloads, and resources may be effective in elevating physician job satisfaction in Rwanda.

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INTRODUCTION

About 36 Sub-Saharan African countries (SSA) are estimated to have less than 0.23 healthcare providers per 1,000 population. This is much lower than the World Health Organization (WHO) recommendations (one healthcare provider per 1,000 population) to achieve adequate healthcare delivery.¹ It was noted that the shortage of health workforce in Rwanda leads to less physician-patient interaction time, higher healthcare access costs, lower patient satisfaction, and eventually poorer quality of care.¹ Shortage of healthcare workers can be due to insufficient investment in pre-service training, international migration, career changes, morbidity, premature mortality, and retirement.² Among the many other reasons, low physician job satisfaction is often cited as a primary cause of physicians leaving their jobs.³

Physicians who are dissatisfied with their jobs are more likely to experience burnout, physical exhaustion, and mental health stress; they are more likely to provide poor patient care resulting in poor patient outcomes.³ Studies have shown a positive correlation between patient's adherence to medical recommendations and physician satisfaction.⁴ In addition, discontentment among physicians may not only cause early retirement but also discourage young students from joining the medical profession, hence affecting the supply of future clinicians.^{3,5}

Rwanda faces shortages of human resources for health, like other SSA countries. As of 2022, the estimated there was 1 physician per 8027

population translating to approximately 0.12 physicians per 1,000 patients. To meet the WHO recommended standard, an additional 10,882 doctors are needed.⁶ Such shortage is disproportionately impacting the rural areas, with only about 12% of the available physicians serving 82% of the Rwandan population in rural areas.^{7,8} Due to the lack of specialist, staff in most public district hospitals, the already overburdened general practitioners are required to perform over 80% of all general surgeries and obstetric procedures potentially leading to further job dissatisfaction among general practitioners in Rwanda.^{7,8}

To address the severe shortage of healthcare providers in rural areas, the Rwanda government, in 2010, introduced a two-year mandatory rural service policy. The policy requires all newly graduated physicians to work in rural hospitals for two years before they can receive their medical practice licenses.⁷ The introduction of this policy to a certain extent alleviated the shortage of physicians in rural areas; however, evidence did not show any increase in health staff retention in rural facilities – physicians left the rural practice as soon as they completed the mandatory requirement.^{7,8}

A study assessing the job satisfaction of healthcare workers in Rwanda reported moderate satisfaction (6.7/10) among the 21 physicians working at a single teaching hospital in the city.⁹ However, the factors causing the dissatisfaction were not examined. Without knowing the causes, targeted interventions cannot be designed. Accordingly, our study

sought to examine a broader set of physicians across multiple hospitals and identify factors associated with their satisfaction levels. It is hypothesized that the younger physicians (new graduates who have been working less than two years) may be less satisfied compared to those who have completed their 2-year mandatory rural services. It is also hypothesized that physicians working in rural areas, working in public facilities are less satisfied compared to those in urban, and private facilities. The findings of this study may provide a baseline for physician satisfaction in Rwanda and help to design interventions that address the key causes of dissatisfaction in the country.

METHODOLOGY

Setting and Design

This is a cross-sectional study that utilized a self-administered online survey, it was conducted in Rwanda from February to June 2022. As of August 2022, data reported 1 physician per 8027 population and the estimated number of physicians in Rwanda was 1559.⁶ Regarding 2020 data, 67.52% were general practitioners and 32.48% were specialists working in both private and public health facilities.¹⁰

Sample and Sampling

Physicians who had not been practicing in patient care in Rwanda for over the past year at the time of the study were excluded. The study utilized a non-probability sampling method. The survey link was shared with physicians practicing in Rwanda via personal and

professional networks. They were encouraged to further share the link with other physicians working in Rwanda.

Data Collection tool

A self-administered online questionnaire was modified based on a previously developed tool - physician working satisfaction (PWS), which was developed and validated to measure physician work satisfaction through a six-step process, including piloting, expert review, and validation study.^{11,12} The survey contained two parts comprising of basic demographic information and 41 Likert-scale 5-point items to assess ten domains related to physician satisfaction, including 1) autonomy (5 items), 2) personal time (3 items), 3) relationship with patients (6 items), 4) relationship with colleagues (5 items), 5) relationship with staff (4 items), 6) income (2 items), 7) job satisfaction (4 items), 8) resources (3 items), 9) career satisfaction (5 items), and 10) specialty satisfaction (4 items). The Likert scale were described as “strongly disagree”, “disagree”, “neither agree nor disagree”, “agree”, and “strongly agree”. One open-ended question was included for participants to provide additional comments. Some statements were reworded to make the survey more coherent and suitable for the Rwandan medical practice context based on the feedback from some pre-tested Rwandan physicians. Responses from the pre-testing were only used to make the survey context-specific and not included in the analysis. The survey was available in English and French languages. The translation was performed by the researchers who are fluent in both

languages. It was translated from English to French and back-translated to ensure the intended meaning was accurate.

Measures

The overall levels and domain of satisfaction were the key measures of the study. For each

statement, 1 point was assigned to “strongly disagree”, 2 to “disagree”, 3 to “neither agree nor disagree”, 4 to “agree”, and 5 to “strongly agree”. The score was calculated as the mean of the total score the participant scored.

Table 1. Table summarizing the demographics of respondents

		n (%)	
Sample		100	
Age	Median (IQR)	32.6 (10)	
Sex	Male	81 (81%)	
	Female	17 (17%)	
	Preferred not to say	2 (2%)	
Marital status	Single	52 (52.5%)	
	Married	46 (46.5%)	
	Divorced	1 (1%)	
Nationality	Rwandan	87 (87 %)	
	Non-Rwandan	13 (13 %)	
Training	General practitioner	73 (74.5 %)	
	Specialist	25 (25.5%)	
Type of facility	Public	79 (79%)	
	Private	20 (20%)	
	NGO	1 (1%)	
Work at other institution	No	54 (54.5%)	
	Yes	Public	18 (18.2%)
		Private	19 (19.2%)
		NGO	6 (6.1%)
	Not related to health	2 (2%)	
Work location	Rural	58 (58.6%)	
	Urban	41 (41.4%)	
Years practiced	Median (IQR)	3 (5.8)	
	2 years or less	48 (48.5%)	
	More than 2 years	51 (51.1%)	

A score of 3 and below was categorized as a “low satisfaction level”, and above 3 was classified as a “Moderate to high satisfaction level”.¹³

Data analysis

Descriptive statistics were used to summarize the demographic information and the

satisfaction levels by domain. Fisher’s Exact tests were used to detect an association between demographic factors and satisfaction levels. All analyses were conducted using SPSS, with a P-value set at < 0.05. Responses from the comment section were summarized.

Table 2: Satisfaction level (overall and by domain)

Domains	Low	Moderate to high
Income	85 (87.6%)	12 (12.4%)
Personal time	76 (76.8%)	23 (23.2%)
Job satisfaction	74 (75.5%)	24 (24.5%)
Resources	73 (74.5%)	25 (25.5%)
Specialty satisfaction	69 (73.4%)	25 (26.6%)
Career satisfaction	56 (56.6%)	43 (43.4%)
Autonomy	46 (46%)	54 (54%)
Relationship with patients	44 (44.4%)	55 (55.5%)
Relationship with staff	38 (38.8%)	60 (61.2%)
Relationship with colleagues	24 (24.5%)	74 (75.5%)
Overall	50 (50%)	50 (50%)

Table 3: Association between job satisfaction levels and demographic variables

		Satisfaction level		P-value
		Low	Moderate to high	
Sex	Female	8 (47.1%)	9 (52.9%)	0.549
	Male	40 (49.4%)	41 (50.6%)	
Marital	Single	35 (67.3%)	17 (32.7%)	<0.001
	Married	13 (28.3%)	33 (71.7%)	
Nationality	Non-Rwandan	6 (46.2%)	7 (53.8%)	0.500
	Rwandan	44 (50.6%)	43 (49.4%)	
Training	General practitioner	41 (56.2%)	32 (43.8%)	0.013
	Specialist	7 (28.0%)	18 (72.0%)	
Practice	2 years or less	30 (62.5%)	18 (37.5%)	0.017
	Above 2 years	20 (39.2%)	31 (60.8%)	
Facility Type	Public	43 (54.4%)	36 (45.6%)	0.140
	Private	7 (33.3%)	14 (66.7%)	
Location	Urban	19 (46.3%)	22 (53.7%)	0.373
	Rural	30 (51.7%)	28 (48.3%)	
Other job	No other job	33 (61.1%)	21 (38.9%)	0.017
	Has other job	17 (37.8%)	28 (62.2%)	

Significant at P < 0.05

RESULTS

A total of 100 respondents completed the survey, with a median age of 32.6 years an interquartile range (IQR) of 10 years, and a median of 3 years (IQR= 5.8) of work experience. Most respondents were Rwandan (87%), male (81%), general practitioners (74.5%), and working in public facilities (79%). Slightly more than half were single (52.5%), worked in rural health settings (58.6%), had more than 2 years of work experience (51.5%) and did not have other sources of income (54.5%) (Table 1).

Half of the respondents (50%) had poor satisfaction levels. The “Income” domain had the highest number of respondents (87.6%) indicating a poor satisfaction level. Four other domains that had more than 70% of respondents indicating poor satisfaction levels were “personal time” (76.8%), “job satisfaction” (75.5%), “resources” (74.5%) and “specialty satisfaction” (73.4%). The Two domains that had the most respondents indicating moderate

to high satisfaction levels were “Relationship with colleagues” (75.5%), and “Relationship with staff” (61.2%) (Table 2).

Four demographic variables were found to have a significant association with satisfaction levels. They include marital status ($P<0.001$), level of training ($P=0.013$), years of practice ($P=0.017$), and having other jobs ($P=0.017$). Sex, nationality, the type of facility they worked at, and location of work were not found to have a significant association with satisfaction level at a P-value of < 0.05 (Table 3). A total of 42 responses were collected through one open-ended question from comment section that was answered by 27 respondents. Fourteen responses (33%) from physicians working in both urban and rural settings, referred to low salary as the cause of dissatisfaction. Other more frequently cited reasons for dissatisfaction included poor legal rights ($n=5$, 12%), poor rural living environment ($n=4$, 10%), and poor workplace infrastructure ($n=4$, 10%) (Table 4).

Table 4. Summary of causes of dissatisfaction from open-ended questions

Causes of dissatisfaction	Total = 42	Rural=29	Urban=13
Low salary	14 (33%)	9	5
Poor legal rights	5 (12%)	4	1
Poor rural living environment (accommodation, transportation)	4 (10%)	4	0
Poor workplace infrastructure	4 (10%)	3	1
High workload	3 (7%)	2	1
Poor workplace resources	3 (7%)	2	1
Not being respected	3 (7%)	1	2
Lacks career development	3 (7%)	3	0
Complicated/disorganized administrative process	2 (5%)	0	2
Poor leadership	1 (2%)	1	0

DISCUSSION

Half of the respondents in this study indicated that they had poor job satisfaction. The least satisfying areas were related to their income, personal time, job satisfaction, and resources at the workplace. The responses to open-ended questions were consistent with the above results.

Income was by far the most respondents cited as the main reason for their dissatisfaction, and it was also mentioned repeatedly by the respondents in the open-ended question. Physicians not satisfied with their salary is common in low-income countries. Studies in Nigeria (Being married, job autonomy and pay were associated with better satisfaction), Uganda and Zambia (overall satisfaction 52.3%), Ghana (23.5% reported an intent to leave Ghana in the next 5 years) all reported similar findings.^{14,15,16,17} Although higher-income countries such as Iceland and the USA have also reported dissatisfaction due to income,^{18,19,20} the magnitude of this issue is not comparable. In Rwanda, the starting monthly salary of a new graduate working as a general practitioner in the public sector is about 234 USD, which is below the national average of 246 USD.²⁰ The medical programs in Rwanda require a minimum duration of six years of training, which is much longer than most other bachelor's degree programs. Additionally, medical training is known for its challenging and demanding nature.^{22,23} After training, a Rwandan physician's salary is lower than Rwanda's national average income. Coupled

with the high workload caused by the shortage of physicians in general, satisfaction towards their income is affected. This was also reflected in the comment section with 47% of the responses reporting that the reason for their demotivation was low salary.

Personal time was another domain that had a high percentage of respondents mentioning dissatisfaction. With respect to the responses to the three items within this domain, respondents indicated that work interfered with their personal time, the number of times they were required to be on call was not reasonable, and the interruption of their personal life by work was problematic. In Rwanda, as the physician population is significantly lower than the WHO recommended standard, many physicians, especially general practitioners, are tasked with responsibilities that are normally performed by specialists, including caesarean sections to mention a few. Previous literature has indicated that the increased workload and responsibilities often translated to reduced personal time,^{1,24} and the pressure of working long hours in addition to having low compensation frequently causes doctors to experience burnout and frustration.^{25,26}

In Rwanda, as well as in many LMICs, the lack of amenities in health facilities is common. Especially in rural health facilities where medication stockout, staff shortage, limited access to clean water and sanitation, unstable internet coverage and intermittent electricity supply are common.^{27,28,29} As of 2022, only

75.31% of Rwandans had access to electricity, and only about half of the households (53.87%) in Rwanda are connected to the national electricity grid, more in the urban than in rural area.³⁰ It is worth linking the results to the 2-year mandatory rural service policy because mandatory work in rural areas for the new graduates not only means they are required to work and live in a challenging environment, but also isolation from family, friends, and continuing education opportunities.⁷ Many of these issues were reflected in our study results. 47.5% of the responses in the comment section also reported a need for improved salary, accommodation and transport modalities for those working in rural areas.

Two items that were brought up in the open-ended question but not in any part of the questionnaire were the poor legal rights of doctors and they were not being respected. Twelve percent of the responses specifically stated that physicians were not respected, and their rights were not observed. According to the Rwanda Medical and Dental Council, the number of medical legal cases has been increasing in Rwanda, from 12 reported in 2014 to between 30 and 40 medical practitioners being reprimanded annually in recent years.³¹ While patients need to recognize and exercise their rights to report substandard medical services, the increase in medico-legal cases also contributes to stress and dissatisfaction among physicians. Their frustration is not necessarily towards the Medical

Professional Liability Insurance Law – which protects patients against poor healthcare services – but the lack of a clear mechanism to enforce it which often leads to physicians being criticized or accused prematurely. respondents opined that physicians’ freedom needs to be reviewed and taken into consideration. This was also reflected in the comment section where 28.5% of responses in the comment section reported unfair medical legal cases and a need for reviewing rules and regulations governing physicians’ work and rights.

Limitations

The small sample size has definitely affected the generalizability of the study. Despite the small sample size, our study provides some insight into physicians’ job satisfaction in Rwanda considering that the majority work in the public sector. Acknowledging that the results may differ in larger samples, we believe the results of the study provided insights to inform future studies to generate further evidence.

CONCLUSION

AND

RECOMMENDATIONS

Apart from increasing salary or providing monetary incentives, improving the workplace, and living conditions in rural areas could help improve satisfaction among these physicians. The medical professional associations could also consider providing legal assistance to physicians when facing medico-legal issues.

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