

## JOB CONDITIONS AND PERFORMANCE OF HEALTH CENTRE IV WORKERS IN SELECTED DISTRICTS OF SOUTH WESTERN UGANDA: A DESCRIPTIVE CROSS-SECTIONAL STUDY.

<sup>1</sup>Johnson Atwiine\*, <sup>2</sup>Gershom Atukunda, <sup>1</sup>Jimmy Mwesigye, <sup>1</sup>Donath Asiimire,.

<sup>1</sup>Department of Economics, Statistics and Tourism Management, Bishop Stuart University, Mbarara Uganda.

<sup>2</sup>Department of Public Administration and Governance, Bishop Stuart University, Mbarara Uganda.

### Abstract

#### Background

Many nations have reduced the precarious number of doctors, nurses, and midwives to 2.3 per 1,000 people. Care must be taken to ensure that essential health services are handled satisfactorily (Jimba et al., 2010; Karwowski & Marras, 1998; WHO, 2016). The purpose of this study is to investigate the connection between Health Center IV employees' performance and their working circumstances in a few Southwestern Ugandan districts.

#### Methods

This study adopted a descriptive cross-sectional study with both quantitative and qualitative approaches to data collection and analysis. A sample size of 215 respondents consisting of health workers, political leaders, end-users, and supervisors participated in this study. The data was collected using the questionnaire survey and interview method. It was also analyzed using both SPSS v.25 and Nvivo statistical packages respectively.

#### Results

The results revealed a positive and significant association between job conditions and performance. In regards to the elements of job conditions, working conditions, and job security were established to be significant predictors of health center IV worker's performance, while training and autonomy were not.

#### Conclusion

The findings disclosed that both job security and work environment are significant and positive predictors of health center IV workers' performance. This means that any positive changes in job security and work environment are associated with positive changes in workers' performance. Nonetheless, job security matters most.

This means that the work environment such as working conditions, office layout, and design, workload, health materials/kits, and equipment once provided to different health centers enhance performance in terms of reliability of health workers and improvement on their productivity.

#### Recommendation

Therefore, the study recommends that health management officers should develop good health policies, working terms, and strategies for the entire health workers at all levels for better health service delivery for all citizens in Uganda.

**Keywords:** Job Conditions, Health Workers Performance, Health Centers IV

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**Corresponding author:** Johnson Atwiine\*

Email: [jatwiine@beg.bsu.ac.ug](mailto:jatwiine@beg.bsu.ac.ug)

Department of Economics, Statistics and Tourism Management, Bishop Stuart University, Mbarara Uganda.

#### Background to the Study

Globally, health workers have persisted to be the weakest bond of health systems (WHO Report, 2006), many countries cut down the precarious of 2.3 physicians, nurses, and midwives per 1,000 people, well thought required to accomplish a satisfactory level of handling of indispensable health services (Jimba et al., 2010; Karwowski & Marras, 1998; WHO, 2016). In addition to the lack of

enough health workers and mal-distribution challenges, inadequate training capacity, fragile management systems, and poor working environment, including insufficient monetary and non-monetary incentives, combine to regulate high erosion and poor morale and accomplishment of tasks by employees (Jimba, et.al 2023).

Improving health workers' performance and output is significant to successful healthcare provision, the

Millennium Development Goals and commitments, guidelines, and activities 'beyond 2015 (Travis et al., 2004). The growing incentive for Universal Health Exposure gives a significant occasion to emphasize health workers' problems in the setting of Universal Health Care. During the last decade, various intergovernmental organizations' resolve as well as action plans have highlighted the importance of Human Resources for Health investments (Saunders, Barr, McHale & Hamelmann, 2017).

However, policymakers and program planners still struggle to establish the exact set of actions to increase health worker performance and output. Critical health workers, particularly in poor circumstances, necessitate improvement on an extensive period of approaches for improved invention and retaining of staff but more significantly we reinforce output and accomplishment of tasks by the hospital employees, to acquire the best possible results and the highest impact with existing resources (Steinfeld & Maisel, 2012).

Health worker performance obstacles such as ambiguous roles and prospects, unclear guidelines, poor procedures of work, unsuitable expertise within the job situations, competency gaps, absence of response, problematic work conditions, and inappropriate inducements specify that when there are no essential labor shortfalls, employees might fail to deliver excellent health care to different patients (Steinfeld & Maisel, 2012). While functional evidence of the usefulness of various kinds of interferences to improve worker performance and output is still limited, salient features are developing from prevailing studies and country experiences that can assist in informing a strategy for enhancing the performance and output of health workers at different facilities (WHO Report, 2006).

This study was anchored on Equity Theory (Redmond, 2010) which emphasizes fairness put by employers on workers' compensation, relationship or exchange relationship as well as employees' attempt to reduce any injustice that might result in low output. The theory further agrees with social relationships and justice/unjust, it is called equity theory (Gogia, 2010).

Malik et.al (2011) investigated the study of work conditions and workers' performance in Pakistan. The results indicate that all the independent variables have a strong and significant association with workers' performance, especially physical working conditions which reflect the strongest positive and significant association. The findings of regression analysis indicate that the performance of workers is typically determined by the physical working environment, training, development, and communication techniques. Much as the study showed strong and significant association between

the variables it was undertaken in a diverse geographical location which the study intended to fill.

Bhaga (2011) conducted a study on the effect of the working environment on the labor outcomes of nursing employees in the midwife obstetrical unit of Pretoria West Hospital. The study discovered that the majority of the nursing employees in the Midwife Obstetrical Unit of Pretoria West Hospital recognize that their working environment is stressful. The working environment is negatively affecting their welfare and job performance. The study also discovered that the Employee Assistance Programme has been implemented at the hospital, but the services of the program are not being utilized by the majority of the nurses in the unit. I agree with the scholar because productivity of the most nurses depends on the working conditions availed to them in any health facility.

Lukwago (2019) investigated working conditions and workers' productivity in medical research institutions at the Uganda Virus Research Institute (UVRI) in Uganda. The results discovered that there is a significant association between working conditions and workers' productivity. I agree with the findings and they were used for comparison in different health centers IVs in selected districts of southwestern Uganda since they are health-related.

Lutwama, Roos, and Dolamo (2013) conducted a study evaluating the execution of performance management of healthcare employees in Uganda. The research was a descriptive survey conducted in the Kumi, Mbale, Sironko, and Tororo districts and utilizing mixed research methodology. A self-administered survey was applied to collect quantitative data from the healthcare employees. A semi-structured interview guide was applied to collect qualitative data from the health service managers. The results indicated that to some extent performance management is executed in the health sector; nonetheless, there were gaps in its execution. There were shortfalls in setting performance targets and performance management planning was hardly done. Although various healthcare workers had job descriptions, the performance signs and standards were not well-defined and identified to all employees and managers. Much as Lutwama's study was done in Uganda, it used a descriptive survey in the Kumi, Mbale, Sironko, and Tororo districts, this study used a descriptive cross-sectional study in selected districts of southwestern Uganda hence the methodological and geographical gap.

Therefore, this study aims to establish the relationship between job conditions and the performance of health Centre IV workers in selected districts of southwestern Uganda.

## METHODS

### Research Design

For this study, a descriptive cross-sectional research design was applied (Sileyew, 2019; Bertrand & Fransoo, 2002) and applied in association with the quantitative data to find out the correlational effects of the hypotheses whereas the descriptive approach is applied to the qualitative data (Gill & Johnson, 2014) Clark et al. (2021), indicates that the quantitative approach is independent of individual thought and relies heavily on statistics, which makes it an objective method. Quantitative data was then collected with

the use of questionnaires and analyzed. Subsequently, the researcher carried out interviews and explored deep insights using a thematic analysis approach. The aim of triangulating the two sources of data and the respective findings was to enhance the robustness of the empirical findings.

### Study Population and Sample Size

*For the quantitative approach*

The study population included 409 workers, from 11 Health Centre IVs (District Health Report, 2019<sup>[1]</sup>) broken down in Table 1.

**Table 1: Sample Distribution by Category**

[1]Mbarara District Health Report, 2019

| Population Category           | Target Population | Proportionate Sample size |
|-------------------------------|-------------------|---------------------------|
| Medical officers              | 71                | 35                        |
| Clinical officers             | 43                | 21                        |
| Nursing officers              | 162               | 79                        |
| Medical laboratory attendants | 29                | 14                        |
| Non-Practicing medical staff  | 38                | 19                        |
| Support Staff                 | 66                | 32                        |
| <b>Total</b>                  | <b>409</b>        | <b>200</b>                |

Source: DHO office (2019)

Given a population of 409 workers, a sample size of 200 workers was determined using the Krejcie and Morgan (1970) table for sample size determination.

*For the qualitative approach*

A total of 15 respondents participated in the qualitative interviews. Specifically, these were 10 end users and 5 health center supervisors (DHOs, CAOs, Health Center IV in-charge, political leaders, and District Health Committee). The sample size of 10 end users was arrived at using the saturation point. This was the point at which analysis of additional interviews led only to aspects that had already been mentioned in previous conversations and did not affect new findings (Creswell, 2006).

### Study Area

The study was carried out in southwestern Uganda. The study covered districts of Mbarara, Kazo, Kiruhura, Rwampala Isingiro, and Ibanda district respectively. It concentrated on health centers IV in those particular districts. These areas were considered due to the poor performance of their health workers as indicated in the statement of the problem. The categories of workers comprised medical officers, clinical officers, nursing officers, laboratory attendants, non-medical and support staff. The Health Centre IVs were; Mbarara Municipal Health Centre IV, (Mbarara), Bwizibwera Health Centre IV (Mbarara), Kinoni Health Centre IV (Mbarara), Bugamba

Health Centre IV (Mbarara), Nyamuyanja Health Centre IV (Isingiro), Rugaaga Health Centre IV (Isingiro), Kabuyanda Health Centre IV (Isingiro), Rwekubo Health Centre IV (Isingiro), Ruhoko Health Centre IV (Ibanda), Kiruhura Health Centre IV (Kiruhura) and Kazo Health Centre IV (Kiruhura).

### Sampling Procedure for Quantitative Approach

*For the quantitative approach*, a two-stage sampling method was used to identify the participants in the study.

*Stage one – Stratification by Staff Category*

Given that the records of the staff were readily available, the first step was to stratify the staff according to the categories adopted in Table 2. This was done to ensure a proportionate representation of the workers across all the health centers.

*Stage two – a selection of the workers*

The respondents from each category were identified using a systematic random sampling method. Specifically, the respondents were drawn from a sampling frame using an interval  $k$  which is equal to  $N/n$ , where  $N$  is the number of units in the target population and  $n$  is the number of units of the sample. The first respondent was identified using a simple random technique and the rest were nominated using the respective interval of two. This technique was employed to ensure that appropriate elements were drawn from all workers of the population to reduce

sampling error and simultaneously maximize representativeness (Field, 2009; Amin, 2005).

### Sampling method for a qualitative approach

Primary data for the qualitative research was collected from 10 end-users and 5 Health Center IV supervisors (DHOs, CAOs, Health Center IV in-charge, political leaders, and the District Health Committee). They were sampled as follows: *Health center IV supervisors* were selected using the purposive sampling method. Purposive sampling includes finding out and choosing people or groups of people that are particularly informed around or practiced a phenomenon of concern (Creswell & Plano Clark, 2011).

*End users* were selected using a convenient sampling method. This involved contacting those individuals who were voluntarily accessible to participate in the interview at that particular moment. Bernard (2002) notes the significance of accessibility and readiness to contribute and the capacity to transfer the message, practices, and feelings in a coherent, expressive, and reflective manner (Showkat & Parveen, 2017).

### Control for Common Methods Bias

The validity of the conclusions concerning the links between measures may be threatened by bias in self-report survey data, which is a prevalent source of measurement errors (Types I & II) (Gabriel et al., 2019). (Spector and Brannick,

2009) state that the use of cross-sectional and self-reported surveys as the primary research instrument raises the most worry over common technique bias. Keeping in mind the existing study methodology, the suggestions made by Gabriel et al. (2019) were used to mitigate the bias caused by conventional methodologies. Therefore, greater planning in the research design and methodology execution was the primary means by which common methods bias was controlled for this study. Specifically, during the questionnaire development phase, common techniques bias was addressed through the application of procedural and statistical remedies, while statistical remedies.

### Data Sources and Data Collection

Given the conceptualization of the study, primary data were gathered from respondents using a survey questionnaire and interview guide.

### Data Processing and Analysis

For the quantitative approach, two statistical software packages were utilized to analyze the data collected. Specifically, SPSS version 21 was used for preliminary data analysis, while Analysis of Moments of Structures (AMOS) version 21 was used for Structural Equation Modelling (SEM). For the qualitative approach, a content analysis with the aid of NVIVO version 8 was used.

**Table 2: Standardized Weights for Job Condition**

| Code                        | Items   | Standardized regression estimates | C.R (t) |      |      |
|-----------------------------|---|-----------------------------------|---------|------|------|
|                             | <b>Job Security - I have at this health facility is....</b> | <b>0.278</b>                      |         |      |      |
| JC1                         | Very unsatisfactory .....very satisfactory                  | 0.92                              | 3.79    |      |      |
| JC2                         | Very unrewarding .....very rewarding                        | 0.878                             | 12.718  |      |      |
| JC3                         | Very small .....very large                                  | 0.85                              | 12.327  |      |      |
| JC4                         | Very wrong ..... very right                                 | 0.748                             |         |      |      |
|                             | <b>Work Environment - at this health facility is....</b>    |                                   |         |      |      |
| JC13                        | Very unsatisfactory .....very satisfactory                  | 0.755                             | 7.594   |      |      |
| JC14                        | Very unpleasant .....very pleasant                          | 0.722                             | 7.46    |      |      |
| JC15                        | Very unhealthy .....very healthy                            | 0.65                              | 6.996   |      |      |
| JC16                        | Very unreasonable ..... very reasonable                     | 0.635                             |         |      |      |
| <b>Achieved Fit Indices</b> |   |                                   |         |      |      |
| CMIN/DF                     | RMSEA   | GFI                               | CFI     | TLI  | NFI  |
| 1.501<br>(28.522 / 19)      | .050  | .964                              | .984    | .976 | .953 |

Source: Primary Data

The CFA results confirmed the validity of the final model with excellent model fit statistics for this construct measure as reported in Table 2. Given that the

model fit the data well and the association among the underlying factors was less than .85, no further adjustments were required. **The composite reliability for job**

conditions is .73, which is above the acceptable level as indicated by DeVellis (2003) and Nunnally (1994).

### Qualitative Data Analysis

The typed notes and audio data from the interviews were transcribed verbatim and analyzed using the content analysis technique. Units of analysis were the paragraphs (segments) in each transcript that dealt with the management of the study variables. Each interview was assigned a number or code. Data analysis was guided by the recommendations of Miles and Huberman (1994), Pope et al. (2000), Creswell (2006), and Bazeley (2009). The analysis followed a 1st order analysis, 2nd order analysis, and the aggregate structure development. The 1st order analysis involved an open coding system of the informants' key terms that emerged. The researcher tried to obey devotedly to informant's terms and made little attempt to distill categories. The objective of the study here is to understand "what is going on?" The 2nd order analysis involves re-reading the codes and asking whether the emerging themes suggest concepts that might help in describing and explaining the phenomena under observation.

### Ethical Considerations

The researcher sought ethical approval from any institution of higher learning that has an Ethical Review Committee and has been approved by the National Council for Science and Technology. Permission to administer questionnaires to various respondents was sought from District Officers and then Hospital Administrators accordingly. Confidentiality of the data and respondents was highly maintained. On the questionnaire survey, the names of the respondents and their health work station were also not to appear on questionnaire survey. After data collection, the data was kept under a key and lock and only used for academic purposes.

One of the major ethical concerns is the publication of the study, (Creswell 2013) warns researchers to share

information from a research study with participants and stakeholders such as posting on a website and publishing in a language that can be understood by a wider audience. Creswell raises an important aspect partaking multiple public from the same research sources and the piecemeal division of studies into parts and their separate publication. For this matter, (Creswell 2013) says that publishers often ask authors to sign letters of compliance with ethical practices and to state that they do not have a conflict of interest in the results and publications of the studies.

### RESULTS

This chapter presents the findings of the analyses performed in testing the study hypotheses. The interpretation of these results is also provided. Both quantitative and qualitative results are catered for.

#### Hypothesis: Job Conditions and Workers' Performance

Hypothesis H1 studied the association between job conditions and workers' performance. The results indicate that there is a significant and positive relationship between job condition and workers' performance ( $\beta=.345$ ,  $t\text{-value} =5.703$ ,  $p=.000$ ), and thus the hypothesis was supported. This suggests that positive changes in job conditions are associated with positive changes in health center IV workers' performances.

#### Testing Relationships between the Elements of the Job Conditions and Workers' Performance

Whereas job condition was earlier conceptualized as a four (4) factor variable (job security, autonomy, training, and work environment), the confirmatory factor analysis retained only two factors (job security and work environment). The two factors were subjected to regression analysis and the findings are displayed in Table 3

**Table 3: Regression Results on the Elements of Job Conditions**

| Variables        | Unstandardized Coefficients |            | Standardized Coefficients | T     | Sig. |
|------------------|-----------------------------|------------|---------------------------|-------|------|
|                  | B                           | Std. Error | Beta                      |       |      |
| (Constant)       | .166                        | .442       |                           | .375  | .708 |
| Education        | .025                        | .081       | .019                      | .306  | .760 |
| Job Security     | .574                        | .072       | .482                      | 7.926 | .000 |
| Work environment | .289                        | .084       | .208                      | 3.425 | .001 |

*Dependent Variable: Workers' Performance; R=.535, R<sup>2</sup>=.287, Adj. R<sup>2</sup>=.275, F-stat=25.97, sig=.000*

The results in Table 3 show that both job security ( $\beta=.482$ , t-value =7.926, p=.000) and work environment ( $\beta=.208$ , t-value =3.425, p=.001) are significant and positive predictors of health center IV workers' performance. This means that any positive changes in job security and work environment are associated with positive changes in workers' performance. Nonetheless, job security matters most. From in-depth interviews, the sub-themes that emerged from end users, supervisors, and political leaders on job conditions include;

**Sub Theme1:** Job security for health workers

**Sub Theme 2:** Training opportunities at the health centers

**Sub Theme 3:** Autonomy of health workers

**Sub Theme 4:** Work environment at the centers

**Sub Theme 5:** Benefits derived from having a healthy, sufficient, pleasant work environment

### Job security for health workers

Secured workers can devote little time distressed about their job security, or disturbed over how they foot their bills if they get laid off, and can devote more time concentrating on their tasks. Respondents were asked how health workers are secure in their workplaces and the majority of them pointed out health workers are permanent and pensionable according to the local government's standing order stated;

*"Their jobs are secure since they are very few, so you can ignore them or chase health workers because getting another one is a problem"(Patient3, Aged 45, Male, Date;2021, Bwizibwera HCIV).*

*"Perfect.... Perfect... perfect in other wards that we have not had any dismissed or laid-off from the duties. In other services, many are pushed out of their position but in the health sector, it has never happened, so health workers are very sure of their jobs since they are permanent though some are interdicted on their chronicle absenteeism" (In charge, Aged 42, Male, Date; 2021, MMC).*

*"Health workers are permanent and pensionable; people are not worried about their jobs since there is a standing order guiding their employment process" (Biostatistician, Aged 38, Female, Date; 2021, Mbarara District.).*

*"They are secure because they are government workers, when they are appointed, there is standing order and it is very hard to chase away someone. These health workers are permanent and pensionable at workplaces" (Dept in-charge, Aged 43, Female, Date;2021, Bwizibwera HCIV).*

*"They are very secure because they are permanent and pensionable so long as they don't make a grave mistake that would lead them to be dismissed like the abandonment of duty, fighting at the workplace, indiscipline" (DHO, Aged 48, Male, Date;2021, Isingiro District).*

*"Once you are confirmed in public service, you are permanent and pensionable so the job stability is guaranteed, ... nobody is on tenterhooks on the safety of the jobs so long they deliver" (DHO, Aged 46, Male, Date;2021, Mbarara District).*

The results indicate that health workers' jobs are secure and they don't have any pressure of losing their jobs. Therefore, the health workers relax and neglect some of their duties and this may compromise their performance, especially when know that the term of the contract is fixed.

### Training opportunities at the health centers

Residents were asked how training is done in health center IVs and which staff development plan, sponsorship, and promotion basis are held. Most of the participants interviewed say that NGOs which patterns with local governments conduct 2 or 3 days of training to equip health workers with ideas of the ongoing projects. More so, supervisors train the health workers by being with them inwards, workshops, meetings, and seminars as indicated below;

*"The training is right from the health centers whereby they sit and plan on how they will be leaving for further studies, they submit the plans to the districts to get study leaves.. the training is in such way that they don't leave the facility without health workers, so they go-in turns....The formal learning also depends on the course because most of them spend 1 and half years, others 3 years mainly we gave them spending an order of three years to finish their course. They also trained in workshops for at least 2 days by NGOS for instance testing HIV, treating malaria and other*

health diseases”(DHO, Aged 48, Male, Date; 2021, Isingiro District).

“There is mentorship; they are trained to also train others like calling them at districts, work with them, workshops and meetings” (Biostatistician, Aged38, Female, Date;2021, Mbarara District).

“We work a lot with projects and NGOs, the on-job training opportunities are there and we do professional advancements, especially for those who have served for at least 5 years and they need to develop their areas of interest for example in the last five years two clinical officers became doctors and they come back to serve.... the current in charge of Bugamba HCIV was clinical officer... he came back with a lot of commitment, enthusiasm, and love.. Uhmm surely the man delivers and performs very well” (DHO, Aged 36, Male, Date: 2021, Mbarara District).

“..... hmmm.. there is equality and equity for workers to be trained, when there are opportunities to be allowed to attend workshops and meetings... they are allowed to go for them, but at times we are constrained by the Budget cuts which may in the long run affect staff performance” (In charge, Aged43, Female, Date;2021, Bwizibwera HCIV).

This shows that health employees are educated and some go for further studies to be competent in their duties. However some of their training, workshops are constrained by budget cuts which in the long run affect service provision and the overall performance of health employees

### Autonomy of health workers

The study further determined the autonomy of health center workers in terms of making independent decisions when they are at the workplace. The majority of the participants stated that health workers have guidelines to follow and also arrange meetings before making crucial decisions that can affect the whole health facility.

“Most of the decisions are at the facility, transfers of staff are at the district for instance if they have PHC, they hold meetings and plan on how they can spend money got out of RBF, so to some extent they are autonomous with guidelines from MOH” (Biostatistician, Aged 38, Female, Date;2021, Mbarara District).

“They are independent but they should make decisions which are legal.... they must follow guidelines for assistance in my position, I make sure that I will be in the office from Monday up to Friday... even morning from 8:0am to 5:00 pm evening although it is hard from most of the DHOs”(DHO, Aged 48, Male, Date;2021, Isingiro District).

“.....when it comes to health services delivery instead of autonomy, it's a protocol, and there is the

procedure followed for instance if it is a C-section, one must follow procedure and there is no need to discover ... whether you are a professor in gynecology and obstetrics or medical officer, there is a re-known approach for C-section or you are treating malaria and your physician or medical officer, the approach is the same... there is no autonomy in health services but there are protocols/procedures to follow, We have standards and we don't invent or re-event the things in health centers” (DHO, Aged 46, Male, Date;2021, Mbarara District).

“hmmmm ... it depends! ... it depends..., at a low level when there is anything that can work for the whole department to perform, they can do some innovations which not affect the health center but for big decisions, they come to the department and we agree on the next step” (Dept. Incharge, Aged 43, Female, Date;2021, Bwizibwera HCIV).

“Health workers are governed by the policies for instance RBF necessitates us to sit together and plan for the amount got for allowances....HUM is the top governing body which comprises 6 members who are chosen by the highest council of Mbarara city, they act as a bridging stone between the community and city council, through the policies, they have neutral staff to sit and listen to the challenges in the health centers for implementation and that's autonomy in this health center IV. On the level of budgeting, I am obliged to call a meeting, tell them how much money has come, and give them a platform to input on the things we have to do” (Incharge, Aged 42, Male, Date;2021, MMC IV).

This indicates that health workers are independent with their private decisions and follow protocol/procedure when they are serving at their health centers.

### The work environment at the centers

Work surroundings are very important in health centers regarding workspace, storage, work tools, lighting, and aeration. It was noted that most respondents pointed out that space at the health center is not enough to accommodate all the clients, poor storage; and they don't have enough equipment to use and medicines in the health center Ivs.

“We have structures for keeping medicine, tools are not enough but they use what they have” (Patient5, Aged27, Female, Date; 2021, Bwizibwera HCIV).

“The work environment is fair for instance there are not enough gloves, poor storage and this demotivates staff, though with support from RBF money, the environment will be changed” (Biostatistician, Aged 38, Female, Date; 2021, Mbarara district).

“The environment is fair apart from staff accommodation, inadequate resources, lack of infrastructures but the relationship with community leaders, politicians, and the district is okay.... We are a water-hit district it affects health

centers, power is there but very expensive to pay, workspace is not enough for patients and there is inadequate equipment and all this affects our staff motivation consequently lowering their performance at our health center IVS" (DHO, Aged 48, Male, Date;2021, Isingiro District).

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"Hahahahah... people are working and surviving in the environment where they are, for instance, Bwizibwera is HCIV but working like a hospital, don't expect heaven on earth... the little space that is there is being used appropriately, they have made renovations and innovations and that's how they are surviving.... when there is a necessity for repair or painting, we have surely tried to do that...." (DHO, Aged 46, Male, Date; 2021, Mbarara District).

"hmmm... (laugh)... hmm .. basically the time I have been here, I have enjoyed this HC IV, we have several cadres and different departments who know what they are doing compared to HC III. The work conditions are conducive because workers are always present. On the supply side, they supply a few things that cannot accommodate the number of clients we have at this HC Iv. .... The general cleanliness is okay because we employed 3 more people who do their work privately...The working relationship with staff is conducive because the level of absenteeism is minimal and we always advise those who do it to stop it. The store is enough to accommodate every equipment and drugs that are supplied." (Dept. Incharge, Aged43, Female, Date; 2021, Bwizibwera HCIV).

This shows that the working environment is poor at most health facilities since workers do not have enough materials to use, the storage is small, and the working space is limited. This influences the performance of the health workers and gives poor service delivery to the community.

### Benefits derived from having a healthy, sufficient, pleasant work environment

The majority of the participants assumed that having a pleasant environment at health center IVs prevents them from acquiring other diseases, eases work, improves the performance of health center workers, and reduces the stress of both clients and health center workers. This was evidenced in the following views;

"[... ] It improves hygiene, Hygiene promotion is significant for staff, patients, and careers. Big and clean spaces can reduce the risk of getting an infection, COVID-19 -19, and flu. This applies to all health-care settings since hygiene may be limited to lack of enough basic information about such things as the location and correct use of toilets and hand washing points" (Patient 10, Aged 28, Female, Date;2021, Kazo HCIV).

"You become stress-free, it eases the work and even if I go back home, I am sure that patients are in a good place"

(Dept. Incharge, Aged43, Female, Date; 2021, Bwizibwera HCIV).

"The benefit would be better service delivery and service giver would serve with the satisfied mind, end users would also get satisfied and most importantly stakeholder like politicians, technical people (CAO, DHO), community, Government would also be satisfied" (DHO, Aged48, Male, Date; 2021, Isingiro District).

"... ah once you sleep on a single bed and you are given a double bed, you will be more comfortable... in other words, if the environment is not better workers will not deliver. The ideal environment is not going to come today because even the health budget in Uganda has never reached 15%. This means the demand in health services will not favor building infrastructure in regards to the budget" (DHO, Aged 46, Male, Date; 2021, Mbarara District).

"both thank you... A healthy environment helps build, maintain, and strengthen the relationship between medical workers and supervisors and allows patients to feel appreciated and cared about. This, in turn, impacts positively on job satisfaction. An environment in which health workers are supported by providing them with good equipment, gloves, uniforms, and security, influences a healthier, happier, and more dynamic workplace ambiance leads to lower levels of workers absenteeism, better cognitive performance, and reduced stress of patients" (Dept. In-charge, Aged43, Female, Date;2021, Bwizibwera HCIV).

"Ook doesn't enhance salaries but at least work on the services!!!... Ooh, it makes magic .... it makes magic especially in the medical field for instance if I want to operate on a mother and am going to fidget with light, imagine that ... oh...if am going to operate on a mother and she is on cannula but for me to fasten it, I use a handkerchief instead of plaster, so imagine that..... .. imagine transferring a mother from labor suit to theatre or ambulance without a stretcher... sometimes we prepare wounds without gloves. I can't explain more..... so a pleasant working environment improves service delivery to almost 80% in health centers" (In-charge, Aged42, Male, Date;2021, MMC HCIV).

This shows that having a decent working condition for health workers is crucial for service delivery, taking care of patients, improving hygiene, and reducing staff turnover hence improving their motivation and performance.

### Health Workers' Performance

Every health worker offers something to the success of the health facility. However lacking a clear understanding of which aspects affect worker performance, it will be challenging to maintain performance. The performance of employees was observed in terms of productivity,



responsiveness, and availability. The majority of participants revealed that health workers deliver to mothers, treat many patients, and respond to emergencies and some are not available at the respective worker place.

*"...For the HCIV because of RBF, we have registered a greater improvement in documentation, teamwork, and commitment. The attitude has improved because the more patients, the more money that is given to them. .... For emergencies, as a country we have challenges but referrals are done for instance if, at a health center, a mother gets a complication that cannot be handled at that facility automatically they are referred to a higher level (hospital) amidst the unavailable ambulances, lack of fuel and lack of specialized personnel. This will demoralize other workers which bring poor performance" (Biostatistician, Aged 38, Female, Date; 2021, Mbarara District).*

One of the top officials in Isingiro district (DHO, Aged 48, Male, Date; 2021, Isingiro District) said that;

Generally, many perform well but there could be one or two who perform poorly because of absenteeism.

### Productivity

They are good because midwives are delivering mothers, seeking mothers for continentals, doctors, and clinical treating patients; support staff is also doing their work like cleaning the compound, and wards, guarding the health centers

**Availability:** ..... Few are absent and those few affect the service delivery, the many that are present perform to the expectations

### Responsiveness

In terms of emergencies, the health workers attend to the affected lives and they are always at health centers IVs, especially a few health workers who don't respond to emergencies

### The DHO Mbarara District pointed out that;

Health center IVs workers work over and above expectations specifically Bwizibwera HCIV workers which are operating at the hospital level, ...They have unique services like emergency obstetric services in that they have blood transfusion services. So it is a good health center IV. In terms of staffing, they are staffed up to 97% not to break down and to deliver to the expectations.

### Productivity

About figures, up to 90% of the mothers deliver in their facility, the C-section rate is 60% in a month, there are 130-

145 normal deliveries a week, and there is immunization and a fully frigid HIV clinic which runs on a daily clinic.

### Emergency/Response

The HCIV has a stand-by ambulance though they have been handy to coordinate the movement of mothers from one place to another. The ambulance is expensive but fueling is for the patients who would like to use it. On a scale of 1-10, the performance of employees in Mbarara is 8. This is because the supervision has been tight. The RBF has been a bullet for employees about motivation. Health workers always work hard to have a big share of the amount got from the ministry. For example, if you're a midwife, the more mothers you work with, the more money you get by default. It is a two-way thing, provide a service and get money. We pray that RBF continues to so that it motivate the health workers. There is also public commitment and involvement in that they have engaged VHTs to identify the mothers who have missed the 4th visitation so that they can acquire service and also deliver at the health center and that is a unique aspect of RBF which was there before.

### The deputy in charge Bwizibwera HCIV observed performance of workers was measured in terms of productivity and responsiveness.

#### Productive

For the time I have been here, I have worked with a good cooperative team, our performance is determined by the data for instance we gauge ourselves from the lead table pinned on the notice boards, in the maternity section, we are supposed to deliver 129 mothers per month but since this HC IV has grown up to the hospital but the number of deliveries shoots up to 180, C-section our target is 30 but we always attend to 35-40 beyond our target, for immunization- we measure performance by working on children up to 1 year plus DPT3 (last injection), for antenatal- we gauge ourselves on those who finish three visits of antenatal care... Generally, our graph is shooting up.

#### Responsive

Our health workers are always around because there are three shifts, morning, evening, and night... The health officers always respond to emergencies by taking history quickly, assessment but the nurse is the first person to work on patients before calling the medical officer. We don't have specialists so when a medical doctor cannot manage the emergency, we refer the patient to referral with the escort of a nurse and we have an ambulance here to help us though it is refueled by the patients who are in need, nonetheless, it is not good gesture, it may affect service delivery.

### The performance of workers at Mbarara Municipal Health Center was reported by in charge who reported that; Productivity

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I give them 70% in regards to human resources, the human resource coverage is 43% and there is a human resource gap, specifically in the maternal child program, health workers are supposed to have 3 shifts (8 hrs.) but they have 2 shifts a day (12 hrs.)..... The client load is enormous for example antenatal section receives 80-100 mothers a day and it is run by 2 health workers who have never missed, always on time at the facility. In the maternity section, before building the functional theater last year, we used to deliver 50-60 mothers a month but now we deliver 300 mothers a month on normal deliveries. This means handling 8-10 mothers a day is not easy at the health center level with limited human resources. Much as deliveries shoot up drastically, the human resources have not increased.... that is how committed and hardworking health workers are. On the side of the HIV section, clients who are getting services per day the 200-250 per day and the process is long, there are two health personnel attending to them.... so the staff is motivated to deliver whatever the case and I give them 75%.

Heavy workload as an outcome of human resource gaps specifically in the maternal child program, health workers are supposed to have 3 shifts (8 hrs.) but they have 2 shifts a day (12 hrs.)..... The client load is enormous and this breaks them down affecting the performance and ultimately poor service delivery

### Responsiveness

In terms of emergency, tremendous!... tremendous!.....oooh it was a tremendous one.. one night I was at home and I got a call about my mother who was in labor....remember, I always leave this health center at around 9:00 pm or 11:00 pm.. we don't have an ambulance or even vehicle so imagine the situation, I got out of my living room, jumped on the boda-boda and attended to her... we had so many challenges which demoralize our staff, for those would like to be referred to the regional hospital, recently we got a special hire vehicle for pregnant mothers..... so in case of C-section, we work as a team to provide a service.

### Availability

Health workers are always at the health center in case there is absenteeism that is understood, someone cannot spend a night and has delivered 5-6 mothers, and because timetable, they are supposed to be on duty the following day....as a

health in charge, I allow them to rest in an imperative to improve on the efficiency for the next shift. I have had one character that would give frequent excuses but the internal system called RBF (Result Based Financing) that was introduced recently has rewards and sanctions, so the person is changing since the RBF checks her performance daily. Overall absenteeism is no longer a problem.

### The performance of health employees as observed by Patients/End users.

The health employees are not productive at all, at this health center, about 100 patients come here and an estimated 30 are worked on, they refer others to health centers or tell them to come back the following day. In terms of availability... Ooh my God, they come at 9:00 am and go back at 2:00 pm, they don't come back after lunch and the health workers have their say that "**omukozzi wa gavumenti takubonabona**" (government worker doesn't toil), they are not available all the time. The response of the health workers was okay though they lacked an ambulance that is when they were available for instance one of the patients was in labor and since she was supposed to be operated on, they used their car to drive her to the hospital...health workers are also human [hahahaahahah]. (*Patient4, Aged28, Female, Date; 2021, Rwekubo HCIV*)

Mbwenu Government should help us, the number of patients is much more than the number of workers, imagine a patient being here the whole day waiting for a medical check-up or treatment, I can't believe 200 patients waiting for one health worker, that's stress on both the workers and patient, never the less, these medical employees are not serious, one worker cannot attend even 10 patients a day. The availability... ah, we are used to these workers because they come when they want not when they are supposed to, they come to only sign in the book at 10:00 am, attend like 10 patients and they will not show up after lunch... some come on appointments.. The response of health workers rhythms very well with the availability of ambulance, **Tonka shi, nokwefaho** (taking care of yourself), you rather ride a bicycle or boda boda and take your patient to the hospital or let him/her die. (*Patient10, Aged 28, Female, Date; 2021, Kazo HCIV*)

One thing that eating up my mind, health workers are at least paid much more than other government workers but they are lazy, they come very late and go back early and they don't attend to us during emergencies saying that they don't have medicine and equipment. Even the ambulance which is supposed to help us during emergencies has no fuel, we refuel ourselves to take us to the hospital for further medication and the cost of refueling is much,... imagine

going to Mbarara referral hospital, tax can cost 5000, the special car can cost a maximum of 20,000 while the ambulance is 50,000 as if the ambulance is taking Benzene not petrol or diesel. We are very unsatisfied with their performance. (Patient3, Aged45, Male, Date; 2021, Bwizibwera HCIV

## DISCUSSION OF FINDINGS

### Relationship between Job Conditions and Performance of Health Workers

The results indicate that there is a significant and positive association between job conditions and workers' performance and thus the hypothesis was supported. This suggests that unit-positive changes in job conditions are associated with positive changes in health center IVs. This means health administrators must ensure that working conditions are friendly and there is the existence of materials to use in prospective health center IVs. The findings also indicated that there is a positive and significant association between job security and employee performance. This means that the Government through the Ministry of Public Service must ensure the job security of health workers to improve their performance.

Respondents were asked about how health workers are secure in their workplaces and most of them pointed out health workers are permanent and pensionable according to the local government's standing order. This implies that health workers are secure in their jobs hence improving their performance. This is in agreement with Lucky, Minaiamd, and Hamzah (2014) who noted that employees' job security in multi-ethnic conditions significantly affects institutional performance.

*'They are very secure because they are on permanent and pensionable so long as they don't make grave mistakes that would lead them to be dismissed like the abandonment of duty, fighting at the workplace, indiscipline' (DHO, Aged48, Male, Date;2021, Isingiro District ).*

*"Their jobs are secure since they are very few, so you can ignore them or chase health workers because getting another one is a problem" (Patient 3, Aged45, Male, Date;2021, Bwizibwera).*

*"Perfect..... Perfect... perfect in other wards that we have not had any dismissed or laid-off from the duties. In other services, many are pushed out of their position but in the health sector, it has never happened, so health workers are very sure their jobs since they are permanent though some are interdicted on their chronicle absenteeism"(Incharge, Aged42, Male, Date;2021, MMC HCIV).*

### Training Opportunities at the Health Centers

The majority of the participants revealed that NGOs which patterns with local governments conduct 2 or 3 days of training to equip health workers with ideas for the ongoing projects. More so, supervisors train the health workers by being with them inwards, workshops, meetings, and seminars. This shows that training opportunities are significant in enhancing employee performance. This is in agreement with Obi-Anike & Ekwe (2014) who underscored that there is a significant association between formal learning of staff and institutional effectiveness. There was an improvement in job satisfaction and a decrease in employee turnover is the advantage of formal learning of staff in the public sector. Inter-individual and cooperation are the influence of formal learning of staff on institutional performance.

*"The training is right from the health centers whereby they sit and plan on how they will be leaving for further studies, they submit the plans to the districts to get study leaves.. the training is in such way that they don't leave the facility without health workers, so they go-in turns....The formal learning of staff also depends on the course because most of them spend 1 and half years, others 3 years mainly we gave them spending an order of three years to finish their course. They also trained in workshops for at least 2 days by NGOS for instance testing HIV, treating malaria and other health diseases" (DHO, Aged 48, Male, Isingiro District).*

*"We work a lot with projects and NGOs, the on-job training opportunities are there and we do professional advancement, especially for those who have served for at least 5 years and they need to develop their areas of interest for example in the last five years two clinical officers became doctors and they come back to serve.... the current in charge of Bugamba HCIV was clinical officer... he came back with a lot of commitment, enthusiasm, and love.. Uhhh surely the man delivers and performs very well" (DHO, Aged46, Male, Date; 2021, Mbarara District).*

### Work Environment at the Centers

Work conditions are very fundamental in health centers regarding workspace, storage, work tools, lighting, and aeration. It was noted that most respondents pointed out that space at the health center is not enough to accommodate all the clients, poor storage; and they don't have enough equipment to use medicines in the health center Ivs. This is in agreement with Bhaga (2011) who conducted the effect of the working environment on the productivity of nursing employees in the midwife obstetrical unit and found that working conditions are negatively influencing their welfare and job performance.

*"Hahahahah... people are working and surviving in the environment where they are, for instance, Bwizibwera is HCIV but working like a hospital, don't expect heaven on earth... the little space that is there is being used appropriately, they have made renovations and innovations and that's how they are surviving.... when there is a necessity to repair or paint, we have surely tried to do that...." (DHO, Aged46, Male, Date; 2021, Mbarara District).*

### **Benefits derived from having a healthy, sufficient, pleasant work environment**

The majority of the participants assumed that having a pleasant environment at health center IVs prevents them from acquiring other diseases, eases work, improves the performance of health center workers, and reduces the stress of both clients and health center workers. This indicates that the working environment is important in enhancing health services hence comforting the workers. This is by Lukwago (2019) disclosed that there is a positive and significant relationship between working conditions and workers' productivity.

*"[.... ] It improves hygiene, Hygiene rise in job ladders is significant for staff, patients, and careers. Big and clean spaces can reduce the risk of getting an infection, COVID-19 -19, and flu. This applies to all health-care settings since hygiene may be limited to lack of enough basic information about such things as the location and correct use of toilets and hand washing points"*

*(Patient10, Aged28, Female, Date; 2021, Kazo HCIV).*

*"both thank you... A healthy environment helps build, maintain, and strengthen the relationship between medical workers and supervisors and allows patients to feel appreciated and cared about. This, in turn, impacts positively on job satisfaction. An environment in which health workers are supported by providing them with good equipment, gloves, uniforms, and security, influences a healthier, happier, and more dynamic workplace ambiance leads to lower levels of worker absenteeism, better cognitive performance, and reduced stress of patients" (Dept. In charge, Aged43, Female, Date; 2021, Bwizibwera HC IV).*

The findings were in agreement with Lutwama, Roos, and Dolamo's (2013) research on evaluating the execution of performance management of healthcare employees in Uganda and the results indicate that to some extent performance management is implemented in the health sector, many healthcare workers had job descriptions, the performance indicators and standards were not clearly defined and known to all workers and managers. The results Lutwama (2011), researched the performance of health employees in the decentralized services in

Uganda and the results discovered that the performance of health employees is generally affected by health systems and work environment-related factors, also the findings indicated that health workers are skilled, and competent, and generally have positive attitudes and behaviors towards their clients. The study uncovered loopholes in performance management no target setting, no performance management planning, performance signs not defined, and the programs for performance measurement not always followed, limited career progression, and absence of practical performance feedback and rewarding strategies. The study results also concur with Maslow's hierarchy of needs which was developed in (1991), it emphasizes that job conditions such as environment and job security are very crucial to improving the performance of employees.

### **Conclusions**

The findings disclosed that both job security and work environment are significant and positive predictors of health center IV workers' performance. This means that any positive changes in job security and work environment are associated with positive changes in workers' performance. Nonetheless, job security matters most.

This means that the work environment such as working conditions, office layout, and design, workload, health materials/kits, and equipment once provided to different health centers enhance performance in terms of reliability of health workers and improvement on their productivity.

The results further revealed that job stability has a significant relationship with health workers and their performance. This means that the Ministry of Public Service together with the Ministry of Health should carry out selection and recruitment and successful applicants should always be appointed permanently, to get assurance of their jobs till retirement. This always motivates staff to continue attending to patients on time and work on emergencies with utmost care.

More so, the results showed a significant association between working conditions and the performance of health workers. This means that it would increase morale at the workplace and hence improve performance.

The results showed no significant association between training and health workers' performance. This means that the Health Ministry should organize regular training for health workers in different health centers so that in the long run, workers benefit from training programs. Through training, the employee competencies are developed and they are enabled to implement the job-related work efficiently, and competitively achieve firm objectives.

Furthermore, the findings also indicated an insignificant association between autonomy and the performance of health employees. This means that health

employees are not independent as far as making decisions on their tasks, is concerned. If this is not considered, it would affect health staff in positions of job involvement, participation, satisfaction, general healthcare, and welfare of employees.

### **Limitations of the study**

During the process of conducting the study, the researcher is expected to face the following problems;

The study was carried out in some communities and therefore transport costs were a challenge. This is because the respondents were far away from each other hence necessitating the researcher to walk long distances before meeting the next respondent in the area of study.

Some respondents failed to release the data even some may demand money before releasing the required data. This study was not funded causing financial constraints to the researcher.

Even getting key informants was also difficult since most health workers were not available at health centers for some time.

### **Recommendations**

The researcher recommends that health administrators must ensure job security for all health workers irrespective of status and class. If this is done it accelerates the performance of all workers in different health facilities. If an employee enjoys high job security, he/she is likely to successfully execute the task which is replicated in the general performance of the institution. For example, in organizations, tasks are normally broken down into jobs that are assigned to each employee.

The findings from the questions on health workers' participation in training and selection for training indicate that these health center IVs have no clear policies regarding formal learning of staff as most of the respondents indicated that they have never participated in such activities. Therefore the researcher recommends that the Ministry of Health adopts training of its staff in different health centres.

The researcher further recommends that health administrators should design training programs that are relevant to the needs of their health workers to boost their confidence when it comes to the performance of their duties.

For training to be effective, the health administrators should first seek approval from the Ministry of Health, because of the financial implications.

### **Contribution of the Study**

Also, dimensions of job conditions like training and autonomy were discovered to be insignificant and did not apply in the context of a developing country whereas job security and work environment were discovered to be positively significant. During the analysis, variables, and items which did not pass construct validity were automatically removed.

### **LIST OF ABBREVIATIONS**

1. AMOS-Analysis of Moments of Structures
2. CAO- Chief Administrative officer
3. CFA- Confirmatory Factor Analysis
4. CFI-Comparative fit index
5. DHO- District Health Officer
6. GFI- Goodness of Fit index
7. HCI- Health Centre three
8. HCIV- Health Centre Four
9. JC- Job Conditions
10. MMC- Mbarara Municipal Council
11. NGO – Nongovernmental Organization
12. Normed Fit Index
13. RBF- Result Based Financing
14. RMSEA- Root Mean Square Error Approximation
15. SEM- Structural Equation modeling
16. SPSS- Statistical package for social sciences
17. TLI Tucker Lewis Index
18. UVRI- Uganda Virus Institute
19. WHO- World Health Organisation

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### **Conflict of interest**

The authors have no competing interests to declare

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