



## Perceived Impact of Safety Management Services on Job Performance of Primary Health Care Workers in Port Harcourt Metropolis, Rivers State

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### Abstract

*This study examined the perceived impact of safety management service on job performance of primary health care workers in Port Harcourt metropolis, Rivers State. A descriptive cross sectional survey design was adopted, with the population of 985 health care workers as at time of the study in Port Harcourt Metropolis. The sample size of 490 was obtained. Multistage sampling procedure was adopted for the study which was in three stages. The instrument for data collection was self-structured questionnaire with a reliability co-efficient of 0.76 titled 'Perceived Impact of Safety Management Service on Job Performance among Primary Health Workers Questionnaire (PISMSJP)'. Data were analyzed using Statistical Products for Service Solution version 23.0. The result of the study revealed that the grand mean of 2.12 was less than criterion mean 2.50 depicting a low impact of safety service on job performance of primary health care workers. The findings of this study showed that there were a significant perceived impact of safety service on job performance of primary health care workers based on gender ( $p < 0.05$ ), income status ( $p < 0.05$ ), training ( $p < 0.05$ ), availability of Personal protective Wears (PPW) ( $p < 0.05$ ) among primary health care workers. It was concluded that safety management service has a low impact on the job performance of primary health care workers in Port Harcourt metropolis. The study recommended that government and management board of health care service should implement health and safety insurance scheme for workers at different levels especially primary health care workers in order to improve their well-being.*

**Keywords:** Impact, Safety, Management service, Primary health care

### Introduction

The health and safety hazards in the workplace have come to stay among health care workers contributing to increase morbidity and mortality rate, burnout, job resignation, depression, health challenges among others in developing countries like Nigeria and Rivers State as part of it. Managing the safety and health of workers especially PHC employees is an integral part of management and job performance. International Labour Organization (ILO, 2020) stipulated that institution like healthcare system need to do a risk assessment to find out about the hazards and risk in their workplace(s) and put measures in place to affectively control them to ensure these hazards and risks cannot cause harm to workers

One of the major factors that determine the impact of health and safety management service on job performance is gender of PHC workers. Gender is the social disposition of an individual to either male or female in society. Job performance among workers varies which could be based on the knowledge and ability to carry out a particular task. Mbachu et al. (2013)



put up that monitoring and evaluation is part of management service of health care workers but the actual practice is on gender. That is the use of management service to improve their job performance could be based on gender. Evidence showed that 78.7% of workers are satisfied with the vital role in work performance with others in same work environment (Tasneem et al., 2018). Studies of Wachter et al. (2014) revealed that there was a negative significant relationship between safety management systems and workers engagement levels can be used to predict accident rates. The health and management system associated with incident reduction may be the initial step towards improving workers' welfare, and safety performance. The PHC workers' performance in the workplace could be based on safety management systems designed to promote and enhance workers' engagement. It could be clear that female health workers are more emotional in reacting to health and safety issues than male which in turn has a great influence in their performance. Primary health care workers engagement in safety may systematically act to reduce the likelihood of human errors occurring, making them more aware of their surroundings.

Training could be another factor that determines the performance of PHC workers. Training is both formal and non-formal process that offers workers new knowledge about the nature of a job or task. It may be clear that if health and safety management system provide quarterly training for health care workers there may increase in job performance. Studies of Nwankwo et al. (2020) revealed that health care workers who receive training (intervention group) are 52.6% likely to show positive effect towards health management system. Also training is interventional and significant towards the improvement in knowledge for effective and quality health care service delivery. The quality health care service delivery is symptomatic to job performance exhibited by PHC workers. Nwankwo et al. (2018) further buttressed that health and safety management information system training achieved an improvement in the data management and good performance of PHC workers. Consistent quarterly training may broaden the knowledge and practice of PHC worker to deliver good services if organized by management system. Similarly, Adindu et al. (2006) affirmed that only 27.8% of PHC workers had training specific on health and safety management system and likely to perform well at work. He further suggested that personnel training, feedback from higher level and availability of transportation will improve the performance (Adindu et al., 2006). Organized training for health personnel at the primary level could exert a great influence on the performance of PHC workers. In-service training enhance good knowledge and provide workers with the latest information to improve their activities at the work place. The health and safety management system should ensure that training and educational programme be organized or defined by the employers to maintain that they are competent to carry out the safety and health aspect of their duties and responsibilities (ILO, 2020).

Availability of health and safety devices such as personal protective equipment may have impact on the job performance of PHC workers. The availability and utilization of safety devices provide a resultant reduction of hazards and risks by PHC workers. It could clear that if health and safety management service made PPE and other safety device available and use by PHC workers there may be increased chances of job performance. Otieno (2019) defined PPE as all equipment designed to be worn or held by a workers or person at work to protect against one or more risks and any addition or accessory designed to meet this objective. Effective use of PPE and availability minimize workplace exposures to hazards thereby predict huge level of safety practice which in turn enhance good performance. Ahmed et al. (2018) revealed use of PPE in



descending order was facemask (25.6%), handgloves (27.5%), safety glasses (33.3%), surgical/safety shoe (10.8%) respectively is interventional.

Good proportion of primary health care workers got infected and died of Covid-19 pandemic in Nigeria and Rivers State because of inadequate management services of health and safety of primary health care workers such as lack of personal protective equipment, lack of training, shortage of staff, and in-access to safety materials among others. There are supposed to be high prioritization and sustainability of health and safety of primary health care workers which could have enhanced good performance. In spite of governmental implementation of health policies and safety measures, the welfare of primary health care workers are yet to be considered. In Rivers State, there are health care facilities in every Local Government Areas but there is dearth of equipment and manpower for effective operation and no appropriation to revamp and revitalize the health care system. This affects the performance of primary health care workers especially in service delivery. There is a dearth of literature from scholars on impact of health and safety management service on job performance of workers. Therefore, the researcher, intend to unravel the perceived impact of safety management services on job performance of health care workers in Port Harcourt metropolis of Rivers State.

### **Objectives of the Study**

The objective of this study was to examine the perceived impact of safety management service among health care workers in Port Harcourt metropolis, Rivers State. Precisely, this study sought to:

1. examine the safety management services on job performance of primary health care workers in Port Harcourt metropolis, Rivers State;
2. ascertain the safety management services on job performance of primary health care workers based on gender in Port Harcourt metropolis, Rivers State;
3. determine the perceived impact of safety management services on job performance based on training of primary health care workers in Port Harcourt metropolis, Rivers State;
4. determine the perceived impact of safety management services on job performance of primary health care workers based on availability of Personal protective Wears (PPW) in Port Harcourt metropolis, Rivers State;
5. find out the impact of safety management services on job performance of primary health care workers based on income status in Port Harcourt metropolis, Rivers State.

### **Hypotheses**

The following null hypotheses were postulated and tested at 0.05 alpha level.

1. Safety management services has no significant perceived impact on job performance of primary health care workers based on gender in Port Harcourt metropolis, Rivers State
2. Safety management services has no significant perceived impact on job performance of primary health care workers based on training in Port Harcourt metropolis, Rivers State
3. Safety management services has no significant perceived impact on job performance of primary health care workers based on personal protective wear in Port Harcourt metropolis, Rivers State;
4. Safety management services has no significant perceived impact on job performance of primary health care workers based on income status in Port Harcourt metropolis, Rivers State.

### **Materials and Methods**



The design for this study was descriptive cross sectional survey design. The population for this study consisted of 985 health care workers as at time of the study in Port Harcourt city and Obio/Akpor Local Government Areas (Port Harcourt Metropolis) of Rivers State. The maximum sample size for the study consisted of 490 primary health care workers which was estimated using Taro Yamene formula for a finite population. Multi-stage sampling procedure was adopted to select the participants for the study. The instrument for data collection was self-structured questionnaire designed by the researcher titled, “Perceived Impact of Safety Management Service on Job Performance among Primary Health Workers Questionnaire (PISMSJP). The validated instrument was correlated by using person product moment correlation coefficient” (PPMCC), a reliability co-efficient of 0.76 was high enough and was used for the study. The researcher and two trained assistants were deployed to administer the instrument to the participants. Data collected from this study were analyzed using Statistical Products for Service Solution (SPSS) version 23.0.

## Results

**Table 1: Socio-demographic data**

Variables	Frequency (n=450)	Percentages
Age		
20-30 years	152	33.8
31-40 years	190	42.2
41-50 years	72	16.0
51-60 years	36	8.0
Marital status		
Married	315	70.0
Single	135	30.0
Gender		
Male	98	21.8
Female	352	78.2
Level of education		
Primary	18	4.0
Secondary	55	12.2
Tertiary	377	83.8
Income status		
30,000-50,000	77	17.1
51,000-70,000	135	30.0
71,000-90,000	112	24.9
91,000 and above	126	28.0
Training		
Monthly	72	16.0
Quarterly	167	37.1
Midyear	36	8.0
Yearly	175	38.9



Table 1 showed the socio-demographic data of respondents. The results showed that 152(33.8%) are aged 20-30 years, 190(42.2%) 31-40 years, 72(16.0%) 41-50 years and 36(8.0%) 51-60 years. 315(70.0%) are married while 135(30.0%) are single. For gender, 98(21.8%) are males while 352(78.2%) are female. Based on education, 18(4.0%) had primary education, 55(12.2%) had secondary education and 377(83.8%) had tertiary education. 77(17.1%) are paid ₦30,000-50,000, 135(30.0%) ₦51,000-70,000, 112(24.9%) ₦71,000-90,000 and 126(28.0%) ₦ 91,000 and above. On training, 72(16.0%) are trained monthly, 167(37.1%) quarterly, 36(8.0%) midyear and 175(38.9%) yearly.

**Table 2: Perceived impact of safety management services on the job performance of primary health care workers**

Variables	Mean	Standard deviation
Personal protective wears are provided for primary healthcare workers	1.72	0.98
Trash bin is available at every primary healthcare facilities	1.50	0.57
directional board are not provided at primary healthcare facilities	2.80	1.11
Training and retraining are organized for primary healthcare workers	1.90	1.14
Muster points are available at primary healthcare facilities	2.82	1.07
Workshops for pandemic diseases are organized for primary healthcare workers	1.98	1.22
Total	2.12	1.01

Criterion mean = 2.5. >2.5 is high impact; <2.5 is low impact

Table 2 showed the perceived impact of safety management services on the job performance of primary health care workers in Port Harcourt metropolis, Rivers State. The result showed that the grand mean = 2.12 is lesser than the criterion mean of 2.5 indicating low impact of safety management services on the job performance of primary health care workers in Port Harcourt metropolis, Rivers State. However, high impact of safety management services on the job performance of primary health care workers was found where respondents agreed that directional board are not provided at primary healthcare facilities (2.80±1.11) and that muster points are available at primary healthcare facilities (2.82±1.07).

**Table 3: Analysis of Variance (ANOVA) showing significant perceived impact on job performance of primary health care workers based on gender in Port Harcourt metropolis, Rivers State**

Sources	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.134	1	.134	.555	.457
Within Groups	107.866	448	.241		
Total	108.000	449			

\*Not Significant. p<0.05



Table 3 showed the One-Way ANOVA of significant perceived impact on job performance of primary health care workers based on gender in Port Harcourt metropolis, Rivers State. The findings of this study shows that there was no significant perceived impact on job performance of primary health care workers based on gender in Port Harcourt metropolis, Rivers State [ $F(1,448) = .555$ ;  $p > 0.05$ ]. Therefore, the null hypothesis which states that health management services has no significant perceived impact on job performance of primary health care workers based on gender in Port Harcourt metropolis, Rivers State was accepted.

**Table 4: Analysis of Variance (ANOVA) showing significant perceived impact on job performance of primary health care workers based on training in Port Harcourt Metropolis, Rivers State**

Sources	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.665	3	2.222	9.778	.000
Within Groups	101.335	446	.227		
Total	108.000	449			

\*Significant.  $p < 0.05$

Table 4 showed the One-Way ANOVA of significant perceived impact on job performance of primary health care workers based on training in Port Harcourt metropolis, Rivers State. The findings of this study shows that there was a significant perceived impact on job performance of primary health care workers based on training in Port Harcourt metropolis, Rivers State [ $F(3,446) = 9.778$ ;  $p < 0.05$ ]. Therefore, the null hypothesis which states that health management services has no significant perceived impact on job performance of primary health care workers based on gender in Port Harcourt metropolis, Rivers State was rejected.

**Table 5: Analysis of Variance (ANOVA) showing significant perceived impact on job performance of primary health care workers based on availability of Personal protective Wears (PPW) in Port Harcourt metropolis, Rivers State**

Sources	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	19.268	1	19.268	97.280	.000
Within Groups	88.732	448	.198		
Total	108.000	449			

\*Significant.  $p < 0.05$

Table 5 showed the One-Way ANOVA of significant perceived impact of safety management service on job performance of primary health care workers based on availability of Personal protective Wears (PPW) in Port Harcourt metropolis, Rivers State. The findings of this study shows that there was a significant perceived impact on job performance of primary health care workers based on availability of Personal protective Wears (PPW) in Port Harcourt



metropolis, Rivers State [ $F(1,448) = 97.280; p < 0.05$ ]. Therefore, the null hypothesis which states that health management services has no significant perceived impact on job performance of primary health care workers based on availability of Personal protective Wears (PPW) in Port Harcourt metropolis, Rivers State was rejected.

**Table 6: Analysis of Variance (ANOVA) showing significant perceived impact on job performance of primary health care workers based on income status in Port Harcourt metropolis, Rivers State**

Sources	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.982	3	2.327	9.939	.000
Within Groups	104.442	446	.234		
Total	111.424	449			

\*Significant.  $p < 0.05$

Table 6 showed the One-Way ANOVA of significant perceived impact of safety management service on job performance of primary health care workers based on income status in Port Harcourt metropolis, Rivers State. The findings of this study showed that there was a significant perceived impact on job performance of primary health care workers based on income status in Port Harcourt metropolis, Rivers State [ $F(3,446) = 9.939; p < 0.05$ ]. Therefore, the null hypothesis which states that safety services have no significant perceived impact on job performance of primary health care workers based on income status in Port Harcourt metropolis, Rivers State was rejected.

## Discussion

### **Safety management services on job performance of primary health care workers.**

The finding of the study showed a low impact of safety management services on the job performance of primary health care workers. However, high impact of safety management services on the job performance of primary health care workers was found where respondents agreed that directional board are not provided at primary healthcare facilities and that muster points are available at primary healthcare facilities. This shows that there are some factors that may improve management services among health care workers. These factors may either improve or decrease job performance among these professionals. The finding of this study is synonymous to that of Kuo-chung et al. (2011) and Abraham et al (2015). Their studies reported low impact of safety management services on the job performance of primary health care workers.

The finding of the study is also in keeping with that of Hakim et al (2016) and Nwankwo et al. (2018) whose studies discovered the impact of safety management services on the job performance of primary health care workers. Though, their result is much better than the result of the present finding. This may be so because the country where this study was done must have invested much in their healthcare compared to the country of the present study. Also, the finding



of this study is in consonant with the studies of Agboola et al (2019) and Liu et al (2020). Their studies showed that safety management services impacted the job performance of primary health care workers. Hence, by implication, it relates that healthcare workers would do well if there are safety management services. However, some factors such non availability of safety equipment can hinder safety services among these professionals.

**Perceived impact of safety management services on job performance of primary health care workers based on gender in Port Harcourt metropolis, Rivers State.**

The finding of the study showed a low impact of health and safety management services on the job performance of primary health care workers. However, the impact seems to be higher among females compared to the males. This shows that though there may be low impact but the females tend to do well on job performance when motivated compare to the males. However, the finding of this study is related to that of Lawan et al (2009) and Campell et al (2011). Their studies discovered that health and safety management services on the job performance of primary health care workers are associated with gender. This shows that motivation is more seen in women than men. The finding of this study is also in keeping with the studies of Amoran et al (2005), Luo et al (2018) and Alao et al (2020). These studies revealed the relationship between gender and the impact of health and safety management services on the job performance of primary health care workers. Also, further test of significance in this study also revealed the relationship between gender and their impact on job performances. The similarities reported between these studies and the present study might be attributed to the fact that humans across the world need some kind of motivation that the female gender tends to be happier and do well when motivated. In terms of safety practice, women also tend to be careful in order not to be injured, compare to men who will always want to show their power.

**Perceived impact of safety management services on job performance of primary health care workers based on availability of Personal protective Wears (PPW).**

The findings of the study show a low impact of health and management services on the job performance of primary health care workers based on availability of Personal protective Wears (PPW). However, the impacts seem to be high among those who have no availability of Personal protective Wears (PPW) compared to those who have. This indicates that if there is availability of Personal protective Wears (PPW), health care workers will comply appropriately as seen in the result of this study were there is more impact on those who do not have access to equipment. The findings of this study are in corroboration with that of Jasani et al. (2016), Alao et al. (2020) and Hassan (2017). There studies reported that lack of materials for use decreased the participation and activities of healthcare workers.

The findings of this study are in line with that of Kuffour (2020) and Kumar et al (2013) including Hakim et al (2016). Their studies reported a relationship between health and management services and availability of materials and equipment. The finding of the study is in consonant with that of Umugwaneza et al (2019) and Nzuv (2020). Their studies discovered that workers are never motivated when they are not provided with working tools. It is plausible that if safety devices such as personal protective equipment are provide and made available for workers without compromise, service delivery would effective and efficient. However, the similarities between these studies and the present study might be attributed to the fact that the presence of working tools improves work efficiency among workers. Though other factors may play important roles, such as ability to provide alternatives and working environment.





### **Perceived impact of safety management services on job performance of primary health care workers based on income status.**

The findings of the study showed a low impact of health and management services on the job performance of primary health care workers based on income status. However, the impacts seem to be high among those paid ₦90,000 and above. The findings of this study further shows that there was a significant perceived impact on job performance of primary health care workers based on income status in Port Harcourt metropolis, Rivers State ( $p < 0.05$ ). This shows that the higher the pay the more impacts among workers. The findings of the study is in keeping with that of Luo et al. (2018) depicting that increase in income status of health care workers goes along way to encourage quality service delivery and good performance. Campell et al. (2011) and DeZolina et al. (2019). Their studies reported that there is a relationship between the impact of safety management services on the job performance of primary health care workers based on income status. It is plausible to note that workers who received good wages as at when due may likely perform excellently in the area of job description because their welfare has been handled. The result of the study is also in line with that of Selamu et al. (2019) and Kuffour (2020). Their studies discovered that income status plays a major role in the motivation of not just health workers but workers as a whole. By implication, its shows that healthcare workers will do well if they are well taken care of in terms of salary. Hence, there is need to improve on the salary of healthcare workers in order for them to do well. However, there are other factors that may play important roles, including the policies enacted by health regulations and regular job supervision.

### **Conclusion**

In respect to this study, it was concluded that safety management service has a low impact on the job performance of primary health care workers in Port Harcourt metropolis which was statistically different based on socio-demographic characteristics such as gender, training, availability of personal protective wears and income status.

### **Recommendations**

In regard to this study, the following recommendations were made:

1. Government and management board of health care service should implement health and safety insurance scheme to workers at different level especially primary health care workers in order to improve their well-being.
2. The National Health Insurance scheme should have a package for health care workers to enroll in to enable them to feel secure and guarantee their health and safety welfare.
3. The primary health care workers should embrace the health and safety insurance scheme to improve their standard of living.
4. Government and health care agencies should provide safety materials and protective devices for health care workers at all levels of health delivery system to secure them from risk or hazards at work place.

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