BEREAVED COVID-19 HEALTH WORKERS: PERCEIVED ORGANIZATIONAL SUPPORT AND LEVEL OF EDUCATION AS CORRELATES OF MOTIVATION AMONG NURSES IN PUBLIC HOSPITALS

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ABSTRACT: The study explored whether perceived organizational support and level of education influence motivation among nurses in public hospitals in the south eastern region of Nigeria despite the loss of their colleagues to Covid-19 virus. Data were collected using cross-sectional design from a sample of 203(120females, 59.1% and 83 males, 40.9%) nurses in Imo state specialist hospital Umuguma, Enugu State University Teaching Hospital, Park Lane, Enugu and Nnamdi Azikiwe University Teaching Hospital Awka, Anambra state, all in South-Eastern part Nigeria. Short version of Perceived Organizational Support (SPOS) (Eisenberger, Huntington, Huchison, & Sowa, 1986) and Situational Motivation Scale (SIMS) (Guay, Vallerand, & Blanchard, 2000) were instruments used to elicit information. The hierarchical multiple regression results showed that level of education is not a significant correlate of motivation, Perceived Organizational Support positively predicts motivation ($\beta = .46$, p<.01). The findings of the study were discussed, conclusions were drawn and recommendations made.

Keywords: Organizational Support, Level of Education, Motivation, Nurses.

INTRODUCTION

Nurses are indispensable in a nation's health system, although a nation like Nigeria has constantly overlooked their relevance. This however, has led to an unfortunate increase in brain drain adversely in our health system as nurses in Nigerian hospitals seek greener pastures in countries where they are adequately encouraged to execute their duties. The factor otherwise known as the energy that keeps one focused in the midst of uncertainties and dangers as the individual aims towards satisfying and achieving an urgent need. Motivation as a complex cum multidimensional construct has been loosely defined by Marquis and Huston (2012) as the force within an individual that influences or directs behavior. In a similar vein, Roussel and Swanburg (2009) viewed the concept as one mainly used to describe an external state inspiring a special behavior and internal responses revealing that behavior.

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In the realm of work settings, scholars like Franco, Benneth and Kanfer (2002) conceptualized motivation as an individual's degree of willingness to exert and maintain an effort towards organizational goals. This willingness to exert such effort may arise from an inner force(intrinsic motivation (IM)) which leads a worker to attain set aims, whereas extrinsic motivation (EM) is viewed as an exterior force that causes workers to meet set goals (Hee, Kamaludin & Ping, 2016). A major disparity between these two types of motivation lies in the location of the driving force. While IM is internally located and facilitated by pleasure and self gratifications, the EM is externally located and enhanced by awards, pay and bonuses. Motivation of workers, especially nurses in hospitals in the face of the contagious COVID-19 is very essential for a better performance in the form of better and quality service delivery (Toode, Routasalo & Suominen , 2015).

It is no longer news that our nurses do not receive adequate attention and are often neglected instead of making them feel like an indispensable part of the building organization and management team of the health care industry. This, however, arouses certain ill feelings in these individuals and fostered problems like low morale and perception of very little or no organizational support (Wynd, 2003). This perception could propel lack of drive to discharge functions ascribed to the profession, whereas nurses remain chief figures to reckon with in the general healthcare provision, hence, the need to give them adequate attention and keep them motivated to discharge their functions.

In a healthcare system as Nigeria's, one will be forced to suggest that increasing the motivational level of every existing staff is very essential. Just as Mosadeghrad (2014) noted, that well motivated employees tend to precipitate better and yield outstanding outputs. Conversely, an institution that take its staff for granted, fails to address their needs nor motivate the employees provokes and breeds a lower performance and, eventually, they give up, leading to higher attrition rates (Toode, et al., 2015; Gagné & Deci 2005). In the healthcare institutions, such situation force nurses and other healthcare workers to exude inadequate healthcare services to patients leading to high mortality rate.

The nursing workforce in Nigeria undoubtedly plays enormous critical role in providing among others a direct primary health care in remote and rural areas. This role is made even more manifest with the invention of mobile clinic. Nurses engage in providing high quality care to patients at all times as front-liners, when their lives are at stake as evidenced in the Covid-19 increase. These nurses at times hold a diploma from a three-year program at an approved health care institutes or nursing schools. Other nurses possesses' bachelor, master and doctorate degrees from reputable universities world over. The duration and intensity of training the individuals for a better performance in the field vary among academic institutions of health and the certification one pursues.

Global systematic review of studies has identified several factors that tend to influence and affect nurses' job motivation. The reviews identified factors such as working condition, living conditions, career development, nurse's empowerment, financial and non financial activities (Halcomb, Smyth & McInnes, 2018; Dormon, Balen, Schmidtke & Vlaev, 2017; Cicolini, Comparcini & Simonetti, 2014). Researchers like Pandey, Goel, and Koushal (2018) found

organizational commitment to the welfare of their Nurses to be significantly related to motivation score among nurses working in the night shifts in Indian hospitals. Although, several other studies like the qualitative work conducted by Bhatnagar, Gupta, Alonge and George (2017) among healthcare workers in Nigeria opines that health care employees are mainly motivated by staff dynamics, leadership style and nature of supervision utilized. Little wonder scholars (Trépanier, Forest, Fernet, & Austin, 2015; Fernet, Trépanier, Austin, Gagné, Forest, et al., 2015) in their study advocated for transformational leadership and other positive managerial practices so as to foster motivation and high quality of incentives among health care employees as inadequate organizational support remains the hallmark of demotivation (Dagne, Beyene, & Berhanu, 2015; Prytherch, Kakoko, Leshabari, Sauerborn, Marx, et al., 2012). This finding was out rightly supported by prominent research works (Purohit, Maneskar, & Saxena, 2016; Daneshkohan, Zarei, Mansouri, Maajani, Ghasemi, et al. 2015), although the later opines that supervisors' support is more important in motivating health care employees. Globally, studies on organizational support in health care industries are just few hence the need to add to existing knowledge.

Nurses' work motivation level is affected by several factors (Baljoon, Banjar, & Banakhar, 2019) and level of education of nurses is one of such factors. A study of nurses' motivation in Addis Ababa by Negussie (2012) found a significant difference in nurse motivation based on educational qualification. Zarei, Najafi, Rajaee and Shaseddini, (2016) found a significant difference in nurse motivation and educational qualifications, adduced that employees who possessed academic qualifications valued career development and job content where as worker that has a less education craved for an increased remuneration, social respect and autonomy. Interestingly, Kumar, Mehra, Inder and Sharma (2016) in their study found non-degree healthcare providers to be less motivated than when compared to their degree holder counterparts. Other researchers like Dagne, Beyene and Berhanu 2015 has also offered credence to the significant difference in nurses' motivation based on educational qualification.

Statement of the Problem

Despite the increased number of studies on motivation (Bhatnagar, Gupta, Alonge & George, 2017; Hee, Kamaludin and Ping, 2016; Toode, 2015; Battistelli, Galletta, Portoghese & Vandenberghe, 2013; Galletta, Portoghese & Battistelli, 2011; Toode, Routasalo and Suominen, 2011), the influence of level of education and how nurses perceive organisational support have received little attention among health care professionals. This study therefore aims to investigate the factors that fueled the health sector towards achieving a near quick triumph over the dreaded Covid-19 pandemic in Nigeria. It explores the roles played by the nurses of various health facilities to drastically reduce the excruciating effects of Corona virus in our society despite the death and failing health of coworkers; nurses and doctors alike. The researchers considered it absolutely necessary to study motivation among nurses in the South Eastern part of Nigeria who are working in public hospitals since government owned and managed hospitals cater for majority of the citizens and these individuals were still up and doing in the face of challenges associated with Covid-19 pandemic like death of colleagues and friends. The motivation of nurses is indispensible if the country hopes for a better health care services delivery and optimal health functioning of its citizens.

Objectives of the Study

In addition, the researchers unravelled that existing studies on this issue in our nation, are very few to inform policy makers, hospital managers, non-governmental and government agencies to enable them formulate an evidence-based master plans for an optimal functioning of human resources in our health care industries. In the light of the forgoing, the present study comprehensively explored perceived organizational support and level of education as correlates of motivation among nurses in the South Eastern states of Nigeria working in public hospitals in the face of Covid -19 pandemic despite the death of their colleagues, using standardized instruments that have been validated in previous researches. Thus, the following questions were examined in this study:

- To what extent does level of education correlate with motivation of nurses in the public hospitals.
- Does perceived organizational support correlate with motivation of nurses in the public hospitals?

Hypotheses

Accordingly, the researchers tested the following hypothesis in this study:

- 1. Perceived Organizational support will significantly correlate with motivation.
- 2. Level of education will significantly correlate with motivation.

METHOD

Participants

The sample consisted of 203 employees of public hospitals in the South Eastern part of Nigeria. Snowball sampling was used to select the participants due to the imposed National lockdown all over the country as a way to reduce the drastic effects of the Covid-19 virus. Participants for the study includes 44 nurses drawn from Imo State Specialist Hospital, Umuguma, 90 from Enugu State University Teaching Hospital, Park Lane, Enugu and 69 from Nnamdi Azikiwe University Teaching Hospital, Awka, Anambra state. Their age ranges between 24 to 50 years (Mage-37 years). The South Eastern states and hospitals used in the study were randomly selected by the researchers with details as shown below;

Demographic Variables	Features of the Variables	Number of participants	Percentage (%)
Gender	Male	83	40.9
	Female	120	59.1
Marital Status	Married		33.0
	Single		67.0
Educational level	WAEC		2.0
	B. Sc		85.7
	M. Sc		8.4
	PhD		3.9

To participate in the study, the nurse should be able to read and write, must have worked for the past two (2) years and presently not occupying any managerial position.

Instruments

Short Version of the Perceived Organizational Support (SPOS)

The Perceived organizational support by Eisenberger, Huntington, Huchison, & Sowa (1986) refers to the general belief in which employees feel that their organization values their contributions and cares about their well-being. The inventory consists of 16 items and a 7-point Likert Scale response (0=Strongly Disagree, 1=Moderately Disagree, 2= Slightly Disagree, 3= Neither Agree nor Disagree, 4= Slightly Agree, 5= Moderately Agree and 6= Strongly Agree). The SPOS was also validated by the researchers using 50 nurses from Imo state teaching Hospital Orlu and Federal Medical Centre Owerri. Reliability analysis results performed showed that the scale has a good internal consistency (Cronbach's alpha) of .87.

The Situational Motivation Scale (SIMS)

This instrument developed by Guay, Vallerand, and Blanchard (2000), assesses personnel situational motivation as it relates to a given construct. The scale is a 16 item scale with four subscales: intrinsic motivation (IM), identified regulation (IR), external regulation (ER) and amotivation (AM). Each item was rated on a 7-point Likert scale ranging from 1= does not corresponds at all; 2= corresponds a very little; 3= corresponds a little; 4= corresponds moderately; 5= corresponds enough; 6= corresponds a lot; 7= corresponds exactly. Items 1, 5, 9, 13 and items 2, 6, 10, 14 measures Intrinsic motivation and identified regulation while items 3,7, 11, 15 and items 4, 8, 12, 16 measures external regulation and amotivation respectively. The SIMShas demonstrated good reliability and factorial validity. According to Guay ET. al., (2000) Cronbach's values for the subscales were relatively adequate (intrinsic motivation .95; identified regulation .85; external regulation .62; amotivation .83). The SIM was also validated by the researchers using 50 nurses from Imo state teaching Hospital, orlu and Federal Medical Centre, Owerri. Reliability analysis was performed on the data obtained from them. The results showed that the scale has a good internal consistency (Cronbach's alpha) of .81. The internal consistency for the subscales was as follows: IM (Cronbach's $\alpha = .84$), IR (Cronbach's $\alpha = .61$), ER (Cronbach's $\alpha = .61$), AM (Cronbach's $\alpha = .85$).

Procedure

The researchers administered an online survey to the participants. Prior to the survey, few prospective participants were contacted by the researchers through phone calls and the rationale of the study explained to them for the purpose of obtaining informed consents. Participants first contacted were requested to forward the survey web link to other nurse colleagues at their working places. The link contained statements assuring participants that they did not have to participate if they so wish and that their individual responses would be kept confidential. Every survey submissions was collected once the participants have finished and pressed the 'submit' button.

A cross-sectional survey was employed in this study for data collection and regression was used for data analysis.

RESULTS

Table 1: Inter-variable Correlations using Pearson Product Moment Correlations

Variables	1	2	3	4	M	SD
SIMS	-				72.56	15.51
Marital St	097*	.094	-		1.33	.47
Education	.094	.160**	.239**	-	3.14	.49
SPOS	.474**	265**	188**	018	59.19	9.60

From Table 1, results showed a significant positive relationship between perceived organizational support and motivation (r=.474, p<.05). Similarly level of education has a significant positive relationship with motivation (r=.094, p<.05). But variables like gender and marital satisfaction has a significant but negative relationship with motivation (r=-.15 and r=-.097) respectively.

Table 2: Summary of Multiply Regression Analysis regarding the influence of Gender, marital status, Educational level and SPOS on SIMS

Predictors	R	R^2	F	Sig.	Beta	t	Sig.
Marital Status	.498	.239	15.531	.000	049	729	
Education					.125	1.88	
SPOS					.456	6.959	***

SIMS=Situational Motivation Scale, **SPOS**=Short Version of the Perceived Organizational Support, ****P*<.001

The data analyzed using standard multiple regression indicated that perceived organizational support is a significant predictor of motivation whereas level of educations is not a significant predictor of motivation among nurses in public hospitals. The multiple correlation coefficient was .24, indicating that motivation variance is explained by 24% linear combination of perceived organizational support and level of education. It was found that while perceived organizational support significantly predicted motivation ($\beta = -.46$, t=6.96 P<.001), level of education did not predict motivation ($\beta = .13$, t=1.88, P<.01).

Considering the standard multiple regression coefficient, perceived organizational support correlated motivation while level of education did not correlate motivation. Therefore the hunch of the researchers that perceived organizational support will significantly correlate motivation was confirmed while the hunch that level of education will significantly correlate motivation was not confirmed.

DISCUSSIONS

This study aimed at examining the extent to which nurses' motivational level can be predicted by the degree of organizational support and level of education. In the health industry, the organizational support is highly necessary if the nurses must achieve the objectives of the This construct, perceived organizational support, has, thus proven to be an indispensable attribute of the nurses in our study and a remarkable drive for job motivation. In the study, perceived organizational support positively correlated with motivational level of nurses in public hospitals. This near triumph over Covid-19 virus in Nigeria according to the findings of this study clearly depicts that nurses enjoyed management supports, have more positive working relationship with the management, were valued leading to high urge and commitment to combat the virus. The general notion of perceived organizational support (POS) have always been the way workers view of how the firm regards their ideas and cares about their well being. Hence it is expected that a worker whose contributions are valued and has his/her well being catered for will have a high POS and in turn be more committed to duty. This perceived organizational support may be reflected in tangible resources such as pay, rank, job enrichment, rewards, or other forms of compensation and benefits (Eisenberger, et al., 1986) and or cares for the socio-emotional well-being of employees such as beliefs and perceptions with regards to organizational policies and practices. According to the data from the study, the nurses' near triumph over Covid-19 virus and dedication to duty in the face of challenges like death of co-workers can only be explained by a supportive relationship between the management team and its workers (nurses). The study further supported the work of Kabene, Orchard, Howard, Soriano and Leduc (2006) who found that the level of motivation health care workers enjoy from the organization is directly proportional to the quality of health services rendered to the people. Thus, the daily decrease and of Covid-19 cases can be ascribed to the high perceived organizational support nurse's in the southern part of Nigeria hospitals enjoy.

Evidence from other studies (Bhatnagar, Gupta, Alonge, & George, 2017; Dagne, Beyene, & Berhanu, 2015; Daneshkohan, Zarei, Mansouri, Maajani, Ghasemi, et al., 2015; Said, Abed, & Abdo, 2013; Zinnen, Paul, Mwisongo, Nyato, & Robert, 2012) shows that this findings further aligns itself with the notion that adequate support from organization, management and supervisors during problems and fairness is one of the chief factors affecting health workers motivation in a country.

Furthermore, the level of education was also investigated as a possible correlate of motivation among nurses in public hospitals. This demographic constructs, level of education, was established in the study as not a correlate of motivation. Previous research (Zarei, Najafi, Rajaee & Shamseddini, 2016; Kumar, Mehra, Inder & Sharma, 2016; Dagne, Beyene & Berhanu, 2015) had shown a positive relationship between level of education and nurse's work motivation. This

finding further contradicts the works of Negussie (2012) who found a significant difference in nurses' work motivation based on educational qualification. According to the researcher, employees with bachelor's degree earmarked more attention and importance to career development where workers with less qualification assigned more relevance to remuneration. The variance in the finding of this study could be as a result of common goal to eradicate the covid-19 virus and heal the nation urgently to avoid more losses in terms of personnel, businesses and overcoming the looming economic downturn as was advocate by the government. It is the opinion of the researchers that the nurses heeded to this clarion call and shelved other ambitions for the interest of the nation and its citizens.

Relevance of the Study to the Nation

The study however reveals the need not only to scheme a suitable intervention but also to promote such interventions as a reliable means to increase the commitment and productivity of nurses within the public health sectors. Health they say is wealth and without health, man is deemed unfit for other jobs. Therefore, the Federal and State Ministry of Health, Senate Committee on Health, Nigerian Nursing Association, policy makers in various health organizations and other stake holders, who relentlessly invest in the Nigeria health sector, are thus called to execute this role diligently as a way of promoting nurse's dedication to duty and possible retention at various places of work.

Also, the findings of the study provides a reckoning contributions to the existing body of literature both globally and in Nigeria as few studies exists on motivation and perceived organizational support as the study utilized standard research methods and randomly selected public hospitals in the South Eastern part of Nigeria.

The study further calls for a possible design of a suitable nursing motivation strategies. The strategy is expected to make nurses happier and issue them a sense of belonging, regards and affection in order to be highly spurred to work and to be always present and willing to discharge their functions.

Conclusion

The policies of various management teams in the health care industry affect the output of their workers. This study is a clarion call to key players and policy formulators in the health sector. Several research findings have established that the motivational level of health care providers is linked to quality health services provided by health workers particularly nurses. Therefore, it will be essential to explore other possible factors that may hinder motivational level of nurses so as to formulate not just a wonderful policy but also design an efficient and effective management techniques that will boost nurse's dedication to duty and performance.

REFERENCES

- Baljoon, R. A., Banjar, H., & Banakhar, M. (2019). Factors affecting nurses' work motivation level at a Governmental hospital: A cross-sectional study. *Journal of Nursing Education and Practice*, 9 (9).
- Battistelli, A., Galletta, M., Portoghese, I., & Vandenberghe, C. (2013). Mindsets of commitment and motivation: Interrelationships and contribution to work outcomes. *The Journal of psychology*, 147 17-48.
- Bhatnagar, A., Gupta, S., Alonge O. & George, A. S. (2017). Primary health care workers' views of motivating factors at individual, community and organizational levels: a qualitative study from Nasarawa and Ondo states, Nigeria. *The International journal of health planning and management*, 32, 217-233.
- Cicolini, G., Comparcini, D., and Simonetti V. (2014). Workplace empowerment and nurses' job satisfaction: a systematic literature review. *J Nurs Manag*, 22(7), 855–71.
- Dagne, T., Beyene, W., & Berhanu, N. (2015). Motivation and factors affecting it among health professionals in the public hospitals, central Ethiopia. *Ethiopian journal of health sciences*, 25, 231-242.
- Daneshkohan, A., Zarei, E., Mansouri, T., Maajani, K., Ghasemi, M. S, et al. (2015). Factors affecting job motivation among health workers: a study from Iran. *Global journal of health science*, 7, 153-160.
- Dormon, F., Balen, J., Schmidtke, K. A., &Vlaev, I. (2017). Health workers' motivation in low and middle income countries: A systematic review of the literature. *Medical Research Archives*, 5(8).
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507.
- Fernet, C., Trépanier, S.G., Austin, S., Gagné, M., Forest, J., et al. (2015). Transformational leadership and optimal functioning at work: On the mediating role of employees' perceived job characteristics and motivation. *Work & Stress*, 29, 11-31.
- Franco, L. M., Bennett, S., & Kanfer, R. (2002). Health sector reform and public sector health worker motivation: a conceptual framework. *Social Science & Medicine*, 54(8), 1255-1266.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior*, 26, 331-362.

- Galletta, M., Portoghese I., & Battistelli, A. (2011). Intrinsic motivation, job autonomy and turnover intention in the Italian healthcare: The mediating role of affective commitment. *Journal of Management research*, 3, 1-19.
- Halcomb, E., Smyth, E., &McInnes, S. (2018). Job satisfaction and career intentions of registered nurses in primary health care: an integrative review. *BMC Family Practice*, 19, 136.
- Hee, O. C., Kamaludin, N. H., & Ping, L. L. (2016). Motivation and Job Performance among Nurses in the Health Tourism Hospital in Malaysia. *International Review of Management and Marketing*, 6, 668-672.
- Kabene, S., Orchard, C., Howard, J., Soriano, M., & Leduc, R. (2006). The importance of human resources management in health care: a global context. *Human Resources for Health*, 4(1), 1 17.
- Kumar, P., Mehra, A., Inder, D &Sharma, N. (2016). Organizational commitment and intrinsic motivation of regular and contractual primary health care providers. *Journal of family medicine and primary care*, 5, 94-100.
- Marquis, B. L., & Huston, C. J. (2012). *Leadership Rules and Management Functions in Nursing: Theory and Application*. Philadelphia, PA: Lippincott Williams & Wilkins.
- Mosadeghrad, A. (2014). Factors influencing healthcare service quality. *Int J Health Policy Manage*, 3(2), 77-89.
- Negussie, N. (2012). Relationship between rewards and nurses' work motivation in Addis Ababa hospitals. *Ethiopian journal of health sciences*, 22, 107-112.
- Negussie, N. (2012). Relationship between rewards and nurses' work motivation in Addis Ababa hospitals. *Ethiopian journal of health sciences*, 22, 107-112.
- Pandey, R., Goel, S., &Koushal, V. (2018). Assessment of motivation levels and associated factors among the nursing staff of tertiary level Public hospitals. *Int J Health Plann Mgmt.*, 1–12.
- Prytherch, H., Kakoko, D., Leshabari, M., Sauerborn, R., Marx, M, et al. (2012). Maternal and newborn healthcare providers in rural Tanzania: in-depth interviews exploring influences on motivation, performance and job satisfaction. *Rural Remote Health*, 12, 20-72.
- Purohit, B., Maneskar, A., & Saxena, D. (2016). Developing a tool to assess motivation among health service providers working with public health system in India. *Human Resources for Health*, 14, 15.

- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698-714.
- Roussel, L., & Swanburg, R. (2009). *Management and leadership for nurse administrators*. Boston: Jones and Bartlett Publishers.
- Said, R. M., Abed, F. A., & Abdo, L. M. (2013). Work Motivating Factors as Identified by Nurses in Children Hospital at Elmonira and Specialized Pediatric Hospital Cairo University. *The Medical Journal of Cairo University*, 81, 27-31.
- Toode, K. (2015). Nurses' work motivation: Essence and associations.
- Toode, K., Routasalo, P & Suominen, T. (2011). Work motivation of nurses: A literature review. *International journal of nursing studies*, 48, 246-257
- Trépanier, S. G., Forest, J., Fernet, C., & Austin, S. (2015). On the psychological and motivational processes linking job characteristics to employee functioning: Insights from self-determination theory. *Work & Stress*, 29, 286-305.
- Wynd, C.A. (2003). Current factors contributing to professionalism in nursing. *Journal of Professional Nursing*, 19(5), 251-261.
- Zarei, E., Najafi M., Rajaee, R and Shamseddini A. (2016). Determinants of job motivation among frontline employees at hospitals in Tehran. *Electronic Physician*, 8, 2249-2254.
- Zinnen, V., Paul, E., Mwisongo, A., Nyato, D., & Robert, A. (2012). Motivation of human resources for health: a case study at rural district level in Tanzania. *The International journal of health planning and management*, 27, 327-347.