

EFFECT OF TURNOVER OF SKILLED STAFF ON THE PATIENT FLOW RATE OF TERTIARY HEALTH INSTITUTIONS IN EBONYI STATE.

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Abstract

The study evaluated the effect of turnover of skilled staff on the patient flow rate of tertiary health institutions in Ebonyi State. The specific objectives were to: examine the effect of turnover of advanced education staff on patient medical care and evaluate the effect of turnover of experienced staff on the patient physical resources of tertiary health institutions in Ebonyi State. A total population for the study was four thousand one hundred and twenty five (4125). The sample size of 351 was drawn using Freund and William's formula at 5 percent error margin. A survey design was adopted for the study. Instrument used for data collection was the questionnaire. A total of three hundred and fifty one(351) copies of questionnaire were distributed while three hundred and twenty five (325) copies of questionnaire were returned. Z-test was used to test the hypotheses. The findings indicated that Turnover of advanced education staff had positive significant effect on patient medical care of tertiary health institutions in Ebonyi State $Z(95, n = 325), 6.989 < 10.026 = p. < 0.05$. Turnover of experienced staff had significant positive effect on the physical resources of tertiary health institutions in Ebonyi state $Z(95, n = 325), 9.028 < 10.692 = p. < 0.05$. The study concluded that turnover of advanced education of staff and experienced staff had significant positive effect on patient medical care and physical resources of tertiary health institutions in Ebonyi state. The study recommended among others that the management should endeavour to reduce Staff turnover for the effectiveness of the human resources management system and the overall management of an organization.

Keywords: *Advanced education, skilled staff, patient flow rate, patient physical resources, turnover.*

INTRODUCTION

Poor psychosocial work environments are associated with higher employee turnover. In human resources context, turnover can be viewed as the rate at which an employer gains and misplaces employees or how long employees tend to stay in a particular organization (Ramamany & Abdullah, 2017). To identify underlying reasons for turnover, qualitative information on the reasons why employees have left is necessary. Employees in the organization are the essential assets that become the driving force and determining the course of the organization, without the role of company employees cannot run following the objectives of the company (Siswanto, 2020). Although helping staff develop their existing skills and learn new ones can cost your business time and money, training and development is crucial to improving your business' performance and can actually help minimise staff turnover. In hospitals, several patient flows compete for access to shared resources. Failure to manage these flows result in one or more disruptions within a hospital system. To ensure continuous care delivery, solving flow

problems must not be limited to one unit, but should be extended to other departments - a prerequisite for solving flow problems in the entire hospital (Winasti, Elkhuizen, Berrevoets, van Merode and Berden, 2018).

The rate of time preference is an important component of decisions that involve inter temporal trade-offs, such as job search choices. Yet the effect of impatience on job search has received little attention, despite a growing interest in time discounting in economics (Vigna & Daniele, 2022). Workers who are more impatient search less intensively and set lower reservation wages. The effect of impatience on exit rates from un-employment is therefore unclear. Impatience has two contrasting effects on job search. On the one hand, more impatient individuals assign a lower value to the future benefits of search and therefore exert less effort: this tends to lower the job offer arrival rate and to increase the length of unemployment.

On the other hand, higher impatience acts to lower the reservation wage and to shorten the unemployment spell: once a wage offer is received, the more impatient individuals prefer to accept what they already have at hand rather than to wait an additional period for a better offer. The global effect on the exit rate depends on the relative strength of these two factors. Advanced, (2019) asserts that in the workforce of today, skilled workers are a necessity. Put simply, any business which values productivity, efficiency, quality workmanship, loyalty and a harmonious workplace should be investing in their employees by providing access to further training, education and new opportunities to expand their skill-set and move up the ranks. In doing so, you will be investing in the success of your business whilst enjoying a positive working relationship with staff.

Optimizing patient flow encompasses quickly, efficiently, and effectively meeting the demand for care by moving patients through care pathways while improving coordination of care, patient safety, and health outcomes. To optimize patient flow, providers seek to successfully match the appropriate amount of resources to each of their admissions (Catalyst, 2018). Staff turnover has been identified as a factor contributing to direct loss of revenue due to associated cost (e.g., searching for a new employee, job interviews, severance pay, administrative costs, training costs) and to more indirect costs resulting from factors like varying customer loyalty, possible loss of expertise, increase of error rate, increase of occupational accidents, resources tied by increased need for knowledge management and loss of product quality (Wolfram, Bielitz & Georgi, 2016). As health institutions increasingly focus on value-based care instead of fee-for-service care, incentives will likely continue to grow for the operational changes hospitals need to make to improve the flow of patients through their facilities. The present study examines the effect of turnover of skilled staff on patient flow rate of tertiary health institutions in Enugu State.

Statement of problem

Businesses with high staff turnover typically experience low employee morale and productivity rates. The impact of high staff turnover includes decreased productivity; increased recruitment costs, avoidable time spent on training new employees, and lost sales. One of the factors that influence employee turnover is organizational conflict. Employees turnover harm the organization. Although the organization conducts various programs to maintain and retain employees, employee turnover still occurs.

When employee turnover happens, companies may lose employee productivity, be forced to recruit new employees, suffer from lower morale, miss out on sales opportunities, and have to deal with additional expenses that could have been avoided if they had just held onto the

employee in the first place. The present study deduced that turnover of skilled staff often arise as a result of turnover of advanced education and experienced staff who take care of the patients.

With high academic staff turnover in Nigeria's higher institutions, research exercises in the nation's academic ivory towers will be established on a shaky foundation. Without intensive teaching in higher institutions, research, and community service, there cannot be inventions and discoveries. These elements form the major functions of academic staff members in all higher institutions in the world. As such tertiary health institutions should deem it fit to tackle the short falls that leads to turnover of skilled as it can lead to fall in patient medical care and patient physical resources.

Objectives of the study

The main objectives of the study were to evaluate the Effect of turnover of skilled staff on the patient flow rate of tertiary health institutions in Ebonyi State. The specific objectives were to:

- i. Examine the effect of turnover of advanced education staff on patient medical care of tertiary health institutions in Ebonyi State.
- ii. Evaluate the effect of turnover of experienced staff on the patient physical resources of tertiary health institutions in Ebonyi State.

Conceptual Review

Turnover

Turnover refers to the number of employees that leave the company over a given time period. Turnover shows the efficiency of a business. It is used to determine how quickly a business gets cash from accounts receivable or sells its inventory. This ratio is known as the inventory turnover ratio. Turnover can provide useful information about your business and its finances. However, turnover in itself is not a measure of success, as it doesn't provide any information about profitability (Superscript, 2023).

Employee turnover is a crucial metric for measuring the performance of human resources departments or human resource management apps. Employee turnover rate is a good indicator of an organization's work culture, the effectiveness of hiring policies and overall employee management. Employee turnover rate is a measure of how many employees leave a company in a given period, usually a year. It's calculated by dividing the number of employees who left by the average number of employees. This rate helps assess the company's retention and overall management effectiveness (Pavlou, 2023). An understanding of turnover rate compared to industry standards as well as global employee retention benchmarks can help businesses drive growth and improve workforce engagement. Turnover among faculty however could undermine the efficiency, productivity and in some occasions, threats the institution's long term survival.

Skilled staff

One of the factors that determine the success of any workplace is availability of competent workers. That is, workers who possessed necessary work skills. Some of these skills transcend educational degrees, certifications, licenses in the workplace. Chabbria, (2022) asserts that skilled worker consistently goes above and beyond in carrying out their responsibilities and possesses the relevant qualifications for their job. Because they are highly qualified and experienced, skilled individuals can help your business becomes more productive. Skilled

workers are an invaluable asset to companies as they help to increase productivity, profitability and as well in solving organizational problems.

Skilled workers are an asset for any business as they play a large role in developing a business's reputation and ongoing success. A skilled staff is a staff with special skill, training and knowledge with which they can then apply to their work. A skilled worker is someone who holds the necessary qualifications to perform their role, and they consistently go above and beyond in the performance of their duties. From striving to provide an outstanding patients experience to ensuring that all work is carried out with care and attention to detail, skilled workers understand their role and are fully committed to your businesses (Advanced, 2019). Skilled staff learns their skills on the work experience, on-the-job training, an apprenticeship program or formal education. These skills often lead to better outcomes economically. Assessment of staff skills is important in the workplace particularly for determining promotion, salary increment of workers and workers that need training. However many organization has turned it to a mere routine exercise as a result of the defects in the choice of scale used to assess the workers (Arowojolu, Oyegoke & Amusan, 2022).

Turnover of skilled staff

Turnover in the organisation describes the number of workers that leave an organization either by termination of contract, resignation or other reasons. Turnover of skilled staff means that an organization loses its experienced employees sometimes to competitors. This leads to problems in the companies culture, its benefits and compensation structure. High turnover impacts profitability and customer satisfaction (Marc, 2021). Reasons behind employee turnover include lack of growth and progression, inadequate compensation, and inefficient management. Understanding the causes of high staff turnover can help managers know how it affects the company. Understanding the factors behind the rate can go a long way towards lowering the number of employees that are leaving your business. Employee turnover rates are vitally important as replacing employees with new hires are costly. A higher rate can bring a cost of both hiring and training new employees. As well as having to build new working relationships (Bright, 2023).

Components of turnover of skilled staff used in the study

Advanced education staff

Education means planned and organized activity by a consultant to impart information to employers and employees to enable them to establish and maintain employment and a place of employment that are safe and healthful. Tertiary education is regarded as the highest peak of education. It is the education that is anchored on teaching, research and community services. The realization of tertiary education depends on the availability of qualified and motivated academic and non-academic staff (Ogunode, Adamu & Ayoko, 2023). Training, education, and development of staff refers to organizational efforts to improve employees' level of performance through the acquisition of specific skills, abilities, and knowledge and/or the change of workplace attitudes (Dolan & Ben, 2015). Education staff professionals are valued and critical members of every institution community. They meet the needs of the whole student, promoting quality education and fostering positive learning environments. The category of education staff professional includes many different career families. Education staff professionals ensure students achieve at their highest levels. They keep students emotionally and physically healthy and safe. They engage students and keep them connected to the larger school community. They provide instruction and academic supports, challenging and motivating students by maintaining high expectations (FEA, 2023).

Experienced staff

Staff experience is a staffs perceptions about his or her journey through all the touch points at a particular company, starting with job candidacy through to the exit from the company. Strengthening the employee experience has numerous benefits that are all associated with employee job satisfaction leading to higher profits and better marketplace positioning. EX is a people-first management philosophy that specifies what works in organisations by examining workplace factors that impacts the employees the most (Plaskoff, 2017). As most talent managers focus on the transactional side of human relations, EX places employees at the heart of the equation. A strong EX is likely to drive a strong customer experience, a business imperative (Tavis, 2020). Because experienced workers are largely ignored or misperceived in organizations' strategic workforce plans, businesses are failing to capitalize on the value that workers with decades of experience can deliver. They are also failing to appreciate or effectively respond to the potential risks posed by the extension of working lives resulting from demographic and economic pressures (Sonsino & García, 2020).

Patient flow rate

Flow implies progressive movement; it refers to the movement of people, equipment, or information, but in healthcare it generally refers to the movement of people (Health Foundation, 2013). Patient flow is primarily associated with hospitals, especially with back-ups and overcrowding in emergency departments and inefficient scheduling in surgical departments. Poorly managed patient flow in hospitals can lead to adverse health outcomes, including increased re-admissions and mortality rates. Patient flow is the movement of patients through a healthcare facility. It involves the medical care, physical resources, and internal systems needed to get patients from the point of admission to the point of discharge while maintaining quality and patient/provider satisfaction. Improving patient flow is a critical component of process management in hospitals and other healthcare facilities (Catalyst, 2018). Woodcock, Moore and others say the key to better patient flow is to develop a deep understanding of your practice's patient flow process, identify problem areas, develop a concept of your ideal system, and then, through small tests of change, begin moving toward your goal. Optimal patient flow minimizes waiting and is associated with quality healthcare. Poor patient flow has been identified as a barrier to the provision of quality care.

Components of patients flow rate used in the study

Patient medical care

Patient's medical care also known as healthcare is the process adopted by medical practitioners to improve the health of their patients through prevention, diagnosis and treatment of ailments. Medical care is often delivered by health profession allied to health careers. Acknowledging and taking care of patient concerns demonstrates that health professionals see them as humans with unique needs. This medical care may also help motivate them to respect their health journey and follow their care plan (Welkin, 2020). Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes. It is based on evidence-based professional knowledge and is critical for achieving universal health coverage. Patient access to care sets the baseline for all patient encounters with the healthcare industry. When a patient cannot access her clinician, it is impossible to receive medical care, build relationships with her providers, and achieve overall patient wellness (Heath, 2022). An Ideal patient care addresses basic human needs and involves asking each individual patient and each patient's family about their preferences, goals, and expectations.

Patient physical resources

Physical resources in client care are effective and make work easier. Functional businesses must have the necessary resources that ultimately contribute to profitability and expansion. This includes physical resources. The flow of a business is affected by the collection of all its resources (Smith & Schofield, 2022). The main functions of healthcare systems and organizations in the continuum of care are financing, provision of health services, stewardship, and resource development (Frenk, Gómez-Dantes, and Moon 2014). Of these functions, provision of health services and resource development are key ones. The school or program has physical resources adequate to fulfill its stated mission and goals and to support instructional programs. Physical resources include faculty and staff office space, classroom space, student shared space and laboratories, as applicable.

Theoretical Framework

Equity theory

Adams' work on equity (Adams, 1965) was one of the first studies in psychology on perceptions of people regarding the allocation of outcomes (Cohen-Charash & Spector, 2001). Equity theory (Adams, 1965) draws from exchange, dissonance, and social comparison theories in making predictions about how individuals manage their relationships with others. The theory claims that individuals in organizations compare the ratios of their own outcomes, normally tangible rewards, to inputs, such as contributions, to the ratios of other organizational referents. The comparisons will lead to adjustment of work behaviors. That is, when the comparisons yield big differences, people will be motivated to change the situation by either modifying their inputs and outcomes, changing their referent other, distorting their perception, or leaving the organization (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001). Adams (1965) claimed that people do care, whether the outcomes they received are fair or not. Individuals arrive at a sense of equity or fairness through the comparison of ratio inputs (contributions) and outputs (rewards) in reference to others within an organization. When people perceive equity within the workplace, they are satisfied.

Empirical Review

Turnover of advanced education staff on patient medical care

Brady, Devitt & Kiersey, (2019) conducted a study on academic staff perspectives on technology for assessment (TfA) in higher education: A systematic literature review. This paper presents a systematic literature review of academic staff experiences and perceptions of adopting Technology for Assessment OF/FOR/AS Learning in Higher Education. This paper is a qualitative synthesis of 65 peer-reviewed journal articles published between 2012 and 2017 reporting on the use of technology for assessment (TfA). The results suggest that there are some efficiencies for staff in implementing TfA but this can come with a cost at the set-up and maintenance phases. Furthermore, results indicated that assessment design is not of foremost concern to academic staff when introducing TfA, but that a wide variety of pressures and both educational and operational drivers are present. There were inconclusive findings in relation to understandings of appropriate institutional environments and supports for TfA to flourish in higher education. There is a need for empirical research, particularly longitudinal investigations, of academic experiences of implementations of TfA to investigate sustainability of adoption. The imperative of exploring the academic staff perspective as the instigator and manager of both the technology and the student learning experience requires deep consideration as TfA adoption progresses.

Oumou & Mounia, (2021) examined the determinants of healthcare worker turnover in intensive care units: A micro-macro multilevel analysis. High turnover among healthcare workers is an increasingly common phenomenon in hospitals worldwide, especially in intensive care units (ICUs). The goal of this article was to understand how the ICU-level nurse turnover rate may be explained from multiple covariates at individual and ICU-level, using data from 526 French registered and auxiliary nurses (RANs). A cross-sectional study was conducted in ICUs of Paris-area hospitals in 2013. First, we developed a small extension of a multi-level modeling method proposed in 2007 by Croon and van Veldhoven and validated its properties using a comprehensive simulation study. Second, we applied this approach to explain RAN turnover in French ICUs. Based on the simulation study, the approach we proposed allows to estimate the regression coefficients with a relative bias below 7% for group-level factors and below 12% for individual-level factors. In our data, the mean observed RAN turnover rate was 0.19 per year (SD = 0.09). Based on our results, social support from colleagues and supervisors as well as long durations of experience in the profession were negatively associated with turnover. Conversely, number of children and impossibility to skip a break due to workload were significantly associated with higher rates of turnover. At ICU-level, number of beds, presence of intermediate care beds (continuous care unit) in the ICU and staff-to-patient ratio emerged as significant predictors. The findings of this research may help decision makers within hospitals by highlighting major determinants of turnover among RANs. In addition, the new approach proposed here could prove useful to researchers faced with similar micro-macro data.

Hou, Pei, Yang, Lu, Yan, Gao & Wang, (2021) investigated factors Associated with Turnover Intention Among Healthcare Workers During the Coronavirus Disease 2019 (COVID-19) Pandemic in China. This study assessed the prevalence of turnover intention and explored associated factors on turnover intention among healthcare workers during the COVID-19 pandemic in China. An institutional-based cross-sectional study was conducted from July to February 13th to 20th, 2020, in 31 provinces of mainland China. A total of 1403 healthcare workers were recruited. Hierarchical logistic regressions were used to identify potential factors associated with turnover intention among Chinese health care workers. The prevalence of turnover intention among healthcare workers was 10.1% during the COVID-19 pandemic in China. Results of hierarchical regression revealed that working in Grade II hospital (OR = 1.78), technician (OR = 0.30), daily working hours over 12 h (OR = 2.92), frequency of mask replacement between 4 and 8 h (OR = 3.51), refuse volunteer to frontline (OR = 1.68), patient-physician relation unchanged (OR = 1.73), depression (OR = 2.21) and lower social support (OR = 1.75) were significantly associated with the risk of turnover intention. Additionally, healthcare worker's psychosocial syndemic (OR = 6.13) was positively associated with turnover intention. Turnover intention is relatively prevalent among healthcare workers during the COVID-19 pandemic in China, and the factors contributing to turnover intention were complex and varied. Early screening of high-risk groups for turnover intention among healthcare workers and more psychosocial health care and physical protection are needed during the COVID-19 pandemic in China.

The study of Ali, Adeel, Masood, Noreen, Ahmed & Siddiqui, (2023) on factors affecting the Staff Turnover and its Impact on quality care in tertiary care hospital. The goal of this research was to identify the causes of staff turnover in tertiary care hospitals. shaheed mohtar ma benazir Bhutto institute of trauma a tertiary care hospitals in karachi, participants were included in a cross-sectional study, from 01/05/2022 to 31/10/2022. Participants had to be registered staff with at least a year of experience working in a clinical environment at either hospital. Quota sampling was used to pick staff from hospitals, stratified by shift, with signed informed

permission from each participant. Information was gathered by a self-administered questionnaire with four parts (Brooks' assessment of QNWL, Anticipated Turnover Scale (ATS), free-form questions, and demographic details). A total 80 participants were recruited to carry out the present study. According to the cutoff for willingness to depart as determined by the ATS (> 3.5), 61% of people are interested in finding another employment. Hospital employees were more likely to be dissatisfied with their quality of life on the job if the QNWL cutoff satisfaction level (≤ 4.2) was lower. There was an equal gap in discontentment between men and women on the quality of their work lives. There is a considerable increase in work dissatisfaction among participants between the ages of 31-40 (19%) ($P=0.000$). Nonetheless, those between the ages of 41- 50 accounted for the largest percentage of respondents (21%) who were interested in leaving their current place of employment. Because of the implications and effects on patient care, the QNWL and nurse turnover pose serious difficulties for healthcare organizations.

Randa & Phale, (2023) The effects of high nurses' turnover on patient care: Perspectives of unit managers in critical care units. Hospitals are faced with a major challenge of high nurses' turnover and staff shortages, and critical care units (CCUs) are no exception. The purpose of this study was to examine how the high nurse turnover affects the provision of quality care in CCUs from the perspectives of unit managers. The qualitative, exploratory and descriptive study was conducted at an academic hospital. Individual face-to-face interviews were conducted with unit managers. Participants were purposively selected from CCUs of an academic hospital in South Africa. Tech's method of data analysis was used to identify themes and sub-themes. The sample consisted of nine unit managers highly experienced in critical care and had managed these units for over eight years. Two main themes emerged, the reasons for high nurses' turnover and the effects of high nurse turnover on patient care. High nurses' turnover in CCUs was influenced by inadequate staffing ratios, absenteeism and increased workloads. The high nurse turnover contributes to non-compliance with the standard norms of nurse-patient ratios. The study revealed that optimal nurse staffing is essential to delivering high quality, cost-effective care with better patient outcomes. The nurses in CCUs possess specialized skills. However, insufficient number of critical trained nurses; and the assigning of unskilled nurses to provide care in CCUs led to compromised quality patient care. High nurse turnover also affected the ability of unit managers to plan, direct, organise, and control.

Turnover of experienced staff on the patient physical resources

Mozhgan, Marzie, Shahrzad & Abbas, (2017) Adequate Resources as Essential Component in the Nursing Practice Environment: A Qualitative Study. Attracting and retaining well qualified nurses to develop healthcare systems and ensure patient safety is a global concern. In this regard, the quality of the practice environment plays a crucial role. Aim: To explore Iranian nurses perception on the key constituents of the nursing practice environment. Materials and Methods: This study was conducted using a qualitative approach. Twelve participants were purposively selected from five teaching hospitals in Shiraz, Iran. Data was collected through semi structured interviews, and analysed using qualitative content analysis. Results: Data analysis led to the extraction of two categories of 'adequate staff', with two subcategories of balanced workload and well qualified nurses, and 'adequacy of physical resources', with subcategories of equipment adequacy and appropriate physical structure as key elements of the nursing practice environment. Conclusion: Imbalanced workloads, inappropriate nurse-patient ratios, and inadequate physical resources negatively affected nurse's perceptions of the quality of the nursing practice environment. The findings provide baseline data for health policymakers in different national and global areas to remodel the practice environment.

Fletcher, Carter and Lyubovnikova, (2018) Congruency of resources and demands and their effects on staff turnover within English health care sector. This study examines, at the organizational level, the congruency between job demands and resources and their effects on staff turnover within the English health care sector. Polynomial regression analyses conducted on 164 acute hospitals trusts found support for the predictions that organizations with congruent levels of resources and demands would have relatively low staff turnover whereas those with incongruent levels would have relatively high staff turnover. Overall, the study indicates that individual job design should be considered within a broader organizational design perspective

Wang, & Yuan, (2018) What is behind high turnover: a questionnaire survey of hospital nursing care workers in Shanghai, China. Currently, hospital nursing care workers (hereafter referred to as HNCWs) have become an important part of the healthcare system in China. A total of 514 HNCWs employed at 11 hospitals in Shanghai participated in this study. The inclusion criteria were as follows: (1) being a certified HNCW, (2) having worked as an HNCW for more than 1 year, and (3) volunteering to take part in the survey. The overall turnover intention of the HNCWs was 41.3%. Influencing factors include education ($\beta = 0.201$, $P = 0.000$), wages ($\beta = -0.920$, $P = 0.000$), management satisfaction, ($\beta = -0.213$, $P = 0.000$), satisfaction with wages ($\beta = -0.612$, $P = 0.000$), satisfaction with working hours ($\beta = -0.270$, $P = 0.000$), satisfaction with their own work ($\beta = -0.066$, $P = 0.027$), work stress ($\beta = 0.726$, $P = 0.000$), enjoyment of the job ($\beta = -0.141$, $P = 0.000$) and hours of sleep ($\beta = -0.046$, $P = 0.037$). Decreasing HNCWs' turnover intentions and the overall turnover rate is important for improving the quality of healthcare. More attention should be paid to this issue in the enactment of health policy.

Zaheer, Ginsburg, Wong, Thomson, Bain & Wulffhart, (2019) study on turnover intention of hospital staff in Ontario, Canada: exploring the role of frontline supervisors, teamwork, and mindful organizing. This study contributes to a small but growing body of literature on how context influences employee turnover intention. We examine the impact of staff perceptions of supervisory leadership support for safety, teamwork, and mindful organizing on turnover intention. Interaction effects of safety-specific constructs on turnover intention are also examined. Cross-sectional survey data were collected from nurses, allied health professionals, and unit clerks working in intensive care, general medicine, mental health, or the emergency department of a large community hospital in Southern Ontario. Hierarchical regression analyses showed that staff perceptions of teamwork were significantly associated with turnover intention ($p < 0.001$). Direct associations of supervisory leadership support for safety and mindful organizing with turnover intention were non-significant; however, when staff perceived lower levels of mindful organizing at the frontlines, the positive effect of supervisory leadership on turnover intention was significant ($p < 0.01$). Our results suggest that, in addition to teamwork perceptions positively affecting turnover intentions, safety-conscious supportive supervisors can help alleviate the negative impact of poor mindful organizing on frontline staff turnover intention. Healthcare organizations should recruit and retain individuals in supervisory roles who prioritize safety and possess adequate relational competencies. They should further dedicate resources to build and strengthen the relational capacities of their supervisory leadership.

Chen, Sang, Rong, Yan, Liu, Cheng, Wang, Ding, & Chen, (2021) Current status and related factors of turnover intention of primary medical staff in Anhui Province, China: a cross-sectional study. This study aimed to explore the current status of turnover intention and its relationship with psychological capital, social support, and job burnout, as well as how these

factors influence turnover intention of primary medical staff in Anhui province, China Using structured questionnaires to collect data, including demographic characteristics, turnover intention, psychological capital, social support, and Chinese Maslach Burnout Inventory scale. A total of 1152 primary medical workers of Anhui were investigated. Data were analyzed by t-test, analysis of variance (ANOVA), Pearson correlation analysis, and multiple linear regression model. Total scores of turnover intention, psychological capital, social support, and job burnout of subjects were 14.15 ± 4.35 , 100.09 ± 15.98 , 64.93 ± 13.23 and 41.07 ± 9.437 , respectively. Multiple linear regressions showed the related factors of turnover intention were age, job position, work unit, and scores of job burnout. Pearson correlation showed psychological capital and social support was negatively correlated with turnover intention, while the score of job burnout was positively correlated with turnover intention. The improvement of psychological capital and social support and the reduction of job burnout may play an important role in reducing turnover intention of primary medical staff. Primary medical managers should strengthen the humanistic care for primary medical staff, optimize the incentive mechanism, and improve internal management of medical institutions for stability.

Method

The area of the study was Alex Ekwueme Federal University Teaching Hospital Abakaliki Ebonyi state and Ebonyi state University, Abakaliki. For the purpose of the study population was four thousand, one hundred and twenty five (4,125) senior staff of public tertiary health institutions of Ebonyi state, Nigeria. To determine the adequate sample size of 351, the study opted for the Freund and Williams (1986) statistical formula. The study used the descriptive survey design approach. The primary source of data was the administration of questionnaire. Three hundred and twenty five(325)staff returned their questionnaire and accurately filled. That gave 93 percent response rate. The validity of the instrument was tested using content analysis and the result was good. The reliability was tested using the Pearson correlation coefficient (r). It gave a reliability co-efficient of 0.86 which was also good. Data was presented and analyzed by mean score and standard deviation using Sprint Likert Scale. The hypotheses were analyzed using Z - test statistic tool.

Data Presentation

The effect of turnover of advanced education staff on patient medical care of tertiary health institutions in Ebonyi State

Table 1: Responses on the effect of turnover of advanced education staff on patient medical care of tertiary health institutions in Ebonyi State

		5	4	3	2	1	$\sum FX$	-	SD	Decisio
		SA	A	N	DA	SD		X		n
1	The ability of meeting patient needs is difficult with quality staff turnover.	790	220	192	52	21	1275	3.93	1.260	Agree
		158	55	65	26	21	325			
		48.6	16.9	20.0	8.0	6.5	100%			
2	Organisation's ability to maintain quality care is affected by skilled staff turnover.	770	220	210	54	19	1273	3.92	1.243	Agree
		154	55	70	27	19	325			
		47.4	16.9	21.5	8.3	5.8	100%			

3	Turnover of knowledgeable staff create barriers to constructive working relationship.	630 126 38.8	220 55 16.9	288 96 29.5	48 24 7.4	24 24 7.4	1210 325 100%	3.72	1.253	Agree
4	Team building is disrupted with staff turnover.	695 139 42.8	328 82 25.2	192 64 19.7	34 17 5.2	23 23 7.1	1272 325 100%	3.91	1.212	Agree
5	As staff turnover rate is high, it reduces productivity and increased time spent on recruiting.	840 168 51.7	376 94 28.9	62 31 9.5	36 18 5.5	14 14 4.3	1328 325 100%	4.18	1.092	Agree
Total Grand mean and standard deviation								3.93	1.212	2

Table 4.1.1, 213 respondents out of 325 representing 65.5 percent agreed that the ability of meeting patient needs is difficult with quality staff turnover with mean score 3.93 and standard deviation of 1.260. Organisation's ability to maintain quality care is affected by skilled staff turnover 209 respondents representing 64.3 percent agreed with mean score of 3.92 and standard deviation of 1.243. Turnover of knowledgeable staff create barriers to constructive working relationship 181 respondents representing 55.7 percent agreed with mean score of 3.72 and standard deviation of 1.253. Team building is disrupted with staff turnover 221 respondents representing 68.0 percent agreed with mean score of 3.91 and 1.212. As staff turnover rate is high, it reduces productivity and increased time spent on recruiting 262 respondents representing 80.6 percent agreed with a mean score of 4.18 and standard deviation 1.092.

The effect of turnover of experienced staff on the patient physical resources of tertiary health institutions in Ebonyi State

Table 2: Responses on the effect of turnover of experienced staff on the patient physical resources of tertiary health institutions in Ebonyi State

		5 SA	4 A	3 N	2 DA	1 SD	∑FX	- X	SD	Decisio n
1	Staff turnover lowers treatment quality and discourages patient flow rate.	645 129 39.7	460 115 35.4	81 27 8.3	78 39 12.	15 15 4.6	1279 325 100%	3.94	1.173	Agree
2	The inexperienced staff becomes less effective resulting in increased training budgets.	690 138 42.5	500 125 38.5	84 28 8.6	16 8 2.5	26 26 8.0	1316 325 100%	4.05	1.154	Agree
3	High rate of turnover staff affects patient recovery and decrease in morale	845 169 52.0	420 105 32.3	81 27 8.3	12 6 1.8	18 18 5.5	1376 325 100%	4.23	1.060	Agree
4	As the staff become disengaged and demotivated it is hard for new employees to share the same values.	755 151 46.5	500 125 38.5	51 17 5.2	36 18 5.5	14 14 4.3	1069 325 100%	4.17	1.049	Agree

5	Increased workloads and responsibilities due to a lack of an active or trained workforce.	530 106 32.6	600 150 46.2	51 17 5.2	70 35 10. 8	17 17 5.2	1268 325 100%	3.90	1.129	Agree
Total Grand mean and standard deviation								4.05	1.113	8

Source: Field Survey, 2023

Table 2., 244 respondents out of 325 representing 75.1 percent agreed that Staff turnover lowers treatment quality and discourages patient flow rate with mean score 3.94 and standard deviation of 1.173. The inexperienced staff becomes less effective resulting in increased training budgets 263 respondents representing 81.0 percent agreed with mean score of 4.05 and standard deviation of 1.154. High rate of turnover staff affects patient recovery and decrease in morale 274 respondents representing 84.3 percent agreed with mean score of 4.23 and standard deviation of 1.060. As the staff become disengaged and demotivated it is hard for new employees to share the same values 276 respondents representing 85.0 percent agreed with mean score of 4.17 and 1.049. Increased workloads and responsibilities due to a lack of an active or trained workforce 256 respondents representing 78.8 percent agreed with a mean score of 3.90 and standard deviation 1.129.

Test of Hypotheses

Turnover of advanced education staff had effect on patient medical care of tertiary health institutions in Ebonyi State

Table 3: Z-test on turnover of advanced education staff had effect on patient medical care of tertiary health institutions in Ebonyi State

One-Sample Kolmogorov-Smirnov Test

		The ability of meeting patient needs is difficult with quality staff turnover..	Organisation's ability to maintain quality care is affected by skilled staff turnover.	Turnover of knowledgeable staff create barriers to constructive working relationship.	Team building is disrupted with staff turnover.	As staff turnover rate is high, it reduces productivity and increased time spent on recruiting.
N		325	325	325	325	325
Uniform Parameters ^{a,b}	Minimum	1	1	1	1	1
	Maximum	5	5	5	5	5
Most Extreme Differences	Absolute	.486	.474	.388	.430	.556
	Positive	.065	.058	.074	.071	.043
	Negative	-.486	-.474	-.388	-.430	-.556
Kolmogorov-Smirnov Z		8.764	8.542	6.989	7.752	10.026
Asymp. Sig. (2-tailed)		.000	.000	.000	.000	.000

a. Test distribution is Uniform.

b. Calculated from data.

If the calculated Z-value is greater than the critical Z-value (i.e $Z_{cal} > Z_{critical}$), reject the null hypothesis and accept the alternative hypothesis accordingly.

Result

With Kolmogorov-Smirnon Z – value ranges from $6.989 < 10.026$ and on Asymp. Significance of 0.000, the responses from the respondents as display in the table is normally distributed. This affirms the assertion of the most of the respondents that **turnover of advanced education staff had positive significant effect on patient medical care of tertiary health institutions in Ebonyi State**

Furthermore, comparing the calculated Z- value ranges from $6.989 < 10.026$ against the critical Z- value of .000(2-tailed test at 95percent level of confidence) the null hypothesis were rejected. Thus the alternative hypothesis was accepted which states that **turnover of advanced education staff had positive significant effect on patient medical care of tertiary health institutions in Ebonyi State**

4.3.2 Turnover of experienced staff has effect on the physical resources of tertiary health institutions in Ebonyi state

Table 4.3.2 Z-test on turnover of experienced staff has effect on the physical resources of tertiary health institutions in Ebonyi state

One-Sample Kolmogorov-Smirnov Test						
		Staff turnover lowers treatment quality and discourages patient flow rate.	The inexperienced staff becomes less effective resulting in increased training budgets.	High rate of turnover staff affects patient recovery and decrease in morale	As the staff become disengaged and demotivated it is hard for new employees to share the same values.	Increased workloads and responsibilities due to a lack of an active or trained workforce.
N		325	325	325	325	325
Uniform Parameters ^{a,b}	Minimum	1	1	1	1	1
	Maximum	5	5	5	5	5
Most Extreme Differences	Absolute	.501	.559	.593	.599	.538
	Positive	.046	.080	.055	.043	.052
	Negative	-.501	-.559	-.593	-.599	-.538
Kolmogorov-Smirnov Z		9.028	10.082	10.692	10.803	9.693
Asymp. Sig. (2-tailed)		.000	.000	.000	.000	.000

a. Test distribution is Uniform.

b. Calculated from data.

If the calculated Z-value is greater than the critical Z-value (i.e $Z_{cal} > Z_{critical}$), reject the null hypothesis and accept the alternative hypothesis accordingly.

Result

With Kolmogorov-Smirnon Z – value ranges from $9.028 < 10.692$ and on Asymp. Significance of 0.000, the responses from the respondents as display in the table is normally distributed. This affirms the assertion of the most of the respondents that **turnover of experienced staff had significant positive effect on the physical resources of tertiary health institutions in Ebonyi state**

Furthermore, comparing the calculated Z- value ranges from $9.028 < 10.692$ against the critical Z- value of .000(2-tailed test at 95percent level of confidence) the null hypothesis were rejected. Thus the alternative hypothesis was accepted which states that turnover of experienced staff had significant positive effect on the physical resources of tertiary health institutions in **Ebonyi state**.

Discussions of findings

Turnover of advanced education staff had positive significant effect on patient medical care of tertiary health institutions in Ebonyi State

Result of hypotheses one showed the calculated Z- value ranges from $6.989 < 10.026$ against the critical Z- value of .000(2-tailed test at 95percent level of confidence). Thus the alternative hypothesis was accepted which states that turnover of advanced education staff had positive significant effect on patient medical care of tertiary health institutions in Ebonyi State.

In line with these hypotheses, Oumou & Mounia, (2021) examined the determinants of healthcare worker turnover in intensive care units: A micro-macro multilevels analysis. High turnover among healthcare workers is an increasingly common phenomenon in hospitals worldwide, especially in intensive care units (ICUs). Based on the results, social support from colleagues and supervisors as well as long durations of experience in the profession were negatively associated with turnover. Conversely, number of children and impossibility to skip a break due to workload were significantly associated with higher rates of turnover. At ICU-level, number of beds, presence of intermediate care beds (continuous care unit) in the ICU and staff-to-patient ratio emerged as significant predictors. The findings of this research may help decision makers within hospitals by highlighting major determinants of turnover among RANs. In addition, the new approach proposed here could prove useful to researchers faced with similar micro-macro data.

Turnover of experienced staff had significant positive effect on the physical resources of tertiary health institutions in Ebonyi sate

Hypotheses two revealed the calculated Z- value ranges from $9.028 < 10.692$ against the critical Z- value of .000(2-tailed test at 95percent level of confidence). Thus the alternative hypothesis was accepted which states that turnover of experienced staff had significant positive effect on the physical resources of tertiary health institutions in Ebonyi state.

In support of these hypotheses, Chen, Sang, Rong, Yan, Liu, Cheng, Wang, Ding, & Chen, (2021) conducted a study on current status and related factors of turnover intention of primary medical staff in Anhui Province, China: a cross-sectional study. This study aimed to explore the current status of turnover intention and its relationship with psychological capital, social support, and job burnout, as well as how these factors influence turnover intention of primary

medical staff in Anhui province, China Using structured questionnaires to collect data, including demographic characteristics, turnover intention, psychological capital, social support, and Chinese Maslach Burnout Inventory scale. Pearson correlation showed psychological capital and social support was negatively correlated with turnover intention, while the score of job burnout was positively correlated with turnover intention. The improvement of psychological capital and social support and the reduction of job burnout may play an important role in reducing turnover intention of primary medical staff. Primary medical managers should strengthen the humanistic care for primary medical staff, optimize the incentive mechanism, and improve internal management of medical institutions for stability.

Summary of Findings

The following findings were made by the study

- i. Turnover of advanced education staff had positive significant effect on patient medical care of tertiary health institutions in Ebonyi State $Z(95, n = 325), 6.989 < 10.026 = p. < 0.05$
- ii. Turnover of experienced staff had significant positive effect on the physical resources of tertiary health institutions in Ebonyi state $Z(95, n = 325), 9.028 < 10.692 = p. < 0.05$

Conclusion

The study concluded that turnover of advanced education of staff and experienced staff had significant positive effect on patient medical care and physical resources of tertiary health institutions in Ebonyi state. High turnover rates can have a significantly detrimental impact on hospitals, patients, and healthcare staff. As a result hospitals may experience increased contingent staff costs. Staff turnover in hospitals is estimated to cost at least two times the pay of a regular employed nurse.

Recommendations

The following recommendations were made by the study

- i. The management should endeavour to reduce Staff turnover for the effectiveness of the human resources management system and the overall management of an organization.
- ii. To avoid direct impact on organisation revenue and profitability there is needed to reduce high employee turnover. As it will increase productivity, decreased recruitment costs.

References

- Advanced G., (2019) The benefits of having a skilled workforce.
<https://www.advancedgroupservices.com.au/the-benefits-of-having-a-skilled-workforce/>
- Arowojolu F.A., Oyegoke D.A., & Amusan M.A., (2022) Assessment of work skills of workers in Nigerian Tertiary Institutions Pre and post Covid-19 Pandemic. In book: Current issues in Education: Trends, views and Analysis (pp.23 to 34)Publisher: Esthom Graphic Prints

- Bright H., (2023) Employee turnover. <https://www.brighthr.com/articles/culture-and-performance/staff-turnover/>
- Catalyst N., (2018) what is patient flow? <https://catalyst.nejm.org/doi/full/10.1056/CAT.18.0289>
- Chabbria M., (2022) Importance of having skilled manpower. <https://www.linkedin.com/pulse/importance-having-skilled-manpower-meena-chabbria>
- Dolan S.L., & Ben C., (2015) Training, Education, and Development of Staff. In book: The SAGE Encyclopedia of Quality and the Service Economy. DOI:10.4135/9781483346366.n225
- FEA, (2023) Education staff professionals. <https://feaweb.org/who-we-are/education-staff-professionals/>
- Fletcher L., Carter M., and lyubovnikova J., (2018) Congruency of resources and demands and their effects on staff turnover within English health care sector. *Journal of occupational and Organisational Psychology* (2018) 1-9
- Heath S., (2022) Top Challenges Impacting Patient Access to Healthcare. <https://patientengagementhit.com/news/top-challenges-impacting-patient-access-to-healthcare>
- <http://dx.doi.org/10.15208/beh.2017.13>
- Institutions: A phenomenal inquiry. *Business and Economic Horizons*, 13(2), 169-181,
- Marc H., (2021) 10 Causes of employee Turnover & How to prevent/reduce them. <https://www.netsuite.com/portal/resource/articles/human-resources/employee-turnover-causes.shtml>
- Market Economics and Business Journal, 52(2), 451-472. Doi: 10.7200/esicm.169.0522.4
- Mozhgan R., Marzieh M., shahrzad Y., & Abbas E., (2017) Adequate Resources as Essential Component in the Nursing Practice Environment: A Qualitative Study. *Journal of Clinical and Diagnostic Research* 11(6):IC01-IC04
- Ogunode N.J., Adamu A.S., & Ayoko V.O., (2023) Motivation, Non-Academic Staff Job Performance and Tertiary Education in Nigeria. *Electronic Research Journal of Social Sciences and Humanities* 5 (III) 20-30
- Pavlou C., (2023) How to calculate employee turnover rate. <https://resources.workable.com/tutorial/calculate-employee-turnover-rate>
- Plaskoff, J. (2017), "Employee experience: The new human resource management approach",
- Ramasamy, V., & Abdullah, N. H. (2017). Faculty's turnover in private higher learning
- Randa M.B., & Phale J.M., (2023) The effects of high nurses' turnover on patient care: Perspectives of unit managers in critical care units. *International Journal of Africa Nursing* 19
- Smith E., & Schofield T., (2022) Physical Resources: Overview & Examples. <https://study.com/academy/lesson/what-are-physical-resources-in-business.html>

- Sonsino, Y., & García, A., (2020), Capturing the value of the experienced worker, *Esic Strategic HR Review*, Vol. 16 No. 3, pp. 136-141.
- Superscript C., (2023) What is business turnover and how do you calculate it? <https://gosuperscript.com/news-and-resources/what-is-business-turnover/>
- Tavis, A. (2020), “Employee experience as a team sport. Key lessons from the pandemic”,
- Vigna D., S., & Daniele M. (2022). Job Search and Impatience. [S.l.] : SSRN. <https://ssrn.com/abstract=611322>
- Wang, Y., & Yuan, H. (2018) What is behind high turnover: a questionnaire survey of hospital nursing care workers in Shanghai, China. *BMC Health Serv Res* **18**, 485. <https://doi.org/10.1186/s12913-018-3281-9>
- Welkin B., (2020) 13 ways to improve patient care. <https://welkinhealth.com/patient-centered-care/#>
- Winasti, W., Elkhuizen, S., Berrevoets, L., van Merode, G. and Berden, H. (2018). Inpatient flow management: a systematic review. *International Journal of Health Care Quality Assurance*, 31(7), 718-734
- Wolfram A.B., Bielitz C.J., & Georgi A., (2016) The impact of staff turnover and staff density on treatment quality clinic. *Front Psychol.* 7: 457.
- Workforce Solutions Review, Vol. 11 No. 4, pp. 30-32
- Zaheer S., Ginsburg L., Wong H.J., Thomson K., Bain L., & Wulffhart Z., (2019) Turnover intention of hospital staff in Ontario, Canada: exploring the role of frontline supervisors, teamwork, and mindful organizing. *Human Resources for Health* 17, Article number: 66
- Zaheer, S., Ginsburg, L., Wong, H.J. *et al.* Turnover intention of hospital staff in Ontario, Canada: exploring the role of frontline supervisors, teamwork, and mindful organizing. *Hum Resour Health* **17**, 66 (2019). <https://doi.org/10.1186/s12960-019-0404-2>