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Influence of Psychosocial Factors on Service Delivery in Level 4 Hospitals in Kisii County, Kenya: The Moderating Role of Safety Policy Implementation

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Abstract

Healthcare workers are frequently exposed to psychosocial hazards in the workplace, which can compromise their mental well-being and impair service delivery. These hazards may lead to stress, burnout, absenteeism, and reduced performance, ultimately affecting the quality of patient care. Effective implementation of safety policies can help mitigate these risks and moderate the relationship between psychosocial support and service delivery. This study, therefore, investigated the association between psychosocial support and service delivery, and examined the moderating role of safety policy implementation in this relationship. The specific objectives of the study were: to determine the influence of psychosocial support on service delivery; and to determine the influence of psychosocial support on service delivery moderated by safety policy implementation. Stratified random sampling, purposive sampling and convenience sampling were used to select the study sample. Data was collected using semi-structured questionnaires and interviews; and analysed using descriptive statistics and inferential statistics. The findings revealed that there was a statistically significant association between psychosocial support and service delivery ($t(13) = 2.365, p = .038$); and safety policy implementation has a moderating effect on the association between psychosocial support and service delivery [$p = .045$; $t(13) = 2.626, p = .022$]. The study concluded that psychosocial support was a significant predictor of service delivery moderated by safety policy implementation. Hospital administrators should design integrated strategies enhancing psychosocial support while simultaneously enforcing safety policies to maximize impact on service delivery.

Keywords: Service Delivery, Psychosocial Support, Safety and Health Policy Implementation



1. Introduction

Healthcare workers (HCWs) play a central role in the delivery of medical services aimed at promoting public health and well-being. As the backbone of healthcare systems, it is imperative that management ensures a safe and healthy working environment free from occupational hazards. Nevertheless, healthcare settings are characterized by a range of psychosocial hazards that adversely affect HCWs. These facilities are among the most demanding workplaces, with staff often required to operate under intense stress (Labrague et al., 2021). The need to care for patients with severe or life-threatening conditions, combined with overwhelming workloads, tight schedules, and disproportionate staff-to-patient ratios, contributes to heightened occupational strain. Additionally, HCWs must manage the expectations of demanding patients, particularly those suffering from chronic or acute conditions (Labrague et al., 2021).

Psychosocial stressors undermine timely and effective healthcare delivery (Chegini et al., 2021; Henderson, 2023). Emergencies and unplanned duties exacerbate stress, while long hours and heavy workloads impair health worker well-being, threatening service quality (Wright, 2022). Empirical evidence links irregular shifts to circadian disruption, fatigue, and reduced performance (Sakurai, 2020; Booker, 2021). Studies in the U.S., Korea, and China associate shiftwork with physical and mental health issues (Jung & Jung, 2021; Li, 2021; Wright, 2022).

Previous studies examining the relationship between psychosocial support and service delivery have primarily focused on the direct association between psychosocial support and either service delivery or job performance (Pettersson et al., 2022; Faduyile, 2023; West & Dawson, 2021; Chegini, 2021; Akhigbe & Issa, 2022). In contrast, the present study not only explored this direct relationship but also investigated the moderating role of safety policy implementation. Furthermore, the current study differs methodologically and contextually from the reviewed literature. For instance, Sasaki (2021) conducted research in large urban hospitals, whereas the geographical locale of level 4 hospitals is predominantly rural areas. Chegini (2021) utilized online data collection targeting only healthcare workers, differing from the present study's use of self-administered questionnaires among both healthcare staff and patients. West and Dawson (2021) employed a nationwide longitudinal design, in contrast to this study's cross-sectional approach focused specifically on public hospitals in Kisii County, Kenya. Pettersson et al. (2022) examined psychosocial work environments in relation to care quality within Swedish public eldercare institutions, focusing narrowly on service quality as the dependent variable. By comparison, the current study adopts a broader view of service delivery, encompassing aspects such as accessibility, affordability, responsiveness, and quality. Additionally, several other studies such as those by Faduyile et al. (2023) in tertiary institutions, Muchiri (2022) in the National Youth Service, Kitole (2020) in Kenya's National Treasury, and Oduor (2021) in beverage manufacturing were conducted in non-healthcare settings, limiting their applicability to the healthcare sector.

Healthcare workers in Kenya are routinely exposed to a wide range of occupational hazards, including significant psychosocial risks (MoH, 2020). Level 4 health facilities have been



identified as the most vulnerable, with the highest rates of occupational safety and health (OSH) non-compliance. Regional disparities exist, with Kisii County reported among the poorest-performing areas. Specifically, a baseline OSH survey rated Level 4 facilities in Kisii County as approaching a severe level of non-compliance, highlighting the urgent need for reforms in their daily operations (MoH, 2020). The challenges facing healthcare service delivery have been exacerbated in the post-COVID-19 period, with healthcare workers facing intensified psychosocial pressures alongside systemic issues such as long patient waiting times, underfunding, low healthcare worker-to-patient ratios, frequent drug shortages, and inadequate infrastructure maintenance (Ombaka & Machira, 2022; Oirere, 2019). These conditions underscore the necessity of examining the link between psychosocial support and service delivery. Effective implementation of safety and health policies mitigates psychosocial hazards (Hassard et al., 2020). Importantly, the implementation of occupational safety and health policies particularly those addressing psychosocial risks may play a moderating role in this relationship, influencing the effectiveness of service delivery through improved worker well-being. Hence, the study sought to determine the influence of psychosocial support on service delivery in level 4 hospitals in Kisii County; the moderating role of safety policy implementation.

1.1 Statement of the Problem

Healthcare service delivery in Level 4 hospitals in Kisii County has increasingly drawn public concern due to persistent inefficiencies, delays, and substandard care. Despite their mandate to offer accessible, efficient, and quality medical services, the capacity of healthcare workers to meet these expectations is significantly hindered by unsafe and unhealthy working conditions. Reports by the Ministry of Health reveal that many of these facilities expose staff to various occupational hazards—both physical and psychosocial. The situation has been further strained by emerging public health threats such as COVID-19, which have intensified workloads and stress levels among healthcare workers. These pressures contribute to psychological distress, illness, absenteeism, and diminished job performance, thereby impairing overall service delivery. Although Kenya has established occupational safety and health (OSH) policies to protect healthcare workers, gaps in implementation particularly at the county level have allowed hazardous work environments to persist. Inadequate enforcement of these policies also undermines the potential effectiveness of psychosocial support interventions designed to mitigate work-related stress. This study seeks to examine the influence of psychosocial support on healthcare service delivery in Level 4 hospitals in Kisii County and assess how OSH policy implementation moderates this relationship. Understanding these interactions is vital for informing policy and management strategies aimed at improving healthcare worker well-being and the quality of service delivery.

1.2 Objectives of the Study

1. To determine the influence of psychosocial support on service delivery in level 4 public hospitals in Kisii County.
2. To determine the influence of psychosocial support on service delivery moderated by OSH policy implementation in level 4 public hospitals in Kisii County, Kenya.



2. Literature Review

2.1 Theoretical Framework

The study was anchored in Robert Karasek's Job Demand-Control (JDC) theory, introduced in 1979, which asserts that jobs involving high demands and low levels of control—referred to as high-strain jobs—are likely to result in elevated stress and negative health outcomes due to prolonged mental exertion and limited coping capacity (Karasek, 1979). This framework was later extended into the Job Demand-Control-Support (JDACS) model by Karasek and Theorell (1990), adding workplace social support as a critical component. According to this enhanced model, jobs marked by high demands, limited control, and minimal support—termed iso-strain jobs—pose the greatest risk to worker well-being. In contrast, roles with high demands, substantial control, and strong support—active jobs—are associated with improved health and enhanced performance (Karasek & Theorell, 1990). In the context of this study, the JDACS model implies that healthcare workers (HCWs), particularly during emergencies, often face intense job demands with little control, increasing their vulnerability to occupational stress and related health issues. The expanded model highlights the critical role of integrating comprehensive social support systems—including collegial support, counseling services, and harmonious workplace relationships—alongside appropriate levels of job control to enhance mental well-being and improve the effectiveness of healthcare service delivery.

2.2 Empirical Review

Sasaki et al. (2021) examined the relationship between workplace social capital and mental health among healthcare professionals in major hospitals located in Tokyo and Osaka, Japan. Employing a cross-sectional survey design, the researchers collected data from 1,400 healthcare workers using structured questionnaires, which were analyzed through descriptive and inferential statistical methods. The results indicated that elevated levels of workplace social support and effective communication—core elements of psychosocial support—were positively and significantly linked to improved mental health and teamwork, thereby enhancing healthcare service delivery. However, this study was conducted in large urban hospitals, contrasting with the current study's focus on level 4 hospitals in a predominantly rural setting.

Chegini (2021) undertook a cross-sectional study during the COVID-19 pandemic across hospitals in Iran. Data were gathered online from 410 randomly selected healthcare workers through questionnaires and analyzed using descriptive statistics, correlation, and regression analyses. The findings highlighted that factors such as high workload, emotional strain, and lack of organizational support were significantly associated with burnout. Conversely, psychosocial support—particularly managerial empathy and peer relationships—correlated significantly with reduced burnout and better perceived quality of care. Unlike the current study, which employed self-administered questionnaires among both healthcare workers and patients, Chegini's data collection was conducted exclusively online and only targeted healthcare personnel.



West and Dawson (2021) conducted a longitudinal quantitative study across hospitals in England to explore the impact of supportive leadership on staff wellbeing and patient care outcomes. Over a three-year period, data from surveys of 10,000 healthcare workers were integrated with national performance statistics. Results demonstrated that leadership styles emphasizing empathy, communication, and emotional support significantly improved both employee wellbeing and patient satisfaction. Their nationwide longitudinal approach differs from the cross-sectional design employed in the current study, which focused on public hospitals in Kisii County, Kenya.

Pettersson et al. (2022) investigated the connection between psychosocial work environments and care quality in Swedish public eldercare institutions using a mixed-methods approach. Data were collected from 43 units through the Copenhagen Psychosocial Questionnaire and qualitative interviews, targeting staff selected via simple random sampling. The study found that units reporting high levels of psychosocial support experienced lower stress, higher job satisfaction, and better patient care. This contrasts with the current study, which was conducted in level 4 hospitals and assessed broader dimensions of service delivery, including accessibility, affordability, responsiveness, and quality.

Faduyile et al. (2023) explored the effects of occupational stress on the productivity of academic staff in public tertiary institutions in Lagos State, Nigeria. Utilizing both descriptive and correlational research designs, data were collected from 700 academic staff members through questionnaires and analyzed using t-tests and MANOVA. The results indicated significant differences in stress and productivity between academic ranks, although no variation was observed across institutional types. While both studies examine the relationship between stress and performance, the current study considers occupational stress as an indicator within the broader psychosocial framework and focuses on healthcare workers in Kisii County, not academic personnel.

Ndep et al. (2020) focused on identifying sources, effects, and coping strategies related to occupational stress among healthcare professionals in Ugep, Cross River State, Nigeria. Using purposive sampling, the study surveyed 198 healthcare workers. A substantial proportion (92.8%) reported stress stemming from factors such as heavy workloads, lack of equipment, poor managerial support, and emergency cases. Stress outcomes included health-related symptoms and decreased work interest, which adversely affected service delivery. Although related, this study differs from the current one in terms of location, methodology, and conceptual framing of variables.

Muchiri (2022) examined the implications of work-related stress on productivity, service delivery, service quality, and institutional image within the National Youth Service (NYS) in Nairobi, Kenya. The study used a stratified random sample of 111 employees and employed structured questionnaires for data collection, with analysis conducted via descriptive and inferential statistics. Findings showed that work stress had a significant negative impact on all outcome variables and was negatively correlated with reduced organizational performance. This differs from the current study, which targets healthcare workers and



frames stress as a dimension of psychosocial factors influencing healthcare delivery.

Kitole et al. (2020) conducted a descriptive study on work-related stress and employee performance in Kenya's National Treasury. The study sampled 304 employees using a semi-structured questionnaire and applied both descriptive and inferential statistics, including regression analysis. Results revealed a strong positive association between work overload and employee performance, identifying stress as a key determinant. In contrast, the current study treats occupational stress as an element of psychosocial factors rather than the primary independent variable and focuses on healthcare delivery within rural hospitals.

Oduor (2021) investigated how safety practices affect employee performance in beverage manufacturing companies in Nairobi, with a focus on psychosocial support and the moderating role of safety policy. An experimental design was adopted, involving 483 participants from various departments. Data were analyzed using multiple regression analysis, revealing that psychosocial support significantly enhanced performance, while safety training and hazard control had minimal impact. The study also found no significant moderating effect from safety policy. While relevant, this study differs in context (manufacturing vs. healthcare), location (urban vs. rural), and scope.

3. Methodology

This study adopted a cross-sectional survey design to investigate the relationship between psychosocial support and service delivery, with Safety policy implementation as a moderating variable. The design was appropriate for capturing relationships and perceptions at a single point in time without manipulating variables (Creswell & Creswell, 2019), and allowed for data collection from multiple respondents across Level 4 public hospitals in Kisii County.

The target population included 521 healthcare workers involved in clinical service provision—who are routinely exposed to various occupational hazards—in 15 Level 4 public hospitals, as well as patients receiving services in these facilities. A sample of 227 healthcare workers was determined using Yamane's (1967) formula, based on a 5% margin of error and 95% confidence level. Proportionate stratified random sampling and purposive sampling were employed, with stratification based on clinical cadres. Additionally, a sample of 300 patients was selected using convenience sampling due to the lack of a comprehensive sampling frame.

Primary data, both quantitative and qualitative, were collected using structured questionnaires and interviews. Instruments were pre-tested at Kisii Level 5 Hospital. Reliability was assessed using the test-retest method and Cronbach's alpha, yielding coefficients of 0.836 and 0.808 ($\gamma = .806$ for standardized items), respectively, indicating acceptable internal consistency. Likert-scaled items on a five-point scale (1 = Strongly Disagree to 5 = Strongly Agree) were used to measure the study constructs.

Quantitative data were obtained from healthcare workers and patients, while qualitative data were gathered through interviews from five key informants-heads of clinical units- from each



hospital. Qualitative data were coded, thematically categorized, and synthesized alongside quantitative findings for integrated analysis.

Quantitative data analysis involved descriptive statistics, simple hierarchical regression, and multiple hierarchical regression analysis. Diagnostic tests confirmed that the data met the key assumptions of regression analysis, including normality, independence of errors, linearity, absence of multicollinearity, and homoscedasticity.

4. Results and Discussion

4.1 Descriptive Analysis

Psychosocial support was measured from shift work, work overload, social relationships at work and occupational stress. Analysis was done at collectively done at hospital level and consolidated for all facilities. Descriptive analyses of responses on psychosocial support are summarized in table 1.

Table 1: Descriptive information on psychosocial support

Item	Strongly Disagree	Disagree	No comment	Agree	Strongly Agree	Total	Mean	Std. dev.
Shift work	0 (0.0%)	0 (0.0%)	12 (5.7%)	159 (75.0%)	41 (19.3%)	212	4.136	0.482
Sleep patterns	0 (0.0%)	23 (10.8%)	50 (23.6%)	131 (61.8%)	8 (3.8%)	212	3.585	0.793
Work overload	0 (0.0%)	7 (3.3%)	27 (12.7%)	172 (81.1%)	6 (2.8%)	212	3.150	0.501
Harmonious relationships	0 (0.0%)	5 (2.4%)	16 (7.5%)	168 (79.3%)	23 (10.8%)	212	3.985	0.528
Counseling and social support	0 (0.0%)	27 (12.7%)	34 (16.0%)	121 (57.1%)	30 (14.2%)	212	3.670	0.708
Work demands	0 (0.0%)	15 (7.1%)	24 (11.3%)	170 (80.2%)	3 (1.4%)	212	3.759	0.686

Source(s): Survey Data, 2025

A majority of healthcare workers (75%) reported that rotating shift work is fairly implemented in Level 4 hospitals in Kisii County, suggesting generally equitable scheduling practices. Specifically, 19.3% strongly agreed with this assessment. Despite the perceived fairness, 61.8% of respondents indicated that rotating shifts disrupt sleep patterns, which may negatively impact mental health. Qualitative data further revealed that such disruptions could reduce alertness, increase the likelihood of errors, and elevate the risk of burnout. Additionally, 81.1% of respondents agreed that healthcare workers experience task overload. Excessive workloads were linked to fatigue and burnout, potentially impairing clinical decision-making and increasing the risk of medication errors, misdiagnoses, and procedural mistakes. These conditions may compromise both worker well-being and the overall quality of healthcare service delivery.

Additionally, 57.1% of respondents reported that healthcare workers receive counseling from



mental health officers and social support from colleagues when facing psychosocial challenges. Counseling was perceived to offer psychological relief and contribute to mental well-being. However, 12.7% of respondents disagreed with the availability of such support. Qualitative data highlighted that existing counseling and social support services are insufficient to meet demand, largely due to the limited number of mental health officers and underutilization of available services by healthcare workers. Nonetheless, peer support remains a significant buffer against occupational stress, particularly for those working with critically ill or dying patients, and may contribute to improved coping and service delivery.

Finally, respondents were asked to indicate their level of agreement with the statement that work demands expose healthcare workers (HCWs) to occupational stress. A significant majority (81.6%) affirmed that the demands placed on HCWs contribute to work-related stress. Such stress can adversely affect the quality of care by diminishing empathy, increasing the likelihood of medical errors, and contributing to mental health challenges. These psychological effects may impair cognitive functioning and decision-making capacity, ultimately compromising patient safety and the overall quality of healthcare services.

4.2 Inferential Analysis

The study tested the null hypothesis that OSH policy implementation does not have a significant moderating effect on the influence of psychosocial support on service delivery in level 4 public hospitals in Kisii County; against the research hypothesis. Statistically, the study tested the hypothesis that;

OSH policy implementation does not have a significant moderating effect on the regression of service delivery on psychosocial support in level 4 public hospitals in Kisii County.

$$H_{01}: R_{SVD \cdot PSS \cdot OSP \cdot PSS_OSP} = 0$$

$$H_{a2}: R_{SVD \cdot PSS \cdot OSP \cdot PSS_OSP} \neq 0$$

where SVD = service delivery; PSS = psychosocial support, OSP is OSH policy implementation, and PSS_OSP is the interaction term. The results of the analysis are summarized in Table 2.

Table 2. Regression of Service Delivery on Psychosocial Support in Level 4 Public Hospitals in Kisii County Moderated by OSH Policy Implementation

Model	Variable	β	R	R^2	$R^2_{adj.}$	$R^2_{chng.}$	Std.ε	T	Sig.	F	TOL	VIF
1	Constant	.000					.208	.000				
	PSS	-.298					.258	-1.155	.273		.947	1.055
	OSP	-.487					.221	-2.203	.048		.947	1.055
	Summary		.667	.445	.352	.445	.805		.029	4.801		
2	Constant	.064					.212	.300	.770			
	PSS	.522					.224	2.331	.040		.899	1.113
	OSP	-.557					.226	-2.462	.032		.879	1.138
	INT	.580					.221	2.626	.022		.884	1.171
	Summary		.710	.505	.369	.060	.794		.045	3.735		

Source: Survey data, 2025



The results indicate that OSH policy implementation has a significant moderating effect on the regression of service delivery on psychosocial support in level 4 public hospitals in Kisii County, $F(3, 11) = 3.735, p = .045$; $t(13) = 2.626, p = .022$. The results also show that psychosocial support is a significant predictor of service delivery, $t(13) = 2.331, p = .040$. Therefore shift work, workload, social relationships at work and occupational stress have significant influence on service delivery in level 4 public hospitals in Kisii County, but subject to the extent of OSH policy implementation.

Service delivery in level 4 public hospitals in Kisii County can be predicted from psychosocial support moderated by OSH policy implementation from the simple model;

$$\text{SVD}^I = 0.064 + 0.522 \text{ PSS} - 0.557 \text{ OSP} + 0.580 \text{ PSS*OSP} + \varepsilon \dots (1)$$

where SVD = service delivery; PSS = psychosocial support, OSP is OSH policy implementation, and PSS*OSP is the interaction term.

From Table 4.16, psychosocial support alone accounts for 35.2% of the variance in service when acting alone, $R^2_{\text{adj.}} = .352, p = .029$. But with OSH policy implementation in the model, psychosocial support accounts for 36.9% of the variance in service delivery, $R^2_{\text{adj.}} = .369, p = .045$. Hence, inclusion of the interaction term increases the proportion of variance explained by 6.0%, $R^2_{\text{chng.}} = .060, p = .045$. The 6% increase in R-squared indicates that the implementation of safety policies significantly moderates the relationship between psychosocial support and service delivery. This implies that the effect of psychosocial support on service delivery is contingent upon the level of safety policy implementation. Specifically, stronger implementation of safety policies enhances the positive influence of psychosocial support, leading to improved service delivery outcomes.

The findings of this study align with those of Sasaki et al. (2021), Chegini (2021), Ndep et al. (2020), West and Dawson (2021), and Faduyile et al. (2023), all of whom reported a significant relationship between psychosocial work support or its constituent elements and job performance or service delivery. Similarly, studies by Ndep et al. (2020), Muchiri (2022), and Kitole (2020) found a significant negative association between stress—used in this study as an indicator of psychosocial support and service delivery. While Oduor (2021) also established a significant relationship between psychosocial support and service delivery, their findings indicated that safety policy had no significant moderating effect on this relationship. The discrepancy between Oduor's findings and those of the current study may be explained by differences in the conceptualization and operationalization of the study variables.

5. Conclusion and Recommendations

The study concludes that Occupational Safety and Health (OSH) policy implementation significantly moderates the relationship between psychosocial support and service delivery in Level 4 public hospitals in Kisii County. The findings further reveal that psychosocial support is a key predictor of service delivery outcomes. Notably, the effectiveness of



psychosocial support in enhancing service delivery is contingent upon the extent to which OSH policies are implemented, highlighting the critical interplay between workplace support systems and occupational health standards in promoting quality healthcare delivery.

The study recommends that the hospital management to prioritize the effective implementation of Occupational Safety and Health (OSH) policies as a strategic approach to strengthen psychosocial support systems, thereby enhancing service delivery. Mental Health Officers should be empowered to intensify the provision of counselling services to healthcare workers (HCWs), while all staff should be encouraged to offer peer support to colleagues facing personal or professional challenges. Additionally, hospitals should actively pursue increased funding to address critical staffing shortages, which would help reduce excessive workloads and improve the overall quality of care.

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