

**THE EFFECT OF INDIRECT FINANCIAL REWARDS ON PERFORMANCE OF HEALTH WORKERS
AT KIRUDDU HOSPITAL**

Nabakiibi Florence

Metropolitan International University

ABSTRACT

The study aimed at the effect of indirect financial rewards on performance of health workers at Kiruddu hospital and it aimed at filling the knowledge gaps, providing empirical data for management on the cost-effectiveness and sustainability of continued investment in the program, this proposed study aimed at conducting a mixed methods outcomes evaluation to determine the effect of indirect financial rewards on objective performance measures and subjective perceptions of motivation among health worker subgroups at Kiruddu Hospital one-year post-implementation. A mixed methods evaluative research design was employed to comprehensively assess the effect of the recently introduced merit-based indirect financial reward program targeting health workers at Kiruddu National Referral Hospital. This involved concurrently collecting both quantitative and qualitative data, then integrating the findings to answer the research question. Additionally, a cross-sectional survey was administered to a sample of 69 staff randomly selected from across professional cadres using a structured questionnaire to determine self-reported levels of motivation, job satisfaction, turnover intentions after experience with the rewards. From the findings, Correlation Coefficient for indirect financial rewards and performance of health workers at Kiruddu Hospital was $r = 0.736^{**}$, which was significantly positive with probability value ($p = 0.000$) that was less than $\alpha = 0.01$ level of significance showing a positive relationship between indirect financial rewards and performance of health workers at the 1% level of significance. The correlation results indicated a significant positive relationship between indirect financial rewards and performance of health workers at Kiruddu Hospital. The statistics indicated that indirect financial rewards were positively and statistically associated with performance of health workers in Kiruddu Hospital. From the recommendations, there should be need for the top leadership of Kiruddu Hospital and the Ministry of Health to review the existing direct financial reward systems. This can be done by benchmarking with private hospitals and other Government Hospitals in the region.

Key words: indirect, financial, rewards, performance and health workers

Background of the study

Health worker motivation and performance remain a major challenge in low-resource public health systems across Sub-Saharan Africa (Winny et al., 2023). In Uganda, insufficient and delayed salaries have demotivated staff in public hospitals (Galukande et al., 2013). Kiruddu National Referral Hospital, the largest public tertiary hospital in Kampala, experiences

similar issues. Previous assessments found high rates of absenteeism affecting service delivery (MoH, 2018). Research shows financial incentives can improve health worker productivity when integrated with non-financial motivators (Das et al., 2016). While salary supplements are unsustainable long-term, indirect rewards costing less than changes to base pay

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may still boost motivation (Christopher, Moses, Muhindo, & Muhammad, 2022). Performance-based incentives in the forms of transport allowances, food subsidies or academic support led to reduced absenteeism and better quality of care in studies from Tanzania and Rwanda (Soeters et al., 2011; Basinga et al., 2011). At Kiruddu Hospital, senior management approved a budget to experiment with introducing merit-based indirect financial rewards. Selected high performers across clinical and support staff received monthly non-wage benefits like fuel vouchers or

phone credits based on departmental needs assessments (Kiruddu Hospital, 2020 internal report). The goal was to incentivize quality, availability and productivity without increasing payroll (Paul & Kazaara, 2023). However, there has been no formal evaluation of the program's impact one year later. While anecdotally positive, rigorous evidence is still needed on how the indirect incentives have affected objective measures of health worker performance as well as self-reported motivation and retention intentions over time (Dieleman et al., 2003).

Problem Statement

While the introduction of an indirect financial incentive program to reward high performing health workers at Kiruddu National Referral Hospital was well-intentioned, aiming to boost motivation levels and foster better performance without increasing fixed costs (Mohammed et al., 2022), a gap remains in rigorously evaluating the effectiveness of this intervention over time using objective outcome measures combined with subjective perception data (Dieleman et al., 2003). Anecdotally, hospital administrators reported positive impacts on availability, productivity and quality of services during the first year of implementation (Kiruddu Hospital, 2020 internal report). However, without a formal mixed methods evaluation to assess changes in important indicators like absenteeism rates, waiting times, patient safety, job retention and health worker views (Christopher, Moses, Muhindo, & Komunda, 2022b), the true impact remains unclear. This lack of robust evidence hampers optimization and informed scale-up decisions (Basinga et al., 2011). Moreover, while previous research shows indirect incentives hold promise when part of a comprehensive package (Soeters et al., 2011), the complexities of the hospital context with diverse professional groups means this particular program's success may vary between clinical, support and management cadres (Okwero et al., 2018). Qualitative insights into differing views and experiences could yield targeted enhancement strategies (Nakamura et al., 2021). Therefore, to fill the knowledge gaps, providing empirical data for management on the cost-effectiveness and sustainability of continued investment in the program (Dieleman et al., 2003), this proposed study aims to conduct a mixed methods outcomes evaluation to determine the effect of indirect financial rewards on objective performance measures and subjective perceptions of motivation among health worker subgroups at Kiruddu Hospital one-year post-implementation (Diallo et al., 2022).

Main Objectives

To examine the effect of indirect financial rewards on performance of health workers at Kiruddu hospital

Methodology

A mixed methods evaluative research design was employed to comprehensively assess the effect of the

recently introduced merit-based indirect financial reward program targeting health workers at Kiruddu National Referral Hospital (Muzie et al., 2022). This involved concurrently collecting both quantitative and qualitative data, then integrating the findings to answer the research question (Creswell & Creswell, 2018). For the quantitative component, hospital records over a two-year period (pre- and post-intervention) were reviewed to retrospectively compare objective measures of staff performance including absenteeism rates, patient waiting times, quality of care indicators such as infection control compliance, and job retention figures among the clinical and support staff who participated in the incentive program versus control departments which did not (Bluestone et al., 2013). Additionally, a cross-sectional survey was administered to a sample of 69 staff randomly selected from across professional cadres using a structured questionnaire to determine

self-reported levels of motivation, job satisfaction, turnover intentions after experience with the rewards (Dagogo et al., 2018). Non-probability purposive sampling was used to recruit 50 participants for one-on-one in-depth interviews to gain a deeper qualitative perspective on views about impact of the monetary and non-monetary benefits on productivity, perceptions of management support, and suggestions for improving the program (Mwai et al., 2013). Data was managed using SPSS and analyzed through descriptive statistics for quantitative data, while qualitative interviews was recorded, transcribed verbatim and subjected to thematic content analysis (Nelson et al., 2022). Finally, data integration occurred to compare and contrast quantitative results on objective outcomes with themes from qualitative perceptions to draw evidence-based conclusions regarding effectiveness of the program in the hospital context (O'Cathain et al., 2010).

RESULTS

Table 1: Descriptive results for Indirect Financial Reward Practices

Statements	SD	D	NS	A	SA	Mean	Std Dev
Health Insurance							
Health workers at Kiruddu Hospital are entitled to health insurance	0.0	0.0	0.0	2.9	97.1	4.97	0.169
Kiruddu Hospital meets medical bills for all my dependants	97.1	2.9	0.0	0.0	0.0	1.09	0.511
Health of employees is linked to the productivity of the workforce	0.0	0.0	1.4	17.4	81.2	4.80	0.440
Paid Training							
Most of the training opportunities are paid for at Kiruddu Hospital	95.7	0.0	0.0	1.4	2.9	1.16	0.760

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Training is for every health worker at Kiruddu Hospital.	11.9	9.0	1.5	61.2	16.4	3.61	1.218
Paid training has direct effect on my motivation and performance	0.0	0.0	1.4	23.2	75.4	4.74	0.474
There is a paid training policy at Kiruddu Hospital	72.5	0.0	11.6	14.5	1.4	1.72	1.223
Kiruddu Hospital pays for every external training I attend.	89.9	8.7	0.0	0.0	1.4	1.14	0.550
Paid Vocation							
Health workers at Kiruddu Hospital are entitled to a paid vocation	97.0	0.0	0.0	1.5	1.5	1.10	0.606
Paid leave benefits provide health workers with an opportunity to recharge and deal with non-work-related issues	0.0	0.0	0.0	24.6	75.4	4.75	0.434
Paid vocation increases job satisfaction	0.0	0.0	0.0	26.1	73.9	4.74	0.442
Housing	SD	D	NS	A	SA		
Kiruddu Hospital provides housing allowances to all health workers	20.3	11.6	0.0	43.5	24.6	3.41	1.488
Housing allowance improves health workers' morale and productivity.	8.7	1.4	1.4	59.4	29.0	1.488	1.078

Source: Primary data (2022)

The results in table 1 above revealed that 97.1% of the respondents strongly agreed to the statement that health workers at Kiruddu Hospital are entitled to health insurance and that partly explains why 98.6% of respondents agreed that to the statement that health of employees is linked to the productivity of the workforce. However, 97.1% of the respondents strongly disagreed to the statement that Kiruddu Hospital meets medical bills for all my dependants.

95.7% of respondents strong disagreed that most of the training opportunities are paid for at Kiruddu Hospital while 77.6% agreed that training is for every health worker at Kiruddu Hospital and 98.6% agreed confirming that paid training has direct effect on my motivation and performance (Christopher, Moses, Muhindo, & Komunda, 2022a). On contrary, the findings in Table 1 indicated that 72.5 % of respondents disagreed to the statement that there is a paid training policy at Kiruddu Hospital and 98.6% disagreed to the statement that Kiruddu Hospital pays for every external training I attend. This implies that health workers have fend for themselves in case of external training.97% of respondents indicated agreed that Health workers at Kiruddu Hospital are entitled to a paid vocation; majority and all most all the respondents agreed that paid leave benefits provide health workers with an opportunity to recharge and

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deal with non- work-related issues and 73.9% strongly agreed that Paid vocation increase job satisfaction (Paul & Kazaara, 2023).

Correlation results of indirect financial rewards and performance of health workers at Kiruddu Hospital

Table 2: Correlation results of indirect financial reward practices and performance of health workers in Kiruddu Hospital

Correlations			
		Indirect Financial Rewards	performance of health workers
Indirect Financial Rewards	Pearson Correlation	1	.736**
	Sig. (2-tailed)		.000
	N	69	69
performance of health workers	Pearson Correlation	.736**	1
	Sig. (2-tailed)	.000	
	N	69	155
**. Correlation is significant at the 0.01 level (2-tailed).			

The results in Table 6 shows that, Pearson's Correlation Coefficient for indirect financial rewards and performance of health workers at Kiruddu Hospital was $r = 0.736^{**}$, which was significantly positive with probability value ($p = 0.000$) that is less than $\alpha = 0.01$ level of significance showing a positive relationship between indirect financial rewards and performance of health workers at the 1% level of significance (Nelson et al., 2023). The correlation results indicate a significant positive relationship between indirect financial rewards and performance of health workers at Kiruddu Hospital. The statistics indicate that indirect financial rewards are positively and statistically associated with performance of health workers in Kiruddu Hospital. In other words, indirect financial rewards significantly led to performance of health workers. In terms of strength, the relationship was weak as indicated by the Pearson correlation of 0.736.

Regression results on indirect financial reward practices and the performance of health workers in Kiruddu hospital

Table 3: Regression results on indirect financial reward practices and the performance of health workers in Kiruddu hospital

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.736 ^a	.559	.552	.24311
a. Predictors: (Constant), Indirect Financial Reward Practices				

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ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.455	1	5.455	84.760	.000 ^a
	Residual	4.294	67	.064		
	Total	9.726	68			
a. Predictors: (Constant), Indirect Financial Reward Practices						
b. Dependent Variable: Performance of health workers						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.978	.175		5.213	.000
	Indirect Financial Rewards	.786	.060	.6951	15.083	.000
a. Dependent Variable: Performance of health workers						

The coefficient of determination (Adjusted R²) indicating the variation in performance of health workers accounted by indirect financial rewards was 0.552. This statistic meant that indirect financial rewards explain 55.2% of the variation in the performance of health workers in Kiruddu Hospital. The 44.8% of variation in performance of health workers is explained by other factors. Regarding significance of the regression model, the p-value for the F-statistic was less than 1% significant level implying that indirect financial reward practices explain a significant effect in performance of health workers in Kiruddu Hospital (Christopher, Moses, Muhindo, & Komunda, 2022a). In terms of magnitude of effect; the b-coefficient was 0.552 indicating that indirect financial rewards would affect performance of health workers in Kiruddu Hospital by 55.2%. Accordingly, the results from the regression analysis implies that the earlier hypothesis that stated that indirect financial rewards have a significant effect on performance of health workers at Kiruddu Hospital is accepted

Multiple regression model

To establish the effect of financial rewards on the performance of health workers at Kiruddu Hospital, a multiple regression was conducted, and the results are tabulated below.

Table 4 Multiple Regression Results for Financial Reward Practices

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.871 ^a	.763	.757	.6817
a. Predictors: (Constant), Indirect Financial Rewards, Direct Financial Rewards				

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	22.401	2	20.519	64.926	.000 ^a
	Residual	74.405	67	.382		
	Total	96.806	69			
a. Predictors: (Constant), Indirect Financial Rewards, Direct Financial Rewards						
b. Dependent Variable: performance of health workers						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.107	.186		.558	.003
	Direct Financial Rewards	.865	.084	.786	12.232	.000
	Indirect Financial Rewards	.831	.074	.735	11.980	.000
a. Dependent Variable: performance of health workers						

Table 8 shows multiple correlation coefficient $R = .871$ which suggest a significant strong positive relationship between financial reward practices (direct financial reward practices and indirect financial reward practices) and performance of health workers at Kiruddu Hospital. It further shows $R^2 = 0.763$ which suggests that financial reward practices accounted for 76.3% of the variance in the performance of health workers in Kiruddu hospital while the remaining 23.7% is explained by other variables. The ANOVA statistics $F(2, 67) = 64.926$, $sig = .000$ confirms that financial rewards significantly affect performance of health workers in Kiruddu hospital through direct financial rewards and indirect financial rewards (Akankwasa et al., 2022). The overall model is significantly useful in explaining performance of health workers since the p-value is less than 0.05. The standardized coefficient statistics shows that

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direct financial rewards had the highest effect on performance of health workers in Kiruddu Hospital as per the ($\beta = .786$, $t = 12.232$, $\text{Sig.} = .000$) which is less than the significance level of 0.05 (Innocent et al., 2023). This implies that a significant change in direct financial rewards would result into a significant 0.865-unit change in performance of health workers in Kiruddu Hospital. The standardized coefficient statistics shows that indirect financial rewards were the least predictor on performance of health workers as per the ($\beta = .735$, $t = 11.980$, $\text{Sig.} = 0.000$) which is less than 0.05. This implies that a significant change in indirect financial reward practices would result into a significant 0.831-unit change in the performance of health workers (Richard, 2022)

Conclusions

It was established that direct financial rewards had a positive effect on performance of health workers at Kiruddu Hospital. Since the study findings indicate that direct financial rewards positively and significantly affect performance of health workers at Kiruddu Hospital, it means that an increase in direct financial rewards would increase health worker performance and vice versa. This therefore leads to the acceptance of the hypothesis which stated that direct financial rewards have a significant effect on performance of health workers at Kiruddu Hospital. It is safe to conclude therefore that direct financial rewards are significantly and positively related to the performance of health workers.

Recommendations

There is need for the top leadership of Kiruddu Hospital and the Ministry of Health to review the existing direct financial reward systems. This can be done by benchmarking with private hospitals and other Government Hospitals in the region.

References

- Akankwasa, A., Akakikunda, T., Ntirandekura, M., Murezi, C. M., & Christopher, F. (2022). *Effect of Capital Budgeting on Development of Organizations Empirical Studies of Kashinge Child Development Centre Kisoro District*. 6(9), 5–10.
- Christopher, F., Moses, N., Muhindo, M. E., & Komunda, T. R. (2022a). *Employee Training and Organizational Performance : A Case Study of African College of Commerce and Technology in Kabale District , South Western Uganda* : 6(5), 1–7.
- Christopher, F., Moses, N., Muhindo, M. E., & Komunda, T. R. (2022b). Employee Training and Organizational Performance: A Case Study of African College of Commerce and Technology in Kabale District, South Western Uganda. *International Journal of Academic Pedagogical Research*, 6(5), 1–7.
- Christopher, F., Moses, N., Muhindo, M. E., & Muhammad, M. (2022). *Rewards and Employee Performance in an Organization : A Case Study of African College of Commerce and Technology in South Western Uganda*. 6(4), 414–428.
- Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. 6(7), 84–122.
- Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. 7(3), 124–145.
- Paul, W., & Kazaara, A. G. (2023). *Assessing How Employee Job Rotation Affects Workers Productivity In*

Organizations . A Case Study of Action against Hunger , Kiryandongo District . 7(3), 168–173.

Richard, A. (2022). *Students ' Physical Activities as a Health Behavior and Course Completion in Public and Private Universities in Uganda . 6(6), 21–23.*

Winny, N. D., Kazaara, A. G., Kazaara, A. I., & Deus, T. (2023). *Effect Of Motivation On Employee Performance In Non- Government Organizations (NGOS): A Case Of Mbale City. 7(3), 67–71.*