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Assessment of Physical Activity Levels and Its Associated Factors among Health Care Workers at King Faisal Hospital, Rwanda

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Abstract: **Physical activity (PA) is essential for maintaining good health. Globally, there is growing evidence suggesting decline in PA. Physical inactivity is a major risk factor for non-communicable disease. Despite the role of healthcare workers (HCWs) in health promotion, they are on risk of insufficient physical activity due to their occupational demand. Information regarding PA among health care workers in Rwanda is limited creating a gap in knowledge critical for promoting their health and optimizing their ability to deliver healthcare services. Knowing the level of physical activity can help healthcare workers to plan for PA programs. This study was guided by 2 specific objectives including to assess the level of physical activity among healthcare workers and to determine the associated factors to physical activity. A quantitative cross-sectional study design was employed. A total of 254 participants were recruited using a systematic sampling technique. A Standardized international physical activity questionnaire short form (IPAQ-SF) was utilized to collect data, analyzed using SPSS 28.0. Both descriptive analysis including frequency and percentage as well as inferential analysis using chi-square test (p <0.05) was done. Bivariate and multivariate analysis was computed. The data was presented in frequency tables and figures. Among the 254 HCWs participated in this study composed of nurses 153 (60.2%), Allied health professionals 60 (23.6%) and Medical doctors 41(16.1%). The findings revealed that most of HCWs 164(64.5%) had low level of PA followed by 67 (26, 4%) with moderate level and 23(9.1%) had high PA levels. Therefore only 90(35.5%) had adequate PA. There was significant associations between variables including age (χ^2=11.14, P=0.011, 95%CI: 1.01–1.09), gender (χ^2=6.51, P=0.011, 95% CI: 1.21–3.59), occupational status (χ^2=9.36, P=0.09, 95% CI: 0.92–1.68), and availability of PA policy (χ^2=6.52, P=0.011, 95% CI: 1.29–5.86) however none of the factors was found significant after adjusting with confounding factors. The study concluded that physical inactivity were prominent among healthcare workers at King Faisal Hospital Rwanda based on the WHO guideline and there were no single factors that can predict PA. Intensifying action that promote different types of PA among healthcare workers at King Faisal hospital is recommended.**

Keywords: **Physical Activity, Levels, Health Care Workers, King Faisal Hospital, Rwanda.**

1. INTRODUCTION

Physical inactivity has emerged as one of the leading global public health challenges of the 21st century. According to the World Health Organization (WHO), between 2020 and 2030, approximately 500 million people worldwide are projected to develop preventable diseases associated with physical inactivity, resulting in substantial health and economic burdens (WHO, 2020). Physical inactivity is a well-established risk factor for premature mortality and numerous non-communicable diseases (NCDs), including cardiovascular diseases, diabetes, obesity, and certain cancers (Bellettiere et al., 2019; Rezende et al., 2018).

Globally, physical inactivity contributes significantly to disease burden and mortality. It accounts for approximately 7.6% of deaths from cardiovascular diseases and 7.2% of all-cause mortality worldwide (Katzmarzyk et al., 2022). The economic consequences are equally substantial. The WHO estimates that, without effective interventions to increase physical activity

levels, nearly USD 27 billion will be spent on treatment costs associated with physical inactivity by 2030 (WHO, 2022). Earlier evidence indicates that physical inactivity resulted in healthcare expenditures exceeding USD 53.8 billion in 2013 alone. Furthermore, inactivity-related mortality contributed to approximately 13.4 million disability-adjusted life years (DALYs) and USD 13.7 billion in productivity losses, with nearly 70% of these DALYs occurring in low- and middle-income countries (LMICs) (Ding et al., 2016). Conversely, increasing global physical activity levels could generate economic benefits estimated at USD 8.6 trillion by 2050 (Hafner et al., 2020).

Recognizing these benefits, the WHO recommends that adults aged 18–64 years engage in at least 150 minutes of moderate-intensity physical activity or 75 minutes of vigorous-intensity physical activity per week to maintain health, reduce disability-adjusted life years, lower healthcare costs, and improve productivity (Bull et al., 2020). To address the growing burden of inactivity, the WHO Global Action Plan on Physical Activity set targets to reduce physical inactivity by 10% by 2025 and 15% by 2030 (WHO, 2018). Despite these commitments, global levels of physical inactivity remained relatively stable between 2001 and 2016, with increasing trends observed in many high-income countries (Guthold et al., 2018).

The rise in physical inactivity has been largely attributed to industrialization, urbanization, and technological advancements that have increased sedentary lifestyles and reduced opportunities for daily physical movement (Thivel et al., 2018). Although many countries have adopted policies and strategies aimed at promoting physical activity, implementation remains inadequate. The WHO reports that fewer than half of countries have established comprehensive measures to promote physical activity, while less than 40% have integrated physical activity protocols into primary healthcare systems despite strong evidence of their health benefits (WHO, 2022).

Physical inactivity remains particularly concerning among adolescents and adults. Recent global estimates indicate that 81% of adolescents aged 11–17 years fail to achieve the recommended minimum of one hour of moderate-to-vigorous physical activity daily, with girls being more inactive than boys (WHO, 2022). Similarly, a decline in physical activity levels among adults has been reported globally. Physical inactivity is estimated to be more prevalent in high-income countries (36.8%) than in low- and middle-income countries (16.2%) (Bull et al., 2020). These trends pose significant challenges to achieving the WHO target of reducing physical inactivity by 15% by 2030.

In response to these concerns, several countries have implemented initiatives to encourage participation in physical activity. Rwanda is among the countries that have actively promoted physical activity through various national initiatives, including the Sports Policy for Public Servants and the Car Free Day program. These initiatives aim to encourage active lifestyles among citizens of all ages and have received substantial public participation and support from national leaders, including the President of the Republic (Kigali City, 2019). Such programs demonstrate the government's commitment to addressing physical inactivity and promoting population health.

Despite these efforts, certain occupational groups may not fully benefit from existing physical activity promotion initiatives due to the unique nature of their work environments. Healthcare workers represent one such group. Although they play a critical role in disease prevention and health promotion, their demanding work schedules, prolonged working hours, overtime duties, and frequent night shifts may limit their opportunities to engage in regular physical activity. Additionally, many healthcare facilities face increasing patient loads coupled with workforce shortages, further intensifying work demands and contributing to sedentary behavior.

While healthcare workers are often perceived as healthy because of their medical knowledge and professional roles, evidence suggests that they may be vulnerable to physical inactivity. A study conducted among primary healthcare workers in Malaysia identified prolonged sitting time as a major contributor to physical inactivity among health professionals (Abu Saad et al., 2020). Similarly, a study in Nigeria reported that 79.2% of healthcare workers had low levels of physical activity compared to the general population, largely due to sedentary work conditions and long working hours (Iwuala et al., 2015).

In Rwanda, evidence regarding physical activity levels among healthcare workers remains limited. Existing studies on physical activity in low-income countries have produced inconsistent findings, and there is insufficient information on the extent of physical activity and its associated factors among healthcare professionals. Given the occupational demands faced by healthcare workers, the health risks associated with physical inactivity, and the scarcity of local evidence, there is a need for context-specific research in this area.

Therefore, this study sought to assess the level of physical activity and associated factors among healthcare workers at King Faisal Hospital, Rwanda. The findings are expected to contribute to the existing body of knowledge and provide evidence for designing targeted interventions and public health strategies aimed at improving physical activity participation and preventing chronic diseases among healthcare professionals.

2. METHODOLOGY

2.1 Research Design

A cross-sectional quantitative study approach was employed in this investigation.

2.2 Location of the Study

The present study was conducted at King Faisal Hospital, Rwanda.

2.3 Target Population

The present study targeted to recruit all healthcare workers at King Faisal Hospital, Rwanda.

2.4 Sampling Techniques

The systematic sampling technique was used to recruit participants from the target population of healthcare workers at King Faisal Hospital, Rwanda.

2.5 Sample Size Determination

The total population for this study comprised 548 healthcare workers at King Faisal Hospital, as obtained from the hospital's Human Resources Department. To determine an appropriate sample size, Yamane's simplified formula (Adam, 2020) was applied, as shown below:

$$n = \frac{N}{1 + Ne^2}$$

Where:

- n = required sample size
- N = total population size (548)
- e = margin of error (0.05 at 95% confidence level)

Substituting the values into the formula:

$$n = \frac{548}{1 + 548(0.05)^2}$$

$$n = \frac{548}{1 + 548(0.0025)} = \frac{548}{1 + 1.37} = \frac{548}{2.37} \approx 231$$

Thus, the initial sample size was 231 respondents.

To account for possible non-response, attrition, and incomplete data, an additional 10% of the sample size was included. This adjustment enhances the reliability and adequacy of the data collected.

$$10\% \text{ of } 231 = 23$$
$$\text{Adjusted sample size} = 231 + 23 = \mathbf{254}$$

Therefore, the final sample size for the study was 254 participants.

2.6 Data Collection Methods and Procedures

A standardized International Physical Activity Questionnaire (IPAQ) was utilized by a researcher to gather data.

3. RESULTS AND DISCUSSION

3.1 Demographic Details

This section presents the results of respondents' socio-demographic data. The sample (N = 254) most participants were aged 30–40 (58.26%), and two-thirds were female (66.5%); all had tertiary education (100%), most were married (86.6%), and the largest occupational group was nurse staff covering (60.2%). Work patterns were dominated by rotating shifts (74%) and the majority had normal-range BMI (19–24; 68.9%). Almost all participants reported to be healthy (95.7%), awareness of PA policy was low or unknown (87% "I don't know"), while most of workers are aware of availability for physical activity facility (93.7% reporting availability).

Table 1: Socio-demographic and work Characteristics of the Respondents

Variables	Frequency (n)	Percent (%)
Age group		
<30	28	11.02
30–40	148	58.26
41–50	73	28.74
Above 50	5	1.98
Gender		
Female	169	66.5
Male	85	33.5
Marital Status		
Single	34	13.4
Married	220	86.6
Occupational Status		
Medical Doctors	41	16.1
Allied Health Services	60	23.6
Nurses	153	60.2
Work Characteristics		
Day Shift	66	26
Rotating Shift	188	74
Working Hours per Day		
8 Hours	66	26
12 Hours	188	74
BMI Category (Anthropometry)		
19–24	175	68.9
25–29	67	26.4
≥30	11	4.3
Current Health Status		
Without Disease	243	95.7
With Disease	11	4.3
Policy Awareness (PA)		
No	33	13
I don't know	221	87
Facility Availability (PA)		
Yes	238	93.7
No	5	2
I don't know	11	4.3

3.2 Levels of Physical activity among Healthcare Workers

The International Physical Activity Questionnaire-Short form (IPAQ-SF) was used to measure physical activity levels, which were then divided into three categories based on the usual IPAQ scoring guidelines: high, moderate, and low. The results of this study showed that 164 (64.5%) healthcare workers had low levels of physical activity, with a median Metabolic Equivalent (METs) of 264 METs-Min/week; 67 (26.4%) had moderate levels, with a median METs of 1158 METs-Min/week; and 23 (9.1%) had high levels, with a median METs of 1860 METs-Min/week. As a result 90 (35.5%) people met the WHO's recommended level of physical activity with a median METs of 3018 METs-Min/week.

The World Health Organization (WHO) recommends a minimum of 600 METs-minute/week, however the median total METs weekly energy expenditure of the healthcare professionals was 480 METs-minute/week, indicating a significant incidence of physical inactivity among healthcare workers at King Faisal Hospital.

Table 2: Level of Physical Activity as per World Health Organization Recommendations

Level of Physical Activity	Frequency (n)	Percentage (%)	Median METs- Min/week
Low level of Physical Activity	164	64.5	264(132-480)
Moderate level of Physical Activity	67	26.4	1,158(960-1,464)
High level of Physical Activity	23	9.1	1,860(1,440-2,100)
Total	**254**	**100**	**480(264-1,290)**

3.3 Associated factors to physical activity among healthcare workers at King Faisal Hospital, Rwanda

The relationship between certain sociodemographic, occupational, and health-related factors and the degree of physical activity among medical staff at King Faisal Hospital is shown in Table 2. The results of the research showed that physical activity levels were substantially correlated with age group, gender, occupational status, and the availability of a physical activity policy ($p < 0.05$), but not with other variables. Age showed a significant relationship with physical activity levels ($\chi^2 = 11.14$, $p = 0.011$). Younger healthcare workers were generally more physically active than older ones. Half of participants under 30 years (50.0%) reported adequate physical activity, whereas this proportion declined progressively in older groups.

Among those aged 41–50 years, only 19.2% achieved adequate physical activity while the majority (80.8%) reported inadequate levels. This pattern implies that getting older may cause people to engage in less frequent physical activity, perhaps as a result of increased work obligations, exhaustion, or family duties. A significant difference was also observed by gender ($\chi^2 = 6.51$, $p = 0.011$). Male healthcare workers were more likely to report adequate physical activity (44.7%) compared with females (27.8%). Conversely, inadequate physical activity was more common among female staff (72.2%) than males (55.3%). These findings may reflect differences in daily workload, social roles outside the workplace, or opportunities to engage in structured exercise.

The relationship between physical activity levels and employment status was statistically significant ($\chi^2 = 9.36$, $p = 0.009$).

Medical doctors demonstrated the highest proportion of adequate physical activity (46.3%), followed by allied health professionals (43.3%). Nurses had the lowest proportion of adequate physical activity (26.1%), with nearly three-quarters (73.9%) reporting inadequate levels. This could be linked to demanding nursing schedules, long shifts, and limited time for structured exercise. Another factor that showed a meaningful association was the availability of a physical activity policy at the workplace ($\chi^2 = 6.52$, $p = 0.011$). More than half of participants who reported that a policy existed (54.5%) achieved adequate physical activity. In contrast, only 30.3% of those who reported no policy or were unaware of one met adequate activity levels. This finding highlights the potential influence of institutional support and workplace culture in encouraging physical activity among healthcare workers.

Several other variables did not demonstrate statistically significant associations with physical activity levels. These included marital status ($p = 0.962$), shift type ($p = 0.900$), BMI category ($p = 0.643$), current health status ($p = 0.906$), and availability of physical activity facilities ($p = 0.640$). Although these factors showed some variation in percentages, the differences were not large enough to indicate a meaningful statistical relationship with physical activity levels in this sample.

Table 3: Association of Physical activity Levels with Socio-demographics Characteristics of respondents

Variables	Adequacy PA n (%)	Inadequacy PA n (%)	χ^2	df	P
Age group			11.14	3	0.011
<30	14 (50.0)	14 (50.0)			
30–40	55 (37.4)	93 (62.6)			
41–50	14 (19.2)	59 (80.8)			
>50	2 (40.0)	3 (60.0)			
Gender			6.51	1	0.011
Male	38 (44.7)	47 (55.3)			
Female	47 (27.8)	122 (72.2)			

Marital status			0	1	0.962
Single	12 (35.3)	22 (64.7)			
Married	73 (33.2)	147 (66.8)			
Occupational status			9.36	2	0.009
Medical doctors	19 (46.3)	22 (53.7)			
Allied health professionals	26 (43.3)	34 (56.7)			
Nurses	40 (26.1)	113 (73.9)			
Shift type			0.02	1	0.900
Day shift	23 (34.8)	43 (65.2)			
Rotating shift	62 (33.0)	126 (67.0)			
BMI category			0.88	2	0.643
Normal (19–24)	62 (35.4)	113 (64.6)			
Overweight (25–29)	20 (29.9)	47 (70.1)			
Obese (≥30)	3 (27.3)	8 (72.7)			
Current health status			0.01	1	0.906
With disease	3 (27.3)	8 (72.7)			
Without disease	82 (33.7)	161 (66.3)			
Availability of PA policy			6.52	1	0.011
Yes	18 (54.5)	15 (45.5)			
No / Don't know	67 (30.3)	154 (69.7)			
Availability of PA facilities			0.22	1	0.640
Yes	81 (34.0)	157 (66.0)			
No / Don't know	4 (25.0)	12 (75.0)			

A multivariate logistic regression analysis was conducted to identify independent predictors of adequate physical activity among healthcare workers at King Faisal Hospital Rwanda. It compared the associations observed in the bivariate analysis using Crude Odds Ratios (COR) with those obtained after controlling for potential confounding variables using Adjusted Odds Ratios (AOR). Variables that demonstrated potential associations in the bivariate analysis were entered into the model.

After adjusting for potential confounders, none of the tested variables remained statistically significant predictors of adequate physical activity ($p > 0.05$). This suggests that no single factor acts as an independent predictor of PA; rather, these variables likely interact with one another to influence behavior, awareness alone is insufficient without addressing other workplace stressors.

Age which showed statistically significant (COR=1.05; 95%CI: 1.01 – 1.09; p=0.011) showed a small positive association with adequate physical activity (AOR = 1.02; 95% CI: 0.98–1.06, p=0.310), but the relationship was not statistically significant. Similarly, male healthcare workers had higher odds of reporting adequate physical activity compared with female workers (COD=2.08; 95%CI: 1.21 – 3.59; P=0.011) however after adjustment this association lost its statistical significance. (AOR = 1.21; 95% CI: 0.68–2.15; p=0.510).

Occupational status which was statistically significant (COR=1.24 95%CI: 0.92– 1.68; p=0.009) were also not independently associated with physical activity levels after adjustment (AOR=1.09; 95%CI: 0.89 – 1.33; p=0.400). Nurses were found to have the highest levels of inactivity in the descriptive data, and while the crude odds ratio (COR) reflected this occupational gap, the multivariate analysis showed that the demands of the nursing profession likely overlap with other factors such as shift fatigue and gender-related domestic responsibilities.

The availability of a workplace physical activity policy demonstrated higher odds of adequate physical activity among healthcare workers (COR=2.75; 95%CI: 1.29 – 5.86; p=0.011) However, the association was not statistically significant after controlling for other variables. **(**AOR = 1.34; 95% CI: 0.71–2.54, p=0.361). Indicating that policy awareness alone is insufficient without addressing other workplace stressors.

Overall, the multivariate analysis indicates that none of the examined factors independently predicted adequate physical activity among healthcare workers in this study.

Table 4: Multivariate Analysis of the factors Associated with Physical activity among healthcare workers

Variable	Category / Comparison	Crude Odds Ratio (COR) [95% CI]	p-value (COR)	Adjusted Odds Ratio (AOR) [95% CI]	P-value(AOR)
Age (years)	Continuous	1.05 [1.01 – 1.09]	0.011	1.02 [0.98 – 1.06]	0.310
Gender	Male vs Female	2.08 [1.21 – 3.59]	0.011	1.21 [0.68 – 2.15]	0.510
Occupational status	Other clinical staff vs Nurses	1.24 [0.92 – 1.68]	0.009	1.09 [0.89 – 1.33]	0.400
Availability of PA policy	Yes vs No	2.75 [1.29 – 5.86]	0.011	1.34 [0.71 – 2.54]	0.361

4. DISCUSSION OF RESEARCH FINDINGS

4.1 Physical Activity levels Among Health Care Workers

This study is among few studies done in Rwanda that investigate the levels of physical activity and associated factors using standardized questionnaire (IPAQ-SF) among different aspects of HCWs in Rwanda. In the current study 35, 5% HCWs met the WHO recommended levels of physical activity, with the majority of HCWs (64.5%) being physically inactive contrary to the study done in Rwanda on physical activity data from NCD STEP survey which showed that 95.4% of Rwandans do sufficient physical activity(Hagenimana et al., 2025; RBC, 2021). These findings suggest that the HCWs in Rwanda have a low level of PA compared to general population and align with study done in Malaysia which reported low level of PA among HCWs compared to general population(Abu Saad et al., 2020) and among the factors contributing to the low level of PA including long working hours, rotating shift and sedentary nature of their work. Even though the studies on levels of physical activity among healthcare workers in Rwanda are limited, The prevalence of physical inactivity among HCWs in this study was higher Compared to other studies done in different cadres of healthcare workers including the one done among physiotherapist which revealed 36% physically inactive (Frantz & Ngambare, 2013)and other among nurses which revealed low(5%) leisure time PA (Lela & Frantz, 2012).

The majority of healthcare workers in this study are classified as having low levels of physical activity (64.5%), which does not meet the recommended guidelines for physical activity by (Bull et al., 2020). This is consistent with a study conducted in Nigeria that found low levels of physical activity among healthcare workers (79.2%) (Iwuala et al., 2015). The study's level of physical inactivity is higher than that of studies conducted in Malaysia and South Africa, which found that 40% and 45.6% of HCWs, respectively (Abu Saad et al., 2020; Kunene & Taukobong, 2015).

The prevalence of physical inactivity in this study contrast with the study done in Ethiopia and India those revealed that the majority of HCWs met the recommended level of physical activity 89.2%, 67.2% respectively(Adane et al., 2019; A. Kumar et al., 2024). That inconsistency might be due to the differences among tools used to assess PA levels and variation in study populations.

4.2 Association between Physical activity Levels and socio-Demographics

This study revealed significant associations between PA and several socio-demographic and occupational variables, including gender, age, occupational status, and awareness of PA policy ($p < 0.05$). However, correlation coefficients suggested weak associations, implying that these factors alone may not strongly predict PA levels but may operate cumulatively or contextually as shown by logistic regression analysis.

Age was shown to be substantially correlated with PA in this study, which is consistent with research conducted in Ethiopia and South Africa that indicated younger individuals to be more active in PA than older participants (Adane et al., 2019; Kunene & Taukobong, 2015). This could be explained by the fact that growing older is also linked to weariness, which can lower HCWS motivation and ability to engage in regular physical activity. The mid-age group (36–40 years) was most represented among the low-active respondents. Studies from Ethiopia by Kassa&Grace and Kenya Muthuri and colleagues show that PA tends to decline with age, particularly in mid-career professionals balancing heavy workloads and family commitments (Kassa & Grace, 2018; Muthuri et al., 2014).

In the present study, gender showed the significant association with PA levels and consistently align with a study done in Saudi Arabia (Alanazi, 2021)who reported high level of PA in male than in female . Female healthcare workers were disproportionately represented among those with low PA levels. Similar to the global findings showing that women are less likely to meet PA recommendations due to dual professional and domestic responsibilities, social expectations, and limited time(Guthold et al., 2018).

This results contradict with the findings done by Al Matrafi and colleagues which revealed no signifancy differences among gender(Al-Matrafi et al., 2025).Given that 66.5% of the sample were female, these dynamics likely contributed to the high prevalence of inactivity observed. Addressing gender-related barriers through flexible scheduling and gender-sensitive wellness programs could enhance engagement in physical activity. This study also demonstrated a modest association between PA and occupational status with Nurses staff reported lower activity levels consistent with findings by(Alanazi, 2021)) this may reflect higher patient loads, less schedule autonomy, and job fatigue compared to physicians or administrators and it contradict with other findings which reported no association differences between PA and worker related factors including shift, job title and specialization(Al-Matrafi et al., 2025) and the other in Malaysia which revealed no association differences among PA and occupation status(Abu Saad et al., 2020).

The current study found no correlation between PA and BMI, which is consistent with a study conducted in Malaysia (Jamil et al., 2016) that found no correlation between PA levels and body composition, such as waist circumference and BMI. This is in contrast to studies conducted in Ethiopia and Nigeria that found that HCWs with a BMI of less than 25 kg/m2 were nearly five times more likely to engage in PA than those with a BMI of ≥25 kg/m2, while physically inactive HCWs were twice as likely to be overweight (Adane et al., 2019; Iwuala et al., 2015). In contrast to a study conducted in Malaysia that found HCWs who tended to sit longer were substantially connected with low levels of physical activity, the current study found no correlation between sitting time and physical activity levels (Abu Saad et al., 2020).

In the present study, Marital status showed no association to physical activity levels similar to the study done by Jamil and his colleagues(Jamil et al., 2016) and it contradict to other study done by Ali Matrafi and colleagues which revealed marital status as a strong predictor of physical inactivity among HCWs in Saudi Arabia with married be more inactive than single counterparts (Al-Matrafi et al., 2025).

And these variations may be caused by family responsibility and differences in culture.

Although work shifts and job satisfaction did not show strong correlations with PA, their potential influence cannot be disregarded. Long working hours (12-hour shifts) and rotating schedules likely limit time for exercise and recovery. Shift-related fatigue is a well-documented barrier to physical activity among healthcare professionals as revealed in the study done by (Mincarone et al., 2024). Furthermore, job dissatisfaction and stress have been linked to reduced engagement in PA, as employees prioritize rest or family time over physical activity as reported by (Yang & Koenigstorfer, 2020) these findings suggest that promoting work-life balance and organizational support may indirectly improve PA participation.

Despite high facility availability, low awareness of existing PA policies was significantly associated with inactivity ($p = 0.047$). This finding supports the argument that institutional awareness and leadership support are key to translating resources into behavior change (Fond et al., 2023). Embedding physical activity promotion into human resource and occupational health policies such as scheduled wellness breaks, departmental fitness initiatives, or team-based activity programs may increase participation(Mannethodi et al., 2025). Regular communication and leadership advocacy are also essential for sustainable behavioral change.

Although 93.7% of respondents reported availability of physical activity facilities at their workplace, 87% were unaware of any existing policy promoting PA. This reflects a gap between infrastructure and institutional culture. Studies by Ndejjo and his colleague and other done by Musinguzi and his colleagues highlight that without structured programs, managerial support, and awareness campaigns, workplace facilities remain underutilized (Musinguzi et al., 2019; Ndejjo et al., 2022). Therefore, raising awareness of PA policies and embedding physical activity into occupational health frameworks are essential to improving participation among healthcare workers.

The current study shows no significant predictor of PA and other factors among HCWs at King Faisal hospital which contradict with a study done in Saudi Arabia which revealed two significant predictors to PA including marital status and pregnant women(Al-Matrafi et al., 2025), the inconsistency in this findings may be due to the limitation that related to self-report of PA where it carries the risk of over or under estimation of PA levels.

5. CONCLUSION

This study concludes that physical inactivity remains a significant concern among healthcare workers at King Faisal Hospital, Rwanda, despite the availability of facilities that support physical activity participation. The findings indicate that awareness and utilization of physical activity (PA) policies and programs are relatively low among staff, limiting their potential impact on promoting active lifestyles. Furthermore, demographic and occupational factors, including age, gender, and employment status, were found to influence engagement in physical activity. These findings suggest that addressing physical inactivity among healthcare workers requires more than the provision of facilities alone. Institutional commitment, effective dissemination of PA policies, supportive leadership, and comprehensive workplace wellness programs are essential to creating an enabling environment that encourages regular physical activity. Promoting active lifestyles among healthcare workers is critical not only for their health and well-being but also for enhancing productivity, reducing the risk of non-communicable diseases, and strengthening the overall quality of healthcare service delivery.

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