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Examining Psychological Wellbeing of Healthcare Workers: Implications for Policy and Practice

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Abstract

A well-functioning healthcare task force and system is important in order to achieve the UN's Millennium Development Goal of universal health coverage. However, the health and wellbeing of healthcare workers has become a global concern that influences quality of care, satisfaction of patients, and productivity. This study examines the work life and psychological wellbeing of healthcare workers in the Amhara region of Ethiopia. This study uses quantitative research methods with a correctional survey design. Whereby three hundred eight healthcare filled out Ryff's Psychosocial Wellbeing Scale Work and Family Conflict Scale (WAFCS), this has measured psychological wellbeing and work-life balance, respectively. The mean, standard deviation, one sample t-test, independent samples t-test, one-way ANOVA, and MANOVA were used to analyse data. Healthcare workers reported a low score of overall psychological wellbeing. There is a positive relationship between work-life balance and psychological wellbeing, which is significant. A significant difference in psychological wellbeing across marital status is noted, but there was no significant difference based on gender and marital status. The overall psychological wellbeing of healthcare workers in the Amhara region of Ethiopia was poor. Work-life balance and educational level have significant influence on psychological wellbeing, while gender has not. Therefore, there is an implications for policy uptake to promote psychological wellbeing of healthcare workers in low- income countries including Ethiopia.

Key words: Psychological Wellbeing, Self-Acceptance, Purpose in Life, Environmental Mastery, Autonomy, Personal Growth, Positive Relations with Others Work Life Balance,

Introduction

Professional healthcare workers are crucial for the success and productivity of the health system. A well-functioning healthcare task force and system is important to achieve the UN's Millennium Development Goal of universal health coverage by 2030 (Zurn et al., 2021); it requires qualified professionals (Campbell et al., 2013). However, the number of healthcare workers in Africa is inadequate to realise the goal of universal health coverage (Ahmat et al., 2022). Not only the qualification and number of healthcare workers is important for the healthcare service, but the wellbeing of healthcare workers influences the quality of care and satisfaction of patients (Bamforth et al., 2023; Sigurdsson, 2021; West et al., 2011). nal healthcare

workers are crucial for the success and productivity of the health system. A well-functioning healthcare task force and system is important to achieve the UN's Millennium Development Goal of universal health coverage by 2030 (Zurn et al., 2021); it requires qualified professionals (Campbell et al., 2013). However, the number of healthcare workers in Africa is inadequate to realise the goal of universal health coverage (Ahmat et al., 2022). Not only the qualification and number of healthcare workers is important for the healthcare service, but the wellbeing of healthcare workers influences the quality of care and satisfaction of patients (Bamforth et al., 2023; Sigurdsson, 2021; West et al., 2011).

Wellbeing can be classified into three categories in relation to work. These include physical wellbeing that involves physical health outcomes free from accident, social wellbeing that is related to workplace social networks, and psychological wellbeing that focusses on workplace satisfaction with practices (Grant et al., 2007). This study focusses on the psychological wellbeing of healthcare workers, which is often used to examine work-related wellbeing (Nanda & Randhawa, 2020).

However, the healthcare workers have faced several health challenges due to their work, especially in emergencies (Søvold et al., 2021). For instance, following the COVID-19 pandemic, the psychological wellbeing concern of healthcare workers increased (Bamforth et al., 2023; Søvold et al., 2021). Among other factors, stress and work overload affect the health and wellbeing of healthcare workers (Sigurdsson, 2021), which requires improving their psychological wellbeing and improving their warfare (Søvold et al., 2021). Fulfilling psychological needs is not the mere absence of disorders like depression, anxiety, and stress; rather, it also incorporates health relationships with others, positive emotions, environmental mastery, and engagement (Adler et al.,. 2017; Seligman, 2011). However, healthcare workers perceive it differently. For instance, healthcare workers in Ethiopia conceptualise wellbeing as the absence of negative factors rather than as a positive state (Selamu et al., 2017). Psychological wellbeing is a multi-dimensional construct that involves pleasure, meaning fulfilment, happiness, and resilience (Tang et al., 2019).

Understanding psychological wellbeing requires examining and measuring its components. Different scholars proposed various measures of psychological wellbeing. This study uses Ryff's six-dimension model of psychological well-being. This model is popular and widely used across different settings (Abbott et al., 2010; Van Dierendonck, 2004). According to Ryff (1989a), psychological wellbeing consists of self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. More specifically, autonomy involves being independent, able to resist pressure to think and do things, and having a positive attitude towards oneself. Environmental mastery entails making an effective use of the opportunities in the surroundings, a sense of competence in managing the environment, and controlling external activities. Personal growth refers to feeling of continued development, being open to new experiences, and observing improvement in oneself. Positive relations with others aspect of psychological wellbeing is characterised by warm, satisfying, trusting relationships with others; is concerned about the welfare of others; is capable of strong empathy, affection, and intimacy; understands give and take of human relationships. Purpose in life is characterised by having goals in life and a sense of directedness; feeling there is meaning to present and past life; holding beliefs that give life purpose; and having aims and objectives for living. Finally, self-acceptance is demonstrated by a positive attitude toward the self; acknowledges and accepts multiple aspects of self, including good and bad qualities; feels positive about past life (Ryff, 2013).

The health and wellbeing of healthcare workers is also influenced by balancing their responsibilities at work and home (Mullen et al. 2008). Due to global workplace dynamics, the issue of work-life balance became a concern of workers and their employing organisations (Guest, 2002; Cvenkel, 2021). Work-life balance is adjusting the working patterns and effectively managing work with their other responsibilities outside work (Higgins et al., 2004). Balancing work and life results in work-related outcomes (e.g., low burnout), non-work-related outcomes (high life satisfaction), and stress-related outcomes like low anxiety and depression (Sirgy and Lee, 2018). Similarly, balanced work and life situations enhance employees'

psychological wellbeing and their sense of satisfaction, improving their performances and productivity (Chen and Cooper, 2014; Kelly & Moen, 2007); on the other hand, conflict between work and family is a source of stress (Mullen et al., 2008). Work-life balance is one factor for health and is negatively correlated with anxiety, stress, and depression (Sprung & Rogers, 2021; Delina & Raya, 2013).

Moreover, personal factors like age, sex, and education level may also influence the psychological wellbeing of healthcare workers (Ahrens & Ryff, 2006; Karasawa et al., 2011; Manandhar et al., 2018; Momtaz et al., 2011). However, there are inconsistent findings on the role of these personal characteristics in affecting psychological wellbeing.

Problem Statement

Ethiopia is one of the nations characterised by emergency, fragility, and conflict-affected contexts. In Ethiopia, many researchers (e.g., Berhan et al., 2023; Gutema et al., 2023) investigated the impact of conflict, death, and displacements of people; it's a burden to health workers and the wellbeing of the healthcare workforce, but this has not been given attention. For instance, the war between the Federal Government of Ethiopia and the Tigray People's Liberation Front tremendously affected the health care system and caused serious repercussions of injuries and death in northeastern parts of the Amhara region (Arage et al., 2023).

Researchers have started studies that focus on health and well-being of healthcare works in Africa in times of crises (Ali, 2021; Makhado, 2024; Onigbinde, 2020; Oyat et al., 2022; Naidoo et al., 2020; Chersich, 2020). In Ethiopia, for example, most of the existing studies (ee.g., Hajure et al., 2021; Demilew et al., 2022; Mulatu, 2021; Yitayih, 2021) examined health and wellbeing of healthcare workers during COVID-19 crises. However, the health and wellbeing of the health taskforce should not be a concern, only in emergency times; rather, it needs due attention from researchers, policymakers, and governments in emergency and normal times. The type of work and overloads make them vulnerable to different stressors, burnout, turnover intention, and depression.

Many researchers found that work-life balance is related to an individual's psychological well-being and overall sense of harmony in life (Clark, 2000). If individuals are not successful in maintaining a work-life balance, they are likely to experience difficulties in coping with required performance at the workplace as well as in their family commitments (Lachman and Boone-James, 1997). A balanced work-life interface is likely to improve the overall psychological well-being as well as increased satisfaction at work and in family domains (Grzywacz, 2000). In addition, the role of socio-demographic factors like gender, age, marital status, and educational level on psychological wellbeing has received attention from researchers in the developed world (Momtaz et al., 2011; Burris et al., 2009; Ahrens, C. J. C., & Ryff, C. D. 2006). In addition, the importance of balancing responsibilities at the workplace and responsibilities at home on the health and wellbeing of healthcare workers has been adequately investigated in Asia, Europe, and America (Le et al., 2020; Nordenmark et al., 2012; Haar et al., 2014; Borowiec, A. A., & Drygas, W. (2022). However, there are limited studies (e.g., Onwuamaegbu et al., 2023; Wilkinson, M. (2013)). The interface of work-life balance and psychological well-being has received little attention; there is a scarcity of empirical evidence on how these factors influence the health and well-being of workers in Africa. It is paramount of importance for policy and practice to generate evidence on the level of psychological wellbeing of healthcare workers and the factors that influence it for the provision of quality service, satisfaction, and productivity. Therefore, this study aims to examine the psychological wellbeing level of healthcare workers and how work-life balance and socio-demographic factors are associated with the psychological wellbeing of healthcare workers in the Amhara Region of Ethiopia. To this end, two main research questions are stated to guide this study.

What is the level of psychological wellbeing of healthcare workers?

Do work life balance and socio-demographic characteristics of healthcare workers significantly related with psychological wellbeing of healthcare workers?

3. Methods

3.1. Design

This study uses quantitative research approach with a cross-sectional survey design to determinant level of psychological wellbeing, relationship between work life balance and psychological wellbeing, and difference in psychological wellbeing across socio-demographic characteristics.

3.2. Participants

The participants of this study were randomly selected from healthcare facilities in Amahara region. A total of 315 healthcare workers filled questionnaire and the responses of 308 participants were used for analysis since seven participants returned incomplete answers. The following Table shows the number and proportion of participants across demographic characteristics.

Table 1: Demographic characteristics of healthcare workers

Variables	Categories	N	%
Sex	Male	207	67.2
	Female	101	32.8
	Total	308	100.0
Educational level	Certificate	13	4.2
	Diploma	95	30.8
	Bachelor)Degree	180	58.4
	Master Degree(MA)	20	6.5
	Total	308	100.0
Marital status	Married	188	61.0
	Single	86	27.9
	Divorced	27	8.8
	Widow	6	1.9
	Total	307	99.7

3.3. Instruments

The Ryff's Psychosocial Wellbeing scale and Work and Family Conflict Scale (WAFCS) were adapted and used to measure psychological wellbeing and work life balance of participants, respectively. Questionnaire was used to collect socio-demographic information from the participants.

Ryff's Psychosocial Wellbeing Scale

This study adapted and used a 54 items Psychosocial Wellbeing scale with 6 point response (1= strongly disagree and 6 =strongly agree) was adapted and used to measure psychological wellbeing. The scale measures six dimensions of psychological wellbeing: Self –acceptance (e.g., "In general, I feel confident and positive about myself"), autonomy (e.g,, "I have confidence in my opinions, even if they are contrary to the general consensus") , positive relations with others (e.g., "I know that I can trust my friends, and they know that they can trust me"), personal growth(e.g, "I think it is important to have new experiences that challenge how you think about yourself and the world"), , environmental mastery(e.g,, "In general, I feel I am in charge of the situation in which I live",), and purpose in life(e.g,, "Some people wander aimlessly through life, but I am not one of them"). After reverse coding negatively stated items, the response of participants on were added and higher scores indicate greater wellbeing.

Work and Family Conflict Scale (WAFCS)

Work-life balance was measured by Work and Family Conflict Scale (WAFCS) which consists of 10 items with 7 point response (1= strongly disagree and 7 = strongly agree) to measure work life balance (Haslam et al., 2015). It measures work to family interface (e.g., My work prevents me spending sufficient quality time with my family) and family to work interface(e.g., My work performance suffers because of my personal and family commitments).

3.4. Data Analysis Techniques

Descriptive statistics (Mean, Standard Deviations, Pearson's correlation and) and inferential statistics (one sample t-test, ANOVA, and MANOVA) were e used to analyze data. Pearson's correlation was computed to see correlation between work life balance and psychological wellbeing. Independent samples t-test was used to compute difference in overall psychological wellbeing between male and female respondents. One way ANOVA was employed to reexamine overall psychological wellbeing difference across educational level and marital status. One sample t-test was used to determine level of psychological wellbeing of participants. Alpha 0.05 was set to determine significant level of all tests. Assumptions of normality, linearity, homoscedasticity, and multicollinearity were checked and the results indicated no violation of these assumptions.

4. Results

4.1.Level of psychological wellbeing of healthcare workers

Table 2: Level of psychological wellbeing of healthcare workers

Variables	Mean	Standard Deviation	t	Sig.
Autonomy	3.54	.63	1.19	.235
Environmental mastery	3.36	.70	3.47	.001
Personal growth	3.15	.47	12.75	.000
Positive relations with others	2.91	.66	15.45	.000
Purpose in life	3.12	.52	13.09	.000
Self –acceptance	3.75	.54	8.18	.000
Overall psychological wellbeing	3.31	.25	13.39	.000

As demonstrated in Table 2, the overall psychological wellbeing of healthcare workers (mean= 3.31) was low as compared to the cut–off value (mean =3.5) at 0.05 level of significance. The mean scores of healthcare workers in personal growth (mean =3.15), positive relations with others (mean =3.91), purpose in life (mean =3.12) were significantly low ($p<.05$). On the other hand, healthcare workers reported high scores on environmental mastery (mean =3.36), and self-acceptance (mean =3.75) dimensions of psychological wellbeing which was significant at alpha 0.05.

4.2. Relationship of psychological wellbeing with work life balance, age and work experience

Table 3: Correlation of psychological wellbeing with work life balance, age and work experience

Variables	**1**	**2**	**3**
1.Age			
2. Experience	.89*		
3.Worklife balance	.006	-0.045	
4.Psycholgical wellbeing	0.081	0.044	.151**

*=p<.05; **= p<.001.

Table 3 indicated the association between psychological wellbeing and work life balance. The Pearson's correlation results indicated significant positive relationship between work life balance and overall psychological wellbeing ($r=.151$, $p<.05$). However, there were no significant relationship of psychological wellbeing score of participants with their age ($r=0.08$, $p> 0.05$) and work experience ($r=0.04$, $p>0.05$).

4.3. Psychotically wellbeing across gender, educational level and marital status of healthcare workers

Table 4: Independent sample t-test comparing overall psychological wellbeing across gender

Sex	N	Mean	Standard Deviation	t	Sig.
Male	207	178.31	13.00	.436	.663
Female	101	179.03	15.06		

The independent samples t-test results in Table 4 unveiled no significant gender difference in psychological wellbeing between male and female participants (t= .436, p> 0.05).

Table 5: MANOVA test comparing gender difference in psychological wellbeing dimensions

Variables	Gender	Mean	Standard Deviation	Roy's Largest root	F	Sig.	Partial eta square
Autonomy	Female	31.63	6.33				
	Male	32.00	5.37				
Environmental mastery	Female	29.95	7.73				
	Male	30.38	5.56				
Personal growth	Female	28.29	4.02				
	Male	28.40	4.455	.982	.903	,493	.018
Positive relations with others	Female	26.49	6.08				
	Male	26.14	5.89				
Purpose in life	Female	28.02	4.93				
	Male	27.96	4.60				
Self –acceptance	Female	34.63	5.45				
	Male	33.40	4.63				

A Multivariate Analysis of Variance (MANOVA) test in Table 5 also shows no significant difference in psychological wellbeing dimensions between male and female healthcare workers (F=.903, p>.05) with small effect size (partial eta square=.018). However, a pairwise comparison test indicated significant difference between males and females in only the self-acceptance dimension of wellbeing (p <.05). The self - acceptance score of females (Mean =34.63, SD=5.45) was higher than males (Mean =33.40, SD=4.63).

Table 6: One way ANOVA test comparing overall psychological wellbeing across education level

Education level	Mean	Standard Deviation	F	Sig
Certificate	186.9231	17.46645	3.322	.020
Diploma	179.2526	15.15029		
Degree	178.3056	12.35060		
MA	172.0000	12.95742		

A one way Analysis of Variance (ANOVA) test in Table 6 revealed that there was significant difference in overall psychological wellbeing among participants with different educational level (F=3.322, p<.05). Scheff post–hoc multiple comparison test indicated significant mean difference in overall psychological wellbeing between Master holders and certificates (p < .05). The mean overall psychological wellbeing of mean score of certificates was higher than master holder participants.

Table 7: MANOVA test comparing psychological wellbeing dimensions across education level

Variables	Education level	Mean	Standard Deviation	Roy's Largest root	F	Sig.	Partial Eta square
Autonomy	Certificate	30.69	6.86	.044			
	Diploma	31.75	6.33				
	Degree	32.30	5.30				
	MA	29.55	4.80				
Environmental mastery	Certificate	34.15	17.35				
	Diploma	29.66	4.80				
	Degree	30.28	5.67				
	MA	30.05	5.52				
Personal growth	Certificate	29.00	4.35		2.206	0.042	.042
	Diploma	28.29	4.09				
	Degree	28.41	4.27				
	MA	27.90	5.68				
Positive relations with others	Certificate	28.46	6.15				
	Diploma	26.41	6.35				
	Degree	26.11	5.78				
	MA	25.50	5.28				
Purpose in life	Certificate	29.23	6.31				
	Diploma	29.20	5.07				
	Degree	27.41	4.35				
	MA	26.60	3.64				
Self –acceptance	Certificate	35.38	5.42				
	Diploma	33.92	4.59				
	Degree	33.78	5.07				
	MA	32.40	4.99				

As presented in Table 7, there was Multivariate Analysis of Variance (MANOVA) test show in Table 3 revealed, there was significant difference in psychological wellbeing dimensions between among certificate, diploma, bachelor and master degree holders ($F=.2.206$, $p <.05$) with small effect size (partial eta square=.042). Pairwise comparison test indicated significant mean difference on autonomy between degree and MA, on environmental mastery between certificate and diploma and certificate and degree; on purpose in life dimension between diploma and degree and diploma and masters.

Table 8: One way ANOVA test comparing overall psychological wellbeing across marital status

Marital status	**Mean**	**Standard Deviation**	**F**	**Sig**
Married	178.5426	14.21167	.372	.773
Single	179.4767	12.84819		
Divorced	176.3704	12.59471		
Widow	177.3333	16.05823		

A one way ANOVA test in Table 8 revealed no significant difference in overall psychological wellbeing of healthcare works with different marital status ($F=.372$, $p >.05$).

Table 9: MANOVA test comparing psychological wellbeing dimensions across marital status

Variables	Education level	Mean	Standard Deviation	Roys Largest root	F	Sig.	Partial Eta square
Autonomy	Married	31.70	5.65				
	Single	32.90	5.42				
	Divorced	30.88	5.98				
	Widow	28.00	8.00				
Environmental mastery	Married	30.01	5.59				
	Single	30.77	7.89				
	Divorced	30.00	5.96				
	Widow	30.83	6.94				

The MANOVA test in Table 9 also indicated no significant difference in psychological wellbeing dimensions among married, single, divorced and widowed participants ($F=2.03$, $p > .05$), implying similar psychological wellbeing irrespective of marital status.

5. Discussion

The results indicate a low score on overall psychological wellbeing and some aspects of psychological wellbeing like personal growth, positive relations with others, and purpose in life among healthcare workers, but they reported higher scores on environmental mastery and self-acceptance aspects of psychological wellbeing. Similar to the present study findings, many healthcare workers in Malawi reported poor psychological wellbeing (Lohmann et al., 2019).

Like previous findings (Clark, 2000; Grzywacz, 2000), the present survey study revealed a positive and significant relationship between work-life balance and overall psychological wellbeing. Higher scores of work-life balance were associated with high scores of psychological wellbeing. Similarly, previous research findings demonstrated a positive association of balancing work and home responsibilities to enhance the psychological well-being, performance, and productivity of individuals (Chen and Cooper, 2014; Timms et al., 2016). Nonetheless, the association between work-family interface is not always positive (Mullen et al. 2008).

The present study shows no significant difference in overall psychological wellbeing of male and female respondents, implying similar wellbeing. Previous studies reported mixed results on the influence of sex on psychological wellbeing, where females scored lower than males (Ferguson, Gunnel, 2016, Diener, & Ryan, 2014). For instance, a study by Awosoga et al. (2022; Visani et al. (2011) showed a significant gender difference in psychological wellbeing, whereas other researchers found a gender difference in psychological wellbeing (Gómez-Baya et al., 2018). The present study shows a higher self-acceptance aspect of psychological wellbeing among female healthcare workers reported as compared to males. On the contrary, previous studies (Matud, M. P., López-Curbelo, M., & Fortes, D. 2019) indicated that men scored higher than females in self-acceptance and autonomy. This variation could be due to cultural factors, which need further comprehensive investigation.

The results of the present study indicated that educational level had a significant influence on the overall psychological wellbeing of healthcare workers. Taken together, there was a significant difference in psychological wellbeing dimensions among certificate, diploma, bachelor, and master degree-holder healthcare workers. Degree-holder healthcare workers scored higher on the autonomy dimension than MA holders. Similarly, certificate-holder healthcare workers scored higher on environmental mastery as compared to diploma-degree holders. On purpose in the life dimension, diploma holders scored higher than degree and masters holders. The certificate holders had higher overall psychological wellbeing as compared to masters holder specialists. This could be due to a high workload and roles and expectations as educational

level increases, which would affect psychological wellbeing. Similarly, previous studies indicated the influence of education level on the psychological wellbeing of healthcare workers (Ahrens & Ryff, 2006; Karasawa et al., 2011).

However, marital status had no significant influence on overall psychological wellbeing and the different aspects. This implies that healthcare workers' marital status did not have a significant influence on the psychological well-being of healthcare workers, and they reported similar scores on psychological wellbeing dimensions regardless of marital status.

Generally, this study indicates that work-life balance and educational level are significantly associated with psychological wellbeing, in which work-life balance was positively associated with psychological wellbeing, whereas psychological wellbeing decreases when educational level increases. The other demographic factors, such as gender, age, experience, and marital status, were not significantly associated with psychological wellbeing.

6. Conclusions

The overall psychological wellbeing of healthcare workers in the Amhara region of Ethiopia is low; a poor psychological wellbeing compounded with an inadequate number of healthcare workers would affect delivering quality health care services. Work-life balance and psychological

The wellbeing of healthcare workers was significantly and positively associated, implying an increase in work-life balance is related to an increase in psychological wellbeing. Gender of healthcare workers had no significant influence on overall psychological wellbeing, and both male and female healthcare workers had similar levels of psychological wellbeing. The educational level of healthcare workers has an influence on their overall psychological wellbeing; this indicates that psychological wellbeing decreases as their educational level increases. However, the marital status of healthcare workers had no significant effect on overall psychological wellbeing and the different aspects of psychological wellbeing.

7. Implications

This study indicates important implications for policy, practice and future research.

Health policy and practice: The present study indicated poor psychological wellbeing among healthcare works. This call for the need to incorporate mechanisms of improving health and wellbeing of healthcare workers in health policy. Since the present study shows positive association between work life balance and psychological wellbeing, it is also important to implement strategies on balancing the work responsibilities and family responsibilities of healthcare workers. It is also important to plan and provide interventions to promote psychological wellbeing of healthcare workers.

Future research: The finding of this study is based on the self-report information from participants in Amhara region. Thus, it is recommended to conduct comprehensive study at national level through collecting data from healthcare workers, administrators and health policy makers.

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