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Exploring the Relationship between Psychiatric Morbidity and Quality of Life among Lady Health Workers: Family Support as Moderator

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ABSTRACT

Aim of the Study: LHWs are the frontline workers collaborating with population from remote areas informing them about health issues. Pakistan LHWs program sought to improve the overall health system at community level. However, besides having low salaries, LHWs face much hurdles in socio- cultural, religious, transportation and financial form. The current study aims to assess the quality of life (DV) and psychiatric morbidities (IV) among LHWs. Moreover, the study focuses on the relationship between psychiatric morbidity and quality of life, taking family support as a moderator.

Methodology: This study is based on quantitative design which is purely based on collecting the data using self-reported measures and data was taken from 75 LHWs using purposive sampling. In addition to the demographics questions, the General Health Questionnaire (GHQ-12), World Health Organization Quality of Life questionnaire (WHOQLQ-Brief) and The Multidimensional Scale of Social Support tools used for data collection from the target public.

Findings: The result showed significant negative correlation between psychiatric morbidity and quality of life. Moreover, the result showed that family support does not significantly moderate the relation between IV and DV.

Conclusion: The study added much needed insight to the previous studies regarding the impact of psychiatric morbidities on quality of life. However, contrary to the previous studies Family support did not moderate the relation between psychiatric morbidity and quality of life among LHWs.

Keywords: Family Support, Quality of Life, Morbidity, Moderator, Lady Health Workers.

Introduction

Background

In many developing countries, access to medical services remains limited, particularly for populations residing in rural or remote areas, older adults, women, and individuals facing various socio-economic challenges (Mailu et al., 2020). Pakistan, as a developing nation, grapples with similar issues. To address the healthcare needs of its population, the Pakistani Government initiated the Lady Health Workers (LHWs) program in 1994. This program aimed to enhance access to primary healthcare services, particularly in underserved communities (Hafeez et al., 2011). Over the years, the LHW program has expanded nationwide, with over 110,000 LHWs recruited, trained, and deployed to conduct monthly home visits. These visits entail providing health guidance, conducting screenings, administering basic remedies, and advocating for recommended health practices.

Lady health workers play a pivotal role in promoting maternal and child health, especially in rural and urban disadvantaged areas where they collaborate with skilled midwives to ensure the well-being of mothers and children (Soofi et al., 2017). They conduct routine health assessments, including monitoring physiological parameters such as temperature, heart rate, pulse rate, and blood pressure during home visits. Additionally, they offer health education, promote preventive measures such as vaccination and family planning, and facilitate access to healthcare services.

However, despite their crucial role, LHWs encounter numerous challenges while carrying out their duties. These challenges span multiple levels, including systemic, community, and individual barriers. At the individual level, factors such as gender dynamics, communication difficulties with families, lack of expertise, and limited education pose significant hurdles. System-level challenges include excessive workloads, inconsistent medication supply, difficulties in patient referral, and inadequate recognition or rewards. Community-level obstacles encompass sociocultural norms, religious beliefs, transportation issues, and financial constraints (Khan et al., 2012).

These challenges contribute to work-related stress among LHWs, with approximately 26% experiencing significant stress (Haq et al., 2008). Balancing professional responsibilities with domestic duties often leads to personal conflicts, impacting their familial relationships, social connections, and personal well-being (Ud Din et al., 2021).

The cumulative effect of professional and domestic challenges may result in psychiatric morbidity among LHWs, adversely affecting their quality of life. Psychiatric morbidity encompasses both physical and psychological manifestations that impede individuals' functioning and overall well-being (Aishatu et al., 2013). This includes a range of psychiatric disorders such as mood disorders, anxiety disorders, trauma-related disorders, and substance abuse, which can manifest as maladaptive thought patterns, emotional distress, behavioral changes, and physical symptoms (American Psychological Association, 2013).

The etiology of psychiatric morbidity is multifaceted, involving biological, psychological, and sociocultural factors. Biological factors include genetic predispositions, fetal exposure to toxins, brain injuries, and substance use, which influence brain chemistry and neurological functioning (Lam et al., 2005). Environmental stressors such as financial difficulties, social isolation, traumatic experiences, and occupational hazards contribute to psychological distress and exacerbate mental health issues (Schmidt, 2007).

In understanding the development of psychiatric morbidity among LHWs, two theoretical models are pertinent: the psychodynamic and behavioral models. The psychodynamic model, proposed by Freud, emphasizes unconscious conflicts between instinctual drives (id), rational thought processes (ego), and moral standards (superego), which can lead to maladaptive defense mechanisms and psychological distress (Freud, 1925). In contrast, the behavioral model highlights learned behaviors and responses to environmental stimuli, suggesting that exposure to stressors in the workplace can elicit distressing reactions and mental health problems (Maximino & van der Staay, 2019).

The adverse impact of psychiatric morbidity on the quality of life is profound. Quality of life encompasses individuals' subjective perceptions of their overall well-being, including physical, psychological, social, and environmental dimensions (World Health Organization, 1994). Factors such as physical health, mental well-being, interpersonal relationships, and environmental conditions influence one's quality of life (Saxena et al., 1997). Several factors can influence the quality of life, including demographic variables, health status, social support, and psychological well-being. Notably, family support emerges as a significant protective factor against psychiatric morbidity and a crucial determinant of quality of life (Almedom, 2005). Positive family relationships provide emotional sustenance, practical assistance, and a sense of belonging, buffering against the adverse effects of stress and promoting psychological resilience (Thoits, 2011).

Given the complex interplay between psychiatric morbidity, quality of life, and family support among LHWs, understanding these relationships is paramount. This study seeks to explore the prevalence of psychiatric morbidity among LHWs, its impact on their quality of life, and the moderating role of family support. By elucidating these dynamics, interventions can be developed to support the mental health and well-being of LHWs, ultimately enhancing their effectiveness in delivering essential healthcare services to communities across Pakistan.

Literature Review

Research indicates that healthcare workers, including Lady Health Workers (LHWs), are susceptible to psychiatric morbidity due to the demanding nature of their profession (Mukhtar, 2020). A study by Haq et al. (2008) found that approximately 26% of LHWs in national programs experienced work-related stress. The stressors faced by healthcare workers, such as heavy workloads, insufficient resources, and challenging patient interactions, contribute to psychological distress and mental health issues (Adams & Boscarino, 2005).

The etiology of psychiatric morbidity among healthcare workers is multifactorial. Biological factors, including genetic predispositions and neurochemical imbalances, interact with environmental stressors such as work-related pressures and personal life challenges (Chen & Zeng, 2021). Studies have identified gender, educational level, job satisfaction, and social support as significant predictors of mental health outcomes among healthcare professionals (Alsubaie et al., 2018).

Healthcare workers' quality of life is influenced by various factors, including job satisfaction, work-life balance, and organizational support (Alshammari et al., 2019). A study by Liu et al. (2019) revealed that high levels of occupational stress negatively impact healthcare workers' quality of life, leading to burnout and reduced job performance. Conversely, positive workplace environments, supportive leadership, and access to resources contribute to improved quality of life among healthcare professionals (Bleich et al., 2011).

Family support plays a crucial role in buffering against the adverse effects of occupational stress and promoting well-being among healthcare workers (Hassan et al., 2013). Studies have shown that strong familial relationships, social networks, and emotional support from family members are associated with lower levels of psychological distress and higher levels of job satisfaction among healthcare professionals (Demerouti et al., 2009). Additionally, family support has been identified as a significant predictor of resilience and coping strategies in the face of work-related challenges (Al-Omari et al., 2020).

Family support may act as a protective factor against the negative impact of psychiatric morbidity on healthcare workers' quality of life (Zhang et al., 2020). Research suggests that perceived social support from family members enhances psychological resilience and mitigates the adverse effects of stressors in the workplace (Zimet et al., 1988). Moreover, positive family relationships facilitate effective coping strategies and promote adaptive responses to occupational stressors, thereby fostering overall well-being (Fathi et al., 2019).

Research Objectives

- To investigate the effects of psychiatric morbidity on quality of life in lady health workers.
- To examine the role of psychiatric morbidity as a predictor of quality of life among lady health workers.
- To examine the relationship between psychiatric morbidity and quality of life among lady health workers.
- To explore the relationship between family support and psychiatric morbidity among lady health workers.
- To explore the relationship between family support and quality of life among lady health workers.
- To explore the role of family support as a moderator in the relationship between psychiatric morbidity and quality of life among lady health workers.

Hypotheses

H1: There will be a negative relationship between psychiatric morbidity and quality of life among lady health workers.

H2: There will be a negative relationship between family support and psychiatric morbidity among lady health workers.

H3: There will be a positive relationship between family support and quality of life among lady health workers

H4: Family support will moderate the relationship between psychiatric morbidity and quality of life.

Rationale

Lady Health Workers (LHWs) play a crucial role as frontline healthcare providers, conducting vital health interventions within communities. These dedicated professionals navigate various challenges, including limited resources, societal expectations, and personal sacrifices. Given their indispensable role in delivering primary healthcare services, understanding the factors impacting their well-being is essential.

LHWs often face multifaceted hurdles, stemming from their socioeconomic backgrounds and the nature of their work. These challenges include gender-related barriers, inadequate training, heavy workloads, and societal pressures. Additionally, their responsibilities often extend beyond professional duties, encroaching upon personal time and relationships. The cumulative effect of these stressors can lead to psychiatric morbidity and diminish their overall quality of life.

Despite the critical role of LHWs in the healthcare system, research focusing specifically on their mental health and well-being remains limited, particularly in the context of Pakistan. Existing studies predominantly address broader issues within the healthcare workforce, overlooking the unique challenges faced by LHWs. This study aims to bridge this gap by investigating the relationship between psychiatric morbidity and quality of life among LHWs in Pakistan. Moreover, it seeks to explore the moderating role of family support in mitigating the adverse effects of psychiatric morbidity on quality of life. By elucidating these relationships, the study intends to provide valuable insights into the challenges encountered by LHWs and inform targeted interventions to support their mental health and well-being.

Furthermore, the findings of this research hold practical implications for policymakers, healthcare organizations, and other stakeholders involved in the LHW program. By identifying the specific needs and stressors faced by LHWs, appropriate measures can be implemented to enhance support systems, improve working conditions, and optimize the effectiveness of the program in achieving its objectives. Ultimately, this study aims to contribute to the holistic understanding of LHWs' well-being and inform evidence-based interventions to promote their health and resilience in serving their communities.
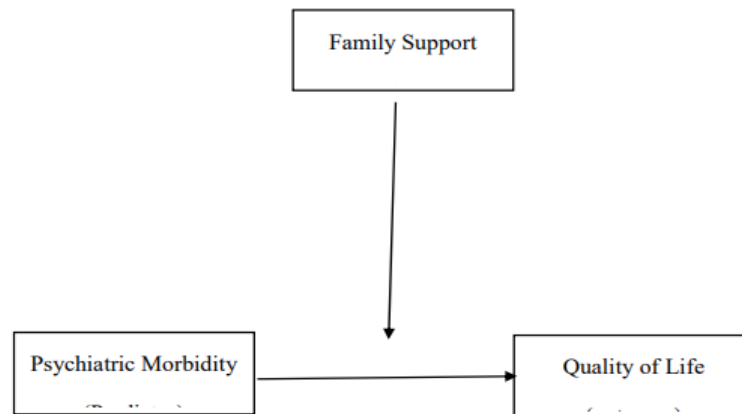
Conceptual Framework

Figure 1: *Moderating role of social support in relationship between psychiatric morbidity and quality of life.*

Method

Research Design

This study is based on a correlational research design in which the relationship between variables were explored and moderating role of social support was assessed. This study is based on quantitative design which is purely based on collecting the data using self-reported measures.

Sample/Participants

The study population was lady health workers. Purposive sampling was used to select the sample. Purposive sampling, sometimes called judgmental, selective, or subjective sampling, is a non-probability sampling technique where researchers use their judgment to pick people from the public to participate in the study. The sample size was 75.

Inclusion Criteria

- LHWs of district Swat (Khyber Pakhtunkhwa) were eligible to participate in the study.
- The LHWs of all age groups were included in the study.
- The LHWs of remote areas of District Swat was also included in the study.
- LHWs from multiple cultures were included in the study across district Swat.
- The LHWs with both married and unmarried marital statuses were included in the study.

Exclusion Criteria

- LHWs that were not working currently and retired from their field were excluded from the study.

Operational Definition

Psychiatric Morbidity

Psychiatric morbidity can be defined as the deterioration in the psychological conditions of the individual; however, the individual is aware of his/her condition despite the deterioration (Skapinakis et al., 2000).

Quality of Life

The World Health Organization defines the quality of life (QOL) as " a person's view of their place in life regarding their objectives, aspirations, norms, and concerns in the framework of the value and culture systems within which they live" (WHO, 2012).

Family Support

Assisting those considered a person's family by their peers are referred to as providing family support. It involves assisting families with system navigation, scheduling many sessions, supporting home care, peer support, parent coaching, mentoring advocacy, and advancing initiatives to create organic and unstructured community supports. It includes instrumental, emotional, financial, and informational support from the family members (Barrera et al., 1993).

Instruments

Following instruments were used in the current study.

Demographic Sheet

Demographic form was used to gather the demographic variables of the study participants. A demographic variable is one that researchers gather to characterize the composition and characteristics of the sample employed with inferential statistics. The demographic form identified the age, location, monthly income, family type, educational status, family background, family type, and marital status of the study participants.

General Health Questionnaire (GHQ-12)

The twelve items general health questionnaire (GHQ-12) was used to assess psychiatric morbidity among individuals. It is a self-administered screening tool. The scale is widely used to screen for early psychiatric disturbances such as depression, anxiety, stress, and sleep disturbances among individuals. It has three factors: anxiety and depression, social dysfunction, and loss of confidence. The scale is a score on a 4-point Likert scale with 0 indicating "never", 1 indicating "sometimes", 2 indicating "frequently," and 3 indicating "always". The scale has high intra-class reliability, good internal consistency, and high content validity (Goldberg & Hillier, 1979).

World Health Organization Quality of Life questionnaire (WHOQLQ-Brief)

The brief 26 items version of WHOQLQ was used to assess the participants' quality of life. World Health Organization developed the Division of mental health scale in 1996. The scale has four factors: physical health (7 items), psychological health (6 items), social relationships (3 items), and environmental health (8 items. It also includes the general health and QOL-related items. The scale is the score on five points Likert scale with 1 indicating "very poor", "not at all," or "very dissatisfied" to 5 indicating "very good", "completely," or "an extreme amount." Mobility, everyday activities, functional ability, stamina, discomfort, and sleep are all part of physical health. Self-image, unfavorable ideas, favorable attitudes, self-esteem, intellect, learning capacity, memory focus, religion, and mental state are all measured within the psychological area. Personal connections, social support, and sexual life are all included in the social relationships area of the test. Financial means, protection, social and medical services, the physical environment in which 26 people live, possibilities for learning new skills and information, leisure, the general surroundings (noise, air quality, etc.), and transportation are all included within the environmental health domain (WHO, 1996).

The Multidimensional Scale of Social Support

Multidimensional scale of perceived social support was used to assess the level of family support among the participants. The 12-item Multidimensional Scale of Perceived Social Support (Zimet et al., 1988)

uses a 5- point Likert scale (0 = strongly disagreed, and 5 = strongly agreed) to assess the perceived sufficiency of social support from three different sources: family, friends, and a significant other.

Procedure

Before everything, permission was taken from both departments of psychological studies and the Research and Ethics Committee. Then, permission was taken from the authors of the questionnaires for the use of the tool for data collection. The participants were approached using a purposive sampling strategy, and the data collection mode was in-person. Before data collection, the study's purpose, required time, and the procedure was explained to participants, and their consent was taken. After that, the demographic form and questionnaire were given to the participants, and the researcher cleared their ambiguities regarding the questionnaires. In the end, they were thanked for their participation in the study.

Ethical Consideration

In order to conduct this research, some ethical considerations were kept in mind. Approval was taken from the Department of Psychology and Human Research and Ethics Committee IIUI. The informed consent was taken from each participant by explaining the nature 27 of the study before administering the questionnaires. They were giving potential research participants the information they needed to make an informed decision about participating in the study is known as informed consent. One of the critical elements of the moral conduct of research with human subjects is obtaining informed consent. The researcher also told the participant they had a right to withdraw from participation and terminate at any time they wished. The researcher also maintained confidentiality. When a researcher maintains confidentiality, they take precautions to prevent a study subject's identity from becoming known to third parties. The informant told their participants that their given information would be kept confidential and that their data was only used for academic purposes.

Results

This chapter explained the results of current study. Descriptive and inferential analysis were used to test the primary and secondary hypotheses of study. The results of frequency, percentage, psychometric properties of scales, correlation, moderation, regression, t-test, and ANOVA are presented here.

Frequency Analysis

This section described the characteristics of the sample. For this purpose, descriptive analysis had been applied to the demographic variables. Mean: percentage and frequency and percentage were used to describe the sample data.

The above table shows the mean and standard deviation of the age of the participants. The total number of participants were (N=75). The mean age of participants was around 31 with standard deviation 6.

Table 1: *Frequencies and percentages of demographic variables of Study* ($N = 75$)

Variables	Category	f	%
Age			
	<20	1	1.30
	20-25 Years	10	13.30
	25-30 Years	20	26.70
	30-35 Years	17	22.70
	35-40 Years	18	24.00
	>40 Years	9	12.00
Marital Status			
	Single	25	33.30
	Engaged	9	12.00
	Married	36	48.00

	Divorced	5	6.70
Family Type			
	Joint	45	60.00
	Nuclear	23	30.70
	Extended	7	9.30
Qualification			
	Class 8th	2	2.70
	Class 10th	24	32.00
	Class 12th	47	62.70
	Graduate and more	2	2.70
Income			
	Less than 10000 Rs	6	8.00
	10000-20000 Rs	14	18.70
	20000-30000 Rs	55	73.30
Monthly Salary			
	5000-10000 Rs	5	6.70
	10000-15000 Rs	70	93.30

Note. *f*=frequency, *%* percentage.

The above table shows the frequency and percentage of the demographics of the study participants. Results show that most participants were within the age range of 25-40 years, and a small ratio of participants below 20 years and above 40 years. A large ratio of study participants was married. The second large proportion of study participants were those who were single. Only five were divorced, and nine were engaged. 60% of participants were from a joint family system. 30% were from the nuclear family system, and only 10% were from the extended family system. 62.70% of participants' qualification was intermediate, and 32% were matric pass. Only 2 of the study participants' qualification was matric, and only two graduated. In terms of monthly income, 73.30 participants' income was within the range of 20000-30000, 18.70 participants' income was within the range of 10000-20000, and the remaining participants' income was below 10 thousand. The monthly salary of 93.30 participants was within the range of 10000-15000, and 5% of participants just received 5000-10000 salary in a month. It is concluded from the above results that most of the study participants' age was within the age range of 25-40 years, monthly income was within the range of 20000-30000, and the monthly salary was within the range of 10000-15000. Most participants' qualification was intermediate; marital status was married and from a joint family system.

Psychometric Properties of Scales

This section presented the psychometric properties of scales that were used in study to collect data from participants. The inter consistency, mean, standard deviation, range and normality distribution was presented in terms of psychometric properties of scales.

Table 2: *Psychometric Properties of the Study Major Variables/Scales (N= 75)*

Variables	k	A	M (SD)	Range Potential	Actual	Skewness	Kurtosis
GHQ	12	.93	25.72(8.51)	0-36	12-30	.90	.03
MPSS	12	.96	50.68(15.95)	0-100	18-78	-.05	-.89
WHOQLQ-Brief	26	.89	61.21(12.32)	12-84	52-70	-.34	.53

Note. GHQ= general health questionnaire, MPSS= multidimensional scale of perceived social support, WHOQLQ=world health organization quality of life questionnaire, *M*=mean, *SD*=standard deviation.

The above table shows the psychometric properties of the study scales. According to analysis, the internal consistency of general health questionnaire, multidimensional scale of social support, and world health organization quality of life questionnaire are .93, .96, and .89 respectively. The cut off score of internal

consistency is between 0.75 and 0.95 therefore, it can be said that the scales have good internal consistency. The mean of general health questionnaire is 25.72 that indicated that the study population has moderate level of psychiatric morbidity. The mean of multidimensional scale of social support is 50 that also indicated that the study participants have moderate level of family support. The level of quality of life is also moderate because the mean value is 61.21. the difference between potential and actual range also indicated the moderate level of study variables scores in study population. He skewness value for general health questionnaire is .90 that is between 0.5 and 1 that indicated that the scores of general health questionnaire is moderately skewed. The general health questionnaires value of kurtosis showed that the distribution is excess to negative side. The skewed values of quality-of-life questionnaire and multidimensional scale of social support also indicated the moderately skewed scores of scales. And the kurtosis values indicated the excess of scores to negative side.

Testing Primary Hypothesis

In this section, the primary hypotheses were tested. Main hypotheses were related to the relationship of study variables. Inferential analysis was used to test these hypotheses. Correlation analysis was used to test the relationship among study variables. Moderation analysis was used to explore the moderating role of family support in relationship of psychiatric morbidity and quality of life in lady health workers. Multiple regression analysis was used to find the best predictor of quality of life in lady health workers.

Hypotheses

The study had following hypotheses:

- There would be a negative relationship between psychiatric morbidity and quality of life among lady health workers.

- There would be a negative relationship between family support and psychiatric morbidity among lady health workers.

- There would be a positive relationship between family support and quality of life among lady health workers.

Table 4: *Correlation of Study Variables (N=75)*

	Variables	1	2	3	4	5	6	7	8	9	10	*M*	*SD*
1	GH		.97**	.95**	.55**	-.55**	-.67**	-.52**	-.34**	-.23*	-.15**	25.72	8.51
2	Social dysfunction			.87**	.61**	-.59**	-.48**	-.13*	-.21*	-.23**	-.10**	13.20	4.19
3	Aniety-Depression				.47**	-.50**	-.56**	-.27**	-.35**	-.17**	-.20*	8.32	3.11
4	Loss of Confidence					-.90**	-.15*	-.03**	-.21*	-.19*	-.09	8.57	3.17
5	MPSS						.24**	.05*	.19**	.21**	.08	50.68	15.95
6	QOL							.85**	.89**	.75**	.89**	91.21	12.32
7	Physical Health								.72**	.41**	.77**	24.13	3.43
8	Psychological Health									.62**	.68**	21.16	3.42
9	Social Relationships										.64**	11.25	2.45
10	Environment											27.52	4.13

Note. GH=general health, MPSS=multidimensional scale of social support, QOL=quality of life, *M*=mean, *SD*=standard deviation. ***p* < .001, ***p* < .01, **p* < .05

Table 5: *Moderating effect of X (Moderator) on Y (Independent Variable) and Z (Dependent Variable) (N=75)*

Predictors	B	B	SEB	t	P	95% CI	
Model 1							
Constant	3.381		.200	16.914	.000	-1.43	2.69
GHQ	-.111	-.167	.093	-1.201	.03	.78	7.05
MPSS	.087	.243	.049	1.754	.05	5.18	6.25
R^2	.04						
F	1.57						
ΔR^2	.01						
ΔF	.21						
Model 2							
Constant	16.914		.665	6.978	.000	2.31	5.89
GHQ	-1.201	-1.102	.328	-2.246	.02	1.23	5.12
MPSS	1.754	-.460	.135	-1.212	.04	1.81	4.25
GHQ*MPSS	16.914	1.466	.060	1.984	.08	2.98	7.31
R^2	.09						
F	3.93						
ΔR^2	.01						
ΔF	.05						

Note. **p < .01, *p < .05 GH=general health, MPSS=multidimensional scale of social support, QOL=quality of life, CL= confidence interval, LL= lower limit, UL= upper limit, B= unstandardized coefficient beta, SEB= standard error beta, β= beta, R^2= R square, ΔR^2= Adjusted R square.

The above table shows the relationship between psychiatric morbidity, family support, and quality of life in lady health workers. Pearson product-moment correlation was used to find out the relationship among study variables. According to the correlation analysis, participants' general health (psychiatric morbidity) was negatively and significantly associated with perceived social support. Participants' general health (psychiatric morbidity) was negatively and significantly associated with the quality of life in lady health workers. General health (psychiatric morbidity) was negatively and significantly associated with the domains of quality of life. All general health domains (social dysfunction, Anxiety-Depression, and loss of confidence) were positively and significantly associated with each other in study participants. Correlation results show positive and significant association between family support and quality of life in lady health workers. All the domains of quality of life (physical health, psychological health, social relationships, and environment) were also significantly and positively associated with each other in lady health workers.

It is concluded from the above results that the hypothesis regarding the negative relationship between psychiatric morbidity and quality of life among lady health workers is accepted because a significant relationship was found between general health (psychiatric morbidity) and quality of life. Moreover, this positive relationship also causes to reject the hypothesis. The hypothesis regarding the negative relationship between family support and psychiatric morbidity is also accepted because a negative and significant relationship was found between general health (psychiatric morbidity) and perceived social support. The hypothesis regarding the positive relationship between family support and quality of life is accepted because the analysis shows positive and significant relationship between quality of life and family support.

The above table showed the moderation analysis results. Moderation analysis was used to explore the role of family support as moderator in the relationship between psychiatric morbidity and quality of life. Moderation analysis results showed that family support does not acts as the moderator in the relationship between psychiatric morbidity and quality of life. The relationship between psychiatric morbidity and

quality life significant with p-value 0.3 but in interaction term (IV*M) the relationship is insignificant at p-value .08.

Regression Analysis

Table 6: *Multiple Regression Analysis of Predictors of Quality of life in Lady Health Workers (N= 75)*

Predictor						95% CL	
	B	*SEB*	*β*	*T*	*p*	*LL*	*UL*
Constant	94.45	24.31		3.88	.00	45.91	143.00
Age	.18	1.34	.01	.13	.89	-2.50	2.87
MaritalStatus	1.08	1.80	.08	.59	.55	-2.52	4.69
FamilyType	3.62	2.31	.19	1.59	.12	-.99	8.24
Qualification	-.96	2.61	-.04	-.36	.71	-6.18	4.25
Income	-1.60	3.31	-.08	-.48	.63	-8.22	5.01
Salary	-1.83	8.54	-.03	-.21	.83	-18.89	15.22
GHQ	-.28	.21	-.19	-1.31	.02	-.70	.14
MPSS	.168	.11	.21	1.53	.04	-.05	.39
R	.33						
R²	.51						
ΔR²	.62						
F	1.03						

Note. GHQ=general health questionnaire, MPSS=multidimensional scale of social support, CL= confidence interval, LL= lower limit, UL= upper limit, B= unstandardized coefficient beta, SEB= standard error beta, β= beta, R^2= R square, ΔR^2= Adjusted R square.

The above table shows the significant predictors of quality of life in lady health workers. The multiple regression analysis was used to check the more than one variable as the predictors of quality of life of lady health workers. Age, marital status, family type, qualification, income, salary, psychiatric morbidity, and family support were including in the regression analysis. Results shows that the psychiatric morbidity and family support were the best significant predictors of quality of lady health workers. The p value of psychiatric morbidity is .02 that is less than alpha value 0.05 and the p value for family support was .04 that is also less than the alpha value 0.05 that's why it is concluded that psychiatric morbidity and family support were the significant predictors of quality of life. Psychiatric morbidity was the negative predictor whereas the family support was the positive predictors of quality of life. the value of R square indicated that the regression model is best fir model to explain the predictability of quality of life. it is also found that 51 percent part of quality of life is explainable by the individuals' predictors. The values of adjusted R square indicated that by adding the new predictor family support the predicting power of model increases from 0.51 to 0.62.

Section IV: Testing Secondary Hypothesis

This section was about to test the secondary hypothesis. Secondary hypothesis based on the demographic variables of the study participants. The test of differences was used to test the mean difference across multiple categories of demographic variables of participants. One way analysis of variance was used to find the mean differences.

Hypothesis

There would be a significant mean difference in the mean of psychiatric morbidity, family support, and quality of life of participants with qualification of class 8th, class, 10th, class 12th, and graduate or above.

Table 7: *One Way Analysis of Variance of psychiatric morbidity, family support, quality of life, and qualification of lady health workers (N=75)*

Variables	Class 8th (n=02) M(SD)	Class 10th (n=24) M(SD)	Class 12th (n=47) M(SD)	Graduate/> (n=02) M(SD)	F	P	Post hoc
GHQ	20.50(4.94)	27.75(7.68)	24.12(8.12)	44.00(0.00)	5.05	.03	4>2>3>1
MPSS	58.50(10.60)	48.62(17.11)	50.25(15.06)	76.50(0.70)	2.14	.10	4>1>3>2
QOL	100.50(6.36)	90.50(11.16)	91.02(13.08)	95.00(15.55)	0.46	.71	1>4>3>2

Note. GHQ= general health questionnaire, MPSS= multidimensional scale of perceived social support, QOL= quality of life (df= 3, df2=71)

The above table shows the results of ANOVA. One way analysis of variance was used to explore the mean difference in study variables in terms of the qualification of lady health workers. Results indicated significant mean difference in psychiatric morbidity. The participants whose qualification was graduation or above had high level of psychiatric morbidity than others. No significant mean difference was found in the scores of multidimensional social support and quality of life of lady health workers.

Hypothesis

There would be a significant mean difference in the mean of psychiatric morbidity, family support, and quality of life of participants with monthly salary of less than 10000, between 10000-20000, and between 20000-30000.

Table 8: *One Way Analysis of Variance of psychiatric morbidity, family support, quality of life, and monthly salary of lady health workers (N=75)*

Variables	<1000 Rs n=06 M(SD)	10000-20000 Rs n=14 M(SD)	20000-30000 Rs n=55 M(SD)	F	P<	Post hoc
GHQ	34.66(9.68)	25.42(9.10)	24.81(7.80)	3.91	0.02	1>2>3
MPSS	61.83(13.12)	50.85(16.58)	49.41(15.85)	1.67	0.19	1>2>3
QOL	93.66(8.73)	93.07(12.06)	90.47(12.80)	0.37	0.69	1>2>3

Note. GHQ= general health questionnaire, MPSS= multidimensional scale of perceived social support, QOL= quality of life (df1= 2, df2=72)

The above table shows the results of one-way analysis of variance to find the mean difference in monthly salary of lady health workers in psychiatric morbidity, family support, and quality of life. Results showed significant mean difference in psychiatric morbidity. The participants whose salary was less than 10000 had high level of psychiatric morbidity than others. No significant difference was fund in family support and quality of life.

Discussion

The aim of this study was to explore the relationship between psychiatric morbidity, family support, and quality of life in lady health workers. The role of family support was assessed as a moderator in relationship between psychiatric morbidity and quality of life. For this purpose, sample of 75 lady health workers was selected by using purposive sampling strategy. The sample was selected from district Sawat, KPK. LHWs are community-based workers who are hired, trained, and assigned to do monthly home visits to offer guidance on health promotion initiatives, screen, administer simple remedies, recommend, and promote referral uptake. Due to the nature of their duties, they are always in mobility and sometimes work with the opposite gender as a team. While performing their duties, they can face multiple hurdles at domestic, social and community level. These hurdles can act as the risk factors to develop mental health problems in LHWs and also affect their quality of life. Family support can act as the protective factor and enable LHWs to adaptively cope with these hurdles.

Table 4 shows the positive relationship between psychiatric morbidity and quality of life. The study hypothesized that psychiatric morbidity would be negatively associated with quality of life. Its mean that as the level of psychiatric morbidity increases the level of quality of life would be decrease and vice versa. Pearson product-moment correlation was used to test the hypothesis. Results showed significant positive relationship between psychiatric morbidity and quality of life. The study used World Health Organization Quality of Life questionnaire to assess quality of life that has four dimensions: physical health, psychological health, social relationships, and environment. The general health scale was used to assess psychiatric morbidity that has three domains: anxiety and depression, social dysfunction, and loss of confidence. It is possible that multiple factors including home visits, lack of expertise, low salary, conflicts between domestic and professional responsibilities, lack of expertise, and lack of education lead LHWs to develop psychiatric morbidity. As it was evident from the findings of Haq et al. (2008) that LHWs reported mental distress and job stress due to working under pressure, working with opposite gender, lack of professional skills, and devalued by the administration. They also indicated that participants were less satisfied and happy with their job, pay, and professional expertise.

While they conduct home visits, they are in consistent stress about the arrangement of convince and need someone who join them in home visits because as female due to social restrictions they cannot travel alone. Due to their professional responsibilities, sometimes they withdraw from social relations such as due to short of time they do not attend the social gathering (wedding, funerals, or other get to gathers). The qualification of most of the LHWs is matric or intermediate so due to lack of education, they cannot properly perform their duties related to providing guidance on promoting health and develop awareness in them. The hurdles in performing their duties due to the lack of expertise and education can make their confidence level low and can induce the sense of incompetence. This can develop mental health problems in them that can further affect their quality of life. As it was sown by the study of Rayan and Deci (2000) that the sense of incompetence effect the psychological perspective of quality of life negatively because three fundamental human wants are "competence," "autonomy," and "relatedness" (Ryan & Deci, 2000). Due to these hurdles, LHWs sleep pattern, eating pattern and self-care routine become disturbed therefore, this can negatively affect their physical health such as weight loss or obesity and mineral deficiency. They can also suffer from muscle tension, stomach problems, headache, and migraine due to the prolonged exposure to stressors. Due to their low salaries, their needs are not fulfilled therefore, they cannot improve their quality of living that's another risk factor in the development of their physical and psychological problems.

Table 4 shows the negative relationship between psychiatric morbidity and family support and positive relationship between family support and quality of life. The study also hypothesized that psychiatric morbidity would be negatively associated with family support. This hypothesis was also accepted. Results showed significant negative relationship between psychiatric morbidity and family support. It can be said that family support acts as a protective factor against psychiatric morbidity to develop. There are several situations where lady health workers need family support. Women are regarded as the family's primary caregivers because they are responsible for all household duties in addition to caring for the children. Consequently, LHWs experience a tension between their personal and professional lives that leads to psychological issues. Work-family conflict is defined as "an inter-role conflict in which the job-related role limitations are, to some extent, irreconcilable with the family-related context" (Greenhaus & Parasuraman, 1986). Work-family issues are regarded as one of the key factors for female employees (Allen & Martin, 2017). So, for working women, family support is important. Family support raises quality of life and serves as a barrier against mental health issues. A high level of these symptoms is linked to a lower quality of life. Anxiety and depression have been identified as factors that influence life satisfaction. The quality of life is impacted by social support in addition to sadness and anxiety. It is well-known that social support affects both mental and physical health since it is negatively connected with a lower quality of life over time (Lee et al., 2018). Additionally, because of their employment commitments, they are unable to meet their social obligations, keep their word, or find time for their interests. Due to the problems at home that are a result of their professional obligations, it is also typical

for them to have family arguments, child neglect, strained social relationships, and personal health problems. These obstacles in the workplace and at home can lead to psychiatric morbidity and have a severe impact on people's quality of life. Therefore, at this point family support is important that act as the protective factor in the relationship between psychiatric morbidity and quality of life. Family support enables the lady health workers to manage the workplace stress and pressure adaptively and thus the psychological issues they face due to professional hurdles do not affect the quality of life severely.

Table 5 shows the results of moderation analysis. The study hypothesized that family support would moderate the relationship between psychiatric morbidity and quality of life. A moderator is a variable that change the strength or direction of relationship between two variables The study accepted this hypothesis. The relationship between psychiatric morbidity and quality of life was significant but by adding family support in interaction terms the relationship was not significant. Therefore, it can be said that family support weakens the relationship between psychiatric morbidity and quality of life. Its might be due to the nature of hurdles they face; family support neutralize their effects and the quality of life not affected.

Table 6 shows the results of multiple regression. Multiple regression analysis was used to find the best predictors of quality of life. Results shows that psychiatric morbidity and family support were the significant predictors of quality of life. The psychiatric morbidity was the negative predictors of quality of life. It means that as the psychiatric morbidity become intense, the quality of life become poorer and poorer. When lady health workers face the workplace stressors, these stressors affect their psychological health negatively and they become vulnerable to develop mood problems, anxiety, sleep problems, as well as eating problems. As it was evident from the study of Estryn et al., (1990) that job stressors lead to the development of mental health problems. These psychological problems further negatively affect their physical health, social relationships and the environment in which they live. On the other side, when lady health workers exposed to stressors at workplace and their domestic responsibilities are also not fulfilling, it is another source risk factor to enhance the level of psychiatric morbidity and thus a cycle form from psychiatric morbidity to poor quality of life and poor quality of life to psychiatrist morbidity. But family support act as the protective factor against psychiatric morbidity. When lady health workers receive family support at that time and their domestic responsibilities are shared by the family members. They feel relief and focus on just to deal professional stressors. Thus, due to increase level of family support, their quality of life improves.

Table 7 shows the results of one-way analysis of variance for the qualification of lady health workers. Results shows that significant mean difference would be present in the score of psychiatric morbidity, family support and quality of life as the level of qualification change. The results showed that the participants whose qualification was graduation or more had high levels of psychiatric morbidity than others. Its might be due to the reason that the lady health workers with high qualification acts as the supervisors that keep eyes on the working of their team and also responsible for the efficient performance for their team. Their team include 5-6 lady health workers. Each lady health workers cover a village or sometimes 2 villages so we can say that a supervisor LHWs covers more than 5 villages at the times and she is also answerable to the authority figures. So, it is possible that due to these high workloads on the supervisor whose qualification is higher than other staff suffer from more psychological problems. It is also evident from the study of Wang et al. (2008) that work pressure act as a significant risk factor for the devlopmnet of psychiratic problems. But the relevant mean difference in not found in quality of life in graduated LHWs its might be due to the fact due to their high qualification they have skills to manage these problems and thus their quality of life affected the same as the quality of life of other LHWs are affected.

Table 8 shows the results of one-way analysis of variance for the monthly salary of lady health workers. Results indicated that the lady health workers whose monthly salary was less than 1000 0 has high level of psychiatric morbidity than those whose salary was above 10000. Here two possibilities are present. It is possible than the LHWs are freshers means they have currently joined the field and thus their salary was low because the starting salary of LHWs are low. So, if the cause behind low salary is their recent joining

so it is possible that the lack of expertise also plays the role of the development of psychiatric morbidity. As it was evident from the study of Tyssen et al., (2000) that the young professionals who have lack of skills were more vulnerable to develop mental health problems. But if their scale and qualification were the cause behind their salary, then it can be taken as the financial factors. Due to low salary, the LHWs cannot fulfill their basic needs even in the time of such inflation so this makes them vulnerable to develop psychiatric problems.

Limitations

The study used questionnaire to assess the study variables in participants. Therefore, it is possible that due to the social desirability factors participants fill the questionnaire in a way that is socially acceptable rather than giving accurate information. Moreover The study used participants form district Sawat so the study results cannot be generalized on the other area's lady health workers.

Suggestions

It is suggested that the use of cultural perspective will be helpful to determine that either it is the true relationship of study variables and it's just the depiction of as specific culture practices. Additionally to confirm the study findings qualitative research design can be used to explore the actual experiences of the lady health workers, so that the real picture of their problems come into presentation.

Implications

The study is a fruitful addition in the existing literature in terms of the relationship of a set of variables. The study findings provide a direction for the future research. The future studies can focus on the both professional and domestics as well as cultural issues that LHWs face while they perform their duties. The study findings would be helpful for the administration to reflect back on their policies and make changes in it for the good psychological health and improved quality of life of LHWs. The study findings would be helpful for the clinical psychologists while they handle the case of LHWs. These findings help them to conceptualize the case in an effective way. The study findings would also be helpful for the administration when they develop training program for the better performance of LHWs.

Conclusion

It is concluded from the current study that the lady health workers arte at risk to develop psychological problems for different reasons including the work pressure, lack of expertise, most often change of duties, and domestic responsibilities. The psychiatric problems further negatively affect their physical, psychological, social life as well as well the environment in which they live. Here family support comes forward and weaken the relationship between psychiatric morbidity and quality of life. At the end, it can be said that if lady health workers are on post such as they are supervisor, the chances to develop psychological problems become increases as their work responsibilities become increase. The financial issues are also there for LHWS such as their low salary that is another significant factor to lead them to psychiatric morbidity and poor quality of life,

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