RESEARCH ARTICLE

Determinants of depression in women with chronic disease: Evidence from a sample of poor loan takers from Pakistan

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Abstract

Depression is one of the most common mental health problems in Pakistani women, with prevalence rates estimated to be above 30%. Identification of the determinants of depression in chronically ill, poor, and debt-ridden women of the country is a neglected area. A quantitative survey using standardized tools was used to sample women from across Pakistan. It was found that women had higher odds of depression when they (a) perceived unfavorable self-health, (b) had less health decision-making power, (c) encountered difficulties in healthcare services, and (d) faced food insecurity. Key reforms are recommended to improve state protection policies, mental healthcare services, and cultural support for disadvantaged women in the country.

KEYWORDS
chronic disease, decision-making, depression, food security, healthcare practitioner, Pakistan

1 | INTRODUCTION

Depression is a rising mental health problem across the world, and in developing nations specifically (World Health Organization, 2017). It is known to be more common in women (Kuehner, 2017), poor people (Ross, 2000), debt-ridden people (Meltzer, Bebbington, Brugha, Farrell, & Jenkins, 2013), and those with chronic diseases (Clarke &

Short Informative: This study helps to identify the determinants of depression in chronically ill, poor, and debt-ridden women of the country. It is hoped that findings will help to improve state protection policies, mental healthcare services, and cultural support for disadvantaged women in the country.

Currie, 2009). There is also the complex interplay of physical and mental health, with depression leading to physical health problems, and conversely chronic ailments leading to depression (Turner & Kelly, 2000). Furthermore, depression shows association with increased morbidity and disability adjusted life years (Pilling, Anderson, Goldberg, Meader, & Taylor, 2009). Women who suffer from depression are unable to fulfill care roles for family, children, and other dependents (Boing et al., 2012). There is a need to understand predictors of depression in women across various disadvantaged groups where there is more need for social support and policy development.

1.1 | Pakistan background

Depression is listed as the most common mental health problem in Pakistani women, with prevalence rates estimated to be above 30% (GodIl et al., 2017). Scholarship also suggests that depression rates are on the rise in women of the country (Husain, Creed, & Tomenson, 2000; Husain, Gater, Tomenson, & Creed, 2004). Due to reporting barriers, it is believed that estimates for depression are underreported and that health-seeking behavior is not timely, thus exacerbating mental health problems (Aijaz & Ambareen, 2014; Niaz, 2004). Reasons for high prevalence of depression in women have been researched, including (a) the inability to make decisions (Ali, Israr, Ali, & Janjua, 2009), (b) high rates of violence (Ali & Mogren, 2013), and (c) poverty (Patel & Kleinman, 2003). In Pakistan, maternal depression rates are also high implying compromised wellbeing for family and child (Karmaliani et al., 2009; Kazi et al., 2006). Pregnant women are at high risk for depression when they face disadvantages related to asset ownership, food shortages, and debt (Maselko et al., 2018).

The plight of Pakistani women is that the majority are impoverished (Tarar & Pulla, 2014) and are either unemployed or employed in the informal sector of the economy (Sarwar & Abbasi, 2013). This makes them increasingly vulnerable not just to depression, but also to the burden of chronic diseases (Jafar, 2006; Khuwaja & Kadir, 2010; Rafique et al., 2018; Rizvi, Jalil, Azam, Shamsi, & Saleem, 2012), and challenges of multi-morbidity (Singh et al., 2019). Women facing double burdens of chronic disease and depression are prevented from functioning to improve life quality and fully participating for income-earning (DiGiacomo, Green, Rodrigues, Mulligan, & Davidson, 2015). Common leading chronic diseases for women in the country have been listed as arthritis, hypertension, diabetes, and cancers (GodIl et al., 2017; Nishtar, 2006). Some of the reasons for the increasing burden of chronic diseases in Pakistani women include (a) sedentary lifestyle, (b) bad eating habits (Samir, Mahmud, & Khuwaja, 2011), and (c) culture-induced stress and neglect (Bari, 2000). Research from the region also highlight that interventions to support depression in women are not as effective if women remain impoverished (Rahman et al., 2012).

2 | THEORETICAL FRAMEWORK FOR STUDY

Based on empirical literature, determinants of depression in women are discussed and used as a theoretical framework to build the hypotheses for this study (Figure 1).

2.1 | Self-perceived health

People with chronic disease may perceive their health to be unfavorable compared to others who are not sufferers, and this can contribute to feelings of depression (Järemo, Arman, Gerdle, Larsson, & Gottberg, 2017; Katon, 2011). Human nature is vulnerable to relative comparisons within the community and perceived health can become a major cause of mental distress (Mahmoud, 2015). Poor people living in urban areas or with media exposure can suffer depression due to knowledge of better opportunities for healthcare and health access in privileged and wealthy populations.
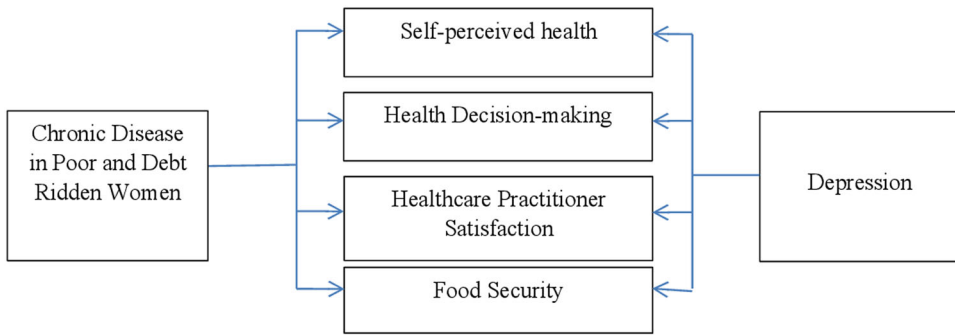
FIGURE 1   Theoretical model for study

2.2 | Health decision-making

Women with chronic disease who do not have decision-making power for health may also face great despair and depression (Pathare & Shields, 2012; Zahidie & Jamali, 2013). The need for periodic checkups and regular medication for people with chronic disease is a necessity to maintain both physical and mental health. Not being able to control decisions for consultancy and visits to healthcare provider can contribute to depression. Reasons for inability to make health decisions locally include patriarchal norms of restricting women's movement and fertility (Rizvi, Khan, & Shaikh, 2014). Additionally, there is cultural tendency to prevent women from making decisions related to mental health and chronic disease; the former because it is a neglected area of health and the latter because it is considered a waste of finances and time (Kapadia, Brooks, Nazroo, & Tranmer, 2017).

2.3 | Healthcare practitioner satisfaction

Healthcare service provider disrespect is known to be a predictor for depression in women and other vulnerable populations (Grissinger, 2017). Women with chronic disease may suffer greater depression if they face the following difficulties with provider: (a) lack of trust, (b) high case load and lack of time, and (c) inability to communicate and cultural incompatibility (Athié et al., 2017; Knickman et al., 2016). Many people may choose not to seek or continue to seek healthcare due to bad service quality of healthcare practitioners (Javed, Liu, Mahmoudi, & Nawaz, 2019).

2.4 | Food security

In both developing and developed countries, problems related to food security and nutrition are a cause of depression and mental distress in chronically ill people (Maynard et al., 2018; Seligman, Laraia, & Kushel, 2010). Poor women with chronic disease are more likely to suffer from food insecurity (Whitaker, Phillips, & Orzol, 2006), especially in traditional cultures like Pakistan, where food prioritization is given to male members of the family (Haider & Zaidi, 2017). Mothers who believe their child has gone to sleep hungry or mothers who are uncertain about whether they will be able to provide adequate nutrition to their child are also known to suffer great depression and stress (Silverman et al., 2015).

2.4.1 | Aim of paper

There is still uncertainty in determining the factors that influence depression in poor Pakistani women suffering from chronic diseases (Turner & Kelly, 2000). The aim of this study, in addition, is to identify predictors of depression in poor and debt-ridden women suffering from chronic disease burden. A better understanding of the determinants of depression will help identify better interventions and policy development in both the health sector, social welfare sector, and microfinance sector. The following hypotheses form the basis of this study:

H1. *Debt-ridden women, with chronic disease, who perceive unfavorable self-health have higher odds of suffering from depression;*

H2. *Debt-ridden women, with chronic disease, who have less health decision-making power have higher odds of suffering from depression;*

H3. *Debt-ridden women, with chronic disease, who face greater difficulties in service provision by healthcare practitioners have higher odds of suffering from depression; and*

H4. *Debt-ridden women, with chronic disease, who face greater food insecurity have higher odds of suffering from depression.*

3 | METHODOLOGY

This paper is part of a wider cross-sectional study to investigate the challenges faced by poor women microfinance borrowers from Pakistan. Ethical approval for this study was taken from the Institutional Review Board, Forman Christian College University. All anonymity and confidentiality was observed during the course of the study. Informed consent was taken from all women respondents.

3.1 | Sample

Microfinance providers were randomly sampled from an official list (Pakistan Microfinance Network, 2018). The selection criterion was current women microfinance borrowers who had completed at least one loan cycle lasting a year. All four provinces of Pakistan were sampled according to population weightage, providing us with a final sample of 442 women borrowers: (a) 252 from Punjab, (b) 100 from Sindh, (c) 50 from Baluchistan, and (d) 40 from KPK (Appendix A). Using SPSS software, a filter was applied on the dataset to select all women with chronic diseases who have been utilizing services from healthcare practitioners in the last 12 months. For this study, a total of 166 women who suffered from one or more chronic diseases were a part of the final analysis.

3.2 | Data collection

Twenty one research assistants, with experience of field research, were trained in the study objectives for a 2-week period to collect data. The surveys were completed with assistance as most women respondents were illiterate or semi-literate. Data were collected at seven different microfinance provider offices in confidential areas, so women were comfortable in answering sensitive questions without worry about outsiders or family members overhearing. Data were collected between February and November 2018.

3.3 | Survey

Our survey included questions from two internationally standardized scales (Appendix B). (a) The Women's Healthcare Experiences Survey (Women's and Children's Health Policy Center, 2000), which included two items to assess perceived health, two items to assess ability to make health decisions independently, 16 items to measure practitioner services, and 11 items to identify chronic diseases. The response scores for practitioner services ranged from 1 to 4 (1: Very Good; 2: Good; 3: Fair; and 4: Poor). These responses were compounded to binary categories for bivariate regression analysis. (b) The Baseline Nutrition and Food Security Survey by UNICEF (Quinn & Kennedy, 1994) was used for questions related to security in accessing nutritious foods. Seven items were used to measure food security, with binary response scores of "Yes" and "No." Questions for food security were asked with respect to the last 6 months.

3.4 | Analysis

Bivariate regression analysis was applied to examine the odds of higher depression in independent variable measuring the constructs of (a) perceived health, (b) ability to make health decisions independently, (c) practitioner services, and (d) food security. For adjusted odds ratio (OR), age and income was controlled. p-values were assigned at .05.

4 | RESULTS

Figure 2 summarizes the types of chronic diseases suffered by the sample. The top five chronic diseases suffered by women include (a) high blood pressure or hypertension (85.5%), (b) arthritis (81.3%), (c) migraine (56.0%), (d) diabetes (47.6%), and (e) heart disease (27.7%).

In Table 1, the sociodemographic characteristics of the sample are presented ($N = 166$). It was found that majority of the sample were between 18 and 39 years, at 87.6%, are currently married, at 94.0%, and belong to the Punjab province, at 68.7%. Similarly, majority women are illiterate 69.9% and all have a household income below USD 4.80, and thus are living below international poverty lines (Ravallion, 2017). Most (99.4%) of the sample have one or two children, and majority at 58.4% suffer from depression.

Table 2 presents the adjusted ORs of women suffering from higher depression with respect to perception of self-health and decision-making power for health. Results suggest that women have higher odds of suffering from
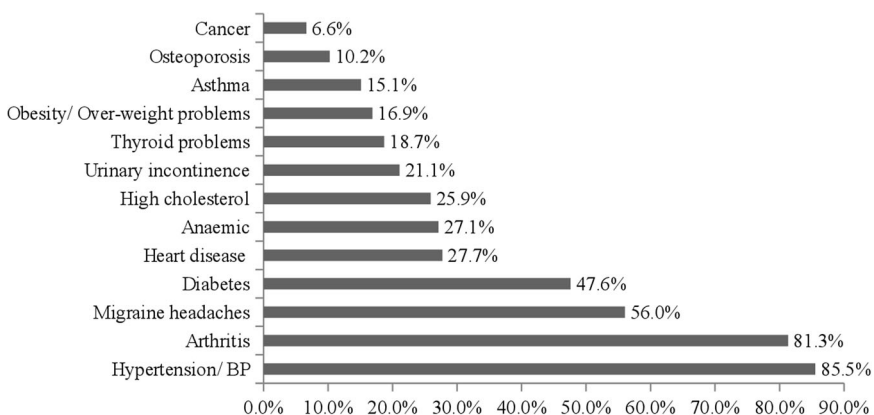
FIGURE 2 List of chronic diseases suffered by poor women borrowers in debt

TABLE 1 Sociodemographic variables of sample, poor and debt-ridden women suffering from chronic illness (N = 166)

Variable	Frequency (%)
Age	
18–39 years	387 (87.6%)
40–49 years	55 (12.4%)
Religion	
Muslim	154 (92.8%)
Other	12 (07.2%)
Province	
Punjab	114 (68.7%)
Other	52 (31.3%)
Marital status	
Married	156 (94.0%)
Other	10 (06.0%)
Literacy	
None	116 (69.9%)
Other	50 (30.1%)
Household Income per day[a]	
<PKR 333.3 (USD 2.40)	116 (69.9%)
Between PKR 333.3 and 666.7 (USD 2.40–4.80)	50 (30.1%)
Children	
1–2	165 (99.4%)
3 or more	01 (00.6%)
Feel depressed	
Yes	97 (58.4%)
No	69 (41.6%)

[a]Exchange rate as at November ending 2018, 1 USD = PKR 138.92.
(*Source:* https://www.exchange-rates.org/Rate/USD/PKR/11-30-2018).

depression when they perceive their health to be fair or poor overall (OR: 3.72, 95% confidence interval [CI]: 1.53–9.01), when they perceive their health to be fair or poor compared to other women (OR: 2.36, 95% CI: 1.06–5.22), and when their decision for health consultancy (OR: 2.23, 95% CI: 1.12–4.40) and health visit (OR: 2.58, 95% CI: 1.31–5.11) is controlled by husband or other relatives. Table 3 presents the odds of women suffering from higher depression and independent variables of healthcare practitioner satisfaction. Women had higher odds of suffering from depression when the practitioner does not talk to them with respect (OR: 11.12, 95% CI: 4.28–16.88) and when the practitioner does not listen to them (OR: 2.83, 95% CI: 1.06–7.54). Similarly, women are at higher risk of depression when they are unable to talk to practitioners (OR: 6.26, 95% CI: 1.67–12.44) or answers their questions (OR: 3.35, 95% CI: 1.60–7.01).

The results also show that women face higher odds of depression when practitioners do not provide complete information (OR: 2.50, 95% CI: 1.11–5.60), discuss alternative therapies (OR: 2.07, 95% CI: 1.00–4.26), and provide information about services (OR: 2.75, 95% CI: 1.35–5.62). Women also have higher odds of depression when they are prevented from making decision (OR: 2.84, 95% CI: 1.30–6.22), not provided written information (OR: 2.17, 95% CI: 1.02–4.61), and not given sufficient time by practitioners (OR: 2.10, 95% CI: 1.04–4.24). Table 4 presents the odds of higher depression in women in relation to food insecurity. Two significant results are revealed, in that

TABLE 2 Bivariate regression results for odds of women suffering from higher depression and independent variables of perception of self-health and decision-making power for health

Variable	Frequency (%)	OR (CI) *p*-value	AOR (CI) *p*-value
Perception of health overall			
Fair/poor	41 (24.7%)	3.93 (1.68–9.18)**	3.72 (1.53–9.01)**
Good	125 (75.3%)	1	1
Perceived health compared to other women			
Fair/poor	45 (24.7%)	2.85 (1.32–6.13)**	2.36 (1.06–5.22)*
Good	121 (72.9%)	1	1
Decision for health consultancy			
Husband/other	58 (34.9%)	1.89 (0.99–3.62)*	2.23 (1.12–4.40)*
Self	108 (65.1%)	1	1
Decision for health visit			
Husband/other	59 (35.5%)	2.24 (1.17–4.29)*	2.58 (1.31–5.11)*
Self	107 (64.5%)	1	1

Note: AORs have been calculated holding age and income constant.
Abbreviations: AOR, adjusted odds ratio; CI, confidence interval; OR, odds ratio.
*$p < .05$.
**$p < .005$.

women who find it difficult to purchase fruits (OR: 3.83, 95% CI: 1.87–7.83) and eggs (OR: 1.95, 95% CI: 1.00–3.83) face higher odds of depression.

5 | DISCUSSION

A limitation of this study is that, though completeness was aimed, there may be other predictors of depression that may have been missed. However, there are strengths to this study including a sample from across Pakistan, and specific demographic characteristics of a community of women, namely, those who are poor, in debt, and suffering from chronic disease. This allows us to highlight depression incidence in women from disadvantaged and impoverished backgrounds specifically. Another advantage is that validated measures were used to assess the independent variables of self-health, decision-making power, healthcare practitioner satisfaction, and food security. We are also able to question the assumption that poor women can easily sustain small businesses and repay loans, without consideration that chronic disease and depression may be significant barriers.

All four hypotheses of the study are confirmed. First, it was found that chronically ill women of Pakistan have higher odds of facing depression when they perceive their health to be unfavorable overall and when they perceive their health to be unfavorable compared to other women. Results confirm local research that women are cognizant of health disparities and inequities; and knowing that women from higher wealth classes have better health access is a cause for depression and dissatisfaction (Nishtar, 2010). The high depression rates may also be caused by regressive cultural forces and lack of social support which compromise health overall in women of the region (Niaz, 2004). Other scholarship confirms that poorer countries have gender-based health inequities, and that women, compared to men, are more likely to experience depression because of systemic social and financial inequalities (Yu, 2018).

Second, the results confirm that women who do not have decision-making power related to health, suffer from higher rates of depression. This is a significant finding considering that Pakistani women face immense cultural barriers which prevent them from making health decisions independently (Hou & Ma, 2013). Local research has confirmed in the past that women microfinance borrowers do not have decision-making power and in many cases

TABLE 3 Bivariate regression results for odds of women suffering from higher depression and independent variables of healthcare practitioner satisfaction

Variable	Frequency (%)	OR (CI) *p*-value	AOR (CI) *p*-value
In general, have you encountered any of the following difficulties while dealing with the HCP?			
Talking to HCP			
No	17 (10.2%)	3.93 (1.68–9.18)**	6.26 (1.67–12.44)**
Yes	147 (89.8%)	1	1
Listening to me			
No	29 (17.5%)	2.84 (1.32–6.13)**	2.83 (1.06–7.54)**
Yes	137 (82.5%)	1	1
Talking to me with respect			
No	58 (34.9%)	7.97 (2.19–12.99)**	11.12 (4.28–16.88)***
Yes	108 (65.1%)	1	1
Understanding dialect of HCP			
Yes	128 (77.1%)	2.03 (0.93–4.44)	1.76 (0.78–3.94)
No	38 (22.9%)	1	1
Answering HCP questions			
Yes	108 (65.1%)	3.72 (1.80–7.68)***	3.35 (1.60–7.01)**
No	58 (34.9%)	1	1
HCP lets me ask questions			
No	45 (27.1%)	1.41 (0.69–2.86)	1.42 (0.68–2.92)
Yes	121 (72.9%)	1	1
HCP makes me feel comfortable			
No	48 (28.9%)	1.43 (0.71–2.87)	1.31 (0.64–2.68)
Yes	118 (71.1%)	1	1
HCP provides me with complete information			
No	45 (27.1%)	2.84 (1.32–6.13)**	2.50 (1.11–5.60)**
Yes	121 (72.9%)	1	1
HCP discusses alternative therapies			
No	52 (31.3%)	2.22 (1.09–4.48)**	2.07 (1.00–4.26)**
Yes	114 (68.7%)	1	1
HCP gives me information about services			
No	59 (35.5%)	2.98 (1.48–6.00)**	2.75 (1.35–5.62)**
Yes	107 (64.5%)	1	1
HCP gives me information about tests			
No	61 (36.7%)	2.01 (1.03–3.90)**	1.85 (0.94–3.66)
Yes	105 (63.3%)	1	1
HCP discusses treatment options			
No	33 (19.9%)	1.83 (0.81–4.13)	1.65 (0.71–3.83)
Yes	133 (80.1%)	1	1
HCP allows me to make decisions			
No	48 (28.9%)	3.25 (1.51–6.97)**	2.84 (1.30–6.22)**
Yes	118 (71.1%)	1	1

TABLE 3 (Continued)

Variable	Frequency (%)	OR (CI) p-value	AOR (CI) p-value
HCP provides me with written information			
No	47 (28.3%)	2.32 (1.11–4.84)**	2.17 (1.02–4.61)**
Yes	119 (71.7%)	1	1
HCP gives me time			
No	57 (34.3%)	2.15 (1.08–4.24)**	2.10 (1.04–4.24)**
Yes	109 (65.7%)	1	1
HCP treats me like a partner			
No	46 (27.7%)	1.69 (0.82–3.45)	1.69 (0.81–3.53)
Yes	120 (72.3%)	1	1

Note: AORs have been calculated holding age and income constant.
Abbreviations: AOR, adjusted odds ratio; CI, confidence interval; HCP, healthcare provider; OR, odds ratio.
**$p < .005$.
***$p < .001$.

they take the loans for relatives, like husband and brothers, and experience very little financial autonomy (Jafree & Ahmed, 2013). There is also scholarship that suggests that women who seem autonomous and may be running small businesses have little power to make decisions that further their interests or benefit their lives (Leykin, Roberts, & DeRubeis, 2011). This may include small and large decisions related to choices for food intake, household purchases, health, and reproduction.

Third, the findings also revealed that women face greater depression when healthcare practitioner services are inadequate or unsatisfactory. With low accountability of healthcare administration and inadequate patient safety standards in the country (Jafree, Zakar, Zakar, & Fischer, 2015), the findings highlight the mental distress of women who, as chronically ill people, are dependent on healthcare practitioner service quality. International literature also confirms that improvement in healthcare services and healthcare practitioner support are known to have a role in alleviating depression in suffering women (Athié et al., 2017). To compound problems, the budget allocation for mental health in the country is estimated at a critically low rate of 0.4%, which may contribute to practitioner quality and service delivery for women (Irfan, 2010).

Finally, it was found that women who face food insecurity also suffer from greater depression. Food shortage and undernutrition in poor families of the country is a rising problem due to lack of initiatives for food security (Khan & Shah, 2011). Other local studies have established a relationship between maternal depression, child development, and household food insecurity (De Oliveira, Rasheed, & Yousafzai, 2019). International scholarship warns that food in-security and undernutrition in poorer women can lead to crippling health problems and negatively impact on women's agency (Compton, Wiggins, & Keats, 2010). At macro level, there is fear that depression can add to the economic costs of households, the health sector, and the national economy (Trautmann, Rehm, & Wittchen, 2016; Wang, Simon, & Kessler, 2003). For Pakistan and the rest of South Asia, there is the compounded cultural problem of patriarchy and regressive norms preventing health-seeking behavior for mental health (Niaz & Hassan, 2006).

On a positive note, there is evidence for effective improvement in women's health from the region through use of psychotherapy and cognitive behavioral therapy intervention (Baranov, Bhalotra, Biroli, & Maselko, 2017). Yet, concern exists about the efficacy of interventions for mental health in women which target the individual and are unable to change structural and cultural factors, such as health access and traditional norms (Falicov, 2003). Stemming from the findings of this study and another intervention-based research (Falicov, 2003), the author will be undertaking another study to improve health literacy and primary health services for poor women loan takers living in disadvantaged communities. Family and community members will also be targeted for the intervention, to help improve cultural support for women. In light of the coronavirus pandemic and physical distancing the author

TABLE 4 Bivariate regression results for odds of women suffering from higher depression and independent variables of food insecurity

Variable		OR (CI) *p*-value	AOR (CI) *p*-value
In the last 6 months, I faced the following food security problems			
Difficulty purchasing food			
Yes	57 (34.3%)	1.15 (0.60–2.20)	1.57 (0.77–3.19)
No	109 (65.7%)	1	1
Difficulty purchasing fruit			
Yes	79 (47.6%)	4.26 (2.18–8.32)***	3.83 (1.87–7.83)***
No	87 (52.4%)	1	1
Difficulty purchasing vegetables			
Yes	65 (39.2%)	2.12 (1.10–4.08)**	1.78 (0.89–3.55)
No	101 (60.8%)	1	1
Difficulty purchasing meat			
Yes	91 (54.8%)	1.98 (1.06–3.72)**	1.67 (0.86–3.27)
No	75 (45.2%)	1	1
Difficulty purchasing eggs			
Yes	70 (42.2%)	2.33 (1.21–4.46)**	1.95 (1.00–3.83)*
No	96 (57.8%)	1	1
Difficulty purchasing milk			
Yes	67 (40.4%)	1.09 (0.58–2.05)	1.01 (0.52–1.93)
No	99 (59.6%)	1	1
Difficulty purchasing wheat			
Yes	56 (33.7%)	1.03 (0.53–1.98)	1.04 (0.53–2.04)
No	110 (66.3%)	1	1

Note: AORs have been calculated holding age and income constant.
Abbreviations: AOR, adjusted odds ratio; CI, confidence interval; OR, odds ratio.
***p < .001.
**p < .005.
*p < .05.

will be pursuing the intervention to women borrowers digitally, with assistance of Health Social Workers, and through provision of a smartphone and 4G Wi-Fi access to women participants.

6 | CONCLUDING RECOMMENDATIONS FOR POLICY IMPROVEMENT

Based on the findings of this study, it is recommended that the screening of depression and mental healthcare, specifically for women in debt and women suffering from chronic diseases, is made mandatory at primary healthcare level. Pakistan has a functional Lady Healthcare Programme working at community level across the country, which can easily integrate primary health services for mental health through their Lady Healthcare Workers (Khan, 2011). In addition, microfinance providers can play a role in including mental health screening and counseling for their women clients by including this service in their social development services, which are an inherent part of the original Grameen microfinance model.

There is major underutilization of women Health Social Workers at community level in the country (Graham, Al-Krenawi, & Zaidi, 2007). It is recommended that Health Social Workers partner with Lady Healthcare Workers to provide more robust and comprehensive support for debt-ridden and poverty-ridden women in the country. Three areas must be specifically targeted for health awareness and prevention: (a) chronic disease burden, (b) mental health, and (c) infectious disease. Improved policies for women by the state, at federal and provincial levels, must also be planned to reduce poverty, and protect informal and home-based workers. Some key recommendations for social and financial protection of poor women loan takers must include (a) cash transfers for food security and basic purchases; (b) health insurance and health coverage, including mental health services; and (c) training and development for skill expansion and income-earning potential. Finally, there needs to be state supervision with regard to microfinance regulation and accountability for health and social development features by MFP for women borrowers, which at the moment is inadequate (Safavian & Haq, 2013).

Critical reform and accountability is needed for service provision by healthcare practitioners in the country. Improvement in patient safety standards must be secured through (a) improved training of healthcare practitioners and administration—specifically at primary level, (b) surveillance of overall services, ethics observance, informed consent, and patient disclosure by practitioners, and (c) the linking of patient satisfaction with license renewals of practitioners (Abuosi & Atinga, 2013). Finally, the most difficult task is to reform society and culture. It is strongly recommend that social awareness in the country be improved through the collaboration of government, media, community notables, and other nonstate actors for progress in (a) health-seeking behavior for mental health, (b) autonomous rights for health decision-making in women, and (c) women assuming responsibility for food security and nutrition through lifestyle reform, such as choosing to eat nutritious food and growing food at home (Gillespie, Harris, & Kadiyala, 2012).

CONFLICT OF INTERESTS

The author declares that there are no conflict of interests.

ETHICS APPROVAL STATEMENT

Ethical approval for this study was taken from the Institutional Review Board, Forman Christian College University.

PEER REVIEW

The peer review history for this article is available at https://publons.com/publon/10.1002/jcop.22399

DATA AVAILABILITY STATEMENT

The dataset in SPSS will be uploaded with the article.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.