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THE SILENT STRAIN: FINANCIAL, EMOTIONAL & SOCIAL BURDEN OF HEART DISEASE ON FAMILIES IN PUNJAB, PAKISTAN

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ABSTRACT

Heart diseases are a high burden public health problem in Pakistan and affect the families especially with low income and in rural population. The general objective of qualitative exploratory study was to assess financial, emotional & social impact of heart disease on families of Punjab, Pakistan. The study was conducted at Nawaz Sharif Cardiology Center, Sargodha, the purposive sampling method was used to select the 15 family caregivers of heart disease patients. Data were gathered in Urdu and Punjabi using semi-structured interviews, analyzed using Braun and Clarke's thematic analysis method. Five major themes emerged from the findings: financial burden, emotional stress, social isolation, role strain of caregivers & coping with policies. The cost of treatment, such as medicines, hospital visits, lost income, transportation, debt and use of limited government health schemes were reported high by families. Emotional stress encompassed anxiety, fear of recurrence of disease, depression, sleep disturbances and worries about patient health. There was also a high level of role strain among caregivers because of their multiple roles in patient care and in their home. The study finds that heart disease is a multidimensional burden on the family, and therefore, there is need for integrated financial, emotional & social support systems in Pakistan.

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INTRODUCTION

Heart disease is a major global public health concern and a leading cause of disability, premature death, and family suffering. As part of cardiovascular diseases (CVDs), it includes conditions such as coronary heart disease, heart attacks, and heart failure. Globally, the cardiovascular diseases are the leading cause of death. It has also social, and economic consequences for patients and families

(World Health Organization, 2025). Heart disease affects the whole family in Pakistan as family is usually the first to look after the patient who suffers the disease, so this has a significant impact on the family financially, emotionally, in terms of the normal family routine and on income (Rafique, Saqib, Munir, Qureshi, Rizwan & Khan, 2018). The cardiovascular diseases are a major problem in the Punjab, the most populous province of Pakistan, and studies have shown that the prevalence of cardiovascular diseases is substantial throughout province (Zubair, Nawaz, Nawaz, Nangyal, Amjad & Khan, 2018).

These costs can also put significant strain on household finances, particularly for low-income and middle-income households, and can lead to reduced access to care, borrowing, or even selling assets to afford treatment (Naz, Ghimire, Zainab & Memon, 2024). Caregivers also face financial pressures and are at risk of anxiety, fear, emotional fatigue, and social disruption. Previous research has shown that caring for heart disease patients can affect caregivers' emotional, social, financial, physical, and spiritual well-being relatively little attention has been given to its broader impact on the patients' families (Suksatan, Tankumpuan & Davidson, 2022). Despite these significant costs, limited research has examined the broader family burden of heart disease in Punjab. Hence, these financial, emotional and social effects on families need to be explored to develop active healthcare and support interventions. In addition to communicable diseases (CDs), non-communicable diseases (NCDs) such as heart diseases are also growing problem in Pakistan (Kazmi, Nagi, Razzaq, Hussnain, Shahid & Athar, 2022). Tobacco use, physical inactivity, unhealthy dietary habits, overweight and obesity, and hypertension are large risk factors, and are highly prevalent in the Punjab and Sindh (Rafique et al., 2018).

Cardiovascular diseases are especially prevalent in Punjab and according to the findings of the study conducted in 53 cities, there was quite a significant burden of cardiovascular diseases in rural as well as urban population (Zubair, Nawaz, Nawaz, Nangyal, Amjad & Khan, 2018). The financial burden was compounded due to the dependence on OOHP in Pakistan, where treatment expenses for medicines, diagnostic tests, hospitalization, specialist consultations, and long-term treatment are all shouldered by families (Naz et al., 2024). In addition to financial difficulties, heart disease can also be a heavy emotional and social burden on families. Caregivers may also be stressed, anxious, feeling fatigued, worried about the disease getting worse, and affected by the interruption of their social and family life. The stigma of caregiving impacts on physical, psychological, social, monetary and spiritual health of the caregiver (Suksatan et al., 2022). Even with these hurdles, little research has been conducted on the experience and impact of heart disease on families in Punjab. This study, therefore, aims to explore the financial, emotional, and social burden of heart disease on families in Punjab, Pakistan besides its lived experiences of caring for, coping with, and adapting to the shifting family roles.

Problem Statement

The heart disease is one of major causes of morbidity and mortality in Pakistan, besides burdening patients, the burden is also substantial on the families. In Punjab, the family members take care of treatment, management, emotional support and healthcare costs. These duties may lead to financial pressures, emotional stress, social isolation and disruption of family life. Although heart disease is

becoming a common problem, little research has been done on the family level and more is needed focused on medical aspect. There is huge knowledge gap regarding the socio-economic, emotional and social impact of heart disease on families in Punjab. Henceforth, this study aims to investigate the burden of heart disease in families of Punjab, Pakistan. In this linking, it also fills the gap for an evidence-based family-focused approach to heart disease interventions, healthcare policies as well as support services.

Research Objectives

1. To explore the economic burden of heart diseases on families in Punjab, Pakistan in terms of treatment cost, debt, unemployment, reliance on government schemes and challenges of rural or low-income families.
2. To discuss emotional and caregiving stress of families of patients with heart disease- anxiety, fear, depression, constant worry, taking medications, role strain, together with the family responsibilities.
3. To interpret social isolation, coping mechanisms& support needs of families with heart disease, like decreased family contact, no social support, coping mechanisms, government and formal health services expectations.

Research Questions

1. To examine that how does heart disease impose financial burden on the families in Punjab, Pakistan?
2. What are the emotional and care giving issues faced by the families when caring for a heart patient?
3. How does heart disease impact family socially & what coping and support systems do families have to respond to this burden?

LITERATURE REVIEW

Economic Burden on Families

In Pakistan, particularly in Punjab, families are burdened with huge financial losses due to heart diseases, which is a frequent out of pocket expenditure. Cardiovascular diseases are very expensive chronic diseases as they are condition which needs long-term drug therapy, regular hospitalization, diagnostic tests, as well as sometimes surgical procedures (Rahu, Fareed, Kumar, Dasti, Soomro & Panhwar, 2026). These costs are often higher than the families' income, which leaves them at risk of taking out loans, selling assets, or relying upon the informal loans (Haq & Awan, 2022). A study conducted in Punjab also reveals the financial instability of households due to catastrophic health expenditure among the cardiac patients and pressures on family members, affecting their quality of life, relationships, and overall well-being. (Sultan, Fatima, Kanwal & Khurram, 2017). Even though initiatives such as Sehat Sahulat Program have been launched, there are still loopholes in providing advanced cardiac care and extended treatment (Raza & Mahmood, 2022). Further, a reduction in income resulting from patient and caregiver unemployment puts a strain on economy particularly in rural settings with limited access to specialized health services (Jiang, Shi & Liu, 2025; Haq & Awan, 2025).

Emotional & Caregiving Stress

In addition to the financial burden, caregivers also experience a lot of emotional distress such as anxiety, depression, fear of sudden death, and constant worry about the patients' health (Rahman, Gasbarro & Alam, 2022). Prolonged fatigue, sleep disturbances and poor self-health are reported as common symptoms of role strain, especially among women who are primarily responsible for the childcare (Sultan, Fatima, Kanwal & Khurram, 2017), and which related to caregiver roles. Stress increases when people are admitted to hospital in an emergency or if they have the cardiac event more than once. It also investigates the emotional burden experienced by family members, such as stress, anxiety, depression, fear, uncertainty, and caregiver fatigue. The studies reveal that heart disease imposes a substantial and interconnected burden on families. Financial hardship resulting from treatment costs and reduced household income frequently intensifies emotional distress and limits the social functioning. In this linking, the caretaker training is another factor that adds to psychological burden & decreases their trust in home-based care (Ali & Hussain, 2019). Emotional distress generally negatively affects caregivers' quality of life & family functioning (Datta, Husain & Asma, 2019).

Social Isolation, Coping & Support

Heart disease also has an impact on family social life, where social isolation may occur for a variety of reasons including time, stigma and financial constraints (Shah & Mirza, 2020). Some coping mechanisms are positive, such as the use of religion to cope, family support, acceptance (Khan & Batool, 2021), while others are negative, such as denial and emotional suppression (Ahmed et al., 2020). There is a need for supportive services such as counselling, financial support, and caregiver education programs as demonstrated in literature (Sultan, Fatima & Kanwal, 2018), but integrated psychosocial services are not seen in the healthcare system in Pakistan (Raza & Mahmood, 2022). Family and community-based coping mechanisms are important but formal support systems are necessary to alleviate the burden of the caregiver and enhance the outcomes (Haq & Awan, 2022). At the same time, strong family bonds, religious faith, and community support emerge as important coping mechanisms that help families adapt to these challenges. The literature as a whole reveal that heart disease in context of Punjab has a multidimensional impact on family, both in economic, emotional and social aspects. These high treatment costs, emotional care-giving strain and social isolation all underscore the need for the comprehensive healthcare policies that care for patients as well as caregivers.

Theoretical Framework

The sociological and psychological theories about family burden in the chronic illness serve as the guidelines for this study. According to the social determinants of health framework, socioeconomic factors likewise income, education and health care access influence health outcomes (World Health Organization, 2010). The problems of poverty and lack of access to cardiac care add to the burden of families in Punjab, Pakistan. The Family Stress Model posits that economic stress results in emotional stress and dysfunction in the family (Conger, Ge, Elder, Lorenz & Simons, 1994). The financial costs of heart disease are higher and place stress and strain upon families. The caregiver burden theory emphasizes that the caregiver feels emotional, physical and social stress from the prolonged care of the patient (Zarit, Reever & Peterson, 1980). In this connection, this is a typical family of someone

with heart condition. Thus, transforming coping strategies to deal with stress might include religion coping or avoidance (Lazarus & Folkman, 1984). Also, the religious coping is prevalent in Pakistan. Therefore, social support theory focuses on the idea that emotional and practical support decreases the amount of stress experienced by caregivers (House, 1981). But there is not any formal support system in Pakistan.

Research Gap

The previous studies carried out in Pakistan have largely concentrated on one of the three aspects financial burden, psychological distress or social issues (Naeem et al., 2020; Shah & Mirza, 2020). In this linking, there are very few studies that combine all three dimensions in the particular context. There is a significant knowledge deficit regarding the economic, emotional and social burden of heart disease upon the families in Punjab, Pakistan. Correspondingly, there has been little research that investigates coping and absence of formal support systems in this population. Consequently, this study seeks to close this gap by linking together the sociological approach to cardiac disease family burden.

RESEARCH METHODOLOGY

This qualitative exploratory study examined financial, emotional and social impact of heart disease on families in Punjab, conducted at NSCC, Sargodha, from January to March 2024, study involved 15 family caregivers selected through purposive sampling. Semi-structured interviews conducted in Urdu and Punjabi and analyzed using Braun and Clarke (2006) thematic analysis approach. Thus, participants were primary caregivers providing care for at least three months. Interviews explored treatment costs, emotional stress, social support, caregiving responsibilities, and coping strategies. Data transcribed verbatim, coded, and organized into themes. Five major themes emerged: financial burden, emotional stress, social isolation, caregiver role strain, and coping and policy implications. Ethical standards maintained through informed consent, confidentiality, and the use of participant codes (P1–P15).

Socio-Demographic

The socio-demographic profile of the participants reveals that majority of the caregivers belonged to rural area, low economic status and in joint families. There were 9 rural and 6 urban participants. Most participants were between 36 and 45 years of age and responsibilities of caring for the person were primarily shared with adult household and economic responsibilities. Educational attainment was mostly low with only one person having bachelor's degree or higher. Unemployed, housewives and informal wage workers were majority of participants. The results of this profile show that care giving was significantly influenced by economic hardship, low education and few opportunities for stable employment.

Table 1 Socio-Demographic Overview of Participants (N = 15)

Dimension	Category	Frequency
Residence	Urban	6
	Rural	9
Age	26–35 years	4

	36–45 years	7
	46–55 years	4
Education	Illiterate	3
	Primary	5
	Secondary / Matric	4
	Intermediate / FA	2
	Bachelor or above	1
Employment	Unemployed / Housewife	8
	Informal / Daily wages	5
	Formal / Private job/Govt job	2
Monthly Income	Below Rs. 20,000	6
	Rs. 20,000–40,000	7
	Above Rs. 40,000	2
Relationship with Patient	Spouse	6
	Son / Daughter	5
	Sibling / Other	4
Family Structure	Joint	10
	Nuclear	5

As can be seen from table that majority of the caregivers were financially and socially vulnerable. The monthly income of the majority of homes was under or at the median of Rs. 20,000 and Rs. I earn between Rs.40,000 and 45,000 for the past one year, only two participants reported an income over Rs. 40,000. This is significant because there is the need to spend consistently on medicines, diagnosis, transport, and on-going visits for the cardiac treatment. In this connection, 10 participants from an extended family indicated that there were joint families, but not always providing emotional or the financial assistance. In this regard, this was evident in the themes of social isolation and of caregiver role strain.

Thematic Analysis

Thematic analysis was used to analyze qualitative data. Findings showed that families in Punjab, Pakistan suffer from a multidimensional burden as a result of heart disease. The five major themes were financial burden, emotional stress, social isolation, coping with role of caregiver, policy related coping strategies. These themes are indicative of complex economic, psychological & social issues faced by caregivers.

Table 2 Themes, Sub-Themes & Codes

Theme	Sub-Themes	Key Codes
Financial Burden	Treatment cost, debt, unemployment, transport cost, rural access issues	Loans, high medicine cost, monthly expenses, health card limitations
Emotional Stress	Anxiety, fear, depression, uncertainty, sleep disturbance	Fear of death, tension, insomnia, emotional distress
Social Isolation	Reduced family contact, lack of support, neglect	No visits, abandonment, emotional distance
Caregiver Role Strain	Multiple roles, workload, lack of training	Dual responsibilities, fatigue, medicine management

Coping & Policy Needs	Government support, informal coping, financial survival strategies	Asset selling, loans, free medicines, insurance demand

Theme 1: Financial Burden

Participants expressed high level of concern about financial burden. Heart disease was a recurring financial burden, not just hospital bill, for families. Common expenses were drugs, tests, checkups, transportation, and emergencies. Wherein the state provides some assistance, treatment costs were still a burden upon the family. "One has to spend Rs. 8,000-Rs. 10,000 almost every month just on medicines and treatment and after paying these costs there is no money for food, utilities and other goods." Another caregiver explained: "So when we found we had no choice but to take loans as we were unable to pay for the hospital visits and medicines as well as our household expenses." (CG-2). The above stories illustrate the financial burden of cardiovascular disease in families. There was a lot of borrowing from, cutting down on expenses within home or postponing other family expenses. The results are in line with past research finding that chronic conditions & cardiovascular diseases are associated with out-of-pocket spending and can lead to catastrophic health spending for poor households (Xu et al., 2003; Datta et al., 2019). For rural and low-income families, burden seemed to be greater in the context of Punjab, as additional expenses of traveling and frequenting hospitals were also a cost.

Theme 2: Emotional Stress

Emotional stress was also high among the participants. Fear, anxiety, sleep disturbance and constant worry about patient's condition were described by the caregivers. Many caregivers were mentally alert all the time because of the risk of sudden cardiac event. "There is constant tension in my mind and I can't sleep properly since every time I think, 'might have another attack." Another caregiver stated: We are living in world of fear, stress, sleeplessness and depression. When the patient appears to be stable, the concern doesn't go away. (CG-7). These remarks make it clear that emotional stress was not a one-off situation, but a day-to-day part of caring. Medicines, diet, hospital appointment and emergency decisions required to handle by caregivers that led to an add-on burden on their mental health. This is corroborated by Schulz and Sherwood (2008), revealed that when caring for others, it tends to be a source of chronic stress and can impact emotional health. The study further notes that low psychological counseling & low formal support to caregivers adds to emotion stress in context of Punjab.

Theme 3: Social Isolation

While most of the participants were residing in extended/fellow family, they indicated that they received not much support from their family members in terms of practical and emotional support. This demonstrates that being there with the family member is not always helpful. "We have less contact with the relatives; people do inquire about the patient but no one comes regularly to assist with care or visits to the hospital." Another participant shared: "We live with our families, but when we need help, nobody is available to help." (CG-9). The reactions indicate that family members' experiences of being socially neglected were expressed in spite of their belonging to larger family networks. They had constraints on their social life because of the responsibilities they bore in caring for the patient, as well as financial constraints and anxiety about leaving patient without someone

to care for him/her. Social support has been found to be important in decreasing the burden among caregivers and enhancing family wellbeing for families coping with cardiovascular disease (CVD) in previous studies (Sultan et al., 2018). The present study points out the gap between two cultures, namely that there can be joint family structure but it does not mean that it is able to offer a reliable caregiving support.

Theme 4: Caregiver Role Strain

There was a high level of endorsement for concept of role strain in the caregiver. It was a challenge for the participants, particularly woman caregivers, to solve many problems simultaneously. These included looking after patient, doing household chores, children's duties, arranging finances and hospital visits. "I have to take care of the patient, care for children, do housework and make hospital visits, mostly alone, which makes me feel physically and mentally exhausted." Another caregiver explained: "Each day is a chore ~ there is no sleep time for me, no routine time to take care of myself, no one to take responsibility for me." (CG-11). The role overload and lack of shared responsibility in families are evident in these statements. The care work was transformed into an invisible as well as unpaid labor. The results are similar to Zarit et al. (1980) who found that caregiver burden was one of the significant consequences of long-term care giving. Lack of training, lack of assistance at home and uncertainty over emergency management were utilized in this study as a means of promoting the role strain.

Theme 5: Coping Strategies and Policy Expectations

Various coping mechanisms were employed when facing financial and emotional stress. These ranged from loans and asset sales to cutting household spending and turning to religion for support. Most strategies were survival based, however, and not long term. Selling jewelry was a necessity for the hospital bills as there was no other way to pay." The participants had very definite expectations of the government and the health care system: "It is government's duty to help families such as ours because treatment is costly & poor families are unable to afford long-term treatment." (CG-15). The medicines should be free or they should be cheaper, otherwise people have to buy medicines every month, but cannot pay one hospital bill. (CG-4). These findings demonstrate that families require financial protection beyond hospital, affordable medicines, counseling and guidance of caregivers, and hospital support. Reliance on borrowing and sale of assets is sign of low social protection against chronic diseases. The same is true for studies on health spending, long-term treatment expenses lead towards financial insecurity for the families in low- and middle-income countries (Xu et al., 2003; Datta et al., 2019).

DISCUSSION

The aim of this study was to assess the financial, emotional and social effects of heart disease of families in Punjab, Pakistan. The results indicate that heart disease is not just a clinical problem of the patient, but also a family-level crisis, impacting on income, emotional health, relationship and everyday responsibilities. One of greatest results was financial one. Families mentioned multiple purchases of medication, multiple visits to a health center, multiple trips to hospital and multiple transportation expenses. Numerous had to borrow money, cut back on household spending or sell personal property. These reflect studies which found that CVD and chronic diseases result in high

out-of-pocket costs and catastrophic health spending, particularly in LMICs (Xu et al., 2003; Datta et al., 2019). The present study reinforces this local evidence from context of Punjab at least partial healthcare support was not enough to buffer families from long financial difficulties. Research also revealed emotional stress, fear, disturbed sleep and depression-like emotions of the caregivers. The results agree with Schulz and Sherwood (2008) who stated that family caregiving can be a chronic stress experience.

In this study, caregivers' worry regarding sudden cardiac complications was ever present and added to their sense of emotional stress. Lack of formal psychological support compounded the situation to leave caregivers to deal with distress alone. Feelings of social isolation were apparent in participant comments. In all multi-generational family systems, caregivers indicated low practical support from family. This discovery is significant as it goes against notion that extended families are always supportive. Past studies on social support of cardiac patients have revealed that caregiver burden is decreased, caregiver well-being improved with perceived social support and community-based support initiatives to reduce burden of cardiovascular disease. (Sultan et al., 2018). Weak family support was found to be emotionally stressful and to lower coping ability, in present study. Another significant problem was struggle of a caregiver. Female carers, particularly wives and daughters, were required to care for the patients whilst doing domestic chores, taking care of the children and managing finances.

This discovery is consistent with previous studies on the role strain of caregivers, which indicates that long-term care giving can lead to role overload, physical fatigue and emotional distress (Zarit et al., 1980). Lack of training and limited professional guidance to home-based care is an example of the role strain added in this study. The results demonstrate that burden of heart disease is multi-faceted. The financial burden raises emotional stress, that social support is lacking raises caregiver fatigue and the lack of policy support makes families reliant on other sources of financial support, like borrowing, selling assets, and sacrificing of personal resources as important coping mechanisms that help families adapt to these challenges. Heart disease be treated not just as medical issue, and that's way it ought to be treated. It should be considered as social and family problem. Strategies are required to mitigate hidden burden on the family in Punjab to access affordable medicines, better government coverage, educate caregivers & provide psychological counseling and robust support system in community.

CONCLUSION

This study highlights that the burden of heart disease is multidimensional in families in Punjab, Pakistan, which is significant. These results show that treatment costs, medicines and transport fees cause a constant financial strain on families, and in many instances, they lose their income. Anxiety, fear and depression are other forms of emotional stress that are prevalent amid caregivers, primarily because of the constant responsibility and the absence of emotional support. Further, social isolation and role strain for caregiver add to family burden. The research contributes to chronic illness, family caregiving & public health by providing evidence-based insights that can inform healthcare policy and improve support services for families affected by heart disease in Pakistan. In general, as it can

be seen that heart disease not only impacts health of patients, but economic, emotional and social health of families.

Recommendations

1. There should be psychological counselling and support of the caregivers in cardiac hospitals.
2. Training programs should be designed for caregivers to enhance their skills in providing care in the comfort of their own homes and handling emergency scenarios.
3. Social isolation and burden of caregivers should be minimized by engaging community and family support systems.
4. Low-income & rural families with heart disease should be granted special financial assistance and/or subsidies.

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