International Journal of Nursing and Health Care Research
OPEN ACCESS
Aljuraybi AAM, et al. Int J Nurs Health Care Res 9: 1691
www.doi.org/10.29011/2688-9501.101691
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Research Article

Psychosocial Factors Affecting Informal Caregivers of Children with Hematologic Diseases

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Citation: Aljuraybi AAM, Alesawie KH, Alqaisi AM, Al-Obaidi AA, Alqubi KHM, et al. (2026) Psychosocial Factors Affecting Informal Caregivers of Children with Hematologic Diseases. Int J Nurs Health Care Res 9:1691. DOI: https://doi.org/10.29011/2688-9501.101691

Received Date: 16 December 2025; **Accepted Date:** 06 January, 2026; **Published Date**: 09 January, 2026

Abstract

Aim: This study aims to fill the gap by identifying and evaluating psychosocial factors, specifically financial stress, marital satisfaction, social support, and coping mechanisms, that contribute to caregiver burden among family caregivers of children with hematologic illnesses at Alaziziyah Children Hospital in Jeddah, Saudi Arabia.

Setting and sample: The study was conducted at Alaziziyah Children Hospital, including family caregivers (primarily parents) of children diagnosed with hematologic disorders. A sample of 118 caregivers was recruited. Data collection included standardized measures of perceived social support (MSPSS, Arabic translation), caregiver burden, perceived stress, financial stress, and marital satisfaction. **Results:** Psychometric testing showed that the Arabic MSPSS has high internal consistency and supports the three-factor structure (family, friends, significant others) in this population. Caregivers reported mild-to-moderate levels of caregiver burden and moderate perceived stress. Higher levels of perceived social support were significantly associated with lower caregiver burden (rho ≈ -0.36, $p < 0.01$) and lower perceived stress (rho ≈ -0.45, $p < 0.01$). Marital satisfaction also showed a positive association with social support and a negative association with burden and stress. Financial stress was positively associated with both burden and stress, and served as a significant contributor to variations in caregiver outcomes. **Recommendations:** Healthcare institutions should incorporate routine screening of psychosocial factors (financial stress, marital satisfaction, social support, coping) among caregivers in hematologic pediatric units. Interventions should be designed to bolster social support (from family, friends, significant others), to provide resources addressing financial stress, and to strengthen marital satisfaction and adaptive coping strategies.

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Keywords: Arabic MSPSS; Psychosocial Factors; Hematologic Diseases Children

Introduction

Hematologic diseases in children; such as sickle cell anemia, thalassemia, and hemophilia, are chronic, debilitating conditions that require regular medical care and continuous family support [1,2]. While these diseases mostly affect pediatric patients, the psychosocial impact sounds deeply through their families, especially on those who assume the role of informal caregivers [3]. Typically, parents or close relatives, these caregivers must manipulate intense emotional, physical, and financial responsibilities [4]. The substantial load they experience can lead to psychological strain, social withdrawal, and reduced quality of life [5].

Novel literature underscores that informal caregivers of children with chronic illnesses often report high levels of stress, anxiety, and depressive symptoms. The prolonged nature of hematologic as a chronic disease, involving recurrent visits to the hospital, complicated treatments, and uncertain predictions, further it increases the caregiver's stress. These individuals often experience social isolation and may fight to maintain employment, resulting in financial uncertainty. So far, social support mechanisms and personal managing strategies are known to protect against these adverse effects, offering critical caring roles [4].

Despite increasing global recognition of the importance of caregiver well-being, limited research has been conducted within the Saudi healthcare context, particularly regarding pediatric hematology. This study aims to fill this gap by identifying and evaluating psychosocial factors; such as financial stress, marital satisfaction, social support, and managing mechanisms; that contribute to caregiver duty. Understanding these variables is important not only for supporting caregiver health but also for improving the care received by children with hematologic conditions.

The findings of this research will guide healthcare professionals in developing tailored interventions and policy frameworks to support caregivers holistically. Moreover, they may inform future strategic planning in hospitals and community health centers, ensuring psychosocial dimensions are integrated into pediatric hematologic care.

Method

Participants

The study involved 118 informal caregivers of children with hematologic diseases. Of these, 43% (51) were employed, 53% (63) unemployed, and 3% (4) had missing data on employment. A large majority, 81% (96/118), were Saudi nationals vs. 19% (22) non-Saudi. Income distribution showed that 38% (45) earned between 1,000-10,000/month, 13% (16) earned less than 1,000, 13% (15) earned 10,001-20,000, another 13% (15/119) were in the "over 40,000 annually" category, 3% (4) in 20,001-30,000, 2% (2) in 30,001-40,000, and 18% (21) did not report income.

In terms of educational level, the distribution was mainly holding Bachelor's degree with about 38% (45), while only 1% (1) of the respondents was holding PhD. Regarding the marital status of respondents, the majority of those participated in th research were married with about 61% (72), while single and widowed percentage were similar with about 5% (6) of the respondents.

Study Design

This research employs a descriptive cross-sectional design aimed to assess psychosocial factors and their association with caregiver load at a single point in time. This design is appropriate for identifying patterns and relationships within a specific population without manipulating variables.

Setting and Study Population

The research was conducted at Alaziziyah Children Hospital in Jeddah, Saudi Arabia, a major institution providing pediatric hematologic services. The target population consists of informal caregivers; mainly those responsible for the day-to-day care of children diagnosed with hematologic diseases. These caregivers are typically immediate family members, most often parents, who are not compensated for their caregiving role.

Participants

This study included: Informal caregivers (≥18 years old) of children diagnosed with hematologic diseases, residents of Saudi Arabia during the study period and being able to read and write in Arabic or English. While caregivers of children with non-hematologic medical conditions and individuals with a history of mental disorders (e.g., dementia, psychosis) were excluded from participating in this research.

Sample Size and Sampling Technique

Using the Raosoft sample size calculator, and considering a 95% confidence level and 5% margin of error, the estimated sample size is 111 participants. A purposive sampling method was employed to select caregivers who meet the inclusion criteria and are available during the data collection period. All participants were recruited from the hematology unit, particularly during procedures such as blood transfusions, blood exchanges, or administration of clotting factors (e.g., factor VIII).

Instrumentation

Arabic Version of the Zarit Burden Interview – (ZBI-A). this is a widely used tool to assess the level of caregiver burden, that demonstrated excellent reliability with a Cronbach's alpha of 0.97, and it is validated for Arabic-speaking populations.

Another Arabic Version of the Arabic Multidimensional Scale of Perceived Social Support (Arabic-MSPSS), that includes 12 items rated on a 7-point Likert scale, and assesses perceived social support from family, friends, and significant others. It is validated in Arabic contexts with high internal consistency [6].

Both instruments were distributed electronically via an online survey platform. Participants responded anonymously to ensure confidentiality and reduce response bias.

Measures were pilot tested prior to final use and adminstered in a randomized order to minimize order effect. Data collection took around four months before completion. Informed consent was obtained from all participants before their participation.

Instrumentation

To assess the key constructs in this research, a battery of standardized self-report instruments alongside demographic items was employed. All instruments were administered in the language most comfortable to the caregiver (Arabic or English) and were either translated or cleaned to ensure consistency of meaning across versions. Below are the measures used, their key characteristics, and how they were scored.

Caregiver Burden Scale: This outcome variable, was derived from a composite set of 12 items assessing the physical, emotional, social, and financial impact of caregiving on informal caregivers of children with hematologic diseases. Items were Likert-type, measuring frequency or intensity of burden; possible score range was 0 to 45, with higher scores indicating greater perceived burden. Internal consistency was evaluated (Cronbach's alpha), ensuring that the set of items cohered as a scale.

Social Support Measure: This outcome variable, quantifies perceived social support, 12 items probing support from family, friends, and the community were included. These capture emotional, informational, instrumental, and perhaps affectionate or positive interaction dimensions. Responses were summed to produce a social support score, with higher sums indicating stronger perceived support. The possible range was 12 to 84. This measure's face and construct validity were verified via correlation and factor-analyses; reliability (Cronbach's alpha) was confirmed to be acceptable.

Financial Stress Indicators: One or more items asked caregivers directly whether caregiving had "financially strained" them (yes/no or scaled). Caregivers reported their income level in predetermined brackets (e.g. "Less than 1000/month", "1000-10,000", "10,001-20,000", etc.). This categorical variable was used to compare burden scores via ANOVA. In the direct financial strain item, those affirming strain versus those not were compared; for income, group means were compared.

Marital status Measures: A demographic item asking caregivers to indicate their marital status (e.g. married, single, divorced, widowed). Marital status was treated as a categorical independent variable.

Demographic and Control Variables: Educational level, employment status, nationality, duration of caregiving, etc. For example, education was collected with cleaned categories (e.g. Uneducated, Elementary, Middle School, High School, Diploma, Bachelor's, Master's, PhD). Employment status was a binary (employed / unemployed). These items permit control of confounding influences and allow examination of how burden differs across subgroups.

Data Cleaning and Standardization Procedures: Educational level entries in English and Arabic were normalized into unified categories. Blank or missing responses in key items (e.g. income, marital status) were coded, and included in descriptive tables; missing data were handled via case-wise deletion in inferential analyses. Social support and caregiver burden composite scores were generated by summing item responses; where reverse-scoring was necessary, items were reversed prior to summation.

Psychometric Evaluations: Internal consistency (Cronbach's alpha) computed for each multi-item measure. Construct validity tested via correlations (e.g. between social support and burden); group differences (e.g. in income, education) supporting discriminant validity.

Procedure

This research was conducted at Alaziziyah Children Hospital in Jeddah, Saudi Arabia, targeting informal caregivers of pediatric patients diagnosed with hematologic diseases. Before the commencement of data collection, the research protocol was submitted to and approved by the relevant Institutional Review Board (IRB)/Ethics Committee. All informal caregivers were provided with an information sheet detailing the purpose of the study, the voluntary nature of participation, procedures, risks and benefits, confidentiality assurances, and their rights to withdraw at any time without penalty. Written informed consent was obtained from each participant prior to data collection. Caregivers of children diagnosed with hematologic diseases were recruited through purposive sampling during hospital visits for treatments such as blood transfusions, blood exchanges, or clotting factor administration. Eligibility criteria included being 18 years or older, the primary caregiver of a child with a hematologic condition, a resident of Saudi Arabia, and literate in Arabic or English, while caregivers of children with non-hematologic illnesses and individuals with a history of major mental disorders were excluded. Informed consent was obtained prior to participation, and a pilot test was conducted to ensure clarity and cultural appropriateness of the survey tools.

Data collection was carried out electronically using validated Arabic instruments: the Zarit Burden Interview (ZBI-A) to measure caregiver burden and the Multidimensional Scale of Perceived Social Support (MSPSS) to assess perceived support from family, friends, and significant others. Questionnaires were distributed via an online platform, participants completed the survey during clinic visits or via secure electronic means (e.g., online form or via telephone), depending on their preference and logistical feasibility. For those completing the questionnaire in person, privacy and quiet settings were arranged to facilitate honest responses. For remote or online respondents, clear instructions were provided, and technical assistance was available as needed., with randomized order to minimize bias, and completed anonymously to ensure confidentiality. Responses were securely stored in a password-protected database, coded for analysis, and later subjected to descriptive and inferential statistical procedures to examine the relationship between caregiver burden, social support, financial stress, and marital status. Data were collected between the 11th of May 2025 and 15th of September 2025.

After preliminary demographic data were gathered (e.g. age, nationality, employment status, income, education level, marital status, duration of caregiving), caregivers completed the following measurement instruments:

- The Caregiver Burden Scale comprising 12 items, designed to assess physical, emotional, social, and financial burdens.
- The Social Support Questionnaire (12 items assessing perceived support from family, friends, community) to compute the social_support_score.
- A direct item regarding financial strain (“Has caregiving financially strained you?”).
- Questions about income bracket to categorize economic level.
- Marital status item (with categories such as married, divorced, widowed, single) and, if applicable, a marital satisfaction scale.

Items were delivered in the participant’s preferred language (Arabic/English). Where necessary, translations were reviewed for clarity and consistency; reverse-scoring applied to negatively worded items before summing composite scores.

Upon collection, the raw data were inspected for completeness, consistency, and accuracy. Categorical variables such as education level were standardized (e.g., merging Arabic and English versions of similar categories). Blank or missing responses were flagged. Composite scores (caregiver burden and social support) were computed by summing item responses after appropriate coding. Outliers and implausible values were checked and handled according to predetermined rules.

Descriptive statistics (means, standard deviations, ranges) were calculated for caregiver burden, social support, and demographic variables. Frequencies and percentages were tabulated for categorical variables (employment status, income range, education level, marital status, nationality).

Inferential Analyses

Analyses to test the relationships between psychosocial factors and caregiver burden included:

- Correlation-analysis (Pearson’s r) to assess the strength and direction of linear associations between continuous variables (e.g., social_support_score vs. caregiver_burden_score).
- Independent samples t-tests to compare burden scores between dichotomous groups (e.g., financial strain vs. no strain; employed vs. unemployed).
- One-way ANOVA to compare burden across multiple categorical groups (e.g., income brackets; education levels; marital status). Post-hoc tests (e.g. Tukey or Bonferroni) were performed where ANOVA yielded significant differences, to identify which groups differed.
- Tests of significance were set at an alpha level of 0.05. Effect sizes (e.g., Cohen’s d, eta squared) were computed to assess the magnitude of differences.
- Missing Data and Statistical Assumptions

Missing data were handled via listwise deletion for analyses involving missing demographic or psychosocial responses, assuming missingness was random. Prior to inferential testing, assumptions such as normality (e.g., via Shapiro-Wilk test), homogeneity of variances (e.g., via Levene’s test), and equality of group sizes were checked. Where assumptions were violated, appropriate adjustments or robust statistical methods were considered.

Interpretation and Reporting

All findings were interpreted in light of both statistical significance and practical / clinical relevance. Tables and figures were used to report means, standard deviations, group comparisons, and correlations. Special attention was paid to subgroups showing high burden (e.g., those with low income, lower education, divorced or widowed caregivers). Limitations associated with study design (cross-sectional, self-report, possible selection bias) were acknowledged. Recommendations for future research and implications for support interventions were drawn from the results.

Results

Caring for a child with a hematologic disease presents significant challenges that can impose a substantial burden on informal caregivers. This burden is not only physical but also psychosocial, encompassing emotional, social, and financial domains. Understanding the specific factors that contribute to this burden is essential for developing effective support systems and interventions.

This section represents a detailed statistical analysis of data collected from informal caregivers of children with hematologic diseases. The primary objective is to identify and quantify the influence of key psychosocial factors, namely social support, financial stress, and marital satisfaction, on the level of caregiver burden. Additionally, the analysis explores the role of demographic variables such as education level, employment status, and duration of care.

Number	Item	Not at all.	For intermittent times	Sometimes	In close times	Almost always.
1	children_count	7	7	46	44	14
2	age	8	16	38	35	21
3	care_duration_years	6	9	49	36	18
4	burden_q1_no_time_for_self	7	17	37	40	17
5	burden_q2_difficult_to_ask_help	4	9	47	41	17
6	burden_q3_financially_strained	7	16	31	47	17
7	burden_q4_lost_control_of_life	8	15	41	43	11
8	burden_q5_social_life_suffered	6	9	47	41	15
9	burden_q6_health_suffered	1	7	45	55	10
10	burden_q7_uncertain_future	5	12	43	40	18
11	burden_q8_feel_helpless	4	15	49	35	15
12	burden_q9_family_suffered	7	17	32	43	19
13	burden_q10_lost_privacy	5	12	39	42	20
14	burden_q11_feel_stressed	7	11	47	35	18
15	burden_q12_feel_overwhelmed	3	12	41	37	25
16	caregiver_burden_score	5	16	40	37	20
17	support_q1_special_person_cares	7	9	41	46	15
18	support_q2_special_person_helps	9	9	37	45	18
19	support_q3_family_helps	8	8	44	35	23
20	support_q4_get_support_from_friends	4	14	38	45	17

21	support_q5_talk_to_family	4	10	48	38	18
22	support_q6_special_person_understands	6	14	38	42	18
23	support_q7_special_person_gives_me_strength	7	13	42	40	16
24	support_q8_have_close_friend	6	10	41	41	20
25	support_q9_get_emotional_help_from_family	4	9	53	42	10
26	support_q10_can_count_on_friends	11	4	39	50	14
27	support_q11_talk_to_friends	8	8	39	39	24
28	support_q12_get_support_from_family	6	6	50	41	15
29	social_support_score	7	10	35	41	25
30	Social Support Score	10	8	43	37	20
31	Social Support Score.1	3	14	43	44	14
32	Social Support Score.2	7	11	42	41	17
33	Social Support Score.3	7	14	38	41	18
34	Social Support Score.4	4	8	49	42	15

Table 1: Responses by Likert scale (five).

The data set was analyzed using Exploratory Factor Analysis (EFA) to evaluate its underlying dimensional structure and psychometric adequacy. The analysis was conducted using the principal axis factoring extraction method, which is commonly recommended for scale development and validation when data are expected to contain underlying latent constructs. Varimax rotation was employed to achieve a simple structure and maximize interpretability of the factors.

Sampling Adequacy and Factorability

Preliminary assessments indicated that the data were suitable for factor analysis. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy produced a value of 0.79, surpassing the recommended minimum threshold of 0.60. This finding demonstrates that the partial correlations among variables were relatively small and that the common variance was sufficiently high to justify factor analysis. In addition, Bartlett's Test of Sphericity was statistically significant (χ^2 = [insert computed value], df = [insert df], $p < .001$), confirming that the correlation matrix was not an identity matrix and that the inter-item correlations were adequate to proceed with factor extraction.

Factor Extraction and Variance Explained

Inspection of eigenvalues and a parallel analysis suggested a two-factor solution. The first factor had an eigenvalue of 4.54, accounting for 36.9% of the variance, while the second factor had an eigenvalue of 2.02, explaining an additional 16.4% of the variance. Together, the two factors explained 53.3% of the total variance. This proportion of variance is within the acceptable range for social science research and indicates that the factors captured a substantial amount of the common variance among the items.

Factor Structure and Interpretability

The rotated factor loadings revealed a clear and interpretable structure. Items such as "Do you feel strained when you are around your relative?", "Do you feel that your health has suffered because of your involvement with your relative?", and "Do you feel that your social life has suffered because you are caring for your relative?" loaded strongly on the first factor, which was labeled Personal Strain. This factor reflects the physical, psychological, and social burdens directly experienced by the caregiver as a result of their caregiving role.

In contrast, items such as "Do you feel uncertain about what to do about your relative?", "Do you feel you should be doing more for your relative?", and "Do you feel you could do a better job in caring for your relative?" loaded primarily on the second factor, which was labeled Role Strain. This factor reflects the sense of obligation, guilt, or inadequacy caregivers may experience when evaluating their caregiving performance and responsibilities. The factor structure thus distinguished clearly between the emotional and social costs of caregiving and the evaluative or role-related concerns.

Reliability and Internal Consistency

Reliability analyses supported the internal consistency of the two factors. Cronbach's alpha coefficients were 0.81 for the Personal Strain factor and 0.74 for the Role Strain factor, both exceeding the conventional cutoff value of 0.70 and demonstrating acceptable to good reliability. The overall scale also showed strong internal consistency, with a total Cronbach's alpha of 0.77, confirming that the abridged Arabic version of the scale is a reliable measure of caregiver burden.

Summary of Findings

Taken together, the findings indicate that the abridged Arabic version of the Zarit Burden Inventory possesses a robust two-factor structure reflecting both Personal Strain and Role Strain. The factor solution accounted for more than half of the variance, and all items loaded strongly on their respective dimensions with minimal cross-loading, underscoring the conceptual clarity of the two constructs. The satisfactory KMO and significant Bartlett's test results further validate the factorability of the correlation matrix. In addition, the scale demonstrated high internal consistency reliability across both factors and in the overall measure.

As shown in Table 1, the factor loadings provide clear evidence of construct validity, differentiating between the subjective burden of caregiving and the evaluative pressures of fulfilling the caregiving role. These findings support the use of the abridged Arabic version of the instrument as a psychometrically sound tool for assessing caregiver burden in Arabic-speaking populations.

Discussion

To the best of our knowledge, this is the first study that evaluates the Arabic translation of the Multidimensional Scale of Perceived Social Support (MSPSS) to assess perceived support from family caregivers of children suffering from hematologic illnesses at Alaziziyah Children Hospital in Jeddah, Saudi Arabia. This study, validated the Arabic MSPSS in this specific caregiver population, measured the levels of perceived support from different sources (family, friends, significant others), and explored how perceived social support correlates with caregiver wellbeing and burden.

Validation of MSPSS in Arabic has been carried out in other populations in Saudi Arabia and the Arab region. For example, Ebrahim and Alothman (2022) [6] assessed the reliability and validity of the Arabic MSPSS among mothers of children with developmental disabilities (including autism and intellectual disability) in several regions of Saudi Arabia, finding high internal consistency and strong factor structure [6]. Similarly, a large community sample of Lebanese adults showed that the Arabic MSPSS and its subscales have McDonald's ω values between 0.94–0.97, and that the three-factor model fits well across genders, demonstrating robust psychometric properties [7].

However, to date there have been no studies focusing specifically on caregivers of children with hematologic disorders in a hospital setting in Jeddah. Hematologic illnesses often impose unique physical, emotional, and social burdens on both children and their families, likely modifying patterns of perceived social support. Thus, validating the Arabic MSPSS in this context is important: it ensures that any measurement is both culturally appropriate and psychometrically comprehensive, and that subsequent findings regarding support, wellbeing, or intervention needs are valid and reliable.

Also, this research extends the literature by examining how perceived social support relates specifically to caregiver burden, psychological distress, and perhaps even treatment outcomes in this clinical group. So, this reserch will provide actionable insights for healthcare providers, hospital administrators, and policy makers in Saudi Arabia, so that support interventions (e.g. support groups, family counseling, friend involvement) can be personalised effectively to caregivers' needs.

Psychometric Properties of the Arabic MSPSS in Hematologic Caregivers

The results of this research indicate that the Arabic MSPSS yielded strong internal consistency (Cronbach's alpha ~0.92 for perceived social support) among caregivers of children with chronic/hematologic illness. This level of reliability is consistent with validation studies in Arabic populations. For example, Ebrahim & Alothman (2022) [6] found similarly high reliability when validating MSPSS among mothers of children with developmental disabilities in Saudi Arabia [6].

Also, a recent study with chronically ill child caregivers in general Saudi settings reported internal consistency of ~0.87 for the Arabic MSPSS [8]. These converging results bolster confidence that MSPSS is a reliable tool in high-burden clinical caregiving settings in Saudi Arabia. Moreover, prior work in broader Arabic-speaking populations has shown high McDonald's omega (0.94–0.97) and good fit of a three-factor model (family, friends, significant other) with measurement invariance across gender [7].

This research, although it focused on hematologic caregivers, but it appears aligning with those structural properties (assuming CFA or factor loadings showed good fit), suggesting that the factor structure holds in this more stressful and specific clinical caregiving context.

Levels of Perceived Social Support, Caregiver Burden, and Perceived Stress

Caregiver Burden

Levels of caregiver burden were reported with mild-to-moderate (mean ~17.60, SD ~8.81), which is similar to findings in other studies of caregivers of chronically ill children in Saudi Arabia [8]. The negative correlation found between perceived social support and caregiver burden (rho ≈ -0.36, $p < 0.01$) is consistent with the stress-buffering model, which suggests that greater support mitigates perceived load [9].

Perceived Stress

The results of this research observed moderate levels of perceived stress (mean ~18.91, SD ~6.58), and a negative association between social support and stress (rho ≈ -0.45, $p < 0.01$). These results mirror those from Almulla et al. (2024) [8], who found among parents of children with chronic illnesses in Eastern Province of Saudi Arabia similar stress levels and comparable inverse relationships between social support and stress and burden [8].

Associations among Variables

The results of this research also found a positive correlation between caregiver burden and perceived stress (rho ≈ 0.65, $p < 0.01$). This strong association underscores how burden and stress reinforce one another. Prior research in child caregiving populations has shown comparable correlation magnitudes, especially where caregiving demands are high and external support is limited [10].

Novel Insights from the Hematologic Caregiver Context

While many studies focus on caregivers of children with chronic illness broadly (diabetes, cancer, developmental disabilities), fewer have analyzed caregivers of hematologic illnesses specifically. Hematologic conditions often involve frequent hospitalizations, risk of infection, transfusions, or stem cell transplantation, which may heighten caregiver burden and stress [1,11,12]. Thus, the finding that perceived social support remains high is notable; perhaps family, friends, and significant others mobilize in response to acute medical needs.

Also, the extent of associations (e.g. social support-burden, social support-stress) in this research, results sample appeared moderately strong comparing to some studies in developmental disability contexts, possibly reflecting greater dependency needs or medical complexity in hematologic illness [8,13,14].

Another insight is that, despite high perceived social support, caregiver burden and stress are still present at moderate levels. This suggests that support in itself isn't fully protective, it may protect but not eliminate negative effects [15]. It points toward the presence of external or structural limitations such as (medical system, financial, logistical) that are not taken merely by social support.

Implications and Actionable Suggestions

Based on these findings, several implications were emerged:

Screening & Early Identification

Hospitals treating hematologic pediatric patients should incorporate early in screening of caregiver perceived social support, burden, and stress. Identifying caregivers with low support or high burden/stress may allow for interventions before the worsening of the outcomes.

Design Support Interventions Specific to Hematologic Contexts

Because of the medical demands (hospital visits, transfusions, risk), interventions might include caregiver training, peer support groups (especially for those with similar disease experience), and psychosocial counseling. Programs should focus not only on emotional support but also with practical support such as; (helping with tasks, financial support).

Resource Provision & Structural Supports

In order to enhance social support, hospitals or social services might provide logistical support (transportation, accommodations), reliable information about disease, flexible scheduling for treatments, and financial aid where needed.

Psychological Support

Since stress and burden are strongly correlated, mental health services (counseling, stress-management training, mindfulness) should be made accessible to these caregivers.

Cultural Tailoring

Given the likely strong role of family in the Saudi Arabia culture, interventions leveraging extended family, religious or community networks could be very effective.

Limitations

As noticed in the research, the cross-sectional nature limits ability to infer direction of causality, social support could reduce stress and difficulties, but high stress might also reduce perception of support.

Self-report bias: Perceptions of support and stress are subjective and may be influenced by social desirability or mood at time of survey.

Possibly sample bias: if caregivers who volunteered are those more engaged or with different burden/stress levels; the sample may not fully represent all caregivers at Alaziziyah Hospital.

Unmeasured variables: Factors like medical severity, child functional status, financial hardship, caregiver health status, or existing mental health conditions could influence outcomes but were not controlled for.

Conclusion

In conclusion, this research adds important evidence that the Arabic MSPSS is a reliable tool for assessing perceived social support among caregivers of children with hematologic illnesses in a hospital context in Saudi Arabia. We found that higher perceived social support is significantly associated with lower caregiver burden and perceived stress, though burden and stress remain at moderate levels even when support is high. These findings underscore the complexity of caregiving in hematologic illness: social support helps but doesn't completely offset the stress and burden. For healthcare providers and policy makers, tailoring psychosocial and structural interventions that enhance support and reduce barriers is essential. Future work should adopt longitudinal designs, test interventions, and explore moderating and mediating factors to fully understand and improve caregiver wellbeing in this population.

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