



International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

SOCIOECONOMIC CHALLENGES AND HIV TREATMENT AMONG CHILDREN AT BWAILA-LIGHTHOUSE CLINIC, LILONGWE, MALAWI

Dr. T Velmurugan¹, Chifundo Chibweya²

DMI-St. Eugene University, Zambia

ABSTRACT :

Background: The socioeconomic conditions of households can shape children's continuity of HIV care, nutrition, transport to facilities and caregivers' capacity to manage treatment. Objective: This article examines socioeconomic challenges affecting households of children receiving HIV treatment at Bwaila-Lighthouse Clinic, Lilongwe, Malawi. Methods: The source study used a quantitative descriptive design and semi-structured questionnaires with 44 respondents; frequencies and percentages were reported. Results: Of the 44 respondents, 27 (61.4%) had primary education, 25 (56.8%) were self-employed and 17 (38.6%) were unemployed. Nineteen households (43.2%, calculated from the reported frequency) had monthly income of MWK 50,000–100,000 and 12 (27.3%) earned below MWK 50,000. Small business was the primary income source for 38 (86.4%). All 44 respondents reported easy access to healthcare, although economic vulnerability remained evident. Conclusion: The descriptive results indicate limited household economic resources alongside reported geographical or service access. They do not independently establish causal effects on medication adherence or nutritional outcomes. Integrated social protection, nutrition screening and caregiver support are recommended, alongside further research directly measuring child-level adherence.

Keywords: children living with HIV; socioeconomic status; antiretroviral therapy; caregivers; household income; Malawi; social determinants of health

1. Introduction

HIV treatment in childhood is both a biomedical and social undertaking. Antiretroviral therapy (ART) requires ongoing engagement with care, appropriate medication use, supportive caregiving and attention to the child's nutritional and psychosocial circumstances. The household environment therefore matters even where treatment services themselves are available.

Socioeconomic status encompasses household resources, education, employment security and living conditions. Limited income may constrain food purchases, transport, sanitation, communication and time available for clinic attendance. These pressures are especially consequential where caregivers support children who depend on adults for medicine collection, administration and follow-up.

The source thesis locates this problem at Bwaila-Lighthouse Clinic in Lilongwe District, Malawi. It considers the effects of socioeconomic difficulties on children receiving HIV treatment, with particular attention to adherence, access to food and challenges experienced by caregivers. This article preserves that focus while presenting only findings visible in the submitted document.

The study's descriptive survey of 44 respondents offers a useful local account of household socioeconomic characteristics. Nevertheless, a survey conducted at one clinic cannot by itself demonstrate that income or education caused particular treatment outcomes. Such conclusions require measured adherence and nutritional indicators, appropriate comparison groups and suitable analyses.

Accordingly, the article separates observed respondent characteristics from plausible pathways discussed in the literature. This distinction supports a more transparent and publishable interpretation of the available evidence.

2. Statement of the Problem

Although ART has transformed the management of HIV, children's sustained treatment engagement may be affected by circumstances beyond the clinic. Households with unstable livelihoods can face difficult trade-offs between food, transport, education and other essential needs. Caregivers may also experience competing work and family responsibilities.

The original research identifies treatment adherence, insufficient access to food and socioeconomic challenges experienced by caregivers as the central areas requiring investigation. These questions are important because the practical ability to follow treatment instructions may differ from the formal availability of HIV services.

The local evidence gap concerns the conditions of families attending Bwaila-Lighthouse Clinic and the extent to which those conditions coincide with difficulties in treatment management. The descriptive data available for this article characterize household economic vulnerability but do not contain the full subsequent analysis needed to quantify relationships between socioeconomic exposures and adherence.

The article therefore asks what the documented socioeconomic profile reveals, what interpretations are justified, and which service responses and future measurements would be most relevant to children and caregivers in this setting.

3. Objectives of the Study

The main objective was to analyse the impact of socioeconomic challenges on children receiving HIV medication at Bwaila Hospital in Lilongwe, Malawi.

- To assess the effect of socioeconomic challenges on drug adherence.
- To evaluate the effect of lack of access to food on drug intake by children.
- To determine the socioeconomic challenges experienced by caregivers of children living with HIV/AIDS.

4. Literature Review

4.1 Socioeconomic conditions and continuity of HIV care

Socioeconomic disadvantage can affect healthcare use through direct and indirect costs. Even when ART is provided without charge, families may incur costs for travel, missed work, communication, meals and management of other illnesses. For a caregiver dependent on daily informal earnings, attending an appointment may mean foregoing income.

The source thesis discusses poverty, insecure employment, transportation constraints and household living conditions as potential determinants of healthcare engagement. It also recognizes that economic vulnerability can interact with social and psychological pressures rather than operating through a single pathway.

Household education may influence health literacy and the interpretation of treatment information. However, educational attainment should not be equated with an individual caregiver's knowledge or competence without direct assessment. Clinic communication and understandable instructions are also important.

4.2 Food security and pediatric ART

Food insecurity can complicate care through hunger, household stress and reduced dietary diversity. A child's nutritional needs depend on age, health status and clinical advice. It is important not to assume that all ART medicines require food; administration instructions depend on the regimen.

The original study identifies inadequate food access as a key research objective, but the supplied portion of its results does not report a measured food-insecurity scale, dietary intake or an adherence-by-food-access analysis. Consequently, this article treats nutrition as a substantive concern requiring further measurement rather than a demonstrated outcome of the present sample.

4. Literature Review (continued)

4.3 Caregiving, stigma and psychosocial support

Children commonly rely on parents or guardians to obtain medicines, maintain schedules, navigate clinical appointments and respond to illness. The burden of care may intensify where households support multiple dependents, experience precarious employment or lack supportive social networks. Stigma and concerns about disclosure may further complicate clinic attendance and social support. Such experiences vary substantially between families and should be assessed directly rather than inferred from poverty or marital status.

The source thesis includes a broader review of patient-related, regimen-related, sociocultural and provider-related influences on adherence. These categories suggest that adherence is multidimensional and cannot be explained solely by household income.

Community-based support, caregiver counselling, peer networks and social-work referrals may address barriers that clinical prescribing alone cannot resolve. Their effectiveness, however, should be evaluated with locally relevant outcomes and careful attention to confidentiality.

4.4 Empirical and methodological gap

Much of the literature discussed in the thesis concerns broad HIV populations or adolescents rather than directly measured outcomes among children at the selected clinic. Local descriptive research can help identify contextual needs but should not be interpreted as evidence of causal mechanisms.

An additional limitation is the difference between caregiver-reported household characteristics and child-level clinical endpoints. Future studies should specify the unit of analysis, the age of the child, treatment duration, adherence measurement, viral-load indicators and nutritional assessment.

5. Theoretical and Conceptual Framework

5.1 Social Determinants of Health framework

The thesis explicitly adopts the Social Determinants of Health (SDH) framework. This perspective understands health outcomes as shaped by the conditions in which people live and the distribution of resources, opportunities and services. For children receiving HIV care, relevant determinants include household income, education, livelihood stability, housing, water, nutrition and access to care.

The SDH framework helps explain why access to ART may not eliminate inequalities in treatment experience. A family may report that the clinic is accessible yet still encounter difficulties with food security or the opportunity costs of routine visits. Such pathways are hypotheses for investigation, not causal findings established by the present descriptive data.

5.2 Conceptual model

The article operationalizes the thesis's conceptual approach as follows:

Socioeconomic context	Potential intermediate mechanisms	Outcomes requiring direct measurement
Income, employment, education	Food availability; transport costs; caregiver time; health literacy	ART adherence; retention in care
Housing, water and dependents	Household stability; infection-prevention resources; caregiving burden	Child nutritional and clinical well-being
Social support and service access	Counselling; appointment support; stigma reduction	Continuity of care and psychosocial well-being

The model is explanatory and is not a tested statistical path model. It distinguishes measured respondent characteristics from mechanisms and outcomes that would need additional observations.

6. Research Methodology

6.1 Design and setting

The thesis reports a quantitative descriptive research design at Bwaila–Lighthouse Clinic in Lilongwe District, Malawi. The clinic setting provides a service-based perspective on households associated with children receiving HIV treatment.

6.2 Sample and data collection

The study reports 44 respondents and the use of semi-structured questionnaires. It states that Slovin's formula, with a 5% margin of error, was used to determine the sample size. The available excerpt does not provide sufficient information to independently validate the underlying population denominator or the final sampling process.

6.3 Variables and analysis

Available descriptive variables include gender, marital status, education, employment, number of dependents, household income, housing type, access to clean water, access to healthcare and principal income source. The thesis reports frequency distributions and percentages. In this article, percentages are recalculated from frequencies where useful, with differences from source percentages identified rather than silently concealed.

6.4 Ethics and analytical boundaries

The research concerns a vulnerable population, making informed consent, privacy and careful handling of HIV-related information essential. The supplied extract does not permit independent verification of ethics approval details. No individual-level records, inferential tests, viral-load results or direct child-level adherence outcomes were available for reanalysis.

7. Key Findings and Discussion

7.1 Respondent demographic profile

Characteristic	Frequency	Percentage from n=44
Male	24	54.5%
Female	20	45.5%
Married	31	70.5%
Primary education	27	61.4%
No formal education	9	20.5%
Secondary education	8	18.2%

The gender distribution was relatively balanced, with a modest male majority. Thirty-one respondents were married, representing 70.5% of the sample. Marriage may offer opportunities for practical support, but the study did not establish whether married respondents received greater support or achieved better child treatment outcomes.

Educational attainment was concentrated at primary level: 27 respondents (61.4%) had primary education, nine (20.5%) had no formal education and eight (18.2%) had secondary education. This pattern suggests the value of accessible, clear and context-sensitive treatment communication. It does not prove that respondents misunderstood medication instructions.

The findings align with the SDH framework's emphasis on the social conditions surrounding healthcare. Education can shape opportunities and resources, while provider communication may help reduce barriers irrespective of formal schooling.

7. Key Findings and Discussion (continued)

7.2 Employment and household livelihoods

Employment status	Frequency	Percentage
Unemployed	17	38.6%
Self-employed	25	56.8%
Part-time employed	1	2.3%
Full-time employed	1	2.3%
Total	44	100.0%

Self-employment was the most frequently reported status (56.8%), followed by unemployment (38.6%). Only two respondents reported part-time or full-time employment. These findings point to potentially irregular household earnings, although the questionnaire extract does not establish the stability of each respondent's income.

Primary income source	Frequency	Percentage
Small business	38	86.4%
Farming	4	9.1%
Formal employment	2	4.5%

Small business was reported as the principal income source by 38 respondents (86.4%). This is consistent with the importance of informal livelihoods in the sample. Respondents might need to balance clinic visits against commercial activity, but the data do not directly measure lost earnings or missed appointments.

The distinction between employment status and income source is important: being self-employed is not synonymous with earning sufficient income, and household income may arise from more than one activity. These descriptive measures should be interpreted jointly but not conflated.

7. Key Findings and Discussion (continued)

7.3 Household income and economic vulnerability

Monthly household income (MWK)	Frequency	Recalculated percentage
Below 50,000	12	27.3%
50,000–100,000	19	43.2%
100,000–200,000	10	22.7%
200,000–500,000	3	6.8%
Total	44	100.0%

Thirty-one respondents (70.5%) reported monthly income of MWK 100,000 or less, combining the two lowest income categories. This concentration in lower nominal income bands is one of the clearest socioeconomic findings in the study. The monetary categories are those used in the thesis; they are not adjusted for inflation, household size or purchasing power.

The source income table reports 19% for the category MWK 100,000–200,000, although its frequency of 10 out of 44 corresponds to 22.7%. The recalculated figure is used here to preserve arithmetic consistency. The original source percentages total 99% and contain this discrepancy.

Low nominal income could constrain household choices, including food purchases and transport, but the study extract does not quantify expenditures or demonstrate how income influenced a child's medicine intake. It would therefore be inappropriate to claim a statistically significant income–adherence association.

7.4 Dependents and household responsibilities

Twenty-three respondents (52.3%) reported 0–2 dependents, 20 (45.5%) reported 3–5 and one (2.3%) reported six or more. Dependents may create additional financial and caregiving responsibilities, but the survey does not establish the exact age composition or medical needs of these household members.

7. Key Findings and Discussion (continued)

7.5 Housing and access to clean water

Housing type	Frequency	Percentage
Permanent	18	40.9%
Semi-permanent	24	54.5%

Temporary	2	4.5%
-----------	---	------

A majority of respondents lived in semi-permanent housing (54.5%). Housing type is a useful descriptive indicator of living conditions, although it cannot on its own establish overcrowding, safety, sanitation quality or the suitability of medicine storage.

Access to clean water	Frequency	Percentage
Yes	35	79.5%
No	9	20.5%

Thirty-five respondents (79.5%) reported access to clean water, while nine (20.5%) did not. This is relevant to household health and hygiene, particularly for children who may be vulnerable to infections. The source narrative states 83% with access and 16% without, which does not agree with its table frequencies. The table-derived percentages are presented here, and the discrepancy should be checked against original questionnaires before publication.

7.6 Reported access to healthcare

All 44 respondents reported easy access to healthcare. This is a positive finding about perceived service access, but it does not necessarily mean that visits were always affordable, timely or free from logistical barriers. “Easy access” was not accompanied in the supplied extract by a validated measure of distance, waiting time or visit completion.

The juxtaposition of reported access and household economic constraints is analytically important. Clinic availability and household capability to sustain care are related but distinct dimensions of healthcare access.

8. Findings in Relation to the Specific Objectives

8.1 Socioeconomic challenges and drug adherence

The first objective sought to assess the effect of socioeconomic challenges on drug adherence. The available findings establish that many respondents had low nominal household incomes and depended on self-employment or small businesses. However, the supplied portion of Chapter Four does not include a child-level adherence measure, missed-dose count, pharmacy refill history or viral-load outcome. Thus, the extent of any effect on adherence cannot be quantified from these data.

The SDH framework suggests a plausible pathway from livelihood constraints to transport, time and care continuity, but further analysis is needed to establish whether such a pathway operated in this sample.

8.2 Food access and medication intake

The second objective concerned the effects of inadequate food access on medication intake. The household income findings may justify nutrition screening and referral, but income alone is not a food-security measure. No food-frequency, dietary-diversity or hunger indicator was available in the uploaded results. A direct conclusion that food insecurity caused missed medication would therefore exceed the evidence.

8.3 Socioeconomic challenges facing caregivers

The third objective is most directly supported by the available descriptive results. High reliance on small business income, limited formal employment, household dependents and variations in housing and water access describe potential pressures in caregivers’ environments. The data do not establish the subjective severity of those pressures or the coping strategies adopted by individual caregivers.

Overall, the documented results support a socioeconomic profile and identify areas for targeted assessment. They are insufficient for causal conclusions or inferential statistical testing.

9. Implications for Social Work and HIV Services

Integrated social-work assessment could be incorporated into pediatric HIV care to identify households requiring nutrition, transport, livelihood or psychosocial assistance. Screening should be voluntary, confidential and designed to avoid stigmatizing families on the basis of income or education.

Caregiver education should use clear language, teach-back approaches and individualized medication instructions. The presence of primary education as the most common schooling level supports making information accessible, but all caregivers may benefit from practical communication.

Where feasible, multidisciplinary teams can coordinate clinic follow-up, nutrition counselling and referrals to existing community support programmes. Eligibility criteria should be based on assessed need rather than assumptions drawn from demographic categories.

Programmes should distinguish service coverage from effective use. Even where respondents perceive healthcare as easily accessible, monitoring should examine missed appointments, waiting time, travel costs, treatment interruptions and child health indicators.

Implementation should include clear referral pathways, confidentiality safeguards and indicators to assess whether social assistance actually improves continuity of care and family well-being.

10. Limitations

The study used a small, single-site descriptive sample of 44 respondents. The supplied document is incomplete and ends before the full results, conclusions

and reference list. Some table percentages disagree with reported frequencies, and there is insufficient information to verify the sampling calculation or ethical approval details. Findings should not be generalized to all children receiving ART in Malawi. No causal, correlational or statistically significant effects are claimed.

11. Conclusion

The study highlights the socioeconomic circumstances of respondents associated with children receiving HIV treatment at Bwaila–Lighthouse Clinic. The available results show a concentration of respondents in lower nominal household income bands, reliance on small-business livelihoods, limited formal employment and substantial primary-level educational attainment. Most reported access to clean water, and all respondents described healthcare as easy to access.

These findings indicate that reported healthcare accessibility can coexist with economic vulnerability. The results support integrating socioeconomic assessment into child HIV services but do not establish that poverty caused poor ART adherence, inadequate food intake or adverse clinical outcomes in the study population.

The central implication is the need for coordinated child-centred HIV care that addresses both clinical services and the social circumstances of caregiving. A fuller evidence base requires direct measurement of adherence, nutrition and child health outcomes, linked appropriately to household socioeconomic characteristics.

12. Recommendations

- Introduce routine, confidential screening for socioeconomic and nutritional needs among families receiving pediatric HIV services.
- Strengthen social-work referral pathways to available food, transport, livelihood and child-protection support.
- Provide accessible caregiver education on prescribed ART regimens, appointment schedules and management of treatment difficulties.
- Monitor effective continuity of care using direct measures such as missed visits, medication refill records and clinically appropriate viral-load data.
- Conduct a larger, multi-site study using validated food-security and adherence measures and a prespecified statistical analysis plan.
- Validate the original frequencies, percentages, sampling denominator and ethics documentation before submitting this article to a journal.

13. REFERENCES

- Joint United Nations Programme on HIV/AIDS. (2024). The urgency of now: AIDS at a crossroads—2024 global AIDS update. <https://www.unaids.org/en/resources/documents/2024/global-aids-update-2024>
- World Health Organization. (2021a). Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: Recommendations for a public health approach. <https://www.who.int/publications/i/item/9789240031593>
- World Health Organization. (2021b). Updated recommendations on service delivery for the treatment and care of people living with HIV. <https://www.who.int/publications/i/item/9789240023581>