



https://annisa.uinkhas.ac.id

DOI: 10.35719/annisa.v18i2.364 Vol 18, No 2, (2025), pp. 105-120

Understanding the patterns and drivers of domestic violence against women in Birnin Kebbi

Sanusi Naja'atu Baura¹, Abdulmumin Musa Omiya^{2*}

^{1&2}Department of Sociology, Federal University, Birnin Kebbi, Nigeria

Article information

Abstract

Submitted: 2025-05-22 Revised: 2025-07-24 Published: 2025-11-20

Norms.

Women Empowerment,

Violence,

Gender

Keywords:

Patriarchy,

Domestic

examine patterns, causes, and survivor experiences of domestic violence in Birnin Kebbi, raise public awareness, empower women, and promote equality, mutual respect, and anti-violence norms while challenging harmful gender stereotypes at social and policy levels. This study employed a survey design with multi-stage sampling to collect quantitative data from 259 married women in Birnin Kebbi. Structured questionnaires captured experiences of domestic violence systematically, ensuring consistency, representativeness, and reliability across diverse wards, residential clusters, streets, and households, while maintaining clarity, confidentiality, and cultural appropriateness. The study found a high prevalence of domestic violence in Birnin Kebbi, including physical, economic, verbal, emotional, and sexual forms. Power imbalances, patriarchal norms, low education, and economic dependence increase women's vulnerability, while empowerment through education, legal awareness, and financial independence mitigates violence and strengthens protection. This study contributes to understanding domestic violence in Birnin Kebbi by highlighting the roles of power imbalances, cultural norms, education, and economic dependence, and demonstrates how women's empowerment through education, legal awareness, and financial independence can inform prevention and protection strategies.

Domestic violence against women in Birnin Kebbi remains prevalent, reflecting

complex patterns and dynamics shaped by power imbalances, cultural norms, and

family structures. These acts of physical, sexual, verbal, and emotional abuse not only harm victims but also undermine social well-being, highlighting the need for context-specific preventive strategies and empowerment interventions. This study aims to



Copyright: © The author(s) 2025

An-Nisa: Journal of Gender Studies is licensed under a Creative Commons AttributionNon-Commercial 4.0 International License. https://creativecommons.org/licenses/by-nc/4.0/

To cite this article (APA Style):

Baura, S. N., & Omiya, A. M. (2025). Understanding the patterns and drivers of domestic violence against women in Birnin Kebbi. *An-Nisa Journal of Gender Studies*, *18*(2), 105-120. https://doi.org/10.35719/annisa.v18i2.364

^{*}Corresponding author: Abdulmumin Musa Omiya, Department of Sociology, Federal University, Birnin Kebbi, Nigeria email: abdulmumin.musa@fubk.edu.ng

INTRODUCTION

Domestic violence is a global social problem that primarily affects women and continues to persist today. Wake and Kandula (2022) indicate that domestic violence cases remain high and may even increase during periods of crisis. Each region has different characteristics of violence, making it important to understand its various forms and contexts, as explained by Bochenkova and colleagues (2023). Domestic violence does not only occur in intimate partner relationships but may also involve children or other family members (Stewart et al., 2020). Sardinha and associates (2024) found that nearly one-third of women worldwide have experienced physical or sexual violence by a partner. The impact is not only harmful to victims but also influences broader quality of life and social development, as described by Rose et al. (2023) and Amir-ud-Din et al. (2024). Ribeiro and colleagues (2022) emphasize that domestic violence is an act of aggression or intimidation within the household influenced by power dynamics. Therefore, addressing domestic violence requires preventive efforts and empowerment strategies that are contextually grounded.

Based on several preliminary studies, violence against women has gained international attention because it occurs across different social groups and age ranges. Linn et al. (2024) highlight that such violence has profound physical, sexual, psychological, and social impacts on women's lives. Bravo-Queipo-de-Llano et al. (2024) explain that violence involves the use of threats or force that may cause injury or harm. Specifically, Dahie et al. (2023) emphasize that gender-based violence results in physical, sexual, or psychological suffering, including threats, coercion, and the restriction of personal freedom. Londono et al. (2021) assert that violence against women is a manifestation of unequal power relations between men and women. In Nigeria, the prevalence of violence against women remains high (Okafor et al., 2023), where women frequently experience humiliation, abuse, and exploitation (Zaki et al., 2025). Bengesai et al. (2024) further report that nearly one-third of women worldwide have experienced physical or sexual violence during their lifetime. Therefore, this study is important to understand the prevalence, causes, and impacts of violence and to encourage effective intervention efforts.

In Nigeria, domestic violence against women remains under-documented, yet various studies indicate high prevalence rates. Conditions of insecurity, including the effects of conflict and social tensions, have further increased women's vulnerability to intimate partner violence (Ekhator-Mobayode et al., 2022). Historically, women in several Nigerian communities have continued to experience forms of humiliation and exploitation, despite being respected in certain cultural contexts. Globally, nearly one-third of women aged 15 years and above have experienced physical or sexual violence, with long-term effects such as depression, anxiety, unintended pregnancies, and sexually transmitted infections (Baneshi et al., 2025). Such violence may take the form of physical, sexual, emotional, psychological, or economic abuse (Doyle, 2020). In Birnin Kebbi, women remain the most affected group. Therefore, comprehensive interventions and collaboration between the government and civil society organisations are needed to address and prevent gender-based violence.

This study seeks to contribute to the development of knowledge on domestic violence against women in the metropolitan area of Birnin Kebbi. Specifically, it aims to foster a culture of mutual respect, equality, and anti-violence in intimate relationships by deepening the understanding of patterns, causal factors, and survivor experiences. By amplifying the voices of women experiencing violence, increasing public awareness of domestic violence, and advocating for changes at the social and policy levels, this study is expected to empower women and challenge harmful gender stereotypes. Ultimately, the study is expected to contribute to the creation of a safer and more just social environment in which individuals can live free from fear, threat, and harm in both domestic and interpersonal spheres.

This study underscores the importance of understanding domestic violence against women in Birnin Kebbi as a phenomenon shaped by power relations, socio-cultural structures, and survivor experiences. By examining the forms, causes, and consequences of violence, the study seeks to strengthen survivors' voices, increase public awareness, and promote social and policy changes that are more responsive to gender equality. It also aims to cultivate respect, equality, and non-violence in intimate relationships by empowering women and challenging harmful stereotypes. In line with these objectives, the study focuses on questions concerning how patterns of violence emerge, what factors influence its occurrence in the local context, and how survivor experiences and coping strategies can inform the development of more effective and sustainable interventions, support services, and policies.

METHOD

This study employed a survey research design, which is considered suitable for collecting quantitative data from a specified population because it enables the systematic depiction of patterns and trends within a phenomenon. Ahmed (2024) emphasizes that survey designs are effective in providing an overall picture of a population through standardized measurements. The research was conducted in Metropolis Birnin Kebbi with married women as the primary population, as this group is regarded as being in a strategic position to provide relevant information regarding experiences of domestic violence. Cash and colleagues (2022) note that women within marital relationships often possess direct experiences that can yield more in-depth and reliable data on domestic violence dynamics.

Respondents were selected through a combination of random and purposive sampling techniques to maintain population representation while accommodating specific characteristics relevant to the study's objectives. A total of 259 respondents participated in this research. The survey design enabled the collection of standardized information, facilitating comparisons across different subgroups within the population. Anderson et al. (2024) highlight that structured data collection techniques help maintain consistency in the information gathered. The primary data collection instrument was a structured questionnaire to ensure that the data obtained were consistent, systematic, and suitable for comparative analysis. Costa et al. (2024) explain that structured questionnaires help minimize response bias and enhance the reliability of survey outcomes.

To ensure fair sample representation, this study employed a multi-stage sampling technique, which is commonly used when the population is dispersed across wide and diverse administrative areas. Rodrigues et al. (2024) state that this method enables researchers to filter the population step-by-step so that the resulting sample is more structured. In this study, the research area consisted of 15 wards. From this total, 7 wards were selected through a simple lottery method, in which the names of the wards were written on paper, folded, mixed in a container, and drawn randomly without replacement. According to Li et al. (2024), such random selection minimizes researcher bias and ensures that each unit has an equal chance of being selected. This process also allows for diverse representation across different geographic and social contexts, thereby strengthening external validity. The selected wards then served as the basis for the subsequent stage of sampling.

In the second stage, the seven selected wards were further divided into smaller residential clusters. From each ward, three locations were randomly selected using the same lottery method as in the previous stage. Schroder (2025) emphasizes that layered random selection such as this helps ensure an even distribution of data collection across different parts of the study area, thereby capturing variations in socio-economic conditions. In the third stage, each of the 21 selected locations was further mapped based on its street network. From each location, five streets were

randomly selected, resulting in a total of 105 streets. According to Guevara et al. (2022), this step-by-step refinement of sampling clusters helps reduce potential sampling bias and improves overall population representation. Thus, this strategy strengthens the validity of the research findings in Metropolis Birnin Kebbi.

In the final stage, the sampling process was focused at the household level. Jin and Yang (2020) explain that narrowing the sampling unit to the household level allows the data collected to be more relevant to the respondents' everyday lived experiences. From the 105 selected streets, two households were chosen using a systematic skip method, selecting every fifth house to avoid proximity bias. Alzoubi and Mishra (2024) emphasize that this technique helps maintain impartiality in the selection of sampling units. This approach resulted in a total of 259 households. In each selected household, one married woman who was available at the time of data collection was chosen through a convenience sampling technique.

The primary data collection instrument was a structured questionnaire. Philip (2024) states that structured questionnaires are effective in consistently capturing respondents' experiences and perceptions. Furthermore, Webster et al. (2025) highlight the importance of designing questionnaires that ensure clarity, confidentiality, and cultural appropriateness, all of which were applied in this study.

RESULT AND DISCUSSION

Result

Demographic characteristic of respondents

The demographic characteristics of the respondents in this study reveal diverse backgrounds in terms of age, ethnicity, number of children, and educational qualifications. The majority of participants were between 29-38 years old, with varied ethnic groups represented, including Hausa/Fulani, Zabarmawa, and Yoruba. Most respondents had secondary education, and a significant portion had between one to three children, reflecting a broad spectrum of socio-cultural and educational experiences.

Table 1Demographic Characteristic of Respondents

| Items | Response | Frequency | Percent |
|---------------------|---------------|-----------|---------|
| Age | 29-38 | 115 | 43.89 |
| | 18-28 | 53 | 20.23 |
| | 39-48 | 42 | 16.03 |
| | Below 18 | 34 | 12.98 |
| | 49 and above | 15 | 5.73 |
| | Total | 259 | 100.0 |
| Ethnicity | Hausa/ Fulani | 72 | 39.1 |
| | Zabarmawa | 77 | 29.39 |
| | Yoruba | 57 | 21.76 |
| | Fulani | 40 | 15.27 |
| | Hausa | 38 | 14.5 |
| | Igbo | 32 | 12.21 |
| | Lelna | 13 | 4.96 |
| | Total | 259 | 100.0 |
| Numbers of Children | 2 | 70 | 26.34 |
| | 3 | 49 | 18.7 |
| | 1 | 35 | 13.36 |
| | 4 | 31 | 11.83 |
| | 5 | 20 | 7.63 |
| | 6 | 17 | 6.49 |
| | None | 14 | 5.34 |
| | 7 | 10 | 3.82 |

| | 8 | 6 | 2.29 |
|----------------------------------|--------------------|-----|-------|
| | 10 above | 4 | 1.53 |
| | 9 | 3 | 1.15 |
| | Total | 259 | 100.0 |
| Educational Qualification | Secondary | 100 | 38.17 |
| | education | | |
| | Primary education | 67 | 24.43 |
| | Tertiary education | 52 | 19.85 |
| | No formal | 40 | 15.27 |
| | education | | |
| | Total | 259 | 100.0 |

Table 1 revealed that majority of the respondent (43.89%n-115) was between 29-38 years of age. This shows that Birnin Kebbi metropolis had a middle-age population. These populations of middle age were matured and exposed to reality of life including domestic's violence. At 29-38, it was expected that such age groups were married and had experienced marital challenges, which might include domestic's violence and its consequences on both family and the society at large. With regard to ethnicity, majority, 39.1% were Hausa/Fulani as the dominate ethnic groups in Birnin Kebbi metropolis. This is not surprising as the present Kebbi metropolis had its origin from the formal Kabi Kingdom which was founded by Muhammadu Kanta and it was an expansion of the Sokoto caliphate established by Usman Danfodio a well-known Fulani. The study also revealed that 26.34% (n-70) have 2 children, 18.7% (n-49) have 3 children, 13.36% (n-35) have 1, 11.83% (n-31) have 4 children, 7.63% (n-20) have 5 children, 6.49% (n-17) have 6 children, 5.34% (n-14) have no children, and 3.82% (n-10) have 7 children.

It was however surprising to know that Kebbi metropolis being state capital of Kebbi State majority of the residents (15.27%, n-40) did not have formal education; rather, they preferred Islamic education. It was disturbing to know that only (19.85%) of the population had attended education to higher institution of learning. While 38.17% (n-100) have secondary school leaving certificate, while 24.43% (n-67) attended only primary school. This was however, beyond the expectation of the researcher and the general assumption that metropolitan cities like Kebbi had more educated people compare to rural dweller.

Socio-demographic characteristic of respondents

This section presents the socio-demographic characteristics of respondents, offering insights into their religious affiliation, occupation, income level, family structure, and area of residence. The respondents reflect a religiously diverse population, predominantly comprising adherents of Islam and Christianity. In terms of occupation, many identified as full-time housewives, traders, artisans, or engaged in agricultural activities. A significant number reported having no regular income or earning minimal monthly wages, indicating varying levels of economic stability. The majority of households were headed by husbands, with a smaller proportion led by wives. Respondents were drawn from multiple wards within Birnin Kebbi Metropolis, ensuring broad and inclusive representation across the study area.

Table 2 *Socio-demographic Characteristic of Respondents*

| Items | Response | Frequency | Percent |
|------------|-----------------|-----------|---------|
| Religion | Christianity | 113 | 43.13 |
| | Islam | 137 | 61.87 |
| | Total | 259 | 100.0 |
| Occupation | Full House wife | 67 | 25.57 |
| | Trading | 61 | 23.28 |
| | Artisan | 33 | 10.6 |

Baura, S. N., & Omiya, A. M. Understanding the patterns and drivers of domestic violence

| | Crop Production | 32 | 10.21 |
|----------------|----------------------|-----|-------|
| | Unemployed | 31 | 11.83 |
| | Animal Production | 26 | 9.92 |
| | Civil servant | 23 | 8.78 |
| | Total | 259 | 100.0 |
| Income | No Monthly Income | 71 | 27.58 |
| | 6000-10000 | 47 | 17.94 |
| | Less than 5000 | 42 | 18.03 |
| | 11000-15000 | 28 | 12.69 |
| | 21000-30000 | 19 | 7.25 |
| | 16000-20000 | 16 | 6.11 |
| | 31000 -40000 | 10 | 3.82 |
| | 71000 and above | 9 | 3.44 |
| | 41000-50000 | 8 | 3.05 |
| | Total | 259 | 100.0 |
| Head of Family | Husband | 210 | 81.3 |
| | Wife | 49 | 18.7 |
| | Total | 259 | 100.0 |
| Ward | Birnin Kebbi Marafa, | 44 | 16.79 |
| | Kola, | 43 | 16.41 |
| | Gwadangwaji, | 39 | 14.89 |
| | Makera, | 39 | 14.89 |
| | Birnin Kebbi | 36 | 13.74 |
| | Nassarawa-1, | 31 | 11.35 |
| | Nassarawa-2, | 27 | 11.07 |
| | Total | 258 | 100.0 |

Note: Field work, 2024

Table 2 presents the composition of respondents based on religion, employment status, income level, and perceptions of household leadership. The majority of respondents are Muslims (61.87%), while 43.13% are Christians, indicating that domestic violence occurs within a religiously diverse community. In terms of employment, 25.57% are full-time housewives and 23.28% are traders, while only 8.78% are civil servants working in the formal sector. These findings suggest that most women operate in informal work settings or are not employed, which may increase economic dependency on their partners.

The income distribution further reflects significant economic vulnerability: 27.58% have no monthly income, and most others earn very low incomes, with the majority earning less than 10,000 per month. Only a small fraction (3.44%) earn more than 71,000 monthly. Such economic disparities can reduce women's bargaining power within the household. Additionally, 81% of respondents stated that the husband is the head of the household, while only 18.7% identified the wife as the household head. This dominant perception highlights the strong patriarchal structure within families, which may normalize male control and heighten the risk of gender-based violence. Overall, this table illustrates how religious, economic, and power-structure factors intersect to shape women's vulnerability to domestic violence.

Types of domestic violence in Birnin Kebbi LGA

These findings present the forms of domestic violence experienced by women in Birnin Kebbi. The data show that most respondents have encountered multiple types of abuse, including physical harm, emotional intimidation, and the neglect of basic needs. The wide variation in these forms of violence illustrates the complex dynamics within household relationships, where power imbalances and economic dependence often reinforce patterns of abuse. Overall, the findings highlight the urgent need for targeted interventions and prevention strategies to address domestic violence and improve the safety and well-being of women in the area.

Table 3 *Types of Domestic Violence in Birnin Kebbi LGA*

| Items | Response | Frequency | Percent |
|--|------------------------------------|-----------|---------|
| Are you victims of domestic Violence? | Yes | 162 | 61.83 |
| | No | 94 | 38.17 |
| | Total | 259 | 100.0 |
| It is going on now? | No | 142 | 55.34 |
| | Yes | 117 | 44.66 |
| | Total | 259 | 100.0 |
| | My husband maltreats me | 82 | 30.3 |
| | No regular food to eat | 70 | 23.72 |
| Tune of demostic violence were you | Husband abuses me Verbally | 63 | 15.7 |
| Type of domestic violence were you | My husband batters me | 44 | 13.79 |
| subjected to | My husband neglects my children | 43 | 13.41 |
| | Others | 14 | 3.34 |
| | Total | 259 | 100.0 |
| | Child-Neglects | 79 | 23.0 |
| | Wife Battery | 70 | 20.0 |
| | Sexual Assault | 58 | 12.0 |
| Albert de veu consider es the Demostic | Husband having sex without consent | 53 | 10.0 |
| What do you consider as the Domestic violence? | Fight/Quarrel | 34 | 12.0 |
| | Making wife angry | 34 | 8.0 |
| | Emotional Abuse | 30 | 9.0 |
| | Biting | 19 | 6.0 |
| | Total | 259 | 100.0 |
| Which type(s) of domestic violence do you | Wife Battery | 92 | 25.1 |
| know is dominant or common in your | Child-Neglects | 75 | 18.6 |
| community? | Sexual Assault | 53 | 15.2 |
| | Fight/Quarrel | 41 | 12.5 |
| | Husband having sex without consent | 41 | 12.6 |
| | Making wife angry | 35 | 8.0 |
| | Emotional Abuse | 28 | 6.0 |
| | Biting | 11 | 2.0 |
| | Total | 259 | 100.0 |

Note: Field survey (2024)

Table 3 revealed that 61.83% (n-162) of the respondents were victims of domestic violence, and 55.34% (n-142) stated that the act is still ongoing, while 44.66% stated that it has stopped. It was also revealed that wife maltreatment by husbands 30/3% (n-82) and no regular food to eat (23.72%, n-70) were the common types of domestic violence in Birnin Kebbi metropolis. More, so, child neglect (23.0% n-79) and wife battery (20.0% n-70) were commonly considered as domestic violence by women in Birnin Kebbi Metropolis. More so, wife battery (25.1% n-92), 18.6% (n-75), Sexual assault 15.2% (n-53), were the dominant domestic violence faced by women in Birnin Kebbi Metropolis.

Table 4 *Types of Domestic Violence in Birnin Kebbi LGA*

| Items | Response | Frequency | Percent |
|---|--------------------|-----------|---------|
| How do you rate the level of domestic violence in Birnin | Low | 85 | 32.44 |
| Kebbi? | High | 76 | 29.01 |
| | Very low | 68 | 25.95 |
| | Moderate | 30 | 12.6 |
| | Total | 259 | 100.0 |
| Beating of wives is culturally approved way of instilling | Strongly Disagreed | 114 | 43.51 |
| discipline in Birnin Kebbi | Agreed | 58 | 23.29 |
| | Strongly Agreed | 49 | 18.7 |
| | Disagreed | 38 | 14.5 |

Baura, S. N., & Omiya, A. M. Understanding the patterns and drivers of domestic violence

| | Total | 259 | 100.0 |
|---|---------------------------|-----|-------|
| Awareness of the Institution(s) specialized in taking care of | No | 113 | 43.13 |
| women who have experienced violence by the | Yes | 107 | 34.73 |
| husbands/partners in Birnin Kebbi. | Doubting/Not sure | 50 | 19.08 |
| | Total | 259 | 100.0 |
| | District Palace | 58 | 22.14 |
| | Counseling Centers | 44 | 16.79 |
| | Ministry of Women Affairs | 42 | 16.03 |
| | Police | 42 | 16.03 |
| Institutions where domestic violence were reported to. | Civil Defense | 36 | 13.74 |
| | Court | 35 | 13.36 |
| | Religious Organization | 32 | 12.21 |
| | Civil society | 26 | 9.92 |
| | Total | 259 | 100.0 |
| Will you be happy if your husband is imprisoned for | Strongly agreed | 43 | 16.41 |
| abusing you? | Agreed | 57 | 21.76 |
| | Disagreed | 57 | 21.76 |
| | Strongly disagreed | 102 | 38.93 |
| | Total | 259 | 100.0 |
| Will you consider your children by not allowing your | Yes | 200 | 76.34 |
| husband go to prison for domestic violence? | No | 59 | 20.61 |
| | Total | 259 | 100.0 |

Note: Field survey (2024)

Table 4 revealed that 32.44% (n-85) rated domestic violence low, 29.01% (n-76) rated it high, 25.95% (n-86) rated it very low and 12.6% (n-30) rated it moderate. More so, wives and child beating (43.51, n-114%) were not perceived as a way of instilling discipline. This shows the understanding of nature of domestic violence among the respondent and this can be attributed to their level of education and the ability to distinguish between discipline and domestics violence. However, for those that believed wives and child beating were cultural ways of instilling discipline lack proper understanding of what discipline entails and what constitute domestics violence. 43.13% (n-113) did not know where to report the case of domestic violence. The inability of the respondents to know the institutions specialized in taking care of victims of domestic violence revealed their level of education and exposure to social events, and those that were aware of institutions mostly reported to their parents and ward heads. While 34.73% (n-107) of those that know where to report the case of domestic violence, majority which is 22.14% (n-58) stated the district palace, 16.79% and 16.03% stated counseling center, ministry of women affairs and police station respectively. 12.21% (n-32) stated religious organization as a place to report domestic violence. Furthermore, 38.93% (n-102) stated that they would not be happy if their husbands are been arrested, while 21.76% (n-57) stated that they would be happy if their husband are arrested. While 76.34% (n-200) stated that they would considered their children while 20.61% (n-59) stated they wouldn't considered their children.

Discussion

Prevalence and types of domestic violence in Birnin Kebbi metropolis

The findings of this study indicate that the prevalence of domestic violence (DV) in Birnin Kebbi Metropolis is relatively high, with 61.83% of respondents reporting having experienced various forms of violence, including physical, emotional, and economic abuse. This figure underscores that DV is not an isolated or incidental issue, but rather part of a systemic and recurring pattern of power relations within households. Winstok (2007) highlights that violence in relationships often arises from unbalanced interaction dynamics, in which one party seeks to maintain dominance. This finding aligns with Colagrossi et al. (2023), who note that DV often remains hidden because victims rarely

seek help, especially when violence is normalized within domestic life. Le et al. (2024) emphasize that social pressures and cultural norms silence victims, meaning the apparent prevalence is likely lower than reality. Moreover, social values and traditional gender norms in Birnin Kebbi further weaken women's position, as noted by Abdalla et al. (2024), allowing DV to persist and delaying interventions.

Among the forms of violence identified, physical abuse was the most prominent, with 25.1% of respondents reporting being hit or physically assaulted. This reflects a power imbalance within households, where men often position themselves as the dominant party, in line with Dulhunty's (2025) interpretation that physical violence frequently emerges from control imbalances and attempts at domination. Economic violence was also significant, with 23.72% of respondents experiencing restricted access to basic necessities. Bergvall (2024) argues that controlling economic resources can be a strategy to maintain victim dependence, which aligns with the analyses of Goergen & Beaulieu (2013) and Bright et al. (2020), showing that economic control is a structural form of violence that reinforces perpetrator dominance and limits victims' ability to resist or leave abusive situations.

In addition to physical and economic violence, the study also found verbal, emotional, and sexual violence against women. Verbal and emotional abuse, often repetitive and long-term, negatively affects victims' psychological well-being, including low self-esteem, anxiety, and social isolation. Huang et al. (2024) highlight that non-physical violence is often harder to detect, but its psychological effects are as severe as physical abuse, consistent with the study's findings. Sexual violence, such as non-consensual sexual relations, also occurs but is often not recognized as violence due to cultural norms that regard marital sexual activity as the wife's duty, as noted by Torrance et al. (2024). These findings indicate that domestic violence is multidimensional, affecting not only physical health but also women's mental well-being and dignity, consistent with Kumar et al. (2013) regarding the psychological impact of violence on women.

The role of cultural norms and social structures in perpetuating domestic violence

Based on the research findings, cultural and social norms appear to play a significant role in normalizing and perpetuating domestic violence in Birnin Kebbi Metropolis. Approximately 41.99% of respondents believed that wife-beating could be accepted as a form of discipline. Lansford et al. (2020) emphasize that such views reflect deeply ingrained societal beliefs, where male authority and dominance in the household are considered legitimate, often at the expense of women's safety and dignity. This aligns with Namy et al. (2017), who note that permissive attitudes toward violence create an environment where abusive acts are not only tolerated but socially justified. Dhawan and Bhasin (2024) further argue that norms justifying violence as a mechanism to "maintain family order" reinforce unequal power structures, delay interventions, and prolong cycles of domestic violence.

The findings support Ryu and Pratt's (2025) view that in patriarchal societies, violence against wives is often rationalized as corrective behavior. Bondestam and Lundqvist (2020) add that such cultural reasoning contributes to low reporting rates, as victims fear being labeled disobedient, facing community backlash, or experiencing social shame. Hosny et al. (2023) note that internalization of these beliefs by both men and women reinforces the cycle of violence, making aggressive behavior a normalized aspect of marital relations. Comparatively, these findings are consistent with international literature while highlighting the local context of Birnin Kebbi, where social values and traditional gender norms strengthen the legitimacy of violence, delay interventions, and maintain household inequalities.

Moreover, the study highlights widespread misconceptions regarding marriage and sexual consent, with many respondents seemingly believing that marriage grants husbands unlimited

sexual rights without regard for their wives' consent. Sedziafa et al. (2019) stress that such beliefs foster marital rape, which is often socially normalized. Widanaralalage et al. (2025) add that these cultural perceptions obscure sexual abuse within the household, making it difficult to detect. Bhatt et al. (2023) and Richardson et al. (2025) argue that the internalization of norms demanding wife obedience reinforces power inequalities and reduces the likelihood of reporting or intervention. Gewirtz-Meydan and Godbout (2023) contend that systemic distortions of marital roles further sustain the persistence of sexual violence within intimate relationships, consistent with the study's findings.

Socioeconomic factors on vulnerability and domestic violence

According to various experts, domestic violence is often influenced by structural and social factors. Orr et al. (2024) emphasize that low educational attainment, economic inequality, and social vulnerability are key determinants that increase the risk of women experiencing violence. Shahriar and Alam (2024) add that women with limited education and no financial independence often struggle to recognize abusive behavior or understand their legal rights, thereby increasing the likelihood of being trapped in unhealthy relationships. Campbell (2020) argues that limited access to education and resources makes it difficult for women to seek support or protection, perpetuating the cycle of violence. Meanwhile, Bhuwania et al. (2024) analytically show that lack of education not only limits employment opportunities but also weakens women's confidence to speak up and seek justice, making education a crucial factor in prevention and empowerment efforts.

Economic dependence is another key factor that reinforces the persistence of domestic violence. Mshweshwe (2020) argues that women who rely entirely on their partners for basic needs such as food, shelter, and clothing are vulnerable to manipulation and control. Khanna et al. (2023) add that this economic dependence creates a power imbalance often exploited by perpetrators to maintain dominance. McAlpine et al. (2024) analytically stress the importance of understanding power dynamics within households to make violence prevention strategies more effective. This perspective aligns with findings from Hardt et al. (2023), which highlight the strong relationship between poverty, low literacy levels, and increased vulnerability of women to violence. Comparatively, these expert opinions reinforce the understanding that economic factors are not merely background conditions but structural determinants that perpetuate the cycle of domestic violence.

Women's empowerment is a crucial strategy in preventing domestic violence. Kiani et al. (2021) emphasize that women's access to education, vocational training, and legal awareness not only expands their capabilities but also reduces dependence on abusive partners. Kazibwe and Li (2025) add that such empowerment enables women to make more informed and strategic decisions when facing social and economic pressures. Davis and Williamson (2022) analytically note that women who are financially independent and aware of their rights are more likely to resist and report violence, demonstrating the direct preventive effect of empowerment. Novitzky et al. (2023) broaden this perspective, stressing that addressing domestic violence requires long-term investment in women's education and economic resilience. Comparatively, these expert views underscore that empowerment integrates legal, social, and economic dimensions in efforts to prevent domestic violence.

CONCLUSION

Based on the discussion above, the findings of this study indicate that the prevalence of domestic violence in Birnin Kebbi is high (61.83%), encompassing physical, economic, verbal, emotional, and sexual violence. These forms reflect imbalanced power relations, significant psychological impacts, and are reinforced by traditional social and gender norms that delay

interventions and maintain victim dependence. Furthermore, cultural norms, patriarchal social structures, and misconceptions about marriage in Birnin Kebbi normalize domestic and sexual violence. These beliefs reinforce male dominance, hinder reporting, and perpetuate the cycle of violence, aligning with international literature on power dynamics and gender. Additionally, low education levels and economic dependence increase women's vulnerability to domestic violence. Empowerment through education, vocational training, legal awareness, and financial independence has been shown to prevent violence, strengthen self-confidence, and integrate legal, social, and economic dimensions in women's protection.

The findings have significant theoretical and practical implications. Theoretically, they reinforce the understanding of domestic violence through the lens of power dynamics, social norms, and gender, highlighting educational disparities, economic dependence, and patriarchal structures as key determinants of women's vulnerability. Practically, the findings guide multidimensional interventions, including women's empowerment through education, skills training, legal awareness, and financial independence. They also support strengthening reporting systems, engaging men in prevention programs, and promoting gender equality norms through community education and institutional interventions. This approach is expected to break the cycle of violence, protect victims, and build more just and responsive communities.

This study has several limitations. First, data were collected only in Birnin Kebbi, so the findings may not fully represent domestic violence dynamics in other regions with different social, cultural, and economic contexts. Second, the study focused on prevalence and forms of violence, while psychosocial factors, legal interventions, and institutional responses were not analyzed in depth. Third, the quantitative and descriptive approach limits exploration of victims' subjective experiences or perpetrators' perspectives. Future research is recommended to use mixed-method or qualitative approaches to explore power dynamics, cultural norms, and patriarchal structures that reinforce domestic violence. Subsequent studies could also assess the effectiveness of women's empowerment, educational interventions, legal and financial awareness training, and the role of men and boys in prevention. Evaluating confidential reporting systems and institutional responses is also essential for more effective prevention strategies.

ACKNOWLEDGEMENT

We express our gratitude to all informants who openly shared their experiences for this research. Appreciation is also extended to the research support team for their valuable technical and field assistance. The contributions of all parties made it possible to complete this study on domestic violence in Birnin Kebbi successfully.

REFERENCES

- Abdalla, S., Ramadan, E., & Al Mamari, W. (2024). Enhancing gender-responsive resilience: The critical role of women in disaster risk reduction in Oman. *Progress in Disaster Science, 24*, 100376. https://doi.org/10.1016/j.pdisas.2024.100376
- Ahmed, S. K. (2024). How to choose a sampling technique and determine sample size for research:

 A simplified guide for researchers. *Oral Oncology Reports*, *12*, 100662. https://doi.org/10.1016/j.oor.2024.100662
- Alzoubi, Y. I., & Mishra, A. (2024). Blockchain consensus mechanisms comparison in fog computing: A systematic review. *ICT Express, 10(2),* 342–373. https://doi.org/10.1016/j.icte.2024.02.008

- Amir-ud-Din, R., Idrees, R., Farooqui, J., & Abbasi, A. S. (2024). Exploring spousal disparities: Age, earnings, and education as predictors of intimate partner violence in 29 developing countries. *Women's Health*, 20. https://doi.org/10.1177/17455057241310289
- Anderson, E., Lybbert, T. J., Shenoy, A., Singh, R., & Stein, D. (2024). Does survey mode matter? Comparing in-person and phone agricultural surveys in India. *Journal of Development Economics*, 166, 103199. https://doi.org/10.1016/j.jdeveco.2023.103199
- Baneshi, M. R., Dobson, A., & Mishra, G. D. (2025). The experience of intimate partner violence and age at the onset of multimorbidity: A population-based cohort study in Australian women. *Social Science & Medicine*, 381, 118294. https://doi.org/10.1016/j.socscimed.2025.118294
- Bengesai, A. V., & Chikhungu, L. (2024). Violence against women and girls in Zimbabwe: A review of a decade of the empirical literature. *Trauma, Violence, & Abuse, 26(4),* 769–788. https://doi.org/10.1177/15248380241291074
- Bergvall, S. (2024). Women's economic empowerment and intimate partner violence. *Journal of Public Economics*, 239, 105211. https://doi.org/10.1016/j.jpubeco.2024.105211
- Bhatt, B., Bhatt, N., Karki, A., Giri, G., Baaniya, B., Neupane, B., Bogati, S., Mahaju, S., Poudel, A., Pokharel, S., Kafle, N., Nepal, S., Sapkota, R., Shrestha, S., Tuitui, R. L., & Sagtani, R. A. (2023). Intimate partner violence against married women of reproductive age in Nepal during the COVID-19 pandemic. *Heliyon*, *9*(*9*), e20117. https://doi.org/10.1016/j.heliyon.2023.e20117
- Bhuwania, P., Mukherji, A., & Swaminathan, H. (2024). Women's education through empowerment: Evidence from a community-based program. *World Development Perspectives, 33*, 100568. https://doi.org/10.1016/j.wdp.2024.100568
- Bochenkova, A., Buonanno, P., & Galletta, S. (2023). Fighting violence against women: The role of female political representation. *Journal of Development Economics*, 164, 103140. https://doi.org/10.1016/j.jdeveco.2023.103140
- Bondestam, F., & Lundqvist, M. (2020). Sexual harassment in higher education a systematic review. *European Journal of Higher Education,* 10(4), 397–419. https://doi.org/10.1080/21568235.2020.1729833
- Bravo-Queipo-de-Llano, B., Sainz, T., Díez Sáez, C., Barrios Miras, E., Bueno Barriocanal, M., Alonso Cózar Olmo, J., Fabregas Martori, A., & Gancedo Baranda, A. (2024). Violence as a health problem. *Anales de Pediatría (English Edition), 100(3)*, 202–211. https://doi.org/10.1016/j.anpede.2024.02.010
- Bright, C. F., Burton, C., & Kosky, M. (2020). Considerations of the impacts of COVID-19 on domestic violence in the United States. Social Sciences & Humanities Open, 2(1), 100069. https://doi.org/10.1016/j.ssaho.2020.100069
- Campbell, A. M. (2020). An increasing risk of family violence during the Covid-19 pandemic: Strengthening community collaborations to save lives. *Forensic Science International: Reports,* 2, 100089. https://doi.org/10.1016/j.fsir.2020.100089
- Cash, P., Isaksson, O., Maier, A., & Summers, J. (2022). Sampling in design research: Eight key considerations. *Design Studies, 78*, 101077. https://doi.org/10.1016/j.destud.2021.101077
- Colagrossi, M., Deiana, C., Dragone, D., Geraci, A., Giua, L., & Iori, E. (2023). Intimate partner violence and help-seeking: The role of femicide news. *Journal of Health Economics*, *87*, 102722. https://doi.org/10.1016/j.jhealeco.2022.102722
- Costa, A., Rodrigues, F., Pitarma, R., & Ferreira, M. E. (2024). Design and validation of an instrument to evaluate the workgroup methodology in university students. *International Journal of Educational Research Open, 7*, 100351. https://doi.org/10.1016/j.ijedro.2024.100351

- Dahie, H. A., Dakane, M. M., & Hassan, B. S. (2023). Prevalence, patterns, and determinants of gender-based violence among women and girls in IDP camps, Mogadishu-Somalia. *Journal of Migration and Health*, *8*, 100193. https://doi.org/10.1016/j.jmh.2023.100193
- Davis, L. S., & Williamson, C. R. (2022). Individualism and women's economic rights. *Journal of Economic Behavior & Organization, 198,* 579–597. https://doi.org/10.1016/j.jebo.2022.04.011
- Dhawan, N. B., & Bhasin, H. (2024). Combating domestic violence in West Bengal, India: Gendered norms and legal regulations. *International Journal of Educational Research Open, 7*, 100352. https://doi.org/10.1016/j.ijedro.2024.100352
- Doyle, J. L. (2020). Experiences of intimate partner violence: The role of psychological, economic, physical and sexual violence. *Women's Studies International Forum, 80*, 102370. https://doi.org/10.1016/j.wsif.2020.102370
- Dulhunty, A. (2025). A qualitative examination of microfinance and intimate partner violence in India: Understanding the role of male backlash and household bargaining models. *World Development*, 186, 106805. https://doi.org/10.1016/j.worlddev.2024.106805
- Ekhator-Mobayode, U. E., Hanmer, L. C., Rubiano-Matulevich, E., & Arango, D. J. (2022). The effect of armed conflict on intimate partner violence: Evidence from the Boko Haram insurgency in Nigeria. *World Development*, 153, 105780. https://doi.org/10.1016/j.worlddev.2021.105780
- Gewirtz-Meydan, A., & Godbout, N. (2023). Between pleasure, guilt, and dissociation: How trauma unfolds in the sexuality of childhood sexual abuse survivors. *Child Abuse & Neglect, 141*, 106195. https://doi.org/10.1016/j.chiabu.2023.106195
- Goergen, T., & Beaulieu, M. (2013). Critical concepts in elder abuse research. *International Psychogeriatrics*, 25(8), 1217–1228. https://doi.org/10.1017/S1041610213000501
- Guevara, M., Sun, Z.-Y., Guevara, P., Rivière, D., Grigis, A., Poupon, C., & Mangin, J.-F. (2022). Disentangling the variability of the superficial white matter organization using regional-tractogram-based population stratification. *NeuroImage*, *255*, 119197. https://doi.org/10.1016/j.neuroimage.2022.119197
- Hardt, S., Stockl, H., Wamoyi, J., & Ranganathan, M. (2023). Sexual harassment in low- and middle-income countries: A qualitative systematic review. *Trauma, Violence, & Abuse, 24(5)*, 3346–3362. https://doi.org/10.1177/15248380221127255
- Hosny, N., Bovey, M., Dutray, F., & Heim, E. (2023). How is trauma-related distress experienced and expressed in populations from the Greater Middle East and North Africa? A systematic review of qualitative literature. *SSM-Mental Health*, 4, 100258. https://doi.org/10.1016/j.ssmmh.2023.100258
- Huang, D., Liu, D., Wan, X., Zou, K., & Gong, X. (2024). A bibliometric and knowledge-map analysis of psychological violence from 2003 to 2022. *Heliyon*, 10(18), e37675. https://doi.org/10.1016/j.heliyon.2024.e37675
- Jin, J., & Yang, J. (2020). Effects of sampling approaches on quantifying urban forest structure. *Landscape and Urban Planning, 195*, 103722. https://doi.org/10.1016/j.landurbplan.2019.103722
- Kazibwe, D., & Li, J. (2025). Universal secondary education, schooling and women's empowerment: Evidence from Uganda. *Journal of Development Economics*, 174, 103464. https://doi.org/10.1016/j.jdeveco.2025.103464
- Khanna, T., Patel, R., Akhtar, F., & Mehra, S. (2023). Relationship between partner support and psychological distress among young women during pregnancy: A mixed-method study from a

- low- and middle-income country. *Journal of Affective Disorders Reports, 14,* 100672. https://doi.org/10.1016/j.jadr.2023.100672
- Kiani, Z., Simbar, M., Rashidi Fakari, F., Kazemi, S., Ghasemi, V., Azimi, N., Mokhtariyan, T., & Bazzazian, S. (2021). A systematic review: Empowerment interventions to reduce domestic violence? *Aggression and Violent Behavior, 58*, 101585. https://doi.org/10.1016/j.avb.2021.101585
- Kumar, A., Nizamie, S. H., & Srivastava, N. K. (2013). Violence against women and mental health. *Mental Health & Prevention, 1(1), 4*–10. https://doi.org/10.1016/j.mhp.2013.06.002
- Lanchimba, C., Díaz-Sánchez, J. P., & Velasco, F. (2023). Exploring factors influencing domestic violence: A comprehensive study on intrafamily dynamics. *Frontiers in psychiatry, 14*, 1243558. https://doi.org/10.3389/fpsyt.2023.1243558
- Lansford, J. E., Zietz, S., Putnick, D. L., Deater-Deckard, K., Bradley, R. H., Costa, M., Esposito, G., & Bornstein, M. H. (2020). Men's and women's views on acceptability of husband-to-wife violence and use of corporal punishment with children in 21 low- and middle-income countries. *Child Abuse & Neglect*, 108, 104692. https://doi.org/10.1016/j.chiabu.2020.104692
- Le, D.-Q., Nguyen, H.-A., Pham Nguyen, D.-T., & Nguyen, N. P. (2024). Perceptions, attitudes, and experiences of domestic violence among Vietnamese university students. *SSM Mental Health*, *6*, 100334. https://doi.org/10.1016/j.ssmmh.2024.100334
- Li, C., Zhang, X., Wang, M., Wang, Z., Cheng, Q., Du, J., & Jia, T. (2024). A simple and economical method for unbiasedly quantifying the alveolar size of entire mouse lung tissue utilizing Hematoxylin and Eosin staining. *Acta Histochemica*, 126(4), 152169. https://doi.org/10.1016/j.acthis.2024.152169
- Linn, N., Chuemchit, M., Mon, A. S., & Boonshuyar, C. (2024). Violence against women and its effects on mental health and quality of life: A study of Myanmar migrant workers in Central Thailand. *Journal of Migration and Health, 10,* 100272. https://doi.org/10.1016/j.jmh.2024.100272
- Londono, P. A. V., Nateras González, M. E., Bruno Solera, C., & Storm Paz, P. (2021). The exacerbation of violence against women as a form of discrimination in the period of the COVID-19 pandemic. *Heliyon*, 7(3), e06491. https://doi.org/10.1016/j.heliyon.2021.e06491
- McAlpine, K., Dennis, R., Mkude, M., & Maro, S. (2024). Practical tools for practitioners: Unravelling power dynamics as a prelude to preventing violence against women and children. *Child Protection and Practice*, 1, 100011. https://doi.org/10.1016/j.chipro.2024.100011
- Mshweshwe, L. (2020). Understanding domestic violence: Masculinity, culture, traditions. *Heliyon, 6(10)*, e05334. https://doi.org/10.1016/j.heliyon.2020.e05334
- Musa, S. Y. (2025). Banditry and modern slavery: (In)security dynamics in Nigeria. *Journal of Economic Criminology*, 10, 100194. https://doi.org/10.1016/j.jeconc.2025.100194
- Namy, S., Carlson, C., O'Hara, K., Nakuti, J., Bukuluki, P., Lwanyaaga, J., Namakula, S., Nanyunja, B., Wainberg, M. L., Naker, D., & Michau, L. (2017). Towards a feminist understanding of intersecting violence against women and children in the family. *Social Science & Medicine*, 184, 40–48. https://doi.org/10.1016/j.socscimed.2017.04.042
- Novitzky, P., Janssen, J., & Kokkeler, B. (2023). A systematic review of ethical challenges and opportunities of addressing domestic violence with AI-technologies and online tools. *Heliyon*, *9*(*6*), e17140. https://doi.org/10.1016/j.heliyon.2023.e17140
- Okafor, M. C., Anorue, L. I., Obayi, P. M., & Chima, O. A. (2023). Knowledge and attitude toward media campaigns against gender-based violence among Nigerian women in Southeast Nigeria. *SAGE Open, 13(4)*. https://doi.org/10.1177/21582440231206594

- Orr, C., Fisher, C., Bell, M., O'Donnell, M., Martin, K., Glauert, R., & Preen, D. (2023). Exposure to family and domestic violence is associated with lower attendance and higher suspension in school children. *Child Abuse & Neglect, 142(Part 1)*, 105594. https://doi.org/10.1016/j.chiabu.2022.105594
- Philip, M. (2024). Questionnaire, rating scale and checklist How do they differ? *Methods in Psychology*, 10, 100145. https://doi.org/10.1016/j.metip.2024.100145
- Ribeiro, R., Almeida, I., Saavedra, R., Caridade, S., Oliveira, A., Santos, M., & Soeiro, C. (2022). The different contexts of domestic violence before and during the COVID-19 pandemic: A Portuguese overview. *Victims & Offenders, 17(8),* 1224–1240. https://doi.org/10.1080/15564886.2022.2052214
- Richardson, R. A., Raj, A., Downs, K., Bergenfeld, I., Wiltshire, C., Dimitrova, A., & Benmarhnia, T. (2025). Impact of domestic violence legislation on reported intimate partner violence: A difference-in-differences analysis across 16 countries. *SSM Population Health, 31*, 101837. https://doi.org/10.1016/j.ssmph.2025.101837
- Rodrigues, M., Street, A., & Arroyo, J. M. (2024). Multistage day-ahead scheduling of energy and reserves. *Electric Power Systems Research, 235*, 110793. https://doi.org/10.1016/j.epsr.2024.110793
- Rose, E., Mertens, C., & Balint, J. (2023). Structural problems demand structural solutions: Addressing domestic and family violence. *Violence Against Women, 30(14),* 3633–3655. https://doi.org/10.1177/10778012231179212
- Ryu, H., & Pratt, W. (2025). Women's educating and coping strategies for cultivating supportive webbased spaces for discussing sexual and reproductive health: Co-design study. *Journal of Medical Internet Research*, 27. https://doi.org/10.2196/62716
- Sardinha, L., Yüksel-Kaptanoğlu, İ., Maheu-Giroux, M., & García-Moreno, C. (2024). Intimate partner violence against adolescent girls: Regional and national prevalence estimates and associated country-level factors. *The Lancet Child & Adolescent Health, 8(9),* 636–646. https://doi.org/10.1016/S2352-4642(24)00145-7
- Schroder, D. (2025). Lotto lotteries decision making under uncertainty when payoffs are unknown. *Journal of Behavioral and Experimental Economics, 114*, 102310. https://doi.org/10.1016/j.socec.2024.102310
- Sedziafa, A. P., Tenkorang, E. Y., & Owusu, A. Y. (2019). Can marriage (re)produce and legitimize sexual violence?: A phenomenological study of a Ghanaian patrilineal society. *Women's Studies International Forum, 77*, 102296. https://doi.org/10.1016/j.wsif.2019.102296
- Shahriar, A. Z. M., & Alam, Q. (2024). Violence against women, innate preferences and financial inclusion. *Pacific-Basin Finance Journal, 87,* 102482. https://doi.org/10.1016/j.pacfin.2024.102482
- Stewart, D. E., MacMillan, H., & Kimber, M. (2020). Recognizing and responding to intimate partner violence: An update. *The Canadian Journal of Psychiatry*, 66(1), 71–106. https://doi.org/10.1177/0706743720939676
- Torrance, R., Akli, Q., Ahmed, R., Cust, H., & Cislaghi, B. (2024). The influence of social norms on sexual violence and physical intimate partner violence in Somalia: A systematic literature review. *Aggression and Violent Behavior, 78*, 101944. https://doi.org/10.1016/j.avb.2024.101944
- Wake, A. D., & Kandula, U. R. (2022). The global prevalence and its associated factors toward domestic violence against women and children during COVID-19 pandemic "The shadow

- pandemic": A review of cross-sectional studies. *Women's Health, 18*. https://doi.org/10.1177/17455057221095536
- Webster, A., Fog, L. S., Hall, E., van Rossum, P. S. N., Nevens, D., Montay-Gruel, P., Franco, P., Joyce, E., Jornet, N., Clark, C. H., & Bertholet, J. (2025). ESTRO guidelines for developing questionnaires in survey-based radiation oncology research. *Clinical and Translational Radiation Oncology*, *51*, 100895. https://doi.org/10.1016/j.ctro.2024.100895
- Widanaralalage, B. K., Raman, E., & Murphy, A. D. (2025). The effect of victims and perpetrators' sex on intervening in non-physical intimate partner violence scenarios. *International Journal of Law, Crime and Justice, 81*, 100746. https://doi.org/10.1016/j.ijlcj.2025.100746
- Winstok, Z. (2007). Toward an interactional perspective on intimate partner violence. *Aggression and Violent Behavior*, *12*(3), 348–363. https://doi.org/10.1016/j.avb.2006.12.001
- Zaki, N. F. M., Farzana, A., Wan Yuen, C., et al. (2025). Scoping the conceptualizations of elder abuse and neglect: A perspective from older adults. *Asia Pacific Journal of Public Health*, 37(6–7), 521–529. https://doi.org/10.1177/10105395251362559