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Socio-Demographic Determinants of Pregnancy Among Teenage Mothers Aged 14 to 19 Years in Homa Bay County, Kenya

Mellan Khavetsa Lilumbi[1*], John Paul Oyore[1], Mary W Gitahi[1]
[1]Department of Family Medicine, Community Health and Epidemiology, Kenyatta University, Kenya
[*]Corresponding author email: mellanlilumbi@gmail.com

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Abstract

Teenage pregnancy remains a major public health concern in Kenya, with Homa Bay County reporting rates higher than the national average. This study examined the socio-demographic determinants of pregnancy among teenage mothers aged 14–19 years in Homa Bay County, Kenya. A descriptive cross-sectional mixed-methods design was employed among 422 teenage mothers aged 14–19 years. Quantitative data were collected using structured questionnaires, while qualitative data were obtained through key informant interviews. Data were analyzed using descriptive statistics, chi-square tests, and binary logistic regression at the $\alpha \leq 0.05$ significance level. Qualitative data were analyzed thematically through content analysis and triangulated with quantitative findings. The study found that socio-demographic factors significantly influenced teenage pregnancy. Adolescents from the lowest wealth quintile were more likely to experience pregnancy (AOR = 2.67, $p < 0.05$), while those in the highest wealth quintile were less likely (AOR = 0.23, $p = 0.005$). Large household size was associated with increased odds of pregnancy (AOR = 2.66, $p = 0.006$). Education was protective, with secondary education reducing the likelihood of pregnancy (AOR = 0.24, $p = 0.001$). Qualitative findings further highlighted peer pressure and weak parental guidance as key contributors.The findings indicate that poverty, household structure, and low educational attainment are key socio-demographic determinants of teenage pregnancy in Homa Bay County. Interventions should prioritize economic empowerment, school retention programs, and strengthened parental guidance to reduce teenage pregnancy rates.

Keywords: *Teenage pregnancy, socio-demographic determinants, adolescent mothers, wealth index, Homa Bay County*

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1. Introduction

Adolescent pregnancy, defined as pregnancy among girls aged 10–19 years, remains a major global public health concern and is associated with high mortality among adolescents aged 15–19 years. Globally, an estimated 16 million girls aged 15–19 and about 2 million girls below 15 years become pregnant annually, with the highest burden occurring in developing countries

(Sharmila, 2021). Evidence further shows wide regional disparities, with adolescent pregnancy rates being relatively low in parts of Asia but substantially higher in Sub-Saharan Africa, where prevalence exceeds 50% in some contexts (Sychareun et al., 2018; Wafula et al., 2020).

In Africa, teenage pregnancy contributes significantly to maternal morbidity and mortality, with complications such as preterm birth, low birth weight, hypertensive disorders, and infections being common among adolescent mothers. Studies indicate that over 70,000 adolescent girls in Africa die annually due to pregnancy-related complications, highlighting the severity of the problem (Nkala-Dlamini, 2021). In addition, adolescent pregnancy is strongly linked to unintended childbearing, with more than 14 million unintended pregnancies reported annually in Sub-Saharan Africa, affecting both educational attainment and long-term socio-economic outcomes (Ayele et al., 2018; Yakubu & Salisu, 2018).

In Kenya, adolescent pregnancy remains prevalent due to poverty, gender inequality, and inadequate access to sexual and reproductive health education. In Homa Bay County, teenage pregnancy is associated with poor parenting, low parental literacy, single-parent households, and negative attitudes toward contraceptive use, which increase vulnerability among adolescents (Kassa et al., 2018; Kawala et al., 2018). Economic deprivation also pushes teenagers into transactional relationships for basic needs, increasing the risk of unintended pregnancy and school dropout (Hedges, 2021; Shiren Ali Al-Hamzawi & Sahar Hamza Ali Al-Tameemi, 2020). Limited access to reproductive health information and services further worsens the situation by reducing adolescents' ability to make informed sexual health decisions (Kassa et al., 2018).

1.1 Problem statement

Homa Bay County continues to report disproportionately high rates of HIV and unintended pregnancies among adolescent girls, estimated to be nearly twice the national average (Ayanaw Habitu et al., 2018). Adolescents in the county remain highly vulnerable due to low contraceptive use, short-term sexual relationships, and intense peer pressure encouraging early marriage and childbearing (Wafula et al., 2020). Additionally, sexual violence and defilement cases are prevalent, especially during school holidays, but often go unreported due to stigma, fear, and community retaliation (Wafula et al., 2020). Certain cultural practices, such as disco matanga, have also been linked to increased risky sexual behavior and unprotected sex, further elevating pregnancy and HIV risks (Sharmila, 2021; Yakubu & Salisu, 2018).

Unintended teenage pregnancy in Homa Bay is associated with serious health, psychological, and socio-economic consequences, including unsafe abortions, increased risk of STIs, and school dropout, often compounded by economic dependence on partners, which exposes girls to abuse (Ramesh et al., 2018; Sharmila, 2021). National reports indicate that Homa Bay has the highest rates of teenage childbearing among Kenyan counties (KNBS, 2019; KDHS, 2022). In response, UNICEF emphasizes the need for strengthened sexual and reproductive health education, HIV prevention services, and financial support programs for vulnerable adolescents (UNICEF, 2021). This study, therefore, sought to examine the socio-demographic determinants of pregnancy among teenage mothers aged 14–19 years in Homa Bay County, Kenya.

2. Literature Review

The risk factors associated with teenage girls' school dropouts and teenagers imply that teenage pregnancies apply to both genders and are gender specific. Kawala et al. (2018) note that most teenagers aged 15-19 years in Homa Bay are already mothers or pregnant. On the same note, the age of 19 years is associated with pregnancy according to the cultural norms of Nyanza Province. According to Everett et al. (2019), almost 33% of adolescent girls in Homa Bay County are stunted. Likewise, 52.7% of teenage girls suffer from anaemia due to lower dietary practices and nutrition knowledge. Hedges (2021) contends that adequate nutritional status for pregnant adolescents is essential for fulfilling the increased requirements of pubertal development and reducing the risk of chronic diseases. Kassa et al. (2018) confirm that energy requirements, iron, calcium, and protein are essential for sufficient support and growth of pregnant teenagers.

A cross-sectional study by Lawal (2020) in Bangladesh on the excellent nutrition status of pregnant adolescents indicates that higher wealth was related to a lower risk of anaemia. Children from affluent households had improved nutritional quality, whereas teenagers from poor backgrounds consume poorer diets with lower macronutrient and micronutrient intakes. At the same time, Nyanza culture supports polygamy, which renders most vulnerable teenagers vulnerable to early marriage during pregnancy. The marital customs, such as religious beliefs, rules, traditions, dialects, and values, play a directive and unifying role, cultivating a sense of common purpose among adolescents. According to Lebina (2017), some cultures encourage or support young adulthood because a teenager who gets pregnant is neither rebuked nor condemned. Luo's multiple social norms encourage early marriage by rewarding fathers for marrying young teenagers in terms of dowry. Therefore, the teenagers who forfeit or deny early marriage are stigmatized in such a society, becoming a family burden.

Otherwise, Ilbert and Marfuah (2021) confirm that the Hindu Religion, with over 815 followers in Nepal, prohibits pre-marital sexual behaviors and sex. Besides, religion as cultural practices and behaviours in most African nations, such as the Pokot and Luo communities in Kenya, have a substantial influence on sexuality, such as specific gender roles and family planning (Nkosi & Pretorius, 2019). Hence, it affects the norms of teenage pregnancy. In short, religion significantly impacts teenage pregnancies and adolescents in most tribes. Various socio-demographic factors have been identified as potential predictors of teenage pregnancies across different contexts. More importantly, age as a socio-demographic factor has been identified as one of these determinants, whereby in most cases, older adolescents are more vulnerable to early pregnancy (Campbell & Lehenbauer, 2019). Secondly, household size is a known predictor whereby researchers note that adolescents drawn from families comprising larger household sizes are more predisposed to engaging in risky sexual behaviours that predispose them to early pregnancy. Religion is another factor that has been critical in determining the levels of teenage pregnancies, whereby certain religions provide access to sex education forums (Bakhurji et al., 2020), hence aiding in limiting the occurrence of teenage pregnancies.

3. Materials and Methods

The study employed a cross-sectional descriptive design using a mixed-methods approach to examine socio-demographic determinants associated with teenage pregnancy among mothers aged 14–19 years in Homa Bay County, Kenya. Data were collected from households with at

least one teenage mother in both urban (Homa Bay Town) and rural (Karachuonyo) settings. The target population comprised teenage mothers aged 14–19 years who had lived in the county for at least 1 year; those who were too ill to respond or declined participation were excluded. A sample size of 422 participants was determined using the standard formula for estimating proportions at a 95% confidence level, and systematic sampling was applied using facility registers and community health records as the sampling frame.

Primary data were collected using researcher-administered structured questionnaires and key informant interviews with sexual and reproductive health experts, including healthcare providers and members of the County Health Management Team. Validity was enhanced through pilot testing and supervisor review, while reliability was assessed using the test-retest method. Quantitative data were coded and analyzed in R using descriptive statistics, chi-square tests, and binary logistic regression at a significance level of $p \leq 0.05$. Qualitative data were analyzed through content analysis and triangulated with quantitative findings to generate themes. Ethical approval was obtained from relevant institutions, and confidentiality, informed consent, and protection of participants' rights were strictly observed throughout the study.

4. Results

4.1 Association between Socio-demographic factors and having ever been pregnant among teenage girls

A cross-tabulation and Chi-square (χ^2) analysis were conducted to examine associations between socio-demographic characteristics and teenage pregnancy among girls aged 14–19 years in Homa Bay County. All statistical tests were performed at a 95% confidence interval ($\alpha = 0.05$), meaning results with $p < 0.05$ were considered statistically significant.

As presented in Table 1, several socio-demographic variables were significantly associated with teenage pregnancy. Age group, education level, occupation, monthly household income, and household wealth quintile showed statistically significant associations ($p < 0.05$).

Older adolescents (17–19 years) had a higher prevalence of pregnancy (35.0%) than younger girls (14–16 years; 20.5%) (χ^2 (1) = 11.07, $p = 0.001$). Education level also showed a strong association ($\chi^2(4) = 51.35$, $p < 0.001$); pregnancy rates declined with higher levels of education. All respondents with no formal education (100%) and most with pre-primary education (88.9%) had been pregnant, compared to only 11.9% with primary education and 27.0% with secondary education.

Occupational status was another significant factor (χ^2 (4) = 40.86, $p < 0.001$). All girls engaged in casual labor (100%), and the majority in formal employment (66.7%) had been pregnant, compared to 22.4% among those with no occupation. Economic indicators, such as monthly household income ($\chi^2(4) = 12.96$, $p = 0.011$) and household wealth quintile ($\chi^2(3) = 18.77$, $p < 0.001$), were also significantly associated with pregnancy. Girls from households earning less than KES 5,000 per month or belonging to the lowest wealth quintile reported higher pregnancy prevalence (33.9% and 35.8%, respectively) compared to those from higher-income or wealthier households.

In contrast, residence ($p = 0.153$), religion ($p = 0.235$), household size ($p = 0.165$), and primary source of household income ($p = 0.552$) were not statistically significant at the 95% confidence level.

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Table 1: A chi-square test result showing the association between socio-demographic characteristics and ever being pregnant among teenage girls in HBC, Kenya

Variable	Category	Ever Been Pregnant		Total n (%)	χ^2 (df)	P-value
		No n (%)	Yes n (%)			
Residence	Rural	148 (70.1%)	63 (29.9%)	211 (50.0%)	2.04 (1)	0.153
	Urban	161 (76.3%)	50 (23.7%)	211 (50.0%)		
Age group	14–16	190 (79.5%)	49 (20.5%)	239 (56.6%)	11.07 (1)	**0.001** **
	17–19	119 (65.0%)	64 (35.0%)	183 (43.4%)		
Religion	Catholic	119 (70.8%)	49 (29.2%)	168 (39.8%)	5.55 (4)	0.235
	Adventist	121 (72.5%)	46 (27.5%)	167 (39.6%)		
	Muslim	6 (75.0%)	2 (25.0%)	8 (1.9%)		
	Protestant	63 (80.8%)	15 (19.2%)	78 (18.5%)		
	Other	0 (0.0%)	1 (100.0%)	1 (0.2%)		
Household size	1–4	141 (76.6%)	43 (23.4%)	184 (43.6%)	1.93 (1)	0.165
	5+	168 (70.6%)	70 (29.4%)	238 (56.4%)		
Education Level	None	0 (0.0%)	4 (100.0%)	4 (0.9%)	51.35 (4)	**<0.001** **
	Pre-primary	1 (11.1%)	8 (88.9%)	9 (2.1%)		
	Primary	111 (88.1%)	15 (11.9%)	126 (29.9%)		
	Secondary	165 (73.0%)	61 (27.0%)	226 (53.6%)		
	Tertiary	32 (56.1%)	25 (43.9%)	57 (13.5%)		
Occupation	None	287 (77.6%)	83 (22.4%)	370 (87.7%)	40.86 (4)	**<0.001** **
	Self-employed	17 (53.1%)	15 (46.9%)	32 (7.6%)		
	Unpaid work	4 (57.1%)	3 (42.9%)	7 (1.7%)		
	Casual labour	0 (0.0%)	10 (100.0%)	10 (2.4%)		
	Formal employment.	1 (33.3%)	2 (66.7%)	3 (0.7%)		

Income source	Business	211 (74.6%)	72 (25.4%)	283 (67.1%)	3.04 (4)	0.552
	Casual labour	38 (64.4%)	21 (35.6%)	59 (14.0%)		
	Employment	38 (73.1%)	14 (26.9%)	52 (12.3%)		
	Livestock	19 (79.2%)	5 (20.8%)	24 (5.7%)		
	None	3 (75.0%)	1 (25.0%)	4 (0.9%)		
Monthly household income	<5000	119 (66.1%)	61 (33.9%)	180 (42.7%)	12.96 (4)	**0.011****
	5000–9999	127 (79.4%)	33 (20.6%)	160 (37.9%)		
	10,000–14,999	57 (76.0%)	18 (24.0%)	75 (17.8%)		
	15,000–19,999	6 (100.0%)	0 (0.0%)	6 (1.4%)		
	≥20,000	0 (0.0%)	1 (100.0%)	1 (0.2%)		
Wealth quintile of the household	Lowest	124 (64.3%)	69 (35.8%)	193 (45.7%)	18.77 (3)	**<0.001**
	Middle	57 (78.1%)	16 (21.9%)	73 (17.3%)		
	Fourth	71 (88.8%)	9 (11.3%)	80 (19.0%)		
	Highest	57 (75.0%)	19 (25.0%)	76 (18.0%)		

*Note: p-value < 0.05 indicates statistical significance with "**" marking significant results at the 0.05 level of significance, χ^2 = Chi-square test, df = degrees of freedom, P-value=Probability value*

4.2 Logistic Regression Analysis of Socio-Demographic Characteristics and Teenage Pregnancy

To further examine the relationship between socio-demographic characteristics and teenage pregnancy, a binary logistic regression analysis was conducted at the 95% confidence level with a significance threshold of $\alpha = 0.05$. Logistic regression was appropriate for assessing both the strength (magnitude) and direction of association between each socio-demographic factor and the probability of teenage pregnancy. The analysis was performed in two stages: the bivariate model, which examined each explanatory variable independently to identify preliminary associations, and the multivariate model, which controlled for confounding effects to isolate the independent predictors of pregnancy. In both models, results were expressed as odds ratios (ORs) with corresponding 95% confidence intervals (CIs) to indicate the precision of the estimates. Variables with $p < 0.05$ were considered statistically significant. The full results are presented in Table 2.

In the bivariate model, age was significantly associated with pregnancy, with girls aged 17–19 having higher odds of pregnancy than those aged 14–16 (OR=2.09, 95% CI: 1.35–3.23, p=0.001). However, this relationship lost significance in the multivariate model after adjusting for other factors (AOR=1.51, 95% CI: 0.78–2.95, p=0.225).

Household size was significant in the adjusted model. Teenage girls from larger households (five or more members) had higher odds of pregnancy than those from smaller households (AOR=2.66, 95% CI: 1.33–5.33, p=0.006). Education level also showed a strong association. Compared to girls with no formal education, those with primary education (AOR=0.13, 95% CI: 0.04–0.40, p<0.001) and secondary education (AOR=0.24, 95% CI: 0.10–0.55, p=0.001) had significantly reduced odds of pregnancy. This protective effect of education was evident in the crude and adjusted models.

The wealth quintile further demonstrated significant associations. Teenage girls in the fourth quintile (AOR=0.14, 95% CI: 0.05–0.39, p<0.001) and those in the highest quintile (AOR=0.23, 95% CI: 0.08–0.65, p=0.005) were less likely to have experienced pregnancy compared to their counterparts in the lowest quintile. In contrast, the middle quintile showed borderline significance (AOR=0.46, 95% CI: 0.20–1.04, p=0.063).

Other socio-demographic variables, including place of residence, religion, occupation, source of income, and monthly household income, were not significantly associated in the adjusted analysis. For instance, urban residence (AOR=0.63, 95% CI: 0.24–1.67, p=0.356) and higher income brackets, such as 5,000–10,000 KES (AOR=0.97, 95% CI: 0.36–2.58, p=0.946), were not significantly associated with pregnancy. Similarly, religion and occupation categories did not yield statistically significant results.

The null hypothesis that "there is no significant relationship between socio-demographic factors and teenage pregnancy" was rejected at the 5% significance level (α = 0.05), as several variables remained statistically significant at the 95% confidence level.

Table 2: A logistic regression test result showing the relationship between socio-demographic characteristics and ever being pregnant among teenage girls in HBC, Kenya

Variable	Category	UOR (95% CI)	p-value	AOR (95% CI)	p-value
Residence (Ref: Rural)	Urban	0.73 (0.47 – 1.13)	0.154	0.63 (0.24 – 1.67)	0.356
Age (Ref: 14-16)	17–19	2.09 (1.35 – 3.23)	**0.001****	1.51 (0.78 – 2.95)	0.225
Religion (Ref: Adventist)	Catholic	1.08 (0.67 – 1.74)	0.742	1.62 (0.84 – 3.10)	0.147
	Muslim	0.88 (0.17 – 4.50)	0.875	0.35 (0.04 – 3.22)	0.354
	Protestant	0.63 (0.32 – 1.21)	0.163	0.46 (0.20 – 1.06)	0.067
Household size (Ref: 1-4)	≥5	1.37 (0.88 – 2.12)	0.165	2.66 (1.33 – 5.33)	**0.006****
Education level (Ref: No education)	Pre-primary	10.24 (1.20 – 87.35)	**0.033****	8.07 (0.54 – 119.76)	0.129
	Primary	0.17 (0.08 – 0.37)	**<0.001****	0.13 (0.04 – 0.40)	**<0.001****
	Secondary	0.47 (0.26 – 0.86)	**0.015****	0.24 (0.10 – 0.55)	**0.001****
	Tertiary	Omitted	—	Omitted	—
Occupation (Ref: Casual labour)	Formal	2.67 (0.16 – 45.14)	0.497	4.26 (0.17 – 105.03)	0.376
	None	0.39 (0.08 – 1.76)	0.218	0.63 (0.09 – 4.39)	0.64
	Self-employed	1.18 (0.23 – 6.13)	0.847	5.73 (0.68 – 48.19)	0.108
	Casual	1.62 (0.89 – 2.94)	0.113	1.66 (0.73 – 3.79)	0.225

Primary source income (Ref: Business)	Employment	1.08 (0.55 – 2.11)	0.822	2.24 (0.79 – 6.32)	0.129
	Livestock	0.77 (0.28 – 2.14)	0.618	3.31 (0.88 – 12.48)	0.077
	None	0.98 (0.10 – 9.54)	0.984	2.29 (0.21 – 25.27)	0.497
Monthly income (Ref: 15–20k)	5000–10,000	0.82 (0.43 – 1.58)	0.559	0.97 (0.36 – 2.58)	0.946
	<5000	1.62 (0.88 – 3.00)	0.122	1.90 (0.65 – 5.57)	0.243
	>20,000	Empty	—	Empty	—
Wealth quintile (Ref: Lowest)	Middle	0.50 (0.27 – 0.95)	**0.033****	0.46 (0.20 – 1.04)	0.063
	Fourth	0.23 (0.11 – 0.48)	**<0.001****	0.14 (0.05 – 0.39)	**<0.001****
	Highest	0.60 (0.33 – 1.09)	0.092	0.23 (0.08 – 0.65)	**0.005****

*Note: UOR =Unadjusted Odds Ratio, AOR = Adjusted Odds Ratio, CI = Confidence Interval, p-value: p < 0.05 indicates statistical significance, with "**" marking results significant at the 0.05 level of significance*

4.3 Qualitative Data Analysis: Socio-Demographic Determinants of Teenage Pregnancy

Poverty and Economic Hardship

Poverty emerged as the most significant socio-demographic determinant of teenage pregnancy. Adolescents from economically vulnerable households reported engaging in relationships to meet basic needs such as sanitary pads, food, clothes, and body oil. One respondent explained:

"Sometimes you lack body oil, sanitary pads, so you prefer going to a boy who gives you something small to buy body oil." (Teenage Mother).

Similarly, another respondent disclosed:

*"We don't have money at home, so I started my relationships because of money…to buy things that are lacking." (*Teenage mother)

Caregivers confirmed this, noting that poverty exposes girls to exploitation, particularly by boda boda riders and older men. A parent remarked:

"You will find a girl needing pads, but she is not telling the parents; instead, she tells the bike riders, and that leads to pregnancy." (Caregiver).

Peer Influence and Social Pressure

Peer pressure also contributed to teenage pregnancy. Respondents described pressure to imitate peers with boyfriends who received financial support. A respondent narrated:

"The main reason I know is peer pressure…maybe the boyfriend you have gives you 200 shillings and the ones for your friends give them 5000, 2000, so you end up envying them." (Teenage Mother)

A Community Health Promoter (CHP) added that young girls compared themselves with peers who received pads and other items from boyfriends, which encouraged them to enter relationships.

Parental Absence and Weak Guidance

A recurrent theme was the lack of parental involvement in guiding children on sexuality and relationships. Many adolescents grew up in single-parent households or with guardians who were either overburdened or uninvolved. One parent explained:

"There are some parents who are not close to their children; they don't talk to them, and they don't tell them how the world is…when you send the girl to the market, and she delays, the parent will not even ask her why." (Caregiver).

This lack of supervision and communication left adolescents vulnerable to exploitation and misinformation.

5. Discussion

The study findings revealed that several socio-demographic factors were significantly associated with teenage pregnancy among girls aged 14 to 19 years in Homa Bay County, while others showed no significant relationship. The quantitative analysis demonstrated that age, education level, household size, occupation, income, and wealth quintile were essential predictors, whereas residence, religion, and income source were not statistically significant. These results are consistent with previous literature and offer context-specific insights from Homa Bay.

Regarding age, the bivariate analysis showed that teenage girls aged 17–19 years were more likely to have ever been pregnant than those aged 14–16, a finding that aligns with Kawala et al. (2018), who reported that older adolescents in Homa Bay are already mothers or pregnant. However, the multivariate regression indicated that the effect of age lost significance after adjusting for other variables, suggesting that underlying socio-economic and educational factors may explain the observed differences. This echoes Campbell and Lehenbauer (2019), who emphasized that while age is a determinant, it often interacts with other social and structural influences.

Education emerged as a critical protective factor. Girls with primary and secondary education had significantly reduced odds of pregnancy compared to those with no formal education. This is consistent with prior studies, such as Everett et al. (2019), who highlighted the role of education in improving girls' health and nutritional outcomes, thereby reducing vulnerability to early pregnancy. Similarly, our findings mirror Bakhurji et al. (2020), who noted that education often provides girls with access to information and forums on sexuality, equipping them with knowledge and decision-making capacity that lowers the risk of teenage pregnancy. The high proportions of pregnancy among girls with limited schooling further reinforce the importance of strengthening school retention initiatives in Homa Bay.

Household size also proved significant in the adjusted model, with girls from larger households having higher odds of pregnancy compared to those from smaller families. This supports existing evidence that economic pressure in larger households may push girls into risky relationships to supplement household resources. The qualitative data confirmed this, with teenage mothers citing poverty and the need for necessities, such as pads, clothing, and food, as drivers of sexual relationships with men who could provide material support. Caregivers further corroborated this by pointing to the role of boda boda riders and older men in exploiting girls' unmet needs. These results resonate with Lawal (2020), who demonstrated that economic vulnerability increases adolescents' exposure to risk.

The wealth quintile was also strongly associated with teenage pregnancy. Girls from wealthier households were less likely to report pregnancy compared to those from the poorest households. This finding is consistent with Lawal's (2020) study in Bangladesh and Kassa et

al. (2018), who noted that economic well-being supports better nutrition and lowers the risk of adverse reproductive health outcomes. Similarly, qualitative findings from this study highlighted poverty as the most significant determinant, with respondents narrating how the lack of financial resources forced them into transactional relationships. This underscores the structural link between poverty and vulnerability to early pregnancy.

Interestingly, factors such as residence, religion, and income source were not significantly associated with pregnancy in this study. While prior research (Nkosi & Pretorius, 2019; Ilbert & Marfuah, 2021) emphasized religion and cultural norms as critical determinants, our findings suggest that these influences may be less pronounced in this population compared to direct socio-economic factors such as poverty, education, and household structure. Similarly, household income did not remain significant in the adjusted analysis, which may be explained by the greater predictive power of wealth quintile as a more comprehensive measure of living standards.

The qualitative data also provided insight into social determinants that may not emerge as statistically significant in regression models. Respondents repeatedly highlighted peer pressure and weak parental guidance as drivers of early pregnancy. Teenage mothers compared themselves to peers who received financial support from boyfriends, leading them to enter relationships prematurely. Caregivers and community health promoters also emphasised the role of absent or uninvolved parents, who failed to provide adequate supervision or communication about sexuality. These findings are in line with Lebina (2017), who highlighted the cultural and familial dimensions that normalise or fail to challenge early sexual activity among girls.

Overall, the study demonstrates that socio-demographic determinants of teenage pregnancy in Homa Bay are multifaceted, with poverty, education, and household dynamics playing central roles, while peer influence and weak parental guidance compound these vulnerabilities. These results suggest that interventions to reduce teenage pregnancy must go beyond awareness creation to address underlying structural issues such as poverty alleviation, improved school retention, and stronger family support systems.

6. Conclusion

The study aimed to determine the socio-demographic determinants of teenage pregnancy, and the findings showed that significant factors included poverty as reflected through low household wealth, low education levels, large household size, older adolescent age, and occupation, alongside peer influence and weak parental guidance from the qualitative findings. These factors were consistently associated with higher odds of pregnancy among teenage girls in Homa Bay County. Based on these findings, this study concludes that socio-demographic factors such as low wealth status, limited education, large household size, and inadequate parental support are key determinants of teenage pregnancy in the study area.

7. Recommendations

The study found that adolescent girls from low-wealth households were more likely to become pregnant due to a lack of basic needs such as sanitary towels, clothing, school requirements, and food. Based on this finding, the Homa Bay County Department of Gender, Youth and

Social Services should strengthen targeted economic support interventions, including cash transfers, bursaries, and sanitary towel programs for vulnerable girls.

The study established that girls with low levels of education had higher odds of teenage pregnancy. In response to this finding, the Homa Bay County Department of Education should enhance school retention programs by supporting mentorship initiatives, academic support systems, and re-entry pathways for adolescent mothers.

Weak parental guidance and limited supervision showed a clear relationship with teenage pregnancy in the study. In light of this finding, County Community Health Services should introduce structured parental engagement programs that strengthen parent-adolescent communication and guidance on sexuality.

References

Ayanaw Habitu, Y., Yalew, A., & Azale Bisetegn, T. (2018). Prevalence and Factors Associated with Teenage Pregnancy, Northeast Ethiopia, 2017: A Cross-Sectional Study. *Journal of Pregnancy*, *2018*, 1–7. https://doi.org/10.1155/2018/1714527

Ayele, B. G., Gebregzabher, T. G., Hailu, T. T., & Assefa, B. A. (2018). Determinants of teenage pregnancy in Degua Tembien District, Tigray, Northern Ethiopia: A community-based case-control study. *PLOS ONE*, *13*(7), e0200898. https://doi.org/10.1371/journal.pone.0200898

Bakhurji, E., Gaffar, B., Nazir, M., Al-Khalifa, K., & Al-Ansari, A. (2020). First Permanent Molar Caries and Oral Health Practices in Saudi Male Teenagers: Inequalities by Socioeconomic Position. *Scientifica*, *2020*, 1–7. https://doi.org/10.1155/2020/2640949

Campbell, C., & Lehenbauer, K. R. (2019). Teenage Pregnancy: Time for Change and Action. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3387949

Everett, B. G., Turner, B., Hughes, T. L., Veldhuis, C. B., Paschen-Wolff, M., & Phillips, G. (2019). Sexual Orientation Disparities in Pregnancy Risk Behaviors and Pregnancy Among Sexually Active Teenage Girls: Updates from the Youth Risk Behavior Survey. *LGBT Health*, *6*(7), 342–349. https://doi.org/10.1089/lgbt.2018.0206

Hedges, K. (2021). Maasai Girls' Experiences of Ukimwi ni Homa (AIDS Is a Fever): Idioms of Vulnerability and HIV Risk in East Africa. *Human Organization*, *80*(4), 332–342. https://doi.org/10.17730/1938-3525-80.4.332

Ilbert, R., & Marfuah, D. (2021). Pre-marital Sexual Behaviour in Student Dating: A Literature Review. *KnE Life Sciences*, 726–735. https://doi.org/10.18502/kls.v6i1.8748

Kassa, G. M., Arowojolu, A. O., Odukogbe, A. A., & Yalew, A. W. (2018). Prevalence and determinants of adolescent pregnancy in Africa: a systematic review and Meta-analysis. *Reproductive Health*, *15*(1). https://doi.org/10.1186/s12978-018-0640-2

Kawala, M., Hyuha, T. S., William, E., Walekwa, P., Elepu, G., & Kalumba, S. C. (2018). Determinants for Choice of Fish Market Channels: The Case of Busia (Uganda/Kenya) Border. *Journal of Agricultural Science*, *10*(8), 118. https://doi.org/10.5539/jas.v10n8p118

Lawal, Z. I. (2020). Culture, Socio-economic Status and Religious Coping As Predictors of Happiness: A Review. *International Journal of Psychosocial Rehabilitation*, *24*(5), 5554–5567. https://doi.org/10.37200/ijpr/v24i5/pr2020262

Lebina, C. M. (2017). Consequences of Teenage Pregnancy. *TEXILA INTERNATIONAL JOURNAL of NURSING*, *3*(2), 124–133. https://doi.org/10.21522/tijnr.2015.03.02.art011

Nkala-Dlamini, B. (2021). "It Was a Mistake, but We Knew That Something Might Happen": Narratives of Teenage Girls' Experiences With Unintended Teenage Pregnancy. *Frontiers in Reproductive Health*, *3*. https://doi.org/10.3389/frph.2021.639544

Nkosi, N. N., & Pretorius, E. (2019). THE INFLUENCE OF TEENAGE PREGNANCY ON EDUCATION: PERCEPTIONS OF EDUCATORS AT A SECONDARY SCHOOL IN TEMBISA, GAUTENG. *Social Work*, *55*(1). https://doi.org/10.15270/55-1-698

Ramesh, N., Baburajan, C., & Johnson, A. R. (2018). Comparison Of Outcomes Of Teenage And Non-Teenage Pregnancies At A Rural Maternity Hospital In Ramnagara District, Karnataka – Arecord Review. *National Journal of Research in Community Medicine*, *7*(1), 66. https://doi.org/10.26727/njrcm.2018.7.1.66-69

Sharmila, S. (2021). Awareness and Attitude Regarding Teenage Pregnancy among Adolescent Girls of Chandannath Municipality, Jumla. *Women Health Care and Issues*, *4*(4), 01–06. https://doi.org/10.31579/2642-9756/049

Shiren Ali Al-Hamzawi, & Sahar Hamza Ali Al-Tameemi. (2020). Patterns of Contraceptives Use and Their Complications in Iraqi Reproductive Age Women. *International Journal of Research in Pharmaceutical Sciences*, *11*(2), 1411–1416. https://doi.org/10.26452/ijrps.v11i2.2010

Sychareun, V., Vongxay, V., Houaboun, S., Thammavongsa, V., Phummavongsa, P., Chaleunvong, K., & Durham, J. (2018). Determinants of adolescent pregnancy and access to reproductive and sexual health services for married and unmarried adolescents in rural Lao PDR: a qualitative study. *BMC Pregnancy and Childbirth*, *18*(1). https://doi.org/10.1186/s12884-018-1859-1

UNICEF. (2021, June 8). *Action urged on teenage pregnancy and HIV, as new report reveals high rates in Homa Bay*. Www.unicef.org. https://www.unicef.org/kenya/press-releases/action-urged-teenage-pregnancy-and-hiv-new-report-reveals-high-rates-homa-bay

Wafula, B., Arudo, J., & Kipmerewo, M. (2020). Determinants of Maternal Health Care Utilization in the Era of Free Maternity Services in Busia County, Kenya. *European Journal of Medical and Health Sciences*, *2*(4). https://doi.org/10.24018/ejmed.2020.2.4.454

Yakubu, I., & Salisu, W. J. (2018). Determinants of adolescent pregnancy in sub-Saharan Africa: a systematic review. *Reproductive Health*, *15*(1). https://doi.org/10.1186/s12978-018-0460-4