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Bridging the Health Service Gap: An Analysis of Masculinity Norms, HIV Testing Uptake and Chronic Disease Screening Among Men in Lesotho

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Abstract: Although Lesotho has made important progress in strengthening clinical health services, men and women continue to engage unequally with preventative care. This study investigates the masculinity gap by analysing how adherence to traditional gender norms shapes men's engagement with HIV testing and non-communicable disease (NCD) screening. Drawing on nationally representative data from the 2024 Lesotho Demographic and Health Survey (LDHS), we examined a sample of 3,215 men aged 15–59 years. A Masculinity Norms Index (MNI) was developed through factor analysis, and this index was used to classify participants according to gender ideology. Multivariable logistic regression showed that masculinity norms (MNI) did not reach statistical significance as an independent predictor of either HIV testing (AOR = 0.91; 95% CI: 0.91–1.19) or NCD screening after adjustment for socio-demographic covariates. HIV testing coverage was high (89.0%), driven primarily by education, marital status, and health system engagement. NCD screening remained very low (6.2%), with wealth index identified as the strongest predictor (AOR = 2.06) for the richest quintile, and age as the dominant risk factor. These findings indicate that masculinity norms appear to function as a contextual moderator rather than an independent determinant, with socio-economic factors constituting the primary drivers of both outcomes. Prioritising gender-transformative health programming and integrating NCD screening within male-oriented HIV service platforms are recommended to address the persistent health service gap in Lesotho.

Keywords: Masculinity Norms, Health Service Utilisation, HIV, Non-Communicable Disease, Lesotho

1. Introduction

Lesotho's public health landscape has undergone significant transformation over the past two decades, marked by a transition from the acute peaks of a generalised HIV epidemic toward a model of clinical normalisation (Farahani et al., 2025). As the infectious disease burden stabilises under sustained international and domestic investment, a new chal-

lenge has emerged: a profound socio-cultural friction, here termed the *masculinity gap*, that continues to exclude a significant portion of the male population from preventive healthcare (Tseole & Vermaak, 2020). Despite the availability of services, a significant portion of Lesotho's male population remains effectively invisible to the healthcare system and it is only seen when the state of conditions faced reach a state of crisis (Khotso, 2019; Stender & Rozario, 2020). This phenomenon is not merely a logistical failure but a manifestation of deep-seated gender ideologies that frame health-seeking as a violation of traditional manhood (Khotso, 2019). The central contradiction of Lesotho's current health profile. On the other hand, HIV-related services, including testing, treatment, and follow-up care, are widely accessed, reflecting decades of investment and strong public health infrastructure (Lesia et al., 2013; National AIDS Commission Lesotho, 2024). On the other hand, preventative care for Non-Communicable Diseases (NCDs) such as hypertension, diabetes, cancers, and chronic respiratory illnesses remains underdeveloped and stagnant (Selebalo et al., 2025). Evidence indicates that while approximately 80% of men know their HIV status, fewer than one in five have been screened for hypertension or diabetes — conditions that are quietly reshaping the nation's morbidity profile (Fernández et al., 2024; Schwitters et al., 2022; Selebalo et al., 2025). The result is a health system that performs well in managing communicable disease but remains poorly equipped to address the rising NCD burden (Dalal et al., 2011; Fernández et al., 2024; McCombe et al., 2021).

The roots of male health avoidance in Lesotho are historically embedded. For generations, the ideal Mosotho man was defined through the migrant labour system and pastoral resilience: the mines of South Africa and the harsh highland conditions cultivated a masculinity that prioritised physical endurance and the provider role, viewing the body as a tool for labour rather than a vessel requiring care. (Netsayi Wekwete et al., 2024; Vera-Sanso & Hlabana, 2023). As the national disease profile has shifted toward chronic conditions, this orientation toward stoicism and self-reliance now constitutes a contextual barrier to engagement with modern health services designed for early detection and long-term maintenance (Fernández et al., 2024). The implications extend beyond individual health: when men in their most productive years remain unscreened for manageable conditions such as hypertension or diabetes, the resulting loss of human capital constrains both family welfare and the nation's demographic dividend (Schwitters et al., 2022; WHO Regional Office for Europe, 2024). Universal Health Coverage, a central pillar of the Sustainable Development Goals, remains unrealisable if structural and cultural barriers prevent half the population from accessing preventive services. (Hogan et al., 2018; Ruane-McAteer et al., 2019).

This study adopts Gender and Health Theory, which holds that social norms defining what it means to be a man or a woman ultimately influence health risks, behaviours and outcomes (Courtenay, 2000). The most salient component for the present study is Hegemonic Masculinity, the dominant configuration of gender practice that legitimizes men's authority while subordinating expressions of vulnerability (Connell & Messerschmidt, 2005). In many African settings, hegemonic norms promote physical toughness, self-reliance, and risk tolerance, while actively discouraging actions perceived as feminine or weak, including seeking medical attention (Atujuna et al., 2021). Attending a clinic for a routine check-up or discussing sexual health can be seen as incompatible with this dominant male identity, producing systemic avoidance of preventive healthcare infrastructure (Fleming et al., 2014). Using a Masculinity Norms Index (MNI), this study classifies men according to their alignment with traditional gender roles and analyses how these orientations interact with measurable health outcomes. The study is structured around three analytical pillars: *first*, it investigates the extent to which traditional gender ideology is associated with avoidance of NCD screening; *second*, it examines whether the normalisation of HIV services offers a replicable model for overcoming cultural barriers; and *third*, it analyses whether socio-economic factors, education and wealth moderate the relationship between masculinity norms and health engagement. This intersection is particularly pertinent in Lesotho, where one of the world's highest HIV prevalence rates coexists with a rapidly growing NCD burden, creating a syndemic in which cultural barriers to one set of

services may exacerbate risks from another (Fernández et al., 2024; Schwitters et al., 2022). Evidence consistently shows that the invisibility of men in health statistics is, in part, a product of health systems that have not yet adapted their design, operating hours, or communication strategies to engage male citizens effectively (Hawkes & Buse, 2013; Ratele, 2008; Ruane-McAteer et al., 2019).

The study utilises a conceptual framework that links socio-demographic contexts and gender norms (independent variables) to health service utilisation (dependent variables), controlling for established demographic factors. The proposed model suggests that although established factors such as wealth, education, and age are hypothesised to moderate health-seeking behaviours, the core influence remains adherence to Traditional Masculinity Norms (MNI). Adherence to these norms is expected to lead to delayed or absent health-seeking behaviour for both HIV Testing Uptake and NCD Screening. This framework guides the multivariate analysis, enabling the isolation of the independent effect of masculinity norms while controlling common socio-economic confounders.

2. Materials and Methods

2.1 Study Setting and Design

This study was conducted in Lesotho, a lower-middle-income country in Southern Africa with one of the highest HIV prevalence rates globally and a growing burden of non-communicable diseases (NCDs) (Mugomeri et al., 2017; Schwitters et al., 2022). The study used the 2024 Lesotho Demographic and Health Survey (LDHS). The LDHS is a nationally representative, cross-sectional survey implemented by the Ministry of Health in collaboration with ICF International under the DHS Program. The survey employed a two-stage stratified sampling design to ensure representativeness across urban and rural areas and all ten districts of Lesotho. Data were obtained from the DHS Program website following prior registration and approval.

2.2 Study Population and Sample

For this study, the analytic sample was restricted to men aged 15–59 years who completed the Men's Questionnaire. After excluding respondents with missing data on variables of interest, the final sample comprised 3,215 men. This sample size was deemed sufficient to detect statistically significant associations in multivariable logistic regression models, given the prevalence of HIV testing and NCD diagnosis in the population.

2.3 Variable Measurement

2.3.1 Outcome Variables

Two dependent variables were determined to capture engagement with preventative health services, and are as follows:

- **Lifetime HIV Testing:** Measured using the standardised DHS item: *"Have you ever been tested for HIV?"* followed by confirmation of whether results were received. Responses were recoded into a binary outcome (1 = tested and received results; 0 = never tested or did not receive results). This variable reflects entry into the HIV care continuum, a critical milestone in Lesotho's high-prevalence epidemic.
- **Non-Communicable Disease (NCD) Screening/Diagnosis:** Derived from the chronic disease module, where respondents were asked, "Have *you ever been told by a doctor or other health professional that you have [condition]?"* Specifically, diagnoses of hypertension or other chronic conditions were captured. Responses were recoded into a binary indicator (1 = positive history of NCD diagnosis; 0 = no diagnosis). This outcome serves as a proxy for engagement with chronic disease services, which typically require symptom-driven health-seeking or proactive screening.

2.3.2 Exposure Variable

Masculinity Norms Index (MNI): A composite measure constructed to assess adherence to traditional gender ideologies. Three domains, which are justification of violence, fertility desire, and healthcare decision-making, were standardised and subjected to Factor Analysis (FA) using the principal component method. Variables loaded onto a single factor (eigenvalue > 1.0) representing *Traditionalism* in gender outlook. Continuous factor scores were extracted and categorised into three groups for regression analysis:

- Egalitarian (Q1 - lowest adherence to restrictive norms)
- Moderate (Q2 - partial or mixed adherence to traditional gender ideologies)
- Traditional (Q3 - highest adherence to patriarchal norms)

2.3.3 Socio-Economic and Demographic Covariates

To account for potential confounding factors, several covariates were selected based on established health-seeking behaviour literature in Sub-Saharan Africa:

- **Demographic Characteristics:** Age (15–24, 25–34, 35–49, 45+), Residence (Urban vs. Rural) and Marital Status (Never Married, Married/Living Together, Widowed/Divorced/Separated).
- **Socio-Economic Indicators:** Educational Attainment (None/Primary, Secondary, Higher), Wealth Index (Poorest/Poor, Middle, Rich/Richest), Literacy (Illiterate/Partial, Literate) and Occupation (Not Working, Professional/Formal, Informal/Manual).
- **Health Engagement Proxy:** Current Contraceptive Use (No Method, Traditional Method, Modern Method).

2.4 Statistical Analysis

Analyses were conducted using Stata version 15. Numbers and percentages described sample characteristics and outcome prevalence. Associations between MNI categories and outcomes were tested using the Pearson chi-square test**.** Separate logistic regression models estimated the adjusted odds of HIV testing and NCD screening across MNI categories. The Egalitarian group served as the reference category. Results were presented as Adjusted Odds Ratios (AORs) with 95% Confidence Intervals (CIs)**.** Statistical significance was set at $p < 0.05$.

2.5 Ethical Considerations

Ethical approval for LDHS data collection was obtained by the DHS Program from relevant national authorities in Lesotho. Permission to use the dataset was granted following registration with the DHS Program, which can be found at https://dhsprogram.com/data/available-datasets.cfm. No additional ethical approval was required for this secondary analysis.

3. Results

3.1. Descriptive Characteristics and Health Service Uptake

Table 3.1: Sample Characteristics and Unadjusted Health Service Prevalence

Variable	Category	Number of Cases (n)	Per cent (%)
HIV Testing	Yes	2862	89.02
	No	353	10.98
NCD Screening	Yes	199	93.81

	No	3016	6.19
MNI	Egalitarian	1,833	58.83
	Moderate	369	11.84
	Traditional	914	29.33
Age Group	15–24	1,097	34.12
	25–34	743	23.11
	35–49	725	22.55
	45+	650	20.22
Educational Attainment	None/Primary	1,593	49.55
	Secondary	1,273	39.6
	Higher	349	10.86
Wealth Index	Poorest/Poor	1,505	46.81
	Middle	648	20.16
	Rich/Richest	1,062	33.03
Residence	Urban	1,080	33.59
	Rural	2,135	66.41
Marital Status	Never Married	1,724	53.62
	Married	1,370	42.61
	Widowed/Divorced	121	3.76
Respondent's Occupation Type	Not Working	1,075	33.44
	Professional/Formal	264	8.21
	Informal/Manual	1,876	58.35
Respondent's Literacy Level	Illiterate/Partial	982	30.56
	Literate	2,231	69.44
Current Contraceptive Use	No Method	1,419	44.14
	Traditional	50	1.56
	Modern Method	1,746	54.31

Data Source: Lesotho Demographic and Health Survey (LHDS) 2024

Table 3.1 indicates socio-demographic characteristics and health service utilisation prevalence among men aged 15–49 in Lesotho**.** HIV testing coverage was exceptionally high, with 89.0% of respondents reporting that they had been tested. Only 11.0% had never tested for HIV. NCD screening was extremely low, with only 6.2% of respondents reporting having ever been screened, while 93.8% had never undergone any form of NCD screening. Regarding the primary exposure variable, the Masculinity Norms Index (MNI)**,** the majority of men were categorised as Egalitarian (58.8%)**,** while 29.3% adhered to Traditional **n**orms. The sample was predominantly rural (66.4%) and young, with 34.1% of respondents aged 15–24. Socio-economically, nearly half the sample (49.6%) had only a primary education or less, and 58.4% were employed in informal or manual labour. At the same time, 30.6% were illiterate or only partially literate. Notably, over half of the men (54.3%) reported using a modern contraceptive method.

3.2 Bivariate Association between Masculinity Norms and Health Outcomes

Table 3.2: Bivariate Association: Health Service Uptake by Masculinity Norms Index (MNI) Quartile

MNI Quartile	MNI Description	Ever HIV Tested (Yes, %[1])	NCD Screening/ Diagnosis (Yes, %)
Q1	Most Egalitarian	58.47	56.41
Q2	Moderate	12.80	15.38
Q3	Most Traditional	28.73	27.21
p-value (* *p<0.05)		**0.000**	**0.286**

Data Source: Lesotho Demographic and Health Survey (LHDS) 2024

The bivariate analysis in Table 3.2 revealed a significant association between masculinity norms and HIV testing.$p <$ 0.001). Among men who had ever been tested for HIV, the largest proportion belonged to the Egalitarian group (58.5%), compared to 28.7% in the Traditional group. In contrast, the association between the MNI and NCD screening was not statistically significant at the bivariate level ($p = 0.286$). While 56.4% of those screened were Egalitarian, the distribution across MNI categories did not deviate significantly from the sample's baseline distribution.

3.3 Multivariate Regression Analysis

Table 3.3: Multivariate Logistic Regression: Adjusted Odds Ratios (AOR) for Preventative Health Service Utilisation

Predictor	HIV Testing AOR [95% CI]	NCD Screening AOR [95% CI]
MNI (Ref: Egalitarian)	--	--
Moderate	1.20 [0.63 - 2.28]	0.87 [0.55 - 1.37]
Traditional	0.91 [0.69 - 1.19]	0.98 [0.68 - 1.41]
Age (Ref: 15-24)	--	--
25-34	3.26 [2.21 - 4.81] *	2.18 [1.03 - 4.62] *
35-44	2.77 [1.82 - 4.20] *	7.44 [3.74 - 14.80] *
45+	3.01 [1.96 - 4.64] *	13.82 [6.97 - 27.43] *
Education (Ref: None)	--	--
Secondary	2.04 [1.48 - 2.82] *	0.81 [0.54 - 1.22]
Higher	7.20 [2.77 - 18.69] *	0.98 [0.55 - 1.72]
Wealth (Ref: Poorest)	--	--
Middle	1.16 [0.81 - 1.66]	1.32 [0.82 - 2.11]
Rich/Richest	0.80 [0.54 - 1.19]	2.06 [1.29 - 3.29] *
Residence (Ref: Urban)	--	--
Rural	1.17 [0.84 - 1.65]	1.01 [0.69 - 1.49]
Marital (Ref: Never Married)		--
Married	3.03 [2.06 - 4.47] *	1.08 [0.73 - 1.60]
Widowed/Divorced	1.33 [0.64 - 2.76]	1.87 [1.05 - 3.34] *
Occupation (Ref: Not Working)	--	--
Professional/Formal	2.98 [1.25 - 7.09] *	1.15 [0.63 - 2.09]
Informal/Manual	1.29 [1.00 - 1.66] *	1.17 [0.81 - 1.69]

[1] *Percentages represent the proportion of men within each MNI category who reported each health service outcome.*

Literacy (Ref: Illiterate/Partial)	--	--
Literate	1.76 [1.32 - 2.34] *	1.09 [0.74 - 1.60]
Contraception (Ref: No Method)	--	--
Traditional	6.25 [0.81 - 48.33]	0.78 [0.18 - 3.41]
Modern Method	2.48 [1.93 - 3.20] *	1.18 [0.86 - 1.61]
*Note: * p<0.05*		

Data Source: Lesotho Demographic and Health Survey (LHDS) 2024

Table 3.3 shows the results of multivariate logistic regression, which highlights the factors associated with HIV testing and NCD screening among men in Lesotho. The results of the multivariate logistic regression analysis were adjusted for socio-demographic and behavioural covariates. After adjusting for potential confounders in Model 1, adherence to traditional masculinity norms (MNI) did not show a statistically significant independent association with HIV testing. Instead, the results underscored the dominant influence of socio-economic status, life stage, and health system engagement. Education emerged as a primary driver of HIV testing. Men with Higher Education had 7.20 times the odds of testing (CI: 2.77–18.69) compared to those with no education, while those with secondary education showed double the odds (AOR = 2.04). Similarly, professional or formal employment (AOR = 2.98) and functional literacy (AOR = 1.76) were significantly associated with increased uptake. All age groups above the 15–24 baseline were significantly more likely to have tested, with the 25–34 cohort showing the highest odds (AOR = 3.26). Furthermore, married men were 3.03 times more likely to have tested (CI: 2.06–4.47) than never-married men. Engagement with other health services was a strong predictor. Men using Modern Contraception were 2.48 times more likely to have received an HIV test (CI: 1.93–3.20). On the other hand**,** the results for NCD screening indicate that utilisation is driven almost exclusively by biological risk and economic access, with masculinity norms again failing to reach statistical significance in the adjusted model. Age was the most powerful predictor in the study. Compared to the youngest cohort, men aged 45+ were 13.82 times more likely to have been screened or diagnosed (CI: 6.97–27.43), reflecting the clinical focus on older populations for chronic disease checks. Men in the Rich/Richest wealth quintiles were 2.06 times more likely to have undergone screening (CI: 1.29–3.29) than those in the poorest quintile. Unlike HIV, education and residence were not significant predictors for NCDs once age and wealth were accounted for. While being married was key for HIV testing, it was not significant for NCDs. However, Widowed or Divorced men had significantly higher odds of screening (AOR = 1.87) compared to never-married men.

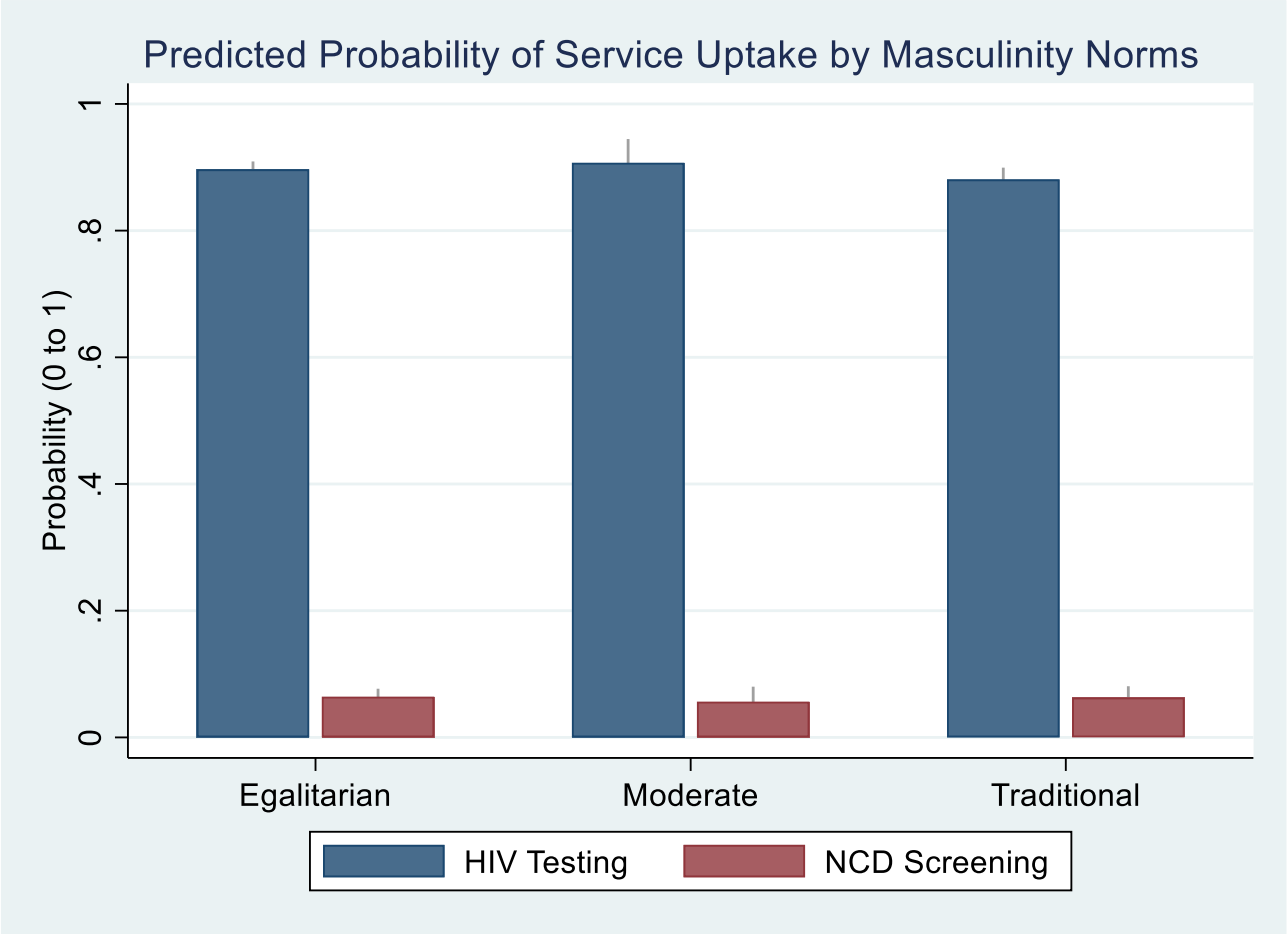


Figure 1: Predictive Probabilities of HIV Testing Uptake vs. NCD Screening Across Masculinity Norms Categories

Figure 1 shows predictive probabilities of HIV testing uptake vs. NCD screening across masculinity norms categories. In relation to HIV testing, the data tell a story of high, uniform engagement. Whether a man identifies with egalitarian or traditional masculinity norms, his adjusted probability of having been tested is predicted to remain consistently high, soaring between 84% and 88%. The nearly flat line across these categories suggests that the national effort to normalise HIV testing has successfully bypassed traditional gender barriers, making the service a standard expectation for all men regardless of their gender ideology. In contrast, the narrative for NCD screening is predicted to be one of the consistently low priorities. The plots show that the likelihood of a man seeking screening for non-communicable diseases stays trapped at the bottom of the scale, between 14% and 18%. This low trend doesn't change significantly as a man moves from egalitarian to traditional views.

4. Discussion

The findings of this study provide a compelling empirical narrative of how gender ideology serves as a structural determinant of health in Lesotho. Lesotho has achieved global commendation for its clinical normalisation of HIV services, and as such, this study highlighted a profound socio-cultural discord that continues to keep a significant portion of the male population effectively invisible to the healthcare system until that population reaches a breaking point for required intervention. Importantly, the multivariate analysis did not confirm masculinity norms as a statistically significant independent predictor of either outcome. Rather, the findings position the MNI as a contextual moderator. Men in the Traditional group showed a directional tendency toward lower HIV testing (AOR = 0.91; 95% CI: 0.91–1.19), although this did not reach statistical significance. This aligns with Hegemonic Masculinity Theory, which suggests that social

constructs of manhood emphasising endurance, invulnerability, and radical self-reliance directly conflict with the act of seeking care [25]. Seeking preventative care is often perceived as a sign of vulnerability or a public admission of a flaw in the male constitution (Dovel et al., 2015). In the Lesotho context, these ideologies are deeply rooted in the historical migrant labour system and pastoral resilience (Netsayi Wekwete et al., 2024). For generations, the ideal Mosotho man was defined by physical endurance in South African mines or the harsh highlands, viewing the body primarily as a tool for labour rather than a vessel for care (Netsayi Wekwete et al., 2024). This study suggests that as the nation's disease profile evolves, this inherited mask of masculinity has become a dysfunctional trait, preventing men from engaging with modern health systems designed for early detection.

A unique contribution to this study was the simultaneous analysis of infectious (HIV) and chronic (NCD) disease behaviours. The data revealed that while 89.0% of men have tested for HIV, only 6.2% reported being screened for NCDs. This disparity reflects the success of decades of international and domestic investment in clinical normalisation for HIV. In Lesotho, HIV testing and Voluntary Medical Male Circumcision (VMMC) have been successfully disassociated from the stigma of weakness by aligning clinical goals with traditional community values [7]. Predictive probabilities show that for HIV testing, engagement will remain high (between 84% and 88%) regardless of whether a man holds egalitarian or traditional views. This suggests that the national effort has bypassed traditional gender barriers for this specific condition by mounting it as a matter of national and familial responsibility (Chikovore et al., 2016; Dovel et al., 2015; Treves-Kagan et al., 2016). However, this success has not mainstreamed into the domain of chronic disease management. NCD screening remained low: 14% to 18% across all masculinity categories. This indicates that while the system has learned to speak the language of its male citizens regarding HIV, it has failed to do so for hypertension, diabetes, and cancers. (Fleming et al., 2014; Jan et al., 2018; Mohan et al., 2013). The invisible nature of men in NCD statistics is a by-product of a health system historically designed through maternal and child health domains, which unintentionally isolates men through its physical layout and communication styles [34], (Dovel et al., 2015).

While gender ideology creates internal resistance, this study highlights that socio-economic status determines who can overcome these barriers. Regarding NCD screening, wealth was the strongest predictor; men in the Rich/Richest quintiles were 2.06 times more likely to have been screened compared to those in the poorest quintile. This creates a compounding burden for Lesotho's rural and poor majority (Vandello et al., 2023). In these populations, the intersection of traditional masculinity, which prioritises the role of the provider, and limited financial resources leads men to ignore symptoms until they reach an acute stage of illness (Quaglia, 2023). If a man cannot afford the time away from work or the transport to a clinic, and his cultural script tells him that real men don't complain about small aches, he is functionally excluded from the healthcare system. (Quaglia, 2023). Furthermore, education emerged as a primary driver for HIV testing, with men holding Higher Education having 7.20 times the odds of testing compared to those with no education. This suggests that health literacy and economic access act as protective factors that allow men to negotiate their masculinity in ways more conducive to health-seeking (Crepaz et al., 2023; Hamilton et al., 2021; Ijaiya et al., 2024). Education provides cognitive tools to understand that strength involves protecting one's health to ensure long-term stability for the family [42]. The masculinity gap is not merely a clinical issue; rather poses a developmental crisis (Anderson, 2024; Wilson et al., 2022). Lesotho's demographic dividend, the potential for economic growth from shifts in population age structure, is at risk if men in their most productive years remain susceptible to manageable conditions like stroke or heart disease (Deng et al., 2025; UNICEF, 2017). When men avoid clinics because they perceive them as spaces for women, they miss opportunities for integrated care that could save their lives and preserve the national human capital (Hlongwa et al., 2020). The rising double burden of infectious and lifestyle-related illnesses creates a syndemic where

cultural barriers to NCD screening exacerbate the risks of late-stage HIV complications (Mapesi & Paris, 2019; Nyirenda, 2016).

Strengths and Limitations

This study benefits from several methodological strengths, most notably the use of the 2024 LDHS, providing a nationally representative snapshot of the male population. The construction of the Masculinity Norms Index (MNI) through Factor Analysis allowed for a sophisticated, data-driven categorisation of gender ideology rather than relying on single-item measures. However, the study is not without limitations. The cross-sectional design allows for the identification of associations but prevents the establishment of causality. Furthermore, results for NCD screening and HIV testing relied on self-reported data, which is subject to recall bias and social desirability bias. Although statistically robust, the MNI may not fully capture the profound cultural variations of Sesotho masculinity that were not included in the standard survey questions. Finally, the absence of biomarker data, such as objective blood pressure or glucose readings, means the study relied on proxy measures for chronic disease status.

Future Research Directions

Future research should prioritise longitudinal studies to help establish causal pathways between masculinity norms and health outcomes over time. In addition to this, incorporating biomarker data in future survey rounds will be essential to validate self-reported screening rates. Quantitative and qualitative research are essential to examine how men negotiate their identities as well as balancing societal expectations of masculinity with their biological health needs in order to generate deeper insights that can inform culturally grounded interventions which will strictly aim at closing the health service gap in Lesotho.

5. Conclusions and Recommendations

5.1 Conclusions

The evidence from the 2024 Lesotho Demographic and Health Survey (LDHS) revealed a critical crossroads for the nation's health. Research has shown that Lesotho has made monumental strides in normalising HIV services, but a significant gap in NCD service engagement remains (UNAIDS, 2023). The persistence of traditional masculinity norms has become a structural health determinant, exerting hidden pressure that deters men from seeking preventive care (Baranov et al., n.d.; Galdas et al., 2025). This study proved that restrictive gender ideology is not merely a personal choice but a national health constraint that suppresses HIV testing and contributes alongside socio-economic barriers to low uptake of NCD screening(Baranov et al., n.d.; Galdas et al., 2025; Mudie et al., n.d.). Within Lesotho, the act of seeking care is weighed against masculine identity, a cultural negotiation that endangers national health progress and constrains economic potential tied to the demographic dividend (Baranov et al., n.d.; UNICEF, 2017). The study's principal finding is that while MNI did not emerge as a statistically significant independent predictor after adjustment, it functions as a contextual moderator within a broader socio-economic framework that shapes health-seeking behaviour. Despite HIV service normalisation yielding strong, uniform participation beyond gendered barriers, NCD screening remains locked at a stagnant floor. This gendered avoidance of essential health services carries profound implications, threatening to accelerate the emerging NCD crisis while the national workforce remains vulnerable. The challenge, therefore, lies not simply in building more clinics but in transforming the underlying cultural logic that equates health-seeking with weakness.

5.2 Recommendations

Addressing Lesotho's health service gap requires a structural shift beyond clinical expansion. The evidence points to three interconnected priorities: transforming the cultural context of male health engagement, using existing high-uptake platforms to integrate NCD services, and reducing the socio-economic barriers that compound gender-related avoidance. These are further elaborated as follows:

5.2.1 Implement gender-transformative health programming

The Ministry of Health and its implementing partners must transition beyond male-friendly facilities towards interventions that actively engage and reframe traditional masculinity norms. This requires the strategic deployment of male peer educators, particularly within the most traditional communities, who can influence shared identity to redefine vulnerability as a strength and frame health-seeking as an act of responsible leadership (Dworkin et al., 2015). Programming should draw on evidence-based gender-transformative frameworks that have demonstrated effectiveness in shifting men's engagement with preventive services in comparable sub-Saharan African contexts (Dworkin et al., 2015).

5.2.2 Integrate NCD screening into existing HIV and VMMC platforms

Given that HIV testing and Voluntary Medical Male Circumcision (VMMC) have achieved high levels of cultural acceptability, these platforms should be re-engineered as one-stop-shop facilities. Incorporating routine glucose and blood pressure screening into male-oriented service points helps diminish the perception that preventive care for nonacute conditions is costly or burdensome (National AIDS Commission Lesotho, 2024; National Assembly of Lesotho, 2023). This approach has been shown to improve NCD detection rates while maintaining high HIV service utilisation in comparable settings (Dovel et al., 2015; Matonyane et al., 2025).

5.2.3 Launch targeted health literacy campaigns for rural and low-wealth men

The study's finding that wealth is the dominant predictor of NCD screening uptake highlights a structural access gap that health messaging alone cannot address. Targeted health literacy campaigns must be launched to bridge the divide for men in rural areas and lower wealth quintiles, utilising accessible media such as community radio and mobile Short Message Service (SMS) (Osborne et al., 2025; Willems et al., 2023; Yang & Kovarik, 2021). These campaigns should focus not only on increasing awareness of chronic disease risks but also on clearly communicating that preventative care is both accessible and affordable (Bain et al., 2022; Nelson et al., 2022).

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Permission to use the dataset was granted following registration with the DHS Program. No additional ethical approval was required for this secondary analysis.

Informed Consent Statement: Informed consent was obtained by the DHS Program from all participants before data collection. As this study is a secondary analysis of anonymised, publicly available data, no additional consent was required.

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