

Men's labor migration and attitudes towards women's sexual autonomy: Evidence from the National Family Health Survey 2019-21

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Abstract

Background

Male labour migration results in prolonged spousal separation and shifts in household decision-making structures. In many low- and middle-income settings, the temporary or long-term migration of men creates shifts in household responsibilities, decision-making power, and the regulation of sexual and reproductive behaviour within families. Migration not only affects economic conditions but also transforms household power relations, gender roles, and attitudes toward women's autonomy. Sexual autonomy, which refers to a person's capacity to negotiate safer sexual practices.

Data & Methods

The present study utilises data from NFHS-5. We used a total of 101,839 samples in which 19241 samples has been deleted as they were not working. There are women aged 15–49 and men aged 15–54. Considering that he is working and has been away from home for more than one month, he must be a migrant in India. So, this study excludes non-working respondents to reduce error in the migrant sample. In our study, we used a binary logistic regression model to examine the association between dependent and explanatory variables

Results

The results show how migration is linked to men's gender perceptions and significant sociodemographic variations in migration trends. This study revealed that approximately 15.3% of men were temporary migrants, including 8.9% short-term migrants and 6.4% long-term migrants, indicating that temporary migration remains a significant livelihood strategy among men in India. In the unadjusted model, I show that men who were migrants (both STM and LTM) and who used substances were significantly more likely to have a negative attitude towards sexual autonomy. Logistic estimates (Model II) further show that men belonging to the middle-aged group (45–54 years), scheduled castes, and having higher education were significantly associated with lower odds of a negative attitude.

Conclusion

This research shows that men's perceptions of women's sexual autonomy in India are significantly influenced by their immigration status. The findings show that both temporary and permanent migrants are more likely to have positive attitudes than non-migrants. In order to encourage gender-equitable views among women, the study emphasizes the necessity of focused interventions that address behavioural and social issues.

Introduction

Migration has long been recognized as a powerful social and economic force that shapes family structures, gender relations, and community norms. In many low- and middle-income countries (LMICs), the temporary or long-term migration of men creates shifts in household responsibilities, decision-making power, and the regulation of sexual and reproductive behaviour within families (Torosyan et al., 2016). Due to gender norms in Asian countries, men are considered breadwinners and are expected to arrange livelihoods, whereas women are expected to take care of the household, and such norms often lead to male migration alone, leaving their families behind at home, especially in economically backwards regions (Forste & Fox, n.d.; Hughes et al., 2020; Wang, n.d.). According to the Census of India (2011), There were 41 million labour migrants; however, it was estimated that there would be approximately 100 million migrant workers, and most of them were (approximately 85%) male migrants (Deshingkar & Akter, n.d.). In the Indian context, internal migration is predominantly male dominated and closely linked to labour market dynamics. This form of migration not only affects economic conditions but also transforms household power relations, gender roles, and attitudes toward women's autonomy (Imran Khan et al., 2023; Ram Mohan et al., 2023).

Male labour migration, particularly in low- and middle-income countries, often results in prolonged spousal separation and shifts in household decision-making structures (Desai & Banerji, 2008a). The long-term absence of migrants with their spouses can reduce closeness and intimacy in marital relationship. (Menjívar & Agadjanian, 2007a). In addition to the increased burden and obligations, the migration of husbands also gives left-behind wives more autonomy and decision-making authority. In India, women are more likely to have a say in daily cooking decisions, household expenses for expensive goods, and the marriage and health care of children when their husbands are away (Desai & Banerji, 2008b). After their spouses have left the house, women in Mozambique now have greater freedom to visit friends and family outdoors, look for work, to visit the city or district capital, and get tested for HIV (Yabiku et al., 2010a). Men's migration increases their spouses' autonomy, independence, and decision-making power (Yabiku et al., 2010b). Historically, women have had less personal autonomy in patriarchal countries (Bloom et al., 2001). Compared to men, they have less access to resources and less control over decision-making processes (Daniel Ikuomola, n.d.; Osezua, 2013; Singh, 2024). Despite extensive research on migration and women's economic and decision-making autonomy, limited attention has been given to understanding how men's labour migration shapes men's own attitudes towards women's sexual autonomy.

Sexual autonomy, which refers to a person's capacity to negotiate safer sexual practices, decrease unwanted sexual relations, make informed and voluntary decisions about sexual activity, and exercise control over their own body and reproductive choices, is a crucial component of this larger concept (Aboagye et al., 2022; Memiah et al., 2019; Willie et al., 2023). Many people agree that women's sexual autonomy is a basic human right and a vital aspect of their sexual and reproductive health and well-being (Heidari, 2015). Various studies suggest that women who have more sexual autonomy are more

likely to negotiate condom use, utilize contraception, and steer clear negative reproductive health outcomes, such as STIs and unwanted pregnancies (Abada & Tenkorang, 2012; Crissman et al., 2012).

The roles and power dynamics in sexual interactions are shaped by conventional normative conceptions of masculinity, femininity, and broader gender inequality (Amaro, 1995). Migration adds an additional layer of complexity: while some studies suggest that male out-migration may increase women's household autonomy, this does not necessarily translate into increased sexual autonomy due to persistent patriarchal norms, social surveillance, and economic dependency (Agadjanian & Hayford, 2018; Matz & Mbaye, 2023; Yabiku et al., 2010c).

Labour migration may influence men's attitudes towards women's sexual autonomy through multiple interrelated pathways. First, economic mobility and remittance flows may strengthen men's provider role, reinforcing traditional patriarchal authority within households (Desai & Banerji, 2008a). Second, prolonged spousal separation may alter emotional intimacy and marital communication, potentially increasing suspicion, control, or insecurity regarding wives' sexuality (Menjívar & Agadjanian, 2007b). Third, exposure to urban or destination contexts may introduce alternative gender norms, including more egalitarian attitudes toward women's decision-making and sexual rights (Levitt, 1998a; Yabiku et al., 2010c). Conversely, harsh migration experiences, including poor working conditions and social isolation, may increase stress, alcohol consumption, and risk-taking behaviours, which have been associated with more controlling and coercive sexual attitudes (Jewkes et al., 2015; Narushima et al., 2016). These competing pathways suggest that migration may either liberalize or intensify patriarchal attitudes, making empirical investigation essential.

Drawing from theories of gender transformation and hegemonic masculinity, this study conceptualises labour migration as a structural experience that reshapes men's economic roles, social exposure, and psychological stress, which in turn influences attitudes toward women's sexual autonomy (Levitt, 1998b). Rather than assuming that migration uniformly empowers women, this study shifts the analytical focus to men and examines whether migration produces attitudinal liberalisation through exposure and social learning or whether it reinforces patriarchal control through economic dominance and masculine insecurity. By distinguishing between short-term and long-term migration, the study further explores whether the duration and intensity of migration differentially shape these attitudinal outcomes.

Although a large body of research has examined the impact of male labour migration on women's economic autonomy and household decision-making, far less attention has been given to how migration experiences shape men's own gender attitudes, particularly attitudes towards women's sexual autonomy. Existing studies have primarily focused on the consequences of migration for women who remain at home, whereas the attitudinal changes among migrant men themselves remain understudied. Understanding men's attitudes toward women's sexual autonomy is critical because such attitudes directly influence sexual negotiation, reproductive health outcomes, and gender power relations during marriage.

Labour migration may reshape men's attitudes towards women's sexual autonomy through several pathways. Migration often involves prolonged spousal separation, exposure to new social environments, and economic changes that can alter gender relations. On the one hand, exposure to urban settings and diverse social norms may promote more egalitarian views regarding women's rights and autonomy. On the other hand, migration-related stress, social isolation, and masculine expectations of economic provision may reinforce patriarchal authority and suspicion toward women's sexuality. These contrasting mechanisms suggest that migration may either liberalise or intensify patriarchal gender attitudes, making empirical investigation essential.

In a country such as India, where patriarchal norms strongly regulate women's sexuality and where male labour migration remains a common livelihood strategy, understanding this relationship is particularly important. Therefore, this study examines the association between men's labour migration and attitudes towards women's sexual autonomy in India using nationally representative data from the National Family Health Survey (NFHS-5). By distinguishing between short-term and long-term migration and examining the role of substance use and socio-demographic factors, this study contributes to the literature on migration and gender relations by shifting the analytical focus from women's outcomes to men's gender attitudes.

Methodology

Data Sources

This study draws on data from the fifth round of the National Family Health Survey (NFHS-5), carried out between 2019 and 2021. NFHS-5 is a nationally representative, large-scale survey that provides comprehensive information on population characteristics, family planning, maternal and child health, nutrition, morbidity, and socio-economic and demographic conditions across all states and Union Territories of India. The survey employed a two-stage sampling design in rural areas and a three-stage design in urban areas. Conducted in two phases, it covered 636,699 households and included 724,115 women aged 15–49 and 101,839 men aged 15–54. Considering that he is working and has been away from home for more than one month, he must be a migrant in India. So, this study excludes non-working respondents to reduce error in the migrant sample.

Detailed information on the survey methodology is available in the NFHS-5 India report (International Institute for Population Sciences (IIPS) and ICF, 2021).

Outcome Variable

For this study, the main outcome variable is men's attitudes towards the sexual autonomy of women. According to the NFHS-5 data, men been asked if their wives refuse to have sex; the husband has the right to (a) get angry, (b) refuse financial support, (c) use force for sex, and (d) have sex with another woman. The outcome variable was generated by combining the responses of these questions, and men

gave a positive response to at least one of the four questions; they were considered to have a negative attitude and were coded as '1'; otherwise, they were coded as '0'. (Scale reliability coefficient: $\alpha = 0.84$).

Explanatory variables: Migration status

There is no direct question on migration status in the NFHS-5; however, some indirect questions have been asked. The respondents were asked (i) In the last 12 months, have you been away from home for one month or more at a time, and those who gave a positive response; furthermore, they were asked (ii) In the last 12 months, have you been away from home for one month or more at a time? Respondents who have never been away from home for at least one month were considered non-migrant, those who have been away for at least one month but who had lived for less than six months were considered short-term or temporary migrants, and those who have been away for six months or more were considered long-term or semi-permanent migrants (Coffey et al., n.d.; Keshri & Bhagat, 2013; NSSO, 2010).

Other explanatory variables

Other explanatory variables are respondents' age (15–29, 30–44 and 45–54), education (no education, primary, secondary and higher), marital status (never married, married, others), occupation (professional, clerical, sales, services, agriculture, production worker, and other), residence (rural, urban), religion (Hindu, Muslim, Christian, and others), social group (Scheduled Caste, Scheduled Tribe, Other Backwards Classes, and Others), wealth index (poorer, poor, middle class, rich and richest), media exposure, smoking behaviour and use of alcohol (no, yes).

Data source NFHS-5

Methods

Descriptive statistics were used to present the distribution of outcome and explanatory variables. The analysis included a total sample of 82,598 men aged 15–54 years, comprising 70,039 non-migrants, 7,253 short-term migrants, and 5,306 long-term migrants. The outcome variable of the study is men's attitudes towards women's sexual autonomy (MASAW), constructed using four survey questions that asked whether a husband is justified in reacting negatively if his wife refuses sexual relations: (a) becoming angry, (b) refusing financial support, (c) using force for sex, and (d) having sex with another woman.

Statistical Methods

Methods

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Statistical Methods

(a) Data source and tools: - We have accessed the data for analysis, the person file (PR) and records from the Demographic Health Survey (DHS). The Program is internationally responsible for collecting and disseminating accurate data on health and nutrition in low- and middle-income countries (LMICs). The initiative, which has been running since 1984, is mostly funded by the United States Agency for International Development (USAID) and provides representative data on population and health in developing nations. The United States Agency for International Development (USAID) provided the majority of the funding for the project, which is carried out by ICF International. Other contributors were UNICEF, UNFPA, WHO, and UNAIDS. It provides high-quality data for researchers and policymakers.

National Family Health Survey: -The National Family Health Survey (NFHS) is a multi-round, extensive survey. The Ministry of Health and Family Welfare (MoHFW), Government of India, is in charge of conducting this version of the Demographic and Health Survey (DHS). International organisations like USAID, UNICEF, UNFPA, the Bill & Melinda Gates Foundation, and WHO sponsor the study, which is conducted by the International Institute for Population Sciences (IIPS), Mumbai, in cooperation with other field agencies. The NFHS has been crucial in delivering trustworthy and nationally representative data since its establishment in 1992–1993. For analysing the NFHS data, such as recording and cross-tabulation, we used STATA (64-bit).

(b) Regression Analysis: - In our study, we used a binary logistic regression model to examine the association between dependent and explanatory variables (a) become angry, (b) refuse financial support, (c) use force for sex. Find the unadjusted association between key explanatory variables and MASAW, reporting **Unadjusted Odds Ratios (UOR)** with 95% Confidence Intervals (CI), controls for socio-demographic covariates, and reports Adjusted Odds Ratios (AOR) with 95% CI.

The Logistic Regression Model.

$$\text{logit}(\pi_i) = \log(\pi_i / 1 - \pi_i) = \beta_0 + \beta_1 X_i + \epsilon_i$$

β_0 = (Intercept) baseline log-odds when $X=0$

β_1 = (Coefficient) effect of independent variable

X_i = (Predictor) Migration status

ϵ_i = (Error term)

Results

Demographic Characteristics of the Sample

According to the defined temporary migration status, among the **82,598** male samples, **8.9% were short-term migrants (STMs)** and **6.4% were long-term migrants (LTMs)** (Table 1). Approximately **49% of men were in the age group 15–34 years**, whereas long-term migrants (approximately **61.5%**) were younger than non-migrants (approximately **47.6%**). In terms of educational qualifications (such as high school or above), long-term migrants (**18.2%**) were more qualified than short-term migrants (**15.5%**) and non-migrants (**15.7%**). Approximately **39.8%** of men were engaged in agricultural activities, while smaller shares were engaged in other occupations. Compared with migrants, non-migrants had greater shares in agriculture (**40.9% vs 35.1% vs 31.1%**) and sales (**10.5% vs 8.4% vs 7.7%**) than migrants did (STM and LTM). Most men, approximately **78% LTMs, 79% STMs, and 74% non-migrants**, were from rural areas. Men from the Hindu religion had a slightly lower share of short-term migration and a higher share of long-term migration than Muslims and Christians. Scheduled Castes and Scheduled Tribes were more engaged in short-term migration than long-term migration, whereas men from Other Backward Classes were more engaged in long-term migration. Short-term migrants had a lower economic status (**26.9% in the poorest category**) than non-migrants (**19.7%**) and long-term migrants (**23.9%**). Men from the richest wealth quantile were less likely to migrate. Compared with short-term migrants and non-migrants, long-term migrants had greater media exposure (**77.8% vs 74.1% vs 73.6%**). Migrants (STM and LTM) were more prone to smoking and consuming alcohol.

Table 1
Percentage of men (age 15–54) according to temporary migration status
and their background characteristics

Characteristics	Migration Status			Total	
	<i>NM</i>	<i>STM</i>	<i>LTM</i>	%	<i>Number</i>
Total Sample (%)	70039	7253	5,306	100	82,598
	(84.80)	(8.78)	(6.42)		
Age					
15–24	17.3	24.3	25.1	18.4	15,198
25–34	30.3	34.0	36.4	31.0	25,628
35–44	28.6	25.0	22.9	28.0	23,085
45–54	23.8	16.8	15.6	22.6	18,687
Years of Schooling					
No education	14.1	13.3	13.2	13.9	11,507
5 years	13.5	14.9	12.5	13.5	11,179
6–9 years	56.7	56.4	56.1	56.7	46,800
10 years or above	15.7	15.5	18.2	15.9	13,112
Marital Status					
Never married	22.8	27.6	31.9	23.8	19,674
Currently married	75.4	70.7	66.5	74.4	31,447
Others	1.8	1.8	1.7	1.8	1,477
Occupation					
agriculture	40.93	35.1	31.12	39.79	32,864
Professional	6.23	6.25	8.48	6.38	5,266
clerical	1.9	1.81	2.3	1.92	1,587
sales	10.45	8.4	7.65	10.09	8,334
services	7.33	8.53	11.1	7.68	6,341
Production worker	28.21	34.14	31.98	28.97	23,930
Others	4.95	5.78	7.37	5.18	4,276
Residence					

Characteristics	Migration Status			Total	
	<i>NM</i>	<i>STM</i>	<i>LTM</i>	%	<i>Number</i>
Total Sample (%)	70039 (84.80)	7253 (8.78)	5,306 (6.42)	100	82,598
Rural	73.7	79.2	78.1	74.5	61,537
Urban	26.3	20.8	21.9	25.5	21,061
Religion					
Hindu	76.1	73.9	76.3	76.0	62,738
Muslim	11.7	13.4	12.4	11.9	9,810
Christian	7.0	8.1	6.2	7.0	5,818
Others	5.2	4.6	5.1	5.1	4,232
Caste					
SC	18.8	20.5	20.2	19.1	15,739
ST	19.2	22.0	19.1	19.4	16,057
OBC	38.7	35.4	40.7	38.6	31,847
Others	23.3	22.1	20.0	23.0	18,955
Wealth Index (MPCE)					
Poorest	19.7	26.9	23.9	20.6	17,033
Poor	22.1	25.1	23.4	22.4	18,524
Middle	21.3	20.4	21.7	21.4	17,529
Rich	19.9	15.6	18.4	19.4	16,044
Richest	17.0	12.1	12.6	16.3	13,468
Media Exposure					
No	26.4	26.0	22.2	26.1	21,524
Yes	73.6	74.1	77.8	73.9	61,074
Smoking					
No	85.0	79.3	78.4	84.0	69,405
Yes	15.1	20.8	21.6	16.0	13,193
Substance Use					

Characteristics	Migration Status			Total	
	<i>NM</i>	<i>STM</i>	<i>LTM</i>	%	<i>Number</i>
Total Sample (%)	70039	7253	5,306	100	82,598
	(84.80)	(8.78)	(6.42)		
No	70.8	65.4	66.0	70.0	57,832
Yes	29.2	34.6	34.0	30.0	24,766

Figure 2 shows the percentage of men's attitudes towards the sexual autonomy of women based on four questions. The questions are: if the wife refuses to have sex, the husband has the right to do the following: (i) get angry, (ii) refuse financial support, (iii) use force for sex, and (iv) have sex with another woman, where positive responses are considered as a negative attitude. Short-term migrants had a higher negative attitude towards the first question compared to non-migrants but slightly lower than long-term migrants (19.29% vs 21.05% vs 21.64%). However, for the third question, short-term migrants had a lower negative attitude (12.35% vs 11.44% vs 15.6%) than long-term migrants and non-migrants. Overall, long-term migrants had a higher negative attitude towards most of the questions compared to the other groups.

Table 2 shows that long-term migrants (33.6%) and short-term migrants (30.2%) had a more negative attitude towards the sexual autonomy of women than non-migrants (27.8%). Men who used substances had a more negative attitude (32.2%) than those who did not (27.0%). Men who were more qualified and belonged to higher wealth quantiles had a lower negative attitude than their counterparts. Men who were engaged in agricultural activities (30.0%) and the service sector (29.4%) had a higher negative attitude compared with several other occupational groups. Similarly, men from the Muslim religion and the Scheduled Castes had a higher negative attitude than their counterparts. Men who smoked had a higher negative attitude (33.6%) than those who did not smoke (27.4%).

Table 2
Prevalence of men's attitudes towards the sexual autonomy of women (MASAW) by their background characteristics

Characteristics	% (W)		P Value
	Positive Attitude	Negative Attitude	
MASAW	71.7	28.3	
Migration status			
Non-migrants	72.2	27.8	< 0.001
Short-term migrants	69.8	30.2	
Long-term migrants	66.4	33.6	
Age			
15–24	71.6	28.4	< 0.001
25–34	72.0	28.0	
35–44	71.2	28.8	
45–54	71.8	28.2	
Education			0.028
No education	69.7	30.3	
Primary	69.3	30.7	< 0.001
Secondary	71.6	28.4	
Higher	75.3	24.7	
Marital Status			
Never married	71.6	28.5	
Currently married	71.9	28.1	
Others	72.7	27.33	
Occupation			
Agriculture	70.0	30.03	< 0.001
Professonal	74.6	25.4	
Clercial	78.8	21.2	
Note: SC: Scheduled Caste; ST: Scheduled Tribes; OBC: Other Backwards Classes; a: Includes technical, administrative, and managerial occupations; b: Includes skilled and unskilled manual occupations			

Characteristics	% (W)		P Value
	Positive Attitude	Negative Attitude	
MASAW	71.7	28.3	
Sales	73.5	26.5	
Servises	70.6	29.4	
Production worker	73.2	26.8	
Others	64.3	35.7	
Residence			
Rural	73.0	27.0	0.907
Urban	73.2	26.8	
Religion			
Hindu	72.6	27.4	< 0.001
Muslim	69.1	30.9	
Christian	70.6	29.4	
Others	58.7	41.3	
Social Group			
SCs	70.2	29.8	< 0.001
STs	74.1	25.9	
OBCs	71.4	28.6	
Others	72.3	27.7	
MPCE			
Poorest	70.5	29.5	< 0.001
Poor	71.6	28.4	
Middle	71.3	28.8	
Rich	71.4	28.6	
Richest	73.6	26.4	
Media Exposure			
Note: SC: Scheduled Caste; ST: Scheduled Tribes; OBC: Other Backwards Classes; a: Includes technical, administrative, and managerial occupations; b: Includes skilled and unskilled manual occupations			

Characteristics	% (W)		P Value
	Positive Attitude	Negative Attitude	
MASAW	71.7	28.3	
No	72.3	27.7	0.001
Yes	71.5	28.5	
Smoking			
No	72.6	27.4	0.001
Yes	66.39	33.6	
Substance use			
No	73.0	27.0	< 0.001
Yes	67.8	32.2	
Note: SC: Scheduled Caste; ST: Scheduled Tribes; OBC: Other Backwards Classes; a: Includes technical, administrative, and managerial occupations; b: Includes skilled and unskilled manual occupations			

Associations between temporary migration status, substance use, and men's attitudes towards the sexual autonomy of wives.

Table 3 shows the estimates of logistic regression to examine the association between temporary migration status and men's attitudes towards the sexual autonomy of women. Approximately 28.3% of men exhibited negative attitudes towards women's sexual autonomy. In the unadjusted model, the results show that men who were migrants (both short-term and long-term) were significantly more likely to have negative attitudes towards sexual autonomy. After adjusting for the covariates, Model II shows that short-term migrants (AOR: 1.13; CI: 1.07–1.19) and long-term migrants (AOR: 1.41; CI: 1.32–1.49) were more likely to have negative attitudes than non-migrants. Similarly, men who used substances were 1.16 times more likely (AOR: 1.16; CI: 1.12–1.20) to have negative attitudes. Logistic estimates in Model II further show that men belonging to the older age group (45–54 years), those with higher education, and those belonging to Scheduled Tribes and Other Backward Classes had significantly lower odds of negative attitudes. On the other hand, men belonging to the Muslim religion and those in higher wealth categories had significantly higher odds of having negative attitudes towards the sexual autonomy of women. Compared with those engaged in agriculture (reference category), men working in professional, clerical, sales, service, and production occupations had lower odds of negative attitudes.

Table 3
Binary logistic estimates showing the associations between temporary migration status and men's attitudes towards the sexual autonomy of women

Characteristics	Model 1		Model 2	
	UOR	CI (95%)	AOR	CI (95%)
Migration status				
Non-migrants®	1	[1.00,1.00]	1	[1.00,1.00]
Short-term migrants	1.12***	[1.06,1.18]	1.13***	[1.07,1.19]
Long term migrants	1.40***	[1.32,1.49]	1.41***	[1.32,1.49]
Age®				
15–24			1	[1.00,1.00]
25–34			0.95**	[0.90,1.00]
35–44			0.93**	[0.87,0.98]
45–54			0.89***	[0.83,0.95]
Education®				
No education			1	[1.00,1.00]
Primary			0.92***	[0.86,0.97]
Secondary			0.82***	[0.78,0.86]
Higher			0.69***	[0.64,0.73]
Marital Status®				
Never married			1	[1.00,1.00]
Currently married			0.95**	[0.90,1.00]
Others			0.98	[0.86,1.11]
Occupation®				
agriculture			1	[1.00,1.00]
Professional			0.79***	[0.73,0.86]
clerical			0.72***	[0.64,0.81]
sales			0.84***	[0.79,0.89]
services			0.87***	[0.82,0.93]

Characteristics	Model 1		Model 2	
	UOR	CI (95%)	AOR	CI (95%)
Migration status				
Production worker			0.78***	[0.75,0.81]
Others			1.16***	[1.08,1.25]
Residence®				
Rural			1	[1.00,1.00]
Urban			1	[0.96,1.04]
Religion®				
Hindu			1	[1.00,1.00]
Muslim			1.22***	[1.16,1.28]
Christian			1.14***	[1.07,1.22]
Others			2.53***	[2.37,2.70]
Social Group®				
SCs			1	[1.00,1.00]
STs			0.73***	[0.69,0.77]
OBCs			0.85***	[0.82,0.89]
Others			0.86***	[0.82,0.91]
MPCE®				
Poorest			1	[1.00,1.00]
Poor			1	[0.95,1.05]
Middle			1.11***	[1.05,1.17]
Rich			1.17***	[1.10,1.24]
Richest			1.29***	[1.21,1.38]
Media Exposure®				
No			1	[1.00,1.00]
Yes			1.08***	[1.03,1.12]
Smoking®				
No			1	[1.00,1.00]

Characteristics	Model 1		Model 2	
	UOR	CI (95%)	AOR	CI (95%)
Migration status				
Yes			1.15***	[1.10,1.21]
Substance use®				
No			1	[1.00,1.00]
Yes			1.16***	[1.12,1.20]

Discussion

This research reveals the associations between temporary migration and men's attitudes toward the sexual autonomy of women in India (MASAW). Results: The results show how migration is linked to men's gender perceptions and reveal significant sociodemographic variations in migration trends. Our study revealed that approximately 14% of men were temporary migrants, including 7.7% short-term migrants and 6.2% long-term migrants, indicating that temporary migration remains a significant livelihood strategy among men in India. Migrants were younger, more educated, and more likely to work in non-agricultural jobs than non-migrants were, which is consistent with earlier migration studies. Existing studies have also shown that migration processes can influence social norms, behaviours, and family dynamics, particularly in traditional gender hierarchal societies where gender relations are strongly structured by cultural norms(Desai & Andrist, 2011; Agadjanian et al., 2011)

Long-term migrants, in particular, had higher levels of education and media exposure than both short-term migrants and while non-migrants did not, whereas short-term migrants were more concentrated in lower wealth categories, indicating that economic vulnerability is still a significant factor in temporary migration. To account for the impact of individual, family, and community characteristics on migration decisions and movement forms, migration behaviour involves the use of factors at several levels (Guilmoto, 1998).

The results also indicate that migrant men were more likely to smoke and use substances, which is consistent with previous studies indicating that stress connected to migration, social isolation, and new urban social contexts may promote risky behaviours among migrants (Weine & Kashuba, 2012). Peer pressure and the lack of family supervision during migration may also be factors contributing to substance abuse among migrants (Ahmadi, 2003).

The study also identifies troubling trends in men's perceptions of women's sexual autonomy. Approximately 28% of males overall indicated negative sentiments, suggesting that men continue to defend against dominating behaviours when their spouses decline to engage in sexual activity (Sabarwal et al., 2014). These beliefs are more common among migrants, especially long-term migrants (33%), than

among short-term migrants (30%) and non-migrants (27%). This implies that attitudes and gender norms may be influenced by migratory experiences. These gender-sex disparities, together with other research on gender-sex-specific migratory trends, were reported in this study (Joseph, Wang, Chellaraj, Luis, et al., 2022).

Negative gender attitudes were also found to be significantly correlated with substance use. Compared non-users, men who reported using drugs were 15% more likely to have negative opinions on women's sexual autonomy. This finding is consistent with the literature linking substance use with aggressive behaviour, reduced impulse control, and higher acceptance of gender-based dominance (Pradhan & De, 2025). Similarly, smoking behaviour was associated with higher odds of negative attitudes, suggesting that risky health behaviours often co-exist with regressive gender norms. It seemed that education had a protective effect. Education may encourage gender-equitable standards and an understanding of women's rights, as seen by the much-reduced likelihood of negative sentiments among men with higher levels of education (Sabarwal et al., 2014). In a similar vein, older age groups were less likely than younger men were to have unfavourable sentiments, indicating that gender perceptions may be influenced by maturity and life experience. These discrepancies could be the result of regional contexts, economic circumstances, and sociocultural norms that influence gender perspectives.

Our study emphasises the importance of addressing migration-related vulnerabilities and substance use behaviours while promoting gender-equitable attitudes among men. Substance use prevention techniques, behavioural change communication, and gender sensitisation programmes should all be included in policies and interventions targeted at immigrant communities. Media campaigns, community interventions, and workplace-based awareness programs may all contribute to the reduction of gender-inequitable attitudes and the promotion of respect for women's autonomy. This study has several limitations, such as the use of a sizable nationally representative sample. Establishing causal links between migration, substance use, and gender attitudes is restricted by the cross-sectional methodology used. Furthermore, self-reported answers were used to evaluate attitudes about sexual autonomy, which could be skewed by social desirability. Longitudinal data could help future studies better understand how migration experiences affect gender perceptions over time.

Conclusion

Our study highlights that migration status is a significant determinant of men's attitudes towards the sexual autonomy of women in India. The results indicate that, in comparison to non-migrants, both temporary and permanent migrants are more likely to have positive sentiments. Such sentiments are also positively correlated with substance usage, suggesting a complex behavioural relationship. These sentiments are further influenced by sociodemographic variables like wealth, occupation, education, and religion. In order to encourage gender-equitable views among women, the study emphasises the necessity of focused interventions that address behavioural and social issues.

Declarations

Ethics approval and consent to participate: *This study is based entirely on secondary data from the publicly available National Family Health Survey (NFHS-5, 2019–21). NFHS-5 data were collected under the supervision of the Ministry of Health and Family Welfare (MoHFW), Government of India, and ethical approvals for the survey were obtained from the Institutional Review Boards (IRB) of the International Institute for Population Sciences (IIPS), Mumbai, and other collaborating institutions. Written informed consent was obtained from all participants by the survey teams before data collection. No separate ethical approval was required for this analysis, as it uses anonymized, publicly available data.*

Consent for publication: *As NFHS data is a publicly available data on DHS program website and IIPS website too. Anyone who wants to explore or wants to do research they can access data freely, analyse, research and publish it. So, there is no need for the consent of publication.*

Availability of data and materials: *The data used in this study were obtained from the National Family Health Survey (NFHS-5), conducted by the Ministry of Health and Family Welfare, Government of India, and coordinated by the International Institute for Population Sciences (IIPS), Mumbai. The dataset is publicly available and can be accessed from the DHS Program website or the https://www.iipsdata.ac.in/datacatalog_detail/1.*

Competing interests: *The authors declare that they have no competing interests.*

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Authors' contributions:

¹**Vikesh Kumar:** *Conceptualization of the research idea; formal analysis; data curation and data analysis; preparation of tables; writing the data, methods, and results sections; project administration; provision of resources; and overall supervision.*

²**Ankit Gupta:** *Conceptual support in manuscript preparation; drafting the introduction; formatting and visualization of results; identification of potential funding sources; information gathering for publication; and finalization of the manuscript draft for submission.*

³**Priti:** *Writing the discussion section; drafting and revising the manuscript; methodological application; validation of analytical results; and preparation of the original draft.*

⁴**Phanidhar Upadhyaya:** *Investigation; manuscript review and editorial support; providing recommendations for improving manuscript quality; ethical oversight; and methodological guidance.*

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Figures

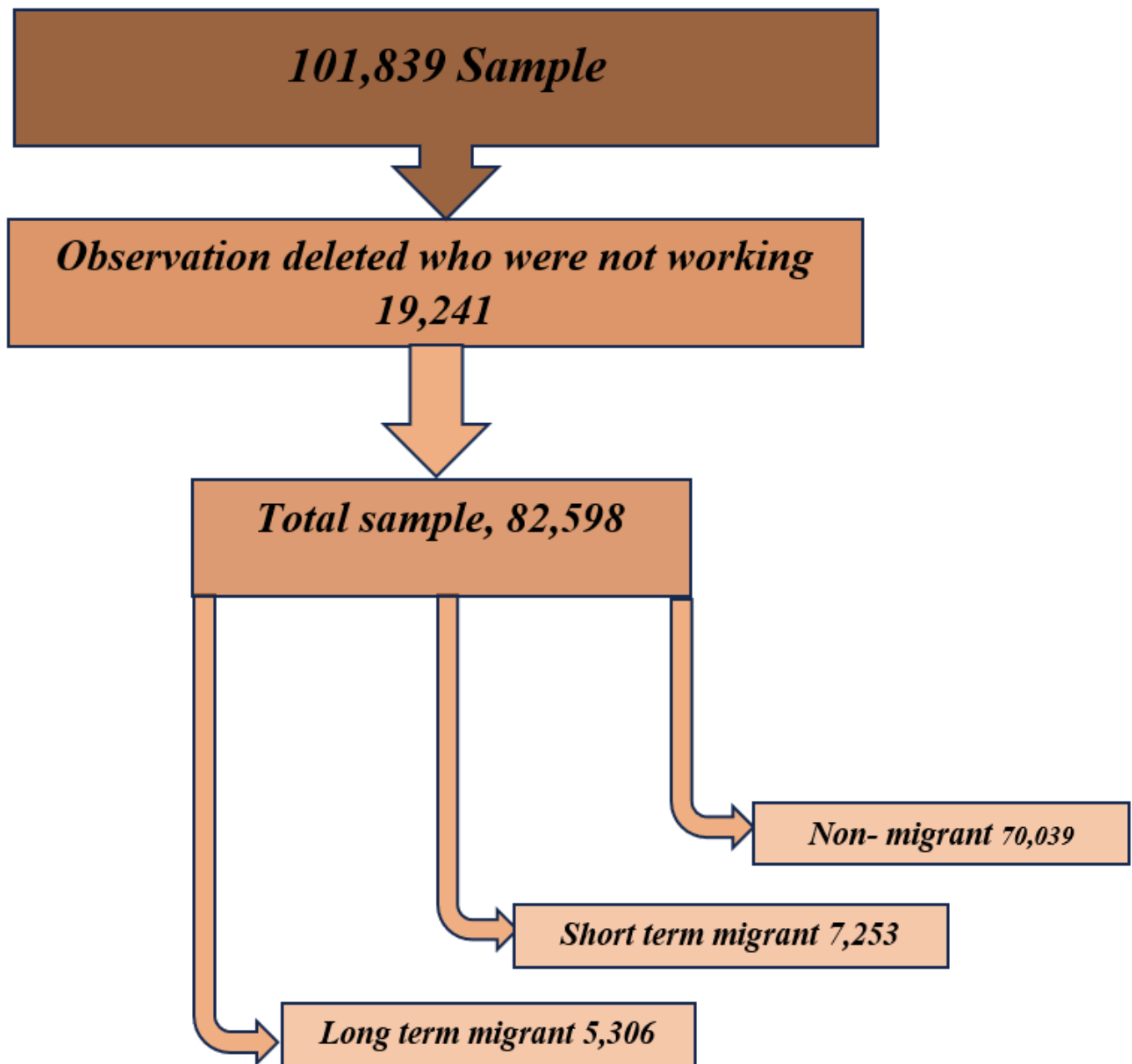


Figure 1

presents the distribution of the study sample according to migration status, including non-migrants, short-term migrants, and long-term migrants.

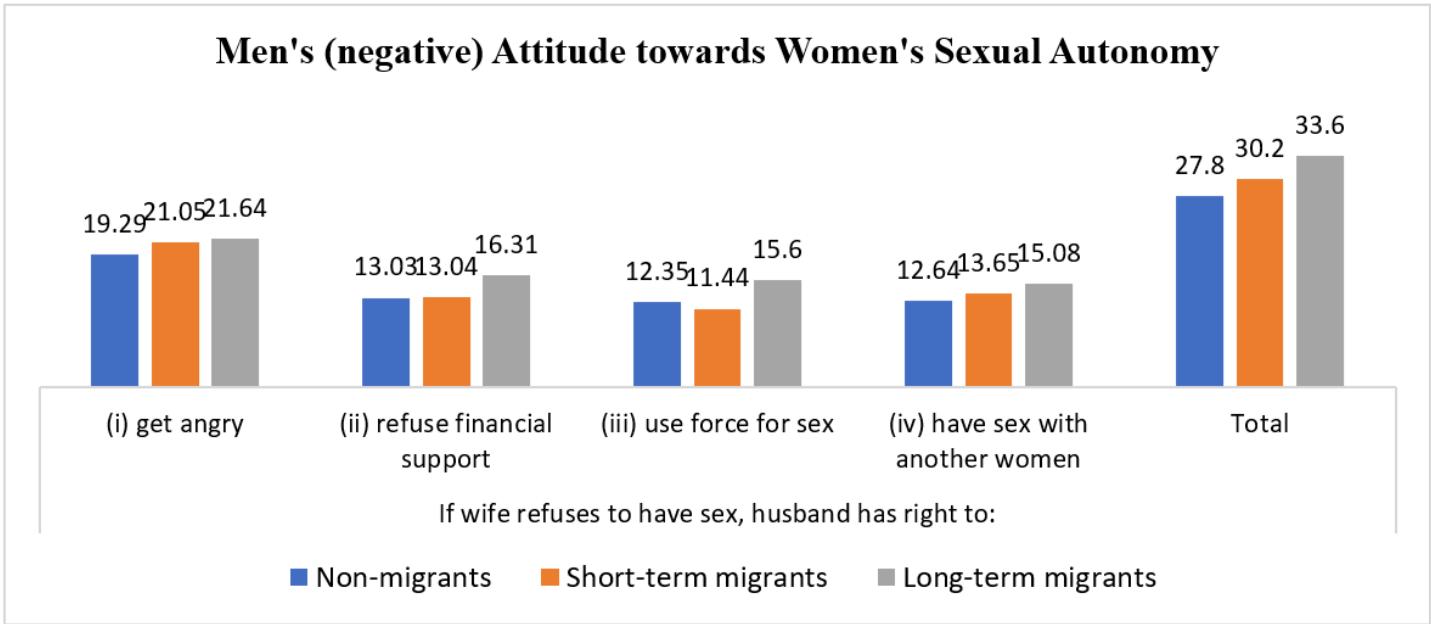


Figure 2

Prevalence of Men's attitudes towards the sexual autonomy of women by Migration status