# How Gender Equity Based Indices of Young Married Men are Associated with Contraceptive Knowledge and Contraceptive use? Evidence from a Nationally Representative Crosssectional Survey, India. 

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#### Abstract

Given multiple spheres/facets of gender equity, a deep dive on how gender norms, perceptions, attitudes, and behaviours affect men is an important area of research, as it helps to understand complexities of rigid gender norms and power relations that burden the society. It also provides clues on how effectively men can be engaged in different programs for improved outcomes. By clubbing 25 gender equity opinions/statements of young married men of India from National Family Health Survey (NFHS, 2015-16), aim of this paper is to classify men as gender equal (GE)/gender inequal (GI) on: decision making power on household issues; masculine attitude towards sex/sexual life; attitude towards Intimate Partner Violence (IPV); contraceptive responsibility; and who attach contraception to promiscuity, and test these five indices association with contraceptive knowledge/use. With wide geo-socio-economic fluctuations, $25 \%$ Indian men were GI on household decisions; $23 \%$ GI with masculine attitudes on sex/sexual life; $22 \%$ support IPV; $41 \%$ perceive contraception is women's business; and $21 \%$ link contraception to promiscuity.


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Also, $30 \%$ men had zero of these GI indices, $31 \%$ had one; $22 \%$ had two; $12 \%$ had three; $4 \%$ had four; and $1 \%$ had all the five GI indices. A young Indian married man with zero GI indices has 2.8 times higher knowledge of contraception and has 3.7 times higher chance of using modern contraception as compared to a man with five GI indices. Thus, this research provides specific nuances of the term 'gender equity/inequity' through five indices, in Indian context, and highlights the need for engaging men in contraceptive related issues, as gender transformed men can become spokespersons of contraceptive knowledge and use.

## Introduction

'Gender' refers to the roles, behaviours, activities, attributes, and opportunities that any society consider appropriate for men and women, and is based on different levels of power within those relationships. Understanding of gender requires, recognizing the complex social processes in which individuals operate at interpersonal, institutional, and societal level (Mary Manandhar et al, 2018). 'Gender equality' is the absence of discrimination based on a person's sex in opportunities, in allocation of resources and benefits, or access to services, while 'gender equity' refers to the fairness and justice in the distribution of benefits and responsibilities between women and men. Hence, gender equality is a human rights issue and is a precondition for gender equity, an indicator of sustainable people-centered development. Also, gender equality recognizes that women and men have different needs and power, and that these differences/power should be identified and addressed in a manner that rectifies the imbalance (WHO, 2019, UN, 2000, BMGF, 2018). It has also been positioned as a gateway factor to behaviors that affect health outcomes (Nanda, 2011). However, these two terms are often used interchangeably although they are different, and gender Janasamkhya Vol. XL, 2022
equity is necessary to achieve gender equality (Glinski, et. al., 2018).

Strong social and cultural norms perpetuate power imbalances between men and women, and men's decisions and behaviours are profoundly shaped by rigid social and cultural expectations associated with masculinity. A nuanced discussion on how gender norms affect both women and men help us in understanding the complex ways in which rigid gender norms and power relations burden our society, and the mechanisms to effectively engage men and boys in contemplations about inequalities. There is increasing evidence that we should be approaching men as stakeholders and co-beneficiaries in advancing gender equality (Beijing discussion paper 2015). Inequitable norms inform notions of masculinity, power and the relationships that shapes individual behavior including acceptability and use of violence (WHO, 2009). Men's understanding of their responsibility on sexual and reproductive behavior, their social and family roles are essential for planning gender equality policies (UNFPA, 1996).

Gender equity indices: Gender equity index includes, indicators on: gender-sensitive breakdown of legislators/senior managers, presence of civil liberties such as freedom of dress/movement, social issues such as ownership rights like access to banks or land, crime indicators such as violence against women, health and education indicators like life expectancy, educational attainment, and economic such as gender pay gap, labour force participation etc. (Angela and Gerardo 2012). To reduce number of indicators, aggregated measures like, gender development index (GDI), gender empowerment measure (GEM), gender equity index
(GEI), etc., are developed (Angela and Gerardo 2012 and Drechsler et al 2008).

Given multiple spheres/facets of gender equality, including: gender norms, gender attitudes, gender relationships, men's/women's empowerment etc., there are eight commonly used scales: couple communication on sex; women's empowerment; gender beliefs; Gender Equitable Men Scale (GEMS); gender norm attitudes; gender relations; household decision-making; and sexual relationship power - each scale focusing on different domains of gender equality. Among them, GEMS is more sensitive, cross-culturally relevant and has good predictive validity when it was tested on individual behaviors such as partner violence and outcomes such as contraceptive use (Nanda, 2011). Although GEMS comprehends the term 'gender equality' by including topics of violence; sexual relationship; homophobia; domestic chores and daily life; reproductive life and disease prevention - the number of items included in GEMS varied from country to country (Glinski et al, 2018).

Based on lessons learned from application of GEMS in different countries and by using 25 opinion-based statements of young (aged 15-34 years) married men, India, 2015-16 (NFHS-4) on the themes of household decision-making, attitudes towards sexual relationship with spouse, attitudes toward intimate partner violence (IPV) and contraceptive behavior - the primary objective of this paper is to develop five types of gender equity / gender inequity (GE/GI) indices and one indicator of gender equal/ inequal practitioners of household finances, relevant to Indian context.

Association between gender equity and family planning knowledge/use: Little is known on the role of gender norms and power dynamics between men and women on Family Planning (FP) knowledge and use (Nanda, 2011). In patriarchal societies like India, sexual and reproductive health (SRH) matters including FP is considered a women's domain, although men are the primary decision-makers on family size, contraceptive use, source of contraception, etc. (Kabagenyi, et. al., 2014). Hence, since mid1990s there has been an increased recognition to include men in SRH/FP (Sternberg and Hubley 2004), and sharing the burden of pregnancy prevention is both the cause and consequence of greater gender equity and couple communication. It was also found that men with negative attitudes toward modern contraceptives are unlikely to use them, and vice-versa (Ezeanolue et al., 2015). Men's attitudes toward FP and their respect for women's agency play a vital role in involving men in the FP processes at family level. By identifying men who are tolerant to ideas of gender equality and women's choices the other aim of this research is to test the hypothesis that "whether young married men with gender equity (GE) opinions are more likely to participate in FP discussions with their spouse, leading to enhanced knowledge and use of modern FP methods, as compared to men with gender inequitable (GI) opinions."

## Methods

Data: We used men's data of NFHS-4, as this data was collected from around $15 \%$ of nationally representative sample of 628,892 households (IIPS, 2015-16) and sample size of men's data was powerful enough to provide state-level estimates on: sexual behavior; husband's background and women's work; attitudes and
behavior; domestic violence; FP knowledge and use; etc. The details of survey methodology used for collecting the data from different respondents, including men are provided elsewhere (IIPS, 2015-16).

Male sample size: As part of the NFHS-4 from across India, 601,509 households were successfully covered, wherein 122,051 eligible men (aged 15-54) were identified. Interviews were completed for $112,122(92 \%)$ men, out of whom 70,781 ( $63 \%$ ) were currently married. Among the currently married 27,166 ( $38 \%$ ) were aged 15-34 years at the time of survey and these men from across 29 states and union territories of India formed the basis for the current analysis. Used 25 opinion-based statements to develop five GE/GI indices and one GE/GI practice - by assigning equal weightage to each statement (Box-1).

Box 1: Type of index, questions and responses used, definitions used for classifying men on five gender equality indices and one gender equal practitioner on finances, NFHS-4 men's data, India (2015-16)

| Type of index | Constructs/ statements used to develop index | Response | Definition used to classify men as gender equal/inequal (GE/GI) |
| :---: | :---: | :---: | :---: |
| Five opinion-based gender equity indices |  |  |  |
| Index 1: <br> Gender <br> equal / <br> inequal <br> (GE/GI) <br> decision <br> maker on <br> household <br> issues | In a couple, who do you think should have the greater say in each of the following decisions: <br> 1. Making major household purchases? <br> 2. Making purchases for daily household needs? <br> 3. Deciding about visits to the wife's family or relatives? <br> 4. Deciding what to do with the money the wife earns from her? <br> 5. Deciding how many children to have? | - Husband <br> - Wife <br> - Both equally | Man, who for $\geq 2$ decisions out of five, responded that husband had a greater say is classified as 'gender inequal (GI) decision maker on household issues' <br> Man, who for < 2 decisions out of five, responded husband had a greater say OR any other response combinations is classified as 'gender equal (GE) decision maker on household issues'. |

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| Index 2: <br> Gender equal / inequal on the topic of masculinity pertaining to sex/sexual life | 1. When a wife knows her husband has a sexually transmitted disease (STD), is she justified in asking that they use a condom? <br> 2. Tell me if you think a wife is justified in refusing to have sex with her husband when her husband has STD? <br> 3. Tell me if you think a wife is justified in refusing to have sex with her when she knows her husband has sex with other women? <br> 4. Tell me if you think a wife is justified in refusing to have sex with her husband when she is tired or not in the mood? <br> Do you think that if a woman refuses to have sex with her husband when he wants her to, he has the right to: <br> 5. Get angry and reprimand her? <br> 6. Refuse to give her money or other means of financial support? <br> 7. Use force and have sex with her even if she doesn't want to? <br> 8. Go and have sex with another woman? | - Justify, wife's behavior <br> - No, does not justify <br> - Yes, justifies reaction <br> - No, does not justify reaction | Man, who on $\geq 3$ occasions out of eight, does not justify wife on sexual behavior or justify violence/reaction for refusing sex by wife is classified as 'gender inequal on masculine behavior' <br> Man, who on <3 occasions out of eight, does not justify wife on sexual behavior or does not justify violence/reaction for refusing sex by wife OR any other response combination is classified as 'gender equal on masculine behavior' |
| :---: | :---: | :---: | :---: |


| Index 3: <br> Gender equal / inequal on the topic of Intimate Partner Violence (IPV) | In your opinion, is a husband justified in hitting or beating his wife in the following situations: <br> 1. If she goes out without telling him? <br> 2. If she neglects the house or the children? <br> 3. If she argues with him? <br> 4. If she refuses to have sex with him? <br> 5. If she doesn't cook food properly? <br> 6. If he suspects her of being unfaithful? <br> 7. If she shows disrespect for in-laws? | - Yes, justifies hitting /beating <br> - No, does not justify hitting / beating | Man, who on $\geq 3$ occasions out of seven, justify hitting / beating wife is classified as 'gender inequal on IPV', <br> Man, who on <3 occasions out of seven, does not justify hitting / beating wife is classified as 'gender equal on $I^{\prime} V^{\prime}$ |
| :---: | :---: | :---: | :---: |
| Index 4: <br> Gender equal / inequal in sharing contraceptive responsibility | Please tell me if you agree or disagree with: <br> 1. Contraception is women's business and a man should not have to worry about it | - Agree <br> - Disagree | Man, who agrees to this statement is classified as 'gender inequal on contraceptive responsibility' <br> Man, who disagrees to this statement is classified as 'gender equal on contraceptive responsibility' |
| Index 5: <br> Gender equal / inequal in ascribing /not ascribing contraception to promiscuity | Please tell me if you agree or disagree with: <br> 1. Women who use contraception may become promiscuous | - Agree <br> - Disagree | Man, who agrees to this statement is classified as 'gender inequal on contraceptive promiscuity' <br> Man, who disagrees to this statement is classified as 'gender equal on contraceptive promiscuity' |


| Opinion-based gender equity practitioner |  |  |  |
| :---: | :---: | :---: | :---: |
| Index 6: <br> Gender equal /inequal practitioners of household finances | 1. Who usually makes decisions about making major household purchases? | - Husband <br> - Wife <br> - Both jointly <br> - Someone else | If husband is decision maker on $\geq 2$ out of three occasions, he is classified as 'gender inequal practitioner of household finances' |
|  | 2. Who mainly decides how the money your wife earns will be used? | - Husband <br> - Wife <br> - Both jointly | If husband is decision maker on zero or one out of three occasions OR any other |
|  | 3. Who mainly decides how your earnings will be used? | - Husband <br> - Wife <br> - Both jointly | classified as 'gender equal practitioner of household finances' |

Other socio-economic and demographic covariates used: Covariates included in this research are: age of man (categorized as: 15-24, 25-34, $35-55$ years); religion (Hindu, Muslim, Other); caste (scheduled caste, scheduled tribe, other backward caste, others); place of residence (rural, urban); literacy of man (no education, primary: one-five years of schooling, secondary: six-eight years, bigher: more than eight years); occupation of man (not working, salaried and sales, agriculture, skilled and unskilled); wife currently employed for cash (yes, no); wealth index (five quintiles: poorest, poor, middle, rich, richest); number of surviving children (zero, one, two or more); years of cohabitation (onefour years, five-nine, 10-19, 20+); and populous states (Andhra Pradesh, Assam, Bihar, Chbattisgarh, Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal, and Telangana).

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Dependent variables: The three dependent variables of this research are:

1. Man, who got knowledge of all the three female spacing methods of contraception (oral contraceptive pill-OCP, intra uterine device-IUD and injectable)
2. Current use of any modern method of contraception by him or wife
3. Number of gender inequity measures scored by each man (zero to five).

Statistical analysis: All analyses were done using SPSS statistical software package Version 19. Standard descriptive statistics in terms of proportion of men with six indices according to socioeconomic and demographic variables was tested using MantelHaenszel Chi-square test. Background variables with less than 0.5 pairwise Pearson correlation coefficient were only included in multivariate analysis. Unadjusted associations between dependent and explanatory variables were estimated by measuring Odds Ratios (OR) and strength of association using Chi-square test. Adjusted associations were tested using multivariable logistic regression. In the logistic regression, we have forced the model to include five gender equality indices and excluded unnecessary socioeconomic variables, using backward stepwise regression. 'State variable' was not included in the logistic regression model, due to multiple categories. Used NFHS-4 sample weights for the men for the analysis (IIPS, 2015-16). Details of ethical clearances for NFHS-4 are available elsewhere (IIPS, 2015-16).

## Results

Out of the 112,122 men aged 15-54 covered by NFHS-4 survey; 70,781 (63 percent) were currently married and among them 27,166 (38 percent) were aged 15-34 years, and these men are part of current
research. Table 1 provides opinion of young Indian married men on who should have a greater say on household issues and their gender equity classification. Only on the topic of number of children, more than $86 \%$ men were of opinion that both husband \& wife should have a greater say on the issue, while for the remaining four statements, proportion of 'both' response dropped to $55-70 \%$. By clubbing five opinions into one index, $25 \%$ men can be classified as 'GI on household chores', as these men on two or more occasions opined 'husband' should have a greater say in household decisions.

Table 1: Percent young ( $15-34$ years) married men's opinion on who should have a greater say on household decisions, NFHS-4, 2015-16.

| Type of perception on who should have a greater say on | Husband | Wife | Both | Row <br> Rotal <br> tota |
| :--- | ---: | ---: | ---: | ---: |
|  | \% Response |  |  | 27.9 |

Using gender equity practices (Index 6), 15\% men were classified as 'GI on household finances', and this index has strong association with GI index on household issues (Figure 1). 81\% of the $85 \%$ GE practitioners of household finances are GE on household decisions, while $62 \%$ of the $15 \%$ GI practitioners of household finances are GI on household decisions. Janasamkhya Vol. XL, 2022

Table 2: Percent young married men (15-34 years) who justify masculine behaviour with his wife on sex related matters, NFHS-4, 2015-16

| Men who justify wife or not justify wife during below occasions of sexual life | \% Men who said |  | $\begin{gathered} \text { \% Row } \\ \text { total } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
|  | Wife not justified | Wife justified |  |
| When a wife knows her husband has STD, is she justified in asking that they use a condom? | 14.3 | 85.7 | 100.0 |
| Tell me if you think a wife is justified in refusing to have sex with her husband when her husband has STD? | 16.8 | 83.2 | 100.0 |
| Tell me if you think a wife is justified in refusing to have sex with her when she knows her husband has sex with other women? | 24.2 | 75.8 | 100.0 |
| Tell me if you think a wife is justified in refusing to have sex with her husband when she is tired or not in the mood? | 25.6 | 74.4 | 100.0 |
|  | \% Men's | esponse |  |
| Men who justify violence/reaction if wife refuses sex during below situations | Justify violence / reaction | Don't justify violence / reaction | $\begin{array}{r} \text { \% Row } \\ \text { total } \\ \hline \end{array}$ |
| If wife refuses to have sex, man has the right to get angry | 18.5 | 81.5 | 100.0 |
| If wife refuses to have sex, man has the right to refuse giving her money | 11.0 | 89.0 | 100.0 |
| If wife refuses to have sex, man has the right to use force for sex | 9.5 | 90.5 | 100.0 |
| If wife refuses to have sex, man has the right to have sex with another women | 9.1 | 90.9 | 100.0 |
| Mean (SD) number of times (out of 8) wife justified or not justify violence |  | 6.6 (1.7) |  |
| Mean (SD) number of times (out of 8) wife not justified or justify violence |  | 1.3 (1.6) |  |
| Index 2: Gender inequitable on masculine behaviour $\geq 3$ occasions does not justify wife on sexual behaviour or justify violence/reaction for refusing sex) | 23.2 |  |  |
| Index 2: Gender equitable on masculine behaviour (<3 occasions does not justify wife on sexual behaviour or not justify violence/reaction for refusing sex) | 76.8 |  |  |

Table 2 presents index of men's masculine attitude based on eight sex and sex-related scenarios and proportion classified as GI/GE on this. Although, $86 \%$ young men justified 'wife to ask husband to use a condom if husband has sexually transmitted
disease (STD)', this proportion drops to $74 \%$ 'justifying wife to refuse sex if she is tired or not in a mood'. On similar lines, around one-in-five young men justified his right to get angry if wife refuses sex with him. Around one-in-ten young married men justify the right to: deny money to wife, use force, and have sex with other women - if wife refuses to have sex. By using these eight statements, $23 \%$ men were classified to have 'GI attitude towards sex/sexual life', as these men on three or more occasions did not justify wives right to refuse sex/justified his right to react if wife refuse sex.

Figure 1: Inter-relationship between GE classification on SED topics and GE practices on economic issues


Using married men's justification/opposition to seven IPV statements, $22 \%$ men were classified as GI on IPV, as these men have justified violence on three or more out of seven occasions (Table 3). A high proportion ( $30 \%$ ) of husbands justified violence if spouse shows disrespect towards in-laws followed by being unfaithful ( $22 \%$ ), argues with him ( $20 \%$ ), neglects children ( $20 \%$ ).

On contraceptive responsibility, $41 \%$ of young married men can be classified as GI as these men believed 'contraception is women's business and men should not have to worry about it' and $21 \%$ men were GI on contraceptive promiscuity, as these men believed 'women who use contraception may become promiscuous' (Figure 2).

Table 3: Percent young married men (15-34 years) who justify intimate partner violence, NFHS-4, 2015-16

| Men who justify hitting or beating wife during the following situations | \% Men's response |  |  |
| :---: | :---: | :---: | :---: |
|  | Justify hitting / beating wife | Don't justify hitting/ beating wife | $\begin{gathered} \text { \% Row } \\ \text { total } \end{gathered}$ |
| If she goes out without telling him? | 15.6 | 84.4 | 100.0 |
| If she neglects the house or the children? | 19.8 | 80.2 | 100.0 |
| If she argues with him? | 20.0 | 80.0 | 100.0 |
| If she refuses to have sex with him? | 8.5 | 91.5 | 100.0 |
| If she doesn't cook food properly? | 10.5 | 89.5 | 100.0 |
| If he suspects her of being unfaithful? | 22.4 | 77.6 | 100.0 |
| If she shows disrespect for in-laws? | 28.6 | 71.4 | 100.0 |
| Mean (SD) number of times (out of 7) not justifying violence | 5.7 (1.9) |  |  |
| Mean (SD) number of times (out of 7) justifying violence | 1.3 (1.9) |  |  |
| Index 3: Gender inequitable on IPV $\geq 3$ out of 7 above occasions justify hitting / beating wife) | 21.5 |  |  |
| Index 3: Gender equitable on IPV (<3 out of 7 above occasions does not justify hitting / beating wife) | 78.5 |  |  |

Table 4 provides percent of young married men by subcategories of background characteristics and five GI indices, and significance of difference in GI indices with background characteristic. Proportion of GI men according to household chores significantly differ for all the background characteristics excluding ' work status of wife for cash '.

Table 4: Percent young married men according to socio-economic and geographic characteristics and five gender inequity indices, and strength of association of background characteristics with the indices, NFHS-4, India

| Socioeconomic and geographic characteristic | \% Men according to Gender Inequity Indices |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Index 1: Household decision making | Index 2: Masculinity on sex \& sexual life | Index 3: IPV | Index 4: Contraceptive responsibility | Index 5: <br> Contraceptive promiscuity | N |
| Age | 30.5*** | 10.1* | 37.4*** | 8.1* | 2.3 (n.s.) |  |
| '15-24 | 28.3 | 21.9 | 24.7 | 42.8 | 21.0 | 4,061 |
| '25-29 | 25.2 | 22.8 | 21.7 | 40.7 | 21.3 | 10,167 |
| '30-34 | 24.0 | 24.0 | 20.3 | 40.3 | 20.5 | 12,639 |
| Religion | 36.7*** | 9.4* | 7.2* | 26.9*** | 15.4*** |  |
| Hindu | 25.1 | 23.6 | 21.2 | 41.5 | 21.2 | 22,319 |
| Muslim | 27.5 | 21.6 | 22.6 | 36.8 | 20.6 | 3,617 |
| Others | 18.9 | 21.4 | 23.8 | 41.6 | 16.6 | 1,230 |
| Caste | 40.7*** | 88.1*** | 180.1*** | 10.9* | 91.2*** |  |
| Scheduled tribe | 25.0 | 24.7 | 23.1 | 38.4 | 25.0 | 2,792 |
| Scheduled caste | 26.0 | 24.9 | 25.4 | 42.1 | 20.8 | 5,653 |
| Other backward caste | 26.0 | 24.2 | 22.3 | 41.0 | 21.6 | 11,985 |
| Others | 21.8 | 18.6 | 15.5 | 40.7 | 16.8 | 5,744 |
| Residence | 124.8*** | 16.0*** | 48.2*** | 51.6*** | 12.4*** |  |
| Rural | 27.3 | 22.5 | 22.8 | 42.4 | 21.5 | 17,914 |
| Urban | 21.1 | 24.6 | 19.1 | 37.9 | 19.7 | 9,253 |
| Literacy of man | 182.0*** | 33.0*** | $234.7 * * *$ | 10.2* | 5.1(n.s.) |  |
| No education | 31.1 | 25.7 | 28.2 | 38.4 | 22.0 | 3,256 |
| Primary | 30.3 | 25.4 | 25.4 | 41.5 | 21.6 | 3,861 |
| Secondary | 24.0 | 22.7 | 21.0 | 41.3 | 20.7 | 15,718 |
| Higher | 20.2 | 21.2 | 14.9 | 40.5 | 20.3 | 4,331 |
| Occupation of man | 82.5*** | 103.4*** | 177.3*** | 47.6*** | 47.3*** |  |
| Not working | 27.8 | 26.1 | 25.4 | 43.8 | 22.9 | 2,025 |
| Agriculture | 28.2 | 25.0 | 25.4 | 43.4 | 23.0 | 7,647 |
| Unskilled | 23.9 | 19.6 | 20.6 | 39.3 | 19.9 | 9,108 |


| Salaried/sales | 22.6 | 24.8 | 17.4 | 39.1 | 19.2 | 8,387 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wife currently employed for cash | 0.2 (n.s.) | 23.5*** | 48.5*** | 2.0 (n.s.) | 12.5** |  |
| No | 25.1 | 22.8 | 20.9 | 40.7 | 20.6 | 24,079 |
| Yes | 25.5 | 26.7 | 26.4 | 42.0 | 23.2 | 3,055 |
| Wealth Index | 245.5*** | 29.3*** | 187.8*** | 19.2** | 27.8*** |  |
| Poorest | 30.1 | 24.4 | 26.7 | 43.0 | 21.6 | 4,577 |
| Poor | 28.6 | 21.6 | 22.7 | 41.7 | 21.8 | 5,488 |
| Middle | 26.6 | 24.5 | 22.2 | 40.1 | 21.6 | 6,122 |
| Rich | 22.7 | 24.1 | 20.9 | 41.0 | 21.1 | 5,667 |
| Richest | 18.4 | 21.4 | 15.7 | 39.0 | 18.3 | 5,311 |
| Populous States | -- | -- | -- | -- | -- |  |
| Uttar Pradesh | 26.2 | 13.6 | 21.6 | 41.2 | 19.4 | 3,649 |
| Madhya Pradesh | 31.6 | 18.2 | 24.4 | 44.2 | 19.2 | 1,932 |
| Bihar | 40.2 | 24.1 | 19.7 | 45.4 | 17.5 | 1,901 |
| Rajasthan | 20.6 | 10.8 | 14.2 | 48.3 | 16.7 | 1,545 |
| Jharkhand | 17.1 | 24.8 | 19.4 | 58.2 | 31.0 | 689 |
| Chhattisgarh | 10.3 | 6.9 | 15.6 | 32.9 | 21.2 | 671 |
| Gujarat | 14.5 | 26.6 | 12.7 | 48.1 | 24.1 | 2,462 |
| Maharashtra | 17.5 | 13.1 | 15.2 | 27.0 | 10.8 | 2,641 |
| Assam | 25.5 | 22.6 | 20.0 | 24.5 | 12.2 | 580 |
| West Bengal | 26.9 | 24.8 | 11.1 | 42.2 | 10.9 | 1,949 |
| Odisha | 35.6 | 19.5 | 19.7 | 32.9 | 23.1 | 736 |
| Andhra Pradesh | 29.7 | 33.5 | 40.4 | 49.0 | 48.3 | 1,118 |
| Telangana | 38.6 | 35.9 | 45.0 | 47.5 | 41.9 | 867 |
| Tamil Nadu | 29.7 | 55.4 | 38.5 | 33.4 | 15.2 | 2,029 |
| Karnataka | 28.9 | 44.0 | 33.7 | 47.8 | 51.7 | 1,096 |
| Kerala | 20.9 | 13.6 | 20.1 | 15.3 | 19.0 | 478 |
| All currently married men | 25.2 | 23.2 | 21.5 | 40.8 | 20.9 | 27,166 |

Proportion of GI men on household chores were highest ( $>30 \%$ ) among illiterate, primary educated, poorest wealth quintile, Madhya Pradesh, Bihar, Odisha, and Telangana. The GI index on sex \& sexual life and IPV differ significantly by all background characteristics. More than half of the Tamil Nadu men and only around $7-11 \%$ of Rajasthan and Chhattisgarh men have GI attitudes on sex \& sexual life. Gender inequal attitudes towards IPV are minimal ( $<16 \%$ ) in other caste, highly educated, highest wealth quintile, Rajasthan, Chhattisgarh, Gujarat, Maharashtra, West Bengal; and highest ( $>35 \%$ ) in Andhra Pradesh, Telangana and Tamil Nadu. Contraceptive irresponsible men differ significantly by all the background characteristics except for 'work status of wife for cash', and such men are minimal ( $<25 \%$ ) only in Assam and Kerala. On similar lines, proportion of men who believe women who use contraception may become promiscuous also vary by all background characteristics excluding age and literacy level of men.
Figure 2: Percent young married men who perceive contraception is women's bussies and who relate it to promiscuity


Figure 3: Percent young married who are aware of three female spacing methods and current users of modern contraception as reported by men


Dependent variables: Even though, $86 \%$ of young married men have knowledge of Oral Contraceptive Pill (OCP), $50 \%$ have knowledge of Intra Uterine Device (IUD) and 68\% have knowledge of injectable contraception - only $42 \%$ men have knowledge of all these three methods is the first dependent variable. Also, only $15.5 \%$ men reported that he or his spouse is currently using any modern method of contraception, is the second dependent variable (Figure 3). Percent of men with number of GI measures (out of five) is the third dependent variable. Out of all young married men only $30 \%$ men were GI on none of the five indices, $31 \%$ were GI on one index, $22 \%$ on two, $12 \%$ on three, $4 \%$ on four and $1 \%$ were GI on all the five indices.

Figure 4 presents the strength of association of each of five GI indices with FP-related knowledge, in terms of unadjusted OR
and $95 \%$ confidence interval of OR. Figure 4 a presents ORs of each of five GI indices, adjusted for socioeconomic covariates. With and without adjustment for background characteristics, all the five gender equity indices are significantly and positively associated with contraceptive knowledge, implies, men with GE attitudes/behaviors have higher knowledge as compared to their GI counterparts, even after controlling for background characteristics. After controlling for background variables, men who are GE decision makers on household chores have 1.4-1.6 times higher knowledge of three female spacing methods as compared to their GI counterparts.

Figure 4: Unadjusted Odds Ratio ( $95 \%$ CI of OR) of contraceptive knowledge with five gender indices


Figure 4a: Adjusted Odds Ratio (95\% CI of OR) of contraceptive knowledge with five gender indices


Similarly, with or without adjustment for background characteristics, men with each of the five GE indices are 1.2 to 1.7 times higher adopters of modern contraceptive methods as compared to their GI counterparts (Figure 5 \& figure 5a).

Figure 6 and 6a presents adjusted association between number of gender-inequitable indices with contraceptive knowledge and modern contraceptive methods use. Number of GI indices of a man has significant influence on both contraceptive knowledge and contraceptive use, even after adjusting for socio-economic factors. The odds of contraceptive knowledge improved 2.8 times ( $95 \% \mathrm{CI}: 2.0-3.7$ ) among men with zero GI indices as compared to man with five GI indices. Similarly, as compared to a man with five GI indices, a man with zero GI indices has 3.7 times higher chance of using modern contraception (OR=3.7, $95 \%$ CI: 2.26.3).

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Figure 5: Unadjusted Odds Ratio ( $95 \%$ CI of OR) of contraceptive use with five gender indices


Figure 5a: Adjusted Odds Ratio ( $95 \%$ CI of OR) of contraceptive use with five gender indices


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Figure 6: Adjusted Odds Ratio ( $95 \%$ CI of OR) of contraceptive knowledge with number of gender-inequal (GI) indices


Figure 6a: Adjusted Odds Ratio ( $95 \%$ CI of OR) of contraceptive use with number of gender-inequal (GI) indices


## Discussion

Based on young married men's response to 25 opinion-based statements on perceptions, attitudes, and behaviors towards gender roles from NFHS-4 men's data, we have constructed five Janasamkhya Vol. XL, 2022

GE/GI indices, and have classified: $25 \%$ of Indian men as GI on household chores; $23 \%$ as GI on masculine behavior on sex/sexual life; $22 \%$ have GI attitudes on IPV issue; $41 \%$ are irresponsible towards contraception; and $21 \%$ link contraception to promiscuity. Distribution of men according to these five indices shows that: only $30 \%$ men were GI on none, $31 \%$ on one index, $22 \%$ on two, $12 \%$ on three, $4 \%$ on four and $1 \%$ were GI on all the five indices. Other than huge inter-state variations they also vary significantly according to almost all the background characteristics with or without adjustment for these characteristics. Men who were GE on these indices have better contraceptive knowledge of three female spacing methods and are significantly better users of modern methods of contraception. Similarly, the odds of contraceptive knowledge and use significantly increase with increase in number of GE indices, as men with five GE indices have 2.8 times higher contraceptive knowledge and are 3.7 times higher users of contraception as compared to men with zero GE indices.

How comparable are our findings with similar research? In Tanzania, using 24 -statements from couples, 'GEM scale' was prepared; using five statements 'bousehold decision making scale'; using four hypothetical scenarios 'attitude toward wife refusing sex scale'; and using five hypothetical scenarios, 'attitude toward wife beating scale' was prepared (Nanda et al 2013). Based on this study, 35\% husbands were GI on GEM's scale, $16 \%$ GI on household decisions, $28 \%$ GI on attitudes towards refusing sex and $70 \%$ GI on attitudes towards IPV. Variations in results of this study with ours were due to variations in respondents of two studies.

Using cross-sectional data from four cities of currently married men in Uttar Pradesh, $20 \%$ men were low sensitive on GE, $17 \%$ were highly restrictive to wives' mobility and $7 \%$ has less GE attitude scale (Mishra et al, 2014). A systematic review on GIs and male perpetration of IPV, employing 64 measures-categorized GI scale into three main thematic areas: views on gender roles/norms, acceptance of violence against women, and genderrelated inequities in relationship power and control (McCarthy et al, 2018). As compared to NFHS-4 in 2015-16, by NFHS-5 in 2019-21, among all men aged 15-54 years, who agree that a wife should have an equal or greater say on five household issues has slightly decreased from $59 \%$ to $57 \%$; attitude towards wife beating (agreement with any of the seven IPV statements) has increased from $42 \%$ to $44 \%$ (IIPS, 2021) - implying no major changes in GE/GI attitudes in last five years.

Interrelationship between men's perceptions about FP and its use: Negative perceptions or beliefs such as using contraception makes men less 'manly' or using contraception causes infertility or FP is women's business or women who use FP may become promiscuous can create barriers to contraceptive access and use (Grindlay et al, 2018). In India, negative perceptions of men about FP seem to be increasing, as men perceiving FP is women's business has increased from $22 \%$ in 2005-06 to $37 \%$ in 2015-16 to $35 \%$ in 2019-21; and men perceiving women who use contraception may become promiscuous also increased from $16 \%$ in 2005-06 to $20 \%$ in 2015-16 to $20 \%$ in 2019-21 (IIPS, 2021). We did not come across any research that explores the relationship between men's perception about FP against FP knowledge and use. Our research showed that men who does not have negative attitude towards FP have significantly higher
knowledge about three female spacing methods (OR=1.1-1.2) and are significantly better users of modern FP (OR=1.3) as compared to men with negative perceptions on FP.

Association between GE classification and FP knowledge/use: In patriarchal societies although men were the primary decisionmakers of FP (Kabagenyi, et. al., 2014), the FP programs typically target information and messaging at women (HPI, 2018) resulting in poor and incorrect knowledge about FP methods, particularly of female methods by men (Dougherty, et. al., 2018 Scott, et. al., 2009). Indian men seem to have poor knowledge about modern FP methods as only 42 percent of young married men (figure 3) were aware of all the three female spacing methods (IUD, OCP and Injectables). A study in central India found that, although $81 \%$ men heard three or more spacing methods, in-depth interviews showed their knowledge of these methods was superficial (Ram, 2009). In Tanzania wives gender attitudes predicted contraceptive use (as reported by wives) but husbands gender attitudes did not (Nanda et al 2013). In urban India, gender sensitive decision making, and equitable attitudes show significant positive association and restrictions on wife's mobility showed significant negative relationship with current contraceptive use (Mishra et al 2014).

FP use as reported by men and GE classification: As documented in other studies in India (Jejebhoy, 2002) and elsewhere (Miller, 2001, Kulczycki, 2008) we also have found that only $20 \%$ of all married men aged 15-54 years in India reported that they or their spouse currently use any modern FP method, although $48 \%$ of currently married women reported to be using any modern method (IIPS, 2017). In a separate analysis done by us (yet to be
published) of the 64,000 unique couples of India in 2015-16, we have found huge variations in contraceptive reporting by women $(56 \%)$ and men ( $26 \%$ ). Despite under-reporting of modern contraceptive methods use by married men in India, we have found that young married men without masculine attitudes toward sex/sexual life are better users of modern contraceptive methods as compared to their masculine attitude counterparts, with OR of 1.7 ( $95 \%$ CI: 1.6-1.9) even after adjustment for other background factors. This finding is in conjunction with findings from urban and rural UP, India (Misra, 2014, Jejeebhoy, 2002, Khan, 1997) and elsewhere (Purr, 2008, Saleem, 2005).

Strengths and limitations: Based on 25 gender equity related opinions/statements, we for the first time have classified young currently married men of India and the populous states according to five gender equity indices and have tested their association with contraceptive knowledge and contraceptive use. Our three gender equity indices are in concurrence with three main thematic areas of gender equality listed in systematic review on this subject (McCarthy et al, 2018). By confining our analysis to young married men, we have tried to test association between independent (GI/GE indices) and dependent (contraceptive knowledge \& contraceptive use) variables that happen almost at same point of time. Men's opinion-based statements on IPV closely match with GEMS statements on GBV, the strength of association between GE indices and the dependent variables, with and without adjustment for other background variables being almost similar indicates negligible effect of confounders (background factors) between contraceptive knowledge/use with gender equity indices.

One major limitation of this research is that our gender equity indices are based on opinions, perceptions, attitudes and are mostly silent on gender equity practices/acts followed by men. We also do not have any clues on the nature of communication between couples in India, as better communication between them may lead to better contraceptive knowledge and use. Although we are aware men under report current use of modern contraception as compared to women, we could not use contraceptive data provided by women, as such analysis is beyond scope of this research.

Significance and need for further research: Using the NFHS - 4 data on young married men's perceptions, norms, attitudes towards different domains of gender equity we have classified them into five types GE/GI indices and have tested association of these indices with contraceptive knowledge and use. Although there is a need for more nuanced research on classifying men as GE/GI, particularly on GE practices - current analysis confirms the hypothesis that young married men with GE perceptions and attitudes have better knowledge of female spacing methods and are better users of modern contraception, irrespective of their background characteristic. We believe our research shows a roadmap on the need for engaging men in FP related issues.

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