

Domestic violence across generations: findings from northern India

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Background Although one cannot underestimate the importance of macrosystem-level forces (such as cultural and social norms) in the aetiology of gender-based violence within any country, including India, individual-level variables (such as observing violence between one's parents while growing up) may also play important roles in the development of such violence. Therefore, this research studies men residing in northern India to: (1) estimate the prevalence of men's childhood experiences of witnessing parent-to-parent violence within their families of origin; (2) examine whether men raised in violent homes were more likely than men raised in non-violent homes to have attitudes supportive of husbands' control of their wives; (3) examine whether men raised in violent homes were more likely than men raised in non-violent homes to be abusive toward their own wives; and (4) estimate the extent to which wife abuse in this second generation could have been prevented had there not been parent-to-parent violence in the men's natal families.

Methods Married men (n = 6902) were surveyed concerning: their childhood experiences of witnessing parent-to-parent violence in their families of origin; their attitudes regarding the appropriateness of husbands' control of their wives; their physically and sexually abusive behaviours toward their own wives; and sociodemographic variables. Descriptive statistics, multivariable modelling procedures, and estimation of a population attributable fraction were used to address the study questions.

Results Approximately one-third of the men had witnessed parent-to-parent violence as a child. Compared to men raised in non-violent homes, men from violent homes were significantly more likely to believe in husbands' rights to control their wives, and to be physically/sexually abusive toward their own wives. Non-violence in the earlier generation was strongly predictive of non-violence in the second generation, with about a third of the wife abuse in the second generation being attributable to parent-to-parent violence in the first generation.

Conclusions These findings from northern India are congruent with those from other geographical/cultural settings in suggesting that witnessing violence between one's parents while growing up is an important risk factor for the perpetration of partner violence in adulthood.

Keywords Domestic violence, family violence, India, physical abuse, sexual abuse, spouse abuse, violence, wife abuse

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Wife abuse, along with its resultant negative health consequences, is becoming increasingly recognized as a pervasive public health

problem within both developed and developing countries, including India.¹⁻⁸ Although estimates of the prevalence of wife abuse within India vary widely (from about 20% to 75%, with differences in study methods being at least in part responsible for the diverse estimates),⁹⁻¹⁹ previous research suggests that wife abuse is a common occurrence within India, as it is within many other countries.

Researchers, theorists, and advocates working in the field of gender-based violence have suggested that a thorough understanding of violence against women (including wife abuse)

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necessitates the recognition that many factors play important roles in the aetiology of such violence.^{20,21} Building on theoretical developments in the field of child maltreatment,²² Heise has proposed an 'ecological framework' for studying violence against women that views this violence as resulting from numerous factors that operate on various levels.²⁰ One such level is the 'macrosystem', defined as the set of commonly accepted cultural values, beliefs, and practices that permeate a society; yet another level is that of the 'individual', defined as personality factors and events that occur within a person's lifetime that help to shape an individual's responses to situations and stresses.

All countries and societies, including India, have macrosystem-level norms embedded in the culture that may exacerbate gender-based violence. Traditional rigid gender roles are one such cultural norm within various areas of India that may increase the likelihood of violence against women. These roles are defined in such a manner that sons are more likely than daughters to be of benefit to their parents, both financially and in other ways. For example, in northern India, many women marry since, traditionally, there are few lifestyle options for women outside of marriage.¹⁴ At the time of marriage, the bride is expected to bring a 'dowry' (i.e. a gift of cash or possessions from her natal family) into the family of her husband; thus, the groom's parents gain wealth while the bride's parents lose wealth.²³ Although dowry demands have been outlawed by the Indian government, these laws are seldom enforced and the practice of dowry is still widespread.²⁴ In recent years, the amount of dowry deemed appropriate has increased dramatically in some areas,^{16,25} so that the bride's family is not always able to provide a dowry large enough to satisfy the groom's family. In this situation, the groom's family may make additional, and repeated, dowry demands. Not meeting such demands places the bride at risk of 'dowry death', either due to homicide (i.e. the bride is killed by the groom and/or his family) or suicide (i.e. the bride kills herself to escape the constant harassment by the groom and his family).²⁶ If such a dowry death occurs (and assuming in the case of homicide by the groom that it goes unpunished by the legal system), the young widower is free to remarry and to obtain another dowry, further enhancing his family's wealth.

Moreover, after marriage and throughout adulthood, traditional gender roles within India assure that sons continue to be more valuable than daughters to their parents. For example, the husband and his wife traditionally reside with the husband's parents, enabling the younger generation to care for the older generation as they age.²⁷ In contrast, a married daughter traditionally resides with her husband's parents in a home that is often far from her own parents;¹⁴ thus, there may be few opportunities for married women to visit their parents, let alone to assure their well-being. Given that sons are greater assets to their parents than daughters, it is not surprising that many Indian couples prefer to have male children. Unfortunately, this strong preference for sons has been implicated as underlying both female infanticide (i.e. the killing of female infants by their parents), a relatively common practice within India in the past, and more recently, female feticide (i.e. the selective abortion of female fetuses based on amniocentesis findings).²⁸⁻³⁰ In light of these aforementioned cultural practices, it is not surprising that every Indian census has registered more males than females in the population, especially in the more traditional northern

states.²⁷ Furthermore, the primary factor implicated for this sex difference in the population is the higher death rate (from infancy through young adulthood) of females compared to males.³¹

Other macrosystem-level cultural norms within India that have been implicated as enhancing gender-based violence are attitudes concerning male superiority to women and male domination of women. These are well described within a famous Indian text (namely, *Manusmriti* or Manu's code), in which it is written that females must be subservient to males throughout their lifetimes: in childhood, to their fathers; in young adulthood, to their husbands; and in old age (and presuming the deaths of their husbands), to their sons.²⁴ Women are viewed as living almost exclusively for the males in their lives,²⁶ with one of the most dramatic cultural practices illustrating this attitude being the practice of *sati*—self-immolation of a widow on her husband's funeral pyre.²⁷ Although *sati* has been declared illegal by the Indian government, there have been a few contemporary cases reported. Furthermore, the widows involved in these recent *sati* cases have been viewed by the populace at large with reverence, and, in one situation, the funeral pyre was later turned into a religious shrine.³² This cultural attitude concerning male superiority is so strong that many in India believe that husbands are entitled to control their wives, even by means of physical chastisement.³³ For example, in recent research conducted within northern India, the majority of study participants (including males and females, and Muslims and Hindus) reported that husbands were justified in beating wives who were disobedient of their husbands' wishes.^{34,35}

Although one cannot underestimate the importance of these macrosystem-level forces in the aetiology of gender-based violence within India, one also must recognize that, as in any country, there is variation among the residents' attitudes concerning violence against women, as well as in their violent behaviours toward women. To help explain this variation within a culture or society, the ecological framework perspective stresses the important roles that individual-level variables may play in the aetiology of this violence. For example, witnessing violence between one's parents while growing up would be expected to influence one's attitudes and behaviours in adulthood. More specifically, boys growing up observing their fathers beat their mothers would be expected to be more likely than boys from non-violent homes to have attitudes supportive of wife abuse, and to perpetrate wife abuse themselves in adulthood.²⁰ In fact, the results of several investigations have supported this notion; however, most of this research has been conducted in developed countries, especially in the US.³⁶⁻⁴⁵

Therefore, the purpose of this investigation is to extend past research by studying men residing in several regions in northern India to examine potential links between a particular individual-level variable, namely, men's childhood experiences of witnessing violence between their parents, and the men's later attitudes concerning whether or not husbands are entitled to control their wives, as well as the men's abusive behaviours toward their own wives. Specifically, this study interviewed representative samples of men from five districts in northern India to: (1) estimate the prevalence of men's childhood witnessing of parent-to-parent violence within their families of origin; (2) examine whether men from violent homes were more likely than men from non-violent homes to have attitudes condoning husbands' control of their wives; (3) examine whether men

from violent homes were more likely than men from non-violent homes to be physically and/or sexually abusive toward their own wives; and (4) estimate the extent to which wife abuse in this second generation could have been prevented had there not been parent-to-parent violence in the men's families of origin.

Methods

Institutional review board approval

The overall survey protocol was reviewed and approved by a group of medical and clinical experts in India, the Executive Director and staff of the State Innovations in Family Planning Services Project Agency (a parastatal agency of the Uttar Pradesh State Government), and staff of the US Agency for International Development. In addition, the protocol was approved by the Committee on Human Subjects Institutional Review Board of the School of Public Health at the University of North Carolina at Chapel Hill.

Study sample and assessment

This analysis uses data from the EVALUATION Project's Male Reproductive Health Survey (a supplement to the PERFORM Systems of Indicators Survey)^{46,47} that was designed to learn more about reproductive health-related behaviours and attitudes of men in the northern Indian state of Uttar Pradesh. The sampling frame for this systematic, multi-stage survey consisted of married men (who were cohabiting with their wives) from approximately 400 villages and towns in five geographical districts (Aligarh, Banda, Gonda, Kanpur Nagar, and Nainital),⁴⁸ which were selected as being representative of Uttar Pradesh's five regions (the Hill, Western, Central, Eastern, and Bundelkhand areas). Among the 8296 eligible men, 6902 (83%) completed the survey (half of the 'non-completed' surveys involved men who could not be contacted by the study interview team after three attempts or who no longer lived in the household, while the other half involved men who were temporarily absent from the household at the time of the attempted survey contact). This report focuses on 89% of these 6902 men, specifically, those with survey information available concerning the variables examined in this paper.

The study survey, that was developed jointly by staff of the EVALUATION Project (which was directed by one of the authors of this paper) and the Center for Population and Development Studies in Hyderabad, contained questions which comprised the following nine sections: (1) respondent background characteristics; (2) accessibility of contraceptive services; (3) current and future use of family planning; (4) media exposure to family planning messages; (5) expenditure and support for family health care; (6) perceptions of wife's ability to obtain and effectively use contraception; (7) knowledge of reproductive health; (8) sexual activity; and (9) domestic violence.⁴⁹ The domestic violence section (which included questions concerning physical violence in the men's families of origin, physical and sexual violence in the men's marital relationships, and the men's attitudes regarding husbands' control of their wives) was included in the survey since these issues have increasingly become recognized as important concerns which may affect many aspects of reproductive health.⁴⁹ In designing the survey questions, the survey developers reviewed various sexual and

reproductive health questionnaires that had been used in previous surveys of men that had been conducted in developing and developed countries. Many of the domestic violence questions were adapted from those used by the Centers for Disease Control and Prevention in their family planning/reproductive health surveys.

Parent-to-parent violence within the men's families of origin was assessed via two questions. Men were asked if, during childhood or adolescence, they had ever seen or heard their mother beat or physically mistreat their father. Men also were asked if they had ever seen or heard their father beat or physically mistreat their mother. For analysis purposes, men were classified into one of the following four family of origin groups: (1) those whose mothers had beat/physically mistreated their fathers, and their fathers had beat/physically mistreated their mothers; (2) those whose fathers had beat/physically mistreated their mothers, but whose mothers had not beat/physically mistreated their fathers; (3) those whose mothers had beat/physically mistreated their fathers, but whose fathers had not beat/physically mistreated their mothers; and (4) those with no parent-to-parent violence in their families of origin.

The survey also asked about the men's physically and sexually abusive behaviours toward their own wives. Wife abuse was assessed by asking one question concerning physical wife abuse (specifically, 'Have you ever hit, slapped, kicked, or otherwise physically hurt your wife?') and two questions concerning sexual wife abuse (specifically, 'Have you ever had sex with your wife even though she was not willing?' and 'Have you ever physically forced your wife to have sex?'). For analysis purposes, the following four wife abuse groups were formed on the basis of the men's responses to these three wife abuse questions: (1) the No Wife Abuse Group—defined as men who reported that they did not perpetrate physical or sexual wife abuse; (2) the Physical Wife Abuse Only Group—defined as men who reported perpetrating physical wife abuse, but who reported that they did not perpetrate sexual wife abuse; (3) the Sexual Wife Abuse Without Physical Force Group—defined as men who reported having sex with their wives when their wives were unwilling, but who reported that they did not physically force their wives to have sex (note that men within this group may or may not have also reported physical wife abuse); and (4) the Sexual Wife Abuse With Physical Force Group—defined as men who reported physically forcing their wives to have sex (note that all of this group reported having sex with their wives when their wives were unwilling, and they may or may not have also reported physical wife abuse).

The survey also included questions to assess men's attitudes concerning the appropriateness of husbands' control of their wives. Certainly not all men who believe in husbands' rights to control their wives will be physically abusive toward their wives. However, the concept of men's control of women is important to assess in studies of gender-based violence since control is often viewed on a continuum, with the use of physical force being on the extreme (severe) end of the continuum. These controlling attitudes were examined using two approaches.

In one approach, men were asked about the extent to which they 'agreed' or 'disagreed' with each of the following four Control Statements: (1) A wife should always follow her husband's instructions, whether she likes it or not; (2) It is harmful if a wife sometimes disobeys her husband's instructions; (3) If

necessary, a wife should be forced to listen to all of her husband's instructions; and (4) Verbal insults and physical beatings should be used against wives who do not follow their husbands' instructions.

For the purposes of this analysis, the men's responses to each Control Statement were coded as follows: 'Strongly disagree' = 1, 'Disagree' = 2, 'Agree' = 3, and 'Strongly agree' = 4. Thus, higher scores on the Control Statements indicated attitudes more supportive of husbands' control of their wives. In addition, the men's coded responses to the four Control Statements were summed to create a Control Summary Score that could range from 4 to 16, with higher scores reflecting attitudes more supportive of husbands' control of their wives.

The other approach used to assess the men's attitudes concerning husbands' control of their wives was to ask the men how a husband should respond if his wife does not behave in a manner consistent with his wishes. Specifically, the men were asked, 'If a wife disobeys the instructions of her husband, should the following measures/actions be taken by her husband?' Men were asked about four specific types of Controlling Measures/Actions, including: verbally persuading one's wife; physically isolating one's wife; verbally insulting one's wife; and physically beating one's wife. Men indicated their opinions concerning the appropriateness of these actions by responding 'yes' or 'no' to each of the four Controlling Measures/Actions. For purposes of this analysis, 'yes' responses to the questions concerning physical isolation, verbal insults, and physical beatings were coded as 1, while 'no' responses were coded as 0. However, for the verbal persuasion question, the 'yes' responses were coded as 0, and 'no' responses were coded as 1. (Note: The rationale underlying this coding is that men who choose to verbally discuss a matter with their wives in order to persuade them to do something are behaving in a more non-violent manner than are men who do not consider such discussion with their wife as a viable option, and who instead prefer to use physical isolation, verbal insults, and/or physical beatings as a control approach.)

The survey also gathered data concerning the men's sociodemographic characteristics, including their district of residence, education level, age, number of years married, number of children in the household, and whether or not the couple lived in the same household as the men's parents. In addition, socioeconomic status was assessed by asking the men whether their household included any of six types of possessions, namely, a clock, a fan, a radio, a television, a bike, and a motorbike/car. For analysis purposes, men were classified as being of lower socioeconomic status if they owned none or one of these possessions, and of higher socioeconomic status if they owned two or more of these possessions.

The survey interview was administered to the study participants by well-trained male interviewers who were from Uttar Pradesh. The interviews were conducted within private areas in the men's homes.

Analysis

The prevalence of each pattern of parent-to-parent violence witnessed by the men within their families of origin (i.e. mother and father beat/physically mistreated one another; father beat/physically mistreated mother; mother beat/physically mistreated father; and no violence) was computed. Descriptive statistics were used to examine the men's sociodemographic characteristics

(including district of residence, socioeconomic status, education level, age, number of children in the household, years married, and men's parents in the household) by the patterns of parent-to-parent violence in the men's families of origin. Descriptive statistics also were used to examine the men's mean scores on each of the four Control Statements, as well as the men's mean Control Summary Scores, stratified by the type of parent-to-parent violence in the men's families of origin. Multiple linear regression analysis⁵⁰ was used to model the men's Control Summary Scores as a function of men's witnessing parent-to-parent violence in their families of origin (coded as 'witnessed violence' versus 'did not witness violence' for this analysis) and the men's sociodemographic characteristics. Descriptive statistics were used to examine the percentages of men who endorsed the use of each of the four types of Controlling Measures/Actions that could be used in response to disobedient wives (i.e. not using verbal persuasion, using physical isolation, using verbal insults, and using physical beatings), stratified by the men's experiences of parent-to-parent violence. In addition, the percentages of men endorsing various numbers of these Controlling Measures/Actions (i.e. 0, 1, 2, or ≥ 3) were computed, stratified by the type of parent-to-parent violence in the men's families of origin. Polytomous logistic regression⁵¹ was used to model the number of Controlling Measures/Actions that the men felt should be taken against disobedient wives as a function of witnessing parent-to-parent violence in their families of origin (coded as 'witnessed violence' versus 'did not witness violence') and the men's sociodemographic characteristics. Pertinent estimated regression coefficients from the fitted model were used to compute estimated adjusted odds ratios (OR) and 95% CI to assess associations between men's witnessing of violence in their families of origin and the number of Controlling Measures/Actions endorsed by the men, while controlling for the men's sociodemographic characteristics. Descriptive statistics were used to examine the percentages of men within each of the wife abuse groups (No Wife Abuse, Physical Wife Abuse Only, Sexual Wife Abuse Without Physical Force, and Sexual Wife Abuse With Physical Force), stratified by the type of parent-to-parent violence in the men's families of origin. Polytomous logistic regression was used to model the men's abusive behaviours towards their wives as a function of witnessing parent-to-parent violence in their families of origin and the men's sociodemographic characteristics. Finally, a population attributable risk estimate⁵² was computed to examine the extent of wife abuse that could have been prevented among the men if they had grown up in homes in which there had not been violence between their parents. All statistical analyses were performed using the SUDAAN software package⁵³ to take the survey sampling methods into account.

Results

Parent-to-parent violence in the men's families of origin

Almost one-third of the men (30.8%) reported witnessing some type of parent-to-parent violence within their families of origin as children or adolescents. Approximately 6.2% of the men reported that both their mother and father had beat/physically mistreated one another; 24.5% reported that their father had beat/physically mistreated their mother, but that their mother

had not beat/physically mistreated their father; and 0.1% of the men reported that their mother had beat/physically mistreated their father, but that their father had not beat/physically mistreated their mother. Since so few men reported violence perpetrated exclusively by their mother, these participants were dropped from the remainder of the analyses due to the extreme analytical constraints presented by this small sample size.

The men's sociodemographic characteristics

Table 1 presents the men's experiences of witnessing parent-to-parent violence in their families of origin, stratified by their sociodemographic characteristics. As can be seen from this Table, while for all subgroups non-violence in family of origin was more common than any form of parent-to-parent violence, the men from the five geographical districts varied considerably in terms of their histories of witnessing this violence. Some type of parent-to-parent violence (including that in which the men's father and mother beat/physically mistreated one another, as well as that in which the men's father was the sole violence perpetrator) was most common among the men from Banda (49%) and was least common among the men from Kanpur Nagar (16%). Some form of parent-to-parent violence also was more likely in the families of men with lower levels of socioeconomic status compared to men with higher levels of socioeconomic status (42% versus 26%), men with lower levels of education compared to men with higher levels of education

(36% versus 25%), and younger men compared to older men (35% versus 29%).

The men's attitudes concerning husbands' control of their wives

Table 2 presents descriptive information concerning the men's mean responses to each of the four Control Statements, as well as the men's mean Control Summary Scores, stratified by the men's experiences of witnessing parent-to-parent violence in their families of origin. As can be seen in this Table, men from violent families (including men from homes in which both their father and mother were violence perpetrators, and men from homes in which their father was the sole violence perpetrator) had somewhat elevated mean scores for each of the Control Statements relative to men from non-violent families. Furthermore, both groups of men from violent families had somewhat higher mean Control Summary Scores than did men from non-violent families. These descriptive findings suggest that men who witnessed violence in their families of origin as children had attitudes as adults that were more supportive of husbands' control of their wives than did men from non-violent families.

Table 3 presents the findings from the multiple linear regression analysis that modelled the men's Control Summary Scores as a function of men's witnessing parent-to-parent violence in their families of origin (coded as 'witnessed violence' versus 'did not witness violence' for this analysis) and the men's

Table 1 Percentages of men who witnessed various types of parent-to-parent violence (or no violence) in their families of origin, stratified by their sociodemographic characteristics

	Father and mother beat or physically mistreated one another	Father beat or physically mistreated mother	No violence in family of origin
District of residence			
Banda (n = 1726)	7%	42%	51%
Gonda (n = 1085)	12%	21%	67%
Aligarh (n = 1137)	4%	23%	74%
Nainital (n = 1101)	3%	15%	82%
Kanpur Nagar (n = 1107)	4%	12%	84%
Socioeconomic status			
Lower (n = 1838)	9%	33%	58%
Higher (n = 4318)	5%	21%	74%
Men's education level			
Lower, <6 years (n = 2936)	7%	29%	64%
Higher, ≥6 years (n = 3220)	5%	20%	74%
Men's age			
Younger, <31 years (n = 2144)	7%	28%	66%
Older, ≥31 years (n = 4012)	6%	23%	71%
No. of children in household			
Fewer children, <4 (n = 3625)	6%	26%	68%
More children, ≥4 (n = 2531)	6%	23%	71%
Years married			
Longer, ≥17 years (n = 3075)	7%	24%	70%
Shorter, <17 years (n = 3081)	6%	26%	69%
Men's parents in household			
No (n = 1088)	6%	25%	69%
Yes (n = 5068)	6%	25%	69%

Note: The percentages presented have been adjusted for the sampling procedures; however, the ns presented have not been so adjusted (they are the actual number of survey participants). Some row percentages do not sum to exactly 100% due to rounding.

Table 2 Men's mean scores on each of the control statements and their mean control summary scores, stratified by the type of parent-to-parent violence (or no violence) witnessed by the men in their families of origin

Control Statements	Father and mother beat or physically mistreated one another Mean (SE)	Father beat or physically mistreated mother Mean (SE)	No violence in family of origin Mean (SE)
A wife should always follow her husband's instructions whether she likes it or not.	2.95 (0.04)	2.86 (0.02)	2.69 (0.01)
It is harmful if a wife sometimes disobeys instructions given to her by her husband.	2.78 (0.04)	2.72 (0.02)	2.48 (0.01)
If necessary, a wife should be forced to listen to all instructions given to her by her husband.	2.46 (0.04)	2.58 (0.02)	2.22 (0.01)
Verbal insults and/or physical beatings should be used against a wife if she does not follow instructions given by her husband.	2.45 (0.04)	2.54 (0.02)	2.19 (0.01)
	Mean (SE)	Mean (SE)	Mean (SE)
Control Summary Score	10.65 (0.14)	10.70 (0.06)	9.58 (0.03)

Note: For this analysis, the men's extent of agreement or disagreement with each of the four Control Statements was coded using a response scale from 1 to 4 in which higher scores indicated greater agreement. The Control Summary Scores were created by summing men's responses to the four Control Statements. Therefore, higher scores on both the Control Statements, as well as the Control Summary Scores, reflect attitudes more supportive of husbands' control of their wives.

Table 3 Results of the multiple linear regression analysis of the men's control summary scores^a modelled as a function of the men's witnessing parent-to-parent violence in their families of origin and sociodemographic variables

Predictor variables	Regression coefficient	P-value
Parent-to-parent violence in family of origin		
Yes	0.46*	<0.005
No	(referent)	
Men's education level		
Lower (<6 years)	0.40*	<0.005
Higher (≥6 years)	(referent)	
Socioeconomic status		
Lower	0.22*	<0.005
Higher	(referent)	
Men's age		
Younger (<31 years)	0.13*	0.04
Older (≥31 years)	(referent)	
District of residence		
Banda	1.06*	<0.005
Gonda	0.15	0.13
Aligarh	-0.44*	<0.005
Kanpur Nagar	-0.23*	<0.005
Nainital	(referent)	
Years married		
Longer marriage (≥17 years)	0.10	0.10
Shorter marriage (<17 years)	(referent)	
No. of children in household		
Fewer children (<4)	0.04	0.46
More children (≥4)	(referent)	
Men's parents in household		
No	-0.03	0.58
Yes	(referent)	

^a Higher Control Summary Scores reflect attitudes more supportive of husbands' control of their wives.

* Statistically significant associations ($P < 0.05$).

sociodemographic characteristics. The results of this multivariable analysis are consistent with the aforementioned descriptive findings. In particular, men who grew up in violent families had significantly higher mean Control Summary Scores than did men from non-violent families, even after adjusting for the effects of the sociodemographic variables. These findings imply that the men who witnessed parent-to-parent violence had attitudes that were more supportive of husbands' control of their wives than did men from non-violent families. In addition, three of the sociodemographic variables significantly associated with the men's mean level of the Control Summary Scores included the men's education levels (with men of lower levels of education having higher mean Control Summary Scores), socioeconomic status (with men of lower socioeconomic status having higher mean Control Summary Scores), and age (with younger men having higher mean Control Summary Scores). Furthermore, district of residence was significantly associated with the men's mean Control Summary Scores. More specifically, compared to the men from Nainital who served as the comparison group for this analysis: the men from Banda had significantly higher mean Control Summary Scores, the men from Aligarh had significantly lower mean Control Summary Scores, and the men from Kanpur Nagar had significantly lower mean Control Summary Scores. These findings suggest that several sociodemographic variables are associated with men's attitudes being supportive of husbands' control of their wives, including having a lower level of education, being of lower socioeconomic status, being younger, and residing in particular geographical areas.

Table 4 presents descriptive information concerning the types of Controlling Measures/Actions that the men felt husbands should take in response to disobedient wives, stratified by the men's experiences of witnessing parent-to-parent violence in their families of origin. These results show that very few men in each of the three family of origin groups felt that verbal persuasion was not a viable option for husbands to use if their wife disobeyed them (i.e. most of the men in each of the groups reported that husbands should use verbal persuasion in response to disobedient wives). However, not using such verbal persuasion was slightly more often endorsed by the two groups of men who grew up in violent homes (4% of the men from

Table 4 Percentages of men who endorsed each type of controlling measure/action that husbands could take in response to disobedient wives, and the number of controlling measures/actions endorsed by the men, stratified by the type of parent-to-parent violence (or no violence) witnessed in their families of origin

	Father and mother beat or physically mistreated one another %	Father beat or physically mistreated mother %	No violence in family of origin %
Types of controlling measures/actions			
Do not use verbal persuasion	4	2	1
Use physical isolation	11	7	7
Use verbal insults	28	38	18
Use physical beatings	35	47	18
No. of controlling measures/actions			
0	58	48	72
1	18	19	17
2	17	30	10
3 or 4	7	3	2

homes in which both parents perpetrated violence and 2% of the men from homes in which only their father perpetrated violence), compared to the men who grew up in non-violent homes (1%). Physically isolating disobedient wives was not a very commonly endorsed Controlling Measure/Action for dealing with disobedient wives, being viewed as appropriate by 11% of the men from homes in which both parents perpetrated violence, 7% of the men from homes in which the father was the sole violence perpetrator, and 7% of the men from non-violent homes. Verbally insulting disobedient wives was a much more popular Controlling Measure/Action, being endorsed as appropriate by about a third of the men from violent homes (28% of the men from homes in which both parents perpetrated violence and 38% of the men from homes in which the father was the sole violence perpetrator) compared to 18% of the men from non-violent homes. Physically beating disobedient wives was the most commonly approved Controlling Measure/Action which could be used in response to a disobedient wife, being more frequently endorsed as appropriate by men from violent homes (35% of the men from homes in which both parents perpetrated violence and 47% of the men from homes in which the father was the sole violence perpetrator) compared to the men from non-violent homes (18%). Given this pattern of findings, it is not surprising that the men from violent and non-violent homes differed in terms of the overall number of Controlling Measures/Actions which they endorsed as being appropriate husband responses to a disobedient wife, with the men from violent homes approving of more of these Controlling Measures/Actions compared to the men from non-violent homes, even though it should be noted that most of the men overall did not endorse any of the Controlling Measures/Actions. More specifically, Table 4 shows that, among men from homes in which both parents were violent, 58% viewed none of the Controlling Measures/Actions as being appropriate, 18% viewed one as appropriate, 17% viewed two as appropriate, and 7% viewed three or more as appropriate. Among men from homes in which the father was the sole violence perpetrator, 48% viewed none of the Controlling Measures/Actions as being appropriate, 19% viewed one as being appropriate, 30% viewed two as appropriate, and 3% viewed three or more as appropriate. Finally, among the men from non-violent homes, 72% viewed none of the Controlling Measures/Actions as being

appropriate, 17% viewed one as being appropriate, 10% viewed two as appropriate, and 2% viewed three or more as appropriate.

Table 5 presents the results of the polytomous logistic regression analysis that modelled the number of Controlling Measures/Actions that the men felt husbands should take against disobedient wives (coded as 0, 1, 2, or ≥ 3) as a function of the men's witnessing parent-to-parent violence in their families of origin (coded as 'witnessed violence' versus 'did not witness violence') and the men's sociodemographic characteristics. The results of this multivariate analysis were consistent with those of the aforementioned descriptive analyses in showing that men whose parents were violent were more likely to endorse multiple forms of Controlling Measures/Actions compared to men from non-violent homes. More specifically, after adjusting for all of the sociodemographic variables, compared to men from non-violent homes, men from violent homes were significantly more likely to approve of the use of one Controlling Measure/Action compared to none of them (OR = 1.40), two Controlling Measures/Actions compared to none of them (OR = 2.50), and three or more Controlling Measures/Actions compared to none of them (OR = 2.36). This pattern of findings suggests that men who witnessed parental violence as children had attitudes which were more supportive of husbands' control of their wives than did men from non-violent homes. In addition, the polytomous logistic regression analysis found that several of the sociodemographic variables were significantly related to the number of Controlling Measures/Actions endorsed by the men, including: education level (with men with lower levels of education generally endorsing greater numbers of Controlling Measures/Actions); socioeconomic status (with men of lower socioeconomic status being more likely to endorse one of the Controlling Measures/Actions compared to none of them); and age (with younger men being more likely to endorse one of the Controlling Measures/Actions compared to none of them). In addition, district of residence was significantly associated with the number of Controlling Measures/Actions endorsed by the men. More specifically, compared to the men from Nainital who served as the comparison group for this analysis: the men from Banda were significantly more likely to endorse greater numbers of Controlling Measures/Actions; the men from Gonda, although significantly less likely to endorse one of the Controlling Measures/Actions compared to none, were significantly

Table 5 Results of the polytomous logistic regression analysis of the number of controlling measures/actions^a that men felt husbands should take against disobedient wives modelled as a function of the men's witnessing of parent-to-parent violence in their families of origin and sociodemographic variables

Predictor variables	One controlling measure/action versus None OR ^b (95% CI)	Two controlling measures/actions versus None OR (95% CI)	Three or four controlling measures/actions versus None OR (95% CI)
Parent-to-parent violence in family of origin			
Yes	1.40* (1.19–1.66)	2.50* (2.10–2.99)	2.36* (1.64–3.40)
No	(referent)	(referent)	(referent)
Men's education level			
Lower (<6 years)	1.64* (1.39–1.93)	2.19* (1.82–2.64)	2.07* (1.36–3.16)
Higher (≥6 years)	(referent)	(referent)	(referent)
Socioeconomic status			
Lower	1.26* (1.06–1.50)	1.18 (0.98–1.41)	1.27 (0.86–1.89)
Higher	(referent)	(referent)	(referent)
Men's age			
Younger (<31 years)	1.28* (1.03–1.58)	1.19 (0.91–1.56)	1.50 (0.92–2.45)
Older (≥31 years)	(referent)	(referent)	(referent)
District of residence			
Banda	1.28* (1.01–1.61)	7.50* (5.28–10.66)	3.32* (1.75–6.30)
Gonda	0.43* (0.32–0.57)	1.76* (1.19–2.59)	5.74* (3.08–10.69)
Aligarh	0.53* (0.41–0.68)	1.02 (0.68–1.52)	0.84 (0.37–1.88)
Kanpur Nagar	0.61* (0.47–0.78)	0.47* (0.30–0.75)	0.35 (0.11–1.09)
Nainital	(referent)	(referent)	(referent)
Years married			
Longer marriage (≥17 years)	1.18 (0.95–1.18)	1.07 (0.81–1.40)	0.70 (0.42–1.17)
Shorter marriage (<17 years)	(referent)	(referent)	(referent)
No. of children in household			
Fewer children (<4)	0.99 (0.82–1.19)	1.06 (0.86–1.32)	0.83 (0.53–1.30)
More children (≥4)	(referent)	(referent)	(referent)
Men's parents in household			
No	0.99 (0.81–1.20)	1.11 (0.88–1.41)	0.82 (0.50–1.35)
Yes	(referent)	(referent)	(referent)

^a Endorsing a greater number of Controlling Measures/Actions against disobedient wives indicates attitudes more supportive of husbands' control of their wives.

^b Odds ratio.

* Statistically significant associations ($P < 0.05$).

more likely to endorse two or three or more of the Controlling Measures/Actions compared to none; the men from Aligarh were significantly less likely to endorse one of the Controlling Measures/Actions compared to none; and the men from Kanpur Nagar were significantly less likely to endorse one or two of the Controlling Measures/Actions compared to none). These findings suggest that several of the men's sociodemographic characteristics, including having a lower level of education, being of lower socioeconomic status, being younger, and residing in particular geographic areas, are predictive of the men being more likely to have attitudes supportive of husbands' control of their wives.

The men's abusive behaviours toward their own wives

Table 6 presents descriptive information concerning the men's abusive behaviours toward their own wives, stratified by the type of parent-to-parent violence that they witnessed in their families of origin. These findings suggest that men who witnessed

parental violence were more likely than men from non-violent homes to be both physically and sexually abusive toward their wives. In particular, men who grew up in violent homes were less likely to be in the No Wife Abuse Group (23% of the men from homes in which both their father and mother perpetrated violence, and 29% of the men from homes in which only their father perpetrated violence) compared to the men who grew up in non-violent homes (65%). Conversely, men from violent homes were more likely to be in the Physical Wife Abuse Only Group (26% of the men from homes in which both parents perpetrated violence, and 26% of the men from homes in which only the father perpetrated violence) than were men who grew up in non-violent homes (14%). Similarly, men from violent homes were more likely to be in the Sexual Wife Abuse Without Physical Force Group (34% of the men from families in which both parents perpetrated violence, and 36% of the men from families in which the father was the sole violence perpetrator) compared to men from non-violent homes (16%), and men from violent homes were more likely to be in the

Table 6 Percentages of men who abused their wives, stratified by the men's experiences of witnessing parent-to-parent violence (or no violence) in their families of origin

	Father and mother beat or physically mistreated one another %	Father beat or physically mistreated mother %	No violence in family of origin %
No wife abuse	23	29	65
Physical wife abuse only	26	26	14
Sexual wife abuse without physical force	34	36	16
Sexual wife abuse with physical force	17	9	5

Sexual Wife Abuse With Physical Force Group (17% of the men from homes in which both parents perpetrated violence and 9% of the men from homes in which the father was the sole violence perpetrator) compared to men from non-violent homes (5%).

Table 7 presents the results of the polytomous logistic regression model of the men's membership in a specific wife abuse group (the No Wife Abuse Group, the Physical Wife Abuse Only Group, the Sexual Wife Abuse Without Physical Force Group, or the Sexual Wife Abuse With Physical Force Group) as a function of witnessing parent-to-parent violence in their families of

origin (coded as 'witnessed violence' versus 'did not witness violence') and the men's sociodemographic characteristics. The results of this model were consistent with the aforementioned descriptive information. More specifically, after controlling for all of the sociodemographic variables, compared to men from non-violent homes, men who grew up in violent homes had more than three times the odds of being in the Physical Wife Abuse Only Group rather than in the No Wife Abuse Group (OR = 3.82), and had more than four times the odds of being in one of the two sexual wife abuse groups compared to the No Wife Abuse Group (OR = 4.35 for Sexual Wife Abuse Without

Table 7 Results of the polytomous logistic regression analysis of the men's abusive behaviours toward their own wives modelled as a function of the men's witnessing parent-to-parent violence (or no violence) in their families of origin and sociodemographic variables

Predictor variables	Physical wife abuse only versus no wife abuse OR ^a (95% CI)	Sexual wife abuse without physical force versus no wife abuse OR (95% CI)	Sexual wife abuse with physical force versus no wife abuse OR (95% CI)
Parent-to-parent violence in family of origin			
Yes	3.82* (3.19–4.58)	4.35* (3.73–5.08)	4.33* (3.40–5.50)
No	(referent)	(referent)	(referent)
Socioeconomic status			
Lower	1.34* (1.12–1.60)	1.17 (0.99–1.38)	1.32* (1.01–1.71)
Higher	(referent)	(referent)	(referent)
Men's education level			
Lower (<6 years)	1.73* (1.45–2.07)	1.12 (0.96–1.30)	1.22 (0.96–1.56)
Higher (≥6 years)	(referent)	(referent)	(referent)
District of residence			
Banda	1.62* (1.22–2.15)	2.27* (1.81–2.85)	1.75* (1.22–2.51)
Aligarh	1.42* (1.05–1.90)	1.13 (0.88–1.45)	1.89* (1.30–2.73)
Gonda	1.09 (0.79–1.49)	1.02 (0.77–1.35)	1.97* (1.35–2.88)
Kanpur Nagar	1.02 (0.75–1.39)	1.72* (1.35–2.19)	0.99 (0.66–1.51)
Nainital	(referent)	(referent)	(referent)
Men's age			
Younger (<31 years)	0.90 (0.70–1.16)	1.02 (0.83–1.25)	1.01 (0.73–1.40)
Older (≥31 years)	(referent)	(referent)	(referent)
Years married			
Longer marriage (≥17 years)	1.21 (0.93–1.58)	0.99 (0.81–1.21)	0.91 (0.67–1.24)
Shorter marriage (<17 years)	(referent)	(referent)	(referent)
No. of children in household			
Fewer children (<4)	0.98 (0.80–1.20)	1.10 (0.92–1.32)	1.22 (0.94–1.60)
More children (≥4)	(referent)	(referent)	(referent)
Men's parents in household			
No	1.00 (0.81–1.24)	0.99 (0.82–1.19)	1.10 (0.81–1.49)
Yes	(referent)	(referent)	(referent)

^a Odds ratio.

* Statistically significant associations ($P < 0.05$).

Physical Force Group, and OR = 4.33 for the Sexual Wife Abuse With Physical Force Group). This pattern of findings suggests that the men who grew up in violent families were significantly more likely than the men who grew up in non-violent families to be physically and sexually abusive toward their own wives, even after controlling for the men's sociodemographic characteristics. In addition, this polytomous logistic regression analysis found that two of the sociodemographic factors significantly related to men's wife abuse were the men's socioeconomic status (compared to men of higher socioeconomic status, men with lower socioeconomic status were significantly more likely to be in the Physical Wife Abuse Only Group and the Sexual Wife Abuse With Physical Force Group rather than the No Wife Abuse Group), and the men's education level (compared to men with higher levels of education, men with lower levels of education were more likely to be in the Physical Wife Abuse Only Group rather than the No Wife Abuse Group). In addition, the men's district of residence was somewhat predictive of wife abuse. More specifically, compared to the men from Nainital who served as the comparison group for this analysis: the men from Banda were significantly more likely to be in each of the three abusive groups compared to the No Wife Abuse Group; men from Aligarh were significantly more likely to be in the Physical Wife Abuse Only Group or the Sexual Wife Abuse With Physical Force Group rather than the No Wife Abuse Group; men from Gonda were significantly more likely to be in the Sexual Wife Abuse with Physical Force Group rather than the No Wife Abuse Group; and men from Kanpur Nagar were significantly more likely to be in the Sexual Wife Abuse Without Physical Force compared to the No Wife Abuse Group.

Finally, the analysis estimating the extent of wife abuse that could have been prevented among the men if they had grown up in non-violent homes found a population attributable fraction of 0.35 (95% CI: 0.33–0.36), after controlling for socio-demographic variables. Thus, non-violence in the earlier generation was strongly associated with non-violence in the second generation, with approximately 35% of the wife abuse in the second generation being attributable to parent-to-parent violence in the previous generation.

Discussion

Consistent with past research,^{9–16,18} this investigation found that partner violence is quite common within India. Approximately a third of the men studied observed physical violence between their parents while they were growing up, with the men's father being the sole violence perpetrator in the majority of violent families (80%) while the men's mother was the sole violence perpetrator in extremely few families (<1%). This pattern of findings is understandable in light of the traditional Indian cultural norms of male dominance and female submissiveness. However, in about 20% of the violent families, men observed both their mother and their father being physically abusive to one another. Although this study did not assess the context/situations in which this parent-to-parent violence occurred, past research suggests that women's use of physical force against their partners is often 'defensive' in nature (i.e. the women are trying to protect themselves from the assaults of their generally larger and stronger male partners).^{54–56} This may be the case in this study.

This research is the first of which we are aware that examines a large representative sample of men from northern India to assess the impact of an important individual-level variable, namely, males witnessing parent-to-parent violence during childhood, on the men's later attitudes concerning husbands' rights to control their wives, as well as the men's abusive behaviours toward their own wives. The findings were clear in showing that, compared to men who grew up in non-violent families, the men who observed inter-parental violence during childhood were significantly more likely as adults to have attitudes condoning a husband's right to control his wife, and to be physically and/or sexually abusive toward their own wives. These results are consistent with those of past research conducted within other geographical and cultural settings which has found that observing parental violence as a child is an important risk factor for perpetrating partner violence in adulthood.^{36–45}

It is noteworthy that this study found that non-violence in the earlier generation was strongly predictive of non-violence in the second generation, in that a third of the cases of wife abuse in the second generation would have been prevented if inter-parental violence had not occurred within the earlier generation. Thus, growing up in a non-violent home is protective against future violence, even within the context of a male-dominated society. This finding underscores the importance of this individual-level variable (namely, witnessing parental violence as a child) in the aetiology of later wife abuse. However, this finding also suggests that the majority of wife abuse seen in the second generation is attributable to something other than witnessing parental violence. In the light of past research and reports concerning wife abuse within India,^{14,23,24,26–33} it is likely that macrosystem-level forces, such as traditional rigid gender roles and the relatively low status of women compared to men, are responsible for much of the wife abuse that was observed within this study.

Several sociodemographic variables were found to be significant predictors of men's attitudes concerning the appropriateness of husbands' control of their wives, as well as their own perpetration of wife abuse. Men who had lower levels of education, lower socioeconomic status, and who were younger were more likely than other men to believe in the rights of husbands to control and physically chastise their wives. In addition, men from various geographical districts often differed in terms of these attitudes. Low levels of education, low socioeconomic status, and district of residence also were predictive of men's abusive behaviours towards their own wives. The associations seen between low education, low socioeconomic status, and wife abuse may be, at least in part, due to high levels of stress within these poorer families, since past research has found that families with low levels of education and low socioeconomic status tend to experience more stressors in their lives, and that various types of stressors are associated with partner violence.³⁷ The association between district of residence and wife abuse suggests that there are district-specific differences in cultural norms and practices within various areas of northern India which are more or less supportive of gender-based violence; for example, the districts differ greatly in terms of their distributions of religion, caste, ethnicity, rural versus urban areas, etc. Finally, it is interesting to compare the findings from the two polytomous logistic regression analyses, the first

which modelled the men's attitudes concerning violence (as assessed by the number of Controlling Measures/Actions that they endorsed), and the second which modelled the men's violent behaviours (as assessed by the men's membership in one of the four wife abuse groups, namely, No Wife Abuse, Physical Wife Abuse Only, Sexual Wife Abuse Without Physical Force, and Sexual Wife Abuse With Physical Force). Although parent-to-parent violence was found to be a significant predictor in both of these models, inspection of the relevant model coefficients shows that the magnitude of this effect was greater in the analysis that modelled the men's wife abuse behaviour relative to the analysis that modelled the men's attitudes concerning wife abuse. This pattern of findings suggests that although the men's experiences of witnessing parental violence were significantly associated with both the men's later behaviours and attitudes, that these childhood experiences were stronger predictors of adult wife abuse behaviour than adult attitudes concerning the rights of husbands to control their wives.

These findings must be viewed in light of the study's methodological constraints. Because this study relied solely on the men's reports to assess wife abuse, and because men may tend to underreport violence perpetration,^{57,58} this research would have benefited from additional confirmatory informational sources such as wives' reports of violence in their lives. Moreover, the men's ability to recall events may have varied as a function of the time period being asked about, with less recall of events which occurred in the more distant past (e.g. men may have been less able to recall their childhood experiences concerning violence between their parents, or to recall their own abusive behaviours which occurred long ago, compared to more recent events). Another potential limitation of this study is that it focused solely on married men who were residing with their wives at the time of the survey, so the findings may not be generalizable to men who were living apart from their wives, or to men whose wives had died. Although separation and divorce are extremely rare within India, it may be that this study missed some of the most severe cases of wife abuse, in particular, those in which the wife actually left her abusive husband, or those in which the wife died as a result of abuse. Finally, this study did not consider numerous variables that may be important in providing a thorough understanding regarding wife abuse within India. For example, although this research included measures of both physical and sexual wife abuse, it did not assess other important types of abuse such as emotional abuse, economic abuse, etc. Similarly, the men were not asked about their own experiences of violent victimization; since research conducted both within India and other countries has found that child abuse occurs more commonly within families in which there is intimate partner violence,^{37,59} it may be that some of the adult attitudes and behaviours of the men in the study resulted from their own experiences of being abused as children. Furthermore, at least some variables not examined in this report may have been important predictors of violence within the specific context of northern India (e.g. issues concerning dowry, caste, religion, etc.), since this study tended to focus on variables that have been implicated as risk factors for gender-based violence within various cultural contexts.

Despite these methodological limitations, this research suggests some potential avenues for violence prevention and intervention strategies within India. In light of the relative

pervasiveness of men's attitudes condoning violence against women, as well as the high prevalence of wife abuse behaviours, a broad-based approach to violence intervention and prevention is needed that brings together women's advocates, legal professionals, health care professionals, researchers, and others concerned with violence against women.³⁴ Legally prosecuting and punishing each violence perpetrator is not feasible since such legal interventions cannot be fully effective against such a socially pervasive behaviour. However, legal sanctions should be encouraged against the most severe offenders for a variety of reasons, one being to help to change the society's views concerning domestic violence from being an accepted normal behaviour to being an aberrant and illegal behaviour.³³ In addition, the legal system should be designed in such a way so that it is 'user-friendly' for abused women. Although there are currently laws against domestic violence in place within India, there are many barriers embedded within the system which often prevent abused women from being able to successfully prosecute their abusers.⁶⁰ Broad-based public education interventions aimed at changing community norms about the acceptability of intimate partner violence could be beneficial given the pervasive nature of men's attitudes condoning husbands' control and physical chastisement of their wives. Government and non-government organizations may play important roles in the development and implementation of such educational programmes. In addition, the health care system could help in this effort by integrating topics such as the definition of healthy relationships, non-violent conflict resolution strategies, gender equity issues, etc., into both health care provider training and patient education activities. Moreover, the incorporation of routine violence screening of patients in health care practices may help to identify people whose lives have been exposed to violence, so that violence-related interventions (such as the provision of counselling by a domestic violence advocate, the provision of mental and physical health services for the trauma resulting from violence victimization, various legal services, etc.) may be provided. Although several community-based services for violence victims have been developed and implemented within India,⁶¹ the availability of such services needs to be greatly expanded. Furthermore, the provision of batterer intervention programmes may be helpful, although similar interventions in other settings have, thus far, been found to be only moderately effective in reducing partner violence.^{62,63} In light of the findings showing that both attitudes supportive of wife abuse, as well as wife abuse itself, are more common among men with low levels of education and socioeconomic status, development efforts aimed at enhancing the education and social status of the general population may offer the additional benefit of reducing domestic violence. Finally, the results of this research strongly support the development and implementation of interventions for children from families in which there is intimate partner violence in order to prevent future partner violence.

Wife abuse is tragically common in northern India, as it is in many parts of the world. Women's advocates, health care professionals, legal professionals, researchers, and others concerned with violence against women are encouraged to work together to develop and implement effective interventions aimed at preventing wife abuse and providing therapeutic health, social, and legal services to violence victims.

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KEY MESSAGES

- Although one cannot underestimate the importance that cultural and social norms play in the aetiology of gender-based violence, individual-level variables (such as observing violence between one's parents while growing up) may also be important risk factors.
- In a survey of more than 6000 married men residing in northern India: (1) approximately one-third of the men had witnessed violence between their parents as children; and (2) the men who witnessed such violence as children were significantly more likely as adults to believe in husbands' rights to control their wives, and to be physically/sexually abusive toward their own wives.
- Non-violence in the previous generation was strongly predictive of non-violence in the second generation, in that about a third of the wife abuse in the second generation could have been prevented had parent-to-parent violence not occurred in the first generation.

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