# List of Publications by Dr. Mrinal Patnaik

1. Mishra HP, Goel A, Sahil Kumar, Chauhan M, **Patnaik M**, Rehman I. *Drug development hit by war*. JPADR. 2022 Jun. 1 Available from: https://www.jpadr.com/index.php/jpadr/article/view/74

2. Narayan, G., Mishra, H. P., Suvvari, T. K., Mahajan, I., **Patnaik, M**., Kumar, S., Amanullah, N. A., & Mishra, S. S. (2023). The Surrogacy Regulation Act of 2021: A Right Step Towards an Egalitarian and Inclusive Society? Cureus, 15(4), e37864. https://doi.org/10.7759/cureus.37864

3. Murmu, S. K., Keche, A. S., **Patnaik, M**., & Sahoo, N. (2023). An Analysis of Psychological Perceptions of Survivors of Sexual Assault. Cureus, 15(5), e39618. https://doi.org/10.7759/cureus.39618

4. Moirangthem, S., Vidua, R., Jahan, A., **Patnaik, M**., & Chaurasia, J. (2023). Phosphine Gas Poisoning: A Case Report. The American journal of forensic medicine and pathology, 10.1097/PAF.0000000000000855. Advance online publication. https://doi.org/10.1097/PAF.0000000000000855

5. Moirangthem S, Yadav J, Jai Kumar Chaurasia, Arora A, Jahan A, **Patnaik M**. (2023). Hypoplastic coronary artery disease, as a cause of sudden death. *Autopsy and Case Reports*, *13*, e2023440. https://doi.org/10.4322/acr.2023.440

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# An Analysis of Psychological Perceptions of Survivors of Sexual Assault

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## Abstract

Introduction: Sexual assault, although not limited to females, is predominantly a form of male-on-female oppression and a form of torture and trauma, both physical as well as psychological, and may have longstanding and lasting effects. It includes any sexual behavior or act which is threatening, violent, forced, coercive, or exploitative and to which a person has not given consent or was not able to give consent. The impact of victimization is utterly profound and there is a wide range of responses a person may have to sexual assault. Some last a few days, others a few weeks, but most can entrench far longer.

Methods: A detailed analysis was conducted on the data of each case using a standardized form and guided interview of 206 survivors who had experienced alleged sexual offenses and met the specified criteria, seeking examination at the Department of Forensic Medicine & Toxicology in a tertiary level teaching hospital in India over a period of two years. Designed as a cross-sectional observational qualitative study, relying on interviews with the survivors. The inclusion criteria encompassed survivors of alleged rape cases, kidnapping cases, and anal sex ("sodomy") cases who presented to the department during the study period. Certain cases were excluded from the study, including those requiring only an "Ossification test" and cases involving prostitution.

Results: The experiences of 206 survivors were analyzed and we found that in the majority of cases, the assailants were known to the survivors. Reasons for this included proximity, familiarity, and taking advantage of trust and faith bestowed upon them by the victim. Up to 75.24% of the offenses were committed with consent, while 24.76% were committed without consent. The causes of consensual and forceful sex acts were explored, with the majority of consensual sex acts being attributed to false promises to marry and love affairs. The majority of non-consensual sexual offenses were forcefully committed with ill intent, with only a small number being influenced by alcohol or drug intoxication. The study also found that almost equal numbers of cases were reported by survivors and their parents, and that survivor statements were valuable for investigating cases, although there were instances where they differed from their initial statements.

Conclusion: Mental and psychological status varied among survivors, with responses related to the elapsed time period from the occurrence of the assault.

**Categories:** Psychology, Epidemiology/Public Health, Forensic Medicine
**Keywords:** consent, rape, perceptions, survivor, psychology, sexual assault

## Introduction

Sexual offenses are one such cruel kind of physical abuse that it is one of the best-known ancient forms of inflicting torture and trauma, both physical as well as psychological, and may have long-standing and lasting effects, mentally and up to some extent socially too. Sexual assault, although not limited to females, is predominantly a form of male-on-female oppression and is not an isolated event that happens to any individual in a random unpredictable way. Rather it is logical, though a completely intolerable, extension of a firmly entrenched misogynist worldview, either systematically subscribed to or imposed upon billions of people over thousands of years [1].

Females, all over the world have to bear the problem of sexual violence (besides physical, as well as psychological) along with other oppressive societal evils [2]. Sexual assault can be any sexual behavior or act which is threatening, violent, forced, coercive, or exploitative and to which a person has not given consent or was not able to give consent [3].

Reporting the assault to the police is often not less than a daring act on the part of survivor and their family members as this invariably results in bringing the matter to the public eye, which is misogynistic and perceived to cause 'social degradation' and 'loss of reputation of the family' as far as the public is concerned [4]. Consequences of victimization in a variety of criminal cases have attracted more than adequate attention from scholars over the world. There is a wide range of responses a person may have to

sexual assault. Some last a few days, others a few weeks, but most can entrench far longer [1]. It is, therefore, quite correct to state that the impact of victimization is utterly profound in cases of rape.

People who have experienced such assaults need to give themselves time to recover, reconcile with and accept that their feelings and emotions are likely to keep changing from one day to the next [4]. Each person responds to and comes to terms with the tragic experience at a different rate and in different ways, influenced by a range of factors, including but not limited to age, the circumstances of the sexual assault, their coping strategies, and response of those from whom they sought/seek support. Talking to someone about the experience soon after an assault may help people deal with its emotional impact. A psychological assessment can shed light on the emotional impact and help in understanding the mental trauma following a non-consensual sexual encounter [5].

In this study, special emphasis was laid on the psychological assessment of the survivor following the sexual assault which includes the study of the survivor's behavior, feelings of guilt, depression, etc. so as to know the extent of suffering as described in Rape Trauma Syndrome, which is a post-traumatic panic-disorder following sexual assault. We hope this study can help guide all those involved in the investigation, medical examination and trial of sexual offenses in a compassionate and healthy manner assuring the dignity, pride, and honor of the survivors so that the survivor does not suffer from any adverse mental trauma post sexual assault and is empowered by a cooperative environment to aid in the administration of justice.

## Materials And Methods

### Place of study

The study was conducted at the Department of Forensic Medicine and Toxicology, M.K.C.G. Medical College & Hospital in Berhampur, Odisha. This institution serves as a tertiary center for southern Odisha, receiving cases from both Berhampur City and nearby villages.

### Inclusion Criteria

The study included survivors of the alleged rape, survivors of alleged kidnapping cases, and survivors of alleged anal intercourse (sodomy) cases.

### Exclusion criteria

Alleged survivors who came solely for the purpose of Ossification test, alleged survivors who refused to give consent for examination, and alleged survivors involved in cases related to PITA (Protection of Children from Sexual Offenses Act) or prostitution were not included in the study.

### Study population

A total of 206 cases out of 433 cases were assessed for the study based on the aforementioned inclusion and exclusion criteria.

### Study materials

The study utilized information obtained from the survivors and accompanying individuals, police requisition, treatment records of survivors admitted to the hospital, medical examination format, case record form, and x-ray requisition for ossification test when age estimation was required for the survivors. All cases were thoroughly examined using a predefined case record form according to the study requirements.

### Statistical analysis

Statistical analysis of data was done by using SPSS software version 23 (IBM Corp., Armonk, NY) after complete compilation of master-chart in MS excel. The cases where data are unavailable have been excluded from statistical analysis in the respective tables. Because of the nature of assessment, the applicable tests included frequency distributions, which have been calculated from the available data in percentages. No averages or correlations have been made so p-values were not relevant to the study parameters.

## Results

Table *1* depicts the frequency of consensual and non-consensual sexual acts. Out of 206 interviewees, the majority had "consensual" sex, i.e., 154 (75.24%) and rest 51 (24.76%) "non-consensual." Multiple acts of intercourse at multiple encounters have been considered a single increment only.

| Type of sex act | No. of cases | Percentage |
|---|---|---|
| Consensual | 155 | 75.24 |
| Non-consensual | 51 | 24.76 |
| Total | 206 | 100 |

**TABLE 1: Number of cases of consensual vs. non-consensual sex**

Table 2 describes the reasons for giving "consent" before the sexual act. Among various reasons, false promise to marry was the most frequent reason, with as many as 80 out of 206 (51.61%) followed next by "love affair" with 73 cases (47.10%). Notable is the fact that two of the 206 cases had been blackmailed into performing sexual acts. Although true consent precludes any form of deception or coercion, we mean the act was "consensual" in a manner such that even though it was against the wall, but with the "consent" of the survivor, in so far as they volunteered in the interview that it was consensual.

| Reasons | No. of cases | Percentage |
|---|---|---|
| False promise to marry | 80 | 51.61 |
| Love affair | 73 | 47.10 |
| Money extraction/ Black mailing | 2 | 1.29 |
| Others | 0 | 0 |
| Total | 155 | 100 |

**TABLE 2: Reasons behind consensual sex**

Table 3 depicts the possible reasons of "non-consensual" sex. In 42 (82.36%) cases out of 51, the act was done with forceful intention. Only six (11.76%) cases were assaulted while they were under the influence of alcohol and three (5.88%) were mentally unsound, which does not preclude temporary as well as permanent unsoundness of mind.

| Reasons | No. of cases | Percentage |
|---|---|---|
| Forceful | 42 | 82.36 |
| Alcohol influenced/ Drug intoxicated | 6 | 11.76 |
| Mentally unsound | 3 | 5.88 |
| Gang rape | 0 | 0 |
| Total | 51 | 100 |

**TABLE 3: Reasons for non-consensual sex**

Table 4 depicts the willingness of the survivors for medical examination by a male doctor. Of the 206 cases, 13 (6.31%) were removed from further assessment, reason being that they either could not give consent or were unable to understand the nature of examination to be conducted. Still, about half (50.49%) of survivors had no objection to examination by a male doctor.

| Willingness of the survivors | No. of cases | Percentage |
|---|---|---|
| Yes | 104 | 50.49 |
| No | 89 | 43.20 |
| Did not Consent | 13 | 6.31 |
| Total | 206 | 100 |

**TABLE 4: Willingness of the survivors to be examined by a male doctor**

Table 5 depicts the psychological profile and the feelings of the survivor at the time of examination, with shame being the most frequent (136 out of 193 cases, 70.46%).

| Psychological status at the time of examination | No. of cases (% age) out of 193 |
|---|---|
| Feeling of Guilt | 86 (44.56) |
| Feeling of Shame | 136 (70.46) |
| Feeling of Humiliation | 81 (41.96) |
| Feeling of Depression | 88 (45.60) |
| Feeling of Fear/ Phobia | 18 (9.33) |
| Emotionally Unstable (while the time of examination) | 82 (42.49) |
| Absence of Readjustment to Normal Life | 26 (13.47) |
| Suicidal attempts taken | 02 (1.04) |

**TABLE 5: Psychological/mental status of the survivors at the time of examination**

Table 6 depicts the multitude views of survivors towards the accused even after the incidences which happened to them. Out of 206, majority (143 cases) sought marriage with the accused (69.42%), with a big portion of them (50.35%) wanting the accused to be punished if they failed to marry the survivor's (72 cases), followed by 52 cases (25.24%) who only wished to marry. Forty nine (23.79%) wanted to punish the accused for their offenses. And six (2.91%) forgave the accused and stated they wanted the proceedings to be dismissed.

| What do the survivors want now from the accused? | No. of cases (% age) |
|---|---|
| Marriage with the accused only | 52 (25.24) |
| Marriage with accused, if not then Punishment | 72 (34.95) |
| Marriage, if not then Punishment, or Monetary Compensation | 15 (7.28) |
| Marriage & dismissal of the case | 4 (1.94) |
| Punishment to the accused only | 49 (23.79) |
| Punishment, with Monetary Compensation | 8 (3.89) |
| Monetary Compensation from the accused only | 0 (0) |
| Forgive & Dismissal of the case only | 6 (2.91) |
| Total | 206 (100) |

**TABLE 6: Survivor's view toward the accused**

Table 7 depicts the cases where FIR was lodged at police stations by the survivors themselves or anyone else. Almost equal shares of FIRs were by survivors and their parents, i.e., 93 (45.15%) and 91 (44.17%), respectively. However, in 22 (10.68%) cases, relatives lodged the FIR.

| FIR lodged by | No. of cases | Percentage (%) |
|---|---|---|
| Survivor | 93 | 45.15 |
| Parents | 91 | 44.17 |
| Relatives | 22 | 10.68 |
| Total | 206 | 100 |

**TABLE 7: Relationship of the person who lodged FIR with the survivor**

Table 8 depicts the concurrence of the statements, as stated by the survivor to us with that in the police requisition furnished. One hundred sixty (77.67%) cases were where statement was accepted as same by the survivor. However, in 46 (22.33%) cases the statements were different from what the survivor had claimed.

| Correlation | No. of cases | Percentage |
|---|---|---|
| Concurrent | 160 | 77.67 |
| Different | 46 | 22.33 |
| Total | 206 | 100 |

**TABLE 8: Correlation of survivor's statement with the requisition submitted by police**

## Discussion

In the present study, the experiences of 206 cases of survivors of sexual offense were studied, out of 433 cases of alleged sexual offense cases presented for examination to the Department of Forensic Medicine & Toxicology, over the period of two years.

Contrary to our findings, studies in Ethiopia, Turkey, and Egypt reported that assailants were not known to the survivors in 42.9%, 61.9%, and 42.5% cases, respectively [6-8]. This is perhaps because of the inherent differences in study designs. In Pakistan, researchers found that only 7% cases were assailants known to the

survivors which also contradicts our findings [9].

There are many reasons for the high probability of the culprits being someone known to the survivor. In male-on-female sexual assaults, her hesitance in taking positive action, being someone known to the family and the whereabouts of the person's residence, taking advantage of the faith and confidence bestowed on them by the survivor, and opportunities for the assailants because of their proximity are the most frequently reported factors responsible for such offenses by known assailants. As far as the relatives as offenders are concerned, major factors like close proximity, staying in the same family, and known anticipation by the survivor play a great role. Other factors like social stigma, underreporting, and compromises at the base level cannot be ignored too, especially in this sub-type of sexual offenses [4].

During the study, we took utmost care to assess the motive behind all the sexual offenses by taking detailed histories from the survivors at the time of examination. A peculiarity we observed in our study was that 75.24% admitted to have committed the offense with their "consent," whereas in 24.76% cases offense was committed "without consent."

Our findings with regard to "consensual" sex acts is similar to the observation of a study in Bangladesh, where maximum cases were consensual too, as high as 73.86% [10]. Contradicting our result were the studies done by some researchers, who found that only 47% and 53.9% cases were consensual, respectively [11,12]. However other studies have found that most of the cases were non-consensual being as prevalent as, 69%, 68.8%, and 60.56% [13-15].

We could not find any available study specifying the reasons behind consensual and forceful sex acts. Nevertheless, we found, on further exploration of reasons behind the consensual sex act, that in the majority of cases it came to be a false promise to marry (51.61%) and love affair (47.10%). Whereas non-consensual sexual offenses in the majority cases (88.24%) were forcefully committed with only 11.76% cases under the influence of alcohol/drug intoxication. In none of the cases did we find a history of gang rape. The possible reasons for forceful sexual offense are the advantage of loneliness, seduction by the accused or taking revenge for the past conflict. Some studies documented 4%-6% cases of non-consensual sex offenses were by putting the survivor under the influence of alcohol/drug intoxication [11,16].

As far as facts of the cases are concerned, the number of cases where FIR was lodged at police stations by the survivors themselves or anyone else must be looked into as well. Almost equal numbers of cases were where the information willingly shared by survivors and their parents, i.e., 45.15% and 44.17%, respectively. Rest 10.68% cases were lodged by their relatives or caretakers. Similarly, the corroboration between the statements given by the survivors to that with the police requisition furnished has also found to be equally valuable for investigating the case. In 77.67% cases statement was accepted as same by the survivor. But in 22.33% cases they differed from their statement.

All the 206 survivors of sexual assault, when assessed for mental stability and state of emotions on the day of their medical examination, implied multiple psychological mental responses observed, possibly related to the elapsed time period from the occurrence of the assault. We found feelings of guilt (44.56%), shame (70.46%), humiliation (41.96%), fear/phobia (9.33%). This study also reveals the willingness of the survivors for examination by a male doctor, i.e., among 193 cases, was high, where more than half (53.89%) said "Yes."

Few Indian authors have conducted the psychological assessment while examining the sexual assault survivors and found interesting results. In Manipur, a prevalence of 15.39% depression was noted at the time of examination, while 7.7% excited and majority 75% were emotionally stable [17]. Out of 206 cases, we found depression in 45.60% cases and emotional lability at the time of examination in 42.49%.

Our sample size had a high prevalence of feelings of absence of readjustment to normal life (13.47%) and two cases where suicidal attempts had been attempted (1.04%). A study from East Delhi found 4% cases were in state of acute stress reaction (absence of readjustment to normal life) [12]. Another study done in Burdwan, West Bengal, reported 28.5% were in depressed phase, 45.2% had previous history of psychiatric illness and 9.5% had suicidal thoughts [18].

It is also important to know the survivor's intentions toward the offender after such oppression. Majority (34.95%) wished to marry the accused, and if not possible, then wanted punishment to be awarded. The next most popular intention was by 25.24% who wished to marry only, while 23.79% wanted to punish the accused for their offense, still fewer cases wanted a monetary compensation from the accused. Only six (2.91%) survivors stated to have forgiven the accused.

## Limitations

There are several limitations associated with this study. The study population is limited to cases received by the Department of Forensic Medicine and Toxicology at M.K.C.G. Medical College & Hospital in Berhampur, Odisha. This may not be representative of the entire population or cases in other regions and affects generalizability. The study relies on information obtained from survivors, accompanying individuals, and

police requisition and involves sensitive topics such as rape and sodomy. Due to the nature of these cases and potential emotional distress experienced by the participants, there may be inconsistencies, biases, or inaccuracies in the information provided, which can affect the reliability and validity of the study findings. It is essential to consider these limitations when interpreting the results and generalizing the findings of this study, as societal attitudes, legal frameworks, and medical practices related to these cases can change over time.

## Conclusions

In this study, the experiences of 206 alleged survivors of sexual offenses were examined and presented for examination over a two-year period. The study found that in the majority of cases, the assailants were known to the survivors. Reasons for this included proximity, familiarity, and taking advantage of the trust and faith bestowed upon them by the survivors. Delayed reporting and medical examination of cases were attributed to social stigma and prejudices, among other factors. The study found that 75.24% of sexual offenses were committed with consent, while 24.76% were committed without consent. The causes of consensual and forceful sex acts were explored, with the majority of consensual sex acts being attributed to false promises to marry and love affairs. The majority of non-consensual sexual offenses were forcefully committed with ill intent, with only a small number being influenced by alcohol or drug intoxication. The study also found that almost equal numbers of cases were reported by survivors and their parents, and that survivor statements were valuable for investigating cases, although there were instances where they differed from their initial statements. Mental and psychological status varied among survivors, with responses related to the elapsed time period from the occurrence of the assault.

## Additional Information

### Disclosures

**Human subjects:** Consent was obtained or waived by all participants in this study. Institutional Ethics Committee Maharaja Krishna Chandra Gajapati (MKCG) Medical College, Brahmapur issued approval 205. **Animal subjects:** All authors have confirmed that this study did not involve animal subjects or tissue. **Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

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# The Surrogacy Regulation Act of 2021: A Right Step Towards an Egalitarian and Inclusive Society?

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## Abstract

With the advent of major scientific and technological advancements in obstetrics and gynecology, surrogacy is quickly becoming a viable alternative to enable people of all genders to become parents. However, its path toward reality is still fraught with legal and ethical dilemmas. With the Surrogacy Act of 2021 coming into effect earlier this year, the present article aims to dissect the various legal nuances involved while also considering the societal norms governing the actual scenario at ground zero. Our review discusses the aspects of eligibility criteria, the health implications, the rights of the surrogate mother and the child born, the financial burden, and compensation. We aimed to bring attention to this act and its implications on marginalized segments of society, with an attempt to bring beneficial changes for them. In this review, we provide viable alternatives adopted across the globe to solve the identified issues to make the present act non-discriminatory and more rewarding to all involved beneficiaries.

**Categories:** Family/General Practice, Obstetrics/Gynecology, Public Health
**Keywords:** society, ethical dilemmas, human rights and legal issues of health, surrogacy act of 2021, surrogacy

## Introduction And Background

Infertility is a growing healthcare concern affecting both men and women. It can result from a variety of factors ranging from age, genetics, lifestyle, and environmental aspects. With the increasing incidence of infertility, there is a need for alternative methods of reproduction to enable people to become parents. Surrogacy has emerged as a viable option due to advancements in artificial reproductive procedures [1]. In addition to infertility, changes in societal norms have also played a role in the acceptance of surrogacy. In today's progressive society, both men and women recognize infertility as a healthcare problem, and parenthood is no longer restricted to the heterosexual community. Advancements in artificial reproductive procedures have enabled people of all genders to become parents, with surrogacy emerging as a viable alternative [1,2].

The term "surrogacy" refers to the practice of using a woman's womb to carry a fetus until birth to be raised by another [2]. It is derived from the Latin word "subrogate", meaning "accepted to act in the place of" or "a substitute". As per American Law Reports, surrogacy is typically defined as “...a contractual undertaking whereby the natural or surrogate mother, for a fee, agrees to conceive a child through artificial insemination with the sperm of the natural father, to bear and deliver the child to the natural father, and to terminate all of her parental rights after the child's birth” [3].

Surrogacy can be classified into altruistic and commercial. True to the meaning of the word, altruistic surrogacy entails no financial compensation for the surrogate. In contrast, commercial surrogacy involves paying the surrogate for bearing the child, implying a profit, while compensated surrogacy simply involves covering the incurred expenses and loss of wages [4].

Commercial surrogacy was legal in India between 2002 and 2015. During this period of legalization, the "businesses of commercial surrogacy flourished in lieu of the vast number of underprivileged women eager to make a fair living by renting their wombs" [5]. Unfortunately, this need was capitalized on by middlemen, who created a nexus between the healthcare system and women, resulting in the exploitation of the latter. In

2012, the annual turnover of this surrogacy market was estimated to have been worth as much as 2.5 billion USD [6]. There are no clear data on the number of verified couples who sought out surrogate mothers in India during this legalization era. Estimates state that of the approximately 25,000 surrogate children born in India every year, at least 50% were for couples from the Western world [7]. A surge in the number of cases of procreative medical tourism has been noted in recent years. Due to the wide accessibility of affordable state-of-the-art therapies for assisted reproductive technologies, India is the go-to destination for surrogacy [8].

As surrogacy gained popularity across the globe, distinct legal regulations began to be crafted in different countries. Complex legal difficulties emerged as the framework in each country aimed at different outcomes. The regulations were so vast and varied, irrespective of their intent, whether to promote, regulate, or ban surrogacy. While countries such as the USA, Georgia, Ukraine, and Colombia have surrogacy-friendly legislations, restrictive regimes have been imposed in Iceland, Germany, Sweden, Austria, and others. Consequently, nationals from countries that have banned surrogacy turned to commission it overseas, resulting in statutory difficulties when the laws clashed across international borders [9]. Additionally, this legal clash also raised concerns about evasive travel [10]. From the perspective of increased demand, this influx of cases into India, in the background of a lack of regulation and international coordination, paved the way for unethical practices and exploitation.

Due to the wide financial gap and the disparity between individuals engaged in the practice of commercial surrogacy, both the surrogate and the child were vulnerable to exploitation [11]. Numerous incidents of harassment of surrogate mothers were reported to the police in 2018-2019. Human rights exploitation rackets in the guise of surrogacy were exposed and arrests were made in 2019 [12]. This revealed an urgent need for an expediting of regulations to be placed on surrogacy. The increasing demand and the unscrupulous activities resulting in the ill-treatment of vulnerable groups forced the Indian government to take action and propose the Surrogacy Regulation Bill of 2015. A need for guidelines required to protect the commissioning parents' rights was also raised at the same time.

The issue was raised in the Lok Sabha of the Indian Parliament when the government took a stand to disallow commercial surrogacy in its response to question 100 on 4th December 2015. This led to the creation of the Surrogacy (Regulation) Bill in 2016, which, following multiple amendments, was passed in 2018 by the Lok Sabha. The Rajya Sabha created a committee for discussion of the Surrogacy (Regulation) Bill 2019 with various stakeholders, the conclusion of which led to some more amendments, culminating in its passage into law on December 25, 2021. It was released along with the Assisted Reproductive Technology (Regulation) Act, 2021, just a week prior. On January 25th, 2022, the new Surrogacy (Regulation) Act, 2021, went into force. The amended act exclusively permits charitable surrogacy, preventing those with financial means from abusing and taking advantage of the surrogacy option. It prohibits commercial surrogacy, as well as the trade of human gametes and embryos [4,12].

# Review

## The Surrogacy Regulation Act, 2021: highlights

*Intending Couple, Intending Woman, and Surrogate Mother: Definitions and Eligibility*

Chapter 1 of the 2021 Act identifies the most significant parties involved in gestational altruistic surrogacy. Chapter 3 establishes the requirements for them to be eligible for altruistic surrogacy in the Indian subcontinent.

An "intending couple" is an Indian infertile married couple, per the Act (the age of the woman being 23 to 50 years and the age of the man being 26 to 55 years). The couple must not have any living children in order to receive a certificate of eligibility for surrogacy (biological, adopted, or surrogate). The only circumstances in which this clause would not apply is if their surviving child has a disability, either mental or physical, or if the child has a condition that poses a serious risk of death [4,12,13]. The Act also permits Indian widows, divorcees, and married couples of Indian origin living abroad to become parents through altruistic surrogacy. An Indian widow or divorcee between the ages of 35 and 45 who plans to use surrogacy is referred to as an "intending woman" [4,12,13].

In the new law, the definition and requirements for becoming a "surrogate mother" have been updated as follows:

a) Any willing, ever-married woman between the ages of 25 and 35 who has her own child may become a surrogate (does not address her eligibility should this child be borne of surrogacy itself). b) May only sign up for surrogacy once in her lifetime, but up to three attempts may be undertaken if embryo transfer does not take place. c) Must be physically and mentally fit, as attested by a medical practitioner through certification. d) Prohibited from providing her own gametes for surrogacy by the Act. e) Not receive any compensation for carrying the child in her womb other than the necessary insurance and medical costs. f) For a period of 36 months, insurance must cover any difficulties arising from the delivery of the baby, including postpartum complications and even death [4].

In addition, the surrogate mother has the choice to revoke her participation even right up until the embryo is placed in her womb and should a need arise, even to terminate the pregnancy, as per the Medical Termination of Pregnancy Act, 2019 [4,12,13].

## Prerequisites for surrogacy as per the Act

As per the Act, only those cases fulfilling the following situations would qualify for the use of surrogacy procedures when there is a medical indication. The District Medical Board must issue this indication certificate in favor of the commissioning party when [4]:

a) The intended parents are of Indian origin. b) The intended mother is a divorcee or widow. c) The surrogacy is for charitable purposes. d) It is not being done for financial gain

## The Surrogacy Regulation Act, 2021 - threats to the ethical, social, and legal constructs - critical reflections: the ethos of Indian society: implications of coercion and views on death

*Depriving Plebeians of Their Reproductive Autonomy*

To avoid the exploitation of women, the current Act maintains strong checks and balances. It makes an effort to cut out the predatory middleman. It safeguards and upholds the value of motherhood as well as any prospective parental rights over the child. However, the outlawing of commercial surrogacy shifts the focus from a right-based approach to a need-based one. The decision pertaining to whether or not one can have children, and the number of children they want should rest with the individuals themselves and not the government. It is offensive and only reflects conservative ideas to base this Act's principles on compensation.

The recent Act also prohibits the following groups from utilizing surrogacy services:

Couples with one child, foreign nationals, in-residence partners or people in "live-in relationships", single men and women, gay and lesbian couples, and widowers

While the Act does not explicitly introduce any gender bias when referring to the child so born, it does not address the finer intricacies of an already complex parentage. By including this language, the regulating Act criminalizes surrogacy in socially oppressed communities and creates the foundation for a patriarchal and heteronormative society.

## Glass ceiling "women’s rights"

Unmarried pregnant women are legally permitted to undergo abortions, if they wish to do so, under the 2021 amendment of the Medical Termination of Pregnancy Act, 1971 [14]. While this Act recognizes a woman’s rights to her own body, the surrogacy Act prevents unmarried women from availing of the services of surrogacy. Although there have been some instances of human rights abuse of women in the setting of commercial surrogacy, there have also been examples where it provided them with a dignified life, financial independence, and even the opportunity to educate their children in an attempt to secure their future [15]. A woman’s reproductive choice is a fundamental right and is an indissoluble segment of her freedom and liberty as enshrined under Article 21 of the Indian Constitution [16]. Using the social construct of marriage to determine eligibility for surrogacy and become a surrogate hinders reproductive autonomy and confines the beneficial provisions to a section of society [17]. Furthermore, regarding the modification to the definition of reproductive rights, setting an age limit for women to become either surrogate mothers or intending mothers denies them their basic reproductive rights.

## Surrogacy and the LGBTQIA+ community

The 2021 Act bars homosexual couples from using altruistic surrogacy. It plays into a stereotyped view of a family, not only in a heteronormative household dynamic but also presuming a lack of autonomy on the part of women. Indian law, societal standards, and religious doctrine declare that both parents must be from two different sexes for the holistic development of a child. In contrast to this mindset, the hypocrisy in this idea is founded on the fact that it permits the utilization of ART services by widowed and divorced women. This is discriminatory and excludes the LGBTQIA+ community from the purview of surrogacy [12].

Interestingly, one can still claim that the Act adheres to the Universal Declaration of Human Rights, adopted in 1948 and ratified by India. Article 16.1 of the Declaration states that "men and women of full age without any restriction due to race, ethnicity or religion have the right to marry and have a family" [18]. The Indian judiciary, conscious of this, regards the right to procreate as a fundamental one. For instance, the Andhra Pradesh High Court recognized the civil rights to rightly include the freedom to reproduce and affirmed that "the right to reproductive autonomy" is inclusive under the "right to privacy" in B. K. Parthasarthi v. Government of Andhra Pradesh [19].

In the Navtej Singh Johar v. The Union of India case, the Supreme Court of India unanimously declared that Section 377 was unconstitutional [20]. The learned judges presiding on this case proclaimed that to "attack" the LGBTQIA+ community on account of their sexual orientation is against the fundamental rights to equality, freedom of speech, right to choose, and the right to dignity. The LGBTQIA+ community was also assured to be entitled to equal legal rights and to be treated equally in society without experiencing any stigma [20].

Through surrogate arrangements in India, many gay couples from Spain and Israel were successful in starting families [21,22]. This provides evidence that parenting a same-sex child is the same as raising a child of a heterosexual marriage. Due to the effective surrogacy ban in the region, there has been a marked surge of single gay men or gay couples as well as single lesbian females or lesbian couples choosing to become parents in Mexico or the US [23,24]. Although decriminalizing homosexuality was a welcome step, revolutionary constitutionalism and its incorporation into public policy still have a long way to go. Despite the repeal of Article 377, the LGBTQIA+ population continues to face societal stigma and denial of fundamental civil rights [12,13]. In the landmark decision of the National Legal Services Authority v. Union of India, the Supreme Court recognized transgender people as a third gender [21]. The 2021 Act makes no mention of granting the people belonging to the third gender equal rights.

It is therefore safe to infer from the aforementioned legal precedents that the courts have upheld physical and sexual autonomy by decriminalizing Section 377 under Articles 14, 19, and 21. It is regrettable that the same policy has not been implemented to permit members of the LGBTQIA+ community to become parents through surrogacy.

## Excluding live-in relationships from the scope

Live-in partners are not covered by the Act's regulatory scope. Contrary to popular belief, live-in relationships between consenting adults are not against the law in India. In the 2006 case of Lata Singh v. State of UP, the same was upheld [25]. In S. Khushboo v. Kanniammal, the Supreme Court ruled that a live-in relationship is covered and protected by Article 21 (right to life) [26]. In Badri Prasad v. Director of Consolidation, the Supreme Court upheld the legality of a 50-year live-in partnership [27]. The Allahabad High Court stated in Payal Sharma v. Superintendent. Nari Niketan, that "a man and a woman, even without getting married, can live together if they choose". The courts have thus made it clear that not all socially unacceptable behavior must be deemed unlawful [28]. However, why the right to choose the path of parenting is not extended to these couples is unclear and remains to be addressed.

The phrase ‘husband" has been replaced with "partner" in the most recent Medical Termination of Pregnancy Amendment Act of 2021, which also grants any woman with an unintended pregnancy the right to use abortion services [29], regardless of her marital status. Therefore, it is tantamount to hypocrisy when Indian courts approve of live-in relationships, but instead of considering the merits of a legal question on such an issue, they would rather ponder if it is likely to "promote" the concept of "promiscuity", and insulting too when such promiscuity is de facto associated with unmarried women. The Act's use of the same theory to limit who may serve as a surrogate is also unfair.

## Altruistic model promoting "forced labor"

The pressing concern in the House is that the prevalence of illicit or covert surrogacy will rise as commercial surrogacy is outlawed. Through the use of unethical and corrupt techniques, the infertility healthcare industry’s common desire to maximize profits will further pave the way for exploitation and corruption [4,9,10,12]. A recent incident of a minor girl allegedly being forced to sell her eggs for donation is a classic example of the nefarious dealings that can occur [30].

Article 19(1) is violated if commercial surrogacy is entirely prohibited. The poverty that already exists and other pressing needs encourage forced labor. Putting restrictions on the bodily autonomy of consenting adults' right to earn a livelihood should not come at the cost of human dignity, which a commercial racket seemingly exploits. Therefore, it is essential to reach a compromise that supports commercial surrogacy under an umbrella of legislation to protect human rights. The idea of "compensatory surrogacy" can be explored, where the costs could be established by qualified authorities [31,32].

## Long-term health implications on the surrogate mother and the fetus: an unsettled debate

Teratogen and maternal drug abuse have always been a matter of concern for the health of the fetus. If in any case, the fetus is affected due to an accidental or intentional overuse of drugs by the surrogate, the rules and regulations say nothing about the consequences for her [12,33]. The current Act also fails to shed light on the possible risks of venereal diseases the mother might contract and the risk of these infections affecting the fetus in utero. Extensive screening of intending parents is a seemingly possible solution to prevent such mishaps from occurring [34,35].

Several studies also report a significantly increased incidence of postpartum consequences in surrogate

pregnancies. Commonly encountered maternal complications include gestational diabetes mellitus, hypertension complicating pregnancy, and the risk of postpartum hemorrhage. Considering that surrogacy is associated with the technique of IVF where generally more than one embryo is implanted, there is a risk for the fetus related to multiple gestations, low birth weight, and preterm delivery [36]. Providing mere insurance coverage for a period of 36 months may not help the surrogate mother [12,37]. The current Act fails to anticipate health problems concerning the surrogate mother and the child.

## Unseen mental health implications

While the current Act is comprehensive and very stringent in terms of determining the psychological eligibility of a surrogate, it fails to shed light on the possibility of new-onset psychiatric disorders post-implantation. Furthermore, unaddressed mental health issues in the surrogate mother might pose dangers to the fetus in utero [38,39]. The current Act only speaks of ensuring psychological fitness while screening and approving surrogate mothers. Although such a provision exists, the Act does not specify a formal psychiatric assessment by a mental health practitioner for the purposes of a psychological fitness certificate. This reflects the ignorance of legal bodies towards addressing possible mental health issues for holistic healthcare delivery [40,41].

Furthermore, it cannot be ignored that having a surrogate baby is associated with various short-term and long-term mental issues. Several studies highlight the possibility of the surrogate mother developing postpartum depression, postpartum blues, or postpartum psychosis. Catering to the emotional and mental dimensions of health becomes extremely important for the well-being of the child. These lacunae need to be effectively addressed [34,35,42].

## Discrimination on the basis of "ableism"

As per the new Act, a couple with a child diagnosed with an incurable physical/mental illness (as duly approved by the District Medical Board) can avail of the services of surrogacy. There is, however, an unclear and ineffective guideline to define the limits of such disability and the various conditions it encompasses. This creates a lacuna in understanding the extent of disability and determining the degree of dependence. Hence, the current algorithm is inadequate, as it does not specify and elucidate the physical/mental disability, thereby discriminating against the common man on the basis of ableism [43].

On the other hand, on the arrival of a new healthy child, the disabled child may face the risk of being emotionally and financially neglected. While welcoming a second child can promote interaction and emotional bonding with the first child, forming an effective support system can be tricky, especially if the second child feels it to be forced [44, 45].

## The downfall of procreative medical tourism

When surrogacy was fully legal in India, advancements in surrogacy led to the rise of "procreative medical tourism". The low treatment cost and availability of modern reproductive techniques make India the best destination for infertility treatments (6,7,10). After the landmark cases Baby Manji Yamada vs. Union of India and Jan Balaz vs. Anand Municipality, the provisions for surrogacy concerning the contracts of custodianship and citizenship of the children born to intending foreign nationals were scrutinized [46]. Keeping in mind the agenda of protecting the child's rights, the current Act was designed to ban foreigners from availing of the services of surrogacy in India. This in turn led to a glut in the massive flock of "fertility tourists" to India [41,44].

Although the current Act is a step toward protecting the child's rights, it completely neglects the economic aspects and financial compensation for the surrogate mother. India suffers from poverty, and with the advent of surrogacy in the country, it was seen as a possible solution to help women from poor backgrounds find a job. In this altruistic model, there is no economic advantage for women from poor backgrounds, and with the above-mentioned examples of forced labor and covert surrogacy, the surrogate women fail to reap economic gains. Thus, rather than completely banning commercial surrogacy, finding alternatives that strike a balance would help provide an effective solution to tackle the risk of exploitation of poor surrogate mothers [45,47].

## Short-term disability insurance coverage: a seemingly possible solution for the compensation of lost wages

Short-term disability (STD) insurance coverage is a program that provides early financial assistance to people with disabilities to help them continue working. It avoids the provision of long-term benefits with the retention of a modest compensation [48]. This particular provision was recently extended to surrogates to make up for some of their lost wages. Although this insurance does not typically compensate for all the lost income of the surrogate, it will still be of some help to them. It is not clear whether they would be eligible to avail themselves of the maternity benefits that allow for 26 weeks of paid maternity leave. In such situations, this provision of short-term disability insurance coverage as available in parts of the US may be a viable solution [49,50].

In addition to paying for the health coverage of the surrogate, to prevent ethical problems unrelated to payments, additional financial funding may be needed. Some global models suggest provisions for independent legal representation of the surrogate to ensure adequate monetary compensation for the financial losses sustained and the possible mental and physical health issues that may arise in the future [51,52].

## Conclusions

While the Surrogacy (Regulation) Act of 2021 attempts to regulate surrogacy in India, it falls short of meeting the Golden Triangle Test of protecting fundamental rights guaranteed by the Indian Constitution. The Act effectively excludes certain sections of society, such as LGBTQIA+ individuals, from opting for surrogacy as a last resort for biological parenthood. Additionally, the Act places numerous hurdles in the name of protecting women from the pitfalls of commercial surrogacy and the artificial reproduction industry, which could have unintended consequences.

Therefore, there is a need to amend the Act to make it a more comprehensive piece of legislation that supports an inclusive and egalitarian society. This can be achieved by acknowledging the shortcomings, addressing the problems, and ultimately arbitrating the law to strike a balance between the interests of all stakeholders. The new laws and regulations must also take into account changing societal patterns to ensure that they remain relevant and effective in addressing the concerns surrounding surrogacy while protecting the fundamental rights of the individuals.

## Additional Information

### Disclosures

**Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

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