

## The etymology of Gender Violence (SDG-5) in Anthropocene: India

### Abstract:

Gender equality measures the human right of a nation. Feminist encounters are common in modern society and gender inequality is mounting in India during the present Anthropocene epoch (1950 onwards). Gender-based violence (GBV) has a myriad of adverse effects but is under-reported in India. The Paris Protocols of Agenda-2030 stipulate Sustainable Development Goals (SDGs) for all sex and age groups of *Homo sapiens*.

The present work involves the quantitative and qualitative investigation of the frequency, physical appearance, and socio-demographic factors that correlate with gender equality and girl-child empowerment (SDG-5) during the Anthropocene epoch and finding means both socially and legally for achieving it. The goal of achieving gender equality, and empowering all girls amidst the Anthropocene epoch **has been cursed under climate challenges**, global warming, mean sea level rise, and anthropogenic stresses upon the environment.

India has recently surpassed the highest population of China and ranked the top in the world. The pandemic COVID 19 has challenged the life/livelihood of Indians. **During the last decade, the dowry and rapes reduced but intimate partner violence and kidnapping are mounting. Transformation of males' outlook toward their partners**

Keywords: Anthropocene, gender equality, SDG-5, Women's healthcare, United Nations,

### Introduction:

The Anthropocene epoch during its golden spike period has succeeded the about 12000 years old Holocene epoch, where *Homo sapiens* instead of being actors and players, showed the significant dominance of humans over the hydro-geo-bio sphere of the global environment. The novice epoch posed threats to the human race and its natural systems. However, the epoch will inspire creativity, transformative, sustainable policy formations, and long-term responses to the unrelenting challenges (Haines et al, 2019<sup>[1]</sup>).

India's population in 2023 (1.4286 billion) has surpassed the ever-accepted highest population of China as per the UN report where the women population is in a decreasing trend. Women have the fundamental right to options for sex and reproduction. The cause for population growth in India is not to target the women community of India (Samaj, Odiya News daily 22.04.23). The other players of the rise in population may be the Anthropocene stresses such as climate change, epidemics, mean sea level rise, and mass extinction of change in sun earth geometry. Therefore, there is no need to instigate, promote, enforce, or challenge women toward family planning. The gender equality and reproductive capabilities in the present Anthropocene epoch may imbalance the population rise or male-to-female ratio.

In 2012, at United Nations Conference on Sustainable Development (Rio 20), Member States agreed to launch a process to develop a set of Sustainable Development Goals (SDGs) to succeed in the Millennium Development Goals (MDGs), whose achievement period concludes in 2015.

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The SDGs are to address all three dimensions of sustainable development (environmental, economic, and social) and to be coherent with and integrated into the United Nations' global progress agenda beyond 2015. The envisaged SDGs or Global Goals are a collection of 17 interlinked global goals designed to be a "shared blueprint for peace and prosperity for people and the planet, now and into the future setting a time horizon of 2030".

SDGs agreed upon by the 193 members of the UN in 2015 and enforced from 1<sup>st</sup> Jan 2016, with 17 interlinked global Goals, 169 Targets, and 230 indicators with a targeted enactment period 2016-2030(one-third of total goals gender equality related) (Fig 2). Addressing three dimensions of growth; Social (SDG 1-6), Economic (SDG 7-11), and Environmental (SDG12-15) and Goals 16 and 17 are on Good Governance and Implementation respectively. As per WHO 1 in 3 from the feminine category have experienced augmented violence against women during the lockdown i.e. shot down, and confinement during the prevalence of the Coronavirus disease (COVID-19), (Huecker et al, 2023<sup>[2]</sup>).

Gender equality is not only a fundamental human rightbut also a necessary foundation for a peaceful, prosperous, and sustainable world.The entire Parity, possibilities, and paradigms, can make women's equality achievable through a constructive approach. Feminist encounters, including girl child abuse, intimate partner abuse, and elder abuse are common problems. Women's equality shall cover the Five P's (People, Planet, Prosperity, Peace, and Partnership). In 2022, amidst the apocalyptic climate emergency, the Pandemic, the deteriorating economy, and global political unrest, the evolution of gender equality has also risen through the reduced population and sex ratio (UN Women, 2020 (a&b)<sup>[3]</sup> and UN Women 2022(a&b)<sup>[4,5]</sup>).



Fig 1: The Sustainable Development Goals (17 Goals, 169 Targets, and 230 indicators)

India is a signatory to the UN Resolution and is committed to the implementation of SDGs. Sustainable Development Goal -5 (SDG-5) claims to close the gender gap and empower all women and girls. Gender-based atrocity perpetuates the manifestation of gender inequality, and inhibits women's ability to enjoy their rights and freedoms, (Babu et al, 2016<sup>[6]</sup>, WHO 2018<sup>[7]</sup>), National Crime Records Bureau, (NCRB) revealed about 228,650 reported GBV incidents (more crime against women) in 2011, the reported incidents were 428,278 (87% increase) in 2021.

United Nations Dept. of Economic and Social Affairs has arrived at certain findings on gender equality and empowering all women and girls in the global scenario. The findings have raised serious concerns over the achievements in respect of SDG-5 with 9 targets and 14 indicators (10 are important), ([United Nation's Goal<sup>\[8\]</sup>](#), [MahapatroM et al., 2021<sup>\[9\]</sup>](#))

**What is Gender Equality?**

Gender equality is also known as sexual equality or equality of the sexes. Gender equality is when people of all genders have equal rights, responsibilities, and opportunities. Everyone suffers from gender inequality - women, men, transgender and gender-diverse people, children, and families. It influences people of all ages in our society. Agenda 30 of the SDGs of Paris Meet 2015 warrants the implementation of its 17 Goals (SDGs) and 169 targets, covering the Five P's (People, Planet, Prosperity, Peace, and Partnership). SDG-5 accords priority to women and feminism coherence. There are 9 targets and 14 Indicators for SDG 5. In patriarchal communities in India, male dominance is an accepted fact and men enjoy privilege and superior status due to their masculinity. On the contrary, women are weak, exploited, and rarely take decisions for their families. Gender parity advocates the call to prevent and eliminate violence and offer equal status socially, politically, and economically to womenfolk and girls in society.

**Anthropocene:**

Anthropocene is an epoch in the quaternary period that has succeeded Holocene which prevailed for 11,700 years with an active Indian summer monsoon. The transition started during the Industrial period and the Anthropocene epoch prevailed from the 1950s, ([Mishra S. P. 2017<sup>\[10\]</sup>](#))

Eonothem/ Eon	Erathem/ Era	System/ Period	Series/ Epoch	Stage/ Age	millions of years ago
Phanerozoic	Cenozoic	Quaternary	Anthropocene	Shift; Great Acceleration	1950-1980
			Holocene	Greenlandian; North grippian; Meghalayan	1981- till date 11700, 8200 4200 yrs bp
			Pleistocene	Upper	0.0117
				Middle	0.126
				Calabrian	0.781
Gelasian	1.806				
					2.588

Fig 2: Geological time scale with the division of the Anthropocene epoch in the Universe

During the Anthropocene epoch when human activity started to have a significant impact on the planet's climate and ecosystems, i.e. earth's geology, hydrosphere, atmosphere, and nutrient cycling. The unofficial interval of geologic time scale unofficially accepted by all branches of study, coined by Curzon in 2000, and later by Zalasiewicz based on global limnology, and stratigraphy united activities of Homo sapiens, (<https://www.britannica.com/science/> in ensuing Anthropocene-Epoch, ([Zalasiewicz et al., 2008<sup>\[11\]</sup>](#), [Joshi et al, 2017<sup>\[12\]</sup>](#), [Mishra 2021<sup>\[13\]</sup>](#)), Fig-3.

## Review of Literature

The dimensioning of gender inequality on a global scale warrant upholding gender-equitable discipline policies and monitoring its impact on interventions (Zhao et al 2023<sup>[14]</sup>). Gender disparity during the pandemic COVID-19 highlighted the persistent gender gap. Reports describe an increase in women violence, atrocities on girl child, and failed partnerships when family members were confined indoors for about 18 months leaving aside all outdoor livelihood activities, (Muric et al, 2021<sup>[15]</sup>). The global trend of decline in male to female geriatric and disabled ratio have threatened Mother Earth for equitable practices warranted for future existence, by communicating all the theme of the goals (Cheung et al, 1990<sup>[16]</sup>, Davis et al, 1998<sup>[17]</sup>, Dada et al 2023<sup>[18]</sup>, Mcleod et al, 2023<sup>[19]</sup>, Shevelkova et al, 2023<sup>[20]</sup>). SDG-5 targets to eliminate all practices of disparity made against all groups of womenfolk including terminating violence, assaulting sexually, and reproductive rights., It can be possible by banning child marriage and sexual abuse, (Küfeoğlu et al. 2022<sup>[21]</sup>, Lau et al. 2023<sup>[22]</sup>, Heb et al. 2020<sup>[23]</sup>)

Present emerging skills, technological innovations, societal modernizations, cutting-edge lifestyles, cultural repositories, and diverse portfolio of stewardship of human actions supporting a resilient biosphere are anthropogenic impacts, (Sweileh et al, 2020<sup>[24]</sup>, Gous et al, 2021<sup>[25]</sup>, Folke et al, 2021<sup>[26]</sup>, Cascella et al, 2023<sup>[27]</sup>). The low energy budget, economic disparities, food insecurity, and agricultural vagaries under climate challenges are prime concerns. Education, transportation, ambient atmosphere, health care for the vulnerable, and adequate waste management are the signatures of the Anthropocene epoch, that is propelling 6<sup>th</sup> mass extinction, (Singh et al. 2018<sup>[28]</sup>, Aldaco et al., 2020<sup>[29]</sup>, Sahoo et al., 2020<sup>[30]</sup>, Alam et al., 2021<sup>[31]</sup>, D Collste et al., 2021<sup>[32]</sup>, Solaymani et al, 2021<sup>[33]</sup>, Ranjbari et al., 2019<sup>[34]</sup>, Mishra et al., 2021<sup>[35]</sup>, Gautam et al., 2021<sup>[36]</sup>).

Gender equality and girl child empowerment enhance economic, social, physical/mental health, and labor yield. It also greatly reduces the incidence of corporal and domestic cruelty, genital mutilation, sexual abuse, involuntary/ child marriages, and. feminine trafficking, (Khan et al., 2023<sup>[37]</sup>, Rajkumar et al, 2023<sup>[38]</sup>)

There are fewer reports of Gender Violence (GBVs) in the literature except for the practice of Sati, (women immolation in their husband's pyre). GBVs remain unreported as India is male-dominated. GBVs are under-reported considering societal stigma. Most vulnerable to GBVs are weaker sections like female children, morbid and disabled persons. Infertility studies on males are rarely available for the gender-dominated working group. GBV awareness education is not a curriculum in India's courseware in environmental studies and climate challenges. The present attempt correlates the epidemiology of the Anthropocene epoch, SDG-5, and (GBV) in India.

### Objectives of the study:

Various Organizations around the globe have reported as follows:

- a. The women workforce employed in the health sector constitutes 70% whereas holding only 25% of senior roles globally. (WHO & Women in Global Health)
- b. The rank of homicide is 4 times greater amongst juvenile boys aged 10-19 than same-aged girls globally. (UNICEF)

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- c. About 45% of women are disallowed to decide on their sexual and reproductive health (SARH) globally. (UNFPA)

The Indian Constitution pledges parity to women and allows its state to implement positive discrimination for women to ameliorate their snowballing socio-economic and political shortcomings. The study aims at a Gender-based potential cohort study, (Mourya et al., 2019<sup>[39]</sup>). Present work focuses on the correlation between the impact of the Anthropocene epoch, GBV, and SDG-5. Model framed to impart knowledge, implementation procedures, and find the Gaps in Gender-Based Violence Management (Arora et al., 2023<sup>[40]</sup>)

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### Gender-Based Violence (GBV)

Gender-based violence (GBV) is violence against the opposite weaker gender that breaches the fundamental right to life, liberty, dignity, security nondiscrimination, and physical/mental integrity between partners. GBV reflects and reinforces inequalities by action against one's will and freedom, imparting a negative impact on physical, and psychological health, his/her identity, and exploiting of distinction between male and female, (Workie et al., 2023<sup>[41]</sup>).

In the present Anthropocene epoch, the woman or the girl child is suffering from violence, and even there are many unreported cases of women harassing their opposite sex. According to the National Crime Records Bureau (NCRB) of India, GBV takes place every three minutes. India's NCRB reports crimes like 94 rapes/day and death of married women per 6 hours by burning or forced to commit suicide, (Snehalaya<sup>[42]</sup>). Every year 324 thousand of women suffer from feministic violence from their intimate partner (NRCB).

### Gender Parity in India

Literature reveals that violence against women (VAW) in India has touched the sky. The cases of GBV were less reported in towns than in rural settlements, and also less reported among the ethnic aboriginal communities. Gender Violence between intimate partners aggravated during COVID-19, (Simister et al., 2010<sup>[43]</sup>, Malik et al., 2019<sup>[44]</sup>, Lynch et al., 2023<sup>[45]</sup>, Sinha et al., 2023<sup>[46]</sup>). The old gender violence is domestic, Femicide, sexual, human trafficking, Female genital mutilation (FGM), and Child marriage. Domestic violence comprises economic, physical, psychological, sexual, or emotional. Femicide and honor killings are the GBV caused by abuse, threats, intimidation, sexual, or situation that compel them to expire. Sexual violence includes sexual harassment, rape, rape culture, and corrective rape, <http://www.unwomen.org/en/what-we-do/ending-violence-against-women/faqs/types-of-violence>.

GBV is an emerging and developed term against commonly used violence against women as they are different. National Family Health Survey (NFHS) reported that one-third of women in India suffered from physical violence. India stands on patriarchal ideology to maintain social power for heterosexual men (Sanjel et al., 2013<sup>[47]</sup>, Huecker et al., 2023<sup>[48]</sup>)

**National:** The GBV as a part of federal decision includes family planning, forced sterilization, forced abortion after threshold issues of femicide, coercive use of contraceptives, female infanticide, and parental sex selection.

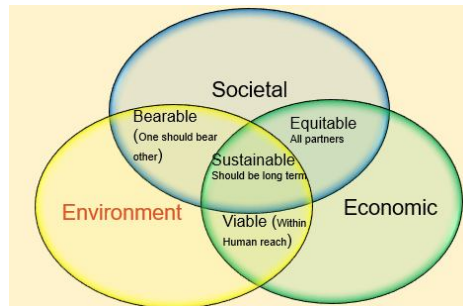


Fig 3: The Venn Diagram of Sustainable Development Goals – 5 (the causes and shortfalls)

**Social:** The GBV can be domestic violence, sexual harassment, sexual violence, conflicts, honor crimes/killings, polygamy, polygyny, polyandry, and harmful traditional practices (like *Debadasi* in temples, Harem culture, Child marriage, Female Genital Mutilation (FGM) (Malik et al, 2019<sup>[49]</sup>, Huecker et al., 2023<sup>[49]</sup>)

**Domestic:** Violence towards a female in a family is a major national issue in India. It is due to their inferior socio-economic, racial, rituals, castes, and cultural status. It reflects the misuse of social power, by one or a group of adult members of both genders, to show brevity/dominance over another. In common, the victims are women and the committers are the male folk/husband. The outcome may be physical, psychological, mutilating reproductive system and sexual health of femininity through injuries, physical system disorders, disabilities (temporary or permanent), depression, and suicidal commitments. The gender inequality in families is poverty, neglecting family members, laziness; disobedience, suspicions, non-palatable cooking, alcoholism, disliking, dowry, braggart attitude and not producing a male child in India.

**Criminal:** The GBV includes women trafficking, kidnapping and abduction of the girl child, forced prostitution, war, Naxalite or unrest outputs, hunger and food scarcity, sexual slavery, forced pregnancy, etc.

**LGBT.** This conceptually interconnected gender disparity group of male or female Lesbians, Gays, Bisexuals, and Transgender (LGBT) have no social, economic, or national boundaries but has yet not been considered in GBV analysis in SDG-5 on the paucity/insufficiency of data ground.

### Gender violence during Anthropocene

This Online or digital gender violence during Anthropocene is caused by both sexes, cases such as Cyberbullying (conveying intimidating messages), Non-consensual sex, and doxing (information released to the public) that can affect the other sex's psychology and cause death.

### Cognizable offenses GBV:

Cognizable criminalities are either under sub-judice of the 'Indian Penal Code (IPC)' or 'Special and Local Laws (SLL)'. They are:

### IPC Offences

As per Sec 498A, IPC and Code of Criminal Procedure, 1973 (2 of 1974), the offense under subsection (1) of section 31 is cognizable, non-compoundable, and non-bailable in the case of GBV. Cases listed under Special and Local Laws are SLL crimes. These cognizable offenses can be

- (i) **Physical violence** (physical force against the partner like slapping, hitting, kicking, and beating)
- (ii) **Sexual violence** (forced intercourse or sexual coercion, psychological, abuse) They can be insults, intimidation, rapes, belittling, humiliation, threats of harm, or eloping with children.
- (iii) **Controlling behaviors:** isolating a woman or girl child from the family, near and dear ones, objecting to legible movements, and restricting education, employment, healthcare, and the option of re-productivity,
- (iv) **Economic violence:** Restricting access to earning, money and keeping women financially dependent (Mittal et al, 2020<sup>[50]</sup>, Dandona et al. 2022<sup>[51]</sup>, Banik et al., 2022<sup>[52]</sup>).

### SLL offenses GBV:

The Special and Local Laws (SLL) signify several illicit accomplishments framed by the state government and enforced under specific issues. The SLL acts/ laws enforced against observing SDG-5 in India are (a). Narcotic Drugs & Psychotropic Substances Act, 1985; (b). Prohibition Act; Immoral Traffic (Prevention) Act, 1956; (c). The Foreigners Act, 1946; (d). Dowry Prohibition Act, 1961, (e). Prohibition of Child Marriage Act 2006, (f). Indecent Representation of Women (Prohibition) Act, 1986, (g). Commission of Sati Prevention Act, 1987, (h). Protection of Women from Domestic Violence Act, 2005.

### GBVs status in India:

Indians must take a pledge to get rid of all actions, attitudes, beliefs, customs, and traditions that humiliate and causes women violence.

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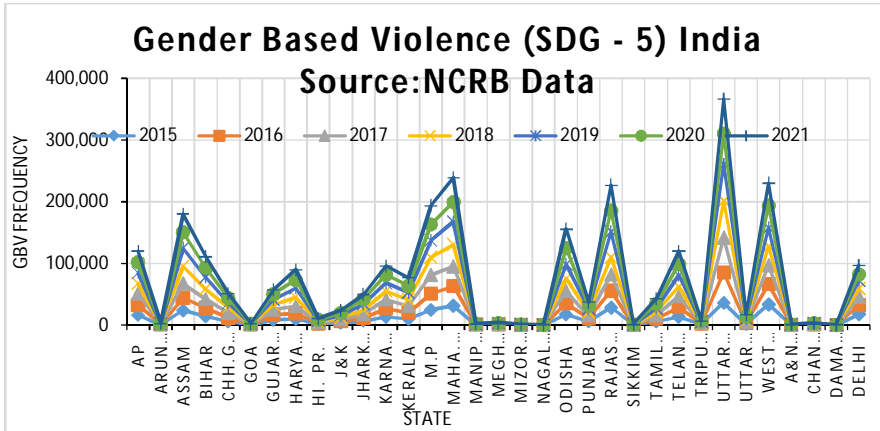


Fig4: The gender-based violence (GBV>7000) in various major states in India and Delhi

The incidents of rape taking place in India are condemned at the global level. When rape has occurred, our heads sling in disgrace, (Kalokhe et al. 2017<sup>[53]</sup>, Gopi et al., 2023<sup>[54]</sup>).

**Causes:**

The societal and cultural norms as per the patriarchal form of Indian family culture, males are portrayed as aggressive, powerful, dominant, extravagant uneconomical and strategy managers. The women in the societal facade are caring, nurturing, submissive, dependent, weak, and emotional. The contrasting characters inculcate the attitude, belief, and practice of dominance of men over women.

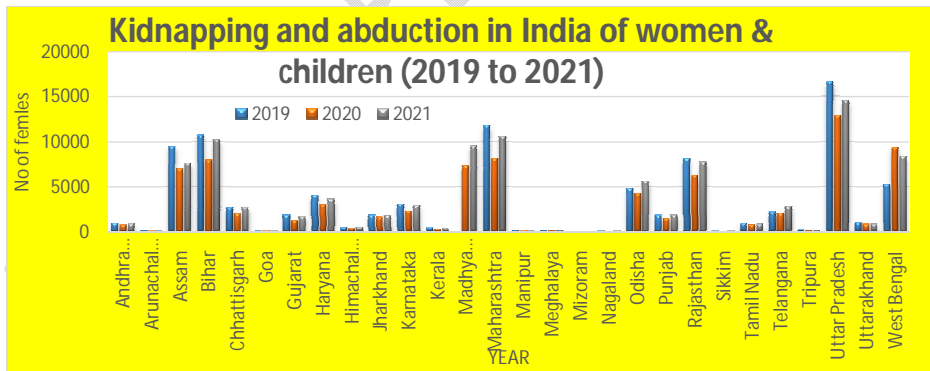


Fig 5: Gender-based violence State wise in India 2016 – 2021 (Source: NCRB -2021 data)

**Infertility:**

WHO estimated one in six people could not have a child (called infertility). India women are socially harassed when producing no children, though the male also shares in infertility. The major causes of infertility are obstetric morbidities and obesity (Chauhan et al, 2015<sup>[55]</sup>).

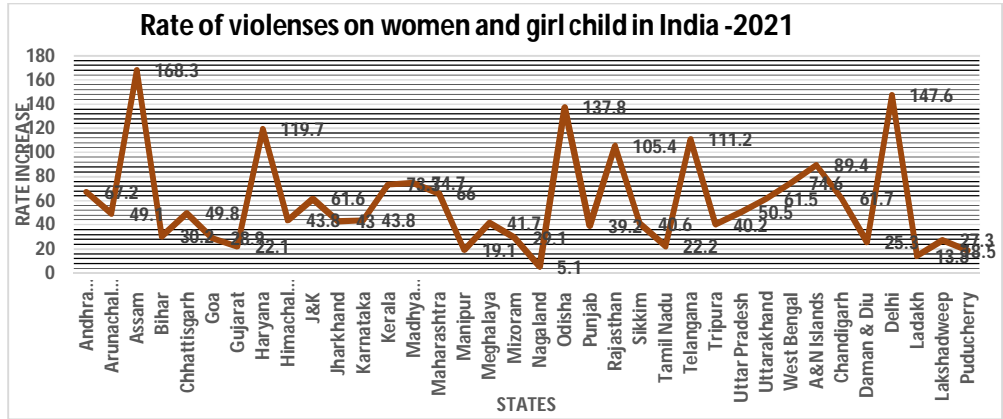


Fig 6: The violence rate on women and girl children (SDG-5) in F.Y 2021 (Source: NRCB-2021)

Projection reveals that the lifetime prevalence is 17.5% whereas the prevalence period is 12.6% (Proportion of a population). As included in sexual and reproductive health and rights, and is vital to achieving SDG 3 and SDG 5 (WHO, 2023<sup>[56]</sup>).

**Identification:** The gravity of the GBV needs careful, systematic, and scientific identification and delineation. The parameters can be sexual, brutal, physical, harassment, economic, and emotional. The scaling of seriousness is calibrated by knowing the signs, quantity of humiliations, symptoms, and gravity of injury of the victims or survivors or their family members and near and dear. Healthcare providers (HCPs) are the first identifiers to interact with the GBV incidence of abuse.

**Status of Feminism:**

Ethnic minority groups such as women and girl children are susceptible to GBV. The scaling rises when the group or individual is poor, elderly, comorbid, disadvantaged, disabled, mentally slow, and lowly working-class people,

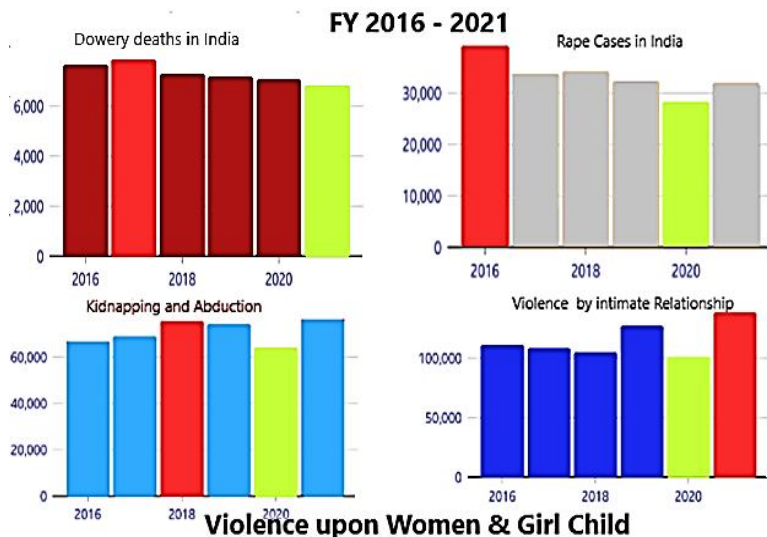


Fig 7: The violence against women and girl children in India (Dowry, rape, kidnapping and domestic 2016-201) Data source (NRCB **WHICH YEAR**)

The ladder of the cyclic GBV starts from ignorance that engenders fear. Fear stimulates hatred and later explodes as violence, (Mitchell, 2012<sup>[57]</sup>, Moore et al, 2016<sup>[58]</sup>, Tan C., 2020<sup>[59]</sup>). State-wise GBV in the last four years 2018 to 2021 and the major states have 30000 cases (Fig 7).

**The Statistics of GBVs**

NRCB considers the population frequency is 1:100000. The NRCB collects information from the Home Department, state, and central government. The NRCB data for FY 2020 seems under-reported and eye-catching. It may be during COVID-2019 due to the prevalence of the pandemic (Nivette et al., 2021<sup>[60]</sup>). From the year of implementation i.e. 2016, the year 2020 has fewer records in all types of women violence and the year 2021 has the maximum number of GBV cases in India; (Pande G, BBC News 2022<sup>[61]</sup>).

Table 1: The analysis results of gender equality and empowering girl child in India between 2016-2021 (SDG period); (Pandey G, BBC 2022<sup>[61]</sup>, Nazmi .S, BBC News 2022<sup>[62]</sup>)

Information under record	The observations after the implementation of SDG-5; Per one lakh population)	Remarks
Rate of crime against women (Fig 6)	56.5% in 2020 to 64.5% in 2021; which may be due to the COVID-19 pandemic; 1 <sup>st</sup> , and 2 <sup>nd</sup> rank goes to Assam (163.8%) and UT Delhi 147.6%; depending upon the mid-year population. Followed by Odisha, Haryana, Telangana, & Rajasthan	Lowest in Nagaland, Sikkim & Arunachal (matriarchal family)

Cruelty, rape, Assaults, and Kidnap(Fig-7)	31.8%: Cruelty by near & dear; 20.8%: Assault Outrage her Modesty; 17.6%: Kidnapping and Abduction women and girl child; 7.40%: Rape (including violence deaths)	Rapes decreasing; overall 2020 less GBV after SDG-5
No GBV cases booked in 2021	UP 1 <sup>st</sup> rank; followed by Rajasthan, Maharashtra, West Bengal, and Odisha. UP has GBV cases declined in 2021 i.e., Haryana, Odisha, &Telangana showing the increase	Worsening Law & orderposition; inadequatepolice
Crime against women rate SDG-5 period	338954 cases in 2016 have risen to 428278 cases in FY 2021 involving a rise of 26.35% over six years.	Always rising except Pandemic year 2020
Type of cases major 2021	Kidnappings and abductions, rapes, domestic violence, dowry deaths, and assaults are more	Rapes number is reducing & other GBV rising
Special and Local Laws (SLL crimes)	107 cases of acid attacks against women 1,580 women were trafficked, 15 girlswere sold and 2,668 women were victims of cybercrimes. State UP has topped GBV-2021	Novice crime & is invasive; rising in the globe
Highest GBV cases statewise	The highest 56000 GBV crimes in UP followed by Rajasthan (40738numbers) and Maharashtra (39526 cases)	The reasons are strong honor killings (casteism).
The steep decline in rape cases	In 2021; the Record of rape cases was 31677, and 38947 cases during 2016; abinitio years of SDG-5; a Rise of 18.67%; (source: Statistic a) (Bilkis Bano case in Gujarat; Nirvaya case in Delhi; Bebina case, Mamata Mehar cases in Odisha)	Cases highest in 2017 and later declining
Kidnapping, abduction & Trafficking	In 2016, such cases were 66544, which increase to 76263 by a rise of 14%. The domino effect is eloping, murder, ransom, and trafficked for prostitution, used as slaves or servants, or for marriage due to an insufficient sex ratio	28222 numbers compelled for marriage
GBV at home (cruelty by husband or relatives)	Police complaints in 2016 were 110434 which has increased to 137956 (a rise of 27%). Reasons for domestic violence are not respecting seniors or caring for minor family members, foods cooked not palatable,and intoxicated	1 in 3 women in the globe under GBV
GBV on dowry cases	In 2021, dowry deaths were 6795, and in the pre-SDG-5 period 7628 (10.92% more). World Bank reports 95% of marriages in rural India occur where the bridegroom family gives dowry to establish the marriage	Section 498A – IPC to curb dowry deaths

### **Childhood violence Exposure**

The girl child is generally exposed to harsh corporal punishment from elders, their mother, and close ones. They become a victim due to parents quarreling, financially backward families, and criminal associations from childhood. They are more susceptible to undergoing gender inequality and face GBVs in their family as they age. These records do not always come out in the open and thus the major mechanism of violence against women is taught to girlchild in her own home and its surrounding.

### **Women empowerment in India:**

Nation shall progress if its women are allowed liberty, freedom, and equal status that includes freehand in decision-making in the economy, society, and politics. The women empowerment of the low-income group (LIG) and Medium income group (MIG) is possible through community development, nongovernmental organizations (NGOs), or self-help groups (SSGs) by financing /resourcing for their economic, societal, and political strength to augment gender equality. Girl child empowerment is one of the global movements (as Women's Day). This is possible by educating the girl child and making them physically and mentally self-sufficient in their technological skill development.

### **GBV among ethnic women in India**

The ethnic communities are the scheduled tribes and aboriginals living on hills ranges or forests of India have a distinct culture, and way of livelihood, and are financially backward. They are well-adjusted and egalitarian. Women's empowerment, with liberal gender equality like decision management, education, and skill development with mobility and augmenting economic status can reduce violence against women (VAW). Women of the community lack knowledge of health care and the reproductive interval between two successive birth. Adequate awareness programs need to be imparted to them with proper contraceptive advice and antitobacco campaign for the tribal couples, ([Maharatna 2000<sup>\[63\]</sup>](#), [Babu et al, 2009<sup>\[64\]</sup>](#), [Sahoo et al., 2021<sup>\[65\]</sup>](#), [Lahiri et al, 2022<sup>\[66\]</sup>](#), [Murmu et al, 2023<sup>\[67\]</sup>](#)).

### **Impact during Anthropocene:**

The growing discrimination between bourgeoisie and proletariat, socio-political influences, the impact of social media, lifestyle changes, everchanging consumption patterns, the urge to rise in the social and economic hierarchy, greed for power, and the authoritative attitude during the Anthropocene epoch have contributed to the number GBV related incidences. The rising cases of alcoholism, and gambling especially in the poor, slums or shanty towns, and middle section of society in rural and semi-urban households have given rise to increased GBV-related cases. The poor labour class indulged in these inhumane acts under intoxication, the women and girl children are usually are worst sufferers. The curse of gambling has also brought misery to the social and economic position of the opposite sex in households. The obsession with social media and the negative messages circulated often undermines the social position of women in society. They become victims of rape, acid attack, physical violence, and immoral and illicit trafficking. The cult of violence perpetuated through various video games is also contributing to the growing

number of GBV in this society during the present golden spike period of the Anthropocene epoch.

### **Discussion:**

SDG-5 highlights the significance and necessity of sexual and reproductive health (SRH). There is a large gap in the globe on both safe maternity and evidence of maternity mortality. Prevention by providing trustworthy contraceptives and benign abortion services for women needs a priority to achieve SDG-5 goals through apposite life-saving healthcare and pertinent support services by 2030. India needs to work with 19 out of the 33 SDG indicators but only 75% of the targets achieved by 2021. The states Madhya Pradesh (MP), Chhattisgarh, Jharkhand, Bihar, and Odisha have not achieved the target in cent percent, (Summerfield et al., 2021<sup>[68]</sup>, Subramanian et al., 2023<sup>[69]</sup>).

The UNICEF has projections on SDG -5 that it shall take 40 years to have gender equality under the same national economic, political, and societal leadership as at the current pace. The percentage of women in the global employment sector has increased from 39% to 45% in the pandemic year 2019-2020. About 25% of women face their intimate partner's violence when above 15 years. About 641 million women encounter GBV at least once in their life period. Only 57% of women give their consent to sex activities and productivity, (United Nation's Goal<sup>[8]</sup>).

In the management of achieving the goals of SDG-5, the health workers need training. Studies reveal about 71.79% of health workers are less knowledgeable about management GBV. The remaining 37% of health workers have updates in behavioral and clinical management. Continuous training and demonstrative sessions, mentors' mentorship, and supervision are essential to yield a good result, (Mtaita C. et al., 2023<sup>[70]</sup>). The knowledge of compensatory expenses, the role of police, legal perception, and the cross-cutting targets and action plans for violence against men, children, and transgender are the corners not yet explored. They are:

#### Compensatory expenses

The expenditure incurred during medical tests and treatment, service costs, funeral expenses, or the co-victim should be free of cost. If the victim is dead and the expenses of the companions should be free and borne by the concerned departments. Irrespective of state or central government, private or polyclinic medical assistance is to be provided free of cost as per Sec 357 C of the PWDV Act 2005 (Protection of Women from Domestic Violence Act, 2005) in India.

#### **Intervention of Police**

Before treatment, FIR or police requisition is optional if the victim/survivor's consent in presence of his parent or guardian stands upon his or her age. It is mandatory in the case of the healthcare provider, who must be a registered medical practitioner (Sec 164A; CRPC) must intimate the police about the details of GBV (Who must not be present during examination). The doctor/health care unit must get a consent letter (MCL) from the victims and after age determination (>12 yrs of age) the HCPs should start the treatment. The deviation is (Section 92 of IPC) if the life is at stake, or the victim following the guidelines and protocols of MOHFW, GOI (Ministry of Health and family welfare, Govt. of India), and National Health Mission and Dept. of Family and Welfare, GoO (Government of Odisha).

### A legal perspective on Indian gender equality:

Legal rights in favor of women's equality to attend to SDG-5 as per the constitution and other legal segments are:

Table 2: Important supporting legal rights that women in India to enjoy the goals of SDG-5

Act/ constitutional	Law/provision	Article	Provisions
The Constitution of India		Article - 14	Assure <i>the right of equality</i> , irrespective of gender to all its citizens
Indian Penal Code introduced in 1983		Section 498-A	<i>Cruelty by husband</i> or a relative of husband on women
Free and Compulsory Education Act, 2009		Covers totally	<i>Right of all children</i> including girls for free & compulsory education
The Equal Remuneration Act, of 1976		Covers totally	<i>No gender discrimination</i> and equal salary for similar work.
The Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, 2013		Covers totally	<i>Right against sexual abuse/harassment.</i> Framework for addressing complaints of sexual harassment at the workplace
The Hindu Succession Act, 1956, (amended in 2005)		Covers totally	<i>Right to property</i> ; identical birthright rights to daughters in Indian Hindu families.
The Hindu Marriage Act, 1955,		Covers totally	<i>Right to marry &amp; divorce</i> ; women have the right to divorce on grounds of cruelty and adultery <i>etc.</i>
The Maternity Benefit Act, of 1961,		Covers totally	<i>Right to health</i> ; women have maternity leave and other benefits of pregnancy and the neonatal period
The Prot. of Women from Domestic Violence Act, 2005		Covers totally	<i>Right against GBV</i> ; legal protection to women from physical, emotional, and verbal abuse

Other women and girl child specific legislations are The Immoral Traffic (Prevention) Act, 1956; The Dowry Prohibition Act, 1961 (28 of 1961) (Amended in 1986); The Commission of Sati (Prevention) Act, 1987 (3 of 1988). The other cognizable and SLL offenses against women are the Dowry Prohibition Act, Cyber Crimes/ IT (Information Technology Act), Protection of Children from Sexual Offences Act (POSCO Act), and many others.,

The first group of persons to know of Gender inequality is health care providers, community personnel, and social workers. The health worker's involvement and dedication are important during the management of GBV cases in practice. This calls for continuous training and specific refresher courses, including on-site practical sessions, professional mentorship, and supervision.

### Cross-cutting targets

The cross-cutting targets to implement SDG-5 aim to end discrimination; violence, kidnapping, adulteration, exploitation; forced marriages, and genital mutilation. They also include free domestic care; ensuring women's prosperity, decision-making possibilities, and leadership. The SDG-5 is possible by ensuring access to health and productivity rights, equal rights in economic

involvement and ownership for women, and technologically promoting and empowering women. The goal aims at adopting and strengthening policies, enforcing legislation; and being custodian agencies for gender equality. The targets and indicators for SDG 5 are extensive and provide equal opportunity for females (women and girls).

### **Crime against other than women**

Crime/violence against men, children, or transgender in India during Anthropocene is high but reported the least. The report is meager as no specific laws in India are there to facilitate crime against men. In India, feminists are in high percentage as lawmakers and frame the judiciary. Completely. Men who are facing violence from their partners are under the humiliation of masculinity in India in the community. Contrarily, man-rape or child abuse in Indian society is a challenge to the masculinity of the male or intimidation respectively. The man-rape or violence against men hardly has FIR (First information report) to the police or Judiciary.

Comment [u7]: PLEASE RE CAST AND REFERENCE

### **Gender inequality in Slums**

Violation of GBV in the domestic sector is common among married women in urban slums in India; Contributing causes are rampant migration from rural to urban. The shift is for livelihood, education, trade, health care, an easy comfortable life, and many others. The economically backward migrants are unable to provide their accommodations either on rent or purchase and are forced to stay in slums. They construct shanty houses without facilities for drinking water, sanitation, energy, healthcare, and other basic facilities. The struggle for livelihood, unemployment, and intoxication result in feministic violence regularly in India.

### **Empowering the girl child:**

DHL Express and Smile Foundation and many other established and well-known corporate entities have initiated and supported empowering girl children. The key contributing factors are quality education for daughters, consistent health check-ups & nutrition support, merit-based grants, scholarships, and awards. The women and girls need to educate themselves in higher/vocational education and skill development (hands-on practices, and start-up units). The paybacks are that educated girls add to personnel development and India's economy. The self-reliant girls provide their livelihood and support their family, community, and near and dear ones. Self-reliant girls disseminate their knowledge and skill among other children, families, and the community. The girls become change-makers and bring social, economic, political, technological, and cultural changes. When girls are empowered, everyone in society including the nation benefits.

### **Line of action SDG-5:**

- Socio-economic growth, education to all, and public awareness particularly in slums in urban areas need improvisation.
- Innovative shelter houses, hotlines, and lifeline services should be at hand.
- Protection of women activists, women protagonists, women civil servants, and women leaders from GBV.
- Abolish child marriage, which raises maternal mortality and pregnancy-related complications.

- Enactment of strict legality toward feministic physical, sexual, or psychological violence
- Needs more care for older, disabled women and women with limited access to (Internet and Communication Technology) ICT, (Like emergency lights nearby, and emergency warning systems in pharmacies and grocery stores)
- Scale up public awareness campaigns with well-trained and effective trainers.
- Developing, SDG-5 start-ups, and financial assistance to women's organizations.
- Ensure women's economic and social independence
- As migration is mounting to urban areas, it is high time to enhance sustainability and sustainmetrics development that includes environmental, cultural, economic, technological, and public policies.
- The criminal inquiry methods along with all POSCO cases, and fast-track courts, need to be scientific, unbiased, and free from influence by politics. The speed of inquiry in India is sluggish and slow-paced the case takes a long period for the judgment. To tell the truth, till the decision of a GBV case, the matter is diluted and the witnesses are trapped, memory is affrays, and punishment turns out to be tougher.

### **Future Action Plan**

The future action plan for achieving gender equality and empowerment in society needs prioritization amidst the Anthropocene epoch are outlined as follows:

1. Promoting societal cohesion and self-reliance
2. Reinforce community bonding to mitigate and respond to GBV risk
3. Gender equality messages in the employment sector.
4. Income generation particularly in slum dwellers and GBV survivors.
5. Protection of women Trafficking, access to national protection mechanisms against (refugee, migrant, adolescent girls, transgender, evicted women, and GBV survivors)
6. Ensuring GBV minimum standards like teamwork between governments, women leaders, SHGs, and women's rights organizations
7. Promote positive bonding and collaboration between governments and women-led and women's rights organizations and strict adherence to implementation of legal recourse.
8. Reinforce health care services making gender sensitive and equitable for satisfying the prerequisites of the communities.
9. The local GBV organizations engaged in SDG-5 activities have more members of health providers. They need adequate training and education enough about violence against women, and girls about the associated legalities.
10. Bringing an end to alcoholism and intoxication in society, particularly in slums is necessary
11. Use gender-sensitized approaches that engage women and men in transforming gender norms and balancing power within families.

The women and girl children belonging to the tribal, marginalized, and deprived section of society are most vulnerable. To attain the goal of zero gender-based violence and atrocities resulting in gender equality, it is imperative that the sexual and reproductive health goals of SDG-5 for health and gender equality (H&GE) targets-2030 need achievement. The standing of women and girl children in Indian society has transformed positively by giving them economic,

social, political, and cultural educational freedom. The stakeholders like women grass root leaders, healthworkers, women organizations, SHGs, women civil servants, judiciary, and investigating personnel can play a major role in bringing this social change. They should be sensitive to the issues of GBV and sensitize themselves to undertake this process of transformation efficiently and effectively.

The authors are of the view that the promotion of gender equality is the soul of SDG-5 charters. There is a long way to go in these years of the Anthropocene, to achieve the goals of SDG-5. It is high time to focus on gender sensitization and empowerment at all levels to build a new India. A society that does not respect its women is doomed as women as mothers, sisters, wives, friends, and partners make a happy, prosperous, and advanced society. India badly needs strategies that augment the rights of women, and girl child, and safeguard their health, economic, societal, and political status in society without gender-based violence.

### **Conclusion:**

GBV is ubiquitous fundamental human rights sacrileges. Social stigma is the least reported and discussed, in India. GBV, are dateable to the survival of the ethnic community. To stop gender-based violence, and attain gender equality, it is imperative that the sexual and reproductive health goals of SDG-5 for health and gender equality (H&GE) targets-2030 need achieved.

The investigation process by law enforcement agencies has a slow pace, sluggish, biased, and subjective. The problems are compounded due to inadequate and inappropriate preventive and post-rehabilitation strategies. It is of great concern that many of the sex abuse and violence cases are both unreported and underreported. Restoration of basic human rights in civil society needs to accord utmost priority for the establishment of a free, democratic, secular, equitable social order.

Women and girl children are susceptible to GBV. The SDG-5 management needs prioritization of GBV against women to reduce the gender gap. However, the investigation of GBV against males, children, and transgender are least accounted for. Therefore, it is also essential to investigate all the forms of gender parity and adequate intervention against GBV against men, children, and transgender in India.

### **Reference:**

1. Haines, A., Scheelbeek P., Abbasi K., (2019). Challenges for Health in the Anthropocene Epoch BMJ 2019; 364 doi: <https://doi.org/10.1136/bmj.l460>.
2. Huecker MR, King KC, Jordan GA, Smock W. Domestic Violence. 2022 Dec 9. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. PMID: 29763066.
3. UN Women (2020a) How COVID-19 impacts women and girls. [interactive.unwomen.org. https://interactive.unwomen.org/multimedia/explainer/covid19/en/index.html](https://interactive.unwomen.org/multimedia/explainer/covid19/en/index.html). UN; (b) Women (2020b) Intersectional feminism: what it means and why it matters right now. UN Women. <https://www.unwomen.org/en/news/stories/2020b/6/explainer-intersectional-feminism-what-it-means-and-why-it-matters>.
4. UN Women (2022a) In focus: sustainable development goal 5. UN Women—Headquarters. <https://www.unwomen.org/en/news-stories/in-focus/2022a/08/in-focus-sustainable-development-goal-5>

5. UN Women (2022b) The United Nations Interim Force in Lebanon (UNIFIL) receives funding from the Elsie initiative fund to enable an inclusive environment in UN peacekeeping. UN Women. <https://www.unwomen.org/en/news-stories/press-release/2022b/01/the-united-nations-interim-force-in-lebanon-unifil-receives-funding-from-the-elsie-initiative-fund-to-enable-an-inclusive-environment-in-un-peacekeeping>.
6. Babu BV, Kusuma YS. Violence against Women and Girls in the Sustainable Development Goals. *Health Promot Perspect*. 2016 Dec 18;7(1):1-3. doi 10.15171/hpp.2017.01.
7. World Health Organization, WHO, 2018. Quality, Equity, Dignity: The Network to Improve Quality of Care for Maternal, Newborn and Child Health—Strategic Objectives. WHO; Geneva, Switzerland: 2018. <https://www.who.int/maternalchildadolescent/documents/quality-care-network-objectives/en/>
8. United Nations Dept. of Economic & Social Affairs; <https://sdgs.un.org/goals/goal5>
9. Mahapatro M, Kumar A. Domestic violence, women's health, and the sustainable development goals: integrating global targets, India's national policies, and local responses. *J Public Health Policy*. 2021 Jun;42(2):298-309. doi 10.1057/s41271-021-00283-0.
10. Mishra S. P., 2017, The apocalyptic Anthropocene epoch and its management in India, *Int. Jour. Adv. Research*, Vol. 5(3), pp. 645-663; DOI: 10.21474/IJAR01/3555
11. Zalasiewicz, J., M. Williams, A. Smith, T.L. Barry, A.L. Coe, P.R. Bown, P. Brenchley, et al. 2008. Are we now living in the Anthropocene? *GSA Today* 18(2), 4-8.
12. Joshi A., Mishra S. P., 2017, Anthropocene Effects on the River Daya and the Lagoon Chilika by the Effluents of Bhubaneswar City India: A physicochemical study, *International Journal of Advance. Research*, Vol-. 5(10),pp- 1370-1384, <http://dx.doi.org/10.21474/IJAR01/5656>
13. Mishra Siba Prasad, (2021); *Pyro Geography and Indian Quest during Anthropocene to COVID-19; International Journal of Environment and Climate Change*, 11(7): 133-149, 2021; Article no.IJECC.72931 ISSN: 2581-8627; DOI: 10.9734/IJECC/2021/v11i730449
14. Zhao X, Akbaritabar A, Kashyap R, Zagheni E. (2023). A gender perspective on the global migration of scholars. *Proc Natl Acad Sci U S A*. 2023 Mar 7;120(10):e2214664120. doi: 10.1073/pnas.2214664120
15. Muric G, Lerman K, Ferrara E. Gender Disparity in the Authorship of Biomedical Research Publications during the COVID-19 Pandemic: Retrospective Observational Study. *J Med Internet Res*. 2021 Apr 12;23(4):e25379. doi 10.2196/25379.
16. Cheung PP. Micro-consequences of low fertility in Singapore. *Asia Pac Popul J*. 1990, 5(4):35-46.
17. Davis DL, Gottlieb MB, Stampnitzky JR. Reduced ratio of male to female births in several industrial countries: a sentinel health indicator? *JAMA*. 1998 Apr 1;279(13):1018-23. doi: 10.1001/jama.279.13.1018. PMID: 9533502.
18. Dada S, Wylie K, Marshall J, Rochus D, Bampoe JO. The importance of SDG 17 and equitable partnerships in maximizing the participation of persons with communication disabilities and their families. *Int J Speech Lang Pathol*. 2023 Feb;25(1):183-187. doi 10.1080/17549507.2022.2150310.
19. McLeod S, Marshall J. Communication for all and the Sustainable Development Goals. *Int J Speech Lang Pathol*. 2023 Feb;25(1):1-8. doi 10.1080/17549507.2022.2160494
20. Shevelkova V, Mattocks C, Lafortune L. Efforts to address the Sustainable Development Goals in older populations: a scoping review. *BMC Public Health*. 2023 Mar 8;23(1):456. doi 10.1186/s12889-023-15308-4.

21. Küfeoğlu, S. (2022). SDG-5 Gender Equality. In: Emerging Technologies. Sustainable Development Goals Series. Springer, Cham. [https://doi.org/10.1007/978-3-031-07127-0\\_7](https://doi.org/10.1007/978-3-031-07127-0_7)
22. Lau PL, Nandy M, Chakraborty S. Accelerating UN Sustainable Development Goals with AI-Driven Technologies: A Systematic Literature Review of Women's Healthcare. *Healthcare (Basel)*. 2023 Jan 31;11(3):401. doi 10.3390/healthcare11030401.
23. Heb P. SDG 5 and the Gender Gap in Standardization: Empirical Evidence From Germany. *Sustainability*. 2020; 12(20):8699. <https://doi.org/10.3390/su12208699>
24. Sweileh WM. Bibliometric analysis of scientific publications on "sustainable development goals" with emphasis on "good health and well-being" goal (2015-2019). *Global Health*. 2020 Jul 28;16(1):68. doi 10.1186/s12992-020-00602-2.
25. Gouws, A., Byrne, D., Coetzee A., 2021. Introduction to the Special Issue of Feminist Encounters on 'Gender and the Anthropocene' Feminist Encounters: A Journal of Critical Studies in Culture and Politics, 5(1), 01
26. Folke, C., Polasky, S., Rockström, J. et al. Our future in the Anthropocene biosphere. *Ambio* 50, 834–869 (2021). <https://doi.org/10.1007/s13280-021-01544-8>
27. Cascella M, Rajnik M, Aleem A, Dulebohn SC, Di Napoli R. Features, Evaluation, and Treatment of Coronavirus (COVID-19). 2023 Jan 9. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. PMID: 32150360.
28. Singh G.G., Cisneros-Montemayor A.M., Swartz W., Cheung W., Guy J.A., Kenny T.A., McOwen C.J., Asch R., Geffert J.L., Wabnitz C.C.C., Sumaila R., Hanich Q., Ota Y. A rapid assessment of co-benefits and trade-offs among Sustainable Development Goals. *Mar. Policy*. 2018;93:223–231. doi: 10.1016/j.marpol.2017.05.030. [CrossRef] [Google Scholar]
29. Aldaco R., Hoehn D., Laso J., Margallo M., Ruiz-Salmón J., Cristobal J., Kahhat R., Villanueva-Rey P., Bala A., Batlle-Bayer L., Fullana-i-Palmer P., Irabien A., Vazquez-Rowe I. Food waste management during the COVID-19 outbreak: a holistic climate, economic and nutritional approach. *Sci. Total Environ*. 2020;742:140524. doi: 10.1016/j.scitotenv.2020.140524
30. Sahoo, P., Ashwani, 2020. COVID-19 and Indian Economy: Impact on Growth, Manufacturing, Trade, and MSME Sector. *Glob. Bus. Rev.* 21, 1159–1183. <https://doi.org/10.1177/0972150920945687>
31. Alam S.T., Ahmed S., Ali S.M., Sarker S., Kabir G., ul-Islam A. Challenges to COVID-19 vaccine supply chain: Implications for sustainable development goals. *Int. J. Prod. Econ.* 2021;239:108193. doi: 10.1016/j.ijpe.2021.108193
32. D Collste, Cornell, S., Randers, J., Rockström, J., & Stoknes, P. (2021). Human well-being in the Anthropocene: Limits to growth. *Global Sustainability*, 4, E30. doi:10.1017/sus.2021.26
33. Soleymani S. A Review on Energy and Renewable Energy Policies in Iran. *Sustainability*. 2021;13:7328. doi: 10.3390/su13137328.
34. Ranjbari M., Morales-Alonso G., Shams Esfandabadi Z., Carrasco-Gallego R. Sustainability, and the Sharing Economy: Modelling the Interconnections. *Dir. y Organ.* 2019;68:33–40. doi: 10.37610/dyo.v0i68.549.
35. Mishra Siba Prasad, (2021); Pyro Geography and Indian Quest during Anthropocene to COVID-19; *International Journal of Environment and Climate Change* 11(7): 133-149, 2021; Article no.IJECC.72931 ISSN: 2581-8627; DOI: 10.9734/IJECC/2021/v11i730449
36. Gautam A.S., Dilwaliya N.K., Srivastava A., Kumar S., Baudhdh K., Siingh D., Shah M.A., Singh K., Gautam S. Temporary reduction in air pollution due to anthropogenic activity switch-off during COVID-19 lockdown in northern parts of India. *Environ. Dev. Sustain.* 2021;23(6):8774–8797. doi 10.1007/s10668-020-00994-6.

37. Khan A, Khan S, Khan MA, Zaman K, Khan HUR, Rosman ASB, Indrianti Y, Hassan AA. Economic costs of gender inequality in health and the labor market: India's untapped potential. *Front Public Health*. 2023 Jan 30;11:1067940. doi: 10.3389/fpubh.2023.1067940.
38. Rajkumar RP. Cultural collectivism, intimate partner violence, and women's mental health: An analysis of data from 151 countries. *Front Sociol*. 2023 Mar 30;8:1125771. doi 10.3389/fsoc.2023.1125771.
39. Mourya DT, Yadav PD, Ullas PT, Bhardwaj SD, Sahay RR, Chadha MS, Shete AM, Jadhav S, Gupta N, Gangakhedkar RR, Khasnobis P, Singh SK. Emerging/re-emerging viral diseases & new viruses on the Indian horizon. *Indian J Med Res*. 2019 Apr;149(4):447-467. doi 10.4103/ijmr.IJMR\_1239\_18.
40. Arora S, Bhate-Deosthali P, Rege S, Amin A, Meyer SR. Healthcare Providers' Perceptions and Experiences of Training to Respond to Violence against Women: Results from a Qualitative Study. *International Journal of Environmental Research and Public Health*. 2023; 20(4):3606. <https://doi.org/10.3390/ijerph20043606>
41. Workie K, Tinsae T, Salelew E, Asrat B. Gender-based violence and its associated factors among internally displaced women in Northwest Ethiopia: a cross-sectional study. *BMC Womens Health*. 2023 Apr 6;23(1):166. doi 10.1186/s12905-023-02306-2.
42. Snehalaya, <https://www.snehalaya.org/snehadhar?gclid>
43. Simister J, Mehta PS. Gender-based violence in India: long-term trends. *J Interpers Violence*. 2010 Sep;25(9):1594-611. doi 10.1177/0886260509354577.
44. Malik JS, Nadda A. A Cross-sectional Study of Gender-Based Violence against Men in the Rural Area of Haryana, India. *Indian J Community Med*. 2019 Jan-Mar;44(1):35-38. doi 10.4103/ijcm.IJCM\_222\_18.
45. Lynch KR, Logan TK. Rural and Urban/Suburban Victim Professionals' Perceptions of Gender-Based Violence, Victim Challenges, and Safety Advice During the COVID-19 Pandemic. *Violence Against Women*. 2023 Apr;29(5):1060-1084. doi 10.1177/10778012221099987.
46. Sinha A, Mallik S, Sanyal D, Dasgupta S, Pal D, Mukherjee A. Domestic violence among ever-married women of reproductive age group in a slum area of Kolkata. *Indian J Public Health* 2012;56:31-6
47. Sanjel S. Gender-based violence: a crucial challenge for public health. *Kathmandu Univ Med J (KUMJ)*. 2013 Apr-Jun;11(42):179-84. doi: 10.3126/kumj.v11i2.12499.
48. Malik JS, Nadda A. A Cross-sectional Study of Gender-Based Violence against Men in the Rural Area of Haryana, India. *Indian J Community Med*. 2019 Jan-Mar;44(1):35-38. doi 10.4103/ijcm.IJCM\_222\_18.
49. Huecker MR, King KC, Jordan GA, et al. Domestic Violence. [Updated 2022 Dec 9]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK499891/>
50. Mittal S and Singh T (2020) Gender-Based Violence During COVID-19 Pandemic: A Mini-Review. *Front. Glob. Womens Health* 1:4. DOI: 10.3389/fgwh.2020.00004
51. Dandona, R., Gupta, A., George, S. et al. Administrative data deficiencies plague understanding of the magnitude of rape-related crimes in Indian women and girls. *BMC Public Health* 22, 788 (2022). <https://doi.org/10.1186/s12889-022-13182-0>
52. Banik M, Singh R, Arora S. Prevalence and perceptions of gender-based violence amongst married women in India. *Indian J Cont Nsg Edn* 2022;23:149-52

53. Kalokhe A, Del Rio C, Dunkle K, Stephenson R, Metheny N, Paranjape A, Sahay S. Domestic violence against women in India: A systematic review of a decade of quantitative studies. *Glob Public Health*. 2017 Apr;12(4):498-513. doi 10.1080/17441692.2015.1119293.
54. Gopi K, Pal DK, Taywade M, Sahoo BK. Intimate partner violence in India: Need for renewed corollary during COVID-19 pandemic. *J Family Med Prim Care*. 2023 Jan;12(1):1-3. doi 10.4103/jfmprc.jfmprc\_1492\_22.
55. Chauhan S, Kulkarni R, Agarwal D. Prevalence and factors associated with chronic obstetric morbidities in Nashik district, Maharashtra. *Indian J Med Res* 2015;142:479–488.
56. World Health Organization; WHO. 2023. Infertility prevalence estimates, 1990–2021. Geneva: License CC BY-NC-SA 3.0 IGO.
57. Mitchell, D. (2012). *Cloud Atlas: A Novel*. New York, NY: Sceptre Books.
58. Moore, JW. (Ed.). 2016. *Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism*. Oakland, CA: PM Press. [www.pmpress.org/index.php?l=product\\_detail&p=779](http://www.pmpress.org/index.php?l=product_detail&p=779)
59. Tan, C. (2020). An ecofeminist study of the Anthropocene age in David Mitchell's *Cloud Atlas*. *Rumeli DE Dil ve Edebiyat Araştırmaları Dergisi*, (19), 628-649. DOI:10.29000/rumelide.752571.
60. Nivette, A.E., Zahnow, R., Aguilar, R., et al. A global analysis of the impact of COVID-19 stay-at-home restrictions on crime. *Nat Hum Behav* 5, 868–877 (2021). <https://doi.org/10.1038/s41562-021-01139-z>
61. Pande G, BBC News, September 2022, <https://www.bbc.com/news/world-asia-india-62830634>
62. Nazmi .S, BBC News 2022, [Rising crimes against Indian women in five charts - BBC News](https://www.bbc.com/news/world-asia-india-62830634)
63. Maharatna A. Fertility, mortality, and gender bias among the tribal population: an Indian perspective. *Soc Sci Med*. 2000 May;50(10):1333-51. doi: 10.1016/s0277-9536(99)00342-1.
64. Babu, B.V., Kar, S.K. Domestic violence against women in eastern India: a population-based study on prevalence and related issues. *BMC Public Health* 9, 129 (2009). <https://doi.org/10.1186/1471-2458-9-129>
65. Sahoo M, Pradhan J. Reproductive health care status of the displaced tribal women in India: An analysis using Nussbaum Central human capabilities. *Health Care Women Int*. 2021;42(4-6):390-419. doi 10.1080/07399332.2020.1743994.
66. Lahiri A and Jha SS (2022). Gender Equity Perceptions among SchoolGoing Adolescents: A Mixed-Methods Comparison amongst Tribal and NonTribal Rural Areas of an Eastern State in India. *Front. Sociol*. 6:772270, doi: 10.3389/fsoc.2021.772270
67. Murmu J, Agrawal R, Manna S, Pattnaik S, Ghosal S, Sinha A, et al. (2023) Social determinants of tobacco use among tribal communities in India: Evidence from the first wave of Longitudinal Ageing Study in India. *PLoS ONE* 18(3): e0282487. <https://doi.org/10.1371/journal.pone.0282487>
68. Summerfield J, Regan L. How Can We Achieve Sustainable Development Goal-5: Gender Equality for All by 2030? *Clin Obstet Gynecol*. 2021 Sep 1;64(3):415-421. doi: 10.1097/GRF.0000000000000643
69. SubramanianSV., Ambade., M, Akhil Ku., ChiH., JoeW., et al., 2023. Progress on Sustainable Development Goal indicators in 707 districts of India: a quantitative mid-line assessment using the National Family Health Surveys, 2016 and 2021. *The Lancet regional health, SE Asia.*, DOI:<https://doi.org/10.1016/j.lansea.2023.100155>

70. Mtaita C, Safary E, Simwanza K, Mpembeni R, Likindikoki S, Jahn A. Knowledge, Implementation, and Gaps of Gender-Based Violence Management Guidelines among Health Care Workers. *Int J Environ Res Public Health*. 2023 Apr 5;20(7):5409. doi: 10.3390/ijerph20075409

UNDER PEER REVIEW