Women and Sexual and Reproductive Health Rights: Issues and Challenges due to Environmental Pollution and Covid-19 Pandemic

Bijaylaxmi Mohapatra¹, Itishri Sarangi²

¹Research Scholar, ²Associate Professor, Department of Humanities, Kalinga Institute of Industrial Technology, Deemed to be University, Bhubaneswar, Odisha

Abstract

The situation emerging out of COVID-19 pandemic is not only just a health issue that has affected people but it has entrenched structural and gender inequalities and inequities in addition to the economic shock, Women as care giver, at home and communities are at the more challenging end in terms of getting attention and care across the societies, be at the rural, tribal or urban areas. degree of vulnerability has increased due to COVID-19 in every sphere be it in domestic space, labour market or access to health care. Worse situation is the provision of sexual- and reproductive-health services where women face innumerable challenges to address them. (Linde & Gonzalez,2020). Further, rising environmental pollution has further worsened the health situation, particularly in case of sexual and reproductive health for women and girls. This paper explores how women's health is affected by Air pollution during COVID-19 situations. The paper discusses how women's health in general and particularly, sexual reproductive health is affected by COVID-19 and environmental pollution, particularly, Air pollution.

Keywords: COVID-19, Environment, Pollution, Women, Sexual and Reproductive Health

Introduction

The situation emerging out of COVID-19 pandemic is not only just a health issue that has affected people but "it has also profoundly impacted economy worldwide, socio-cultural compatibility, political academic atmosphere, and moreover people's living standards particularly in developing and underdeveloped countries" [1]. The COVID-19 was declared as global pandemic by the World Health Organization on March 11, 2020. The first confirmed case of COVID-19 in India was on January 30, 2020. Since then, there has been a consistent increase in the number of cases within the country. "As on 1st April, 2021, the highest number of active cases of COVID-19 were found in Maharashtra, followed by Kerala, Karnataka, Andhra Pradesh, Tamilnadu and Delhi".[2]

Before the COVID-19 situation, the world has experienced severe health crisis such as the Spanish

Flu of 1918, outbreak of HIV/AIDS, MERS (Middle East Respiratory Syndrome), SARS (Severe Acute Respiratory Syndrome) and Ebola. "India has also witnessed and dealt with diseases such as the small pox, polio and plague. All of these individually have also affected the economy and loss to humanity in some way" [3,4,]. However, the Covid-19 which was found for the first time in China in December 2019 and rapidly spread to almost all countries of the world and turned out to the worst biggest health crisis in the history. It has also caused a great damage to world economy. "It has had devastative effects on various section of society such as the poor, socially marginalised groups, people those who are working in the informal sectors and those employed in contact-intensive sectors." [5] Further, rising environmental pollution has further worsened the health situation

For girls and women, degree of vulnerability has increased as a result of COVID-19 pandemic in every

sphere be it in domestic sphere, labour market or access to health care. Worse situation is the provision of sexualand reproductive-health services where women face innumerable challenges to address them on, particularly in case of sexual and reproductive health for women and girls. This paper explores how women's health is affected by Air pollution during COVID-19 situations. The paper discusses impact of air pollution on reproductive health and health of women in general in different locations both in rural and urban areas.

Objectives

The study aims:

- To understand the Social, Economic and health Impact of COVID-19 and Environmental Pollution at national and international level
- To explore the issues of issues of Sexual and Reproductive health Rights of women being affected by COVID-19 Pandemic and Environmental pollution
- To suggest mechanism, need to be provided to women to address issues of sexual and reproductive health.

Research Questions:

- 1. What was the Social, Economic and health Impact of COVID-19 and Environmental Pollution at national and international level
- 2. How are sexual and reproductive health Rights of women affected by COVID-19 Pandemic and Environmental pollution?
- 3. What kind of solution be provided to address the sexual and reproductive health issues of women.

Methodology

This study is based on non-empirical method. For the purpose of the research, secondary data such as books, articles, newspapers and various reports of national and international agencies such as ILO, UNFPA, UN Women and UN were referred and analyzed

Social, Economic and health Impact of COVID-19 and Environmental Pollution

"COVID-19" is also likely to set back human capital development".[6]. The spells of unemployment which is currently in a longer mode will depress workers from the left-out labour force, that could noticeably erode skills and lead to more job losses. "In earlier crises of economy, susceptible groups confronted with complex rates of school dropout and compacted skills development, which amplified income differences."[7] As per the estimation of International Labour organization (ILO), full or partial lockdown measures has affected almost 2.7 billion workers, constituting around 81% of the world's total workforce.

In India, where the economy was already deteriorated before the pandemic by stress in non-bank financial corporations, has pushed as many as 75 million people into the ranks of the poor (those who earn \$2 or less a day) as per the estimation by the Pew Research Centre. Similarly, the numbers of India's middle class (Those who earns income of \$10.01-\$20 per day) are projected to have shrunk by 32 million to about 66 million. The level of poverty may increase as there are other risks involved such as financial distress due to an abrupt shrinking of financing conditions or corporate bankruptcies, extreme weather and climate change, and further a possibility of worsening of policy- and securityrelated uncertainty.

The impacts are not just economic. The loss of earnings and livelihoods has higher chances of hampering women's access to sexual and reproductive health as they are not able to spend the money on their health aspects. There were also rising cases of Violence against women as widespread stay-at home orders compel women to stay for a long time at one place with their abusers and often with disastrous consequences. Further, the burden of unpaid care and domestic work also exacerbated the situation for women and girls during Covid outbreak. Women and girls those who are in the vicious circle of institutionalized poverty, domestic violence and other forms of discrimination

are particularly at high risk. "Their probability of being affected by COVID-19 transmission and fatalities are higher and are most exposed to more adverse situation such as loss of job and livelihood." [8]

Women as care giver, at home and communities are at the more challenging end in terms of getting attention and care across the societies, be at the rural, tribal or urban areas. Further, School closures during COVID situation have put additional stress and demand on women and girls. As formal and informal provision of childcare were on decline, the demand for unpaid childcare and education was falling more heavily on women. This has further constrained their ability to work, particularly during the situation when it is difficult to carry out jobs remotely.

The lack of childcare support during covid-19 has not only costs economic loss but it also caused poor physical and mental health for women. A recent study done on young people in three Indian states of Uttar Pradesh, Rajasthan and Bihar by Population Foundation of India points out that "51% female adolescents experienced an increase in workload as a result of the nationwide lockdown due to COVID-19, against 23% male adolescents. In Uttar Pradesh, 96% females experienced an increase in workload was experienced by 96 percent female and out of them 67% are below 18 years of age".[9]

Environmental pollution particularly air pollution has been a major contributor to ill-health. As per The State of Global Air (SoGA) 2020 report, long-term exposure to outdoor and household air pollution has caused to over 16.7 lakh annual deaths across age groups in India. With Covid-19 situation, the health challenges become very acute. Although there is not enough study to substantiate the link between long-term exposure to air pollution and COVID-19 outcomes, a recent study done to find out "the link between air pollution and COVID-19 outcomes done in the united states reveals that someone who lives for decades in a county with high levels of fine particulate pollution(PM_{2.5}) is 8%* more likely to die from COVID-19 than someone who lives in a region that

has just one unit (one microgram per cubic meter) less of such pollution."[10] Another study done also reveals that "around 15% deaths worldwide happened due to exposure to air pollution for a long period of time. While in Europe, the proportion of COVID death happening due to exposure to air pollution for along period of time was about 19%, proportion of death in North America was 17%, and it was about 27% in East Asia." [11]

Most fine particulate matter that cause air pollution comes from sources such as fuel combustion, like automobiles, refineries and power plants and also from some indoor sources like tobacco smoke. Breathing in such microscopic pollutants inflames and damages the lining of the lungs over time, weakening the body's ability to fend off respiratory infections. While exposure to such fine particulate matter have caused heightened risk for lung cancer, heart attacks, strokes and even premature death for people, it has really put life at more risk during COVID-19 periods.

Environmental Pollution and issues of Women's Sexual and Reproductive health Rights during COVID-19

The COVID-19 pandemic has potentially disastrous direct and indirect impacts on the health of women and girls around the world. As COVID-19 demands health care and caution at every level, it is less likely that women will have adequate access to sexual and reproductive health services and rights. This will lead to sharp rises in maternal and neonatal mortality. "During such times, some sexual and reproductive health services, such as contraception and safe abortion care, are also often considered as non-essential or even illegitimate. These services are deprioritized considering that as it is not urgent."[12] In this regard, "The WHO has strictly noted such restrictions on access to services are a violation of human rights." [13] This has provided rights-based interim operational guidance on how States should maintain essential services in the context of the pandemic, including sexual and reproductive health services

One important lesson from the "West Africa Ebola outbreak of 2014-2016 is that the major threat to women's lives was not the Ebola virus itself, rather the closure of routine health services and people's fear that going to health centers/hospitals where their chance of being infected could be higher. Death of thousands more women happened as safe delivery, neonatal, and family planning services became inaccessible due to the Ebola outbreak. Now, the same dynamics are being faced by women on a much larger scale and more affected are aspiring mothers."[14,15,16]

"A study by United Nations Population Fund (UNFPA) held in April 2020 suggests that as result of COVID-19 Pandemic, 47 million women in 114 low- and middle-income countries would not be able to access the facilities of modern contraceptives and 7 million unintended pregnancies would have occur if the lockdown or related disruptions continues for the period of six months. The study further points out that for every three months the lockdown continues, up to an additional two million women would be unable to access modern contraceptives ." [17]

Another study conducted by UNFPA and Avenir Health done in 115 low- and middle-income countries in January 2021 estimated that as many as "1.4 million unintended pregnancies may have occurred lasting an average of 3.6 months as a result of COVID-19. At the higher end of projections, it could be as high as 2.7 million and on the other hand, it could be as low as 500,000 at the lower end of projections. "[18]A detailed study done by The Foundation for Reproductive Health Services India, in May, 2020 suggests that in likely cases, the disruption caused from lockdowns could leave up to 25.63 million couples in Indian will be unable to access contraceptives. In addition, "COVID-19 is also going to result in 2.38 million unintended pregnancies and 1.45 million abortions."[19]

With environmental pollution, particularly air pollution, the risk is higher for women, particularly pregnant women. "Air pollution has largely impacted the lives of women too particularly when it comes to

pregnancy and infant mortality. Bad air quality impacts the intrauterine growth retardation (IUGR) in the first month of gestation which leads to many challenges, including premature birth or major health complication or deaths in new born babies. Mothers' exposure to airborne pollutants during pregnancy has much adverse effects as babies may either be born prematurely or with a lower weight. If a woman during pregnancy is exposed to air pollution, there is a chance of both women and new born to be affected to respiratory disorders like Chronic Obstructive Pulmonary Disease (COPD), asthma, chronic bronchitis, cancer".[20]

The pregnant women being in the environment affected by toxic air are at the disadvantage as there are higher chances of some amount of damage occurring to the baby being nurtured in their uterus. When the new born baby comes out after delivery and breathes for the first time, if the air quality level PM 2.5 which is close to 500-600 [AQI] – equal to about 30 cigarettes of smoke in terms of damage – the new born baby becomes a smoker from the first breath. It is going to have sever health impact on the new born baby. When tiny particles enter the foetal side of the placenta, it impacts the development of the unborn baby. This increases the high risk of infant mortality. With COVID-19 pandemic, the situation has become much worrisome for the women.

As per The State of Global Air 2020 published by Health Effects Institute (HEI) in the year 2020, 21 percent of all neonatal deaths in India has happened due to air pollution. 116,000 infants die in India in the first month alone, due to the impact of air pollution on newborns. The report further states that half of these infant deaths were caused by outdoor air pollution. "Various south Asian nations like India, Bangladesh, Pakistan and Nepal were among the top 10 countries contributing highest PM 2.5 levels in 2019 and thus, affected the life of infants. Among these countries, the level of air pollutants in India was dangerously higher in 2019. The annual average concentration of outdoor air pollutant was measured at 83.2 micrograms per cubic meter in India which was eight times higher than the World Health Organization's air quality guideline of 10 µg/m. This is being recorded highest in the world, which puts higher risk for women and children." [21]

During November, 2019, World Health Organization reported that out of the world's 15 most polluted cities, 14 cities are in India. "During winter season every year, smoke generated through farmers' fires along with industrial and vehicle emissions turn towns and cities located in northern India into smogblanketed hellholes, which heavily pollutes the air. As air get devastatingly polluted, this becomes challenging both for pregnant mothers and new born kids. New born infants breathe the noxious air twice as fast as adults as they have the smaller lungs and this causes respiratory problems and even impairing brain development."[22] With COVID-19, the pregnant women are in doubly disadvantaged position struggling with both health challenges from environmental pollution and COVID-19 pandemic.

The COVID-19 has also put disastrous impact on the couples experiencing infertility and undergoing fertility treatment to have their babies. However, due to COVID-19, fertility treatment of these couples either postponed or cancelled. "While Women experiencing infertility are already affected with a disproportionate share of the psychological burden and consistently reporting anxiety, lower self-esteem, more depression and lower life satisfaction." [23,24] The situations arising out of COVID-19 has disastrously affected the women's health. These fertility treatment postponement or suspension has considerable effect on mental health and quality of life of women.

In India, COVID-19 has posed challenging situation for 3 million infertile couples in India seeking fertility treatment. "As per the data analysis done in 1100 IVF centers across India from April to June, almost 90% drop was observed in number of clienteles undergoing IVF cycles." [25] It is not only due to the decision of government or health centers arising out of COVID-19 but also due to the lack of public transport and communication, travel restriction and also due to the concern that COVID-19 may affect pregnancy.

Although there are rare studies in India depicting the impact of COVID-19 done on fertility treatment and overall quality of life of women, a study conducted on "92 women from United States and Canada, the aged between 20–45 years whose fertility treatments had been cancelled revealed that majority of them (52%) endorsed clinical levels of depressive symptoms." [²⁶] This also causes various social and emotional problems terms of adjustment between couples and in the family.

Conclusion and Future Recommendations

It is important that Sexual and Reproductive Health services and rights be considered as a significant public health issue during pandemic and it should be a priority call for the nations to address this issue with care and attention. Women particularly aspiring mothers and their new born babies may be more likely to require specialist care and attention. This is particularly true for women who are located in urban areas where the cases of air pollution are widespread and therefore, more precautions are to be taken for them. It is also important to note that there are high chances of the increased stress and anxiety may be experienced by pregnant women and their partners, and families. Therefore, it is important that healthcare providers have to play a crucial role in to deal with pregnant women with proper attention and care and compassionate manner.

Provision of uninterrupted abortion and contraceptive counselling, devices and care services are vital to protect and safeguard the reproductive rights of women. Efforts must be made to continue the services through various measures such as telemedicine including those on telemedicine medication abortion, and extending digital access, ensuring continued coverage of birth control methods and detailed counseling and resolving drug supply chain disruptions etc.

More importantly, there is need to strengthen operational strategies and actions to protect Sexual and Reproductive Health and rights of women, young people, and marginalised populations during the epidemic. There should be concerted effort not only from the scientists and physicians, but also policy-

makers, community-based organizations, and national and international agencies, need to work tandem with each other to deal with such a human rights issues as this are integral to well-being of women and also the larger benefit of society and nation.

Conflict of Interest: Nil. Funding: No funding received. Ethical Clearance: No ethical clearance needed

References

- UN Women From Insights to Action: Gender Equality in the Wake of COVI-19. 2020 Available at: https://www.unwomen.org/-/media/headquarters/ attachments/sections/library/publications/2020/ gender-equality-in-the-wake-of-covid-19-en. pdf?la=enAccessed on 03.04.2021]
- MoHFW. COVID-19 Statewise Status. Available at: https://www.mohfw.gov.in/ Accessed 01.04.2021
- Mills CE, Robins JM, Lipsitch M. Transmissibility of 1918 pandemic influenza. Nature. 2004 Dec;432(7019):904-6.
- WHO. Managing epidemics: key facts about major deadly diseases? Geneva. World Health Organization.2018. Available at: https://www.who. int/emergencies/diseases/managing-epidemicsinteractive.pdf [Accessed on 10.04.2021]
- Linde, A. & Gonzalez, A. The Pandemic's Gender Imperative, Project Syndicate. Available at [https:// www.project-syndicate.org/commentary/covid19pandemicgender-differences-by-ann-linde-andarancha-gonzalez-2020-05]. 2020 [Accessed on 07.04.2021]
- World Bank. Global Economic Prospects. June. 2020 Washington, DC: World Bank. Available at: https://www.worldbank.org/en/publication/globaleconomic-prospects. [Accessed on 09.04.2021].
- Shmis, T., A. Sava, J. E. N. Teixeira, and H. A. Patrinos."Response Note to COVID-19 in Europe and Central Asia: Policy and Practice Recommendations." World Bank, Washington DC.2020
- UN Women From Insights to Action: Gender Equality in the Wake of COVI-19. 2020 Available at: https://www.unwomen.org/-/media/headquarters/ attachments/sections/library/publications/2020/ gender-equality-in-the-wake-of-covid-19-en. pdf?la=enAccessed on 03.04.2021]

- Population Foundation of India. Policy Brief: The Impact of COVID-19 on Women. 2020. Available https://populationfoundation.in/wp-content/ uploads/2020/07/Policy-Brief Impact-of-COVID-19-on-Women.pdf [Accessed on 14.04.2021].
- Wu X, Nethery RC, Sabath MB, Braun D, 10. Dominici F. Air pollution and COVID-19 mortality in the United States: Strengths and limitations of an ecological regression analysis. Sci Adv. 2020 Nov;6(45):eabd4049.
- Pozzer A, Dominici F, Haines A, Witt C, Münzel T, Lelieveld J. Regional and global contributions of air pollution to risk of death from COVID-19. Cardiovascular Research. 2020 Dec 1;116(14):2247-53
- Cousins S. COVID-19 has 12. "devastating" effect on women and girls. The Lancet. 2020 Aug;396(10247):301-2.
- 13. UNFPA. Impact of COVID-19 on Family Planning: What we know one year into the pandemic. Available at: https://www.unfpa.org/sites/default/ files/resource-pdf/COVID Impact FP V5.pdf [Accessed on 12.04.2021].
- 14. McKay G, Black B, Mbambu Kahamba S, Wheeler E, Mearns S, Janvrin A. Not all that bleeds Is Ebola: how has the DRC Ebola outbreak impacted sexual and reproductive health in North-Kivu. New York (NY): The International Rescue Committee; 2019. Available at: https://www.rescue.org/report/ not-all-bleeds-ebolahow-drc-outbreak-impactsreproductive-health. [Accessed 07 April, 2021).
- 15. Smith J. Overcoming the 'tyranny of the urgent': integrating gender into disease outbreak preparedness and response. Gender & Development. 2019 May 4;27(2):355-69.
- 16. MSF. "Women Face Greater Danger during Coronavirus COVID-19 Pandemic: MSF." Médecins Sans Frontières (MSF) International, 4 Mar. 2019 Available at: www.msf.org/womenand-girls-face-greater-dangers-during-covid-19pandemic [Accessed on 07 April 2021].
- UNFPA. Impact of the COVID-19 Pandemic on Family Planning and Ending 6Gender-based Violence, Female Genital Mutilation and Child Marriage .2020. Available at: https://www.unfpa. org/sites/default/files/resource-pdf/COVID-19 impact brief for UNFPA 24 April 2020 1.pdf [Accessed on 14.04.2021]

- 18. J UNFPA. 'COVID-19: A gender lens'. 2020. Available at: https://www.unfpa.org/resources/covid-19-gender-lens. [Accessed on 16.04.2020]
- 19. FRHS. Impact of COVID 19 on India's Family Planning Program. Available at :http://www.frhsi.org.in/images/impact-of-covid-19-on-indias-family-planning-program-policy-brief.pdf [Accessed on 15.04.2020]
- Zheng T, Zhang J, Sommer K, Bassig BA, Zhang X, Braun J, et al. Effects of Environmental Exposures on Fetal and Childhood Growth Trajectories. Annals of Global Health. 2016 Jun 17;82(1):41.
- Health Effects Institute. State of Global Air 2020. Special Report. Boston, MA: Health Effects Institute.2020
- 22. NDTV. Delhi's Mothers-To-Be Fear for Their Unborn as Smog Chokes City.2019 Available at: https://www.ndtv.com/india-news/delhis-mothers-to-be-fear-for-their-unborn-as-smog-chokes-city-2130454. NDTV. [Accessed on 01.04.2021]

- 23. Bromham DR, Bryce FC, Balmer B, Wright S. Psychometric evaluation of infertile couples. (preliminary findings.). Journal of Reproductive and Infant Psychology. 1989 Oct;7(4):195-202.
- 24. Lindberg LD, Bell DL, Kantor LM. The Sexual and Reproductive Health of Adolescents and Young Adults During the COVID □19 Pandemic. Perspectives on Sexual and Reproductive Health. 2020 Jul;52(2):75-9.
- 25. Healthcare Radius. Covid-19 compromised IVF treatment access to 90% couples: Study, 2020. Available at: https://www.healthcareradius.in/clinical/26660-covid-19-compromised-ivf-treatment-access-to-90-couples-study. [Accessed on 11.04.2021].
- 26. Gordon JL, Balsom AA. The psychological impact of fertility treatment suspensions during the COVID-19 pandemic. PLoS ONE. 2020 Sep 18;15(9):e0239253