Preface

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The COVID-19 pandemic, since its beginning, is bringing in new challenges for medical personnel as well as the general public. The medical fraternity is struggling to complete the disease's natural history and further prevention, control, and treatment of COVID-19. The general population is mainly confused and anxious because of the rising figures of deaths and infected people. Globally, with over 7.28 lakh deaths and 1.97 crore infected persons over seven months, there is still a lot to be discovered about COVID-19.[1]

This pandemic has opened up multiple issues to be dealt with simultaneously in hospitals and communities. The doctors are overwhelmed with the management of patients in hospitals; prevention and control in the community also seem daunting. In this pandemic, stress and anxiety is the prevailing emotion among the healthcare providers and the general population. A particular section of the community, comprising people with comorbidities, elderly, and males, are more vulnerable to the COVID-19 infection. The efforts are focused on decreasing mortality in this high-risk population infected with COVID-19.[2] However, in this entire play of events, women need to be acknowledged as important members of our families and communities battling with the disease, either as a frontline healthcare provider or as a caregiver at home. While executing their duties in multiple roles, various hardships are being faced by them, adversely affecting their health.[3]

Multiple guidelines by different health bodies in India and outside are available for the management of these COVID-19 patients.[4,5] Even though gynecological and obstetric societies formulated guidelines, but women-specific diseases, which are frequent in nature, were not addressed separately. The physiological events and pathological comorbidities pose problems to women during this pandemic, especially because of health services being overburdened. There is difficulty in providing regular health services to pregnant women and those seeking contraceptive services. Women are also weighed down due to a stressful home environment, resulting from lockdowns and work from home options. Therefore, physicians must be aware of these common prevalent problems affecting women's health during the COVID-19 crisis. This knowledge will help them further identify the underlying stress, thus improving the treatment outcome. The articles cover various topics that draw attention to and can help frame guidelines for the management of women-centric issues that have arisen due to the pandemic, which none in the present generation have experienced.

However, epidemiological data worldwide demonstrated more mortality in males than females, with an exception in the form of an Indian study (which was discussed in a review article titled " Evolving methods of COVID-19 testing–from individual testing to mass surveillance " in this issue). There are biological and behavioral/sociocultural explanations for this.

On the biological side, women have better innate and adaptive immunity. So, vaccination produces a very good antibody response in females. Even the clearance of the virus or other pathogens is faster in females. These differences may be due to the X chromosome on which the genes for immune function are present. Also, immune modulation is dependent on sex hormones. The immunomodulatory function of estrogen and progesterone brings down the inflammation more than male hormones. Also, the immune-response pathways are different in males and females. However, we do not understand enough about these mechanisms to apply them to COVID-19.

In terms of behavioral factors like hand hygiene maintenance, differences exist between men and women. In general, handwashing practices are not proper in males along with high-smoking rates which were reported before.[6] Even though cardiovascular diseases (CVD) are more frequent in males, females are more susceptible to stress, anxiety, depression, and posttraumatic stress disorder than men.[7]

There is literature that states that there is a gender difference in the predilection of infection by the SARS-CoV.[8] In experimental mice, when the SARS-CoV was injected, the male mice had a more viral load and increased inflammatory markers along

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with more alveolar edema than female mice. After oophorectomy to female mice or after giving estrogen receptor antagonist, the above-mentioned protective function against the SARS-CoV was lost.

Besides, women face unique issues when it comes to drug use. Drug usage practices are also different in women than in men. Women use drugs in small quantities and for a shorter time than indicated. So, relapses after treatment are frequent in females.[9] Therefore, gender-specific drug-drug reactions need to be addressed.

The COVID-19 infection is also challenging physicians in terms of atypical presentations and complicating already existing chronic diseases. Similarly, in different medical specialties, there is a gender difference in presentation, predisposition, and prognosis. Therefore, there is a need to prepare guidelines for the management of such cases.

This special edition of IJCDW is an attempt to issue a scientific statement on working guidelines and recommendations for the female population in the COVID-19 pandemic. We are not only overwhelmed by the enthusiasm and promptness shown by all to contribute but also grateful to all reviewers for their comments, which have helped improve the original submissions.

We dedicate this special issue to all patients who lost their lives to COVID-19, and to all the caregivers who have worked tirelessly since the beginning of this pandemic.

Conflicts of Interest

None declared

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