

# Stress Pregnancy, Covid-19 And A Solve: Telehealth

Rafailia Skoura<sup>1</sup>, Evangelia Michail Michailidou<sup>7</sup>, Panagiotis Eskitzis<sup>2</sup>, Ioannis Kalogiannidis<sup>3</sup>, Angelos Daniilidis<sup>4</sup>, Eirini Orovou<sup>5</sup> & Kyriaki Paulidou<sup>6</sup>

I.ICU Director at General Hospital of Agrinio
Professor at the University of Western Macedonia, Department of Obstetrics
Professor at 3rd Obstetrics-Gynecology Clinic of Aristotelio University of Thessaloniki
Professor at 2rd Obstetrics-Gynecology Clinic of Aristotelio University of Thessaloniki
Ph.D at the University of Western Macedonia, Department of Obstetrics
Student at the University of Western Macedonia, Department of Obstetrics
ICU Director at General Hospital of Agrinio

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ABSTRACT

Considering the data of the last 2 years, we find that stress and depression have increased dramatically. More specifically, during the pregnancy we saw that the percentages are constantly on the rise. There are many reasons for stress, loneliness, and depression during pregnancy. Concerns about their lives, but also about their newborn are included in them and many others, which are listed below.

Telehealth and constant contact with the patient helped in this important problem, reassuring her, and supervising her quite often through a camera. Furthermore, they were protected from any exposure to the virus but also from constant guidance. However, there are still improvements in telehealth and its applications that we hope will take place in the future.

**<u>Key-words</u>**: COVID-19, stress, pregnancy, mental health, telehealth

#### I. INTRODUCTION

During pregnancy the woman enters a process of reshaping herself. This happens due to the hormonal changes that create additional differences in her body and her daily life. Weight gain, changes in psychology, difficulty sleeping and moving after the second trimester, and breast changes strongly affect the pregnant woman. The main situation that is observed during pregnancy, however, is the intense stress that is created in the majority of women. This is related to the anxiety and fear that arises for the unknown about the continuation of the pregnancy, as well as for childbirth and after childbirth.<sup>1</sup>

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During the COVID-19 pandemic, an increase in stress was observed during pregnancy. This is due to the unknown situations that pregnant women were forced to submit to. Fear of disease and transmission of the virus was noted as their biggest concern.<sup>2</sup> The pandemic of women's loneliness as a preventative measure, as well as the increase in domestic violence, has created additional difficulties.<sup>3</sup> Studies have shown that stress was at extremely high levels resulting in the poor outcome of many pregnancies and therefore the greatest desire for psychological support from health scientists.<sup>4</sup>

### **II. DISCUSSION**

GENERAL

Studies of COVID-19 and women during pregnancy during a pandemic found that 53% of the sample felt lonely, 43% suffered from post-traumatic stress disorder, and 31% experienced anxiety and / or depression. 86% of the women in the sample reported concern about COVID-19.<sup>2</sup> It was also noted that women who chose to give birth in the community showed less anxiety and fear as they did not perceive childbirth as a medical procedure but as a natural procedure. Note that these women were virus positive.<sup>5</sup> It was observed that the births in the community were constantly increasing, while the births in the hospitals decreased.<sup>6</sup>

Comparing stress levels - without, mild, moderate, severe - before and during the COVID-19 pandemic in pregnant women, it was observed



that levels - without and mild - decreased while increasing at the same time - levels - moderate, severe - and substantial we end up with the most severe levels of stress.<sup>4</sup>It was also found that between mild to severe depression and mild to severe anxiety there were 7.4% suicidal tendencies.<sup>7</sup> Another problem was increased insomnia in pregnant women with COVID-19 compared to those who were not COVID-19 positive.<sup>6</sup>It has undoubtedly been observed that in a period of only 50 days of quarantine, all women experienced mental health problems - pregnant and non-pregnant women - with pregnant women having more intense negative emotions.<sup>8</sup>

Regarding stress levels and the trimester of pregnancy, the peak of depression, anxiety and stress occurred during the third trimester and was most likely due to the fear of COVID-19 disease while the pregnant woman was in the hospital. In Canada, the rates of depression, anxiety and stress were higher during the second wave of the virus because there was a higher rate of outbreak, and the restrictions were greater. Also, the production of vaccines did not exist yet, so the fear of pregnant women was maximized. During the 3rd wave, the rates of anxiety, depression and stress decreased.<sup>9</sup>

Results of a study in which experts compared the psychology of black and white women showed that black women were more likely to be depressed during pregnancy during a COVID-19 pandemic than white women.<sup>10</sup> It should also be noted that women who lived in a rural area and not in an urban one during pregnancy had severe depression.<sup>9</sup>

A positive result within the duration of the pandemic was that the rate of depression in breastfeeding women was significantly lower than in women during pregnancy.<sup>11</sup> On the other hand, women during pregnancy and childbirth who experienced intense stress had a more relaxed bond with their newborn and therefore experienced breastfeeding problems resulting in not easily finding a natural way to lower the level of anxiety, stress or depression.<sup>12</sup>

## WHY ARE PREGNANCY WOMEN WORRIED

Looking for reasons that attributed the increased rates of anxiety, stress, depression and fear during pregnancy and childbirth, we identified in various studies that were carried out several causes. These include a lack of support during pregnancy, the inability to visit after childbirth, concerns about the virus being or may be positive for the newborn, and changes in birth planning due to COVID-19. The most important are those concerning children and the interruption of medical appointments.<sup>2</sup>

In other cases, financial problems, isolation, relationship difficulties, and the virus as a challenge in general were the most serious reasons for mental health problems.<sup>13</sup> A study of black women showed that stress was attributed to work, that is not to become unemployed, in prenatal care, as well as in the process and needs of childbirth and after childbirth.<sup>10</sup>

Risk factors that were also implicated in poor mental health were smoking, unplanned pregnancy, occupational status, mental illness, and chronic postpartum physical illness<sup>11</sup>. Anxiety was also observed about the existence of conflicts at home between members.<sup>6</sup>

Overall, education, age, occupation, rural or urban area of residence, duration of pregnancy, any complications during pregnancy and the number of children born are factors that led to anxiety or even depression during the pandemic.<sup>7</sup>

### THE TREATMENT IS TELEHEALTH

It was expected to look for a solution to the need for distance that should exist in case of quarantine or protection and then medical followup. So, telehealth was the one that helped solve this problem to some extent. Social media and online health services have made it easier for pregnant women to keep in touch with their doctor about prenatal care. In this way there were positive results in the mental health of pregnant women.<sup>7</sup>

A survey showed that a large percentage completely cut off direct contact with doctors, while most of the other pregnant women communicated by phone with their doctor and others by video call.<sup>6</sup>

Telehealth has been used by many doctors to implement electronic services, such as virtual meetings and telephone interventions. In this way there was a rapid increase in incidents and contact with patients during the pandemic.<sup>14</sup>

At a New York medical center, telehealth systems were the mainstay of prenatal care. Their goal was to reduce the movements of pregnant women so that the virus would not be transmitted. Online visits to patients in need of additional monitoring of their pregnancies have increased in number and follow-up and counseling more closely. In addition, referrals and services made more frequently to those in the high-risk group for adverse outcomes. Such patients were women with gestational hypertension, preeclampsia and chronic hypertension, cardiovascular disease, gestational or pre-gestational diabetes, neurological diseases, a history of prematurity or fetal mortality, or even the



presence of a congenital anomaly or limited development.<sup>15</sup>

Online group meetings during the COVID-19 pandemic were identified as important for informing pregnant women and thus helped reduce anxiety, depression, and loneliness. In the programs of prenatal and perinatal control of the mental health of future mothers, but also parents in general, it seemed that even in the virtual form of meetings they were provided with help. The satisfaction received by the families who chose telehealth and its capabilities helped those in charge to continue their work in this way in the future.<sup>16</sup>

Another solution given by telehealth is to provide care to newborns and the possibility of improving a bad result. However, efforts are still needed to fully integrate telegraphy programs.<sup>17</sup> It is important that perinatal health care centers rely on empirical information to best deliver their services.<sup>8</sup>

### **III. CONCLUSION**

Although pregnancy is a period of increased stress and especially during the COVID-19 pandemic, telehealth has greatly contributed to its reduction. It also helped reduce the potential exposure of pregnant women and their companions to the virus and its effects. There are still several shortcomings in telehealth, such as the provision of free connection to broadcast applications to enable all patients to communicate via telehealth, but we hope that such problems will be rectified soon.

It is worth noting that in the future it would be reasonable to expect mobile applications that will keep their personal doctor informed. For example, applications that will detect and send an instant message to the pregnant woman's doctor when she is facing a dangerous condition or even when she has entered a state of childbirth. We can only wait to see the evolution of this phenomenon that acted during the outbreak of the COVID-19 pandemic.

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