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Questions

1. From our understanding of teratology, Can we say Corona virus is a teratogen and if No/ Yes, Justify your answer
2. What are the impact of ageing and environment in the outbreak of this novel Covid- 19.
3. Summarize the importance of Oogenesis and spermatogenesis. 4. Describe what you understand by personal hygiene and disaster; hence state their correlation if there any.

ANSWERS

1. **Tetralogy:** this is the study of abnormalities of physiological development of an embryo.

Teratogen: an agent or factor which causes malfunction in an embryo.

Human to human transmission of the Covid 19 virus has only been proven.

Pregnancy is a state of partial immune suppression which makes pregnant women more vulnerable to viral infections, and the morbidity is higher even with seasonal influenza. Therefore, the COVID- 19 epidemic may have serious consequences for pregnant women, However, there is no evidence suggesting trans placental transmission based on very limited data, as the analysis of amniotic fluid, cord blood, neonatal throat swab, and breast milk samples available from very few patients were found to be negative for SARS- COV- 2. Whether virus shedding occurs vaginally is also not known. Whether COVID- 19 increases the risk of miscarriage and stillbirth is unknown.

2. Why are the elderly more vulnerable to coronavirus?

There are both physical and social reasons. Older people don't have as strong an immune system so they are more vulnerable to infectious disease. They're also more likely to have conditions such as heart disease, lung disease, diabetes or kidney disease, which weaken their body's ability to fight infectious disease.

There's a direct correlation between mortality and age. So if you're 60 to 69, the mortality rate is at 3.6%. At 70 to 79, it's 8%. And if you're 80 or above, it's 15%. In some of the data I've seen, it's even higher, at 18%. The elderly are more likely to get acute respiratory distress syndrome, the acute lung injury that is causing many of the deaths. But it seems the virus is also more likely to affect the heart than any similar viruses, so they're actually seeing people dying from heart attacks who have COVID-19. A dialysis center in Wuhan had a number of patients die from coronavirus without any pneumonia, so it just stresses the body in general. It doesn't have to be the pneumonia that kills them.

In many countries, they are more likely to be in institutionalized settings like a nursing or retirement home, or living with family in a more crowded situation where there's a greater risk of infection.

The elderly might also have isolation or mobility challenges. So because they're isolated, they can't get information about what to do, or they're not able to get food they need if stores are out of stock and things become more difficult. In many societies, seniors are more likely to live in poverty, which makes it more difficult for them to get the things they need and to take care of themselves. Poverty presents a whole range of challenges pertaining to health.

What impact is COVID-19 having on our environment?

The presence of the virus has caused so many lives and fear amongst humans, for the fact that a vaccine has not been found yet increases this fear daily, preventive measures are been taken to reduce the risk of contracting the virus, the measures include

1. Usage of face mask
2. Practicing social distance
3. Staying at home
4. Washing of hands frequently
5. Usage of alcohol based and sanitizers.
 - The virus has caused great depreciation of the worlds economy
 - The temporary restraint of air and car travel could lead to cleaner air.
 - The quarantine time could lead to more use of single-use plastics, which could find a their way into our bodies of water
 - A benefit of limiting travel is a way we will spend some time rethinking how we use energy
 - "You hear about people seeing animals in different places that they don't expect to see them and well, yes, because when people aren't around, animals show up," said Jon Bossenbroek, Ph.D. Bossenbroek teaches ecology at the University of Toledo.
 - "Air pollution makes people sick and kills people. We know that, it kills many people across the country and across the world," said Dr. Kurt Rhoads, an assistant engineering professor at Case Western Reserve University. He says fewer planes in the air and cars on the road could cleanse the air

3. Oogenesis and spermatogenesis.

Significance of Spermatogenesis: produces mature male gametes, commonly called sperm but more specifically known as spermatozoa, which are able to fertilize the counterpart female gamete, the oocyte, during conception to produce a single-celled individual.

Significance of Oogenesis: It helps to retain sufficient amount of cytoplasm in the ovum which is essential for the development of early embryo. Formation of polar bodies maintains half number of chromosomes in the ovum. During meiosis first crossing over takes place which brings about variation.

4. Personal hygiene and Disaster

Hygiene is a series of practices performed to preserve health. According to the World Health Organization, "Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases." Personal hygiene refers to maintaining the body's cleanliness

Good basic personal hygiene and hand washing are critical to help prevent the spread of illness and disease. Hygiene is especially important in an emergency such as a pandemic, flood, hurricane, or earthquake, but finding clean, safe running water can sometimes be difficult.

Communicable disease after disaster

Disaster is known as a sudden or a natural catastrophe that causes great damage or loss of life. The major causes of communicable disease in disasters can be categorized into four areas: Infections due to contaminated food and water, respiratory infections, vector and insect borne diseases, and infections due to wounds and injuries. The most common causes of morbidity and mortality in this situation are diarrheal disease and acute respiratory infections.