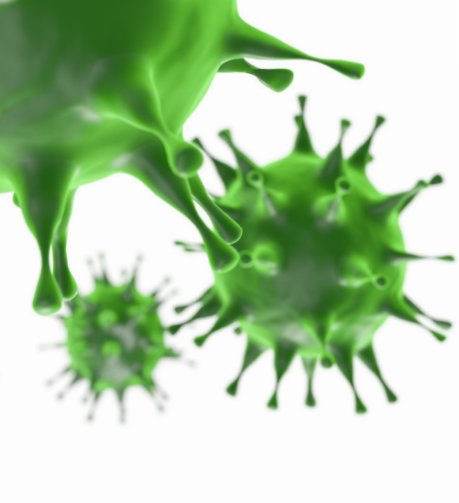

مستشفى الملك فيصل التخصصي ومركز الأبحاث
King Faisal Specialist Hospital & Research Centre
Gen. Org. مؤسسة عامة

For Better Health Series (3)
Chronic Diseases and Immunity

Hussein Raef, MD
Consultant Endocrinologist

In a previous discussion, I mentioned that chronic diseases negatively affect the immunity. These common diseases are a defect that affects an organ or function or more in the body and lasts for a long period, or possibly for lifetime. Thus, diabetes, arterial hypertension, congestive heart failure, chronic kidney failure, inflammatory bowel diseases, asthma, and obstructive lung diseases are all chronic diseases.

These diseases affect the immunity in a variety of ways, which depends on a percise and complex balance between many immune cells and other body functions. This may be due to an increase of certain substances such as cytokines that adversely or directly affect the immune cells, for example by increase in blood sugar, chronic hypoxia and high blood urea and other effects.

It is well known for physicians and many patients that diabetic and chronic kidney failure patients as well as patients with chronic asthma and lung disease, have increased exposure to repeated bacterial infections. These patients are more likely to be infected with the COVID- 19 virus, as well as for its complications, and unfortunately the deaths resulting from it as global statistics show so far.

Can We Change This Image by Improving the Stability of Chronic Diseases?
There is no doubt that information about the coronavirus disease is still limited to give a satisfactory answer to this question, but the experience and medical information indicate that controlling these chronic diseases as much as possible and thus the return of body physiology to what is closer to normal stability will often lead to improved body resistance in addition to all positive health benefits from reducing complications and improving the quality of life and often improving the average life . For instance, long-term control of blood sugar and its significant positive results in reducing diabetic vascular complications and also reduces the possibility of septic infections, such as in well-treated pulmonary diseases, especially when they use lower doses of cortisone or stop it, as well as congestive heart patients when treated appropriately and their health improves, the proportion of septic infections will be less frequent and less severe.

How to Control Chronic Diseases?
We cannot give this topic its right as there are many chronic diseases that with that differ from one another whether as a lifestyle from a diet and others or as a drug treatment. What I hope for my colleagues and specialists to address the importance of these diseases for future interventions and to put some general advice in dealing with them individually. What I can mention in this regard are general guidelines for my brothers and sisters who suffer from some of these diseases and in this particular period to motivate them to take care of controlling these diseases as possible not only to improve resistance to infectious diseases, but more importantly to improve the quality of life and reduce complications in the long term, and that is what I suggest:
1- Keep communicating with the supervising physician and the specialist to ensure good quality treatment and results
2- Follow the appropriate diet for each case, such as reducing starches and sugars intake for diabetic patients, reducing salt for heart patients, and others
3- Take the medications as prescribed for dose and time and ensure the presence of adequate amount of medications
4- Monitor the results of treatment regularly, such as monitoring weight, blood sugar, arterial pressure, lung function, etc. according to each case
5- Diet that helps strengthen immunity if it does not conflict with the prescribed treatment, and we will discuss this in close participation, God willing, as well as the permitted physical exercises for each case.