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Exercise Recommendations for Patients from Primary Care Physicians in the Setting of the COVID-19 Pandemic

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INTRODUCTION

The Coronavirus Disease 2019 (COVID-19) pandemic has resulted in an unprecedented global “lockdown,” which has confined millions to mandatory isolation or self-quarantining in an effort to limit virus transmission. This has led to major socioeconomic disruptions, including travel restrictions and the closure of schools and businesses. Quarantine measures and the closure of gymnasiums, public pools, and exercise facilities have disrupted the exercise/physical activity (EPA) routines of millions of people. Primary care physicians (PCPs) serve as frontline health workers as patients continue to visit them for COVID-19 and non-COVID-19 healthcare needs. Because regular EPA has proven health benefits, it is essential that PCPs are prepared to adequately counsel and offer EPA recommendations to their patients during the COVID-19 pandemic.

In 2015, the World Health Organization (WHO) recommended that adults aged 18-64 should perform at least 150 minutes/week of moderate-intensity aerobic activity or 75 minutes/week of vigorous-intensity aerobic activity.¹ EPA has been shown to have wide-ranging positive effects on physical and mental health. Regular EPA is associated with decreased rates of major chronic diseases, such as hypertension, diabetes, and coronary heart disease². Regular EPA also has been shown to have favorable effects on immune function³ and mental health.⁴ More recently, it also has been suggested that regular EPA can reduce the risk of acute respiratory distress syndrome, a leading cause of mortality in COVID-19 patients.⁵ Given the many potential health benefits of regular EPA, PCPs should counsel their patients about regular EPA and recommend it to them during the COVID-19 pandemic.

The fluid nature of the evolving COVID-19 outbreak has resulted in unique quarantine and social distancing guidelines in different countries, states, and locales. In consideration of the EPA recommendations from the American College of Sports Medicine⁶ and the WHO¹, and in consideration of the ongoing need for some albeit varying quarantine and social distancing guidelines, we propose PCPs offer their patients the following EPA counseling and recommendations during the COVID-19 pandemic.

OBJECTIVES

Formulate 10 recommendations for safe EPA during the COVID-19 Pandemic State that PCP's can suggest to patients.

METHODS

The medical literature and publish guidelines where analyzed for exercise for exercise recommendations. COVID-19 pandemic quarantine and safety guidelines were also considered. EPA recommendations where formulated.

RESULTS

EPA recommendations that PCPs should review and discuss with their adult patients, and encourage them to practice:

1. Get 7-9 hours of sleep/night⁷, in line with your unique circadian rhythm and reduce exposure to video screens and blue light-emitting devices at least 30 minutes before bed, in accordance to the National Sleep Foundation recommendations.⁸
2. Wear proper clothing for the planned EPA and for the weather and environmental conditions where it will be performed. Consider loose fitting, moister-wicking fabrics (e.g. polyester, nylon, etc.). Shower and change cloths after EPA.
3. Perform appropriate muscle stretches or other “warm-up” activities before engaging in the EPA.
4. To avoid injury, start by limiting the time and intensity of any new EPA routine (“Start low and go slow”). For example, a realistic and attainable goal might be to exercise for only 5-15 minutes a day at first. The EPA can be gradually increased to a goal of performing at least 150 minutes/week of moderate-intensity aerobic activity or 75 minutes/week of vigorous-intensity aerobic activity.
5. Follow the most basic quarantine and social distancing guidelines, wear a face mask, avoid close contact with others (e.g., maintain at least 6 feet of physical separation), and perform the EPA outdoors, if possible.
6. If planning to use an indoor exercise facility, schedule the EPA at off-peak times and utilize specific time slots. Clean all exercise equipment before and after each use with appropriate cleaning and disinfecting materials. Avoid “high fives” and other forms of physical contact.
7. Performing EPA with household members poses no significant health risks; however, children should avoid contact with children from other households. In addition, children should be educated about COVID-19 and how to stay safe and avoid disease transmission using age-appropriate language.
8. YouTube, other online websites, and many mobile applications (apps) offer free and easily accessible EPA routines. Many other EPAs can be safely and easily performed at home (e.g., jumping rope, dancing, climbing stairs, yoga, Pilates, running in place, etc.). In addition, where available, EPA can be performed on home exercise equipment (such as on a treadmill or exercise bike) or in a swimming pool. In resource limited settings, weight training can be performed with inexpensive and readily available items such as water-filled bottles or food cans.
9. Regular EPA and recovery days can be scheduled with family and friends. This can promote accountability and encourage participation for all. Multiple online platforms are available to schedule remote or virtual interaction, including Facebook Live, Zoom, FaceTime, Skype, etc.
10. Activities such as housework and yardwork that easily satisfy weekly EPA recommendations can be encouraged.

CONCLUSION

All patients should be encouraged to establish and maintain safe PA practices during the COVID-19 pandemic. Ultimately, the primary goals of regular EPA are to promote improvements in physical and mental health and to prevent chronic illness. By restricting physical activity and reducing physical contact and social interactions, the negative effects of quarantine can include increased boredom, frustration, and isolation.⁹ Encouraging regular EPA among household family members and friends could help to combat these detrimental psychosocial impacts of quarantine.

Despite the challenges it has brought, the COVID-19 pandemic can be viewed as an opportunity for PCPs to counsel their patients and to encourage them to pursue healthy lifestyles that include regular EPA. With its potential to improve physical and mental health, EPA can serve as a vital element in the struggle against COVID-19, regardless of the length of quarantine and the potential for multiple disease “waves”. In addition, as we emerge from the pandemic, PCPs should continue to encourage patients to pursue regular EPA routines. To continue providing the best possible care to all patients, PCPs should closely monitor the pandemic, including the latest quarantine and social distancing recommendations and all other developments in the prevention and treatment of COVID-19.

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