

Psyche and Sport in Times of COVID-19

Psyche und Sport in Zeiten von COVID-19

The World Health Organization (WHO) emphasizes the importance of physical activity and maintenance of a healthy lifestyle in its recommendations “Coping with stress during the 2019-nCoV outbreak” (11). These recommendations are part of informational material that the WHO issued during the COVID-19 pandemic on various aspects of mental health (12).

Recommendations for dealing with mental health and for wellbeing during the COVID-19 outbreak were also published in the magazine Nature (5), and the New England Journal of Medicine has also already addressed the topic of mental health and the COVID-19 pandemic (9). In this editorial, we want to also address the importance of mental health in times of the COVID-19 pandemic, but especially to present the positive contribution of physical exercise, training and sports in this respect. Action recommendations in dealing with the burdens and risks for mental health in high-performance sports in time of COVID-19 are also presented in a subsequent fact sheet (3). Whereas at the beginning of the pandemic, increased fears and worries had to be dealt with, in later phases other burdens and aspects affecting mental health must be taken into account (5, 9, 12). Among these are the effects of quarantine on the usual activities and routines, on loneliness and depressions as well as on detrimental alcohol and substance use, self-inflicted injuries, suicidal behavior and domestic violence (9, 12). As the length of the pandemic increases, mental aspects will likely gain more and more in importance, and it can presently not be assumed that the pandemic will be over in a few weeks. Preventive measures to maintain mental health in the population must now be taken. Exercise, training and sports can make an important contribution to this. There is considerable evidence these days for exercise-therapeutic approaches in the prevention and therapy of mental diseases, for example in treatment concepts of anxiety disorders, depression, schizophrenia and substance abuse (7, 8). In our exercise-deficient society, the health-relevant “maintenance exercise dose” is increasing in importance, both from a preventive point of view and for mental health. This is more than ever valid in times in which it is recommended that people stay home. Social distancing allows people to still remain physically active and take part in individual sports either at home in quarantine or outdoors.

Confinement and Contact Limitations and their Consequences for Mental Health

Sports and physical activity are important not only for strengthening and maintaining physical health, but also for wellbeing and mental health (7, 8). According to a study performed in 2017, about 12% of depressions can be avoided if at least one hour of moderate sport is performed per week (6). People with depressive disorders die seven to eleven years earlier than healthy comparison groups, in schizophrenia even ten to twenty years earlier and not primarily due to the danger of suicide but due to chronic physical diseases which arise over the years as a result of a lack of exercise (2). The current confinement and contact bans markedly limit human social relationships, so that the risk of damage to mental health will increase as the pandemic continues. As a long-term study at Harvard University impressively demonstrated, like physical and mental health, satisfaction with life and quality of life depend essentially on the quality of social bonds (10). Especially for older people and those living alone, the contact limitations are a challenge and danger that must be combatted daily on one's own initiative.

Sport and Exercise are Effective against Stress and Mental Disorders

People who are regularly active in sports experience very directly the beneficial effect of sport on mood, tension and emotional state. This effect is the result of unspecific effect factors of movement and on sport-specific neurobiological and neuro-endocrinological changes (7). Among others, improvement of physical health and the resultant mental wellbeing are taken as unspecific effect factors. The self-efficacy experienced in being active usually conveys improved self-confidence. Depending on the type of sport, one is often forced to train and improve coping strategies and social competence. And finally, one experiences improvement in cognitive capabilities and coping with tension as profitable and pleasant. We have known for decades that regular physical activity also results in specific neurobiological and neuro-endocrinological changes (7). These direct effects on mental health have contributed greatly to increasingly better understanding of the importance of somato-emotional changes. Moderate physical training, for example, influences the secretion of glucocorticoids, like cortisol, >

EDITORIAL

ACCEPTED: May 2020

PUBLISHED ONLINE: May 2020

DOI: 10.5960/dzsm.2020.435

Claussen MC, Fröhlich S, Spörri J, Seifritz E, Markser VZ, Scherr J. Psyche and sport in times of COVID-19. Dtsch Z Sportmed. 2020; 71: E1-E2.



Dr. med. Malte C. Claussen



Prof. Dr. med. Johannes Scherr



Article incorporates the Creative Commons Attribution – Non Commercial License. <https://creativecommons.org/licenses/by-nc-sa/4.0/>



QR-Code scannen und Artikel online lesen.

KORRESPONDENZADRESSE:

Dr. med. Malte Christian Claussen
Psychiatrische Universitätsklinik Zürich,
Klinik für Psychiatrie, Psychotherapie und
Psychosomatik, Sportpsychiatrie
und -psychotherapie,
Lenggstrasse 31, 8032 Zürich, Schweiz
✉: malte.claussen@puk.zh.ch

which is elevated for example in stress and depression. This is usually experienced as positive by many people and used to reduce stress. The discovery of neuroplasticity in certain regions of the brain provided better understanding of mental and neurodegenerative diseases. Moreover, the possible effects of physical activity on neurotransmitters like serotonin or noradrenalin have already been used as an additional extension of treatment possibilities for depressive people. Sports and exercise therapy is already included in the S3 Guideline Unipolar Depression of the DGPPN with recommendation grade B as an additional treatment method (4).

Difficult Motivation and Own Initiative in Times of the Pandemic

Many people have been robbed of their accustomed exercise programs and social contacts because sport facilities have been closed. Now, one needs not only motivation but also the willpower to keep going. These are both capabilities which many people need first to develop in this unexpected emergency. This, however, can only succeed when goals are selected which are individually appropriate, positively viewed and realistically attainable. Activities should be selected that are familiar, with known effects, or which are easily mastered. The goals should especially be attainable within a defined time period. In this, it is often helpful to set short-term and long-term goals and to present their achievement with positive images. Entering the daily training program in the calendar has proven helpful, serving as both motivation and monitor. It is very important to celebrate the achieved goals daily with good and positive feelings of self-satisfaction. Positive feelings strengthen one's own activity and it is not for no reason that the word emotion is based on the Latin *movere*, or to move. Emotions move people. But how can one motivate oneself in

times of the COVID-19 pandemic and official confinement to adequate physical activity? Differentiation is usually made between intrinsic and extrinsic motivation (7). The greater one's own drive and enthusiasm for certain goals, the more one can reckon with performance and achieving the goals. In addition, extrinsic motivation (e.g. praise and reward from others) helps. For this reason, exchanging information about activities with friends and acquaintances and plans for activities together is recommended. Even though we only have limited possibility for activities together in the current situation (e.g. with adequate social distancing) or in some countries have no possibility, certain Apps or internet programs offer possibilities of comparison with friends or acquaintances.

Choosing the Type of Sport and Exercise

The types of sports in which participation is still possible are greatly limited by the current confinement regulations. Nordic walking, jogging, cycling and hiking are good outdoor activities. At home, gymnastics, stretching and training with light weights can be performed. The internet and Apps offer an increasing number of training programs using one's own body weight (so-called body-weight training). The choice of a familiar type of sport is important for motivation. Recommendations for physical training and sports in times of corona offered by Bloch, Halle and Steinacker are, of course, equally applicable to the maintenance of mental health (1). In their editorials, the authors highlight the importance of exercise, training and sports as contributing to physical performance and functional capacity in times of the COVID-19 pandemic, and emphasize that physical training is requisite to physical performance capacity and should be maintained despite all restrictions. We can only agree with this with respect to mental health as well! ■

Literatur

- (1) **BLOCH W, HALLE M, STEINACKER JM.** Sport in Zeiten von Corona. *Dtsch Z Sportmed.* 2020; 71: 83-84. doi:10.5960/dzsm.2020.432
- (2) **CHESNEY E, GOODWIN GM, FAZEL S.** Risks of all-cause and suicide mortality in mental disorders: a meta-review. *World Psychiatry.* 2014; 13: 153-160. doi:10.1002/wps.20128
- (3) **CLAUSSEN MC, FRÖHLICH S, SPÖRRI J, HASAN A, SEIFRITZ E, SCHERR J, MARKSER VZ.** Fact sheet: Sport psychiatric and psychotherapeutic aspects in competitive sports in times of the COVID 19 pandemic. *Dtsch Z Sportmed.* 2020; 71: E1-E2. doi: 10.5960/dzsm.2020.436
- (4) **DGPPN.** BÄK, KBV, AWMF. S3-Leitlinie/Nationale VersorgungsLeitlinie Unipolare Depression. Springer Verlag, Berlin. 2. Aufl. 2015.
- (5) **DICKERSON D.** Seven tips to manage your mental health and well-being during the COVID-19 outbreak. *Nature.* 2020 [Epub ahead of print]. doi:10.1038/d41586-020-00933-5
- (6) **HARVEY SB, OVERLAND S, HATCH SL, WESSELY S, MYKLETUN A, HOTOPF M.** Exercise and the Prevention of Depression: Results of the HUNT Cohort Study. *Am J Psychiatry.* 2018; 175: 28-36. doi:10.1176/appi.ajp.2017.16111223
- (7) **MARKSER VZ, BÄR K-J.** Sport- und Bewegungstherapie bei seelischen Erkrankungen. Forschungsstand und Praxisempfehlungen. Schattauer Verlag, Stuttgart. 1. Aufl. 2015.
- (8) **NGAMSRI T, CLAUSSEN MC, IMBODEN C, HEMMETER UM.** Sport als Prävention und Therapie psychischer Erkrankungen. *Ars Med.* 2020; 110: 224-228.
- (9) **PFEFFERBAUM B, NORTH CS.** Mental Health and the Covid-19 Pandemic. *N Engl J Med.* 2020 [Epub ahead of print]. doi:10.1056/NEJMp2008017
- (10) **VAILLANT GE, MUKAMAL K.** Successful aging. *Am J Psychiatry.* 2001; 158: 839-847. doi:10.1176/appi.ajp.158.6.839
- (11) **WORLD HEALTH ORGANIZATION.** Coping with stress during the 2019-nCoV outbreak; 2020. https://www.who.int/docs/default-source/coronaviruse/coping-with-stress.pdf?sfvrsn=9845bc3a_2_4th_May_2020.
- (12) **WORLD HEALTH ORGANIZATION.** Mental health and COVID-19; 2020. <https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf> [4th May 2020].