

The Recovery with Nature and Flowers, Implications for the Coronavirus Disease Pandemic

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Abstract

Connection with flowers and ornamental plants has been considered beneficial for psychological well-being since times of evolution. Despite nutrition and mutual use, human beings are an integral and essential part of nature, and there has been a logical harmony between man and nature. Since evolution, flowers have been known to be beneficial to psychological well-being in connection with nature. Ecotherapy (nature therapy) is a type of psychotherapy technique that is based on explicit environmental or ecological interventions. Social gardening and horticultural therapy and the principles of nature therapy have been integrated into other methods of psychotherapy for better effectiveness. This article tries to discuss the results of using it during the infamous coronavirus pandemic crisis.

Keywords: Horticulture; Nature; COVID-19; Flowers; Plants.

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Introduction

Human beings and nature are fundamentally different but interrelated quiddity. Man has the superior power to interfere in the natural discourse of nature. Connection with flowers and ornamental plants has been considered beneficial for psychological well-being since times of evolution (1). Technological advances, the integration of the context of global connections and communications, along with urbanization, have pushed people from more outdoor mobility into the world of TV screens, computers, and computer games, and accelerated the pace of environmental imbalances on a wide and unprecedented scale (2). These changes and advances in technology in the new age and

mechanization reduced exposure to natural environments and green spaces. On the other hand, there is evidence of an increase in the prevalence of mental disorders worldwide at the same time as urbanization (3). According to the results of research, they have shown the positive effect of human interaction with natural landscapes and have been trying to prove how contact with nature increases various aspects of well-being (4). However, it is obvious that flowers and ornamental plants have a long positive effect in the mood. Giving flowers to someone establishes an intimate relationship between the two parties. Giving flowers to the elderly creates a positive mood and improves episodic memory (memory of everyday events). Flowers lift the spirits of all people, but their effect on the elderly is enormous (5).

By receiving flowers, people experience less depression and anxiety and feel more pleasure and satisfaction in life.

The coronavirus, beginning of the devastation that the pandemic would cause to the world (6). For the most part, a pandemic and consequently a quarantine was needed, not only to recall the barbaric and unforgivable actions of human beings in destroying the ecological balance and its interaction with human beings, but also to understand how interaction with nature could calm us (7). When an individual shows coronavirus disease symptoms, quarantine can no longer be applied and that person should be in isolation (8). Along the way, we have to try to institutionalize taking care of others in our perspective and lifestyles, and through empathy, solidarity and mutual trust, we can repair and enhance our social Capital more than before (9). Creating a positive mood, enhancing experiences and a general sense of connection to life during this pandemic of coronavirus disease (COVID-19), when humans are confined to their surroundings due to health protocols and quarantine, the nature, through the re-emergence of species rarely seen, can recover a little again (10). For instance, a year after the pandemic of this infamous disease was evident, the houseplants and flowers that we see in the apartment environment, we may be fascinated by them the moment we hear the sound of a bird. All of this makes us feel better. The fact that all restrictive and quarantine measures following the corona pandemic not only have affected physical health but also have had destructive effects on mental health and well-being has been widely discussed and accepted (11). Therefore, it can be said that the reduction in social interactions, and the reduction in exposure to landscapes and green spaces and ornamental plants as well as increased loneliness are known risk factors for several mental disorders (3, 10). By standing next to flowers and plants, the focus of patients is reduced from pain and discomfort. With

the presence of flowers and plants in the room, the ability of sick people to tolerate the pain caused by the disease increases and their need for pain killers decreases (12). Therefore, measures are needed to reduce these mental health consequences during the coronavirus period. On the other hand, proper nutrition supports the physical and mental health of individuals (3). Physical interaction with plants leads to a significant reduction in the length of the treatment period (13). Connection with beauties and pleasant fragrance of most flowers make us happy, and flowers help to improve the positive mood. The reason is that they have strong positive effects on our emotional health. By standing next to flowers and plants, the focus of sick people is reduced from pain and discomfort (3, 12). Man can establish a strong sensory connection with the flowers. According to studies, just seeing and smelling flowers improves the mood of about 70 % of people who buy flowers. By receiving flowers, people experience less depression and anxiety and show more pleasure and satisfaction in life (14).

Implications of Nature Therapy, the Use of Edible Flowers as a New Approach in the Corona Crisis

Flowers and ornamental plants increase the level of positive energy and help people feel safe and calm. It is often experienced that a simple walk in the park, green space and flower garden as well as watching a plant that grows from a small seed to a flower and an ornamental plant reduce stress. This shows us that man really has a deep rooted desire to connect with the natural world and ornamental plants, the more he separates himself from new and advanced technology in his residence, the healthier he will be. Houseplants affect the emotions and feelings of people at home and increase the feeling of kindness by reducing the feeling of anxiety. Having flowers at home increases positive energy during the day (5). The term ecotherapy was first coined by Howard Clinebell (15),

and he introduced it as a kind of ecological spirituality. In other words, when man is placed in an environment where plants and natural ornamental landscapes exist, he will feel a sense of superiority in his self (10). For patients, green space has a very positive effect on their mood and recovery (12). As soon as the coronavirus (COVID-19) pandemic sweeps across the world, it is causing widespread concern, stress and fear, all of which are natural and normal reactions to the changing and uncertain situation that everyone finds themselves and has revealed the importance of another concept called ecotherapy, which dominates nature therapy refers to both recovery and growth that is nurtured by healthy interaction with the earth. Therefore, it is one of the ecosystem services that nature provides and refers to therapies that include the natural world in relation to mutual improvement and growth. Flowers and plants accelerate the recovery of the disease by stimulating a positive outlook (3, 9). According to mood assessments, communication with flowers and plants increases positive emotions and reduces stress caused by disease (16). In addition, walks in nature, parks and green spaces, as well as communication with flowers and ornamental plants reduces depression and a number of diseases following depression and physical inactivity (2). People who have flowers in their home feel happier and more relaxed. Through this positive energy, the chances of suffering from stress-induced depression are reduced (3, 10), and this positive attitude helps to place life events in a broader perspective and reduces the negative effects of negative emotions. Positive emotions such as gratitude, hope, empathy, happiness, love, pride, and peace are associated with flowers (3). Even today, some flowers have been proven to be edible. In the world, the consumption of edible flowers is constantly increasing. Edible flowers are flowers that are non-toxic and can be consumed by humans due to their additional nutritional and medicinal

properties. Edible flowers can be used as a source of phenolic compounds with bioactive potential, which can be used in the food sector (17).

Vibrant colors of edible flowers indicate the presence of beneficial compounds called plant nutrients, anthocyanins, flavonoids and antioxidants, all of which can reduce the risk of some health problems such as colds, cancer and heart disease. The presence of some vitamins and pharmaceutical nutritional substances in flowers has been found to be beneficial for the health of body and soul (3). For example, calendula which is also called marigold, contains flavonoids that help protect human cells from damage. Marigold also contains lutein and zeaxanthin, and Nastaran petals also contain lutein and zeaxanthin. Both of these compounds can help protect the human eye from age-related disorders. Violet is a source of rutin that keeps blood vessels healthy and reduces inflammation. Chrysanthemum is another food source and it is a source of antioxidant compounds. Balanced nutrition per capita with horticultural products and edible flowers strengthens the immune system, which in turn can prevent from catching the coronavirus. Therefore, consumption of edible flowers is suggested as the main ingredient in the production of some pharmaceutical nutritional products (17).

WHO takes the impact of the crisis on people's mental health very seriously(18), and for those who are quarantined, which may be in isolation at home or being alone outside the house, spending even a day can be upsetting and traumatic due to local quarantine, separation from loved ones, boredom, avoidance behavior, work performance deterioration, depression, insomnia, detachment and acute stress and the feeling of loneliness. The sense of disappointment especially among the younger generation, heralds how our societies are vulnerable in facing hazards (9), and all of these occur due to the

restrictions imposed on communities (3, 10). This has led to serious concerns for citizens in all countries, even in societies without a confirmed outbreak.

In fact, research to date has shown that reconnecting with nature through some aesthetic methods will certainly bring about positive changes in our well-being and mental health (10). Under these conditions, we can put our hands on the ground in connection with nature (ecotherapy) to feel the ground, immerse ourselves in water to recover emotionally, fill our lungs with fresh air to be mentally enlightened, raise our face to the heat of the sun, and communicate with the fire to feel the great power within us. The most common reason for buying flowers is to give a gift. Giving flowers as a gift have a lot of benefits. Men and women who give flowers as a gift are compassionate and emotional, happy, strong, capable, and brave. 65 % of people feel very special when they receive a flower. 60 % of people believe that unlike any other gift, a flower has a special meaning to them (14). Taken together, physical contact with nature improves our mental health concerns. In today's world where humanity's self-centered activities lead to environmental crises, the implication of such a technique would be a profound ecotherapy if it could be accelerated. Exposure to natural landscapes, ornamental plants, and gardens can restore human health, and according to the living and natural world, we can move towards a better tomorrow. Considering the evidence that points to the unique perspectives of nature therapy, some of its subgroups such as horticultural therapy (garden therapy), green space and flower therapy, treatment with animal exposure (hearing the sound of birdsong), natural arts and crafts, and specific naturopathy techniques that interact with semi-natural or natural areas where flowers and ornamental plants are grown that are in contact with nature, may be effective in combating psychological disturbances

during the pandemic of coronavirus disease and future crises. Houseplants increase humidity inside the house and reduce the risk of headaches (12). As mentioned earlier, physical contact with flowers and nature improves our mental health concerns, more physical interaction with plants leads to a significant reduction in the duration of COVID-19 treatment (13).

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