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Use of Integrative Treatment Methods by Individuals With COVID-19

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Original Research

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A B S T R A C T

This study was conducted to examine the use of integrative treatment methods by individuals with COVID-19 using Pender’s health promotion model. During the analysis of the themes, we observed that individuals’ decisions to start integrative treatment were affected by uncertainty related to COVID-19, desire to recover and strengthen immunity, and thinking that there would be permanent damage due to the disease. Integrative treatment methods were frequently used by individuals who had COVID-19, and these methods were primarily based on non-evidence-based information sources and not disclosed to health care professionals.

Introduction

The COVID-19 virus from the SARS-CoV-2 family was observed first in Wuhan, China, in December 2019, then rapidly spread worldwide. The World Health Organization (WHO) announced the outbreak of this new type of coronavirus disease, COVID-19, a Public Health Emergency of International Concern, in January 2020. It indicated that the risk of spreading COVID-19, which started in China, to other countries in the world was high. This prediction proved to be true. On March 11, 2020, the WHO declared COVID-19 a pandemic. COVID-19 infection, which has had worldwide effect but as yet has no definitive treatment, not only causes physiological damage also causes affect the integrity of the individual, which reveals the need to focus on a holistic approach. The holistic approach includes the concepts of physical health and disease and the individual's mental, social, economic, and cultural dimensions. As a result of this approach, integrative treatment methods have been considered. The WHO defines integrative treatments as “practices based on beliefs and experiences specific to different cultures, which are used for the prevention, improvement or treatment of physical and mental illnesses, as well as for the promotion of health.” The European Federation of Complementary and Alternative Medicine stated that these treatments are health practices to protect and improve health and prevent diseases. The use of integrative treatments has increased frequently in recent years and continues to exist alongside the medical treatment and care process in society. Especially in periods of epidemic disease, communities may think that diseases are due to religious/sacred reasons and related to the supernatural. Therefore, communities’ belief about where and why there is a disease affects the method chosen for the treatment. Recommendations of modern medicine are accepted or rejected accordingly. The main reasons for increasing interest in integrative treatments include the presence of diseases that conventional medicine cannot treat, the problems arising from treatment, and people’s sense of curiosity.

Health promotion has been defined as the individuals’ gaining the power to improve their health and increase control over their health. According to Pender’s health promotion model, individuals should be evaluated holistically, and the parts of this whole should be considered separately. In this respect, integrative treatments are compatible with the health promotion model because individuals decide to use it with their autonomy and support the holistic approach in care. Although there are studies in the literature on integrative methods used for protective purposes against the risk of COVID-19, no study was found that examined the experiences of individuals who used integrative treatment methods for COVID-19. The literature also reported a need to explore cultural aspects of this issue. Therefore, this study aimed to examine the use of integrative treatment methods by individuals undergoing COVID-19 within the framework of Pender’s health promotion model with all aspects.

Materials and Methods

This study was a qualitative phenomenological study conducted to examine the use of integrative treatment methods by individuals undergoing COVID-19 within the framework of Pender’s health promotion model.

Population and Sample of the Study

The criterion sampling method was used in the study. The sample included those diagnosed with COVID-19 and used integrative treatment methods. The sample size was determined as 12 due to the adequacy of the qualitative data obtained by the in-depth interview method.

Data Collection Tools

The authors collected data between July and October 2021. The information form included descriptive characteristics of the individuals with COVID-19, the semistructured interview form, and
the complementary therapy use form as the data collection tools. The information form consisted of 13 questions, including socio-demographic and disease-related characteristics of individuals. The complementary therapy use form consisted of 8 questions and included a tabulated question that detailed information about complementary therapies. Relevant experts evaluated the questions in the semistructured interview form. Due to pandemic measures, in-depth interviews were conducted by organizing video calls and online meetings on mobile phones. The interviews lasted for an average of 25 to 30 minutes.

The semistructured interview form consisted of the “introduction, interview questions and closing” sections. The introduction section included information about the purpose of the interview, its characteristics, and the interviewer. The interview questions consisted of open-ended questions and subquestions prepared using the literature and based on Pender’s health promotion model to determine the use of integrative treatment methods by individuals undergoing COVID-19. The closing section of the interview provides thanks to the individuals who participated.

Analysis of Data

The quantitative data in the information form were evaluated using descriptive statistical analyses (number, percentage, mean, standard deviation). The data collected with the semistructured interview forms were analyzed using the descriptive content analysis method, and raw data were converted into codes and themes.

Ethical Considerations

The study was conducted in accordance with the Declaration of Helsinki. Institutional permission was obtained from the Ministry of Health on June 17, 2021, to conduct the study, and ethics committee approval was obtained from Amasya University Social and Human Sciences ethics committee (25.06.2021-20910). The aim of the study was explained to the participants individually, and their verbal consent was obtained.

Results

Participants’ mean age was 37.3 ± 12.2, and they were diagnosed with COVID-19 an average of 8.5 ± 5.1 months earlier. Only 1 individual who participated in the study was hospitalized and stated that he received respiratory support with nasal oxygen therapy for 2 days during his 11-day stay in the hospital. Their symptoms of COVID-19 lasted for an average of 10.6 ± 7.4 days. The descriptive information of the individuals is presented in Table 1.

| Table 1 | Descriptive Characteristics |
|---------|-----------------------------|
|         | n  | %     | (X± SD) | Min | Max |
| Age     |    |       | 37.3±12.2 | 24  | 65  |
| When did you have COVID-19? (month) | -  | -     | 8.5±5.1  | 3   | 18  |
| How long did COVID-19 symptoms last? (days) | -  | -     | 10.6±7.4 | 4   | 30  |
| Gender  |    |       |         |      |     |
| Female  | 10 | 83.3  |         |      |     |
| Male    | 2  | 16.7  |         |      |     |
| Marital status | 3  | 25.0  |         |      |     |
| Single  | 3  | 25.0  |         |      |     |
| Married | 9  | 75.0  |         |      |     |
| Educational level |      |        |         |      |     |
| Primary education  | 1  | 8.3   |         |      |     |
| High school       | 3  | 25.0  |         |      |     |
| Associate degree  | 2  | 16.7  |         |      |     |
| Licence           | 3  | 25.0  |         |      |     |
| Postgraduate      | 3  | 25.0  |         |      |     |
| Working status    |      |        |         |      |     |
| Housewife         | 2  | 16.7  |         |      |     |
| Government official | 5  | 41.7  |         |      |     |
| Employee          | 4  | 13.3  |         |      |     |
| Retired           | 1  | 8.3   |         |      |     |
| Income status     |      |        |         |      |     |
| Medium            | 4  | 33.3  |         |      |     |
| Well              | 8  | 66.7  |         |      |     |
| Family structures |      |        |         |      |     |
| Nuclear           | 10 | 83.3  |         |      |     |
| Extended          | 2  | 16.7  |         |      |     |
| Chronic disease   |      |        |         |      |     |
| Yes               | 5  | 41.7  |         |      |     |
| No                | 7  | 58.3  |         |      |     |
| Type of disease   |      |        |         |      |     |
| Arrhythmia        | 1  | 20.0  |         |      |     |
| Hyper/Hypothyroid | 2  | 40.0  |         |      |     |
| Asthma            | 2  | 40.0  |         |      |     |
| Hospitalization   |      |        |         |      |     |
| Yes               | 1  | 8.3   |         |      |     |
| No                | 11 | 91.7  |         |      |     |
| Uninterrupted treatment |     |        |         |      |     |
| Yes               | 8  | 66.7  |         |      |     |
| No                | 4  | 33.3  |         |      |     |
| Respiratory support |   |        |         |      |     |
| Yes               | 1  | 8.3   |         |      |     |
| No                | 11 | 91.7  |         |      |     |

X: Mean SD: Standard Deviation
All individuals reported using an integrative treatment method before contracting COVID-19. Among the sample, 41.7% started to use integrative treatment when they were first diagnosed, and 33.3% responded that they began the treatment because people around them reported benefit from the therapy. Additionally, 33.3% of individuals said they used integrative treatments to do everything possible to treat the disease, and 83.3% did not consult a physician or nurse while using integrative treatment. Whereas 83.3% indicated that they believed that integrative treatment was beneficial and intended to continue using it, 33.3% said they would use integrative treatment if the disease relapsed. Also, 33.3% reported that they would occasionally use integrative therapy (Table 2). Detailed information on integrative treatment methods used by individuals during COVID-19 is presented in Table 3.

**Themes Created in Accordance With the Health Promotion Model**

The data obtained from the interviews on the experiences and opinions of individuals about the integrative treatments they used while they had COVID-19 were discussed and evaluated under the themes of “Situation-Specific Effects,” “Relationship to Previous Behaviors,” “Participating in Health-Promoting Behavior,” “Behavior-Specific Concepts and Effects,” “Interpersonal Effects,” and “Responsibility of the Action Plan.”

### Table 3

| Variables | n  | %   |
|-----------|----|-----|
| Using integrative therapy before |    |     |
| Yes       | 12 | 100 |
| No        | 3  | 25  |
| When did she/he start using integrative therapy? |    |     |
| Before illness | 1 | 8.3 |
| When I first got the diagnosis | 5 | 41.7|
| After starting treatment | 3 | 25.0|
| Using it from time to time since a long time | 3 | 25.0|
| Reason for starting integrative therapy |    |     |
| Because those around me benefit | 4 | 33.3|
| Strong recommendation from the neighbors | 2 | 16.7|
| For making it a lifestyle | 4 | 33.3|
| Because it has been tried and proven useful | 2 | 16.7|
| Reason for using integrative therapy |    |     |
| Increase resistance | 3 | 25.0|
| Feeling better, hope | 3 | 25.0|
| Wanting to do anything against the disease | 4 | 33.3|
| Increasing resistance and coping with side effects | 2 | 16.7|
| Consulting a physician or nurse when using integrative therapy |    |     |
| Yes | 2 | 16.7|
| No | 10 | 83.3|
| Believing that integrative therapy is beneficial |    |     |
| Yes | 10 | 83.3|
| No idea | 2 | 16.7|
| Considering continuing to use integrative therapy |    |     |
| Yes | 10 | 83.3|
| No | 2 | 16.7|
| In which case would you consider using complementary therapy in the future? |    |     |
| Non-healing status | 2 | 16.7|
| Recurrence | 4 | 33.3|
| If treatment side effects develop | 2 | 16.7|
| I will use it occasionally | 4 | 33.3|

### Theme I. Situation-Specific Effects (Choices/Demands)

While all individuals answered yes to the question, “Would you consider using any of the complementary therapies?” Ms. 4 stated that “I certainly use the treatments that I think are harmless and will benefit my disease process.”

For the question “How did you decide to use complementary therapy?,” individuals reported the following: “having respiratory distress, having no information about the process of the disease, inability to fully recover with medical drugs, the recommendation of people who had previously experienced the disease” affected their decisions. The statements of individuals are as follows;

**Ms. 1:** “I started immediately after leaving the hospital because it was getting hard to breathe.”

**Ms. 3:** “When I thought that I could not fully recover.”

**Ms. 4:** “I did not know the process. The recommendations of people around me who experienced the disease were effective.”

For the question “What methods do you use other than the treatment recommended by your doctor?,” individuals stated that they applied methods such as “bioenergy, vitamin C and vitamin D supplements, herbal drugs, breathing exercises, honey-ginger mixture”;

**Ms. 3:** “Bioenergy”

**Ms. 4:** “Additionally, I used vitamin C and vitamin D supplements. I consumed mulberry molasses and butter. At the same time, I consumed vitamin C—rich liquids. I drank lots of fluids. I drank clear soups.”

**Ms. 6:** “I used a mixture of honey and ginger and did not use any other method.”

**Ms. 7:** “I used medicinal plants and breathing exercises.”

For the question “Who recommended the method you used?,” individuals gave answers such as family elders, hearsay, people who had the disease, individuals who used the method before, and some learned about it on social media. Only 1 individual stated that her health care professional friends recommended the method.

**Ms. 1:** “I mostly considered hearsay information and the guidance of our elders.”

**Ms. 4:** “My health care professional friends working in the COVID service, my relatives and friends around me who had had COVID-19, and e-resources.

**Mr. 5:** “I did not get information. I used complementary therapy because of the posts about herbal medicine on social media and, of course, my mom’s suggestion.”

**Ms. 10:** “The ones I always use, family tradition, old folk remedies.”

For the question “Do you believe that integrative methods have an effect on the control of your disease?,” only 1 individual answered no; other individuals stated, for example, that “I strongly believe I survived the disease without staying in the intensive care unit; it could be a placebo.”

**Mr. 5:** “No”
| Ms. 1 | Lemon juice | 2x1 Oral | 2 weeks | C vitamin | Family and TV | Mixing with water | Yes / No | 15 TRY |
|-------|--------------|---------|---------|-----------|---------------|------------------|--------|-------|
| Grape molasses | 2x1 Oral | 2 weeks | To prevent to cough | Family | I drank via one tablespoon | A bit / No | 15 TRY |
| Ms. 2 | Food supplement | 3x1 Oral | A month | To prevent lung damage | People who have survived the illness | I drank via one tablespoon | Yes / No | 150 TRY |
| Food supplement | 1x1 Oral | A month | Vitamin | People who have survived the illness | I drank via one tablespoon | Yes / No | 280 TRY |
| Ms. 3 | Bioenergy | 2 sessions per week | A month | To complete disappearance of symptoms | Family | Through the synergy pass | Yes / No | 7000 TRY |
| Ms. 4 | C vitamin | 1x1 Oral | A week | C vitamin | My friends and relatives who have had covid | Mixing with water | Yes / No | I don’t remember |
| D vitamin | 1x1 Oral | A week | D vitamin | My friends and relatives who have had covid | With bread | Yes / No | 40 TRY |
| Mr. 5 | Linden | 1x1 Oral | 2 weeks | To strengthen immunity | My mother | Form of tea | Yes / No | Not very expensive |
| Pine cone juice | 1x1/2 Oral | A day | To strengthen immunity and to reduce the impact of the illness | My mother | Pine cones are boiled in a glass of water | I don’t know / No, it tasted bad | Not very expensive |
| Ms. 6 | Ginger honey | 1x1 Oral | A month | To prevent to cough | Nobody | Via a teaspoon | I amn’t sure / No | Prepared it myself |
| Ms. 7 | Black cumin | 1x1 Topical | As long as the cough persisted | To reduce to cough | My mother | You heat it up in a pan and put it on the chest and back. | Yes / No | 10 TRY |
| Ginger honey | 3x1 Oral | A week | To reduce to cough | My colleagues | Via a teaspoon | Yes / No | It was at home |
| Oil mix (olive, sesame and coconut) | 1x1 Topical | A week | To reduce pains | My husband/ internet/books | Massaged into the aching area. | Yes / No | 15 TRY |
| Ms. 8 | Vitamin | 2x1 Oral | 2 weeks | To strengthen immunity | My friends | Mixing with water | Yes / No | 64.90 TRY |
| Garlic | 1x2 Oral | 2 weeks | To strengthen immunity | My friends | Mixing with yoghurt | Yes / No | 35 TRY |
| Sauerkrut | 1x1 Oral | 2 weeks | To strengthen immunity | My friends | - | - | - |
| Ms. 9 | Ginger lemon | 1x2 Oral | As long as the illness persisted/ sometimes | To prevent to cough, shortness of breath and influenza | Family elders | Form of tea | Yes / No | 35 TRY |
| Pine cone paste | 2x1 Oral (20 gr) | As long as the illness persisted and after | To prevent to cough, shortness of breath and influenza | My daughter | Via a teaspoon | Yes / No | 60 TRY |
| Ms. 10 | Ginger lemon | 2x1 Oral | As long as the illness persisted/ sometimes | To prevent to cough, shortness of breath and influenza | Family elders | Form of tea | Yes / No | 35 TRY |
| Pine cone paste | 2x1 Oral (20 gr) | As long as the illness persisted and after | To prevent to cough, shortness of breath and influenza | My relative | Via a teaspoon | Yes / No | 60 TRY |
| Mr. 11 | Ginger lemon | 2x1 Oral | As long as the illness persisted/ sometimes | To prevent to cough, shortness of breath and influenza | Family elders | Form of tea | Yes / No | 35 TRY |
| Ms. 12 | Linden | 2x1 Oral | sometimes | To prevent to cough and influenza | Family elders | Form of tea | Yes / No | In the garden |
| Honey propolis | 2x1 Oral (20 gr) | sometimes | To prevent to cough and influenza | My sister | Via a teaspoon | Yes / No | At home |

TRY: Turkish lira
For the question “Have you shared this information with the health care personnel?,” only four of the individuals answered yes; and the remaining eight individuals responded no.

| Ms. 1 | “No, I didn’t share because I applied it after hospital discharge.” |
| Ms. 4 | “Yes, later with my doctor.” |

**Theme II. Relationship With Previous Behaviors**

For the question “Have you applied such a treatment previously? If you have applied, was it beneficial?” individuals stated that “they applied integrative treatments, and they were beneficial in cases such as asthma and cold.”

| Ms. 1 | “When I have a cold or similar respiratory disorders, I often applied [these treatments], and they were beneficial.” |
| Ms. 7 | “I used it for asthma, and it was beneficial.” |
| Ms. 12 | “I used it, and it was beneficial.” |

For the question “Did it make you feel better to decide to use these treatments on your own?” only one of the individuals answered no, and the other 11 individuals answered yes.

| Ms. 4 | “No, the process is already unclear. I used it because I felt helpless and thought it was beneficial.” |
| Mr. 5 | “Of course, when you use herbal medicines, you feel that you have reached a better psychological level. I also felt better psychologically during this pandemic period.” |
| Ms. 6 | “It didn’t have a great effect, of course, but I can still say that it’s better.” |

For the question “Have you felt any barriers to using treatments?,” all individuals answered no. The interesting statements of the individuals are as follows:

| Ms. 4 | “No, I do not think that the methods I use are harmful to my health.” |
| Ms. 7 | “I felt pressure to if I would be misunderstood or reacted if I said I did this as a health care professional.” |

**Theme III. Participating in Health-Promoting Behavior**

For the question “How did you decide to use the treatment?,” responses included learning that one has become sick; onset of respiratory distress; positive results obtained by people around them; experiencing symptoms such as fever, weakness, malaise; and fear of further progression of the disease were factors in participants’ decision to use integrative treatments. The data samples of the individuals for the theme are as follows;

| Ms. 1 | “When I had COVID 19 and difficulty breathing.” |
| Ms. 3 | “I made this decision when I saw the people around me had good results.” |
| Ms. 4 | “Since I thought that strengthening my immune system would help me cope with the disease, I tried complementary applications that would strengthen my immunity and make me feel good.” |
| Ms. 7 | “I decided by considering that I should take measures as soon as possible before it would get worse.” |
| Mr. 11 | “I decided to use it when fever and weakness started.” |

For the question “When did you decide to use the treatment?,” participants stated that being diagnosed with the disease, emergence and aggravation of symptoms, and uncertainty about the process affected the time of starting integrative treatments.

| Ms. 2 | “When my troubles and pain increased after the diagnosis.” |
| Ms. 4 | “There was an uncertainty about the disease process. Therefore, considering the possibility of worsening of my symptoms, I decided to use complementary methods immediately after the onset of the disease.” |
| Ms. 8 | “As soon as I learned that I had corona.” |
| Ms. 12 | “When I started to show the symptoms of the disease.” |

For the question “What was the most important factor in your use of the treatment?,” individuals answered, “symptoms due to COVID-19, belief in integrative treatment, suggestions of people around me, speeding up the healing process.” Sample statements of the individuals are as follows:

| Ms. 1 | “Cough and shortness of breath.” |
| Ms. 4 | “Speeding up my healing process.” |
| Mr. 5 | “The COVID-19 pandemic, the devastating effects of the pandemic, high mortality rates revealed that we need to do something to get rid of the virus and this pandemic or that we should take other actions.” |
| Ms. 7 | “Thinking it would be more effective than drugs.” |
| Ms. 8 | “Mild recovery from the disease.” |
| Ms. 9 | “Fear of triggering an asthma attack.” |

**Theme IV. Behavior-Specific Concepts and Effects**

For the question “What was your purpose in using the treatment?,” individuals responded that they used integrative treatments to “breathe comfortably, to overcome the disease with the least damage, to reduce the problems that may remain after the disease, and to get rid of the disease.”

| Ms. 1 | “To be able to breathe comfortably.” |
| Ms. 2 | “To prevent my condition from getting worse and to prevent permanent lung damage.” |
| Ms. 3 | “Getting rid of the problems caused by COVID-19.” |
| Mr. 5 | “Of course, efforts to turn from positive, namely COVID-19 virus, into negative as soon as possible.” |
| Ms. 7 | “To be able to recover before it gets worse and reaches the level of hospitalization as soon as possible.” |
**Situation-Specific Effects**

**Theme VI. Responsibility of the Action Plan**

For the question “Have you recommended the treatment to other people around you?” except for two of the individuals, the remaining ten people answered “yes” to it. The statements of the individuals are as follows;

- **Mr. 5:** “No, I did not recommend it to anyone.”
- **Ms. 6:** “I always recommend it.”

For the question “Will you continue to apply the complementary therapy you use to maintain your health?,” except for 2 individuals, everyone else answered yes.

- **Ms. 1:** “It was the method I usually used when I had respiratory distress.”
- **Ms. 2:** “No, because I continued for the month after my test turned negative.”
- **Ms. 4:** “No, it’s been a long time.”
- **Mr. 5:** “I can continue in other epidemic diseases.”
- **Ms. 7:** “Yes, if I experience similar situations.”
- **Ms. 8:** “Of course.”

For the question “What were the emotions you felt when you used integrative health applications?,” individuals responded by stating that “they felt healthier, better, and safer.”

- **Ms. 1:** “Desire to regain my health as soon as possible.”
- **Ms. 2:** “I felt safer.”
- **Mr. 5:** “I had a feeling that the herbal medicines I used would enable me to get rid of COVID-19.”

**Discussion**

The themes created within the theoretical framework of the health promotion model were “Situation-Specific Effects,” “Relationship with Previous Behaviors,” “Participating in Health-Promoting Behavior,” “Behavior-Specific Concepts and Effects,” “Interpersonal Effects,” and “Responsibility of the Action Plan.” The study results are discussed with similar studies in the literature.

**Situation-Specific Effects**

The reasons for individuals’ desire to keep their health under control or to live a healthy life, current care, and the fear of possible side effects affect individuals’ preference for integrative treatments. Although some people reject these methods as “old” and “unscientific,” they have been sought after for precautionary purposes during the pandemic. With the worldwide outbreak of COVID-19, information and applications related to integrative treatment began to be investigated more frequently. People from all segments resort to integrative therapies, especially herbal...
Although herbal remedies may seem advantageous, such products use of herbal products based on evidence-based science. It is crucial for patient safety that NPs provide counseling about the prefer- ence and use of integrative treatment methods.

Along with the spread of COVID-19 disease, health care professionals’ suggestions for “strengthening the immune system” against the virus in the written and visual media increased. Individuals have further turned to integrative treatments to improve their immunity, prevent transmission, and improve healthy life- style behaviors. Searching the Internet using terms related to herbal medicine and integrative therapies has increased dramatically during the pandemic. Most individuals in our study stated that their sources of information about integrative treatments were the Internet, social media, and other mass media is similar to the literature. NPs, who are responsible for providing safe, accessible, and personalized care, will effectively meet the information needs of individuals by sharing evidence-based recommendations and seeking to increase their own and others’ knowledge of integrative treatments in health care services.

In one study, phyotherapy was considered the most helpful practice during the COVID-19 pandemic (22.46%). In another study, the word “ginger,” and herbal method, was among the most searched terms in Internet-based search engines. Individuals mostly preferred herbal products, including honey—ginger and ginger—lemon mixtures, which are inexpensive and easy to access. Although herbal remedies may seem advantageous, such products should be used carefully due to the risk of food—drug interactions. It is crucial for patient safety that NPs provide counseling about the use of herbal products based on evidence-based scientific information.

**Relationship With Previous Behaviors**

Health-seeking behavior can be affected by many factors such as health perception, adherence to traditional health beliefs, lifestyle, cognitive, emotional, and cultural factors, and previous illness experiences, and may lead them to integrative treatments. Individuals who used integrative therapies in the past are more likely to resort to these methods again and try all the methods they think will be good for them. In a study conducted with 187 patients admitted to a COVID-19 outpatient clinic, 71.7% of the individuals believed in integrative treatments, 50.27% thought that these treatments were beneficial, and 33.2% had used these treatments previously. Individuals frequently used these treatments for asthma, colds, and other respiratory disorders. Furthermore, 83.3% of the individuals believed that integrative treatment was beneficial.

**Participating in Health-Promoting Behavior**

The consumption of vitamin-rich foods and functional foods can strengthen the immune system to help fight against viruses. For instance, ascorbic acid (vitamin C) plays a protective role, as it supports the immune system and is necessary for developing and repairing all body tissues. Furthermore, vitamin D supplementation has been said to increase resistance to COVID-19. In this regard, dietary supplementation with vitamins and medicinal plants can be a tool to support the immune system against COVID-19. However, some studies suggest that there is still no significant evidence indicating that bioactive ingredients can strengthen the immune system sufficiently to prevent or treat COVID-19. Integrative treatments may support immune response-related cytokine production, regulation, and balanced functioning of the immune system. The fact that those who participated in the study also decided to start integrative treatment to strengthen their immunity is consistent with the literature.

**Behavior-Specific Concepts and Effects**

A meta-analysis performed by Liu et al in 2020 emphasized that integrative treatments improved symptoms (fever, cough, sputum production, fatigue, chest tightness, and loss of appetite) experienced in COVID-19 and reduced the duration of the symp- toms. Furthermore, the effects of integrative treatments did not increase any reaction with pharmacological agents used for COVID-19. In our study, individuals stated that they benefited from integrative treatment, did not suffer from it, and were satisfied with the treatment supports the literature. In this study, 83.3% of the individuals considered continuing to use integrative therapy, and 66.6% stated that they would use integrative treatment when the disease relapsed and occasionally provided important information about their benefit from the treatment.

In the study by Çetin Kargin, 27.7% of the individuals reported that integrative treatments would not be more beneficial than classical COVID-19 drugs, but 19.79% said that they believed they would be helpful in combination with standard drugs. Only 1 participant stated that he did not believe in integrative treatments; the other individuals said how strong their belief in these treat- ments was, with statements such as, “I believe I survived the disease without staying in the intensive care unit.”

Individuals generally believed that the integrative treatment methods they used were beneficial and had few side effects, provided physical and psychological relief, slowed down the progress of their disease, and were safer than standard treatments. The fact that individuals in our study stated they felt safer and that the method they used made them feel as if they would get rid of COVID-19 is similar to the literature. NPs should advise patients to recognize and use opportunities to cope with the problems related to COVID-19 while respecting the individual’s autonomy. NPs can provide an environment for open discussion and shared decision-making when individuals decide to use integrative treatment methods, providing guidance using evidence-based information.

**Interpersonal Effects**

Integrative treatments have received increased attention during the COVID-19 pandemic. Because modern medicine has not yet found a cure for this disease, people seek and apply alternative methods to protect themselves from possible damage caused by viruses. The literature supports that since the beginning of the pandemic, there has been an increased interest in and use of integrative treatments. In this study, the number of integrative treatment methods, especially those described as “traditional” and learned from the family or close acquaintances, increased at the same rate. In this study, individuals resorted to integrative methods recommended by the people around them and their family elders. Individuals considered these treatment methods a supportive factor for a variety of reasons such as the following: an inability to fully recover from medical treatment, for strengthening their immunity, minimizing the damage that may occur due to COVID-19, belief in integrative therapies, feeling better, benefiting from integrative treatments for those who had the disease before. According to the statements of our participants, the most important factor in using these integrative treatments is traditional orienta- tions such as interpersonal relationships and interactions. In this regard, NPs can seek to understand the patient and their relatives and the meaning individuals attribute to integrative treatment
methods, guiding NPs to meet patients’ needs during the care and treatment process.

Responsibility of the Action Plan

Individuals generally avoided informing a health care professional about the use of integrative treatments. Possible reasons identified in a previous study are not considering these treatments as drugs, their belief that it is not important for a health care professional to know that they apply integrative treatments or their fear that they will not approve of their use, and considering that the doctor or nurse has a lack of knowledge about integrative treatments or that they will react negatively. Similarly, 83.3% of the individuals in our study reported that they did not consult a physician or nurse while using integrative treatment.

Originality and Limitations of the Study

During the literature review, we found no study examining the experiences of individuals with COVID-19 using integrative treatment methods within the framework of the health promotion model. In this respect, our study contributes to clinical practice and the literature. The fact that the study was planned with a qualitative design during the pandemic led to limitations such as the number of available subjects, face-to-face interviews, and participatory observation. One limitation of the study is that the sample size of 12 was small. However, this is in accordance with the nature of qualitative studies.

Conclusion and Recommendations

Vitamin C and medicinal plants were the integrative treatment methods mostly used by individuals during the COVID-19 process. Ginger, lemon, linden, and cones were commonly used as medicinal plants, and these plants were used in teas and as a paste during the disease process. Only 1 person preferred the bioenergy method and recommended it to others indicated in a previous study are not considering these treatments as drugs, their belief that it is not important for a health care professional to know that they apply integrative treatments or their fear that they will not approve of their use, and considering that the doctor or nurse has a lack of knowledge about integrative treatments or that they will react negatively. Similarly, 83.3% of the individuals in our study reported that they did not consult a physician or nurse while using integrative treatment.

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