Evidence-Based Literature Assignment

Michaela Murphy

Santa Ana College- OTA Program

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Evidence-Based Practice is the examination of different research and how the research that was studied can be used for a practitioner's own treatment. This provides the best available treatment that has been already applied and is also the most affordable care for patients. Another reason why it is very important to use Evidence-Based Practice is for reimbursement purposes. In order for many insurances to pay for services they look at if these services are being implemented with Evidence-Based Practice first before they are reimbursed. The field of Occupational Therapy is always changing and staying up to date with OT practice means researching new practices and skills. (Meydam, 2021)

There are many different ways to conduct research and retrieve evidence and some of these include systematic review, meta-analysis, case control and randomized controlled trial. A systematic review is a summarized version of all the data and information that is conducted by researchers and usually get this information from observational studies and clinical trials

("Evidence-Based Research: Evidence Types"). A meta-analysis is the statistical and quantifiable data from multiple studies that are summarized into one study ("Evidence-Based Research: Evidence Types"). Studies that investigate two groups of people to see if they have any similarities to a particular disease and the non-affected group are considered case-control studies ("Evidence-Based Research: Evidence Types"). They compare these two groups and make hypotheses based on their observations for why particular populations are exposed to different things that might trigger the disease. Lastly, a randomized-control study observes a group of people that are randomly put into either a group that is receiving treatment or a group that isn't receiving treatment. This form of treatment allows researchers to determine if the treatment being given is indeed effective or not. ("Evidence-Based Research: Evidence Types")

Different forms of research methods include quantitative and qualitative data. The difference between the two is that quantitative data has to do with numbers or the quantity of information from studies while, qualitative data has to do with language and can include anything that is non-numerical such as from a video, text, or photos. Quantitative research is used more for testing purposes based off a theory or hypothesis (Streefkerk, 2022). For example, if someone was to use a quantitative approach they would ask a participant a question on their level of pain and to answer from a level of 1-10. Qualitative research on the other hand is used to understand concepts and experiences from someone through interviews. (Streefkerk, 2022)

The different groups of people I researched were adults with chronic diseases such as osteoarthritis and older adults that have sedentary behavior and incorporating OT treatment for these individuals. Settings included a community center and a family-medicine clinic. The first article I researched was a systematic review on the effectiveness that OT has for adults that have Osteoarthritis (OA). This study focuses on the benefits of using evidence-based interventions for individuals with OA and what interventions would be the most beneficial to them. Some of the issues that were focused on throughout this article was pain, fatigue, depression, and occupational performance. This research study included 450 people and 45 people being examined for the final study. The interventions that were held included Tai Chi,

yoga, and land and water-based activities. What was discovered from this study is that physical activity and psychoeducational interventions improved mobility and independence and helped decrease pain, fatigue, and depression symptoms for these individuals. (Poole et al, 2017)

Another article I researched was a systematic review on how occupation and activity-based health management interventions can benefit older adults. 28 articles total were summarized and combined into one systematic review. This article focused on older adults and the aging process and the health complications associated with aging such as osteoporosis, diabetes, and arthritis. It is crucial that older adults continue to be physically active because it can reduce these disabilities as well as even death. The occupational therapy program given to the clients with hip or knee osteoarthritis "included active practice of procedures such as joint protection and behavioral strategies such as activity pacing and incorporating meaningful activities into daily routines (Arbesman, M., & Letha J. M. 2012)." The results of these interventions were that there is a higher physical activity level for these participants based on this occupational-therapy program. Overall this article discovered moderate to strong evidence that client-centered occupational therapy programs benefited older adults when performing their physical activities.

The next article I researched was about how OT interventions can help older adults with chronic diseases. This study was a two-group randomized controlled study held at a family medicine clinic and the participants included 18 adults 50 years of age or older. As people with chronic diseases age, it makes it increasingly difficult to perform activities of daily living and one's independence decreases. That is why the aim of this study was to maintain the independence of the participants that have a chronic disease. The i-PROACTIF which stands for Integrated Primary care and Occupational therapy for Aging and Chronic disease Treatment to preserve Independence and Functioning was used as an intervention for the participants in the study as well as the complex care management (CCM). The i-PROACTIF intervention included two weeks of assessments being administered which went over goal planning and six weeks of "treatment sessions focused on chronic disease education, recommendations for embedding physical activity into everyday tasks, and environmental modifications or activity adaptations to increase functional independence (Mirza, M. et al, 2020)." The CCM intervention, on the other hand, included 8-weekly phone call appointments that went over "diet, symptom management, medication management, community resources, and referral management (Mirza, M. et al, 2020)." What was discovered from this study was that participants from the CCM intervention would have preferred the i-PROACTIF intervention mainly because it was more client-centered. As a result, the participants from the i-PROACTIF were extremely happy with the interventions that were given to them and also had improved scores from the outcome measures.

The last article I researched was about sedentary behavior in older adults and how OT can help these individuals. This study was a one-group design focused on people 65 or older who have sedentary behavior and have a higher chance of developing a disease or health disability. The purpose was to develop goals for these individuals and implement meaningful occupations into the interventions that are given to them. The study was held at a Midwestern

community center for older adults and certain outcome measures used were the COPM and the sedentary behavior questionnaire. Six individuals from the ages of 76-87 were studied and what was discovered was that "Increased occupational performance from 5.17 (SD = 1.95) to 6.07 (SD = 2.63) and increased satisfaction with occupational performance from 4.67 (SD = 1.96) to 6.65 (SD = 2.48) was noted on the COPM following goal-based interventions (Naber, A. et al, 2021)" In conclusion, the research found in this article was that purposeful and meaningful occupations can help sedentary older adults, but more extensive research must be studied to gain more information on this topic.

After researching my articles on individuals that suffer chronic diseases specifically osteoarthritis and sedentary older adults, I have a better outlook on how to treat these individuals. What I learned was that specific treatment interventions for people with osteoarthritis include Tai Chi, yoga, and land and water-based activities which can help with pain associated with this disease as well as significantly help with mobility and independence. Implementing physical activity into daily tasks, and environmental modifications or activity adaptations are other interventions that can help people that suffer from a chronic disease. Client-centeredness is key when developing goals for people and allows for a better outcome in therapy. And for sedentary individuals, the overall takeaway is that implementing purposeful and meaningful occupations into a person's daily life can help decrease sedentary behavior.

The information that I read throughout my research articles has given me a better outlook on how I should treat my client for the community-based program assignment. I will definitely be doing one session that will cover an interest check-list for my client, this way I can develop a better idea on purposeful and meaningful occupations for them. From there I will make sure to incorporate physical activity into the last two sessions for my client to help decrease their sedentary behavior. Combining everything I learned from all of the research articles I read will give me the best possible treatment for my client since I will be using Evidence Based Practice. Once I begin working as a COTA it is crucial that I understand the background of my client, so I can learn what is purposeful and meaningful to them, and they can benefit from treatment to the best degree possible. I will continue to incorporate Evidence Based Practice into my future treatments because I know it will be the best available treatment for them.

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