**The Assignment** (Evidence-Based Project)

*Part 2: Advanced Levels of Clinical Inquiry and Systematic Reviews*

Create a 6- to 7-slide PowerPoint presentation in which you do the following:

* Identify and briefly describe your chosen clinical issue of interest.
* Describe how you developed a PICO(T) question focused on your chosen clinical issue of interest.
* Identify the four research databases that you used to conduct your search for the peer-reviewed articles you selected.
* Provide APA citations of the four relevant peer-reviewed articles at the systematic-reviews level related to your research question. If there are no systematic review level articles or meta-analysis on your topic, then use the highest level of evidence peer reviewed article.
* Describe the levels of evidence in each of the four peer-reviewed articles you selected, including an explanation of the strengths of using systematic reviews for clinical research. Be specific and provide examples.

**This is my professor instructions**

This assignment will be an approximately 7 slide ppt presentation. **Use these suggestions for your slides**:

1. title slide with your name, course, date, etc
2. Introduction and purpose for your inquiry
3. PICO(T) question. Please identify P.I.C.O. and T
4. The **4 databases**you used for your search (You may have new ideas following the suggestions in the forum. Articles should provide RESEARCH for the INTERVENTION you have selected for your inquiry and not just genera in nature. Did the intervention you proposed have an effect on the outcome you named? If you do not already have 4 articles with this detail you will need to search again) You need to USE four databases but your articles no not need to be from each of the 4 databases
5. For each of 4 research articles pertaining to your idea give a brief notation of the**level of evidence**(your articles should be systematic reviews or highest level of evidence possible). On this slide also be sure to mention the benefit of using a systematic review, even if you do not have a source utilizing one. These articles may be the same as you used for the past assignment **if they fit.** Some have had to change topics or variables, or your previous articles might not have been high levels of evidence, and therefore you may need new articles. There is reading about “level of evidence”. This is not the purpose or design of the study, it’s the numerical strength of the research and will be graded as level I through level V. Give rationale for your rating.
6. Conclusion slide
7. A slide with all your resources typed in **APA format**(double spaced, indented, properly italicized where pertinent according to the new APA manual). You will have 4 references pertaining to research (cited in the ppt and referenced on last slide). By the way the new APA manual does not use “retrieved” unless you include the date, nor typing of the city of publisher in references.

This was my Discussion

**The Impact of Physical Activity on the Medical Outcomes of Elderly Adults.**

The importance of physical activity among elderly adults cannot be overstated, as it can potentially improve several medical outcomes in this population. A growing body of evidence suggests that engaging in moderate physical activity can have numerous positive effects on elderly adults regarding overall health and medical outcomes. Physically active elderly adults have a lower risk of chronic diseases like Type 2 diabetes, coronary heart disease, and stroke (Wickramarachchi et al., 2023). Increased physical activity has been found to reduce the risk of falls among elderly adults, thereby reducing the associated chance of fracture or mortality. Moreover, exercise levels are associated with improved elevation of depression and cognitive function. As such, physical activity appears to be an effective tool for preventing and managing chronic diseases in elderly adults.

In addition, elderly adults who are physically active often have reductions in the risk factors associated with medical conditions such as hypertension and obesity. Furthermore, physically active elderly adults frequently demonstrate better overall functional performance associated with activities of daily living, such as walking, ascending stairs, and completing household chores (Zarco et al., 2021). Thus, the potential benefits of increased physical activity levels for elderly adults are indisputable.

The original search yielded 241 articles from Psych Info, CINAHL, and PubMed. The keywords used were "elderly," "physical activity," and "medical outcomes." Additionally, the Boolean operators used were "AND" and "OR," the latter of which was utilized to expand the search to broaden the range of articles. The initial search results incorporated multiple aspects of physical activity and medical outcomes. The Boolean operator "AND" was used to connect specific words to narrow the results. This reduced the results to 77 articles.

The search should be expanded with more precise target words to increase the rigor and effectiveness of a database search for this PICO(T) question. For instance, words such as "cardiovascular" and "physical fitness" could be included in the search to narrow the results to more research-oriented studies. Moreover, utilizing different databases, such as Science Direct, could help improve the thoroughness of the search. Combining different databases could offer alternative results, mainly as not all medical journals are accessible to all databases. Additionally, using a more comprehensive range of Boolean operators, such as "compound terms/expressions" or "AND NOT," could potentially enhance the accuracy and rigor of the search.

Finally, When searching, it is essential to consider a publication's date range. Limiting the search to the past five years can ensure the results are more applicable and current. Utilizing the filter options within the databases can help narrow results and collect more relevant information. Additionally, filtering options help remove typos and omitted words from the search query to improve results accuracy. Utilizing the databases' filter options allows users to filter out outside sources such as reviews, books, and personal writings.

Limiting the publication date range can also limit the number of false positives in the search (Naeem& Bhatti, 2020). False positives refer to irrelevant results included in the search results, and narrowing the range to the past five years will limit this possibility. Furthermore, limiting the date range can ensure that the results reflect the most up-to-date understanding and research of the searched topic. Additionally, it can reduce the chances of inaccurate data or information being included in the results. Limiting the search to the past five years is an important step when conducting a search, as it can ensure the results are relevant, accurate, and up-to-date.

In conclusion, the impact of physical activity on the medical outcomes of elderly adults is a pertinent issue that needs further research and understanding. A rigorous and effectively conducted database search is essential to ensure that the most relevant and current articles are included in the results. Expanding the search with precise target words, utilizing different databases, considering a publication date range, and utilizing the filters in each database can help enhance the accuracy and rigor of the search.

PICOT question

Population-elderly adults over 65 years old.

I intervention- impact of physical activity - exercising 150 minutes a week.( Recommended by National Institute of Aging)

Comparison - elderly that not having physical activity

Outcome- elderly who have physical activity have better strength, balance, energy and delay in chronic disease comparing those who not having physical activity.

Time- during 12 months.

**Part 1 assignment**

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| Wickramarachchi, B., Torabi, M. R., &Perera, B. (2023). Effects of Physical Activity on Physical Fitness and Functional Ability in Older Adults. *Gerontology & geriatric medicine,* 9, 23337214231158476. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9969476/ | Gabrielle McNamara,  Caroline Robertson,  Tegan Hartmann &  Rachel Rossiter. (2020). Effectiveness and Benefits of Exercise on Older People Living with Mental Illness’ Physical and Psychological Outcomes in Regional Australia: A Mixed-Methods Study. *Human Kinetics Journal.* https://journals.humankinetics.com/view/journals/japa/31/3/article-p417.xml | Zarco EPT, Aquino M, Petrizzo J, Wygand J, &McGorry A. (2021). Perceived Benefits of a Guided Exercise Program Among Older Adults. *Gerontology and Geriatric Medicine*. https://journals.sagepub.com/doi/full/10.1177/23337214211060147 | Thomas, E., Battaglia, G., Patti, A., Brusa, J., Leonardi, V., Palma, A., &Bellafiore, M. (2019). Physical activity programs for balance and fall prevention in elderly: A systematic review. *Medicine, 98(27)*, e16218. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6635278/ |
| I chose this article because it is related to the clinical issue of interest of how physical activity affects physical fitness and functional ability in older adults. The research ethics related to this clinical issue include obtaining informed consent from the participants and providing comprehensive information on the nature and purpose of the study. | I chose this article because it focuses on the effects of physical activity on the mental and physical health of elderly adults living in regional Australia, an area of particular clinical interest. Research conducted into clinical issues should be conducted ethically, with informed consent from the participants, and with respect for the rights and safety of both the participants and the researchers. | This article relates to the clinical issue of interest in that it focuses on how guided exercise programs can improve the health outcomes of elderly adults. I chose this article because it provides evidence-based research demonstrating the effectiveness of exercise programs catering to older adults. Furthermore, it is essential to conduct ethical research on elderly adults as they are a vulnerable population and may need to be protected from exploitation. | This article was chosen because it looks at the impact of Physical Activity on balance and fall prevention in older people. Research in this area is essential ethically because it preserves the health and safety of vulnerable members of society and improves their overall well-being. |
| The research in this article aims to examine the effects of physical activity on physical fitness and functional ability in older adults. | The research aimed to investigate the effectiveness and benefits of physical exercise for older adults living with mental illness in a regional setting in Australia. | The research evaluated the perceived benefits of a guided exercise program among older adults. | The research in this article aims to review the existing literature on physical activity interventions for balance and fall prevention in the elderly. |
| The research methodology used in this article was a quantitative approach involving self-reported questionnaires, functional tests, physical activity tests, and the Trail Making Test. | The research methodology used was mixed methods, employing both quantitative and qualitative research methods. These included semi-structured interviews, observation, questionnaires, focus groups, creative activities, and physical examinations. | The research methodology used was qualitative, as the researchers conducted interviews with participants to gather qualitative data. | The research methodology used in this study was a systematic review. A systematic review is a broad-scope study designed to identify, analyze, and synthesize data from the literature to demonstrate a comprehensive overview of a particular research topic. |
| The strengths of the research methodologies used in this article include reliable and valid self-reported questionnaires and tests which accurately measure the participant's physical fitness and functional ability. | The use of a mixed-methods approach has its strengths. It allowed the results from the quantitative and qualitative methods to be combined and synthesized. Qualitative methods enable more profound insight into the topic's complexities, while quantitative methods allow researchers to draw more generalizable and statistically robust conclusions from a sample size. | The qualitative methodology used was a strength in that it was able to gather data in a way that considered the participants' personal experiences and feelings. It is also reliable in that it could accurately assess the impact of the guidance exercise program on the participants. It was also valid because the researchers followed up with participants to ensure that the data gathered was reflective of their actual experiences. | The strengths of the systematic review methodology used in this study are that it includes a critical assessment, synthesis, and evaluation of existing data to present a holistic overview of a research topic. Reliability and validity are present in this methodology, as it is conducted objectively and reliably, and the results are reproducible. |
| Generally, this article provides a comprehensive examination of the effects of physical activity on physical fitness and functional ability in older adults, utilizing reliable and valid research methods. | Overall, this study employed a rigorous methodology to explore the impact of physical activity on elderly adults. The mixed-methods approach ensured that the research could capture both the depth and breadth of the topic, providing accurate and insightful results. | Overall, the article provides a unique perspective on the impact of physical activity on the medical outcomes of elderly adults. It is a valuable source in helping to understand the potential benefits of exercise programs for elderly individuals. | This article is a comprehensive review of the literature on physical activity interventions for balance and fall prevention in the elderly. It provides a reliable, valid, and reproducible synthesis of existing research aimed at improving our understanding of the positive effects of physical activity on medical outcomes in elderly adults. |