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Table of Contents

Finding a Research Topic	Page 3 of 9
The research Topic	Page 3 of 9
Justification	Page 3 of 9
Discussion of the Idea	Page 4 of 9
Methodology for the Research	Page 5 of 9
Finding Credible Sources to Support the Research	Page 6 of
Some Credible Sources	Page 7, 8 of 9
References list:	Page 9 of 9

Finding A Research Topic

Each research paper's topic is the foundation of the whole research project. The research's scope is limited and well-defined; it may be considered a question, although this is not mandatory. The research answers the related question. The study subject may be presented as a hypothesis or a research question. Before commencing a research project, one must adopt a specific and systematic strategy to ensure a clear and effective research topic. The following are a series of processes that may be taken to arrive at a research topic in the area of digital health.

The researcher should begin by focusing on a specific topic of interest within the broader realms of medicine and technology. This may apply to a particular disease or condition, a particular location, or a particular aspect of healthcare delivery (Snipp, 2021, p. 2). The second stage is to research the most current industry trends and developments. It is feasible to achieve this objective through Internet searches, reading publications and reports, and attending conferences and seminars. Consider the key gaps in our understanding of the areas that need more research (Snipp, 2021, p. 4). These may be uncovered through evaluations of current practices, literature reviews, and speaking with subject matter experts. Then, the researcher homes down on a specific research topic or hypothesis that corresponds to the problem, which helps to focus the study and establishes a clear direction for its future development.

The Research Topic

The use of wearable technology in managing chronic illnesses in nursing homes is an intriguing research question that needs further investigation.

Justification

Wearable technologies, such as fitness trackers and smartwatches, can monitor and treat chronic illnesses more effectively by giving real-time data on patients' vital signs and the amount of physical activity they engage in. However, there is a need for more research on the

efficacy and impact of wearable technology in this context; so, further studies are required to establish the most effective methods to adopt and use this technology in nursing homes.

Several factors contribute to this subject being worthy of further investigation; first, nursing home residents are prone to developing chronic illnesses like diabetes, hypertension, and heart disease, which are often linked to unfavourable outcomes and have a high prevalence rate. Wearable technology can enhance chronic disorders management by giving real-time data on patients' vital signs and levels of physical activity. This data may assist in the early detection of issues and the prompt implementation of remedial measures. Second, there is a possibility that the use of wearable technology might enhance the standard of care provided in nursing homes. These devices can enable the formulation of tailored treatment plans by delivering real-time data and enhancing communication between patients, carers, and healthcare practitioners. In addition, there need to be more studies on the efficiency and influence of wearable technology in nursing homes. Some studies have been conducted on the use of wearable technology in several different types of healthcare settings; however, further study is required to establish the most effective methods to adopt and use this technology in nursing homes. This study can influence the establishment of rules and guidelines to facilitate the uptake and usage of wearable technology in this environment.

Discussion of the Idea

Wearable technology is a term used in the medical field to refer to various gadgets that patients may connect to their bodies to monitor their health and fitness and then share that information with their physicians, other health professionals, insurance, and any other appropriate parties. Examples include trackers for fitness and activity, blood pressure monitors, and biosensors (Schroer, 2022, p.2). Wearable medical devices such as fitness trackers, smart watches, electrocardiogram (ECG) monitors, blood pressure monitors, and biosensors have seen a significant increase in demand due to their advantages. The use of wearable technology in the medical field has the potential to shake up the business and provide patients with detailed data that can be turned into useful insights. Wearable technology gives patients the capacity to monitor their health, compile relevant data, and transmit it in an electronic format, so doing away with the need that they attend in-person sessions (Schroer, 2022, p.1). Wearable technology has also been embraced by providers and insurers, who depend on the data obtained from health monitoring devices to develop health plans that are more accurate and individualized to

the individual. Wearable technology has even been utilized by businesses to promote healthy behaviours among office workers and those who work from home.

In nursing homes, wearable technology has the potential to become an invaluable instrument in the management of chronic illnesses. Continuous monitoring, medication management, illness management, and remote consultations are ways that individuals living with chronic ailments might benefit from wearable technology. There are many other ways that this technology can be employed. Wearable technology enables continuous monitoring of vital indicators, including heart rate, blood pressure, and oxygen levels in the blood. This may assist in identifying early warning signals of a possible health condition and make it possible to intervene at an appropriate time. The residents will be more likely to stick to their treatment plan if the gadgets can be set to send them reminders to take their medicine at the prescribed times. Wearable technology can provide users with real-time data on various health variables, including physical activity, sleep habits, and nutritional consumption. With the help of this information, one can monitor the development of a chronic condition and modify treatment methods appropriately. Wearable technology also has the potential to be outfitted with telemedicine capabilities, which would make it possible for locals to obtain medical consultations from a healthcare practitioner in a remote location.

Before the implementation of such a technology, it is essential to give serious consideration to both the possible advantages and hazards associated with the use of wearable technology, which has the potential to make the treatment of chronic illnesses in nursing homes more effective. As a result, further in-depth study on the subject is required to guarantee that patients may benefit from the technology successfully while minimizing the associated risks.

Methodology for the Research

Below is a general outline of the methodology that I would suggest for studying the use of wearable technology in managing chronic diseases within nursing homes using secondary materials.

Identify the research question and objectives: Determine the research question and the study's directions. The first stage of a study is to determine the research question and the objectives of the investigation. In this case, the study question may be as follows: "How successful is the use of wearable technology in the management of chronic illnesses with

residents in nursing homes?" The study's goals might include determining the different kinds of wearable technology now in use, the advantages and disadvantages of using such technology, and any trends or models in the approval and use of such technology inside nursing homes.

Conduct a thorough literature review: the next stage would be to conduct a comprehensive literature study on the subject to locate papers and sources pertinent to the investigation. This might require online scanning databases such as PubMed and Google Scholar, in addition to doing a manual search through the reference lists of relevant papers. The purpose of the literature review is to amass as much information as possible on the subject in question and to determine whether or not there are any knowledge gaps in the previously conducted research that the present investigation can cover.

Develop a research design: The next stage would be to construct a plan for the research based on the research question and the goals. This may necessitate selecting a particular research design, such as cross-sectional, longitudinal, or experimental, identifying the demographic and sample size for the study, and devising a strategy for the data gathering and analysis processes.

Collect and analyse data: After the research design has been formed, the next stage would be to collect and analyse data from the indicated sources. This may require reading and evaluating the chosen research, obtaining important data and information, and analysing the data using statistical methods.

Draw conclusions and make recommendations: The next and finale phase would be to draw conclusions based on the analysis of the data and then to provide suggestions for further research or practice. This would bring the full process circle. This can include describing the research's most important results, discussing the consequences of those impacts, and identifying areas that need additional exploration.

Finding Credible Sources to Support the Research

To find credible sources for a research topic like "the use of wearable technology in managing chronic diseases within nursing homes," it would be helpful to follow these steps

Determine the most important search phrases connected to the subject of the study to get started. The phrases "wearable technology," "chronic disease management," "nursing homes," and "elderly care" might all be appropriate descriptors in this scenario.

Use these search phrases in online databases such as PubMed, Google Scholar, and the Cochrane Library to explore for papers, books, and other materials pertinent to your topic. These databases provide access to a plethora of research resources that have been examined by experts in the sector and published in scholarly publications.

Examine the available sources to determine if they are or not reliable. If the source was published in a respectable publication, if it was authored by an expert in the subject, or mentioned by other researchers are all markers of the source's reliability (George, 2021, p. 3). It might be beneficial to study materials from diverse viewpoints and analyse both the advantages and restraints of wearable technology in treating chronic illnesses in nursing homes. Look for sources that give a balanced picture of the issue. You should take into consideration the timeliness of the sources that you discover. It may be beneficial to utilize the most up-to-date sources that are accessible, as this can assist in guaranteeing that your research is relevant and accurate in the present day.

Finally, after finishing the research, the researcher needs to make sure that they correctly reference every source they used. Not only should they include direct quotes, but they should also incorporate thoughts and facts that they have paraphrased from other sources (George, 2021, p. 6). It is essential to provide accurate citations to prevent accusations of plagiarism and to provide due credit to the original authors of any works that a researcher draw.

Some Credible Sources

Bruno, E., Simblett, S., Lang, A., Biondi, A., Odoi, C., Schulze-Bonhage, A., Wykes, T., Richardson, M.P. and RADAR-CNS Consortium, 2018. Wearable technology in epilepsy: the views of patients, caregivers, and healthcare professionals. *Epilepsy & Behaviour*, 85, pp.141-149.

Godfrey, A., Hetherington, V., Shum, H., Bonato, P., Lovell, N.H. and Stuart, S., 2018. From A to Z: Wearable technology explained. *Maturitas*, 113, pp.40-47.

Wu, M. and Luo, J., 2019. Wearable technology applications in healthcare: a literature review. *Online J. Nurs. Inform*, 23(3).

The above sources were retrieved from google scholar, which is a reliable online platform. The researcher used the keywords "use of wearable technology in healthcare" to arrive at the sources. To identify the credibility of these sources for the study topic of "The use of wearable technology in managing chronic diseases within nursing homes," the researcher follows these steps: Check the authors' credentials. Are the authors' qualified experts in their field? Do they have relevant experience or education that would make them knowledgeable about wearable technology in healthcare? Evaluated the publication, is the source a peer-reviewed journal or conference paper? Peer review is a process in which experts in the field review a manuscript before it is published, which can help ensure that the content is accurate and trustworthy. Looked for any potential prejudice: Does the author or funding source have any potential biases that could affect the results or conclusions of the study? Assessed the methodology: Is the study well-designed and conducted rigorously? Do the data support the results?

Based on this evaluation, the following sources are considered credible for the study topic because of various reasons. Wu and Luo (2019) is a literature review published in an online nursing informatics journal. The authors appear to be qualified experts in nursing informatics and wearable technology. The publication is peer-reviewed, and the study appears to be well-conducted, with the authors conducting a comprehensive review of the literature on wearable technology in healthcare. Bruno et al. (2018) is a conference paper published in the journal *Epilepsy & Behaviour*. The authors appear to be qualified experts in the field of epilepsy and wearable technology. The publication is peer-reviewed, and the study appears well-conducted, with the authors gathering views from a diverse group of collaborators, including patients, caregivers, and healthcare professionals. Godfrey et al. (2018) is a review article published in the journal *Maturitas*. The authors appear to be qualified experts in the field of wearable technology. The publication is peer-reviewed, and the study appears to provide a comprehensive overview of wearable technology and its potential applications in healthcare.

Reference List

- Bruno, E., Simblett, S., Lang, A., Biondi, A., Odoi, C., Schulze-Bonhage, A., Wykes, T., Richardson, M.P. and RADAR-CNS Consortium, 2018. Wearable technology in epilepsy: the views of patients, caregivers, and healthcare professionals. *Epilepsy & Behaviour*, 85, pp.141-149.
- George, T. 2021. What Are Credible Sources & How to Spot Them | Examples. *Scribbr*. <https://www.scribbr.com/working-with-sources/credible-sources/> 3 January 2023.
- Godfrey, A., Hetherington, V., Shum, H., Bonato, P., Lovell, N.H. and Stuart, S., 2018. From A to Z: Wearable technology explained. *Maturitas*, 113, pp.40-47.
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- Snipp, P.M. 2021. 14 Ways to Find a Topic for Your Research Paper - wikiHow. *wikiHow*. <https://www.wikihow.com/Find-a-Topic-for-Your-Research-Paper> 3 January 2023.
- Wu, M. and Luo, J., 2019. Wearable technology applications in healthcare: a literature review. *Online J. Nurs. Inform*, 23(3).