

TELE-EDUCATION IN FAMILY AND PATIENTS IN HIV/AIDS MANAGEMENT DURING TREATMENT

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ABSTRACT

This study aims to determine the tele-education of families and patients in managing HIV/AIDS during treatment. This type of research is Literature, selecting themes and possible keywords (Keywords) and Boolean operators (AND, OR NOT or AND NOT) before finding scientific articles online. The literature search in this literature review uses three databases, namely Science Direct, PubMed, and Scopus. The results showed that six pieces were considered relevant using The Joanna Briggs Institute (JBI), which assessed the quality of journals, and articles from various developed countries, including Norway, China, Germany, Egypt, and the United States. In conclusion, Telehealth, Tele-education, mHealth, and HIV can be developed in the world of health, especially 1000, which aims to build science and practice.

Keywords: Family, Patient, HIV/AIDS Management, Tele-Education

INTRODUCTION

Human Immunodeficiency Virus (HIV) is a type of virus that can infect white blood cells which can cause a decrease in the human immune system (Herbawani & Erwandi, 2020). Acquired Immune Deficiency Syndrome (AIDS) is a collection of symptoms that arise due to decreased immunity caused by HIV infection (Fatihatunnida & Nurfiti, 2018). The largest cases of HIV infection in the world are the African continent with 25.7 million people, then the second in Southeast Asia with 3.8 million people, and the third in America with 3.5 million people (Andrianto et al., 2021; Infodatin Kemenkes RI, 2020).

Society often gives negative assumptions to PLWHA patients so that the negative stigma will affect ODHA in responding to their physiological adaptations (Andri et al., 2020). HIV/AIDS case management is a continuous service that involves or collaborates with other sectors including doctors, nurses, psychologists, family and social aspects which include supportive treatment (support), prevention and treatment of opportunistic infections and antiretroviral (ARV) treatment. The HIV/AIDS case management process is divided into five stages, including: initial intake, assessment, service planning, linkage and referral services, monitoring and evaluation (Andrianto et al., 2020; Kurniyawati & Fuaida, 2017).

Current technological developments greatly affect maximum health services to support the efficiency of nursing resources which makes it one of the professions that has an important role in developing technology-based services. The use of this technology is applied to tele-education technology to support long distance systems between nurses and patients. Tele-education is defined as telecommunications technology used to improve health information and health services in areas that have problems with geographical conditions, access, social level, culture, telehealth system services using the internet with systems, video conferencing, SMS (Short Message System), e-mail, cellular/traditional

phones, cameras, robotics, 3D sensors and WAP (Wireless Application Protocol) on communication networks between nurses and patients (Istifada et al., 2018; Padila et al., 2018).

Tele-education programs have been used in various forms in the health sector to improve access in settings for the development of remote service education as best practice in health programs. This development is a real need and a solution to assist in health education services related to remote handling of HIV/AIDS cases.

The adoption of tele-education or telehealth is a pleasant advantage of video-based visits. Telehealth can also address common barriers to retention in HIV care. The benefits of implementing tele-education or telehealth are for patients who have difficulty with transportation, inflexible work schedules, stressful life events. The ability of telehealth providers to see the state of the patient's home and the social context of the patient's environment including family members who are protected by the patient. Overall, patients and families have positive attitudes about the potential benefits of using teleeducation or telehealth because they have more privacy.

RESEARCH METHOD

Literature Search Strategy

A comprehensive summary in the form of a literature review on teleeducation for families and patients in HIV/AIDS management during hospitalization. The protocol and evaluation of the literature review will use the PRISMA checklist to determine the selection of studies that have been found and adapted to the objectives of the scoping review.

Search Database

Literature review which is a comprehensive summary of how many studies are determined based on certain research. The literature search was carried out in December 2020. The data used in this study was secondary which was obtained not from direct observation, will be obtained from the results of research that has been carried out by researchers- previous researchers. The secondary data sources obtained are in the form of reputable journal articles both nationally and internationally with predetermined themes. The literature search in this literature review uses five databases with high and medium quality criteria, namely, Google Scholar, Pubmed, Scopus, proQuest.

Keywords

Table. 1
Keywords in Literature Review

| No | Data Base | Keyword | Synonim |
|----|----------------------------------|--------------------------------|--|
| 1 | | Tele-education* | M-health E-health Mobile-health Telehealth Telenursing |
| | Science Direct, Pubmed,Scopus | Pasien* Patient* Fmilly* | Penderita, Pengidap community |
| | | Management* HIV/AIDS* | Sistem Administrasi People living with HIV/AIDS ODHA |

The search was carried out using the Google Scholar, Pubmed, Scopus, proQuest databases, with keywords for each variable that had been selected. The articles found were read carefully to see whether the articles met the authors' inclusion criteria to serve as literature in writing a scoping review. Limited income from 2015 to 2020 which is accessed in full text in pdf format and has a PRISMA design and qualitative research. Articles that meet the inclusion criteria are analyzed, extracted and synthesized and then the evidence is determined. From the results of the extraction and analysis, a conclusion can be obtained that can be used as the basis for conducting medical surgical nursing interventions. Search using keywords that have been compiled. After being selected based on inclusion and exclusion criteria, it was found (n= 1500) that the articles were analyzed. Below is a (N=6) list of extracted articles in tabular form:

Prisma Flowchart

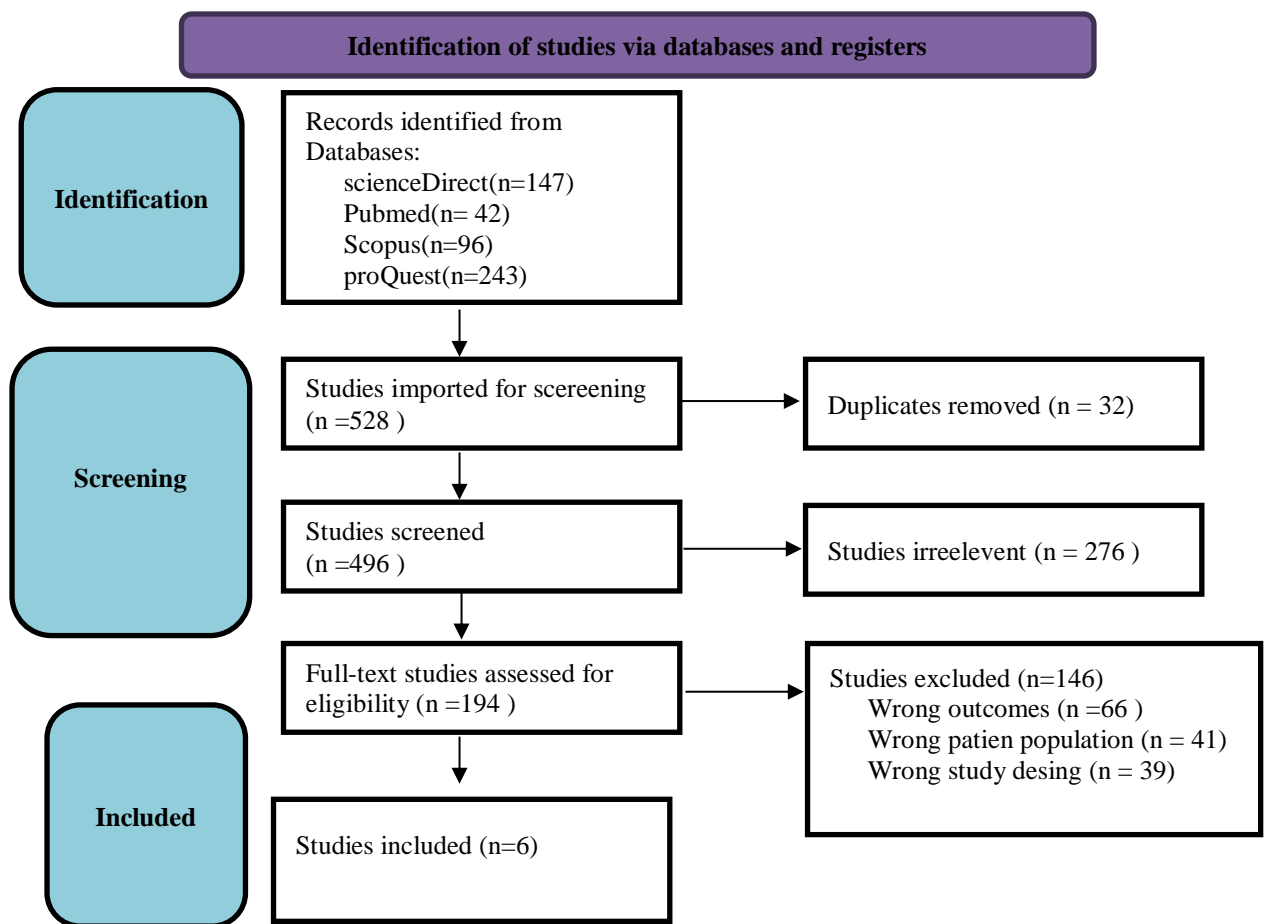


Figure. 1
Prism Flowchart

RESULTS

Study Characteristics

The articles that have been obtained are then extracted. Extraction of articles based on article author, year of publication, title, country, method, design, sample, results of research conducted, and journal quality.

Table. 2
Literature Review

| Author Name, Article Title, Literature Type | Year | Aims | Findings |
|--|------|--|--|
| Fresia, Efektivitas Pemberian Edukasi Berbasis Audiovisual dan Tutorial Tentang Antiretroviral (ARV) Terhadap Kepatuhan Pengobatan pada Pasien HIV / AIDS di Klinik Teratai Rumah Sakit Hasan Sadikin Bandung Tahun 2016, <i>Quasi experimental with pretest- posttest design</i> | 2016 | To find out the effectiveness of providing audiovisual- based education and tutorials about antiretrovirals (ARVs) on medication adherence in HIV/AIDS patients at the Lotus Clinic, Hasan Sadikin Hospital | Educational programs using visual media, audio media, audiovisual media and animation, as well as computer media are intended so that patients not bored in the learning process, able to encourage and motivate patients to be more obedient to treatment programs and change lifestyles in handling cases of HIV/AIDS. |
| Dandachi et al., It is Time to Include Telehealth in Our Measure of Patient Retention in HIV Care. AIDS and Behavior, <i>Qualitative</i> | 2020 | To find out how to Include Telehealth in a Patient Retention Measure in HIV Care | Telehealth programs for PWH can increase retention in care. Availability and trustworthiness of using various telehealth Technologies need to be addressed to increase acceptance and use of telehealth among PWH |
| Tenforde et al., Telehealth in Physical Medicine and Rehabilitation : A Narrative Review, <i>Literature Review</i> | 2017 | To know Telehealth in Physical Medicine and Rehabilitation | Teleeducation as a solution in overcoming the distribution of health services. Teleeducation in homecare services is applied using virtual interactions with patients without reaching access to health services |
| Dandachi et al., Exploring the Attitude of Patients with HIV About Using Telehealth for HIV Care. AIDS Patient Care and STDs, <i>Qualitative</i> | 2020 | To explore attitudes of people living with HIV (PWH) about using telemedicine for HIV care rather than face-to-face clinic visits | Tele-education or Telehealth can overcome common barriers to HIV care, including difficulties with transportation, inflexible work schedules, and long distance clinic visits. |
| Webel et al., The Impact of Mental Wellness on HIV Self- Management, <i>Cohort Study</i> | 2016 | To describe the relationship between HIV self-management practices and mental health (depressive symptoms, perceived stress) | HIV management can improve the work of health workers related to the management of HIV infection plus the prevention and mitigation of various chronic health conditions, including the practice of chronicity health. Thus can face associated with HIV infection and mental health. |

| | | | |
|--|------|--|--|
| Zepeda et al., Management of nursing care in HIV / AIDS from a palliative and hospital perspective, <i>Qualitative Research</i> | 2019 | To find out Nursing Care Management in HIV/AIDS from a Palliative and Hospital Perspective | Five categories covering the profile of hospitalized persons, palliative care, intervention conditions for care management, the need for qualified professionals, and other aspects to better organize and manage care, including emerging management conflicts. |
|--|------|--|--|

Study Characteristics

Respondents in this study were adults who carried out treatment in a research study on family and patient teleeducation with a total of 30 respondents. Respondents in this study were aged 20 to 60 years. The gender characteristics of the respondents are almost the same between men and women because the study is comprehensive and most of the education levels are upper secondary.

Educational programs using visual media, audio media, audiovisual media and animation, as well as computer media are intended so that patients not bored in the learning process, able to encourage and motivate patients to be more obedient to treatment programs and change lifestyles in handling cases of HIV/AIDS.

DISCUSSION

Tele-education is one of the ways that can be used to help improve public health status, including promotive, preventive, curative and rehabilitation efforts. This is the need for education to families and patients in order to stabilize the health status of HIV/AIDS patients. Educational media that can be used for health educators can be in the form of visual media, audio media, audiovisual and animation media, as well as computer media, this method serves so that patients do not get bored in the learning process (Fresia, 2016).

The education provided is in the form of knowledge, encouragement and motivating patients to be more obedient to treatment programs and change unhealthy lifestyles, and will help clarify the material to be delivered, in the process of implementing HIV management during the implementation of care. So, with this educational method, it is hoped that families and patients with HIV can overcome problems and improve treatment and can also understand and apply the education provided to their daily lives (Fresia, 2016).

The availability of telehealth or tele-education can be used for patients who feel their health is very good and poor, HIV patients who are not controlled, as well as for patients who have a higher stigma on HIV. Telehealth or tele-education can overcome many of the factors defined as barriers to retention in HIV care. The availability of such programs on the application of the HIV virus can improve nursing services. This can explore HIV patients using telehealth in HIV care instead of clinic visits or face-to-face (Dandachi et al., 2020).

In a study conducted by Dandachi et al., (2020) that in this study explored patient attitudes about using telehealth or teleeducation programs for HIV care through face-to-face care or clinic visits. The ability to adapt better, reduce travel time, and privacy. There are several concerns regarding effective communication skills and the checking and security of personal information. The possibility of using telehealth or tele-education programs for HIV patients could increase retention in care. The availability and trustworthiness of using various technologies need to be addressed to increase the acceptance and use of telehealth or tele-education.

HIV management is a central health goal for everyone living with a chronic disease, including those living with HIV. However, what influences the global constructs of HIV self-management, beyond HIV-specific behaviors, is unknown. Evaluated the impact of mental health on HIV self-management and found evidence that depressive symptoms were associated with successful HIV management. Transitioning to an era that focuses on healthy living with HIV, our evidence reveals one domain specific, daily self-management health practice scale is primarily influenced by one domain of mental health aspects of depressive symptoms. As people living with HIV get older, they develop morbidity that can be prevented or reduced by being physically active; eat a healthy diet; manage stress and symptoms; and balance work, family, and health responsibilities. Effective and tailored interventions to improve these self-management behaviors are needed (Pollack et al., 2020; Webel et al., 2016).

Within the framework of the nursing paradigm, adequate nursing care management seeks to facilitate the development of beneficial actions to meet the needs of PLWHA and their families in various fields that penetrate hospital and palliative perspectives. Thus, the need to understand patients and families in aspects that go beyond the clinical complications of AIDS is evident to contribute to the control of conditions that require hospitalization, in continuity of follow-up after discharge from hospital, health care networks and components, as in the case of special care in hospitals. outpatient level at the institution itself, as well as primary care services. The theoretical matrix construction, despite the limitations that arise from a particular context, through the elements of a paradigmatic model brings together information that can help nurses to characterize their practice, seeking to harmonize theoretical concepts related to the management of nursing care (Zepeda et al., 2019).

CONCLUSION

It can be concluded that Telehealth, Teleeducation, mHealth and HIV can be developed in the world of health, especially nursing which aims to develop science and practice. Small-scale efforts, pilot projects, and preliminary descriptive studies are being developed for increasingly systematic and rigorous monitoring/evaluation, operations research, and impact evaluation.

SUGGESTIONS

For other research to start measuring and integrating into local programs and prevention with HIV/AIDS management, the theoretical framework for Telhealth, Teleeducation, mHealth programs should be articulated and evaluated, and the overall rigor of research and evaluation should be increased to strengthen and provide actionable action.

REFERENCES

- Andri, J., Ramon, A., Padila, P., Sartika, A., & Putriana, E. (2020). Pengalaman Pasien ODHA dalam Adaptasi Fisiologis. *Journal of Telenursing (JOTING)*, 2(2), 127-141. <https://doi.org/10.31539/joting.v2i2.1397>
- Andrianto, M. B., Setyawati, A. D., Muin, M., & Mendofa, F. A. M. (2020). Koping Religius pada Kelompok Penderita HIV/AIDS. *Journal of Telenursing (Joting)*, 2(2). 150-157. <https://doi.org/10.31539/joting.v2i2.1528>
- Andrianto, M. B., Padila, P., Andri, J., Sartika, A., & Harsismanto, J. (2021). Religious Practices on HIV/AIDS Patients. *JOSING: Journal of Nursing and Health*, 2(1), 8-14. <https://doi.org/10.31539/josing.v2i1.2976>

- Dandachi, D., Dang, B. N., Lucari, B., Teti, M., & Giordano, T. P. (2020). Exploring the Attitude of Patients with HIV About Using Telehealth for HIV Care. *AIDS Patient Care and STDs*, 34(4), 166–172. <https://doi.org/10.1089/apc.2019.0261>
- Dandachi, D., Freytag, J., Giordano, T. P., & Dang, B. N. (2020). It is Time to Include Telehealth in Our Measure of Patient Retention in HIV Care. *National Library of Medicine*, 24(9), 2463–2465. <https://doi.org/10.1007/s10461-020-02880-8>
- Fatihattunnida, R., & Nurfitra, D. (2018). *Hubungan antara Pengetahuan, Dukungan Keluarga, dan tingkat ekonomi dengan kepatuhan pengobatan antiretroviral pada penderita HIV/AIDS di Yayasan Matahati Pangandaran*. Universitas Ahmad Dahlan. <http://eprints.uad.ac.id/id/eprint/15131>
- Fresia, S. (2016). Efektivitas Pemberian Edukasi Berbasis Audiovisual dan Tutorial Tentang Antiretroviral (ARV) terhadap Kepatuhan Pengobatan pada Pasien HIV / AIDS di Klinik Teratai Rumah Sakit Hasan Sadikin Bandung Tahun 2016. *The Indonesian Journal of Infectious Diseases*, 3(2), 38-45. <https://doi.org/10.32667/iji>
- Herbawani, C. K., & Erwandi, D. (2020). Faktor-Faktor yang Berhubungan dengan Perilaku Pencegahan Penularan Human Immunodeficiency Virus (HIV) oleh Ibu Rumah Tangga di Nganjuk, Jawa Timur. *Jurnal Kesehatan Reproduksi*, 10(2), 89–99. <https://doi.org/10.22435/kespro.v10i2.2085>
- Infodatin Kemenkes RI. (2020). *Infodatin HIV*. Kementerian Kesehatan RI, 1–12. <https://pusdatin.kemkes.go.id/article/view/20111200002/infodatin-hiv.html>
- Istifada, R., Sukihananto, S., & Laagu, M. A. (2018). Pemanfaatan Teknologi Telehealth pada Perawat di Layanan Homecare. *Nursing Current Jurnal Keperawatan*, 5(1), 51. <https://doi.org/10.19166/nc.v5i1.1102>
- Kurniyawati, D & Fuaida, L. D. (2017). *Manajemen Kasus dalam Menangani Orang dengan HIV/ AIDS (ODHA) oleh Pekerja Sosial pada Yayasan Pelayanan Anak dan Keluarga (Layak) di Citayam 3 Depok*. Universitas Islam Negeri Syarif Hidayatullah Jakarta <https://repository.uinjkt.ac.id/dspace/123456789/37539/.pdf>
- Padila, P., Lina, L. F., Febriawati, H., Pratiwi, B. A., & Yanuarti, R. (2018). Home Visit Berbasis Sistem Informasi Manajemen Telenursing. *Jurnal Keperawatan Silampari*, 2(1), 217-235. <https://doi.org/10.31539/jks.v2i1.305>
- Pollack, T. M., Nhung, V. T. T., Vinh, D. T. N., Hao, D. T., Trang, L. T. T., Duc, P. A., Kinh, N., Van-Dung, N. T. H., Dung, D. L., Ninh, N. T., Huyen, H. T. T., Huy, V. X., Hai, D. M., Khanh, T. H., Hien, N. T. T., Khuong, P. T. A., Trong, N. T., Lam, N. Van-Phinh, V. N., & Cosimi, L. (2020). Building HIV Healthcare Worker Capacity Through Telehealth in Vietnam. *BMJ Global Health*, 5(4), 1–9. <https://doi.org/10.1136/bmjgh-2019-002166>
- Tenforde, A. S., Hefner, J. E., Kodish-wachs, J. E., Iaccarino, M. A., & Paganoni, S. (2017). Telehealth in Physical Medicine and Rehabilitation : A Narrative Review. *PM&R*, 9(5), S51–S58. <https://doi.org/10.1016/j.pmrj.2017.02.013>
- Webel, A. R., Sattar, A., Schreiner, N., Kinley, B., Moore, S. M., & Salata, R. A. (2016). The Impact of Mental Wellness on HIV Self-Management. *Physiology & Behavior*, 176(1), 139–148. <https://doi.org/10.1016/j.jana.2016.03.002>
- Zepeda, K. G. M., Silva, M. M. Da-Santos, D. C. L. dos, Gaspar, R. B., & Trotte, L. A. C. (2019). Management of Nursing Care in HIV / AIDS from a Palliative and Hospital Perspective. *Res Braf Enferm*, 72(5), 1243–1250. <https://doi.org/10.1590/0034-7167-2017-0431>