

## Education With Video on Diabetes Mellitus Patients' Treatment Compliance Based on The Philosophy of Ontology: A Review

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### ABSTRACT

**Background :** Diabetes Mellitus is a metabolic disorder in which the body is unable to produce insulin or cannot maximize the work of insulin produced by the pancreas. **Objective:** This literature aims to analyze the philosophical study from the perspective of Ontology. Article searches come from several sources such as ProQuest, Google Scholar, PubMed, and other search engines using the keywords education in diabetic patients" Or "diabetic patient video education" and "diabetes management education using video". **Results:** obtained from the literature search found that providing video-based education can improve medication compliance in diabetes mellitus patients. **Conclusion:** video-based education can be applied to diabetes mellitus patients and can be applied in one of the nursing care interventions.

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## **Introduction**

Diabetes Mellitus or commonly called a silent killer is a metabolic disorder in which the body is unable to produce insulin or cannot maximize the work of insulin produced by the pancreas. It is called a silent killer because this diabetes disease is most often known when further complications have occurred (Massi et al., 2020). Problems that often occur in patients who have been diagnosed with diabetes are non-compliance in carrying out follow-up care for DM patients such as: diet, non-compliance in administering insulin, lack of knowledge and lack of physical activity, these are problems that often occur in Diabetes patients (Adam et al., 2018).

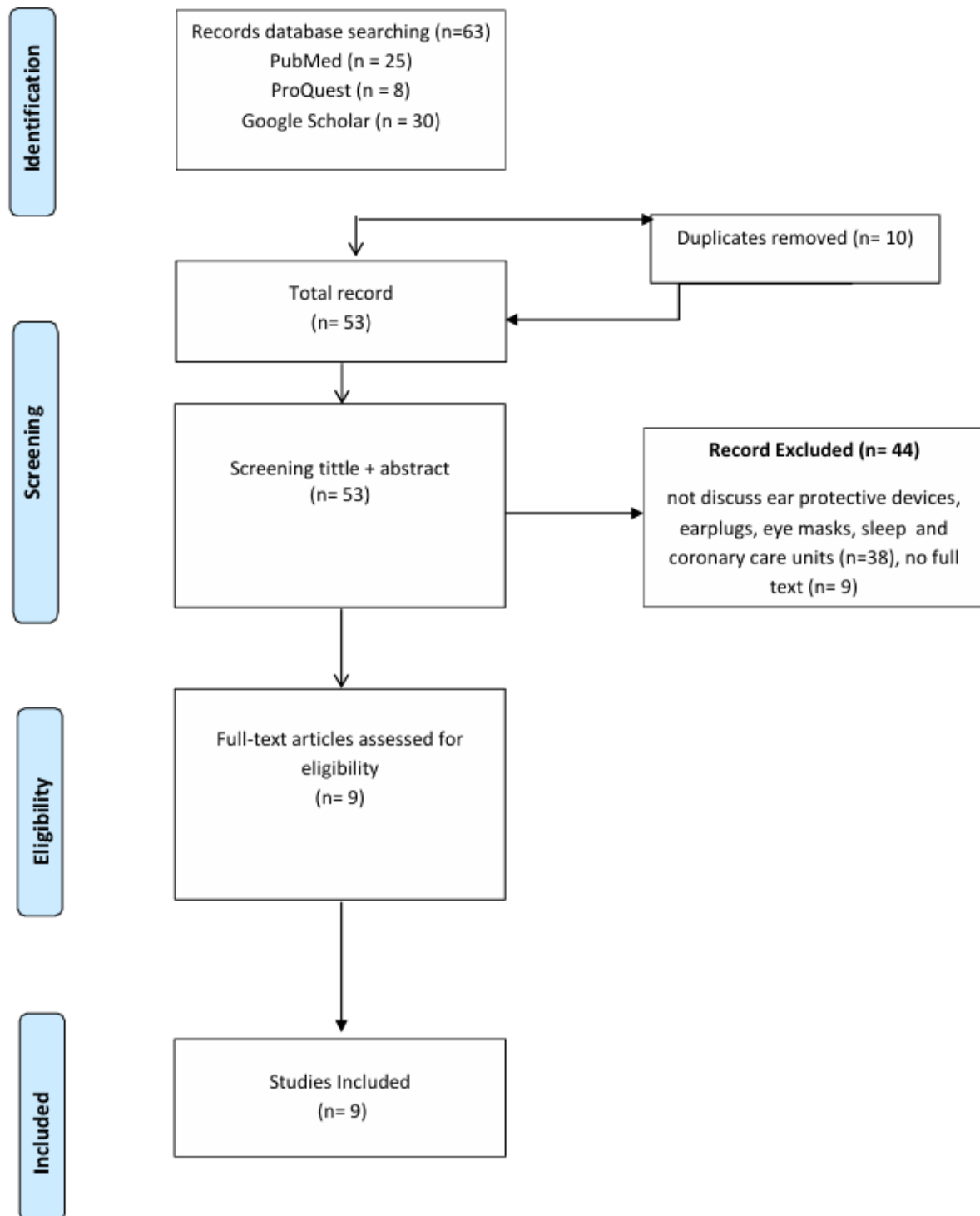
There are several ways to improve the quality and increase the level of compliance in diabetes patients in improving their health, such as providing educational videos or direct education (Molavynejad et al., 2022). Research conducted by (Leong et al., 2022) states that providing educational videos through social media has been shown to increase patient independence in dealing with their illness. This is also emphasized by (Molavynejad et al., 2022) who combined video and face-to-face education and found that providing education via video was more effective than providing education face-to-face, but (Molavynejad et al., 2022) emphasized in their research that providing direct education has the advantage of creating an interactive relationship with the patient.

## **Objective**

This literature aims to analyze the philosophical study from the perspective of Ontology. Article searches come from several sources such as ProQuest, Google Scholar, PubMed, and other search engines using the keywords education in diabetic patients" Or "diabetic patient video education" and "diabetes management education using video".

## **Method**

Article search using the keywords "education in diabetic patients" Or "diabetic patient video education" and "diabetes management education using video". In the article search, it can be seen from the Flow chart as follows:



## Results

**Tabel 1.** Article search

Author/ Year	Article Title	Method	Results
(Molavynejad et al., 2022)	A randomized trial of comparing video telecare education vs. in-person education on dietary regimen compliance in patients with type 2 diabetes mellitus: a support for clinical telehealth Providers	RCT	The research results found that education via video was more significant than direct face-to-face education, but the researchers added that direct face-to-face education was just as good.
(Adam et al., 2018)	Evaluating the Impact of Diabetes Self-Management Education Methods on Knowledge, Attitudes and Behaviours of Adult Patients With Type 2 Diabetes Mellitus	RCT	The research conducted was to analyze the independence of diabetes patients by looking at the knowledge, attitudes and behavior of diabetes sufferers through direct face-to-face education and supervision at home.
(Hu et al., 2022)	Leveraging Social Media to Increase Access to an Evidence-Based Diabetes Intervention Among Low-Income Chinese Immigrants: Protocol for a Pilot Randomized Controlled Trial	RCT	This study focuses on Chinese immigrants, where this study utilizes social media-based educational videos to improve the health status of Chinese immigrants, and finds that there is an increase in knowledge and an increase in the level of health of Chinese immigrants.
(Cha et al., 2017)	Community-based randomized controlled trial of diabetes prevention study for high-risk individuals of type 2 diabetes: Lifestyle intervention using web-based system	RCT	This study aims to prevent the increase in diabetes sufferers, where the results of the study said that there was an increase in knowledge about preventing diabetes and an increase in interest in sports. This study used the video method.
(Dyson et al., 2010)	An assessment of lifestyle video education for people newly diagnosed with type 2 diabetes	RCT	This study aims to improve and maintain the health status of newly diagnosed diabetes patients (acute), where this study resulted in an increase in knowledge and interest in learning from patients who were given educational videos.
(Subramanian et al., 2020)	Effectiveness of nurse-led intervention on self-management, self-efficacy and blood glucose level among patients with Type 2 diabetes mellitus	RCT	The results of the study prove that intervention in the form of providing educational videos can improve self-management in diabetes patient
(Leong et al., 2022)	Social Media-Delivered Patient Education to Enhance Self-management and Attitudes of Patients with Type 2 Diabetes During the COVID-19 Pandemic: Randomized Controlled Trial	RCT	The results of the study prove that providing video-based education via social media can improve self-management in diabetes patients.
(Hidrus et al., 2020)	Effects of brain breaks videos on the motives for the physical	RCT	The research results found that there was an increase in interest in learning from the intervention given,

Author/ Year	Article Title	Method	Results
	activity of Malaysians with type-2 diabetes mellitus		namely providing educational videos to diabetes patients.
(Hamidi et al., 2022)	The Effects of Self-Efficacy and Physical Activity Improving Methods on the Quality of Life in Patients with Diabetes: A Systematic Review	SYSTEMATIC REVIEW	The research results found that there was an increase in self-efficacy in the intervention of providing education via video.

Based on an ontological study of articles on video-based education to improve medication adherence, the following results were obtained:

1. Education has been proven effective in improving medication adherence.

Ontological analysis shows that the application of education has real potential to improve treatment adherence in diabetic patients. The essence of this intervention shows that education is an important component in building adherence behavior.

2. Video-based education has the potential to further improve adherence.

A more in-depth study shows that education through video media not only conveys information but also provides a more engaging and easy-to-understand learning experience. Ontologically, video media has characteristics that can strengthen understanding, thereby improving patient adherence to treatment.

## Discussion

The results of the study show that education, especially video-based education, has strong potential in improving medication adherence among patients. These findings are in line with the ontological concept that emphasizes understanding the essence of an intervention. In this context, education is understood as a systematic effort to shape behavior, increase knowledge, and influence patients' decisions in carrying out medical therapy.

Video-based education has been proven to provide a more engaging and interactive learning experience compared to conventional education. From an ontological perspective, video media not only conveys information, but also provides visualizations, audio, and storylines that can strengthen patient understanding. This is the basis for why videos are more effective in influencing compliance behavior, as patients can see real examples, clear instructions, and easy-to-remember explanations.

In addition, the use of video in education allows for consistent delivery of material, independent of variations in healthcare providers' explanations, and can be repeated whenever needed. This consistency reinforces the construction of meaning received by patients, thereby increasing medication adherence. From an ontological perspective, this shows that the essence of education through video media has stronger practical and functional value than verbal education alone.

Thus, this discussion emphasizes that video-based health education is an intervention that ontologically has a strong basis for improving treatment compliance, especially in patients with chronic diseases such as diabetes.

## Conclusion

The basis or main question in the literature review with the theme of video-based education in medication adherence is considered to be feasible based on the study of philosophical ontology. This is proven by the search for articles where the results show that video-based education can improve medication adherence, especially in patients with diabetes mellitus.

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