

Good epidemiology in the news: randomized trials nur 8310-1 literature review exa...

[Health & Medicine](#), [Diabetes](#)



Nursing

Shea, S., Kothari, D., Teresi, J. A., Kong, J., Eimicke, J. P., Lantigua, R. A., . . . Weinstock, R. (2013). Social impact analysis of the effects of a Telemedicine intervention to improve diabetes outcomes in an ethnically diverse medically underserved population: Findings from the IDEATel study. *American Journal of Public Health, 103*(10), 1888-1894. doi: 10.2105/AJPH.2012.300909

About the Article

Empirical and theoretical studies suggest that the adoption of innovations indicative of a general pattern revealing that adoption process of the health-related innovations vary according to socio-economic status of individuals. This is one of the fundamental principles behind the study conducted by Shea et al. (2013) on the Social impact analysis of the effects of a Telemedicine intervention to improve diabetes outcomes in an ethnically diverse medically underserved population: Findings from the IDEATel study. The study assumes that adoption to innovation is easier for individuals with better education and higher income threshold. In addition, socioeconomic factors were also identified as determinants of health service use in which less financially capable individuals tend to be less adoptable to innovations in healthcare services.

Purpose

With regards to the purpose served by the study, it is apparent that social impact was analyzed for the effectiveness of Telemedicine intervention

(icucare. com) in improving diabetes outcome among population of medically underserved and ethnically diverse.

Studied Population

The study focused on a specific population composed of 1, 665 participants from New York City, which are randomly assigned between December 2000 and October 2002. The participants were randomly selected using an inclusion criteria of 55 years or older and are currently enrolled Federal government funded healthcare, Medicare. In addition, the main qualifying characteristic used in selecting participants is the fact that all of them were diagnosed of diabetes and are being treated with hypoglycemic agent, controlled diet and or taking insulin.

Length of the Trial

The participants were first assured to have enrolled through primary care practices, which marks the beginning of the randomized trial. The length of the entire trial took one year and ten months beginning from December of 2000 until October of 2002. It appears that the length of the study itself took a long process due to the need for the desired outcome to achieve, which are gradual and changes could only be determined through long-term observation.

Data Collection Methods

The data collection method employed in the study was the IDEATel trial in which previous studies and data provided by the Telemedicine intervention was measured by determining the hemoglobin (HbA1c) systolic blood

pressure and density lipoprotein cholesterol of the targeted population was monitored and the differences in treatment outcome was measured between the patients that has access to Telemedicine and those that have none. The test trial results was collected and plotted to point out whether SES (socio-economic status) played an important role in terms of improvement outcome.

Outcome Measures

Measuring the outcome of the study encompasses the measurement of hemoglobin (HbA1c) systolic blood pressure and density lipoprotein cholesterol. The use of the data collected from these tests provides the important analytical information that determines whether SES is a factor or not in improving the condition of the samples.

Results and Conclusion

It was determined from the study that hemoglobin (HbA1c) is higher in low-income patients and that the intervention (Telemedicine) shows disparities based on SES. Whereas the systolic blood pressure among low-income patients were higher due to intervention effects. On the other hand, intervention effects were shown to have more positive effect among subjects among higher income subjects.

Ethical Issues Associated in the Study

In terms of ethical consideration, it is apparent that the study have employed the use of consent approval in which the participants have agreed to be a part of the study and that the study, the results of the trials, and pertinent

information about the subjects were protected and that utmost confidentiality of the medical information was exercised during the study.

Final Assessment of the Study

The research have benefited from the random design because it avoided the possibilities of biases that will render the results inadmissible. However, the randomization might have been demonstrated further demonstration of the important differential aspects that would support the claim further. For example, it was determined that SES plays an important role in determining the intervention outcome among low and high-income patients. The study could have also shown a variation of other results that would aid the field of study in pointing out the other study that will result to further improvement in patient intervention and access to healthcare.

References

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