Secondary Analysis of Maternal Education and Decision of Medical Birth Attendant

Cassidy Walter
cawalter@carroll.edu

Courtney Sherick
csherick@carroll.edu

Follow this and additional works at: https://scholars.carroll.edu/surf

Part of the Health Services Research Commons, Maternal and Child Health Commons, Public Health Education and Promotion Commons, and the Women's Health Commons

https://scholars.carroll.edu/surf/2018/all/55

This Event is brought to you for free and open access by Carroll Scholars. It has been accepted for inclusion in Carroll College Student Undergraduate Research Festival by an authorized administrator of Carroll Scholars. For more information, please contact tkratz@carroll.edu.
Secondary Analysis of Maternal Education and Decision of Medical Birth Attendant

Cassidy Walter and Courtney Sherick, Department of Health Sciences. Carroll College, Helena, Montana.

Introduction

Although OB-GYN doctors are commonly credited with being more qualified to perform births, many studies have shown that midwives are equally qualified in low-risk situations.

This secondary analysis investigates the usage of midwives versus medical doctors according to maternal education, and makes inferences as to what accounts for any correlations.

We hypothesized that more educated women would be more likely to utilize midwives because of easier access to educational materials, and because they typically have children later in life and have therefore gathered more information.

The results of this study revealed a need for further research about access to medical care, how informed women are when it comes to choosing a medical birth attendant, and more awareness on what midwives typically offer that doctors do not.

Methods

The data used for this secondary analysis was pulled from the database, CDC Wonder, for the years 2007-2015 under “Natality”.

Birth counts were grouped by the variables: education level of the mother and type of medical attendant at birth, and then downloaded into an excel file.

A two-tailed T-test assuming equal variance was used to evaluate which medical attendant was more likely to be chosen in all education levels.

This evaluation consisted of graphing and analyzing the line of best fit to see if it indicated a relationship between the variables of education, and midwife usage.

Results

Our analysis found that doctors were significantly more likely to be the birth attendant (p = 0.001).

As the level of the mother’s education increases, the percentage for the number of births delivered by a doctor of medicine also increased (Fig. 3).

Mothers-to-be with a low education have a higher percentage of midwives delivering babies than those with a higher education (Fig. 3).

The positive correlation indicates that as education increases, medical attendants are more likely to be doctors than midwives.

The bar graph (Fig. 4) showed that a higher percentage of infants are delivered by a doctor of medicine as the mother’s education increased.

Public Health Implications and Recommendations

These findings suggest that there might be a lack of public understanding when it comes to midwifery.

Research has found that midwives are well trained and even preferable to the women who choose them (Sutcliffe et al., 2012), yet our results show that increased education does not lead to increased midwife usage.

Awareness of the benefits of midwifery should be increased. A survey of the general population should be conducted to evaluate this awareness, and reveal why women in the USA typically do not use a midwife.

Acknowledgements

We would like to thank Katie Wagner for helping us through the research and creation of this presentation.

References


Figure 1. Process for obtaining, organizing and researching data to conduct a secondary analysis.

Figure 2. Cute baby: Kentucky Coalition of Nurse Practitioners & Nurse-Midwives. (n.d.). Retrieved April 07, 2018, from /www.kcnpnm.org/?page=about_nm

Figure 3. Doctor use was analyzed to compare percentage of usage among different educations.

Figure 4: A visual comparison of percentage of doctors chosen versus midwife.