

Critique of the Study Conducted By Author Deshayne and His Colleagues

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In 2005, the Canadian Journal of Public Health published a research article "Changes in Maternal Characteristics in Nova Scotia, Canada from 1988 to 2001." The research was conducted by author Deshayne B. Fell and his five colleagues. In this regard, the purpose of this paper is to critique the study by analyzing various aspects, such as research design, findings and nursing implication. This critique paper will also discuss the importance of incorporating the findings of this study into the community health nursing practice.

Study Design

The research article has examined the trend of maternal age, parity, smoking status, pre-pregnancy weight and during pregnancy weight over two periods of time, i.e. 1988 to 1991 and 1998 to 2001 (Fell, et al., 2005). The research has analyzed numerical values to show the trends of various variables; therefore, this is a quantitative study. In this research,

author Fell and his colleagues have surveyed and gathered data over a period of time. When a study collects the data more than twice, this type of study is called longitudinal study (Loiselle, Profetto-McGrath, Polit, & Beck, 2011). Similarly, there are a few sub-types of longitudinal studies such as cohort studies and panel studies. In cohort studies, data is gathered from the population experiencing a particular disease to find out the common factors they share (Stamler & Yiu, 2012). In the research of author Fell and his colleagues, all samples have given birth in various years. The Cohort study can be further divided into two sub types such as retrospective study and prospective study (Stamler & Yiu). Historical data from 1988 to 2001 was obtained from Nova Scotia Atlee Perinatal Database. Since this research has gathered the historical data to compare the trend, this study falls under retrospective cohort study.

Findings of the Study and Association

The study has examined the characteristics of maternal age, parity, smoking status, pre-pregnancy weight and during pregnancy weight in Nova Scotia. The entire frequency distribution of maternal age and pre-pregnancy weight between 1988 to 1991 and 1988 to 2001 has been shifted to the right. The result has shown that in this province, the age of first time mothers has been increased in later year. This picture clearly indicates that the results are significant. Similarly, the maternal weight has also been increased significantly. In contrast, the number of smokers has been slightly declined from 1988 to 2001, indicating the decrease in the prevalence of smoking. When we examined this trend with the overall Canadian trend, we can observe similarity. For example, one of the reports presented by CBC News Canada shows that since 2001, the smoking ban at the workplace rose from 62 percent to 68 percent in 2005 (CBC News, 2011). According to Health Canada

(2002), in all over Canada, university graduate women show less prevalence of smoking than lower educated women. Similarly, according to Parsons & McMullen (2009), in Canada the numbers of university graduate women are increasing. These three reports and statistics clearly indicate that various factors such as smoking ban, higher education and increasing number of graduate students are playing a positive role to reduce the prevalence of smoking in all over Canada. Therefore, the statistic of Nova Scotia shown in the study positively correlates with the statistic of overall Canada and makes sense.

Beside prevalence of smoking, other results of this study also match with the statistic of Canada. For example, population health approach indicates that health is largely influenced by various sociological, economical, political and personal factors such as education and income (Vollman, 2012). According to the Canadian Institute for Health Information [CIHI] (2004), the level of education is

considered one of the major determinants of health after income and poverty. These factors such as level of education and income are highly associated with the quality of lifestyles and health outcomes (Murphy, 2006; Khandoor & Mason, 2007). Based on these facts, the result presented in the research makes sense. On the one hand, various factors such as level of education and various media activities seem to be discouraging the pregnant women for quitting their smoking habits. On the other hand, the same factors seem to be responsible for increasing the maternal age and parity. It is because in later years, the number of women attending higher education has been increased significantly (Parsons & McMullen, 2009). Similarly, the trend of advanced maternal age is also positively correlated with the level of education (Carolan & Frankowska, 2011). Therefore, it is reasonable to conclude that, in later years, more women are engaging with their educational carrier before they become a mom.

Incorporating the Findings into the Community Health Nursing

One of the major goals of the community health nursing is to prevent the disease in the community by appropriate intervention such as education and enforcement (Vollman, 2012). These interventions also help to prevent or minimize the epidemic. Disease processes are the result of the interaction between host, agent and environment (Stamler & Yiu, 2012). The findings of this research can help the community health nurse to identify and understand such interactions that are adversely impacting the community health.

Nursing intervention should be integrated with the evidenced based practice presented by recent research and studies. Therefore, the study conducted by author Fell and his team is an important tool to educate the prenatal clients. The study is about maternal characteristics and their current trend, which is relevant and appropriate for the

community clients where the community nurse is responsible to provide education about maternal health. The authors have appropriately identified the current trends in the maternal health. The current trend of maternal age, as mentioned in the article, is associated with positive and negative health outcomes. For example, the current trend of advance maternal age is associated with some of the maternal health issues such as higher risk of stillbirth, low birth weight, preterm birth and other unwanted birth outcomes (Cleary, et al., 2005). On the other hand, some authors have also argued that this trend of advance maternal age is also associated with favourable outcomes such as quality care for newborns (Carolan & Frankowska, 2011). Therefore, The understanding of these issues helps health care providers to find the appropriate nursing strategies to decrease the risk of maternal health issues. These evidenced based facts also help the community clients to make an

informed decision about their preferences and health care needs.

According to the McGill Nursing Model, finding the client's strength and resources are very important nursing tasks to achieve the collaborative goal (Gottlieb & Feeley, 2005). The McGill model has suggested that the nurses should focus on the strength of the clients to motivate and balance out the deficits. Therefore, by explaining the positive aspects of the trends of maternal characteristics, such as the benefit of advance age, the community nurse can motivate new moms with advance maternal age for taking care of their newborn babies. It can also help younger women for making wise decisions about the choices of pregnancy and their academic career. Not only that, the conclusion of this research can also help community health clients to quit their smoking habits. More importantly, this study can also be used for explaining modifiable risks such as obesity, smoking, and alcohol consumption to the

community clients. The results of the study are correlated with the overall statistics of Canada. Therefore, the result of this research can be used in all provinces of Canada.

Further Research Question

Population health approaches states that the community client's health is largely influenced by various sociological, economical, political and personal factors such as level of education, income and lifestyle choices (Stamler & Yiu, 2012; CIHI, 2004). Since the research is retrospective in nature, it could not collect other factors influencing the trends such as lifestyles choices and level of income. Therefore, the research did not address how these determinants of health are related to the recent trends of maternal characteristics. For instant, as the maternal age increases, it is possible that the level of education and maturity also increases. Therefore, it is necessary to find the relationship between the determinants of health and the recent trends in maternal characteristics.

Further research question would be - are there any correlations between level of education and the maternal age in overall Canada? Answer to this research question could help us to identify the cost and benefit of academic career for a woman who wanted to be a healthy mom of a healthy newborn.

Conclusion

Like all other nursing profession, the community nursing also demands nurse's leadership and active participation. Active leadership is essential for understanding the community needs. When needs are identified, it is easier to create an appropriate intervention which requires a good research. Evidence based practice justifies the nursing intervention. Research conducted by author Fell and his team is an useful tool to educate the community clients about the current trends of the maternal health. This research can be used for developing and teaching prenatal classes in any Canadian community health unit. The current

trends, mentioned in the research, have both positive and negative impacts on the health of mother and their newborns. Therefore, it is nurses' responsibility to provide appropriate education so that harm can be minimized and benefit can

be maximized. The research conducted by author Fell and his team is highly recommended to all health care providers.

References

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