

Summary of research No. 2

Effect of Preconception Genetic Counseling on Consanguineous Couples in Rural Area

Background: Preconception genetic counseling is the process which helps people to understand and adapt to the medical, psychological, and familial complications of the genetic disease. This process gives information for family to know the chance of disease occurrence or recurrence. In fact preconception genetic counseling covers education about inheritance, testing, management, prevention, resources and research. Counseling helps to promote informed choices and adaptation to the risk or health condition.

Aim: The study aimed to evaluate the effect of preconception genetic counseling on consanguineous couples in rural area.

Study Design: A quasi-experimental design was used to conduct this study.

Setting: The study was carried out at the genetic center in Fayoum university hospitals.

Sample: A purposeful sample composed of two hundreds (200) consanguineous couples chosen as (40) couples were studied from each district were selected from five districts out of six districts in Fayoum Governorate

Tools: Three different tools were used for data collection. **First tool:** An interviewing questionnaire which comprised the following parts, couples' socio-demographic characteristics, health history of couples, family history about genetic diseases, and couples' knowledge regarding to genetic diseases. **Second Tool:** Medical record for consanguineous couples. **Third Tool:** Anxiety assessment scale for couples

Results: results of this study indicated that, the preconception genetic counseling had an effect on consanguineous couples' knowledge regarding genetic disorders between wives and husbands pre-post genetic counseling with highly statistically significant relation ($P < 0.001$). 60% of couples performed genetic investigations, and a few of them (4.5%)

take decision of using family planning methods, while more than one third of them (35.5%) didn't take any decision regarding reproductive health. Also there was a highly statistically significant relation between anxiety level for both wives and husbands pre-post genetic counseling ($P < 0.001$).

Conclusion: This study proved that genetic counseling helped in increasing couples' knowledge regarding genetic conditions for consanguineous marriage and helped them to take a proper decision toward their reproductive health. The study also revealed that there were significant statistical relations between couples' knowledge and their anxiety levels.

Recommendations: The study recommended the publication and dissemination of genetic counseling program in all maternity and child health care centers for consanguineous couples to raise awareness about their potential genetic problems with their offspring before marriage.

Key words: Preconception genetic counseling, Genetic investigation, consanguineous couples, Nurse's role in genetic counseling