Abstract

The Impact of Oral Contraceptive Use on Selected Vitamins and Minerals in Women of Reproductive Age †

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† Presented at the Second International Conference on Applied Medical Sciences 2023 (ICAMS-II) and the International Conference on Enhancing Clinical Nutrition in Palestine (ECNAD), Gaza, Palestine, 14–16 March 2023.

Abstract: Childbearing women on combined oral contraceptive agents (COCAs) have been linked with the development of various diseases and possible deficiencies in serum micronutrients. This study aimed at investigating the vitamins and trace mineral changes associated with the use of COCAs among child-bearing healthy women in the Gaza Strip. A comparative cross-sectional study was designed. After informed consent was obtained, questionnaires, anthropometric measurements, and blood samples were collected from a total of 90 women of childbearing age (45 used different contraceptive methods, and 45 used COCAs). The mean hemoglobin, hematocrit, and red blood cells that obtained from the COCAs users group were significantly lower than those in the non-users group (p < 0.001, p = 0.073, and p = 0.047, respectively). There was a significant association between the use of COCAs and cholesterol level (p = 0.044). In addition, there was a statistically significant difference in the levels of homocysteine and vitamin B6 between the groups (p = 0.008 and p = 0.010, respectively). The present study indicated the possibility of micronutrient deficiencies in women on combined oral contraceptive agents.

Keywords: contraceptives; micronutrients; childbearing age; Gaza

Author Contributions: Conceptualization, A.S.A. and I.A.N.; methodology, I.A.N.; software, A.S.A.; validation I.A.N., A.S.A. and A.M.M.; formal analysis, A.S.A.; investigation, A.M.M.; resources, A.M.M.; data curation, A.M.M.; writing—original draft preparation, A.S.A.; writing—review and editing, A.S.A. and A.M.M.; visualization, A.S.A.; supervision, I.A.N.; project administration, I.A.N.; funding acquisition, A.M.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of local Helsinki committee (DHRC/HC/77/16).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Conflicts of Interest: The authors declare no conflict of interest.

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