



Short Communication

Acceptance of COVID-19 vaccine and associated factors among pregnant women

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Dear editor

The published article by Ghamri RA et al., revealing the pregnant women' vaccination uptake of COVID-19 vaccine and associated factors, piqued our curiosity [1]. We recognize the need of researching pregnant women' reactions to the COVID-19 vaccination. We infer the possible elements that influence expectant women' desire to accept the COVID-19 vaccination in this communication, which we anticipate will lead to more strong findings of vaccine acceptance predictions.

Infection with COVID-19 during pregnancy is linked to an increased risk of mortality and morbidity in both the mother and the baby [2,3]. COVID-19 vaccinations have been described as a therapy option for the disease's prevention in pregnant moms [2]. Despite this, a study of vaccine apprehension among expectant women was published.

According to the findings of Ghamri RA et al., mothers' vaccine attitudes were a predictor of vaccine hesitation [1]. This was due to a lack of evidence on the efficacy and side effects of the newly developed vaccination on pregnant mothers and their unborn children [4,5].

In a study by Ghamri RA et al., the gestational week was found to be a predictor of vaccine uptake. This is because pregnant women in the first trimester were more likely than those in the later trimesters to receive the vaccine [4]. There was a direct relationship between COVID-19 The knowledge, attitude and practice of the mothers towards the disease and their vaccine acceptance. Despite this, the predictors were not studied that might be a possible confounder for vaccine acceptance.

In the study by Ghamri RA et al., the area of living was a predictor of vaccine acceptance. This was supported by the findings of a study conducted in northeastern Ethiopia [3]. In urban regions, vaccine acceptability was higher than in rural areas. This could be owing to the influence of various social media platforms, adequate health care, and the presence of human resources in urban regions.

The author looked at the link between past tetanus and influenza vaccination and COVID-19 vaccine uptake. Women who had a tetanus toxoid vaccination during pregnancy were more likely to have the COVID-19 vaccine [6].

Different socio-demographic and obstetric variables of pregnant moms were identified by the author. However, because they may be given with information on vaccine safety and efficacy during their follow-up, the author was unable to examine the impact of prenatal and postnatal care visits on possible vaccine uptake.

Similarly, their husband's opinion toward the COVID-19 immunization was not evaluated.

A husband who was willing to have COVID-19 vaccine for his wife was a predictor of COVID-19 vaccine in a pregnant mother, according to a study by Pairat and Phaloprakarn et al. [7].

The author solely looked at the husband's work in terms of vaccine acceptability. As a result, more research might be done to determine the factors that are linked the couples' acceptance of COVID-19 vaccines and the impact of antenatal and post natal care could be studied at large.

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Abbreviations: COVID, Coronavirus disease.

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Author contribution

FB contributes in the preparation of this communication. BS was participated in preparing the first draft of the manuscript. YB was contributed to the editing of the manuscript. All authors checked and confirmed the final version of the manuscript.

Registration of research studies

NA.

Guarantor

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Declaration of competing interest

The author reports no conflicts of interest for this letter.

References

- [1] R.A. Ghamri, S.S. Othman, M.H. Alhiniah, R.H. Alelyani, A.M. Badawi, A. A. Alshahrani, Acceptance of COVID-19 vaccine and associated factors among pregnant women in Saudi Arabia, *Patient Prefer. Adherence* 16 (2022) 861, <https://doi.org/10.2147/PPA.S357653>.
- [2] E.O. Kharbanda, G. Vazquez-Benitez, COVID-19 mRNA vaccines during pregnancy: new evidence to help Address vaccine hesitancy, *JAMA* 327 (15) (2022 Apr 19) 1451–1453.
- [3] E.B. Taye, Z.W. Taye, H.A. Muche, N.T. Tsega, T.T. Haile, A.E. Tiguh, COVID-19 vaccine acceptance and associated factors among women attending antenatal and postnatal cares in Central Gondar Zone public hospitals, Northwest Ethiopia, *Clinical Epidemiology and Global Health* 14 (2022 Mar 1) 100993.
- [4] S. Goncu Ayhan, D. Oluklu, A. Atalay, D. Menekse Beser, A. Tanacan, O. Moraloglu Tekin, D. Sahin, COVID-19 vaccine acceptance in pregnant women, *Int. J. Gynecol. Obstet.* 154 (2) (2021 Aug) 291–296.
- [5] A. Ercan, E. Şenol, A. Firat, COVID-19 vaccine hesitancy in pregnancy: a cross-sectional study, *J Clin Obstet Gynecol* 32 (1) (2022) 7–12.
- [6] Z. Iliyasu, J.M. Perkins, F.I. Tsiga-Ahmed, H.S. Galadanci, A.M. Jibo, T.G. Amole, A. A. Umar, H.M. Abdullahi, A.A. Kwaku, H.M. Salihu, M.H. Aliyu, COVID-19 vaccine acceptability among pregnant women in northern Nigeria, *J. Obstet. Gynaecol. Can.: JOGC= Journal D'obstetrique et Gynecologie du Canada: JOGC* 44 (4) (2022 Mar 16) 349–350.
- [7] K. Pairat, C. Phaloprakarn, Acceptance of COVID-19 vaccination during pregnancy among Thai pregnant women and their spouses: a prospective survey, *Reprod. Health* 19 (1) (2022 Dec) 1, 1.