



KAP Study Regarding COVID-19 Amongst Pregnant Women in Central India



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INTRODUCTION

- The battle against COVID-19 is still continuing all over the world and is a constantly evolving one. Many of the facts on pandemic keep on changing and many myths are prevalent causing confusion and panic in the public
- To guarantee the final success over COVID 19, people's adherence to these control measures is essential, which is largely affected by their knowledge, attitudes, and practices (KAP) towards COVID-19 in accordance with the KAP theory^[1]
- By evaluating knowledge, attitude and practices of pregnant women in Covid 19 pandemic era -- areas of deficit can be found for which directed health education programmes can be formulated for vulnerable groups such as pregnant women.

AIM

To assess the knowledge, attitudes and practice of preventive measures against COVID-19 infection among pregnant women

METHODOLOGY

- Study Design-** Observational cross sectional study
- Place of study-** Department of Gynecology and Obstetrics, LN Medical College, Bhopal
- Study duration-** January 2021 to November 2021.
- Study participants-** A total of 130 antenatal women were included after their consent.
- Method of data collection-** Face-to-face interview by doctors/nurses
- Tool of data collection--**A self-reported questionnaire was developed as per the information available on websites of the Ministry of Health and Family Welfare (MoHFW), GOI, Ministry of AYUSH, GOI, WHO, and Centers for Disease Control and Prevention (CDC), United States of America.

Validity of questionnaire was established for face and content validity by a panel of five experts in obstetrics and gynecology and community medicine departments at our institute. Before using the questionnaire a pilot study on 10 antenatal women was also successfully conducted.

The questionnaire had two language versions—Hindi and English, with questions framed in a way which aimed at being simple to understand for participants. In case the woman was illiterate, she was administered the questionnaire verbally by a member of the study team.

The questionnaire consisted of 3 major domains- Knowledge (10 questions), Attitude (10 questions) and Practice (4 questions). For each domain there were closed ended questions and each correct response was allotted score 1 and an incorrect answer was allotted score 0.

- Scoring system**
 - Poor score < 60%
 - Fair score 60-75%
 - Good score > 75% of total score in each domain.

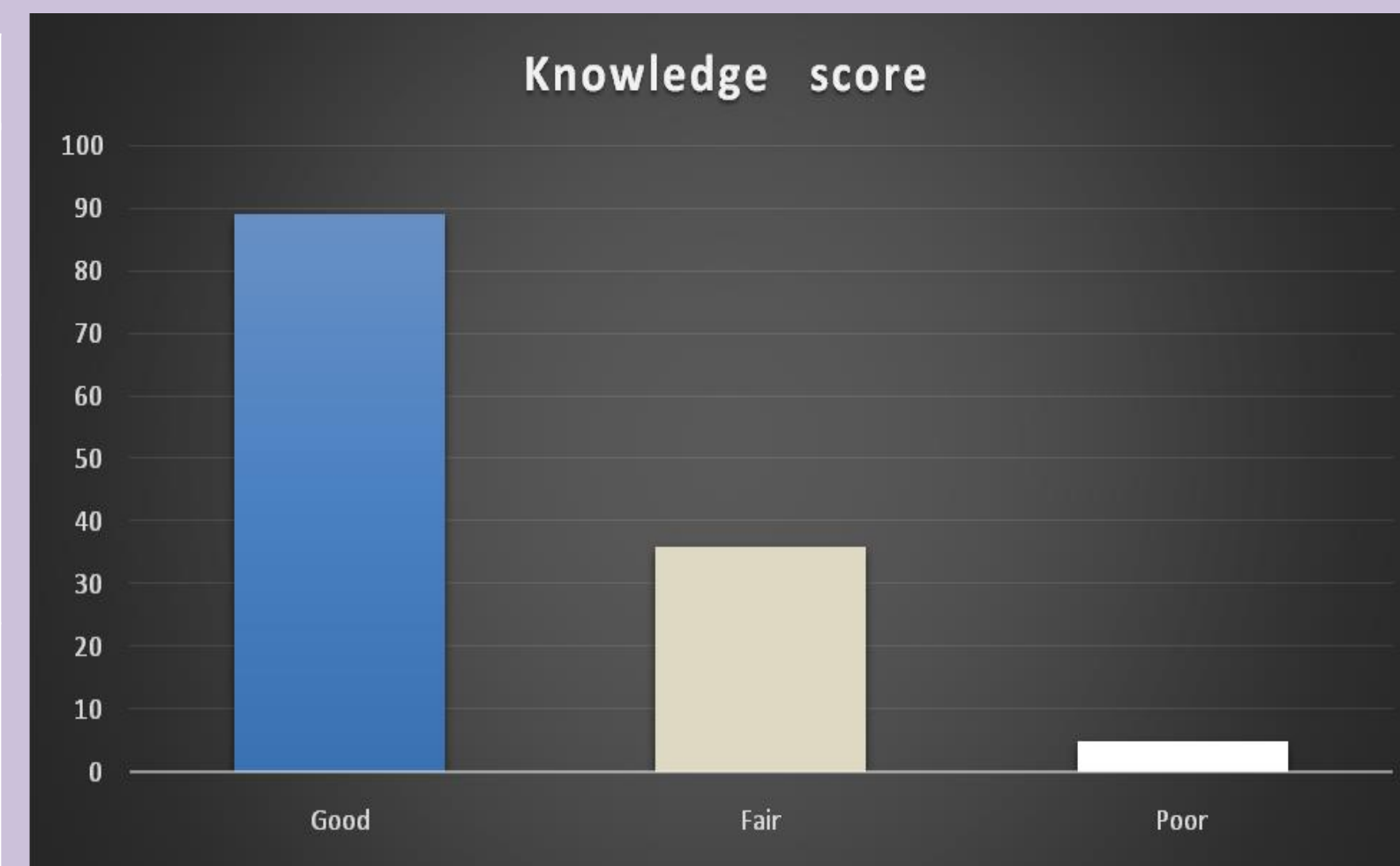
- Statistical analysis-** The questions pertaining to the three domains (Knowledge, Attitude and Practice) were described as frequencies and percentages. SPSS version 25 was used for statistical analysis.

RESULT

Total antenatal others were 130 with a mean age of 25.85+/- 3.4 years and equal distribution of parity i.e. primigravida and multigravidas.

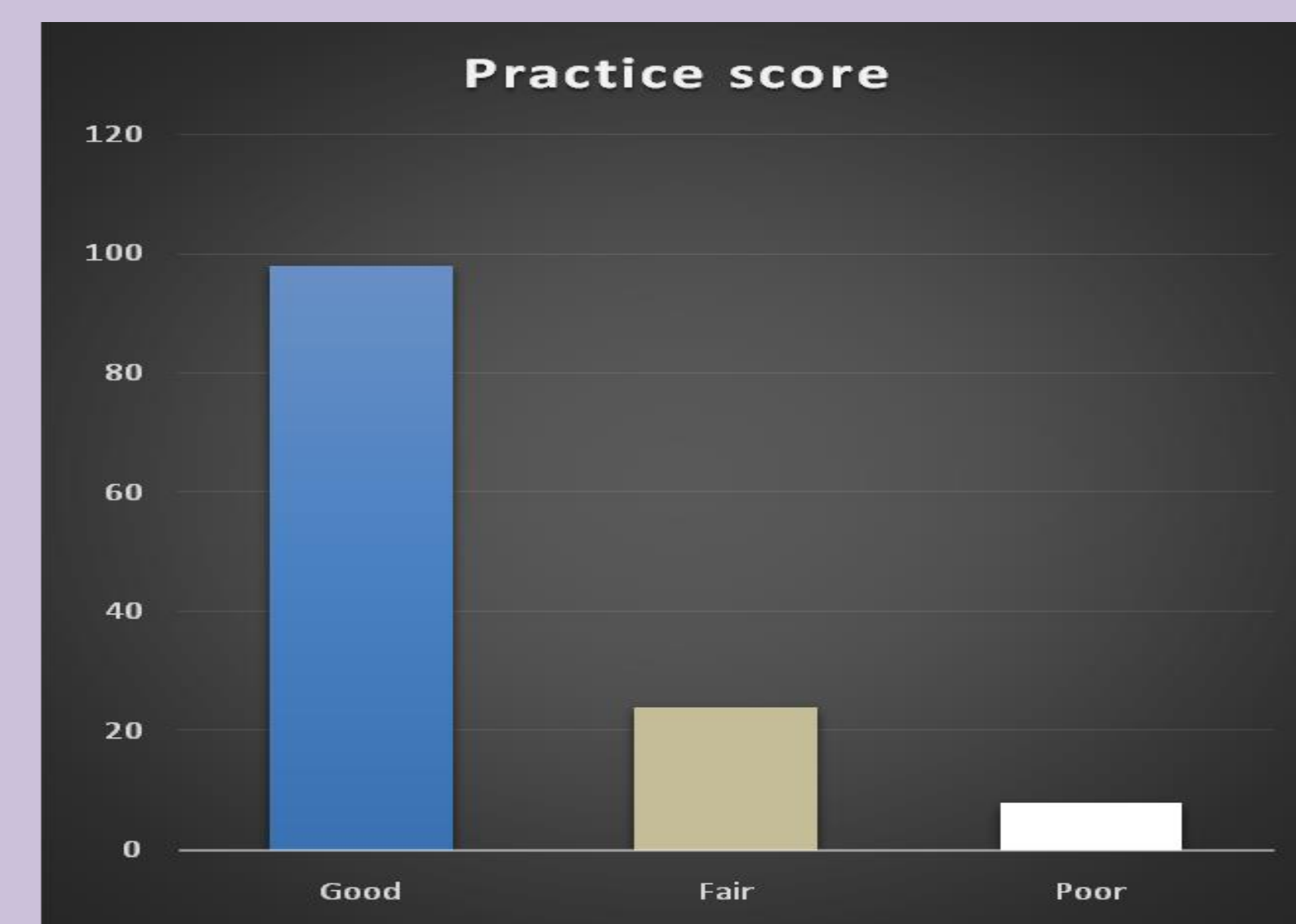
- Most of the participants belonged to urban areas (92.3%) and most were homemakers (83.8%).

S.No	Question	Response		N(%)
K7	Did you know about the need for routine antenatal visits during pregnancy?	Yes-1	No-0	Yes-96(73.8%)
				No-34(26.1%)
K8	Do you know about tele consultation provisions?	Yes-1	No-0	Yes-68(52.3%)
				No-62(47.6%)
K9	Did you utilize tele consultation services at any time in this pandemic?	Yes-1	No-0	Yes-24(18.4%)
				No-106(81.5%)



- The major area where knowledge was observed to be lacking was teleconsultation awareness and routine antenatal care awareness.

S.No	Question	Response		N(%)
A2	Did you feel worried about getting pregnant in COVID 19 pandemic when you found out first about being pregnant?	Yes-0	No-1	Yes-84(64.6%) No-46(35.3%)
A6	Over time and with increasing knowledge has your COVID19 related anxiety level decreased?	Yes-1	No-0	Yes-111(85.3%) No-19(14.6%)
A7	Do you feel that you could enjoy your pregnancy experience better if it was in a pre-Covid era?	Yes-0	No-1	Yes-112(86.1%) No-18(13.8%)
A8	Did you avoid going for routine antenatal visits due to the ongoing COVID 19 pandemic?	Yes-0	No-1	Yes-66(50.7%) No-64(49.2%)
A10	For all pregnant mothers: Have you altered your childbirth place due to this pandemic? If yes specify--	Yes-0	No-1	Yes-36 (27.6%) All these changed to non-covid
	--Home delivery	☐		No-94(72.3%)
	--Exclusively Non Covid institutions	☐		All these continued with mixed institutions.
	--Covid Institutions(non covid +covid patients)	☐		
	Only for pregnant women who have given birth previously, where did you have your last childbirth?	☐		
	--home delivery	☐		
	--Small institutions (PHC, Nursing homes)	☐		
	--Large setup institutions (CHC, corporate setup, medical colleges.)	☐		



The attitude domain showed poor scores as women had fear and anxiety for being pregnant during Covid times.

DISCUSSION:

- Pregnant women form a unique vulnerable group due to the immunological suppression during pregnancy and measures should be taken to prevent COVID-19 infection in this subgroup.
- This is crucial particularly in developing nations like India where the health infrastructure is not as strong as in developed countries.
- Pregnancy is a landmark requiring extra attention and dissemination of information regarding knowledge and right practices will help diminish the anxiety and apprehension among the pregnant women and their relatives and will enhance positive attitude.
- The first study published in Indian context to evaluate KAP in pregnant women was by deep Kamal et al^[2] –July 2020.
- In their study, scores for adequate knowledge, positive attitude, and good practices were 75.3 %, 73.9%, and 92.7 % respectively.
- A community based cross-sectional study was conducted in Ethiopia^[3], which included 422 pregnant women from May 25-June 15, 2020. The mean age was 27.15 (SD± 4.719) years. About 46.8% and 47.6 % of women were knowledgeable and had good practice against corona virus respectively.
- A cross-sectional survey study ^[4] aimed to evaluate psychological impact and anxiety in pregnant women during the COVID-19 outbreak in Italy using validated questionnaires was carried out.
- More than two-thirds of the women also reported higher than normal anxiety.

CONCLUSION:

- The knowledge and practice domain were adequate in most participants and it was observed that antenatal choices remained largely unaffected.
- The attitude domain showed anxiety and fear related to Covid-19 in most participants thus affecting mental health of women which needs to be addressed in antenatal care.

REFERENCES:

- Zhong BL, Luo W, Li HM, Zhang QQ, Liu XG, Li WT, Li Y. Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey. *International journal of biological sciences*. 2020;16(10):1745.
- Kamal D, Thakur VD, Swain SK, Vikneshram CR. Knowledge, attitude, and practice toward COVID-19 among pregnant women in a tertiary care hospital during the COVID-19 outbreak. *Journal of Marine Medical Society*. 2020 Nov 1;22(3):66.
- Alemu Degu Ayele, Gedefaye Nibret Mihretie, Habtamu Gebrehana Belay et al. Knowledge and Practice to Prevent Against Corona Virus Disease (COVID-19) and Its Associated Factors Among Pregnant Women in Debre Tabor Town Northwest Ethiopia: a Community Based Cross-Sectional Study. DOI: <https://doi.org/10.21203/rs.3.rs-50212/v1>
- Gabriele Saccone, Alessia Florio, Federica Aiello et al. Psychological impact of coronavirus disease 2019 in pregnant women. 2020 Elsevier Inc. All rights reserved. <https://doi.org/10.1016/j.ajog.2020.05.003>