

**Assessment of knowledge, Attitude and Practice of
Obstetricians and Gynecologists towards Cesarean Section**

Thesis protocol

Submitted for partial fulfillment of Master Degree in Public Health and
Community Medicine

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Section

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Of

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Summary

Study title: “a study on KAP of obstetricians towards CS.”

CS rates are rising significantly worldwide. Egypt is amongst countries with the highest CS in the world as reported the CAPMAS in their (EFHS) 2022 that CS rate has reached 72% from 52% in 2014. For its subsequent complications in the following pregnancies, non-medically indicated CS has to be reduced, problems facing obstetricians have to be investigated and solved, negative attitude has to be changed and bad practice has to be supervised.

The current study aimed to: assess KAP towards CS of 168 obstetricians in Fayoum public and private obstetric hospitals, clinics and centers, discovering the factors affecting the attitude and examining the relationship between knowledge, attitude and practice of the participants by using a self-administered questionnaire and an open-ended questions interview of 10 of them.

Concerning results of the study the collected data revealed the following:

Concerning sociodemographic and work-related characteristics:

- The age of the participants ranged from 26 to 73 years (54% females and 46% males).
- Most participants lived in urban areas 78% and only 22% lived in rural areas.
- Length of experience of participating obstetricians ranged from 0.5 a year (6 months) up to 44 years.
- Most participants 124 (74) % were found to be working in Ministry of Health Hospitals followed by 23 (13.7%) in university hospitals only, 14

(8.3%) in private clinics and hospitals only, 2 (1.2%) in MOH & Health insurance hospitals and 5 (3.0%) in Health insurance hospitals only.

- Most participants 91 (54%) had master's degree, 54 (32%) had bachelor's degree, 20 (12%) had MD and only 3 (2%) had diploma. 73 (44%) worked as specialists, 54 (32%) as residents and (41) 24% as consultants.
- Regarding knowledge:
- Most participants (76.2%) had their knowledge about CS and VD from most Senior Staff, 118 (70.2%) from Guidelines, 82 (48.8%) from Textbooks, 55 (32.7%) from Conferences and 43 (25.6%) from Courses.
- The subtotal knowledge score regarding indications of CS of the study was generally good except for (HCV, HIV, HBV infections, CPD, heart diseases and sever preeclampsia questions).
- The subtotal knowledge score regarding complications of CS of the study was generally not very high, major defect was in maternal death, neonatal mortality, major obstetric hemorrhage and admission of the baby to ICU questions.
- The total observed knowledge score (of indications and complications combined) was generally good.
- There was no statistically significant difference in median (IQR) knowledge scores regarding different characteristics.
- Regarding attitude:
- The observed total attitude was towards increasing CS rates. (The interpretation of lower attitude scores indicates attitude towards increasing CS).
- Most (90.5%) participants included in the study believed that obstetricians perform CS to avoid medico-legal problems, (83.4%) for financial reasons, (82.8%) as CS is less time consuming, (82.2%) as CS is

easier and (62.5%) of the participants considered that obstetricians perform CS as it has less complications.

- The majority (75%) of the participants thought that the decision to perform CS should be based only on clinical conditions but also, (73.2%) think that women has the right to choose the type of delivery and (66.7%) thought that CS without clinical indication increases maternal mortality.
- The majority (79.8%) thought that they shouldn't give a VBAC trial after 2 previous CS and (61.3%) thought that they shouldn't give a VBAC trial after 1 previous CS.
- Only (38%) of the participants preferred CS as the mode of delivery of choice for themselves or their partners also, (32.7%) thought CS was safer than VD.
- The attitude score was significantly higher among female than male obstetricians. Otherwise, there was no statistically significant difference in total attitude score according to other characteristics.
- Regarding practice:
- The majority (75.8%) of the participants in the study performed CS at public hospitals, while (38.2%), (30.9%), (3%) performed CS at private hospitals, private centers and private clinics respectively (a total private of 72.1%).
- Most obstetricians (77%) in the study considered themselves equally skillful at both CS and VD. While only (14%) and (9%) considered themselves more skillful at CS and VD respectively.
- Also (63.6%) thought that they got equal training to both modes of delivery. While (30%) and (8.5%) got more training to CS and VD respectively, indicating that there is less training on vaginal delivery.
- More than half of the participants (51%) had no periodic supervision over CS rates in their workplaces.

- (90%) of the participants said that they make time to think regularly after performing CS (self auditing).
- (64%) of the participants said that they had guidelines or standards regarding CS in their workplace.
- Most (88%) of the participants ask for professional guidance or help from a senior staff or colleague.
- The majority (70%) of the participants (usually) gave information about complications and benefits of CS to women requesting CS without medical indication while (23%) (sometimes) gave these information and only (7%) (never) informed women requesting CS without medical indication about the complications and benefits of CS.
- Also informing the mothers about the reasons for performing CS when choosing it came with the highest percentage of (97.6%) usually, (1.8%) sometimes and only 1 participant (0.6%) never told about the reasons.
- (60%) of the participants (never) perform CS in case of absent obstetric indication, while 66 participants, (38.8%) and (1.2%), (sometimes) and (usually) perform it respectively as women and their families' culture and avoiding medicolegal problems were the most important 2 reasons.
- Most of the participants 127 participants (20,6%), (56.4%) (usually) and (sometimes) perform elective CS on maternal request (even if there is no indication) respectively also as women and their families' culture and avoiding medicolegal problems were the most important 2 reasons, while only (23%) (never) perform it without indication.
- Most of the participants 143 participants (62.4%) and (24.2%) (never) and (sometimes) give women with previous one CS delivery a trial for VD respectively, the most important two reasons for this practice were to avoid medico-legal problems and women and their families' culture. Only (13.3%) said they (usually) give the trial.

- All of the participants (165 participants as 3 still training to perform CS), (20.6%) and (79.4%) (sometimes) and (never) give women with previous two CS delivery a trial for VD respectively and no one (usually) used to give the trial to avoid medicolegal problems CS can decrease complications in case of previous 2 CS.
- The actual practice of the study participants was towards increasing CS rates most of the time.
- Female obstetricians had higher practice score than male obstetricians.
- Private clinics and hospitals had the lowest total practice score which was statistically significant compared to other places of formal work.
- Master's degree participants had the lowest total practice score which was statistically significant.
- The total attitude score was statistically significantly positively correlated with the total practice score.
- No statistically significant correlation was found between the knowledge score and the attitude score. Also, no statistically significant correlation was found between the knowledge score and the practice score.
- The findings of the study revealed the following conclusions:
 - The total knowledge of the study participants was generally good.
 - Knowledge about indications of CS and VD was generally good except for knowledge about CPD, heart diseases, preeclampsia, HBV, HCV, and HIV infection.
 - Knowledge about complications of CS and VD was average except for maternal death, neonatal mortality, major obstetric hemorrhage and admission of the baby to ICU.
 - Guidelines are available and reachable by most participants and their application is thought to decrease CS rates (so, there is no lack of Outcome expectancy), but our participants can't always apply guidelines

(lack of self-efficacy) mainly due to fear of lawsuit, unacceptability by some patients, maternal request, lack of resource or unsuitability of the surrounding circumstance.

- There is no learning culture or motivation for VD in our participants workplaces.
- The attitude of the study participants was towards increasing CS especially among males.
- Many attitudes towards increasing CS were related to avoiding medicolegal problems, financial incentives, being less time consuming, easier, having less complications, avoiding VBAC culture, respecting patient autonomy (maternal request), personal preference and thinking it is safer.
- Most participants think that CS with no indication increase maternal mortality and the decision to perform CS should be based on clinical conditions but still women have the right to choose their mode of delivery.
- The total practice score of the study participants was slightly above average.
- The decision to perform CS of study participants was towards increasing CS rate, especially among males, those having master's degree and in private settings.
- Barriers to perform proper, safe and only indicated CS was affected by many reasons, fear of medicolegality, maternal request, culture and perception of complications, lack of resources, lack of supervision over CS rate, CS can decrease complications, CS is easier, less time consuming, financially better, lack of staff collaboration and obstetrician's personal preference.

- There was a strong correlation between the attitude and the practice of the study participants, so their practice is influenced by their attitude, however there was no sufficient evidence for the effect of knowledge on both the attitude and the practice.
- More participants considered themselves more skillful and got more training to CS than VD.
- Based on the findings revealed from this study, the following is recommended:
- Increase the knowledge of obstetricians and gynecologists towards CS indications about CPD, heart diseases, preeclampsia, HBV, HCV, and HIV infection, and complications especially maternal death and neonatal mortality.
- Provide suitable guidelines and health policies that are applicable in our settings.
- Health education programs (incorporated in antenatal care programs or through mass media), for the mother and their families about risks of non-medically indicated CS, the ability to try VBAC and to eliminate misconceptions about painful normal VD.
- Finding a solution for the financial incentive of CS
- Providing protection from lawsuits in case of guidelines application and occurrence of complications.
- Introducing the learning culture and creating motivation for training on normal VD.
- Having regular supervision on CS rates in public and private settings together with recording indications of the C-sections performed.