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Cardio-obstetrics in India: The Mission, the Scope and the Road Ahead

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- *We just need to begin*

Cardiology for women is not a religion for cardio feminists, but an evolving scientific field with evidence based data that need to be implemented in clinical practice. A culture shift is needed in Cardiology…….Angela HEM Maas.[1]

As the world of cardiology starts envisioning cardiovascular ailments in women as a different entity in quest of variant approach to diagnostic and management strategies, not to be forgotten is the most precious phase in a woman's life….pregnancy and child birth. Cardiac ailments are notably increasing in the pregnancy as a significant number of women with congenital and valvular heart disease now survive to this age. Moreover, more women with underlying cardiac ailments and cardiovascular involvement in pregnancy (e.g., pregnancy induced hypertension, preeclampsia, arrhythmias, and peripartum cardiomyopathy) are being diagnosed and referred to tertiary care centers for a team-based management. In line with obstetrics transition model indirect deaths including cardiac deaths are becoming relatively more important as obstetric care improves and obstetric deaths are reduced. Hence, it becomes imperative for a physician and an obstetrician to diagnose cardiac ailments not just from the beginning of pregnancy and follow it up through labor, delivery, and postpartum, but also offer required guidance as a component of preconceptional counseling. This also lays a ground for cardio-obstetrics team which can work in cohesion spanning over the period of pregnancy, postpartum, and even beyond.[2]

A cardio-obstetrics team comprises of a cardiologist, an obstetrician, a sonologist, a neonatologist, a maternofetal medicine expert, cardiac anesthetist, a geneticist, medical social officer, devoted nursing staff, pharmacist, and individual case managers. An effective focused communication amongst these at all stages of pregnancy including the fourth trimester (the postpartum period notorious for cardiovascular pregnancy related deaths) is the crux to a successful maternofetal outcome. The team aims at a monitored progress of pregnancy throughout to ultimately plan for a safe delivery. Shared decision making keeping in mind patient preferences is imperative. The institutes can offer to allocate a fixed day, time and outpatient clinic devoted to presence of most (if not all) of these components of cardio-obstetrics clinic. This team would also collaborate with referring physicians and primary health-care centers to encourage timely referrals as late referrals have been a contributory factor for preventable maternal mortality.[3] Maternal outcomes can significantly improve with timely referrals as well as close follow up in immediate and late post-partum period. The first 6 weeks postpartum is a high-risk time for complications, hence

a follow-up visit in the first 3 weeks is recommended by The American College of Obstetrics and Gynecology Presidential Task Force.

Its right time now that Indian health systems encourage cardio-obstetrics clinics in their tertiary care units in connect with primary and secondary levels of care. These clinics would cater to the needs of preconceptional risk assessment and counseling in patients with cardiac ailments, cardiovascular evaluation and diagnosis during pregnancy, diagnosis and treatment of pregnancy-associated hypertension and preeclampsia, management of native and prosthetic valvular disease, congenital heart disease (naive as well post procedural), cardiomyopathies (peripartum, dilated, and hypertrophic cardiomyopathy), and arrhythmias in pregnancy.[4-11] It would also review methods for fertility control for the patient with cardiac disease and the risk of cardiac drugs during pregnancy and lactation. Moreover, the diagnosis and management of acute catastrophies as deep vein thrombosis and pulmonary embolism during pregnancy, acute myocardial infarction, and spontaneous coronary dissection during pregnancy could have an active involvement of cardio-obstetrics team.[12,13] The benefit of this team work could also be extended to pregnant patients with assisted reproductive techniques, elderly primigravida and their related hemodynamic and cardiovascular issues. The genetic screening and fetal echocardiograms would be performed as indicated. The coordination of cardiac anesthetist and obstetrician as regards analgesia and anesthesia during pregnancy, labor and delivery in these patients with cardiovascular ailments would be encouraged. Not only would the team address the challenges of labor and delivery in women with cardiovascular disease but also support postpartum follow-up and screening in these patients given their potential futuristic role in cardiovascular risk profile of women. The team would encourage to spread the lacking cardiac health awareness in these women and encourage a regular cardiac checkup in all the stages of reproductive life pre/peri and postmenopausal as indicated.[14]

In words of Napolean Hill "Strength and growth come only through continuous effort and struggle." The untiring efforts of initiating cardio-obstetrics team network across the country could be a promising step to safe maternal and fruitful neonatal outcomes. ***WE JUST NEED TO BEGIN.***

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