Gestational Diabetes Mellitus Training: A Well-grounded Approach for Safeguarding Two Generations

Sir,

Certificate course gestational diabetes mellitus (GDM), training program in gestational diabetes.

Diabetes is one of the major medical disorders complicating pregnancy, and it is associated with several risks to unborn child, which can be prevented by early detection and appropriate treatment of maternal hyperglycemia.[1] International Diabetes Federation (IDF) estimated that 20.9 million women suffered from some form of hyperglycemia during pregnancy.[1] In India, it has been estimated that nearly 4 million women had GDM in 2015.[2] Providing screening and care to mothers at risk is therefore likely to have multigenerational impact.

Unfortunately, missed and delayed diagnosis of GDM is common, particularly in low- and middle-income countries (LMICs) like India. The frequently cited reasons are lack of awareness among patients and health-care providers, paucity of facilities, and shortage of medical staff.[3] The multiplicity of screening and diagnostic guidelines also adds to the confusion. In a study conducted all over India, it was found that fewer than 50% of health-care professionals correctly followed any of the accepted screening and diagnostic criteria for GDM.[3] Improving awareness of GDM and its management among health-care professionals is, therefore, imperative to reduce morbidity.

In 2013, the Public Health Foundation of India, Delhi, in partnership with Dr. Mohan's Diabetes Education Academy, Chennai, launched a National Capacity Building Programme, titled certifi cate course in GDM (CCGDM), targeting Primary Care Providers (PCPs) across the country along with key stakeholders (as found in Tables 1 and 2).

The main objective being enhancement of knowledge, skills, and core competencies of all doctors who are involved in the diagnosis and management of GDM and build a network to update these doctors with the latest advancements in the field. This contact training program is conducted once in a month for 4 consecutive months on a weekend (As found in Figure 1).

CCGDM Course has been recognized by the IDF for a duration of 2 years (2015–2016), and South Asian Federation of Endocrine Societies for a duration of 6 years (2014–2019). Huge participation by postgraduate physicians (52%) is a testament to the necessity and requirement of such capacity building initiatives. Training is delivered to small groups (trainer-to-participant ratio 2:15 approx.) through didactic lectures. Finally, an organic referral linkage is established, creating a potential network for implementation research.

Table 1: Key stakeholders

Academic partner-develop the course content
National experts-leading endocrinologists/diabetologists and OBGYs-vet the curriculum developed by academic partner
Regional faculty-endocrinologists/diabetologists and OBGYs conduct the trainings
Observers-public health professionals- monitor the training session to ensure quality of the course
Participants-PCPs and OBGYs
With major educational grant from industry, participants pay a moderate fee which ensures their commitment

PCPs: Primary care providers, OBGYs: Obstetrics and gynecology

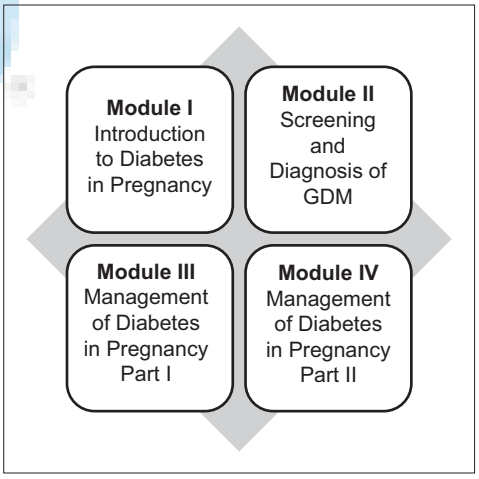

Figure 1: Modules in certificate course in gestational diabetes mellitus course

Table 2: Certificate Course in Gestational Diabetes Mellitus cycles details

	Cycle I	Cycle II	Cycle III	Cycle IV
Date of launch	August 25, 2013	August 24, 2014	July 26, 2015	August 21, 2016
State/UT	17	15	11	16
Number of centers	55	40	20	20
National experts	15	15	14	15
Regional faculty	110	80	40	40
Observers	25	20	22	22
Participants	1465	928	364	417

Approximately 3500 PCPs have been trained. This program had been adopted by various state governments (Gujarat, Madhya Pradesh, and Meghalaya) under National Health Mission. Mean clinical experience of the doctors was 10 years. Government sector doctors represented 39% of the participants. Knowledge improvement score of doctors was 1.6 unit increase in pre- and post-test conducted before and after the sessions. Pass percentages have consistently been more than 90% during the past 4 cycles. Participants reported a substantial increase in knowledge at end line evaluation and increased confidence in the management of diabetes, and they gained confidence about selection, planning, and customized administration of insulin regimens and other drugs to their patients as per requirements.

We believe that CCGDM model is a robust approach for emulation across LMICs as it could help build the capacity of PCPs in GDM management and could also be a model for several other chronic diseases.

Financial support and sponsorship

The certificate course in gestational diabetes mellitus program was majorly funded by an educational grant from Johnson and Johnson Medical Companies along with Johnson and Johnson Diabetes Institute and partly course fees of the participants.

Conflicts of interest

There are no conflicts of interest.

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Access this article online

Quick Response Code:

Website: www.ijem.in

DOI: 10.4103/ijem.IJEM_221_17

How to cite this article: Unnikrishnan R, Jaganathan S, Wadhwani P, Bhalla S, Kumar P, Sinha S, *et al*. Gestational diabetes mellitus training: A well-grounded approach for safeguarding two generations. Indian J Endocr Metab 2017;21:934-5.