Integrating GDM management in primary care: Gulf Cooperation Council (GCC) perspective

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Abstract

Diabetes is prevailing universally and Gulf Cooperation Council (GCC) is no exception. Pregnancies associated with gestational diabetes place women at high risk of natal complications.

Statistics from GCC gives variable figures for GDM.

Family Physicians are the first level health care providers and their role in management of GDM can be promising. This has been evident from a focused group study where patients prefer screening for GDM in primary care settings.

Strengthening of primary care is important universally. Government should have mandatory primary care registration to be referred to secondary level for obstetric follow up and management.

An important issue needing attention is presence of multiple criteria for diagnosing and screening GDM. There is need for a single guideline globally to avoid confusion for primary care providers.[10]

Primary care centers can better be utilized to screen for GDM at early stages. This will decrease the load on secondary and tertiary care centers and can also maintain continuity of care.

Overview

Diabetes is prevailing universally and GCC is no exception. With advancements and increase in awareness, screening for diabetes is becoming an important component of health. Pregnancy complicated with diabetes presents a challenge to health care providers. The contributing factors towards gestational diabetes (GDM) are obesity, life style, eating patterns, multiparity and sedentary habits. GCC is predominantly Muslim culture with preponderance to increased number of childbirths. Obesity with grand multiparity increases the risk of gestational diabetes. A study has reported prevalence of GDM to be 12.5% in grand multiparous Saudi women.[1] Pregnancies associated with gestational diabetes place women at high risk of natal complications. Appropriate antenatal management of these cases with a multidisciplinary approach has proven to improve neonatal outcomes. A study from Australia revealed that good glycaemic control among GDM women had a similar pregnancy outcome when compared with non GDM women, except that GDM mothers underwent earlier induction of labour.[2] Another study from the United Arab Emirates showed multidisciplinary approach to manage GDM had decreased incidence of macrosomia and reduction in neonatal hypoglycaemia.[3]

Situation of GDM in GCC countries

The GCC member countries are Saudi Arabia, United Arab Emirates, Qatar, Oman, Bahrain and Kuwait. Most of the countries have well established primary health care system (PHCS) in place especially in the government sector. The statistics from GCC is giving variable figures for GDM and a mixed picture from community to centers and hospitals. A household community survey from Saudi Arabia revealed 36.6% of GDM among women.[4] Situation in Bahrain is different, only 10% women were diagnosed with GDM from those attending government based units for delivery.[5] Study from Oman showed that approximately 5% women could be diagnosed with GDM, and almost 80% from those achieved good glycaemic control with comprehensive care.[6] Another study compared different criteria for GDM in United Arab Emirates which revealed 12.9% women to have GDM according to American Diabetes Association (ADA) criteria, whereas with International Association of Diabetes and Pregnancy Study Group (IADPSG) criteria, 37.7% women were diagnosed to have GDM.[7]

Role of Primary care / Family Physicians in GDM

Family Physicians are the first level care health care providers and their role in management of GDM can be promising. Patients feel contented and more satisfied in discussing their condition with family doctors. This has been evident from a focused group study where patients prefer screening for GDM in primary care settings. They feel more comfortable attending PHCS with regards to travel distance, better care, ease of convenience and optimal screening.[8] On the contrary, an Irish study compared primary vs secondary settings for GDM screening, which showed that primary care providers

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faced difficulties in screening, although community is considered better for this purpose.[9]

As part of an effort in streamlining level of care, strengthening of primary care is of prime importance universally. Government should have mandatory primary care registration to be referred to secondary level for obstetric follow up and management. This can facilitate early screening of pregnant women for GDM and better counseling of these cases. The standard practice is to screen pregnant women at 24-28 weeks for gestational diabetes by offering oral glucose challenge test. At primary care level, a pregnant woman can be screened in the early weeks for diabetes by offering a simple glucose fasting or random test. This has been reinforced in a study comparing different criteria for screening GDM and has suggested considering fasting plasma glucose for early screening of GDM.[7] Simple testing in PHCS will facilitate referral of patients to specialized centers and doctors early in pregnancy. Henceforth complications of pregnancy associated with gestational diabetes can be managed at an early stage. In addition, GDM implies care and screening of women postnatally, which can again be provided at PHCS.

Primary Health Care centers in the Gulf have available insulin and metformin for effective management of GDM by family physicians. Glucometers are provided to all diabetic patients in government health sector in the UAE for self monitoring of glucose and educating patients on adjustment of insulin dosing.

Family physicians are advocates of holistic and comprehensive care, thereby; dietary counseling and appropriate exercise during pregnancy can go hand in hand during visits. In Dubai Health Authority established PHC, we have antenatal physiotherapy clinic working efficiently and offering exercises to pregnant women. These PHCs provide us with equal opportunities for preconception counseling and vaccination of girls for Human Papilloma Virus and Tetanus Toxoid, in addition to regular pap smear screening for cervical cancer.

An important issue needing attention is presence of multiple criteria for diagnosing and screening GDM. A review on all available criteria revealed that this has resulted in adhoc approach, bringing doctors in a state of confusion as to which one to follow. There is need for a single guideline globally to avoid confusion for primary care providers.[10]

Conclusion

Primary care centers can better be utilized to screen for GDM at early stages. This will decrease the load on secondary and tertiary care centers and can also maintain continuity of care.

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