

INTRODUCTION

Gestational diabetes mellitus (GDM) is associated with adverse maternal and fetal outcomes, and the prevalence and impact of GDM is rising globally. This has been influenced by the screening method employed, diagnostic criteria used, and the population tested¹. Strategies for the screening of GDM could either be universal or selective. Failure to diagnose a patient with GDM is double tragedy, as the risks to both mother and fetus have been established². The National Institute for Health and Care Excellence recommends the selective screening approach³. However, the International association of the Diabetes and Pregnancy Study Group (IADPSG), and the International Federation of Gynecology and Obstetrics (FIGO) advocate universal screening on account of adverse events associated with even mild forms of hyperglycemia⁴.

OBJECTIVE

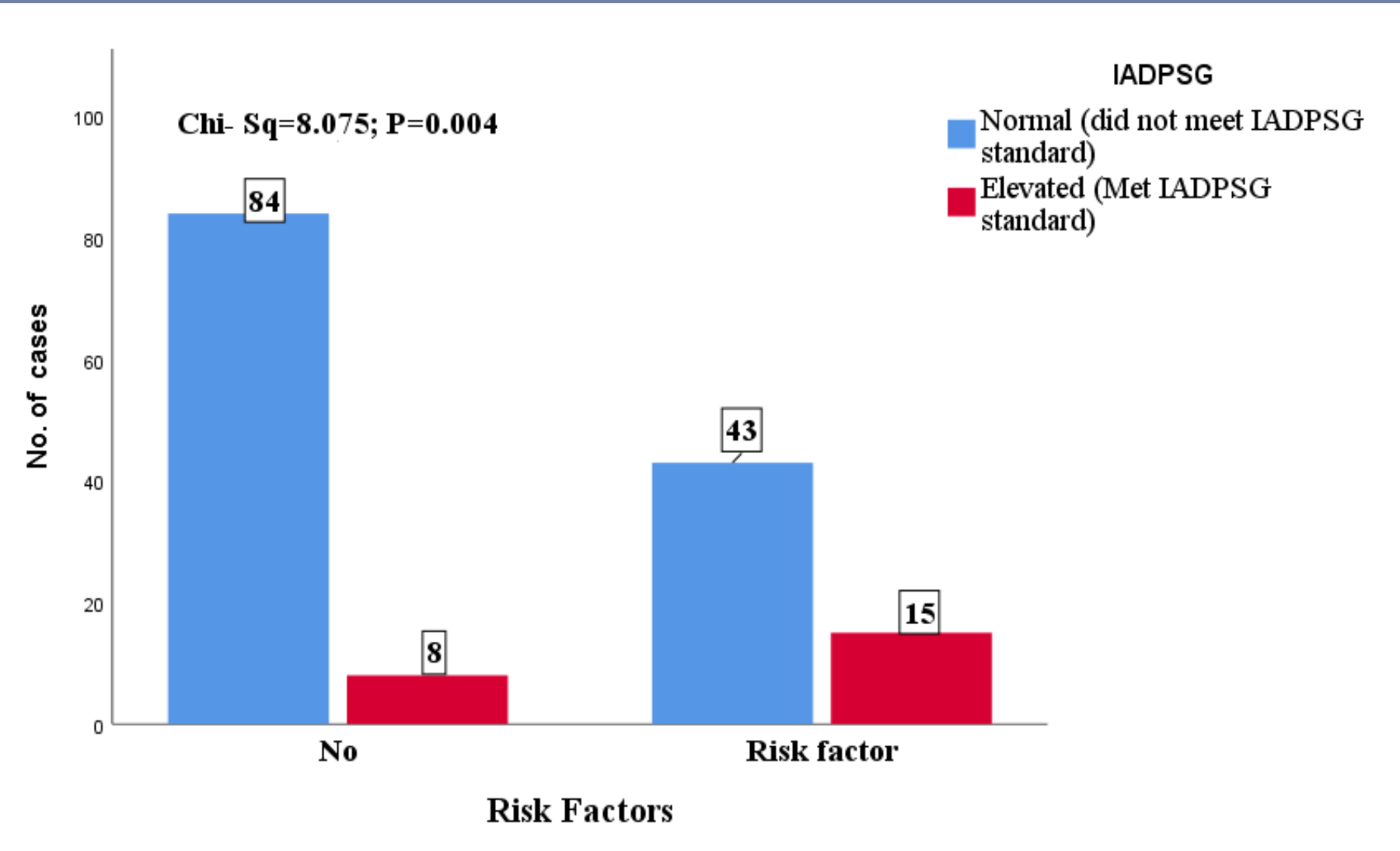
The aim of this study was to compare universal screening with selective risk factor-based screening for GDM, using the 75 g oral glucose tolerance test (OGTT) in the community.

METHODOLOGY

- A cross-sectional prospective comparison between universal and selective risk factor based screening for GDM, among 150 pregnant women in Ushafa Community: a rural community in Abuja, Nigeria.
- The participants were selected using cluster sampling method, risk factor screening and 75 g OGTT at 24–28 weeks was done.
- The universal group consisted of all 150 participants, while pregnant women with established risk factors made up the selective risk factor group. The diagnosis of GDM was made in each participant using the IADPSG criteria.
- Data was analyzed using the statistical package for social sciences (SPSS) computer software version 23.0 for windows. Statistical significance was set at the p-value <0.05.
- Ethical clearance was obtained from the Health Research and Ethics committee of Garki Hospital Abuja, Nigeria.

RESULTS

- One hundred and fifty women belonging to the universal group, of these 23 women (15.3%) had GDM according to IADPSG diagnostic criteria while fifty eight (58) women belonging to the selective screening group, had risk factors and 15 women (25.9%) had GDM according to IADPSG.
- Using multivariable analysis, age >34 years(p=0.032), BMI >30kg/m2(p=0.021) and previous history of macrosomia(p=0.031) were significantly associated with GDM.
- Approximately 35% of GDM cases would have been missed if only selective screening strategy was employed as against universal screening. Eight women (34.8%) in the universal group, did not have risk factors and met the IADPSG criteria.



There is a significant difference comparing women in the universal group who met the IADPSG criteria and did not have risk factors , p value 0.041

RECOMMENDATIONS

- This research highlights the significant reduction in opportunity for diagnosis of GDM using the selective screening criteria.
- There is a need for reappraisal and uniformity on the diagnostic approach and criteria to be used when managing gestational diabetes mellitus globally.
- Further research into pregnancy outcomes in women without risk factors who develop GDM.