MedCrave
Step into the World of Research

Obstetrics & Gynecology International Journal

Research Article

Open Access

CrossMark

Gestational diabetes: epidemiological, diagnostic, prognostic and therapeutic aspects of 158 cases at Principal Hospital of Dakar

Abstract

Introduction: Gestatitonal diabetes has attracted renewed interest in recent years due to the proliferation of its risk factors and its serious repercussions on maternal and perinatal health. The epidemiology, diagnosis and management of glucose metabolism disorders during pregnancy warrant further evalua8on in Africa, and particularly in Senegal. It is against this backdrop that this study was conducted.

Methodology: We conducted a retrospective, descriptive and analytical study over a 13-month period at the Hospital Principal de Dakar. All patients with diabetes who gave birth in the department were included.

Results: We found a prevalence of gestational diabetes (GD) of 4%. The main risk factors for GD identified were maternal age over 30 years (75.9%), a BMI ≥ 25 kg/m² (78.9%) and a family history of diabetes (46%). Several complications occurred during the course of the pregnancy: hypertension (70.2%), preterm birth (46.1%), low birth weight (44.6%), premature rupture of membranes (40.5%) and macrosomia (21.6%). Approximately one in two patients (51.3%) gave birth by caesarean section. The mean birth weight of the newborns was 3010 g. The mean APGAR score was 7.6 at 1 minute and 8.5 at 5 minutes. Sixty-five newborns (41.1%) presented with neonatal complications, including respiratory distress (16.9%), neonatal hypoglycaemia (9.2%) and congenital malformations (3.1%).

Conclusion: Carbohydrate metabolism disorders during pregnancy constitute a public health problem due to their high prevalence, particularly among older women and those who are overweight or obese, and due to their unfavourable prognosis for the newborn. Consequently, screening should be systematic and management optimised.

Keywords: carbohydrate metabolism abnormali8es, pregnancy, gestational diabetes, screening, complications, caesarean section

Volume 17 Issue 2 - 2026

Yaye FO Gaye, Hage Hady E, Dedde M Yahye, Niang Ndama, Ngom Papa M, Sylla Mafing A, Faye Marie E

Department of Medicine, Cheikh Anta Diop University (UCAD), Senegal

Correspondence: Yaye Fatou Oumar Gaye, Department of Gynecology and Obstetrics, Cheikh Anta Diop University (UCAD), Senegal, Tel 00221775235277

Received: April 14, 2026 | **Published:** April 28, 2026

Introduction

Gestational diabetes (GD) is defined by the WHO as an impaired glucose tolerance leading to hyperglycaemia of varying severity, which begins or is diagnosed for the first time during pregnancy, regardless of the treatment required and the postpartum course.[1,2] It is one of the most common conditions during pregnancy, with a highly variable prevalence worldwide. Indeed, it ranges from 1% to 14% depending on the population studied.[3,4] Globalisaton is associated with an increase in risk factors predisposing to diabetes. Obesity and its associated factors (sedentary lifestyle and overeating) play a significant role in the development of gestational diabetes.

It also affects the short-, medium- and long-term prognosis for the mother– child pair.

However, the methods for screening and diagnosing gestational diabetes have long been a source of debate and controversy. This condition, a genuine public health problem, has been the subject of numerous epidemiological, clinical, biological and therapeutic research studies. However, few African studies have been devoted to this topic.

In sub-Saharan Africa, and in Senegal in particular, data on the prevalence of gestational diabetes (GD) are limited, and the impact of new screening and diagnostic strategies for GD on our populations has been little studied.

It is against this backdrop that we conducted this study with the aim of determining the prevalence of gestational diabetes at the Main Hospital in Dakar, as well as the various risk factors present in pregnant women, diagnostic and therapeutic management, and finally the maternal-fetal prognosis.

Patients and methods

We conducted a retrospective, descriptive and analytical study in the maternity ward of the Main Hospital of Dakar during the period from[1]June 2022 to 30 June 2023, a duration of 13 months.

Our study included pregnant women with true gestational diabetes or undiagnosed pre-gestational diabetes, discovered during pregnancy, who gave birth in the department.

Patients with incomplete obstetric records and those with known pre-gestational diabetes were excluded from our study.

The data were entered and analysed using Microsok Excel, EpiInfo™ version 7.2 and R 4.3.3.

We described the qualitative and quantitative variables using univariate analysis. Bivariate analysis enabled us to investigate associations between variables, using appropriate statistical tests according to their conditions of applicability. The alpha error risk was set at 5% and the confidence interval at 95%.

Results

Prevalence

Of the 3,904 pregnant women seen during the study period, 158 patients had gestational diabetes, representing a prevalence of 4%.

Sociodemographic data

Age: The mean age of the patients was 33.1 years, ranging from 19 to 48 years. The 30–35 age group was the most common (Figure 1).

Place of origin: The vast majority of patients (82.9%) lived in the Dakar region, particularly in its suburbs (58.9%).

Occupation: In our study, more than half of the patients (57%) were housewives and around a quarter (24.7%) were self-employed.

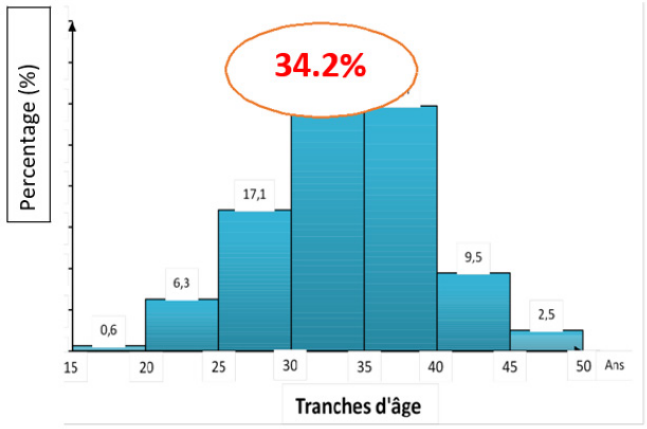

Figure 1 Breakdown of patients by age group.

Gynaecological and obstetric history

The average number of pregnancies was 2 ± 1.7, ranging from 1 to 7. Women with few pregnancies were the most common group (36.1%).

Forty-nine patients (31%) had a history of abortion, with an average of 1 previous abortion (ranging from 1 to 4 abortions). Only twelve patients (7.6%) had a history of MFIU.

In our series, only thirteen patients (8.2%) had previously used contraception.

This was most commonly a hormonal method (91.8%).

Risk factors for gestational diabetes

Of the 15ti patients, 63 (39.9%) had risk factors for gestational diabetes. Family history of diabetes (46%) was the main risk factor, followed by a personal history of gestational diabetes (33%) (Figure 2).

With regard to lifestyle, a sedentary lifestyle was found in fiky-one patients (32.3%) and passive smoking in three cases (1.9%).

Only 19 patients (21.1%) had a normal body weight, as shown in the following Figure 3.

Weight gain was recorded in only 90 records, and the average weight gain was 6.4 kg ± 11.9, with extremes of –8 (weight loss) and 12.1 kg. Three patients (3.3%) gained more than 12 kg.

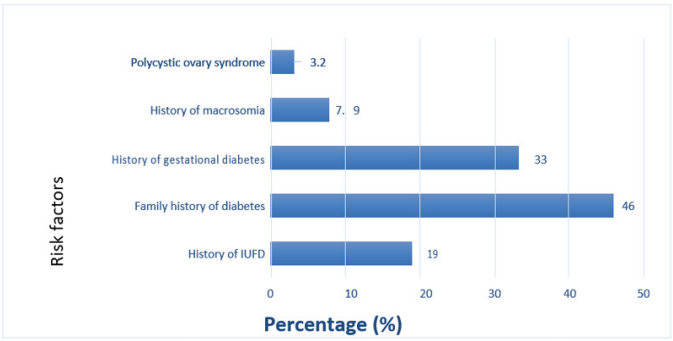

Figure 2 Breakdown of patients by risk factors (n=63).

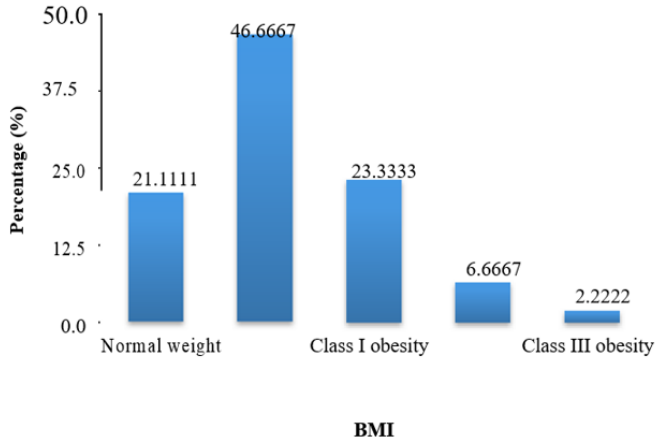

Figure 3 Distribution of patients by body mass index.

Perinatal follow-up data

Almost all of our patients (93.5%) were diagnosed in the first trimester of pregnancy by a fasting blood glucose test, as shown in the following Figure 4.

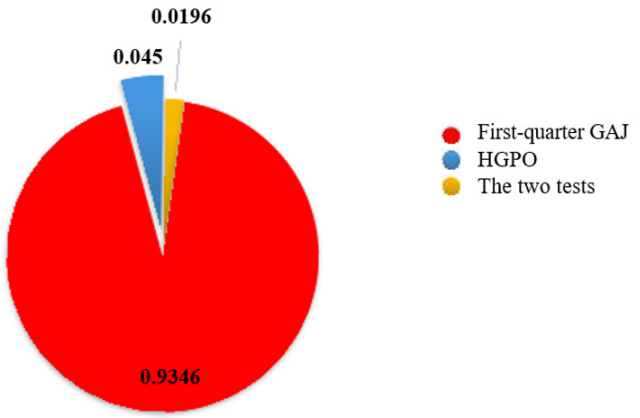

Figure 4 Breakdown of patients by method of diagnosis of gestational diabetes.

The WHO test (OGTT with 75g of glucose) was performed in 15 patients (9.5%). The Table 1 below shows the distribution of blood glucose values recorded during the OGTT.

Citation: Gaye YFO, Hady HE, Yahye DM. Gestational diabetes: epidemiological, diagnostic, prognostic and therapeutic aspects of 158 cases at Principal Hospital of Dakar. *Obstet Gynecol Int J.* 2026;17(2):81–86. DOI: 10.15406/ogij.2026.17.00828

Table 1 Distribution of blood glucose values during the oral glucose tolerance test (n=15)

FPG in g/l	Minimum	Mean	Standard deviation	Median	Maximum
at H0	0.69	0.87	0.09	0.91	1.02
at 1 o'clock	1.24	1.61	0.26	1.6	2.08
at 2 o'clock	0.87	1.38	0.26	1.46	1.72

Treatment initiated after diagnosis

In our series, 81 patients (51.3%) had received diabetes care involving lifestyle and dietary measures (39.9%) plus or minus insulin therapy (11.4%). Nearly half of the patients (48.7%) had not received any diabetes treatment. Among the ti1 patients who were on treatment, 56 (69.1%) had their blood glucose levels controlled by lifestyle and dietary measures alone. In contrast, 25 patients (24.7%) required insulin therapy. The Figure 5 below illustrates the progression of gestational diabetes in our patients whilst on treatment.

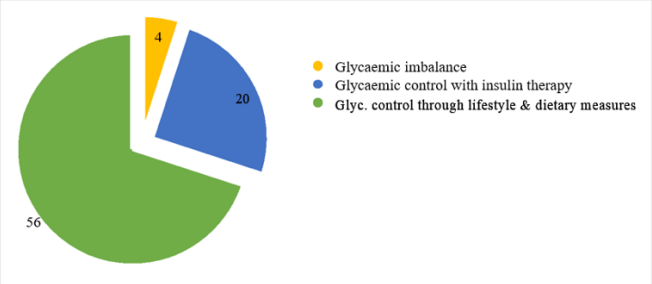

Figure 5 Distribution of patients according to treatment outcome (n=81).

Delivery data

Approximately three-quarters of the patients (76.0%) were admitted directly to the maternity ward, and 24% were transferred from peripheral facilities for in-utero transfer. The mean gestational age was 37.55 weeks ±9.49. We recorded 33 preterm pregnancies (21.6%) and 112 full-term pregnancies (72.3%), as shown in Figure 6.

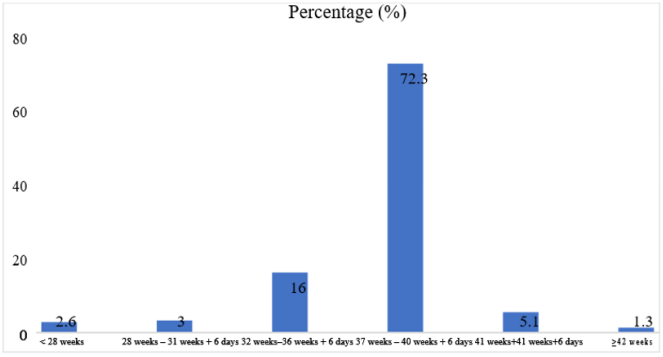

Figure 6 Distribu8on of pa8ents by gestational age.

Labour onset was spontaneous in 43% of patients. In contrast, 36.1% of patients had been scheduled for a caesarean section and 20.9% had undergone labour induction (Figure 7). Mechanical balloon induction was the most commonly used method (57.6%), followed by pharmacological methods such as misoprostol (36.4%) and oxytocin (6%).

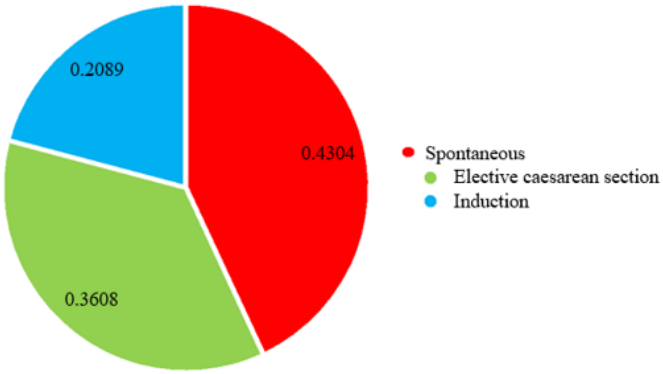

Figure 7 Breakdown of pa8ents by method of labour induction (n=158).

Early neonatal data

The APGAR score at 1 minute and 5 minutes was recorded in 154 records. It averaged 7.6 ± 1.2 at 1 minute, with extremes of 0 and 9, and 8.5 ± 1.1 at 5 minutes, with extremes of 0 and 10.

The mean birth weight was 3010 g ± 802, with extremes of 600 and 4750 g. There were 14 macrosomic newborns, representing 9%. Low birth weight infants accounted for 18.7% of the sample.

Prognosis

The main complication observed was hypertension, which affected 26 patients (Table 2). We noted a worsening of diabetes in 3 pregnant women (8.1%). In two cases this was ketoacidosis and in one case it was hyperglycaemia alone.

Table 2 Distribution of patients according to complications of childbirth (n=58)

Complications of childbirth	Number (n)	Percentage (%)
Dynamic dystocia	10	17.2
Failure of induc8on	8	13.8
Uncertain foetal status	13	22.5
Foetal-pelvic dispropor8on	16	27.6
Abnormal presenta8on	6	10.3
Shoulder dystocia	1	1.7
First-degree tear	6	10.3
Postpartum haemorrhage	1	1.7

Among the patients who had delivered vaginally, only one case (1.7%) of shoulder dystocia was reported. Six patients (10.3%) had a first-degree tear, and we found only one case of postpartum haemorrhage (1.7%) as shown in the following table.

With regard to foetal and adnexal complications, these were dominated by premature rupture of membranes (PROM), accounting for 40.5%. We also noted five cases of polyhydramnios and three cases of IUGR. In our series, 65 newborns (41.1%) presented with complications, as shown in Table 3.

Citation: Gaye YFO, Hady HE, Yahye DM. Gestational diabetes: epidemiological, diagnostic, prognostic and therapeutic aspects of 158 cases at Principal Hospital of Dakar. *Obstet Gynecol Int J.* 2026;17(2):81–86. DOI: 10.15406/ogij.2026.17.00828

Table 3 Distribution of newborns by complications (n=65)

Neonatal complications	Number (n)	Percentage (%)
Low birth weight	29	44.6
Prematurity	30	46.1
Macrosomia	14	21.5
Respiratory distress	11	16.9
Neonatal hypoglycaemia	6	9.2
Congenital malforma8on	2	3.1
Post-term	2	3.1
Neonatal infec8on	1	1.5

The postpartum glucose screening at 3 months was recorded in only 10 case files (7.1%) and was normal, as shown in the table below. However, none of the patients returned for follow-up beyond 3 months. The remaining patients (92.9%) were lost to follow-up (Table 4).

Table 4 Distribution of patients according to long-term glucose test results (n=10)

Screening method	Number (n)	Percentage (%)
GAJ + HbA1c	5	50
HGPO	4	40
GAJ	1	10
Total	10	100

Discussion

Epidemiological aspects

The prevalence of gestational diabetes found in our facility (4%) is low compared to that reported in the literature, which usually ranges between 8.8% and 26.9%. Mamabolo et al.[5] and Dionadji et al.[6] reported a prevalence of 8.8%. The French study by Wery et al.[3] in 2014 found a prevalence of 14%.[3] In Nigeria, the prevalence of gestational diabetes rose from 13.9% in 2012, according to the study by Kuti et al.,[7] to 20.7% in 2025, according to the study by Adeoye et al.8 In Senegal, Diop et al.[9] in 2018 and Touré et al.[10] in 2023 found prevalence rates of 29.6% and 26.3% respectively. Our low prevalence could be explained by the fact that some of our patients were unable to undergo screening.

Risk factors

The mean age in our study was 33.1 years, which is similar to that reported in the literature.[3,11,12] This result is comparable to those of the study by Ramch et al.[13] in 2016, by Bonomo et al.[14] conducted in 2004, and by Diop[9] in 2018, which found average ages of 31.5 years, 33.6 years and 30.6 years respectively. However, the mean age in our study is higher than that of the French DIAGEST study, in which it was 28.8 years.[15] Patients aged over 30 accounted for 75.9% of the cohort. This is consistent with the findings of the study by Amazian et al.[16] conducted in 2018, which found that 80% of women were over 35 years of age. Indeed, 49% of patients were over 35 years of age. Our results are consistent with the literature data on the increase in the prevalence of GD with the age of pregnant women.[17,18]

In line with data reported by other studies in Africa and worldwide, the predominance of nulliparous women suggests that parity has no influence on the occurrence of gestational diabetes.[9,10,13,14,19–23] However, a history of abortion appears to be a risk factor for GD, and other African authors have made the same observation.[9,24–27] A history of gestational diabetes in a previous pregnancy was found in 41% of cases, a rate comparable to that reported by Martin et al.[18] in France (40%) but significantly higher than that reported by Diop et al.[9] This could be linked to the widespread practice of GD screening in our facility. A MFIU may result from undiagnosed GDM and is considered a risk factor for GDM by most authors.[24,27–32] It was found in 19% of our patients. Overweight (46.7%), obesity (32.2%) and a family history of diabetes (46%) were the most common risk factors in our study. Our data are comparable to those of other African authors, notably in Morocco (67%), Togo (42.2%/40.8%) and Senegal (60.9%/36.4%).[32,33,10] Indeed, being overweight and obesity exacerbate the physiological insulin resistance that emerges in the second trimester and is heightened in predisposed women.[15] Hence the need for increased awareness and targeted prevention strategies among women presenting these modifiable risk factors.

Diagnostic aspects

With regard to the diagnostic methods for GDM, 93.5% of patients were identified through a fasting blood glucose test in the first trimester, only 4.5% via the OGTT, and 2% via both tests. In contrast, in other studies such as that by Sana et al. in Morocco in 2015,[34] the OGTT in the second trimester (WHO) was the main method of detection (42.5%). The mandatory performance of a first-trimester fasting blood glucose test in accordance with Senegalese standards and protocols, and the application of IADSPG criteria, likely explain these differences. This strategy led to the detection of undiagnosed pre-gestational diabetes in 10.1% of patients. This rate, lower than those reported by Sidibé et al.[35] in Mali (87%) and M'Rabet[22] in Morocco (26%), likely reflects improved pre-gestational screening of diabetic patients.

Therapeutic aspects

Regarding diabetes management, dietary management alone was implemented in 39.9% of our patients. Insulin therapy was prescribed in 11.4% of cases. Higher rates are reported by Azib et al.,[36] who found 7ti.5% and 21.5%. Nearly half of our patients (48.7%) had not received any treatment. Consequently, glycaemic control was achieved in only 69.2% of our patients, a rate significantly lower than that reported by Azib et al.,[36] which was 92.6%. In 43% of cases, labour commenced spontaneously. In contrast, 36.1% of patients were scheduled for a caesarean section and 20.9% underwent artificial induction of labour. Mechanical balloon induction was the most commonly used method (57.6%), followed by pharmacological methods such as the use of misoprostol (36.4%) and oxytocin (6%).

With regard to mode of delivery, the caesarean section rate was 51.3%, comparable to the findings of other authors such as Chanegriha et al.[24] and Touré et al.,[10] who reported rates of 57.9% and 52.1% respectively. In contrast, caesarean section rates are lower in the French and Moroccan series by Vidal-Trécan et al.,[37] Sana et al.[34] and Azib et al.,[36] at 19%, 33% and 41.5% respectively, probably due to better therapeutic education and earlier intervention. In contrast, we observe a marked decrease in the caesarean section rate in Senegal, which fell from 87.8% in 2017 according to Boiro et al.[27] to 51.3% in 2023 according to our series.

Prognostic factors

Regarding maternal prognosis, 37 patients (23.4%) had experienced pregnancy complications. The main complication identified in our study was hypertension (70.2%). This finding has also been reported by other authors in Senegal, with rates that are admittedly lower—ranging from 36.7% to 57.1%—but which highlight the significance of this adverse association in pregnant women.[22,29,38] In practice, this

necessitates systematic screening for pre-eclampsia from the[20th]week of amenorrhoea, close clinical monitoring and appropriate management.

During delivery, the main complications noted were foetal-pelvic disproportion (27.6%), foetal distress (22.5%) and dynamic dystocia (17.2%), which constituted the main indications for caesarean section. However, in line with other authors, we found a low rate of obstetric trauma (1.7%).[3,38–41] The adoption in practice of recommendations for elective caesarean section in cases of estimated foetal weight ≥4500g and induction of labour between the[3tith]and[39th]weeks of gestation in cases of a tendency towards macrosomia likely explains this finding. Recommendations regarding follow-up care, on the other hand, are rarely followed. Indeed, the majority of patients (92.9%) were not seen at the 3-month postpartum follow-up to undergo an OGTT. Patient awareness of the risks of developing type 2 diabetes should be increased. Indeed, in Senegal, Mbaye[42] found a prevalence of 11.2% of type 2 diabetes secondary to GDM.

With regard to perinatal outcomes, prematurity was the main complication (46.1%). This rate is comparable to that reported by Boiro et al.,[27] i.e. 44.4% of our patients' pregnancies. In contrast, much lower rates, ranging from 7.81% to 26.7%, have been reported by other African authors.[13,28,32,39,43]

Better glycaemic control and optimal management of associated conditions such as pre-eclampsia could reduce the incidence of preterm birth, the main factor in neonatal respiratory distress, which affected 16.9% of newborns of diabetic mothers in our series. The systematic initiation of pulmonary maturation, before the 34th[th] week of gestation, using betamethasone administered in two 12 mg doses 24 hours apart, helps to reduce the incidence of this complication. However, in certain situations of unavoidable preterm delivery, it was not possible to ensure that the pulmonary maturation protocol was completed.

At birth, the rates of macrosomia and low birth weight were 21.5% and 44.6% respectively. Unlike Boiro et al.,[27] we found no influence of pre-gestational diabetes on the occurrence of macrosomia. The high rates of low birth weight, comparable to those reported by Lèye et al.,[38] who found hypotrophy in

44.4% of cases, are likely linked to the high proportion of preterm births. These newborns are at risk of hypoglycaemia (9.2%). According to Boiro et al.,[27] undiagnosed pre-existing diabetes significantly increases this risk ($p = 0.017$). We did not find this association in our series ($p = 0.521$).

Conclusion

Abnormalities in glucose metabolism during pregnancy constitute a genuine public health problem due to their high prevalence, particularly among older women and those who are overweight or obese, and due to their poor prognosis, particularly in the perinatal period. Thus, improving the prognosis requires early diagnosis through the routine screening of fasting blood glucose in the first trimester of pregnancy and the WHO test between 24 and 28 weeks' gestation in at-risk patients. This will enable early, optimised multidisciplinary care, with lifestyle modification at its core, to improve maternal and perinatal outcomes. Appropriate postpartum follow-up is essential to detect and treat any long-term complications early, particularly type 2 diabetes.

Acknowledgments

None.

Funding

None.

Conflicts of interest

Authors has no conflicts of interest to declare.

References

1. World Health Organization. *Diagnostic criteria and classification of hyperglycaemia first detected in pregnancy*. World Health Organization; 2013.
2. American Diabetes Association. Classification and diagnosis of diabetes: standards of medical care in diabetes—2019. *Diabetes Care*. 2019;42(suppl 1):S13–S28.
3. Wery E, Vambergue A, Le Goueff F, et al. Impact of the new screening criteria on the prevalence of gestational diabetes. *J Gynecol Obstet Biol Reprod (Paris)*. 2014;43(4):307–313.
4. Harlev A, Wiznitzer A. New insights into glucose pathophysiology in gestational diabetes and insulin resistance. *Curr Diab Rep*. 2010;10(3):242–247.
5. Mamabolo RL, Alberts M, Levitt NS, et al. Prevalence of gestational diabetes mellitus and the effect of weight on measures of insulin secretion and insulin resistance in third-trimester pregnant rural women residing in the Central Region of Limpopo Province, South Africa. *Diabet Med*. 2007;24(3):233–239.
6. Dionadji M, Ngaré A, Adoum C, et al. Gestational diabetes during antenatal consultations in Ndjamena. *Diabetes Metab*. 2013;39:A106–A107.
7. Kuti MA, Abbiyesuku FM, Akinlade KS, et al. Oral glucose tolerance test results among women at high risk of gestational diabetes mellitus. *J Clin Pathol*. 2011;64(8):718–721.
8. Adeoye I, Adedapo KS, Sonuga OO, et al. Incidence, risk factors and pregnancy outcomes of gestational diabetes mellitus in Ibadan, Southwest Nigeria: a prospective cohort study. *BMJ Open*. 2025;15(1):e095252.
9. Diop F. *Gestational diabetes: evaluation of screening and prognosis through a prospective study at the IHS Hospital in Dakar*. Medical thesis. Cheikh Anta Diop University; 2018.
10. Touré Y. *Gestational diabetes: epidemiological and prognostic aspects in the Dakar region. Preliminary Results of a Multicentre Study*. Medical thesis. Cheikh Anta Diop University; 2021.
11. Clay JC, Deruelle P, Fischer C, et al. Fifteen practical questions concerning gestational diabetes. *Gynecol Obstet Fertil*. 2007;35(9):724–730.
12. Chu SY, Abe K, Hall LR, et al. Gestational diabetes mellitus: all Asians are not alike. *Prev Med*. 2009;49(2-3):265–268.
13. Ramch W. *Gestational diabetes: a retrospective study of 64 cases*. Medical thesis. Hassan II University; 2016.
14. Bonomo M, Cetin I, Pisoni MP, et al. Flexible treatment of gestational diabetes based on ultrasound assessment of intrauterine growth: a controlled randomised clinical trial. *Diabetes Metab*. 2004;30(3):237–243.
15. Vambergue A, Nuttens MC, Verier Mine O, et al. Is mild gestational hyperglycaemia associated with maternal and neonatal complications? The Diagest Study 2000. *Diabet Med*. 2000;17(3):203–208.
16. Amazian K, Ouahidi I, Housni A. Screening for gestational diabetes: a descriptive cross-sectional study in Moroccan health centres. *Rev Francoph Int Rech Infirm*. 2018;4(1):64–70.
17. Galtier F. Gestational diabetes mellitus: definitions, epidemiology, risk factors. *J Gynecol Obstet Biol Reprod (Paris)*. 2010;39(8 suppl 2):S144–S170.

18. Martin P. *Management of gestational diabetes in réunion: follow-up of 518 pregnancies at the CHR Groupe Hospitalier Sud Réunion (2009-2011)*. Thesis. 2012.

19. Vambergue A, Nuttens MC, Debodinance P, et al. Gestational diabetes. *Rev Fr Endocrinol Clin Nutr Métab*. 1996;37(4-5):457–473.

20. Carlot N, Maugendre D, Laurent MC, et al. Screening for gestational diabetes using the O'Sullivan test in a hospital clinic: experience in Rennes. *J Gynecol Obstet Biol Reprod (Paris)*. 1996;25(2):168–173.

21. Chadli-Chaieb M, Maaroufi A, Slim I, et al. Gestational diabetes: clinical profile, screening and management. *Diabetes Metab*. 2014;40(suppl 1):A41–A42.

22. M'Rabet H. *Gestational diabetes: a retrospective study of 60 cases*. Medical thesis. Hassan II University; 2016.

23. Fenichel P, Hieronimus S, Harter M, et al. Diabetes and pregnancy. *EMC-Pédiatrie*. 1998;4-002–S-50.

24. Chanegriha M. *Gestational diabetes in an Algerian population: incidence, risk factors and complications during pregnancy*. Medical thesis. University of Algiers I; 2022.

25. Mimouni-Zerguini S, Smail M, Boudiba A, et al. Gestational diabetes: risk factors, development, and perinatal outcomes. A survey at the Mustapha Bacha University Hospital, Algiers (Algeria). *Med Mal Metab*. 2009;3(6):626–633.

26. Telejko B, Kuzmicki M, Kretowska MZ, et al. A comparison of the International Association of Diabetes and Pregnancy Study Groups recommendations with former criteria for diagnosing gestational diabetes mellitus: a retrospective cohort study. *Exp Clin Endocrinol Diabetes*. 2019;127(6):359–366.

27. Boiro D, Guéye M, Seck N, et al. Newborns of diabetic mothers in the neonatal unit at Dakar University Hospital (Senegal). *J Pédiatrie Puériculture*. 2017;30(4):150–155.

28. Diack ND. *Results of gestational diabetes screening according to IADPSG recommendations at Pikine General Hospital: A Report on 128 Cases*. Medical thesis. Cheikh Anta Diop University; 2015.

29. Moumhil N, Asmouki H, Soummani A. *Diabetes and pregnancy: a study of cases*. Medical thesis. Mohammed VI Polytechnic University; 2013.

30. Xiong X, Saunders LD, Wang FL, et al. Gestational diabetes mellitus: prevalence, risk factors, maternal and infant outcomes. *Int J Gynaecol Obstet*. 2001;75(3):221–228.

31. Mimouni-Zerguini S, Smail M, Boudiba A, et al. Gestational diabetes: risk factors, development, and perinatal outcomes. A survey at the Mustapha Bacha University Hospital, Algiers (Algeria). *Med Mal Metab*. 2009;3(6):626–633.

32. Damoune I, El Ouahabi H, Ajdi F. P51: Risk factors for gestational diabetes in 100 cases. *Diabetes Metab*. 2014;40(suppl 1):A42.

33. Djagadou KA, Tchamdja T, Némi KD, et al. Diagnostic, therapeutic, and prognostic features of gestational diabetes at the Sylvanus Olympio University Hospital Centre. *Pan Afr Med J*. 2019;34:18.

34. Sana D. *Gestational diabetes: experience of the endocrinology Department at Hassan II University Hospital, Fez: a report on 200 cases*. Medical thesis. Sidi Mohammed Ben Abdellah University; 2015.

35. Sidibé AT, Maïga I, Soukho A, et al. Diabetes and pregnancy in Bamako. *Diabetes Metab*. 2011;37(1 suppl 1):A48–A49.

36. Azib H, Tschudnowsky M, Rasamisoa M, et al. Assessment of the impact of new guidelines on the management of gestational diabetes: a retrospective study. *Diabetes Metab*. 2015;41(suppl 1):A45.

37. Vidal-Trécan T, Ciangura C, Chastang N, et al. A 10-year analysis of changes in the profile of patients with gestational diabetes and its impact on foetal and maternal morbidity and mortality. *Diabetes Metab*. 2011;37(1 suppl 1):A49.

38. Lèye A, Diack ND, Sarr NN, et al. High prevalence of gestational diabetes diagnosed according to IADPSG criteria in a Dakar hospital seeing: preliminary results of a cross-sectional study at the CHUN in Pikine. *Rev Afr Med Interne*. 2017;4(1):48-55.

39. Bensalem S, Lakehal A, Roula D. Gestational diabetes in the commune of Constantine, Algeria: a prospective study. *Med Mal Metab*. 2014;8(2):216–220.

40. Diallo M, Diallo A, Balde N, et al. Epidemiological, clinical and therapeutic profile of 100 diabetic patients receiving outpatient care at Conakry University Hospital, Guinea. *Diabetes Metab*. 2014;40(suppl 1):A108.

41. Maïga MI. *Diabetes and pregnancy in the Internal Medicine and Obstetrics and Gynaecology Departments of Point G and Gabriel Touré University Hospitals (Based on 100 Cases)*. Medical thesis. University of Bamako; 2009.

42. Mbaye A. *Changes in glycaemic status following gestational diabetes: a cohort study in the endocrinology and diabetology Department of the Pikine National Hospital (Senegal)*. Medical thesis. Cheikh Anta Diop University; 2019.

43. Odar E, Wandabwa J, Kiondo P. Maternal and fetal outcomes of gestational diabetes mellitus at Mulago Hospital, Uganda. *Afr Health Sci*. 2004;4(1):9–14.

Citation: Gaye YFO, Hady HE, Yahye DM. Gestational diabetes: epidemiological, diagnostic, prognostic and therapeutic aspects of 158 cases at Principal Hospital of Dakar. *Obstet Gynecol Int J*. 2026;17(2):81–86. DOI: 10.15406/ogij.2026.17.00828