Table S1: Crude and adjusted odds ratio stratified by time since first diagnosis of gestational diabetes mellitus with reference to women with no history previous of GDM amongst 5,738 pregnant women in Al Ain, UAE. The Mutaba’ah Study

| Activities and behaviors before current pregnancy | Crude OR with 95% CI | Adjusted OR with 95% CI |
|--------------------------------------------------|---------------------|------------------------|
| **Planned pregnancy**                           |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 0.81 (0.69-0.96)    | 0.77 (0.65-0.92)       |
| > 5 years since first diagnosis                 | 0.87 (0.73-1.03)    | 1.00 (0.83-1.21)       |
| **Contraceptive use**                           |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 1.04 (0.82-1.34)    | 1.08 (0.83-1.41)       |
| > 5 years since first diagnosis                 | 1.18 (0.93-1.51)    | 0.91 (0.69-1.19)       |
| **Inter Pregnancy Interval (SD)**               |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 0.82 (0.77-0.90)    | 0.80 (0.73-0.87)       |
| > 5 years since first diagnosis                 | 1.14 (1.04-1.24)    | 0.94 (0.86-1.03)       |
| **Physical Activity**                           |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 1.01 (0.85-1.20)    | 0.99 (0.83-1.19)       |
| > 5 years since first diagnosis                 | 1.15 (0.96-1.36)    | 1.09 (0.90-1.32)       |
| **Folic acid consumption**                      |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 0.74 (0.56-0.97)    | 0.74 (0.56-0.98)       |
| > 5 years since first diagnosis                 | 1.04 (0.81-1.34)    | 0.97 (0.73-1.29)       |
| **Iron consumption**                            |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 0.86 (0.61-1.20)    | 0.95 (0.67-1.35)       |
| > 5 years since first diagnosis                 | 0.66 (0.45-0.97)    | 0.64 (0.42-1.00)       |
| **Vitamin D consumption**                       |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 1.03 (0.68-1.58)    | 1.11 (0.71-1.73)       |
| > 5 years since first diagnosis                 | 0.73 (0.45-1.19)    | 0.87 (0.50-1.50)       |
| **Multi-vitamin consumption**                   |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 0.84 (0.61-1.16)    | 0.84 (0.60-1.17)       |
| > 5 years since first diagnosis                 | 0.81 (0.58-1.14)    | 0.78 (0.54-1.13)       |

| Activities and behaviors during current pregnancy | Crude OR with 95% CI | Adjusted OR with 95% CI |
|--------------------------------------------------|---------------------|------------------------|
| **Worried about birth**                          |                     |                        |
| No previous GDM                                 | 1                   | 1                      |
| ≤ 5 years since first diagnosis                 | 1.21 (1.01-1.44)    | 1.28 (1.06-1.54)       |
| > 5 years since first diagnosis                 | 1.00 (0.84-1.20)    | 1.16 (0.96-1.41)       |
| Physical Activity | No previous GDM | ≤ 5 years since first diagnosis | > 5 years since first diagnosis |
|-------------------|----------------|--------------------------------|-------------------------------|
|                   | 1              | 1.17 (0.99-1.38)               | 1.16 (0.97-1.38)              |
| Sedentary behavior overall | No previous GDM | 1 | 1 |
| ≤ 5 years since first diagnosis | 0.94 (0.70-1.26) | 0.87 (0.65-1.17) |
| > 5 years since first diagnosis | 0.79 (0.58-1.06) | 0.88 (0.64-1.21) |
| Sedentary behavior during week | No previous GDM | 1 | 1 |
| ≤ 5 years since first diagnosis | 1.01 (0.74-1.38) | 0.94 (0.69-1.29) |
| > 5 years since first diagnosis | 0.84 (0.61-1.16) | 0.92 (0.66-1.30) |
| Sedentary during weekend | No previous GDM | 1 | 1 |
| ≤ 5 years since first diagnosis | 0.77 (0.56-1.07) | 0.73 (0.52-1.02) |
| > 5 years since first diagnosis | 0.66 (0.47-0.92) | 0.76 (0.53-1.10) |
| Exposure to passive smoking | No previous GDM | 1 | 1 |
| ≤ 5 years since first diagnosis | 0.77 (0.65-0.92) | 0.76 (0.63-0.91) |
| > 5 years since first diagnosis | 0.99 (0.83-1.18) | 1.17 (0.97-1.42) |
| Folic acid consumption | No previous GDM | 1 | 1 |
| ≤ 5 years since first diagnosis | 0.90 (0.73-1.11) | 0.93 (0.75-1.16) |
| > 5 years since first diagnosis | 0.80 (0.64-0.99) | 0.92 (0.73-1.18) |
| Iron consumption | No previous GDM | 1 | 1 |
| ≤ 5 years since first diagnosis | 1.13 (0.91-1.42) | 1.20 (0.95-1.51) |
| > 5 years since first diagnosis | 0.75 (0.58-0.98) | 0.89 (0.67-1.18) |
| Vitamin D consumption | No previous GDM | 1 | 1 |
| ≤ 5 years since first diagnosis | 1.08 (0.84-1.38) | 1.16 (0.90-1.50) |
| > 5 years since first diagnosis | 0.75 (0.56-0.99) | 0.90 (0.66-1.23) |
| Multi-vitamin consumption | No previous GDM | 1 | 1 |
| ≤ 5 years since first diagnosis | 1.01 (0.80-1.27) | 1.03 (0.81-1.31) |
| > 5 years since first diagnosis | 0.80 (0.62-1.04) | 0.90 (0.68-1.19) |