



IG: intervention group
CG: comparison group

FIGURE 1: Participant recruitment summary.

proportion of intervention group was nulliparous (35.7% versus 6.7% in the comparison group). It also appears that the intervention group has a higher baseline weight than the comparison group but their BMI values seem to be similar.

4.3. Maternal and Infant Outcomes. From a visual inspection of Table 4, women in the intervention group seem to have a considerably lower amount of gestational weight gain (mean (SD) kg 5.6 (4.6) versus 9.7 (7.2)) in relation to the comparison group. They were also less likely to exceed the Institute of Medicine (IOM) [11] gestational weight gain limit of 9 kg (28% versus 50%, resp.). There were no incidences of large for gestational age or small for gestational age in the study groups. One stillbirth was reported in the comparison group, being born at 34 gestational weeks.

4.4. Intervention Process. The goal setting, text messaging, and self-monitoring tools only applied to women who participated in the intervention. These were aimed to support behaviour change as part of the complex intervention.

4.5. Goal Setting and Text Message Selection. Out of the eight predefined goals, the most popular health eating goal was “I am going to eat three balanced meals every day” and the most commonly selected physical activity goal was “I am going to exercise at least 30 minutes every day.” None of the participants selected the goal entitled “I am going to eat five portions of fruit and vegetables every day” (see Table 5).

Along with selecting the standard messages relating to their goals, women had the option of choosing editable messages which appeared to be highly popular. The healthy lifestyle midwife adapted these editable messages creating 63 additional messages which included praising statements. The examples for this include “*Heather, keep on trying to be active and do whatever you can—I’m proud of you for trying!*”

4.6. Self-Monitoring Tools

4.6.1. One-Week Food and Activity Diary. Every participant completed the initial 1-week food and activity diary, although two participants forgot to complete it in time for consultation 2, so they brought it to their next appointment.

4.6.2. Diet and Activity Records. Half the participants returned two completed DARs. Ten of the first 16–28 week DARs were returned and eight of the 29–36 week DARs were returned.

4.7. Qualitative Findings. A qualitative phase was conducted to further explore the practical aspects of MOMTech and experiences of the specialist midwife and participants as well as reasons for lack of participation for those who declined or withdrew from the study and these thematic findings are presented below.

4.8. Comparison Group

4.8.1. Reasons for Lack of Participation. A convenience sample of eight women from the comparison group was contacted, of whom four women agreed to a short telephone interview.

Reasons given for declining to take part in MOMTech are clustered into the following four themes: recruitment/approaching style, timing of the intervention, low perception of risk, and the fact that some decliners thought that MOMTech would not benefit them but might benefit first time mums.

Recruitment and approaching style included women feeling judged and treated differently because of their size. They felt that the recruiting midwife only mentioned it because of their increased BMI, not fully understanding why it was limited to obese women.

Timing of the intervention covered beliefs that pregnancy was not a good time as you are expected to gain weight and develop physical health problems and that there was a lack of suitable antenatal exercise classes in the area even if you wanted to be active. They also stated issues related to balancing participation with the demands of work and their existing family and that this intervention would be more beneficial to first time mums.