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Abstract*

We evaluate the effectiveness of sending text messages to pregnant women containing appointment reminders and suggestions for healthy behaviors during pregnancy. Receiving messages had an overall positive effect of 5 percent on the number of prenatal care visits attended. Moreover, for women who live close to their assigned health center and who have higher educational attainment, the intervention positively affected vitamin intake compliance, APGAR scores, and birth weight. Evidence suggests that reminders are more effective among those who are more able to understand the future benefits of preventive care (more educated) and who face lower transaction costs of going to prenatal care checkups (located near health centers). No evidence of geographical spillover effects was found.

JEL classifications: I10; O12

Keywords: WAWARED; Peru; e-Health; Pregnancy; Experimental Design

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1. Introduction

Pregnancy-related complications are still a leading cause of death among women, especially in developing countries (Ronsmans and Campbell, 2011). According to the World Health Organization, every minute at least one woman dies from pregnancy-related issues. This staggering fact explains why maternal and child care became one of the Millennium Development Goals. The aim is to reduce by two thirds the under-five child mortality rate and to improve maternal health by 2015 (Torres et al., 2004; Adam et al., 2005; United Nations, 2012).

Although the American Medical Association indicates that frequent—at least 14—prenatal care visits have positive effects on birth outcomes, it is challenging to disentangle whether such benefits are attributable to a higher number of prenatal care visits. Healthier women are more likely to have better birth outcomes and attend a higher number of prenatal care visits. Thus, the relation between birth outcomes and prenatal care visits could be related to unobserved characteristics that systematically affect birth outcomes and the number of prenatal care visits. Therefore, establishing a link between prenatal care and health outcomes has been difficult in the absence of credible exogenous variation in prenatal care.

According to Joyce (1994), most research on birth outcomes has found a direct association between adequate prenatal care and increased birth weight. However, without a randomized design, it is complicated to determine the degree to which the association is due to the medical intervention and the degree to which it is due to the characteristics of the women receiving the care. In this regard, Evans and Lien (2005) used the exogenous variation in prenatal care provided by a 4-week public transportation strike to identify the effect of prenatal care visits on birth outcomes. Although their results suggest that prenatal care visits improve birth outcomes for at-risk populations, the magnitudes are small.

Although early prenatal control visits have the potential to (a) avoid pregnancy-related complications and (b) increase maternal and child care (Kerber et al., 2007; Miller et al., 2003), most pregnant women in the developing world attend only one—or sometimes, none—prenatal care visits during their entire pregnancy. Poor quality services, poor access to these services, and lack of awareness among women explain the low number of prenatal care visits in developing countries. As a first step, governments could use potentially effective interventions to reduce mortality by raising pregnant women's awareness of the importance of prenatal care visits (Bhutta, 2009; Karolinski et al., 2010; Nyamtema et al., 2011).

Information and communication technologies (ICTs) such as mobile phone short message services (SMS) could increase awareness about prenatal care visits to improve health outcomes (Krishna et al., 2009). Health related interventions using SMS such as the one conducted by Perron et al. (2010) show how the use of SMS improves patients' attendance at medical outpatient clinics by means of a reminder system, whereas Cole-Lewis and Kershaw (2010) and Dammert et al. (2014) analyze the effect of SMS on behavioral changes in relation to disease prevention and management. Other studies (Jareethum et al., 2008; Curioso et al., 2010; Tezcan et al., 2011; Cormick et al., 2012) show evidence that most pregnant women have access to SMS and have interest in receiving SMS with educational information regarding pregnancy.

In theory, reminders could mitigate attentional failure and motivate welfare-enhancing changes in intertemporal allocations by providing associations between future opportunities and current choices (Reis, 2006; Karlan et al., 2010). However, there is no robust evidence on the effects of these interventions on birth outcomes. Thus, understanding the role of information and communication technologies on birth outcomes constitutes a great opportunity to improve health outcomes. This is highly relevant for developing countries where the penetration of mobile technologies is very high and the marginal costs of SMS is low, and particularly important in contexts in which scarce public resources must be allocated efficiently.

We implemented a randomized controlled trial to assess the effectiveness of SMS containing prenatal care visits reminders and suggested healthy practices during pregnancy in the Ventanilla district in Peru. Overall, our main findings suggest that SMS increased the number of prenatal care visits by 5 percent and the number of prenatal care visits attended on time by 10 percent. However, these effects are stronger for more educated women with easier access to health centers. Likewise, the intervention also improved prenatal vitamin intake compliance, APGAR scores and birth weight only within this group. In other words, results show that the intervention was more effective for those more able to understand the future benefits of preventive care (those who are more educated) and with lower transaction costs of using preventive care services (livenear the health center). Therefore, the results of this paper present some important answers for future research and policymakers in developing countries. It seems that sending prenatal health care reminders by way of mobile technologies yields positive effects when the basis of human capital and care access are already in place.

The remainder of the paper is organized as follows. Section 2 presents the intervention and experimental design. Section 3 describes the dataset used for the empirical analysis. Section 4 describes the empirical strategy. Section 5 presents results and discussion. Last, Section 6 concludes.

2. Experimental Design

In 2010, the Mobile Citizen Program of the Inter-American Development Bank implemented the Project WAWARED “Connecting for better maternal and child health in Peru” (WAWA is a Quechua word for “baby”). The project involved the development and implementation of an electronic medical record system for maternal health (Curioso et al., 2010), which is linked to a platform that sends SMS to pregnant women tailored to their health profile and gestational age.¹ SMS include prenatal care checkup reminders, nutritional and motivational messages, and general health-related pregnancy messages. Furthermore, the system includes an Interactive Voice Response system, free of charge to the public, with relevant information for pregnant women.

WAWARED was implemented in the district of Ventanilla, region of Callao, in the central coast of Peru. Women of reproductive age represent almost 30 percent of the entire population of Callao. The project focused on the 16 health centers located in the Ventanilla district.² Medical care in Ventanilla does not require out-of-pocket expenditures; more than 98 percent of its population qualifies for the government-funded comprehensive health insurance (*Seguro Integral de Salud*).³

Despite the absence of out-of-pocket expenses, prenatal care visits are low in Ventanilla. Around 70 percent of pregnant women attend less than nine prenatal care visits. These levels are far below the American Medical Association’s recommended level of prenatal control visits of 14. In focus groups conducted during project preparation, most women reported that forgetfulness was one of the main reasons for missed prenatal control visits.

¹ See www.wawared.org for a detailed description of the project.

² Callao Region comprises 6 districts: Bellavista, Callao (downtown), Carmen de la Legua Reynoso, La Perla, La Punta and Ventanilla. There are 53 health centers located across the whole Callao Region; with 16 of these located in the Ventanilla district (the focus of our intervention).

³ For an evaluation of the effects of the *Seguro Integral de Salud* see Bernal et al. (2014)

The development and full implementation of the electronic medical records system and SMS interphase ended in January 2012. The system began full and effective application and functionality in March 2012. During the pilot period half of the pregnant women received SMS and the other half did not. The selection of women receiving SMS (treated group) was randomly assigned through an automatic routine embedded in the electronic system and SMS interphase. Note that the randomization was conducted at the individual level but stratified at the health center. Thus, from March 2012 until January 2013, women attending their first prenatal care visit within the first 20 weeks of gestation were randomized to either receive or not receive SMS reminders.⁴

Appointment reminders were sent every Monday and the day previous to the scheduled appointment. Furthermore, every Wednesday and Saturday, other educational messages suggesting healthy food, vitamin intake reminders, and hygiene practices were also sent to the treated group. Last, specific strings of messages related to special conditions such as hyperemesis, being overweight, malnutrition, anemia, smoking, hypertension, diabetes, urinary tract infection, syphilis, HIV, tuberculosis, and alcohol and drug consumption were also developed and delivered only to women manifesting the specific condition.⁵

3. Data and Outcomes of Interest

We use data from the electronic medical records system and face to face interviews with women participating in the pilot period of *WAWARED*. The final sample size consists of 1,162 women from which 576 received SMS reminders (intervention) and 586 did not (control). From the baseline sample (i.e., all women who attended at least one prenatal control before 20 weeks of gestation within the experimental period), the attrition rate was only 6 percent, orthogonal to intervention status and baseline characteristics. In Peru, incoming SMS are free of charge, so households did not incur any cost when receiving text messages.

⁴ We focused on women attending their first pre natal control within the first half of pregnancy in order to allow sufficient time to observe probable behavioral changes along the pregnancy. Women who attended the first control beyond the first 20 weeks of their pregnancy received the SMS string without being randomized into treatment or control groups.

⁵ See Appendix Table A1 for the full set of messages sent to a typical pregnant woman corresponding to each week of pregnancy. In addition, Appendix Table A2 shows specific strings of messages related to the listed special conditions.

Baseline information was collected during the first prenatal control. Furthermore, since women were followed until childbirth, outcomes regarding prenatal care visits and health indicators during pregnancy were recorded electronically in the system developed within the project. Other information such as APGAR scores, birth weight, adherence to vitamin intake, and the range and quality of food eaten during pregnancy was collected in face-to-face interviews 2–3 weeks after childbirth. The data also include some demographic (i.e., age, educational attainment, employment status, and marital status) and household characteristics (i.e., income, distance to health center, access to water, electricity, Internet, and kitchen). The advantage of this dataset is that it provides a rich and unique set of variables about household characteristics of pregnant women, and their health practices before, during, and after the intervention.

Table 1 shows that the average age of women in the sample is 26 and their average gestational age at the first prenatal control is 12 weeks. Almost half completed secondary school, 72 percent work in unpaid domestic work and most are single but live with their partner (72 percent). On average, women in the sample have had one previous birth and around one fifth were anemic in the first prenatal control. The average distance to the assigned health center is a little less than a kilometer. Most dwellings have tap water (76 percent), electricity (99 percent), television (98 percent), gas kitchen (100 percent), and at least a digital video disc player (80 percent). By contrast, computer and Internet access is very low (6 and 3 percent, respectively).

For our analysis, we created three sets of dependent variables. Each set corresponds to variables related to prenatal care visits, behavioral outcomes, and birth/maternal health outcomes. The prenatal care visit variables include two indicator variables that are based on the number of prenatal care checkups attended (i.e., at least six and at least nine), and two additional variables defined by the total number of prenatal checkups attended overall during pregnancy and on time.

Behavioral outcomes include self-reported vitamin intake compliance, use of emergency services following adverse symptoms, attending a doctor's appointment following adverse symptoms, and standardized indexes that are based on self-reported information on recommended and non recommended food intake.⁶ For the food-intake related outcomes, we

⁶ Adverse symptoms considered include: abundant vomiting; vaginal bleeding; strong and frequent cramps; pain or itching when urinating; gray, green or bad smell vaginal secretion; foamy urine; fever; swallowing of feet, hands or face; headache; hum; vision difficulties; decreased fetal movements.

follow Kling et al. (2007) to build categorical summary standardized indexes expressed in standard deviations with respect to the control group as follows:

$$Y^* = \frac{1}{K} \sum_{k=1}^K \frac{Y_k - \mu_k}{\sigma_k} \quad (1)$$

where Y^* is the created index and indicates where the mean of the intervention group is located in the distribution of the control group in terms of standard deviations. For example, the components of the index pertaining to recommended food include K indicators that report consumption of each of the recommended food items included in the SMS strings. Then the index in equation (1) is defined to be the equally weighted average of z scores of its components. The z scores are calculated by subtracting the control group mean of each individual indicator and dividing by the control group standard deviation.

Last, the birth/maternal health outcomes include birth weight, an indicator variable that measures if the weight of the newborn is below 2,500 grams (i.e., low birth weight), APGAR score, number of weeks of gestation, weight gain during pregnancy, maternal hemoglobin level at delivery, and whether the mother was anemic at delivery.

4. Empirical Strategy

As previously noted, it is challenging to disentangle whether birth outcomes are attributable to a higher number of prenatal care checkups. Healthier women are more likely to have better birth outcomes and attend a higher number of prenatal care checkups. Thus, there may be some unobserved characteristics systematically influencing both inputs (i.e., prenatal care checkups) and outcomes (i.e., birth outcomes and healthy behavior). As a result, a simple regression that overlooks the sources of endogeneity may overestimate the effect of prenatal care checkups. Getting unbiased estimates depends on the assumption that birth outcomes are uncorrelated with unobserved determinants of the number of prenatal care checkups attended, after controlling for observed determinants. We could use the external variation provided by the randomized controlled trial as an instrument affecting the outcomes of interest through the number of prenatal care checkups attended. However, the SMS also included health tips that likely had a direct effect on other behavioral outcomes. Therefore, the intervention has the potential to affect birth and behavioral outcomes not based solely on the number of prenatal care checkups.

Hence, our goal is to examine whether receiving prenatal checkup reminders and other pregnancy-related information via SMS affects pregnant women’s behavior. In particular, we estimate the causal impact of the series of SMS on several health-related variables: (a) prenatal care checkups, (b) behavioral outcomes, and (c) birth and maternal health outcomes. Our identification strategy relies on the exogenous variation provided by the text messages through the randomized controlled trial. This framework allows us to make causal comparisons between treated and control groups.

The validity of our empirical strategy relies on the assumption that both intervention and control groups are statistically equivalent regarding both observable and unobservable characteristics systematically related to the outcomes of interest. To partially test this assumption, we compare observable characteristics between intervention and control groups collected before intervention implementation. Table 1 presents means and adjusted differences in relevant baseline characteristics across intervention and control groups.⁷ Out of the 36 baseline characteristics, only 3 (student status, pulse, and access to television) are significant at the 10 percent level or lower. Overall, these results show that there are no significant differences across groups in most covariates indicating that the randomization was successful in balancing the baseline covariate mean values between groups. Hence, women in the intervention and control groups appear to be similar in observable characteristics; thus, we can compare outcomes between these groups to identify the causal effect of the intervention.

Having showed that women in intervention and control groups are similar in observed characteristics at baseline, we estimate the following regression model to understand the effect of the intervention on the different outcome variables:

$$Y_{ij} = \alpha_j + \beta T_{ij} + \gamma' X_{ij} + \varepsilon_{ij} \quad (2)$$

where Y_{ij} is the outcome for woman i attending health center j . The parameter α_j is a health center fixed effect. T_{ij} is an indicator for whether the woman is randomly assigned to the intervention. X_{ij} is a vector of baseline characteristics that include age, education, and distance to health center. Last, ε_{ij} is the error term, clustered at the health center level in all specifications.⁸

⁷ We adjust these differences using health center fixed effects in all regressions. Estimated standard errors are also clustered at the health center level.

⁸ We also estimated all of our regressions using robust and bootstrapped estimated standard errors. All results were equivalent and are available upon request.

β is the parameter of interest and measures the average impact of the intervention on the various health-related outcomes.⁹

Some aspects of Model (2) deserve discussion. First, the health center fixed effects control nonparametrically for any time invariant observable and unobservable characteristics at the health center level. In addition, given that randomization was stratified at the health center, these fixed effects act as strata fixed effects helping to increase precision in our estimations. Second, we include control variables such as age, education, and distance to health center because they are typically related to health outcomes. However, given our randomized controlled trial design, they are orthogonal to the intervention indicator. Therefore, by including these control variables, we reduce the unexplained variation contained in the error term, thereby increasing precision for inference on the parameter of interest.

5. Results and Discussion

5.1 Overall Effects

The first set of regressions describes the average impact of the intervention on the different sets of health-related outcomes. Table 2 reports the estimation results for specification (2) using the whole sample. Columns 1 and 2 report means of treated and control groups, respectively; column 3 shows the estimated overall intervention effect (the estimated β coefficient).

Note that women receiving SMS show an improvement in the number of prenatal care checkups. Looking at the overall results, the average impact for this set of variables is positive and statistically different from zero. More specifically, receiving SMS increased the likelihood of going to at least six prenatal care checkups by five percentage points, which is a 6 percent increase with respect to the control group mean. Likewise, belonging to the intervention group also increased the likelihood of going to at least 9 (one per month) prenatal care checkups by seven percentage points, which is a 21 percent increase with respect to the control group mean.

⁹ Note that we estimate intent-to-treat (ITT) effects resulting from a comparison between women assigned to the intervention and control groups respectively. It might be, however, that not all SMS reached women in the intervention group as a result of several reasons like possible phone sharing between different household members. If such situations were present, our estimates would be providing a lower bound of the program's effect. However, no tracking of how many SMS were exactly read by each woman was possible to implement. Therefore, we were not able to scale up our results.

Furthermore, while the intervention increased the number of total prenatal care checkups by 5 percent in relation to the control group (0.35/7.48), it also increased the number of prenatal care checkups done on time by 10 percent (0.31/3.1). These results confirm the idea that SMS could be an effective tool for appointment reminders overall. Although SMS also emphasized better health practices for pregnant women, there were no statistically significant effects on behavioral, birth, and maternal health outcomes for the entire sample.

5.2 Heterogeneous Effects

We are also interested in understanding whether there are heterogeneous effects across different groups of women. Pregnant women's behavior could be influenced by factors such as their understanding of the importance of prenatal health care and transaction costs associated with the prenatal visits. As Dupas (2011) shows, the provision of information can influence people's behavior when they are not fully informed about the health situation they face, when the source of information is credible, and when they are able to process the new information. Furthermore, only if the expected benefits of the prenatal health checkups are higher than the transaction costs will women be more likely to attend them. Thus, we consider a variation of the effects of the intervention as a function of observable characteristics such as educational attainment and distance to the health center. These proxies intend to capture differences in awareness of the potential benefits of prenatal care visits (through educational attainment) and their transaction costs (through distance to the health center).

Accordingly, the second set of regressions estimate heterogeneous effects across different groups of women defined by their educational attainment and their distance to the health center separately. Columns 1–4 in Table 3 present estimation results of specification (2) after dividing the sample by educational attainment (i.e., below and above secondary school). Likewise, columns 5–8 in Table 3 display estimation results of specification (2) after dividing the sample by distance to health center (i.e., below and above 500 meters).

As columns 1–4 show, the intervention seems to be more effective among women with secondary or higher education. In this segment, the intervention had a clear effect on the number of prenatal care visits. The highest impact appears on the number of prenatal care checkups done on time (13 percent increase with respect to the control group). In addition, we also find statistically significant effects for vitamin intake. Women exposed to SMS increase their

adherence to vitamin intake during the last week of pregnancy by five percentage points (or 7.7 percent with respect to the control group mean) and also increased their vitamin intake compliance during the last month of pregnancy by three percentage points (or four percent with respect to the control group mean). Finally, we observe a positive effect of 0.14 points on the APGAR score (equivalent to 1.6 percent with respect to the control group mean). Note that there are no statistically significant effects among women with education below secondary school.

Columns 5–8 display regression results for subsamples divided by distance to health center. In this case, we find that SMS had positive effects on the number of prenatal care checkups for both groups. However, we find relatively larger impacts among those who live closer to the health center. In addition, we find that receiving SMS also increased vitamin intake compliance during the last month of pregnancy by three percentage points (or 4 percent with respect to the control group mean), and reduced the consumption of non recommended food by 0.09 standard deviation. Also, there was a positive effect on newborn birth weight equivalent to 87.72 grams (or 2.69 percent with respect to the control group mean).

Evidence presented in Table 3 suggests that SMS serve as an effective reminder for prenatal care checkups in particular for women with more education and who live closer to the health center. Therefore, we also explored heterogeneous effects by educational attainment and distance to the health center combined. We divide the sample into four mutually exclusive groups: (a) women with incomplete secondary school or less who live below 500 meters to the health center, (b) women with incomplete secondary school or less who live above 500 meters to the health center, (c) women with at least secondary school who live below 500 meters to the health center, and (d) women with at least secondary school who live above 500 meters to the health center. The even numbered columns in Table 4 show the average estimated impact within each group.

Along the lines of the results shown in Table 3 we find the same pattern for prenatal care outcomes. The average impact of the intervention seems to be positive and statistically different from zero, with the likelihood of going to at least six prenatal care checkups increasing in almost all groups (except for the group of women with less than secondary level education and who live relatively far from the health center). Regarding prenatal care outcomes, column 6 in Table 4 indicates that the intervention was more effective within the group of women with at least secondary level education and who live closer to the health center. In particular, besides being

more likely to go to at least six prenatal care checkups compared to the control group, receiving SMS also improved the total number of prenatal control visits attended by 0.53 visits (or 7.1 percent with respect to the control group mean). Furthermore, the total number of prenatal control visits done on time increased by 0.58 (or 18.7 percent with respect to the control group mean). Vitamin intake during the last week (month) of pregnancy was also increased by 12 (6) percentage points. For this same group (women with at least secondary level education and who live closer to the health center), receiving SMS affected the weight of newborns by 161.76 grams (or 5.02 percent with respect to the control group mean) and affected the APGAR score by 0.16 point (or 1.8 percent with respect to the control group mean).

Column 9 of Table 4 displays differences in the estimated effects between women with at least secondary education who live relatively close to the health center and women with less than secondary education who live relatively far from the health center. No significant differences are found regarding prenatal care attendance. However, significant differences are found regarding vitamin intake compliance, birthweight and APGAR score. This confirms that our intervention differentially affected women with relatively higher education and with lower transaction costs of prenatal care attendance.

The evidence presented suggests that short message services (SMS) serve as a mechanism that encourages pregnant women to attend prenatal care visits. Furthermore, when assessing whether impacts are heterogeneous across groups of women, differentiating by their educational attainment and distance to health center, we find that impacts are higher in women with more education and at a closer distance to the health center. In contrast, we do not find these effects among women with less than secondary level education and who are further away from the health center. We interpret these results as evidence that inexpensive interventions, such as SMS, are effective when a minimum level of education and health care accessibility have been previously achieved.

5.3 Spillover Effects

Another relevant question relates to the potential spillover effects of the intervention. Women in the control group can learn from women in the intervention group about the importance of prenatal checkups, and therefore adopt healthy behaviors during their pregnancy. If this were the case, results shown in Tables 2–4 would be lower bound estimates of the intervention effects.

Observing behaviors of and interacting with women in the intervention group could improve the information about the perceived benefits of prenatal care (Bandiera & Rasul, 2006). Furthermore, the homogeneity of women in the intervention and control groups increases the likelihood of this social learning.

Following Conley and Udry (2010), we use data on geographical location to define each woman's information neighborhood. An information neighborhood is the set of other women from whom a woman might learn. Our empirical strategy tests whether women in the control group adjust their prenatal care and health practices when they have close proximity to women in the intervention group. In other words, we measure whether women in the control group conform to the behavior of their neighbors in the intervention group. As such, we attribute behavioral changes to social learning by identifying whether women in the control group align their behavior to women in the intervention group.

The challenge of identifying spillover effects relies on the definition of the set of neighbors from which a woman could learn. To do so, we collected the GIS coordinates corresponding to the household of each woman in our sample. Then, we defined each woman's neighborhood as the mass of women living within a 25-meter radius.¹⁰ Within this framework, we identified spillover effects through the estimation of the following regression model (restricted to the sample of women in the control group):

$$Y_{ij} = \alpha_j + \beta_2 T_{2ij} + \lambda \text{Density}_{ij} + \gamma' X_{ij} + \varepsilon_{ij} \quad (3)$$

where Y_{ij} is the outcome for woman i attending health center j , and α_j is a health center fixed effect. T_{2ij} is an indicator for whether woman i has at least one treated woman within her neighborhood. Density_{ij} is the total number of women (regardless of intervention status) that belong to the neighborhood of woman i , and X_{ij} is a vector of baseline characteristics that include age, education, and distance to health center. Last, ε_{ij} is the error term, clustered at the health center level in all specifications.

Because intervention was randomly assigned, conditional on the density of women living within each neighborhood, β_2 identifies geographical spillover effects of the intervention on the various outcomes. In other words, β_2 measures the effect on the various health-related outcomes of having at least one treated woman within woman's i neighborhood. The validity of this

¹⁰ We also performed the analysis considering 50, 75, and 100 meter thresholds. All results were equivalent and are available upon request.

strategy requires that, conditional on density, control women living close to treated women should be observationally equivalent at baseline when compared with control women living far from treated women. Appendix Table A3 shows that these groups were well balanced at baseline (out of 36 measured characteristics, only 3 were significant at the 10 percent level or lower).

Table 5 shows estimated spillover effects. The evidence suggests null general spillover effects on the outcomes of interest. Therefore, it appears that social learning flowing from treated to control women living close by did not generate discernible impacts. These findings confirm that the main effects of the intervention were not biased as a result of the potential presence of social learning flowing from treated to control women.

6. Conclusions and Policy Implications

This paper examined the role of SMS as a reminder mechanism for prenatal care checkups and as a vehicle for promoting healthy practices during pregnancy (adherence to vitamin-intake and eating habits). We did this by implementing a randomized controlled trial in the district of Ventanilla, in the region of Callao, Peru. Our main findings suggest that SMS increased the number of prenatal care checkups attended by 5 percent, and the number of prenatal checkups attended on time by 10 percent. Furthermore, they increase the likelihood of going to at least nine checkups (one per month) by 21 percent.

We also found heterogeneous effects of the intervention across groups of women defined by educational attainment and distance to the health center. Impacts seem to be concentrated among more educated women with easier access to the health center. Although all groups showed impacts on the number of prenatal care checkups, women with secondary education and living within 500 meters of the health center also increased healthy behaviors such as adherence to vitamin-intake. Furthermore, birth weight and APGAR scores were positively affected only within this segment. Thus, results suggest that the intervention was more effective within groups more able to understand the future benefits of preventive care (more educated) and with lower transaction costs of attending preventive care (living closer to health centers). Last, no evidence of spillover effects were found, suggesting that estimated effects do not suffer from potential downward biases that would exist in the presence of spillovers flowing from treated to control women.

The main limitation of our analysis becomes apparent in the inability to use the intervention as an instrument for the number of prenatal care visits. The inclusion of health tips in the SMS string limits the use of the intervention as an instrument since it does not affect the outcomes of interest, exclusively, through the number of prenatal care visits. Nonetheless, the results of this paper pose some important questions for future research and policymaking about the role of ICT in increasing awareness about prenatal care visits to improve health outcomes. In particular, because the intervention seems to be more effective in more educated women who live closer to the health center, it could be the case that less educated women at a further distance from the health center might be helped by facilitating access and providing education about preventive care. Thus, SMS need to be complemented by other institutional arrangements aiming at increasing understanding and access to preventive care to more disadvantaged groups of women.

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Table 1. Baseline Balance

| | Treated | Control | Adjusted difference | Observations |
|--|---------|---------|---------------------|--------------|
| | (1) | (2) | (3) | (4) |
| <i>Women Sociodemographic Characteristics</i> | | | | |
| Age | 25.75 | 25.58 | 0.17 (0.32) | 1,162 |
| Born in Lima | 0.43 | 0.45 | -0.03 (0.03) | 1,100 |
| Education | | | | |
| Incomplete secondary or lower | 0.33 | 0.38 | -0.05 (0.03) | 1,162 |
| Complete secondary | 0.48 | 0.44 | 0.03 (0.03) | 1,162 |
| Incomplete tertiary | 0.09 | 0.09 | 0.01 (0.01) | 1,162 |
| Complete tertiary | 0.09 | 0.09 | 0.00 (0.02) | 1,162 |
| Occupation | | | | |
| Unpaid domestic worker | 0.72 | 0.69 | 0.02 (0.03) | 1,156 |
| Paid domestic worker | 0.08 | 0.09 | -0.00 (0.01) | 1,156 |
| Paid nondomestic work | 0.09 | 0.08 | 0.01 (0.02) | 1,156 |
| Student | 0.06 | 0.10 | -0.03** (0.01) | 1,156 |
| Civil status | | | | |
| Single | 0.17 | 0.17 | -0.00 (0.02) | 1,162 |
| Married | 0.11 | 0.14 | -0.03 (0.03) | 1,162 |
| Not married but living with partner | 0.72 | 0.69 | 0.03 (0.03) | 1,162 |
| Pre-pregnancy weight (kilograms) | 58.32 | 58.42 | -0.09 (0.50) | 1,159 |
| Height (meters) | 1.53 | 1.53 | -0.00 (0.00) | 1,162 |
| <i>Women physical signals (1st control)</i> | | | | |
| Weeks of pregnancy | 12.01 | 11.73 | 0.32 (0.22) | 1,154 |
| Number of prior births | 1.02 | 0.93 | 0.08 (0.05) | 1,162 |
| Temperature (Celsius) | 36.55 | 36.55 | 0.01 (0.02) | 1,156 |
| Respiratory frequency | 18.98 | 18.92 | 0.06 (0.14) | 1,156 |
| Pulse | 76.29 | 75.87 | 0.51** (0.20) | 1,156 |
| Systolic blood pressure | 96.96 | 97.40 | -0.46 (0.45) | 1,156 |
| Diastolic blood pressure | 60.94 | 60.91 | -0.01 (0.26) | 1,156 |

| | | | | |
|---|--------|--------|------------------|-------|
| Hemoglobin level | 11.83 | 11.76 | 0.09 (0.06) | 936 |
| Anemic (hemoglobin level <11) | 0.22 | 0.24 | -0.02 (0.02) | 936 |
| <i>Household Characteristics</i> | | | | |
| Total household income (PEN) | 737.39 | 720.75 | 12.81 (11.77) | 1,153 |
| Distance to health center (meters) | 929.65 | 895.12 | 34.71 (47.76) | 1,162 |
| Tap water | 0.76 | 0.76 | -0.01 (0.02) | 1,161 |
| Electricity | 0.99 | 0.97 | 0.01 (0.01) | 1,161 |
| Internet | 0.03 | 0.03 | 0.00 (0.01) | 1,160 |
| Television | 0.99 | 0.98 | 0.01* (0.01) | 1,160 |
| Refrigerator | 0.59 | 0.63 | -0.04 (0.03) | 1,160 |
| Electric kitchen | 0.01 | 0.01 | 0.01 (0.00) | 1,160 |
| Gas kitchen | 1.00 | 0.98 | 0.02 (0.03) | 1,160 |
| Kerosene kitchen | 0.01 | 0.02 | -0.00 (0.01) | 1,159 |
| Digital video disc player | 0.80 | 0.77 | 0.03 (0.02) | 1,161 |
| Computer | 0.06 | 0.06 | 0.00 (0.01) | 1,160 |

Notes: This table presents estimated differences between treated and control women from whom valid information on both number of prenatal controls attended during pregnancy and newborn's birth weight were obtained. Baseline data was collected during the first prenatal control. Columns 1 and 2 present means; column 3 presents estimated coefficients and standard errors on a treatment indicator from ordinary least square regressions with health center fixed-effects. Estimated standard errors, reported in parentheses, are clustered at the health center level. Significance at the 1, 5, and 10 percent levels is indicated by ***, ** and *, respectively.

Table 2. Overall Treatment Effects

| | Treated | Control | Treatment effect | Observations |
|--|----------|----------|-------------------|--------------|
| | (1) | (2) | (3) | (4) |
| <i>Prenatal care</i> | | | | |
| Attend ≥ 6 prenatal controls | 0.87 | 0.82 | 0.05** (0.02) | 1,162 |
| Attend ≥ 9 prenatal controls | 0.40 | 0.33 | 0.07*** (0.02) | 1,162 |
| Total prenatal controls | 7.82 | 7.48 | 0.35*** (0.12) | 1,162 |
| Total prenatal controls on time | 3.41 | 3.10 | 0.31** (0.14) | 1,157 |
| <i>Behavioral outcomes</i> | | | | |
| Took vitamins on time (last week) | 0.72 | 0.69 | 0.03 (0.03) | 1,115 |
| Overall vitamin compliance (last month) | 0.78 | 0.77 | 0.01 (0.01) | 1,121 |
| Attended emergency (given adverse symptoms) | 0.36 | 0.34 | 0.03 (0.04) | 675 |
| Visited doctor (given adverse symptoms) | 0.79 | 0.81 | -0.02 (0.02) | 675 |
| Recommended food (in standard deviations) | 0.02 | 0.00 | 0.03 (0.02) | 1,162 |
| Not recommended food (in standard deviations) | -0.04 | 0.00 | -0.04 (0.03) | 1,162 |
| <i>Birth and maternal health outcomes</i> | | | | |
| Birth weight (grams) | 3,343.87 | 3,316.29 | 31.11 (28.07) | 1,162 |
| Low birth weight (<2500) | 0.05 | 0.05 | -0.00 (0.01) | 1,162 |
| APGAR score (1 minute) | 8.82 | 8.76 | 0.07 (0.06) | 1,144 |
| Weeks of gestation | 38.89 | 38.89 | 0.00 (0.09) | 1,161 |
| Weight gain during pregnancy (kilograms) | 10.45 | 10.29 | 0.14 (0.27) | 1,154 |
| Hemoglobin level | 11.73 | 11.64 | 0.08 (0.08) | 936 |
| Anemic (hemoglobin level <11) | 0.21 | 0.22 | -0.00 (0.03) | 936 |

Notes: This table presents estimated effects of the intervention on the main outcomes of interest. Columns 1 and 2 present means; column 3 presents estimated coefficients and standard errors on the treatment indicator from ordinary least square regressions that control for health center fixed effects, education level and age of the woman, and distance between the residence and the health center. Estimated standard errors, reported in parentheses, are clustered at the health center level. Significance at the 1, 5, and 10 percent levels is indicated by ***, ** and *, respectively.

Table 3. Heterogeneous Effects: Education and Distance to Health Center Separately Assessed

| | Effects, by education | | | | Effects, by distance to health center | | | |
|--|-----------------------|-------------------|---------------------|-------------------|---------------------------------------|-------------------|--------------------|------------------|
| | Below Secondary | | Secondary or Higher | | Below 500 meters | | Above 500 meters | |
| | Control group mean | Treatment effect | Control group mean | Treatment effect | Control group mean | Treatment effect | Control group mean | Treatment effect |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| <i>Prenatal care</i> | | | | | | | | |
| Attend ≥6 prenatal controls | 0.83 | 0.02 (0.04) | 0.82 | 0.06*** (0.02) | 0.80 | 0.09*** (0.02) | 0.83 | 0.03 (0.03) |
| Attend ≥9 prenatal controls | 0.30 | 0.04 (0.05) | 0.35 | 0.07** (0.03) | 0.33 | 0.07 (0.05) | 0.33 | 0.08** (0.03) |
| Total prenatal controls | 7.41 | 0.24 (0.21) | 7.52 | 0.40*** (0.11) | 7.43 | 0.53*** (0.16) | 7.50 | 0.32* (0.18) |
| Total prenatal controls on time | 3.19 | 0.14 (0.30) | 3.05 | 0.40** (0.14) | 3.13 | 0.42* (0.20) | 3.09 | 0.26 (0.21) |
| <i>Behavioral outcomes</i> | | | | | | | | |
| Took vitamins on time (last week) | 0.75 | -0.03 (0.07) | 0.65 | 0.05* (0.03) | 0.74 | 0.03 (0.03) | 0.67 | 0.02 (0.04) |
| Overall vitamin compliance (last month) | 0.79 | -0.02 (0.01) | 0.76 | 0.03** (0.01) | 0.76 | 0.03** (0.01) | 0.77 | 0.01 (0.01) |
| Attended emergency (given adverse symptoms) | 0.31 | 0.05 (0.07) | 0.35 | 0.01 (0.06) | 0.34 | 0.02 (0.05) | 0.33 | 0.03 (0.04) |
| Visited doctor (given adverse symptoms) | 0.80 | -0.03 (0.06) | 0.81 | -0.01 (0.03) | 0.79 | -0.03 (0.05) | 0.81 | -0.02 (0.03) |
| Recommended food (in standard deviations) | 0.01 | 0.03 (0.02) | -0.00 | 0.01 (0.02) | 0.03 | 0.01 (0.05) | -0.02 | 0.03 (0.03) |
| Not recommended food (in standard deviations) | 0.05 | -0.10 (0.07) | -0.03 | -0.00 (0.03) | 0.05 | -0.09* (0.05) | -0.03 | -0.01 (0.03) |
| <i>Birth and maternal health outcomes</i> | | | | | | | | |
| Birth weight (grams) | 3,350.51 | -20.15 (54.02) | 3,295.12 | 56.74 (35.13) | 3,266.95 | 87.72* (44.07) | 3,341.09 | 8.24 (46.17) |
| Low birth weight (<2500) | 0.04 | 0.01 (0.02) | 0.05 | -0.01 (0.02) | 0.06 | -0.02 (0.02) | 0.04 | 0.01 (0.02) |
| APGAR score (1 minute) | 8.80 | -0.06 (0.10) | 8.73 | 0.14** (0.06) | 8.69 | 0.13 (0.09) | 8.79 | 0.04 (0.06) |
| Weeks of gestation | 39.01 | -0.11 (0.16) | 38.81 | 0.07 (0.10) | 38.83 | 0.16 (0.19) | 38.92 | -0.08 (0.13) |
| Weight gain during pregnancy (kilograms) | 9.81 | -0.30 (0.44) | 10.58 | 0.41 (0.33) | 10.01 | -0.10 (0.54) | 10.42 | 0.46 (0.36) |
| Hemoglobin level | 11.59 | 0.18 (0.13) | 11.67 | 0.03 (0.09) | 11.81 | -0.10 (0.12) | 11.56 | 0.14 (0.11) |
| Anemic (hemoglobin level <11) | 0.21 | 0.02 (0.06) | 0.23 | -0.02 (0.03) | 0.16 | 0.05 (0.06) | 0.25 | -0.02 (0.03) |
| Observations | 224 | 414 | 362 | 748 | 196 | 405 | 390 | 757 |

Notes: This table presents estimated effects of the intervention on the main outcomes of interest by different subgroups separately defined by educational level and distance to the health center. Columns 1, 3, 5, and 7 present control group means. Columns 2, 4, 6, and 8 present estimated coefficients and standard errors on the treatment indicator from ordinary least square regressions that control for health center fixed effects, education level and age of the woman, and distance between the residence and the health center. Estimated standard errors, reported in parentheses, are clustered at the health center level. Significance at the 1, 5, and 10 percent levels is indicated by ***, ** and *, respectively.

Table 4. Heterogeneous Effects: Education and Distance to Health Center Jointly Assessed

| | Below Secondary | | | | Secondary or Higher | | | | Difference (6) - (4) |
|--|-----------------------|---------------------|-----------------------|---------------------|-----------------------|----------------------|-----------------------|---------------------|-------------------------|
| | Below 500 meters | | Above 500 meters | | Below 500 meters | | Above 500 meters | | |
| | Control group mean | Treatment effect | Control group mean | Treatment effect | Control group mean | Treatment effect | Control group mean | Treatment effect | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | |
| <i>Prenatal care</i> | | | | | | | | | |
| Attend ≥6 prenatal controls | 0.80 | 0.09* (0.05) | 0.85 | -0.01 (0.05) | 0.80 | 0.08** (0.03) | 0.83 | 0.05** (0.02) | 0.09 (0.07) |
| Attend ≥9 prenatal controls | 0.32 | 0.04 (0.05) | 0.30 | 0.05 (0.06) | 0.34 | 0.08 (0.05) | 0.35 | 0.08** (0.03) | 0.02 (0.09) |
| Total prenatal controls | 7.38 | 0.33 (0.23) | 7.42 | 0.20 (0.31) | 7.47 | 0.53** (0.19) | 7.55 | 0.36** (0.16) | 0.33 (0.37) |
| Total prenatal controls on time | 3.17 | 0.16 (0.28) | 3.20 | 0.13 (0.40) | 3.10 | 0.58* (0.28) | 3.03 | 0.31 (0.22) | 0.45 (0.49) |
| <i>Behavioral outcomes</i> | | | | | | | | | |
| Took vitamins on time (last week) | 0.82 | -0.11* (0.06) | 0.71 | 0.03 (0.09) | 0.68 | 0.12** (0.04) | 0.64 | 0.02 (0.03) | 0.09 (0.11) |
| Overall vitamin compliance (last month) | 0.80 | -0.04* (0.02) | 0.78 | -0.01 (0.02) | 0.73 | 0.06*** (0.02) | 0.77 | 0.01 (0.01) | 0.07** (0.03) |
| Attended emergency (given adverse symptoms) | 0.27 | 0.02 (0.12) | 0.33 | 0.07 (0.07) | 0.39 | 0.01 (0.06) | 0.34 | 0.02 (0.07) | -0.06 (0.09) |
| Visited doctor (given adverse symptoms) | 0.77 | -0.03 (0.10) | 0.83 | -0.02 (0.06) | 0.81 | -0.01 (0.07) | 0.81 | -0.02 (0.04) | 0.00 (0.09) |
| Recommended food (in standard deviations) | 0.03 | 0.05 (0.05) | -0.01 | 0.04 (0.03) | 0.03 | -0.00 (0.05) | -0.02 | 0.02 (0.03) | -0.05 (0.06) |
| Not recommended food (in standard deviations) | 0.11 | -0.17*** (0.05) | 0.01 | -0.05 (0.09) | 0.01 | -0.03 (0.06) | -0.05 | 0.01 (0.03) | 0.02 (0.12) |
| <i>Birth and maternal health outcomes</i> | | | | | | | | | |
| Birth weight (grams) | 3,330.23 | -48.06 (95.04) | 3,362.23 | -4.86 (66.25) | 3,221.44 | 161.76*** (46.28) | 3,328.98 | 9.73 (55.04) | 166.6* (93.68) |
| Low birth weight (<2500) | 0.06 | -0.02 (0.03) | 0.03 | 0.03 (0.03) | 0.06 | -0.03 (0.03) | 0.05 | 0.01 (0.02) | -0.05 (0.05) |
| APGAR score (1 minute) | 8.66 | 0.04 (0.17) | 8.89 | -0.14 (0.09) | 8.72 | 0.16* (0.08) | 8.73 | 0.14* (0.08) | 0.30** (0.11) |
| Weeks of gestation | 38.83 | 0.12 (0.25) | 39.11 | -0.28 (0.25) | 38.83 | 0.16 (0.23) | 38.81 | 0.03 (0.16) | 0.44 (0.34) |
| Weight gain during pregnancy (kilograms) | 10.38 | -1.43** (0.58) | 9.49 | 0.33 (0.53) | 9.75 | 0.37 (0.60) | 10.96 | 0.46 (0.40) | 0.04 (0.96) |
| Hemoglobin level | 11.75 | 0.02 (0.24) | 11.50 | 0.27 (0.19) | 11.85 | -0.15 (0.15) | 11.59 | 0.10 (0.11) | -0.42** (0.19) |
| Anemic (hemoglobin level <11) | 0.14 | 0.12 (0.10) | 0.25 | -0.03 (0.08) | 0.18 | 0.02 (0.05) | 0.25 | -0.03 (0.03) | 0.05 (0.08) |
| Observations | 82 | 151 | 142 | 263 | 114 | 254 | 248 | 494 | |

Notes: This table presents estimated effects of the intervention on the main outcomes of interest by different subgroups jointly defined by educational level and distance to the health center. Columns 1, 3, 5, and 7 present control group means. Columns 2, 4, 6, and 8 present estimated coefficients and standard errors on the treatment indicator from ordinary least square regressions that control for health center fixed effects, education level and age of the woman, and distance between the residence and the health center. Estimated standard errors, reported in parentheses, are clustered at the health center level. Significance at the 1, 5, and 10 percent levels is indicated by ***, ** and *, respectively.

Table 5. Spillover Effects

| | Control women close to treated women | Control women far from treated women | Spillover effect | Observations |
|--|--|--|--------------------|--------------|
| | (1) | (2) | (3) | (4) |
| <i>Prenatal care</i> | | | | |
| Attend ≥ 6 prenatal controls | 0.76 | 0.83 | -0.01 (0.10) | 586 |
| Attend ≥ 9 prenatal controls | 0.32 | 0.33 | -0.16* (0.09) | 586 |
| Total prenatal controls | 7.31 | 7.50 | -0.36 (0.47) | 586 |
| Total prenatal controls on time | 3.39 | 3.06 | -0.31 (0.45) | 582 |
| <i>Behavioral outcomes</i> | | | | |
| Took vitamins on time (last week) | 0.85 | 0.67 | 0.05 (0.05) | 563 |
| Overall vitamin compliance (last month) | 0.79 | 0.77 | 0.01 (0.03) | 566 |
| Attended emergency (given adverse symptoms) | 0.36 | 0.33 | 0.14 (0.12) | 341 |
| Visited doctor (given adverse symptoms) | 0.74 | 0.82 | -0.00 (0.11) | 341 |
| Recommended food (in standard deviations) | 0.04 | -0.01 | -0.02 (0.12) | 586 |
| Not recommended food (in standard deviations) | 0.04 | -0.01 | -0.01 (0.11) | 586 |
| <i>Birth and maternal health outcomes</i> | | | | |
| Birthweight (grams) | 3,414.47 | 3,302.10 | 129.37 (122.88) | 586 |
| Low birth weight (<2500) | 0.03 | 0.05 | -0.02 (0.03) | 586 |
| APGAR score (1 minute) | 8.85 | 8.74 | 0.23* (0.13) | 577 |
| Weeks of gestation | 39.16 | 38.85 | 0.01 (0.37) | 585 |
| Weight gain during pregnancy (kilograms) | 10.26 | 10.29 | 0.39 (1.59) | 583 |
| Hemoglobin level | 11.77 | 11.62 | -0.23 (0.20) | 476 |
| Anemic (hemoglobin level <11) | 0.11 | 0.24 | -0.01 (0.09) | 476 |

Notes: This table presents estimated spillover effects of the intervention on the main outcomes of interest. Only control women are included in the analysis. Columns 1 and 2 present means; column 3 presents estimated coefficients and standard errors on an indicator for control women living within a radius of 25 meters from at least one treated woman. Ordinary least square regressions control for health center fixed effects, education level and age of the woman, and distance between the residence and the health center, and the number of pregnant women living within the 25-meter radius. Estimated standard errors, reported in parentheses, are clustered at the health center level. Significance at the 1, 5, and 10 percent levels is indicated by ***, ** and *, respectively.

Table A1. General Messages: Delivered to all the Treatment Group

| ID | Week | Day | Area | Message |
|----|--------------|------|------------|--|
| 1 | At enrolment | | | Bienvenida a WawaRed: Un programa que te brindara consejos e informacion importante para un embarazo saludable |
| 2 | 5 | Lun | Mot | Tu salud es importante! Ven a tu control. Un mensaje de WawaRed |
| 3 | 5 | Mier | Edu | Evita acercarte a ninos que tengan sarampion o rubeola, porque pueden contagiarte a tu bebe. Un mensaje de WawaRed |
| 4 | 5 | Sab | Nutri | Consume comidas a vapor o al horno en vez de frituras. Es mas saludable!. Un mensaje de WawaRed |
| 5 | 6 | Lun | | Tu bebe es importante! Ven a tu control. Un mensaje de WawaRed |
| 6 | 6 | Mier | Hipermesis | Si tienes nauseas y vomitos come algo seco y en poca cantidad, como un trozo de pan o galletas de soda. Un mensaje de WawaRed |
| 7 | 6 | Sab | Nutri | Consume siempre tu desayuno, almuerzo y cena, ademas de un refrigerio como una fruta. Un mensaje de WawaRed |
| 8 | 7 | Lun | | Mami ponle ganas! Ven a tu control. Un mensaje de WawaRed |
| 9 | 7 | Mier | Alarma | Si presentas vomitos abundantes o frecuentes acude a tu centro de salud. Un mensaje de WawaRed |
| 10 | 7 | Sab | Nutri | El desayuno es el alimento mas importante del dia, puedes tomar una taza de leche o yogurt y frutas. Un mensaje de WawaRed |
| 11 | 8 | Lun | | Cuida tu salud! Ven a tu control. Un mensaje de WawaRed |
| 12 | 8 | Mier | Edu | Lavate las manos antes de preparar tus alimentos y almacenalos en lugares frescos. Un mensaje de WawaRed |
| 13 | 8 | Sab | Nutri | Son importantes los alimentos con acido folico durante el embarazo: carnes rojas, visceras, verduras de hojas verdes y cereales |
| 14 | 9 | Lun | | Cuida a tu bebe! Ven a tu control. Un mensaje de WawaRed |
| 15 | 9 | Mier | Alarma | Si tienes colicos fuertes y frecuentes o sangrado, acude de inmediato a tu centro de salud. Un mensaje de WawaRed |
| 16 | 9 | Sab | Nutri | Toma agua en vez de gaseosas o jugos envasados o de sobre. Es mas saludable. Un mensaje de WawaRed |
| 17 | 10 | Lun | | Mami, Animo! Ven a tu control |
| 18 | 10 | Mier | Edu | Di que estas embarazada antes que te den alguna medicina |
| 19 | 10 | Sab | Nutri | Recuerda que es importante incluir en tus comidas al menos una porcion de cualquier carne o viscera, huevo o queso al dia |
| 20 | 11 | Lun | | Tu y tu bebe lo necesitan! Ven a tu control. Un mensaje de WawaRed |
| 21 | 11 | Mier | Hipermesis | Si tienes nauseas o vomitos evita las comidas grasosas. Un mensaje de WawaRed |
| 22 | 11 | Sab | Edu | Para evitar que te salgan manchas en la cara usa protector solar antes, durante y despues de salir al sol. Un mensaje de WawaRed |
| 23 | 12 | Lun | | Ven a tu control: sabemos que es tempranito, pero tu bebe estara sanito. Un mensaje de WawaRed |
| 24 | 12 | Mier | Vacu | Vacunate, acude a tu centro de salud para saber cuales necesitas. Un mensaje de WawaRed |
| 25 | 12 | Sab | Motiv | Lo estas haciendo muy bien!, sigue adelante y evita la comida chatarra (dulces, bebidas gaseosas, chisitos o cosas empaquetadas) |
| 26 | 13 | Lun | | Tu eres muy importante para tu bebe! Ven a tu control. Un mensaje de WawaRed |
| 27 | 13 | Mier | Alarma | Si presenta sangrado vaginal durante el embarazo acude a emergencia del centro de salud mas cercano. Un mensaje de WawaRed |
| 28 | 13 | Sab | Nutri | Consume frutas y verduras, como tomate y zanahoria porque son fuentes de vitamina A, C y fibra. Un mensaje de WawaRed |
| 29 | 14 | Lun | | Tu bebe quiere que vengas! Ven a tu control. Un mensaje de WawaRed |
| 30 | 14 | Mier | VIH | Hacerte la prueba del VIH te da ventajas. Si aun no te la has hecho solicitala en tu centro de salud. Un mensaje de WawaRed |
| 31 | 14 | Sab | Nutri | Tu bebe necesita que te alimentes bien, consume frutas y verduras de diversos colores. Un mensaje de WawaRed |

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| 32 | 15 | Lun | | Mami animo! No faltes a tu control. Un mensaje de WawaRed |
| 33 | 15 | Mier | Violen | Tu mereces ser valorada. Si sufres algun tipo de maltrato fisico o psicologico llama gratis desde cualquier telefono al numero 100 |
| 34 | 15 | Sab | Act. Fisica | Mantente activa, camina 30 minutos al dia es bueno para tu salud fisica y emocional. Un mensaje de WawaRed |
| 35 | 16 | Lun | | Ven a tu control, quiza te puedas cansar, pero es lo mejor para ti. Un mensaje de WawaRed |
| 36 | 16 | Mier | Inf. Uri | Para prevenir las infecciones urinarias toma abundante agua todos los dias y no te aguantes la orina. Un mensaje de WawaRed |
| 37 | 16 | Sab | Nutri | Es mejor tomar tus vitaminas con limonada o jugo de naranaja o algun otro citrico. Un mensaje de WawaRed |
| 38 | 17 | Lun | | Tu bebe te lo agradecera! Ven a tu control. Un mensaje de WawaRed |
| 39 | 17 | Mier | Sifilis | Hacerte la prueba de Sifilis te da ventajas. Si aun no te la has hecho solicitala en tu centro de salud. Un mensaje de WawaRed |
| 40 | 17 | Sab | Vacu | Vacunate contra el tetano es importante para ti y para tu bebe, si no lo has hecho solicitala en tu centro de salud. Un mensaje de WawaRed |
| 41 | 18 | Lun | | Es lo mejor para tu salud! Ven a tu control. Un mensaje de WawaRed |
| 42 | 18 | Mier | Alarma | Es normal que orines con frecuencia pero si tienes dolor, comezon o ardor cuando orinas debes de acudir a tu centro de salud |
| 43 | 18 | Sab | Nutri | Consume mucho hierro para tener suficiente energia y prevenir la anemia, lo encuentras en: Sangrecita, higado, bazo, bofe y carnes rojas |
| 44 | 19 | Lun | | Ponle energias! Ven a tu control |
| 45 | 19 | Mier | Higiene | Un buen aseo es importante. Banate seguido y cepillate los dientes a diario. Un mensaje de WawaRed |
| 46 | 19 | Sab | Nutri | Mami toma tus vitaminas porque es importante para tu bebe. Un mensaje de WawaRed |
| 47 | 20 | Lun | | Ven a tu control, quiza te puedas cansar, pero es lo mejor para tu bebe. Un mensaje de WawaRed |
| 48 | 20 | Mier | Inf. Uri | Para prevenir las infecciones urinarias, orina cuando tenga ganas y no te aguantes la orina. Un mensaje de WawaRed |
| 49 | 20 | Sab | Motiv | Sigue adelante, ya estas en la mitad de tu embarazo, y tu bebe esta grandecito. Un mensaje de WawaRed |
| 50 | 21 | Lun | | Tu bebe quiere nacer bien! Ven a tu control. Un mensaje de WawaRed |
| 51 | 21 | Mier | Constipasio n | Si te cuesta mucho ir al bano toma agua, come frutas, alimentos con fibra como la yuca y salvado de trigo. NO tomes laxantes |
| 52 | 21 | Sab | Nutri | Tu alimentacion y el ejercicio son importantes, consulta en tu centro de salud tu peso ideal. Un mensaje de WawaRed |
| 53 | 22 | Lun | | Cuidate y cuida a tu bebe! Ven a tu control. Un mensaje de WawaRed |
| 54 | 22 | Mier | Alarma | El flujo vaginal transparente o blanquesino es normal. Pero si es gris, verde o grumoso o huele mal acude a tu centro de salud |
| 55 | 22 | Sab | Edu | Si alguien fuma cerca de ti pidale que apague su cigarro o que se vaya de la habitacion, no te acerques al humo. Un mensaje de WawaRed |
| 56 | 23 | Lun | | Ven a tu control, muchas veces tienes que esperar pero es lo mejor para tu bebe. Un mensaje de WawaRed |
| 57 | 23 | Mier | Alarma | Si tienes orinas espumosas debes de acudir lo mas pronto a tu centro de salud. Un mensaje de WawaRed |
| 58 | 23 | Sab | Motiv | Sentirte bien es importante para ti y para tu bebe. Habla con las personas importantes para ti o pide consejos en tu centro de salud |
| 59 | 24 | Lun | | Tu bebe quiere nacer sano! Ven a tu control. Un mensaje de WawaRed |
| 60 | 24 | Mier | Edu | Evita las duchas vaginales ya que pueden causar inflamacion vaginal. Un mensaje de WawaRed |
| 61 | 24 | Sab | Motiv | Tu bebe ya te puede escuchar, dile cuanto lo quieres. Un mensaje de WawaRed |
| 62 | 25 | Lun | | Mami, alegrate! Ven a tu control. Un mensaje de WawaRed |
| 63 | 25 | Mier | Alarma | Si tienes temperatura mayor de 37.5 acude rapidito a tu centro de salud. Un mensaje de WawaRed |
| 64 | 25 | Sab | Edu | Evita tomar medicinas que no te dieron en tu centro de salud. Algunas medicinas pueden danar al bebe. Un mensaje de WawaRed |

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| 65 | 26 | Lun | | Se feliz, Mami! Ven a tu control. Un mensaje de WawaRed |
| 66 | 26 | Mier | Inf. Uri | Para evitar infecciones cuando vaya al baño límpiase de adelante hacia atrás, para no llevar bacterias a tu vagina. Un mensaje de WawaRed |
| 67 | 26 | Sab | Nutri | Come saludable, consume: pescado, vísceras, pollo, carnes rojas, leche, menestras, frutas y verduras. Un mensaje de WawaRed |
| 68 | 27 | Lun | | Tu bebe quiere salud! Ven a tu control. Un mensaje de WawaRed |
| 69 | 27 | Mier | Alarma | Si se te hinchan los pies, manos o cara, puede que sufras de presión alta, acude de inmediato a tu centro de salud. Un mensaje de WawaRed |
| 70 | 27 | Sab | Nutri | Mami, toma tus vitaminas porque es importante para ti y tu bebe. Un mensaje de WawaRed |
| 71 | 28 | Lun | | Ven a tu control, quizá tengas que caminar, pero sabrás como está tu bebe. Un mensaje de WawaRed |
| 72 | 28 | Mier | Alarma | Si tienes dolor de cabeza, zumbidos y dificultad para ver, puedes sufrir de presión alta acude rapidito a tu centro de salud |
| 73 | 28 | Sab | Motiv | Hoy es un día especial para ti! Tu bebe sigue creciendo, ahora reconoce tu voz. Háblale y estimúlalo con música. Un mensaje de WawaRed |
| 74 | 29 | Lun | | Para que tu bebe este sanito! Ven a tu control. Un mensaje de WawaRed |
| 75 | 29 | Mier | Alarma | Si tienes flujo vaginal con picazón o ardor en tu vagina, acude a tu centro de salud. Un mensaje de WawaRed |
| 76 | 29 | Sab | Edu | Pon menos sal y condimentos y come alimentos bajos en grasa, para evitar problemas de presión alta. Un mensaje de WawaRed |
| 77 | 30 | Lun | | Mami, se feliz! Ven a tu control. Un mensaje de WawaRed |
| 78 | 30 | Mier | Edu | Las hemorroides o venas hinchadas en el recto son comunes durante el embarazo y en general desaparecen después de dar a luz |
| 79 | 30 | Sab | Act. Fisica | No cargues bultos y evita actividades pesadas durante estos últimos meses. Un mensaje de WawaRed |
| 80 | 31 | Lun | | Ven a tu control, no es perder toda la mañana, es ganar salud para tu bebe. Un mensaje de WawaRed |
| 81 | 31 | Mier | Edu | Preparate para dar de lactar a tu bebe. Toma líquidos y alimentate bien. Un mensaje de WawaRed |
| 82 | 31 | Sab | Control | Desde ahora acude a tus controles cada 15 días hasta las 36 semanas de embarazo. Un mensaje de WawaRed |
| 83 | 32 | Lun | | Hazlo por tu bebe! Ven a tu control. Un mensaje de WawaRed |
| 84 | 32 | Mier | Nutri | Tus pechos comienzan a formar leche, es posible que manches tu ropa. Un mensaje de WawaRed |
| 85 | 32 | Sab | Nutri | Las grasas como frituras o mantequillas no son saludables y te aumentan de peso, evítalas. Un mensaje de WawaRed |
| 86 | 33 | Lun | | Ven a tu control, la atención puede demorar, pero es importante para ti y tu bebe. Un mensaje de WawaRed |
| 87 | 33 | Mier | Edu | Tu bebe puede patear muy fuerte o en el mismo lugar. Esto puede ser doloroso o incómodo, pero no te lastimara. Un mensaje de WawaRed |
| 88 | 33 | Sab | Sexual | Disfruta tus relaciones sexuales, no las suspendas a menos que te indique tu médico o que tu quieras suspenderlas. Un mensaje de WawaRed |
| 89 | 34 | Lun | | Animate, Mami! Ven a tu control. Un mensaje de WawaRed |
| 90 | 34 | Mier | Motiv | Prueba acariciarte el vientre si te sientes estresada, al sentir a tu bebe podrás relajarte. Disfruta tu día! Un mensaje de WawaRed |
| 91 | 34 | Sab | Edu | Tu bebe sigue creciendo, ahora tu bebe esta más atento a todo lo que le rodea, evita lugares molestos |
| 92 | 35 | Lun | | Tu bebe te necesita! Ven a tu control. Un mensaje de WawaRed |
| 93 | 35 | Mier | Alarma | Si los movimientos de tu bebe disminuyen o no los sientes acude a tu centro de salud de inmediato. Un mensaje de WawaRed |
| 94 | 35 | Sab | Puerperio | Planifica donde vas a dar a luz, prepara tu maleta y la de tu bebe (ropa, útiles de aseo, etc). Consulta con tu obstetra para más detalles |
| 95 | 36 | Lun | | Ven a tu control: quizá tengas que esperar, pero es lo mejor para tu bebe. Un mensaje de WawaRed |
| 96 | 36 | Mier | Nutri | Sentir un poco de ahogo es algo común en el embarazo pero si sientes que no puedes o te duele al respirar acude a tu centro de salud |
| 97 | 36 | Sab | Control | Ya tienes 36 semanas de embarazo, ya se acerca el momento del parto. Debes acudir a tus controles cada semana. Tanquila, estarán bien |

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|-----|----|------|--------------------|--|
| 98 | 37 | Lun | | Es lo mejor para tu bebe! Ven a tu control. Un mensaje de WawaRed |
| 99 | 37 | Mier | Nutri | Preparate para el regreso a casa despues del nacimiento. Planea quien te acompanara y ayudara despues de haber dado a luz |
| 100 | 37 | Sab | Motivacion ales | Felicitaciones ya estas por terminar el embarazo, si aun no nace tu bebe muy pronto lo hara. Un mensaje de WawaRed |
| 101 | 38 | Lun | | Tu salud es importante! Ven a tu control. Un mensaje de WawaRed |
| 102 | 38 | Mier | Puerperio | Si se te rompe la fuente o pierdes liquido por tus partes (vagina) acude de inmediato a tu centro de salud. Un mensaje de WawaRed |
| 103 | 38 | Sab | Puerperio | Si tienes contracciones frecuentes o intensas, cada 3 o 5 minutos acude de inmediato a tu centro de salud, tu bebe esta por nacer |
| 104 | 39 | Lun | | Tu bebe es importante! Ven a tu control. Un mensaje de WawaRed |
| 105 | 39 | Mier | Puerperio | Despues de una semana de haber dado a luz acude para tu centro de salud para tu control. Un mensaje de WawaRed |
| 106 | 39 | Sab | Puerperio | Despues de un mes de haber dado a luz acude al consultorio de planificacion familiar. Un mensaje de WawaRed |
| 107 | 40 | Lun | | Mami ponle ganas! Ven a tu control. Un mensaje de WawaRed |
| 108 | 40 | Mier | Edu | Recuerda que cuando nazca tu bebe le debes de dar lactancia materna exclusiva para poder protegerlo de muchas enfermedades |
| 109 | 40 | Sab | Puerperio | Despues del embarazo debes de seguir tomando tus vitaminas. Un mensaje de WawaRed |
| 110 | 41 | Lun | | Cuida tu salud! Ven a tu control. Un mensaje de WawaRed |
| 111 | 41 | Mier | Vacu | Las vacunas son importantes para tu bebe, recuerda cumplir con el programa de vacunacion y llevarlo a sus controles. Un mensaje de WawaRed |
| 112 | | Sab | Despedida | WawaRed te agradece por dejarnos acompanarte durante tu embarazo. Esperamos que nuestra compania haya sido de tu agrado |

Table A2. Specific Messages: Delivered only to Women presenting the Specific Condition

| ID | Week | Hiperemesis |
|-----|------|---|
| 113 | 5 | Si presenta nauseas o vomitos come alimentos en pequenas cantidades. Un mensaje de WawaRed |
| 114 | 6 | Si presenta nauseas o vomitos, coma varias veces al dia, consuma alimentos solidos y liquidos por separado. Un mensaje de WawaRed |
| 115 | 7 | Si presentas vomitos abundantes debe de acudir de inmediato a tu centro de salud o a emergencia del hospital mas cercano |
| 116 | 8 | No te olvides de tomar liquido cuando te calman las nauseas, es necesario para que no te deshidrates. Un mensaje de WawaRed |
| 117 | 9 | Comer pequenas cantidades de carne de vaca, pollo o pescado pueden ayudar a aliviar tus nauseas o vomitos. Un mensaje de WawaRed |
| 118 | 10 | Si te duele mucho la cabeza, te sientes confundida o te late muy rapido el corazon, acude de inmediato a tu centro de salud |
| 119 | 11 | Las nauseas y vomitos calman despues de los 3 primeros meses de embarazo, ten paciencia. Un mensaje de WawaRed |
| 120 | 12 | Si tienes los labios secos, los ojos hundidos y la piel seca pueda ser que te encuentres deshidratada, acude a emergencia de inmediato |
| 121 | 13 | El comer pequenas cantidades de nueces antes de acostarse o en las noches puede ayudarte a disminuir las nauseas o vomitos |
| 122 | 14 | Comer en pequenas cantidades podra aliviar tus nauseas o vomitos. Un mensaje de WawaRed |
| 123 | 15 | Para mayor informacion sobre nauseas o vomitos consulta en tu centro de salud. Un mensaje de WawaRed |
| 124 | 16 | Si presentas fiebre o dolor de barriga acude de inmediato tu centro de salud. Un mensaje de WawaRed |
| 125 | 17 | Para disminuir las nauseas puedes comer alimentos secos como galletitas. Un mensaje de WawaRed |
| 126 | 18 | Puedes encontrar mas consejos para tu embarazo llamando gratis al *121. Un mensaje de WawaRed |
| 127 | 19 | Si tienes nauseas y vomitos es normal, no te preocupes, estas molestias van a calmar pasadas las 20 semanas de embarazo (3 primeros meses) |
| 128 | 20 | Tus nauseas y vomitos ya deben haber calmado, si aun continuas con estas molestias acude a tu centro de salud para que te evaluen |
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| | | NUTRICIÓN: SOBRE PESO |
| 129 | 7 | Recuerda que debes evitar alimentos con alto contenido en grasas, no son saludables, prefiere comer frutas y verduras |
| 130 | 8 | Evita los dulces, bebidas gaseosas, chisitos o cosas empaquetadas. No son buenos para tu salud ni la de tu bebe. Un mensaje de WawaRed |
| 131 | 9 | El sobrepeso te puede ocasionar problemas en el embarazo, como presion alta, y diabetes. Por eso es importante controlarlo |
| 132 | 10 | Evita consumir embutidos como jamonadas, hot dog o chorizo, contienen mucha grasa. Un mensaje de WawaRed |
| 133 | 11 | Consume alimentos en los que se indique bajo contenido de grasas. Un mensaje de WawaRed |
| 134 | 12 | No frias tus comidas, mejor cocinalos a vapor o en el horno. Un mensaje de WawaRed |
| 135 | 13 | No olvide la importancia de realizar ejercicios (psicoprofilaxis) durante el embarazo, son importantes para tu salud. Un mensaje de WawaRed |
| 136 | 14 | A tus ensaladas solo colocale limon o vinagre. Un mensaje de WawaRed |
| 137 | 15 | Evita el consumo de quesos muy grasosos. Un mensaje de WawaRed |
| 138 | 16 | Cuando comas pollo u otras aves retiraes el pellejo, contienen mucha grasa. Un mensaje de WawaRed |
| 139 | 17 | No consumas grasas saturadas de origen animal como la mantequilla, son malas para la salud. Un mensaje de WawaRed |
| 140 | 18 | Una alternativa al azucar es usar azucar rubia o chancaca, tienen menos calorías. Un mensaje de WawaRed |

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| 141 | 19 | Si vas a consumir frutas, que sean frutas frescas, no en conserva porque tienen mucha azúcar. Un mensaje de WawaRed |
| 142 | 20 | Si vas a acudir a una fiesta o reunion controla el consumo de los bocaditos. Un mensaje de WawaRed |
| 143 | 21 | Evita consumir comidas que tengan mucha grasa. Un mensaje de WawaRed |
| 144 | 22 | Si deseas comer alimentos con menos grasas escoge las menestras y cereales. Un mensaje de WawaRed |
| 145 | 23 | Mastica bien tus alimentos y come despacio, esta es una forma de controlar lo que comes y comer menos cantidad. Un mensaje de WawaRed |
| 146 | 24 | Evita ponerle mucho aceite a tus comidas. Un mensaje de WawaRed |
| 147 | 25 | Evita el consumo de alimentos con muchas calorías, como el platano o la lucuma. Un mensaje de WawaRed |
| 148 | 26 | Si te da hambre entre las comidas come alguna manzana u otra fruta. Un mensaje de WawaRed |
| 149 | 27 | Come pescado varias veces a la semana, es muy nutritivo. Un mensaje de WawaRed |
| 150 | 28 | Prefiere el consumo de alimentos bajos en calorías. Un mensaje de WawaRed |
| 151 | 29 | Si tienes sobrepeso consume menos grasas y harinas. Un mensaje de WawaRed |
| 152 | 30 | Debes de establecer un horario para tus alimentos y trata de respetarlos para no comer fuera de hora, esta es una forma de controlar tu peso |
| 153 | 31 | Consume abundante agua, se recomienda que minimo debes de tomar 8 vasos de agua al dia. Un mensaje de WawaRed |
| 154 | 32 | Prefiere el consumo de ensaladas, son mas saludables. Un mensaje de WawaRed |
| 155 | 33 | Puedes encontrar mas consejos para tu embarazo llamando gratis al *121. Un mensaje de WawaRed |
| 156 | 34 | En vez de comer postres y dulces come frutas frescas. Un mensaje de WawaRed |
| 157 | 35 | Si tienes sobrepeso trata de quitar todas las grasas a tus guisos y sopas, no son saludables. Un mensaje de WawaRed |
| 158 | 36 | Los productos "light" o "diet" tienen menos calorías, pero si los consumes en grandes cantidades te van a engordar |
| 159 | 37 | Cuando salgas, lleva contigo alguna fruta como una manzana, asi evitas comer dulces o golosinas que no son saludables |
| 160 | 38 | Controla el consumo de calorías en tus alimentos. Un mensaje de WawaRed. Un mensaje de WawaRed |
| 161 | 39 | Si deseas mayor informacion sobre nutricion y sobrepeso acude a tu centro de salud. Un mensaje de WawaRed |
| 162 | 40 | No debes de subir mucho de peso, en tu control prenatal te dira cuantos kilos debes de subir, subir en exceso es perjudicial para tu salud |
| 163 | 41 | Use un plato mas pequeno, de manera que sus porciones no sean tan grandes. Un mensaje de WawaRed |
| 164 | 42 | Piense antes de comer, en vez de comer solo lo que tienes a la mano. Un mensaje de WawaRed |
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| | | NUTRICIÓN: DESNUTRICIÓN |
| 165 | 7 | Debes de comer todas las comidas nutritivas que pueda conseguir como leche, queso, pollo, huevo, carne, pescado, fruta, verdura, menestra |
| 166 | 8 | Necesita mas hierro, acido folico, calcio y vitamina A. Debe tratar de comer esas vitaminas todos los dias porque tu bebe los necesita |
| 167 | 9 | Puede ser peligroso evitar alimentos. Para estar sana durante y despues del embarazo necesita comer una gran variedad de alimentos |
| 168 | 10 | Las proteinas son importantes para el crecimiento de tu bebe, las mejores fuentes de proteinas son: Carnes, pescado, pollo, huevo, sangrecita |
| 169 | 11 | En tu caso es importante ingerir carbohidratos porque producen energia (pan, cereales, arroz, papa, fideos, frutas y vegetales) |
| 170 | 12 | El calcio ayuda a tener huesos y dientes fuertes, y mejora tu sistema nervioso. Fuentes de calcio son: leche, queso, yogurt, espinacas. |
| 171 | 13 | Vitamina A ayuda a una piel saludable, buena vision y huesos fuertes. Fuentes de vitamina A: Zanahoria, vegetales de hojas verdes, camote |

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| 172 | 14 | Vitamina C ayuda a tener encias, dientes y huesos sanos, tambien ayuda a absorber el hierro.Fuentes de vitamina C:Naranja, tomate, brocoli |
| 173 | 15 | Vitamina B6 ayuda a aprovechar mejor tus alimentos. Fuentes de vitamina B6: Cerdo, jamon, cereales integrales y platano |
| 174 | 16 | Vitamina B12 ayuda a tus globulos rojos y a tu sistema nervioso. Las mejores fuentes de vitamina B12 son: carne, pollo, pescado, leche |
| 175 | 17 | Vitamina D ayuda a tus huesos y dientes, y ayuda a la absorcion del calcio. Fuentes de vitamina D:Productos lacteos, cereales y panes |
| 176 | 18 | El acido folico es bueno para tu salud,lo obtienes de vegetales de hoja verde y amarillos oscuros,tambien de habas y frutos secos |
| 177 | 19 | Las grasas ayudan a almacenar la energia corporal.Fuentes de grasa son:carne, productos lacteos(leche entera, mantequilla) aceite vegetal |
| 178 | 20 | Una mujer que esta embarazada debe de comer lo suficiente para su bebe y para si misma (3 comidas principales y un refrigerio) |
| 179 | 21 | Tienes poco peso, aparte de las tres comidas y un refrigerio obligatorio para las embarazadas tu debes comer uno mas, eso ayudara a tu bebe |
| 180 | 22 | Estas con poco peso, recuerda que tienes que ganar 12 kilos durante tu embarazo, debes comer tus 3 comidas principales y un refrigerio |
| 181 | 23 | Debes de hacer un horario de tus comidas, no dejes de comer alguna de ellas. Un mensaje de WawaRed |
| 182 | 24 | Si deseas mayor informacion sobre nutricion y bajo peso acude a tu centro de salud. Un mensaje de WawaRed |
| 183 | 25 | Puedes encontrar mas consejos para tu embarazo llamando gratis al *121. Un mensaje de WawaRed |
| 184 | 26 | Piensa en tu bebe, una buena alimentacion lo ayudara. Un mensaje de WawaRed |
| 185 | 27 | En tu centro de salud te indicaran cuanto peso deberas subir por mes. Un mensaje de WawaRed |
| 186 | 28 | Si estas con bajo peso puede suceder que tu bebe nazca antes de tiempo y no este listo. Por eso no descuides tu alimentacion |
| 187 | 29 | De tu buena alimentacion depende el buen desarrollo cerebral de tu bebe. Un mensaje de WawaRed |
| 188 | 30 | Cuando acudas a tu control preguntale al profesional que te atiende como esta tu peso y que alimentos debes de consumir para mejorarlo |
| 189 | 31 | Para disminuir las complicaciones en tu embarazo es necesario que tengas un peso adecuado, no descuides tu alimentacion |
| 190 | 32 | Es recomendable consumir 3 vegetales (o 3 platos de ensalada) y 4 a 5 frutas al dia. Un mensaje de WawaRed |
| 191 | 33 | Deberias de tomar 4 tazas de leche o yogurt al dia. Un mensaje de WawaRed |
| 192 | 34 | Recuerda que el peso que ganas durante el embarazo lo perderas cuando nazca tu bebe. Un mensaje de WawaRed |
| 193 | 35 | Para que tu bebe nazca con un peso adecuado necesita de tu buena alimentacion. Un mensaje de WawaRed |
| 194 | 36 | Despues de comer toma un descanso de 30 minutos, de esa manera asimilaras mejor los alimentos. Un mensaje de WawaRed |
| 195 | 37 | El estres muchas veces contribuye a que no aumentes de peso, trata de evitarlo. Un mensaje de WawaRed |
| 196 | 38 | Come alimentos en buen estado, cuida la higiene, evita enfermedades del estomago, estas enfermedades te bajan de peso |
| 197 | 39 | Si a pesar de que sigas una buena alimentacion no llegas a subir de peso pide ayuda especializada en tu centro de salud |
| 198 | 40 | Si estas baja de peso debes comer 4 veces al dia:desayuno, almuerzo, cena y un refrigerio ligero en la manana |
| 199 | 41 | Algunas veces el sentirse triste disminuye tu apetito, trata de mejorar tu animo o pide consejeria en tu centro de salud |
| 200 | 42 | Una buena alimentacion asegura una rapida recuperacion despues del parto. Un mensaje de WawaRed |
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| | | ANEMIA |
| 201 | 6 | El consumo de alimentos ricos en hierro previene la anemia. Un mensaje de WawaRed |

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| 202 | 7 | Consume alimentos de origen animal ricos en hierro: hígado, sanrecita, bofe, pescado. Un mensaje de WawaRed |
| 203 | 8 | Recuerde que el pollo y otras aves también son alimentos ricos en hierro. Un mensaje de WawaRed |
| 204 | 9 | Recuerde que el pescado también es un alimento rico en hierro, debes comer también la parte oscura. Un mensaje de WawaRed |
| 205 | 10 | Recuerde que el huevo es un alimento rico en hierro, es preferible lo comas sancochado. Un mensaje de WawaRed |
| 206 | 11 | Los alimentos de origen animal tienen más hierro que los frijoles y lentejas, prefíerelos. Un mensaje de WawaRed |
| 207 | 12 | Los alimentos de origen animal tienen más hierro que las verduras, prefíerelos. Un mensaje de WawaRed |
| 208 | 13 | Los alimentos ricos en hierro acompáñalos con cítricos (naranja, tomates, limones) te ayudarán a absorberlos mejor |
| 209 | 14 | Los granos integrales (arroz y trigo), son ricos en ácido fólico, necesarios para mejorar tu anemia y evitar problemas en tu bebé |
| 210 | 15 | Tu organismo absorbe en mayor porcentaje el hierro de las carnes y vísceras, después las menestras y último el de las verduras |
| 211 | 16 | Toma diariamente 1 pastilla que contenga hierro y ácido fólico te ayudan a prevenir la anemia. Un mensaje de WawaRed |
| 212 | 17 | Una mujer embarazada necesita mucho hierro para prevenir la anemia. Un mensaje de WawaRed |
| 213 | 18 | En el parto pierdes sangre, puedes recuperarla cuando ingieres alimentos ricos en hierro, pero también te puedes ayudar con vitaminas |
| 214 | 19 | Recuerda que necesitas mucho hierro para que tu bebé esté sano. Un mensaje de WawaRed |
| 215 | 20 | Muchas veces la anemia está asociado a no alimentarse adecuadamente y no consumir tus vitaminas. Un mensaje de WawaRed |
| 216 | 21 | No te olvides de consumir menestras y alimentos ricos en vitaminas |
| 217 | 22 | Muchas dietas que se usa para bajar de peso o la alimentación desordenada producen anemia, no te descuides con tu alimentación |
| 218 | 23 | Que no falte carne, vísceras, pescado, pollo en tu almuerzo y cena. Un mensaje de WawaRed |
| 219 | 24 | Come un trozo de carne (vaca, pollo, pescado) con una porción de menestras, la carne ayuda a asimilar mejor el hierro de las menestras |
| 220 | 25 | Los cítricos como la naranja, limón, mandarina, lima, ayudan a absorber mejor el hierro. Un mensaje de WawaRed |
| 221 | 26 | Puedes encontrar ricas fuentes de hierro en menestra, marisco, soya, frutas secas (pasas, nueces) y vegetales de hojas verdes |
| 222 | 27 | Los cítricos como la naranja, limón, mandarina, lima, maracuya te ayudan a absorber mejor el hierro. Un mensaje de WawaRed |
| 223 | 28 | Evita los alimentos enemigos del hierro: infusiones, té, café, gaseosas. No te ayuda a absorber el hierro que ingieres en tus alimentos |
| 224 | 29 | Tus suplementos de hierro puede causar malestar estomacal, si te incomoda hable con el profesional que te atiende para buscar una solución |
| 225 | 30 | Si tomas tus vitaminas y comes adecuadamente te sentirás de mejor ánimo. Un mensaje de WawaRed |
| 226 | 31 | Las mujeres embarazadas necesitan mayor cantidad de hierro, toma tus vitaminas y come adecuadamente. Un mensaje de WawaRed |
| 227 | 32 | La palidez puede ser un signo de anemia, debes de comer alimentos ricos en hierro, ayúdate también con el sulfato ferroso |
| 228 | 33 | Si deseas mayor información sobre anemia y embarazo acude a tu centro de salud. Un mensaje de WawaRed |
| 229 | 34 | Las mujeres embarazadas necesitan consumir hierro y comer adecuadamente. Un mensaje de WawaRed |
| 230 | 35 | No tomes café o té con tus comidas, esto evita que no absorbas el hierro de las comidas, cambia por un jugo de naranja o una limonada |
| 231 | 36 | El cansancio y agotamiento se puede deber a que sufres de anemia, para mejorar estas molestias come adecuadamente y toma tus vitaminas |
| 232 | 37 | El cansancio intelectual (sueño, falta de concentración) se deben a la anemia, por eso no te olvides de tomar tus vitaminas y come bien |

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| 233 | 38 | Recuerda que las las vitaminas no reemplazan tus alimentos, solo complementan tu alimentacion, por eso come adecuadamente |
| 234 | 39 | La anemia causa que tu corazon lata mas rapido, por eso no te olvides de tomar tus vitaminas |
| 235 | 40 | Puedes encontrar mas consejos para tu embarazo llamando gratis al *121. Un mensaje de WawaRed |
| 236 | 41 | Recuerda de no dejar de tomar tus suplementos vitaminicos, todavia lo necesitaras aunque ya haya nacido tu bebe. Un mensaje de WawaRed |
| 237 | 42 | Despues de que nacio tu bebe debes de seguir comiendo alimentos ricos en hierro para poder recuperarte del parto |
| | | |
| | | TABACO |
| 238 | 7 | Si necesitas ayuda para dejar de fumar pide consejeria en tu centro de salud lo mas pronto posible. Un mensaje de WawaRed |
| 239 | 8 | Recuerda que el fumar hace dano a tu bebe, piensa en ti y en el. Un mensaje de WawaRed |
| 240 | 9 | No estes expuesta a humos de cigarro, le hace tanto dano a tu bebe y a ti como si los estuvieras fumando. Un mensaje de WawaRed |
| 241 | 10 | ¿Sabias que si fumas tienes mas riesgo de tener caries?. Un mensaje de WawaRed |
| 242 | 11 | Si alguien cerca a ti esta fumando pidele que apague el cigarro porque estas embarazada. Un mensaje de WawaRed |
| 243 | 12 | ¿Sabias que la primera causa de cancer de pulmon es debida a fumar?. Un mensaje de WawaRed |
| 244 | 13 | Si no tienes fuerza de voluntad para dejar de fumar, pide apoyo a tus familiares y amigos. Un mensaje de WawaRed |
| 245 | 14 | El fumar es un factor de riesgo para enfermedades del corazon. Un mensaje de WawaRed |
| 246 | 15 | Si sientes la necesidad de querer fumar solo por tener algo en la boca trata de masticar un chiclet. Un mensaje de WawaRed |
| 247 | 16 | Debes hacer respetar tus derechos, si ves a alguien fumando en un lugar publico pidele que apague el cigarro. Un mensaje de WawaRed |
| 248 | 17 | Cuando salgas frecuente lugares donde no esta permitido fumar, como restaurantes o lugares cerrados. Un mensaje de WawaRed |
| 249 | 18 | No permitas que nadie fume en tu casa, si alguien lo hace pidele que lo haga afuera. Un mensaje de WawaRed |
| 250 | 19 | Si tienes ganas de fumar realiza otra actividad que distraiga tu mente, esto te ayudara a que se te vayan las ganas. Un mensaje de WawaRed |
| 251 | 20 | Ten en cuenta que las personas que fuman se les ponen amarillo los dientes. Un mensaje de WawaRed |
| 252 | 21 | El tabaco del cigarro produce mal aliento, tenlo en cuenta la proxima vez que tengas ganas de fumar. Un mensaje de WawaRed |
| 253 | 22 | El humo del cigarro le da mal olor a tu ropa, tenlo en cuenta la proxima vez que tengas ganas de fumar. Un mensaje de WawaRed |
| 254 | 23 | ¿Cuanto dinero gastas en cigarros? ¿Puedes pensar cuanto dinero ahorrarias si dejaras de fumar?. Un mensaje de WawaRed |
| 255 | 24 | ¿Te ha pasado que muchas veces no puedes sentir bien los olores? Esto le pasa a las personas que fuman. Un mensaje de WawaRed |
| 256 | 25 | Despues de 10 anos de haber dejado de fumar se reduce el riesgo de contraer cancer de pulmon a la mitad. Un mensaje de WawaRed |
| 257 | 26 | Recuerda que si fumas tu bebe puede nacer con bajo de peso o antes de tiempo. Un mensaje de WawaRed |
| 258 | 27 | Si te da ganas de fumar puedes salir a caminar para distraerte y no pensar en eso. Un mensaje de WawaRed |
| 259 | 28 | Si te da ganas de fumar puedes leer un libro para que no pienses en eso. Un mensaje de WawaRed |
| 260 | 29 | El fumar no te va a resolver los problemas de estres que tienes, seria mejor que los enfrentes de otra manera. Un mensaje de WawaRed |
| 261 | 30 | Ahora necesitas mayor cantidad de vitamina C. Si fumas, el tabaco te consumira la vitamina C que tienes. Un mensaje de WawaRed |

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| 262 | 31 | No consumas cafe, ni te, esto aumenta la ansiedad por querer fumar. Un mensaje de WawaRed |
| 263 | 32 | Las personas que no fuman tienen mejor calidad de vida. Un mensaje de WawaRed |
| 264 | 33 | Puedes encontrar mas consejos para tu embarazo llamando gratis al *121. Un mensaje de WawaRed |
| 265 | 34 | Si deseas mayor informacion sobre tabaco y embarazo acude a tu centro de salud. Un mensaje de WawaRed |
| 266 | 35 | Ten en cuenta que los niños de madres fumadoras son mas propensos a que ellos mismos tambien fumen. Un mensaje de WawaRed |
| 267 | 36 | Para que tu bebido no se enferme de tos cronica y asma es mejor que no fumes y que no lo expongas a personas que lo hacen |
| 268 | 37 | Si vas a dar de lactar no puedes fumar, porque todo el toxico del cigarrillo pasa a la leche materna y de alli a tu bebe |
| 269 | 38 | No permitas que nadie fume en la habitacion de tu bebe, pidele que se retire. Un mensaje de WawaRed |
| 270 | 39 | No llesves a tu bebe a lugares donde sabes que suelen fumar, eso es perjudicial para tu salud. Un mensaje de WawaRed |
| 271 | 40 | Si ves que alguien fuma cerca a tu bebe pidele que se retire, esto es perjudicial para tu bebe. Un mensaje de WawaRed |
| 272 | 41 | Piensa en ti y en tu bebe antes que en el cigarro. Un mensaje de WawaRed |
| 273 | 42 | No te des por vencida, tu puedes seguir sin fumar. Un mensaje de WawaRed |
| | | |
| | | HIPERTENSIÓN ARTERIAL |
| 274 | 7 | Si tienes dolor de cabeza que no te calman debes de acudir a tu centro de salud porque puede ser que te ha subido tu presion |
| 275 | 8 | Puedes encontrar mas consejos para tu embarazo llamando gratis al *121. Un mensaje de WawaRed |
| 276 | 9 | Si se le hinchan los pies, las manos y la cara, debe de acudir a tu centro de salud o a emergencia del hospital mas cercano |
| 277 | 10 | El dolor de cabeza intenso, que no descansa, es senal de presion alta,acude de inmediato a la emergencia del hospital mas cercano |
| 278 | 11 | Si tienes zumbidos de oido puede ser que tu presion este muy alta, acude de inmediato a la emergencia mas cercana |
| 279 | 12 | Si has notado que has subido mucho de peso de forma muy rapida, acude a tu centro de salud para tu evaluacion. Un mensaje de WawaRed |
| 280 | 13 | Si tus orinas son muy espumosas, puede ser un sintoma de pre eclampsia, debes de acudir a tu centro de salud de inmediato |
| 281 | 14 | Evita las comidas saladas. Un mensaje de WawaRed |
| 282 | 15 | Controla tu dieta, come menos grasas y frituras. Un mensaje de WawaRed |
| 283 | 16 | Trata de estar tranquila. Un mensaje de WawaRed |
| 284 | 17 | Para evitar que le suba la presion debe de comer alimentos ricos en proteinas, pero con poca sal. Un mensaje de WawaRed |
| 285 | 18 | Si tu presion esta elevada, te falla la vista,o se te hincha mas la cara o te da un ataque(convulsiones), acude a la emergencia mas cercana |
| 286 | 19 | La presion alta puede danar a tu bebe, ademas de danar tu corazon, ojos, cerebro y rinones. Un mensaje de WawaRed |
| 287 | 20 | Controla tu presion todos los dias,en el horario que te ha indicado,muchas veces puedes tener la presion alta y no sentir molestias |
| 288 | 21 | Tu presion no puede ser mayor a 140/90, si es mayor debes de acudir a tu centro de salud o a emergencia del hospital mas cercana |
| 289 | 22 | Si tienes dolor de cabeza y ves lucecitas debes acudir de inmediato a tu centro de salud o a emergencia del hospital mas cercano |
| 290 | 23 | Si sabe que sufre de presion alta y presenta nauseas y mareos acuda de inmediato a la emergencia del hospital mas cercano |
| 291 | 24 | Si tienes presion alta y tienes sobre peso puedes tener mayores complicaciones, trata de mantener tu peso |
| 292 | 25 | ¿Ya sabes donde puedes medirte la presion todos los dias? Si no es asi trata de averiguar el lugar mas cercano |
| 293 | 26 | Trata de medirte la presion todos los dias. Un mensaje de WawaRed |

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| 294 | 27 | Debe de incluir verduras y frutas en tu alimentacion, es importante para tratar de controlar tu peso y presion |
| 295 | 28 | Si te han indicado medicamentos para que controles tu presion es importante que los tomes a la hora que te ha indicado tu medico |
| 296 | 29 | Ubica un lugar donde te midan la presion todos los dias. Un mensaje de WawaRed |
| 297 | 30 | Si deseas mayor informacion sobre presion alta puedes acudir a tu centro de salud. Un mensaje de WawaRed |
| 298 | 31 | Preeclampsia es si tienes presion alta con otros sintomas(orina espumosa o cara o manos hinchadas)si es tu caso acuda a tu centro de salud |
| 299 | 32 | Si siente que perder sensibilidad en alguna parte de tu cuerpo debes de acudir a tu centro de salud o a emergencia del hospital mas cercano |
| 300 | 33 | Si has podido bajar tu presion no debes de bajar la guardia, debes de seguir con tus controles y cuidando tu salud |
| 301 | 34 | Debes de seguir todas las recomendaciones que te han dado para cuidar tu presion, no solamente cuando te sientas mal |
| 302 | 35 | Sigue las recomendaciones que te dio el profesional que te atiende para tu alimentacion, consume menos grasas y sal |
| 303 | 36 | Disminuya el consumo de comidas altas en sodio como comidas enlatadas, jamon, embutidos, y chizitos, para que no suba tu presion |
| 304 | 37 | Los condimentos mejoran el sabor de las comidas.Pero muchos tienen sodio (sal),come natural usa como condimentos hierbas aromaticas |
| 305 | 38 | Siempre consultar con el profesional que te atiende cualquier duda sobre tu salud y antes de comenzar un nuevo tratamiento con medicamentos o dieta |
| 306 | 39 | Los alimentos que tienen un sabor muy salado tienen mucha sal, evita su consumo. Un mensaje de WawaRed |
| 307 | 40 | Las salsas como la mostaza o el ketchup tiene mucho sodio (sal) debes de evitar su consumo. Un mensaje de WawaRed |
| 308 | 41 | Si vas a una fiesta o reunion no comas los bocaditos, muchos de estos tienen mucha sal. Un mensaje de WawaRed |
| 309 | 42 | Antes de comer piensa dos veces si esta bien lo que vas a comer, no puedes comer alimentos que tengan mucha sal y grasa |
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| | | DIABETES MELLITUS |
| 310 | 7 | Coma comidas saludables, y no solamente lo que es mas facil, o lo que encuentra en el refrigerador |
| 311 | 8 | Trata de no consumir salsas. Un mensaje de WawaRed |
| 312 | 9 | Trata de consumir alimentos bajos en grasas. Un mensaje de WawaRed |
| 313 | 10 | Mastique lenta y completamente, saboreando cada bocado, en vez de comer lo mas que puede en el menor tiempo posible |
| 314 | 11 | Disminuya la cantidad de carne de res que come.Use mas pollo o pescado. Cuando coma carnes rojas, elija la que tiene menos grasa |
| 315 | 12 | Saque la grasa antes de cocinar la carne,incluyendo la piel del pollo,evite agregar grasas durante el proceso de cocinar |
| 316 | 13 | Elimina de tu dieta alimentos grasosos:embutidos,chorizos, salchichas,manteca, mantequilla,margarina, aderezos de ensaladas,grasa de cerdo |
| 317 | 14 | Evita comer helados, contienen mucha grasa. Un mensaje de WawaRed |
| 318 | 15 | Aumente los alimentos ricos en fibras. Consuma panes , cereales y galletitas integrales. Un mensaje de WawaRed |
| 319 | 16 | Aumente el consumo de fibras.Coma mas verdura,tanto crudas como cocidas.En vez de jugos de fruta embotellados o en caja,coma frutas frescas |
| 320 | 17 | Trata de consumir cebada, trigo, frijoles, lentejas y arvejas. |
| 321 | 18 | Trata de consumir alimentos ricos en fibras. Un mensaje de WawaRed |
| 322 | 19 | Los alimentos ricos en fibra disminuyen el colesterol, no te olvides de consumirlos. Un mensaje de WawaRed |
| 323 | 20 | Coma menos cantidad de alimentos preparados, y trate de evitar restaurantes de servicio rapido. Un mensaje de WawaRed |
| 324 | 21 | Evita comer miel, jalea, mermelada, caramelos, gelatina, y pasteles dulces. Un mensaje de WawaRed |

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| 325 | 22 | No tome gaseosas. Una lata de gaseosa regular de unos 360 cc contiene azucar equivalente a nueve cucharaditas de azucar. |
| 326 | 23 | Hornee, use la parrilla, o hierva las carnes y los sustitutos en vez de freirlos. Un mensaje de WawaRed |
| 327 | 24 | No le pongas harina o pan rallado cuando cocines tus carnes. Un mensaje de WawaRed |
| 328 | 25 | Trate de sacar la grasa que esta visible antes y despues de cocinar. |
| 329 | 26 | Las verduras son fuente de vitaminas y minerales.Las verduras frescas tienen mas vitaminas que las envasadas, y tienen menos sal |
| 330 | 27 | Prefiere consumir la fruta entera y fresca. Un mensaje de WawaRed |
| 331 | 28 | Trate de conseguir un glucometro,sirve para medir el nivel de azucar en la sangre, sería bueno que tenga uno y aprenda a usarlo |
| 332 | 29 | Si te van a invitar a comer nunca comas alimentos que tu sabes que tu sabes que no debes. Tu salud es mucho mas importante. |
| 333 | 30 | Si no puede comer en tu casa lleva tu dieta estricta con contigo. Un mensaje de WawaRed |
| 334 | 31 | Si come en un restaurante pida comidas que usted conoce que se cocinan en forma simple.Evite las frituras, cremas, rellenos, postre,empanada |
| 335 | 32 | Trate de comer dentro de una hora del horario normal de tu comida. Si hay un retraso, sancoche coliflor y/o zanahoria y consumalo |
| 336 | 33 | No te olvides que debes de medir tus niveles de azucar de forma continua, es la unica forma de poder saber si estas controlado la diabetes |
| 337 | 34 | Prefiere consumir las frutas frescas a las enlatadas. Un mensaje de WawaRed |
| 338 | 35 | No descuides tu tratamiento, sigue las indicaciones de tu medico. Un mensaje de WawaRed |
| 339 | 36 | Tus pies son importantes,siempre estate atenta de cambios de color,ampollas o cortadas,si presentas estas molestias consulta a tu medico |
| 340 | 37 | La medicacion que te indica tu medico es para que la tomes como te indico, no solo cuando te sientas mal. Un mensaje de WawaRed |
| 341 | 38 | Es importante que cuides tus pies, evita caminar descalzos, si te haces alguna herida en tu pie avisale a tu medico |
| 342 | 39 | No te estreses, el estres aumenta los niveles de azucar en la sangre. Un mensaje de WawaRed |
| 343 | 40 | No olvides controlar tu nivel de azucar. Un mensaje de WawaRed |
| 344 | 41 | Si deseas mayor informacion sobre diabetes puedes acudir a tu centro de salud. Un mensaje de WawaRed |
| 345 | 42 | Puedes encontrar mas consejos para tu embarazo llamando gratis al *121. Un mensaje de WawaRed |
| 346 | | En vez de comer frutas enlatadas prefiera comer frutas frescas o jugos naturale. Un mensaje de WawaRed |
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| | | INFECCION URINARIA |
| 347 | . | Antes de tomar cualquier medicacion realízate un examen de orina. Un mensaje de WawaRed |
| 348 | . | Para realizar una buena toma de tu muestra de orina debe de lavar tus genitales (entre los labios de la vagina) |
| 349 | . | Cuanto tomes tu muestra de orina no coloque el 1º chorro de orina en el frasco,recien el 2º chorro, antes de terminar retire el frasco |
| 350 | . | Si vas a descartar una infeccion urinaria, debes de dejar primero tu muestra de orina y despues empezar tu tratamiento |
| 351 | . | Pregunta en el laboratorio en cuantos dias estaran sus resultados para que los puedas llevar al centro de salud y lo evaluen en tu consulta |
| 352 | . | No te olvides de tomar las pastillas que te indicaron en tu centro de salud, luego de haber recolectado tu muestra de orina. |
| 353 | . | Si tienes dolor,comezon o ardor cuando orina,es posible que tengas una infeccion urinaria.Si es asi,acuda a tu centro de salud |
| 354 | | No te aguantes las ganas de orinar, acude al bano lo mas pronto posible. Un mensaje de WawaRed |
| 355 | | Despues de terminar tu tratamiento debes de acudir a tu centro de salud para verificar si te curaste |

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| | | SIFILIS |
| 356 | . | ¿Ya le pusieron tu inyeccion? No te olvide que son 3 dosis , una dosis por cada semana . Eso es necesario para la salud de tu bebe |
| 357 | . | ¿Tu pareja la acompaño al centro de salud? Recuerde que ambos tienen que ir al siguiente control para recibir consejería y tratamiento |
| 358 | . | ¿Tu pareja ya recibió tratamiento? Recuerde que ambos tienen que recibir tratamiento completo por el bien de tu bebe |
| 359 | . | Recuerde que no puede tener relaciones sexuales con tu pareja hasta que ambos terminen su tratamiento. Un mensaje de WawaRed |
| 360 | | Recuerda que es muy importante que ambos concluyan su tratamiento, para así evitar reinfectarte. Un mensaje de WawaRed |
| | | |
| | | VIH |
| 361 | . | Ahora debe de comer mas, debe de realizar 3 comidas principales, además de incluir 1 refrigerio. Un mensaje de WawaRed |
| 362 | . | Recuerda que debes de tomar medicación para prevenir que tu bebe se infecte. Un mensaje de WawaRed |
| 363 | . | Si esta tomando alguna medicación informele a tu medico para evaluar los posibles riesgos y beneficios que puede traer a tu bebe |
| 364 | . | Pregunte al profesional que le atiende que medicamentos no debe de consumir en el embarazo, y que otra medicina alternativa puede consumir |
| 365 | . | Toma tus pastillas tal como te ha indicado el profesional que te atiende, olvidarte de tomar estas pastillas puede ser malo para ti y tu bebe |
| 366 | . | No te olvides de acudir a todos tus controles, es importante para tu salud y la de tu bebe. Un mensaje de WawaRed |
| 367 | . | Tienes que recoger todos tus resultados de laboratorio y llevarlos al profesional que te atiende. Es importante llevar un buen control |
| | | |
| | | FIEBRE |
| 368 | . | Si tiene temperatura mayor de 38C y no le ha bajado a pesar de la medicación que le han recetado, debe de ir a la emergencia mas cercana |
| | | |
| | | TUBERCULOSIS |
| 369 | . | Pregunte a sus medicos que medicamentos no debe de consumir durante tu embarazo, y que otra medicina puede consumir para no danar a tu bebe |
| 370 | . | Acude todos los días al centro de salud para recibir tu medicación. Un mensaje de WawaRed. Un mensaje de WawaRed |
| 371 | . | Ahora debe de comer mas, debe de realizar 3 comidas principales, además de incluir un refrigerio. Un mensaje de WawaRed |
| 372 | . | No te olvides de acudir a tus controles, es importante para ti y tu bebe. Un mensaje de WawaRed |
| 373 | . | Es importante que todas las personas que viven contigo acudan al centro de salud para que los examinen. Un mensaje de WawaRed |
| 374 | . | Si algun miembro con quien vives tiene tos por mas de 2 semanas debes de llevarlo al centro de salud para su evaluación |
| 375 | . | ¿Acudiste hoy a recibir tu medicación? No te olvides que es importante para tu salud y para la de tu bebe. Un mensaje de WawaRed |
| | | |
| | | ALCOHOL |
| 376 | . | Es importante que evites cualquier bebida alcoholica, debido da tu bebe. Si necesitas ayuda pide consejería en tu centro de salud |
| | | |
| | | DROGAS |
| 377 | . | Las drogas son perjudiciales para tu bebe, si necesitas ayuda pide consejería en tu centro de salud, estar dispuestos a ayudarte |
| 378 | . | La cocaína, heroína, marihuana, extasis y crack te hacen mal a ti y a tu bebe, no las consumas. Un mensaje de WawaRed |

Table A3. Baseline Balance: Spillover Effects

| | Control women close to treated women (1) | Control women far from treated women (2) | Adjusted difference (3) | Observations (4) |
|--|---|---|-------------------------------|---------------------|
| <i>Women Sociodemographic Characteristics</i> | | | | |
| Age | 25.47 | 25.59 | 1.16 (1.47) | 586 |
| Born in Lima | 0.43 | 0.46 | 0.01 (0.12) | 559 |
| Education | | | | |
| Incomplete secondary or lower | 0.45 | 0.37 | 0.09 (0.05) | 586 |
| Complete secondary | 0.34 | 0.46 | -0.16** (0.08) | 586 |
| Incomplete tertiary | 0.11 | 0.08 | 0.02 (0.08) | 586 |
| Complete tertiary | 0.11 | 0.09 | 0.05 (0.04) | 586 |
| Occupation | | | | |
| Unpaid domestic worker | 0.62 | 0.70 | -0.02 (0.05) | 584 |
| Paid domestic worker | 0.12 | 0.08 | 0.01 (0.04) | 584 |
| Paid nondomestic work | 0.08 | 0.07 | 0.01 (0.05) | 584 |
| Student | 0.11 | 0.10 | -0.03 (0.08) | 584 |
| Civil Status | | | | |
| Single | 0.16 | 0.17 | -0.09 (0.08) | 586 |
| Married | 0.23 | 0.13 | 0.17** (0.07) | 586 |
| Not married but living with partner | 0.61 | 0.70 | -0.09 (0.11) | 586 |
| Pre pregnancy weight (kilograms) | 60.24 | 58.15 | 0.08 (2.66) | 585 |
| Height (meters) | 1.53 | 1.53 | 0.01 (0.02) | 586 |
| <i>Women physical signals (1st control)</i> | | | | |
| Weeks of pregnancy | 11.77 | 11.72 | 0.97 (0.71) | 583 |
| Number of prior births | 0.80 | 0.95 | 0.05 (0.15) | 586 |
| Temperature (Celsius) | 36.64 | 36.54 | 0.07 (0.06) | 584 |
| Respiratory frequency | 18.69 | 18.96 | -0.70 (0.82) | 584 |
| Pulse | 76.50 | 75.78 | 0.61 (1.36) | 584 |
| Systolic blood pressure | 98.51 | 97.24 | -0.29 (2.09) | 584 |
| Diastolic blood pressure | 60.81 | 60.93 | -1.03 | 584 |

| | | | | |
|---|--------|--------|--------------------|-----|
| Hemoglobin level | 11.91 | 11.74 | (0.90) 0.22 | 476 |
| Anemic (hemoglobin level <11) | 0.20 | 0.24 | (0.25) -0.03 | 476 |
| | | | (0.11) | |
| <i>Household Characteristics</i> | | | | |
| Total household income (PEN) | 748.78 | 716.67 | 4.37 (43.90) | 582 |
| Distance to health center (meters) | 970.82 | 884.17 | 316.32 (238.27) | 586 |
| Tap water | 0.78 | 0.76 | 0.01 (0.07) | 585 |
| Electricity | 1.00 | 0.97 | 0.01* (0.00) | 585 |
| Internet | 0.04 | 0.03 | -0.01 (0.03) | 585 |
| Television | 1.00 | 0.98 | 0.02 (0.02) | 584 |
| Refrigerator | 0.61 | 0.63 | -0.02 (0.11) | 584 |
| Electric kitchen | 0.00 | 0.01 | -0.02 (0.02) | 584 |
| Gas kitchen | 0.97 | 0.99 | -0.04 (0.03) | 584 |
| Kerosene kitchen | 0.03 | 0.02 | 0.01 (0.04) | 585 |
| Digital video disc player | 0.72 | 0.77 | -0.06 (0.13) | 585 |
| Computer | 0.08 | 0.05 | 0.05 (0.06) | 585 |

Notes: This table presents baseline balance for spillover effects. Only control women are included in the analysis. Columns 1 and 2 present means; column 3 presents estimated coefficients and standard errors on an indicator for control women living within a radius of 25 meters from at least one treated woman. Ordinary least square regressions control for health center fixed effects and the number of pregnant women living within the 25-meter radius. Estimated standard errors, reported in parentheses, are clustered at the health center level. Significance at the 1, 5, and 10 percent levels is indicated by ***, ** and *, respectively.