Fetal and Infant Mortality in Los Angeles County Service Planning Areas 1 and 6, L.A. HOPE Pilot Project

The Los Angeles Health Overview of a Pregnancy Event (L.A. HOPE) Project is a survey of women who had a fetal or infant loss in Los Angeles County. Mothers were asked about their health and experiences around the time of their pregnancies. The goal of the L.A. HOPE Project is to investigate problems related to fetal and infant loss to help future pregnant women and their infants.

The pilot L.A. HOPE Project was done between October 2005 and July 2006. It focused on mothers living in the Antelope Valley and South Los Angeles (Service Planning Areas (SPA) 1 and 6). Overall, 50 of the 133 women contacted responded to the survey.

Many of the women were shown to have had needs before their pregnancies that were not addressed. For example, 38% did not have health insurance before their pregnancies. No insurance may be related to poorer birth outcomes.

HP 2010 Goal
100% of people should have health insurance.¹

(Healthy People 2010 (HP2010) - Health goals for the USA to achieve by 2010)

Overall, 44% of pregnancies were not planned. This high percentage may explain why 62% of the women did not take multivitamins in the month before their pregnancy. Women who do not plan their pregnancies lose the time before their pregnancy to prepare for a healthy baby.

No more than 30% of pregnancies should be unplanned.¹

Among L.A. HOPE women, 52% said they had at least one medical condition before their pregnancy. This includes asthma, high blood pressure, diabetes, anemia, sickle cell anemia, and other health problems. In addition, 18% of the women were overweight and 33% were obese before pregnancy. Being overweight or obese is associated with higher rates of poor birth outcomes.²

Obesity among adults should be no more than 15%.¹

In previous pregnancies: 19% of the women had a miscarriage (the loss of a fetus before 24 weeks of pregnancy); 14% had a stillbirth (a fetus that was expected to survive died during birth or late pregnancy); and 9% had an infant loss (the death of a baby less than 1 year old). Nineteen percent had a premature baby (born more than three weeks before its due date); and 20% had a low birth weight baby (weighing less than 2500 grams at birth). All of the above issues should be addressed before and during prenatal care.

Table 1. L. A. HOPE Birth Outcomes, SPAs 1 & 6, 2005-2006

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N (%)</th>
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<tbody>
<tr>
<td>Total</td>
<td>50 (100%)</td>
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<tr>
<td>Fetal Death</td>
<td>27 (54%)</td>
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<tr>
<td>Infant Death</td>
<td></td>
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<tr>
<td>Neonatal (less than 28 days old)</td>
<td>15 (30%)</td>
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<tr>
<td>Post-neonatal (28-364 days old)</td>
<td>8 (16%)</td>
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High rates of smoking and gum disease before pregnancy also lower the chance of having a healthy baby. Before pregnancy, only 10% of the L.A. HOPE respondents smoked, and only 13% had teeth and gum disease.

Prenatal Care
Prenatal care helps women have successful pregnancies or overcome medical conditions. All of the L.A. HOPE respondents received prenatal care. Only 10% received late prenatal care (after their first trimester), which is related to poorer birth outcomes. Despite the high percentage of prenatal care, 29% of the women did not receive adequate prenatal care (Kotelchuck Index).

At least 90% of women should receive early prenatal care. The information conveyed during prenatal care is also important. Patients can be taught to identify signs of problems and ways to deal with them. However, 36% reported their doctors did not talk to them about what to do if they went into labor early. Thirty-five percent said their doctors did not speak to them about the genetic testing, and 56% said their doctors did not talk to them about fetal movement (kick) counting. In addition, 60% said their doctors did not ask them if they felt anxious or depressed, even though the women described high levels of stress and depression during pregnancy. Both conditions when left untreated may be associated with poor pregnancy outcomes.

Maternal Medical Conditions During Pregnancy
Along with medical conditions before pregnancy, conditions during pregnancy must be addressed early in prenatal care to avoid serious outcomes for both the mother and baby. As many as 86% of L.A. HOPE respondents reported some sort of medical condition during their pregnancies. (See Table 2 for the top five conditions.) Eighty percent of all respondents actively took precautions to prevent preterm or early labor. Despite their actions, 40% of respondents had some type of labor and delivery problem (See Table 2).

No more than 24% of women should experience maternal illness and complications due to pregnancy.

Maternal Psychosocial and Behavioral Issues
Addressing emotional and social issues is an essential step toward improving women’s health and birth outcomes.

The respondents reported that during their pregnancies, 29% were unhappy. Sixty percent stated they felt depressed, and 26% lost interest in hobbies and things they normally enjoyed. These are all possibly signs of depression, which can be treated. In contrast, only 6% were diagnosed as having a mental health problem.

During pregnancy, 63% experienced some sort of stressful life event, and 30% lived in neighborhoods that they perceived to be unsafe. All kinds of stress may affect pregnancy outcomes.

Most of the mothers did not engage in risky behaviors, such as smoking, drinking, or taking drugs. Four percent reported...
Fifty-eight percent reported being involved in potentially risky behaviors at work, such as standing for long hours, night shifts, lifting and carrying heavy weights, and skipping a meal because of work.

**Infant Health**

Overall, 78% of the babies were low birth weight, 27% had birth defects, 15% had genetic abnormalities, and 10% had growth problems, all issues that affect a baby’s chance of surviving. After delivery, only 6% of all L.A HOPE mothers were able to take their babies home.

**Grief and Bereavement**

Since so many women had emotional and social problems before they lost their babies, it is especially important that these women receive support after the loss of their babies. However, among the women who reported postpartum depression, only 44% had support after the loss of their baby. Amongst them, 17% were not offered any grief or bereavement materials, and 35% were not offered any information on support groups. Twenty percent of women received individual counseling, and 47% felt their religion pro-

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**Table 2. Pregnancy, Labor, and Delivery Experiences, Reported by Mothers**

<table>
<thead>
<tr>
<th>Medical Conditions During Pregnancy (Top 5 listed)</th>
<th>86%</th>
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<tbody>
<tr>
<td>Experienced cramps or back pain in the 4th to 7th month</td>
<td>60%</td>
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<tr>
<td>Had vaginal bleeding during pregnancy</td>
<td>38%</td>
</tr>
<tr>
<td>Had severe nausea, vomiting, or dehydration</td>
<td>36%</td>
</tr>
<tr>
<td>Had urinary tract infection during pregnancy</td>
<td>27%</td>
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<tr>
<td>Had high blood pressure during pregnancy</td>
<td>14%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Actions Taken During Pregnancy to Prevent Early Labor</th>
<th>80%</th>
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<tbody>
<tr>
<td>Stopped or limited sex</td>
<td>54%</td>
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<tr>
<td>Reduced housework</td>
<td>52%</td>
</tr>
<tr>
<td>Reduced or stopped working early</td>
<td>46%</td>
</tr>
<tr>
<td>Bed rest at home</td>
<td>38%</td>
</tr>
<tr>
<td>Hospitalized</td>
<td>30%</td>
</tr>
<tr>
<td>Took medicine</td>
<td>12%</td>
</tr>
<tr>
<td>Had cervical cerclage</td>
<td>12%</td>
</tr>
<tr>
<td>Used condoms</td>
<td>10%</td>
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<table>
<thead>
<tr>
<th>Labor and Delivery Complications</th>
<th>40%</th>
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<tbody>
<tr>
<td>Had water break more than 3 weeks before baby was due</td>
<td>28%</td>
</tr>
<tr>
<td>Had labor pain more than 3 weeks before the baby was due</td>
<td>25%</td>
</tr>
<tr>
<td>Had problems with the placenta</td>
<td>12%</td>
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No more than 1% of pregnant women should smoke;
No more than 6% of pregnant women should drink alcohol;
No women should use drugs during pregnancy.¹

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“I developed an infection while I was pregnant and the doctor never informed me of it until I was having a hemorrhage that caused the loss of my baby.”
– L.A. HOPE mom

“In a situation like this, you're not looking for someone to blame. You're just looking for answers.” – L. A. HOPE mom

“I felt that the most challenging thing that I encountered during my pregnancy was getting the support I needed during this time. I really felt alone.”
– L. A. HOPE mom

“My family was the basic support.” – L. A. HOPE mom

“I was offered a booklet of materials on grief or bereavement, but it was too far to go with the price of gas.”
– L. A. HOPE mom

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provided the best support.

**Next Steps**

The results from this study have been shared with Healthy Birth Learning Collaboratives in Service Planning Areas 1 and 6. Several recommendations for actions arise from the study. The Los Angeles County Public Health Department and providers should:

- Conduct a countywide study based on this pilot study to better assess the problems related to fetal and infant loss throughout L.A. County in order to help future pregnant women and their infants.

- Expand grief and bereavement resources for mothers and families that have experienced a fetal or infant loss.

- Increase awareness of these resources through community referral systems.

**References**


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