

Miami-Dade Fetal Infant Mortality Review (FIMR) Project



Fetal Infant Mortality Review
FIMR
of Miami-Dade County

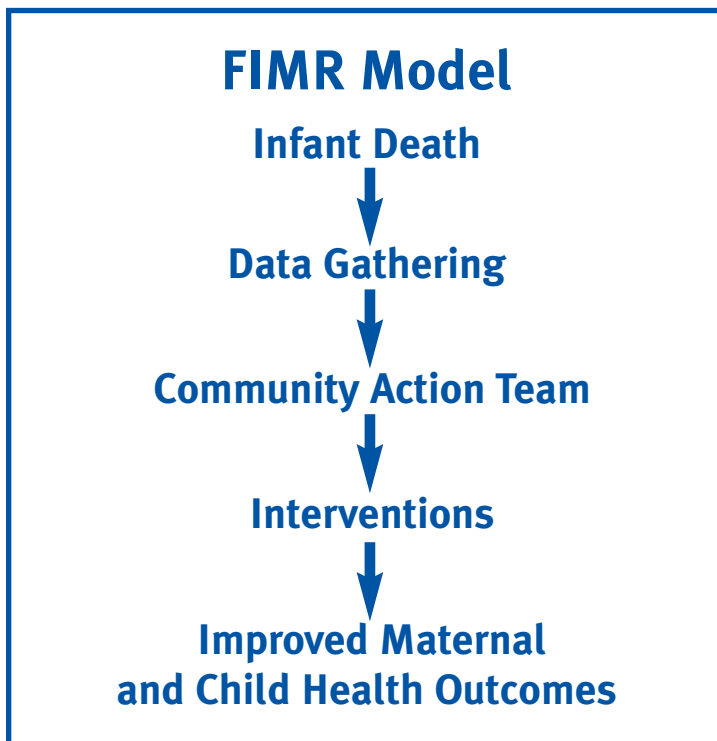
2005-2006 Community Report

Fetal and Infant Mortality Review Project

The Fetal and Infant Mortality Review (FIMR) Project is a countywide effort to better understand the issues associated with fetal and infant mortality and morbidity and to develop strategies that improve perinatal systems of care, locally and statewide.

FIMR began in 1990 as a collaborative effort between the American College of Obstetricians and Gynecologists (ACOG) and the Federal Maternal and Child Health Bureau (MCHB). Since it was first introduced in the late 1980's, FIMR has been a dynamic, community process. FIMR has enjoyed continued growth and refinement as more communities have used it. Today, there are over two hundred FIMR programs nation-wide. While the basic methodology is the same in most programs, the specific recipe for actual operation is local. Funding sources vary from community to community. Different types of agencies sponsor the FIMR program including city and county health departments, local hospitals, regional perinatal centers and community based maternal and child health coalitions.

Florida adopted the FIMR model in 1992. The Healthy Start Coalition of Miami-Dade has been contracted by the State of Florida to implement FIMR locally. FIMR of Miami-Dade County is one of 11 FIMR projects statewide organized under Florida Statute 766.101 and funded by the State of Florida.

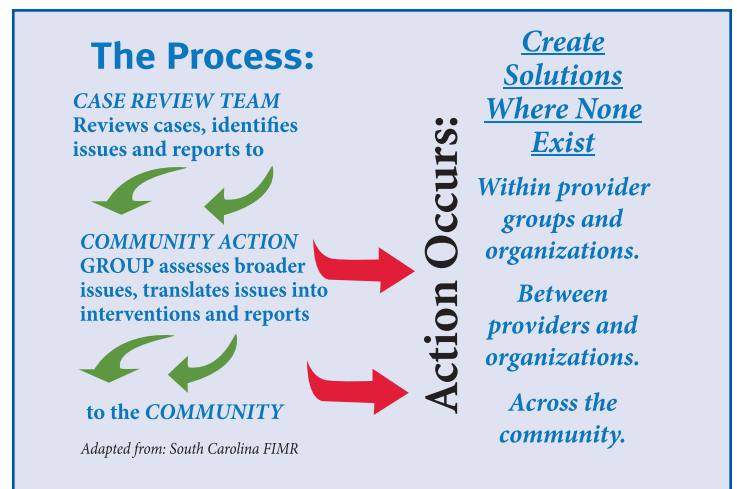


The Need for FIMR

In the FIMR process, we examine the tragedy of an infant death in order to achieve a better future for all children and families. Each case reviewed provides us with an opportunity to look more broadly at community circumstances.

The Fetal Infant Mortality Review process has valuable outcomes:

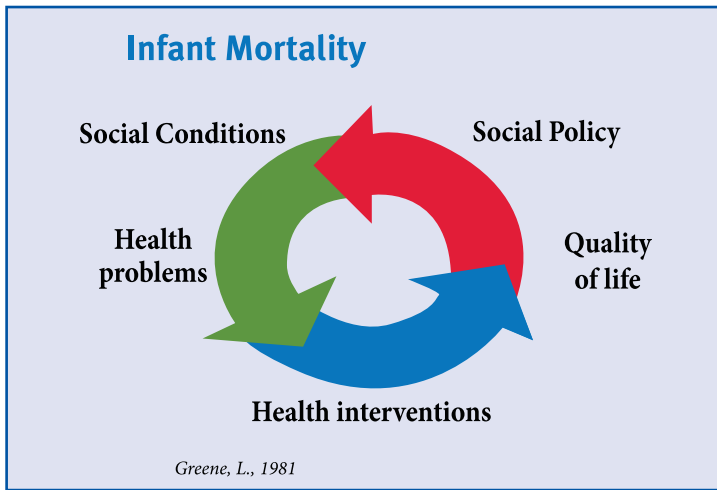
- **For the family experiencing a fetal or infant loss** - the interview process itself may help move them through the stages of grief and improve their ability to cope with the loss;
- **For institutions and providers** - fetal and infant mortality review findings lead to improved quality of services; both duplication and gaps in services can be avoided;
- **For communities** - the fetal and infant mortality review process empowers the community to create solutions where none existed and can improve existing service systems and community resources for women, children and families.



This process does not strive to assign blame or responsibility for any infant's death. Through FIMR, the community becomes the expert in the knowledge of the entire local service delivery systems and community resources for women, children and families. FIMR stresses community ownership and pride. Community members become the change agents and advocates for the health and well-being of local families.

Examining Infant Mortality

Infant mortality is a complex issue that impacts everyone-regardless of circumstances. That is why infant mortality has always been viewed as a good overall indicator of a community's quality of life as well as the health status of its citizens.



As the graphic above shows, there are several, interconnecting factors that influence infant mortality. Each requires our attention as we work to improve the health of the women, children and families in our community. Certainly we need to consider the health care available. However, we must further consider general community resources, policies, social conditions and quality of life factors, each of which can also influence infant mortality.

There are many reasons professionals study fetal and infant deaths:

- **Health care providers:** to implement peer review process;
- **Institutions:** to monitor overall compliance with policies and procedures;
- **Medical Researchers:** to develop insights into new medical treatments to prevent infant death;
- **County and State health officers:** to aggregate vital statistics to document and quantify causes of death.

Fetal and infant mortality review complements all of these efforts but takes a different approach. It uses a unique, substantive blend of social, community and medical information not available through any of these other efforts. FIMR identifies strengths and areas for improvement in overall service systems and community resources for women, children and families. FIMR also provides direction towards the development of new policies to safeguard them.

WHAT IS FIMR?

FIMR is:

- a strategy to close the gap in health disparities at the community level;
- a timely and valuable source of information about changing health care systems and how they affect real families trying to access them;
- a community coalition that promotes volunteerism and good citizenship and will translate into local accountability;
- a community coalition that can represent all ethnic and cultural views in the community;
- a strategy that improves communication among health and human service providers;
- a form of continuous quality improvement that allows communities to assess the performance of systems and the impact of changes in those systems;
- a voice for local families who have lost their baby;
- a tool that helps local health officials implement policies to safeguard families.

Who is part of FIMR?

Potential members come from the entire community and include individuals and agency representatives who:

- live in the community and use its resources;
- provide health and human services;
- set policy; and/or,
- rely on the community as a source for workers and a good place to do business.

FIMR is composed of two groups, the Case Review Team (CRT) and the Community Action Group (CAG). A multi-disciplinary team of professionals, the CRT uses unidentified/patient blinded abstracted information from vital records (death and birth certificates), hospitals, clinics, physicians, police, Medical Examiner records and family/maternal interviews.

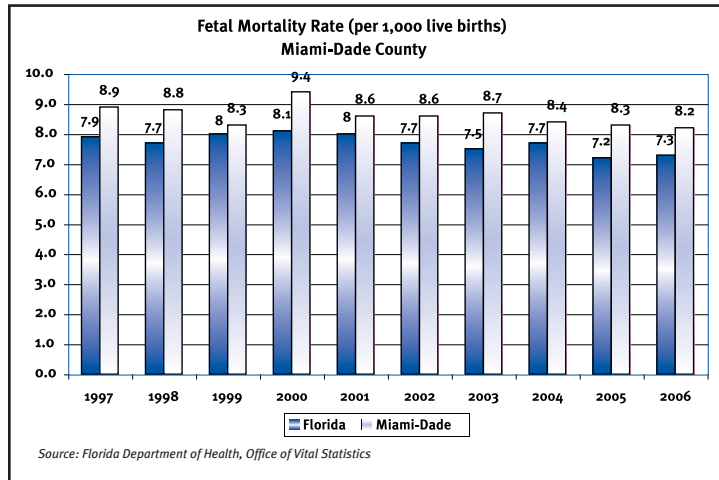
The CAG is comprised of community leaders representing government, consumers, key institutions, health and human services organizations. The members of the CAG work collaboratively with the CRT to implement strategies that will improve fetal and infant outcomes within our community.

Text adapted from materials provided by the National Fetal-Infant Mortality Review Program of The American College of Obstetricians and Gynecologists.

STILLBIRTHS AND INFANT LOSSES

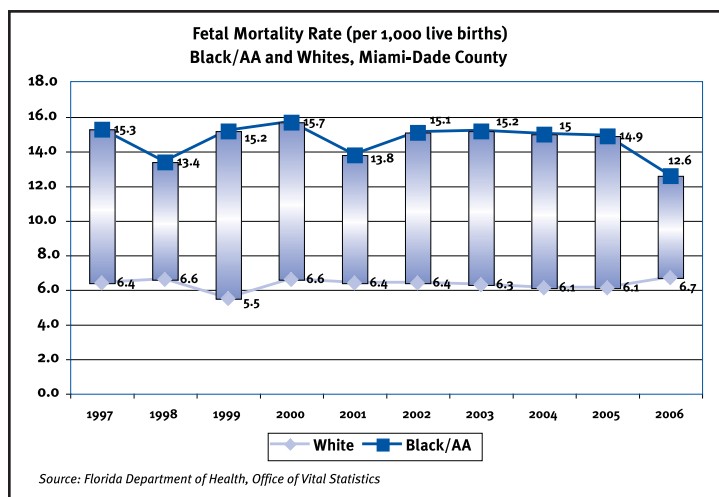
Fetal Mortality/Stillbirths

According to the National Center for Health Statistics, fetal death or stillbirth is defined as "death prior to the complete expulsion or extraction from its mother of a product of human conception...and which is not an induced termination of pregnancy. The death is indicated by the fact that after such expulsion or extraction, the fetus does not breathe or show any other evidence of life..., and must occur with at least 20 weeks gestation."



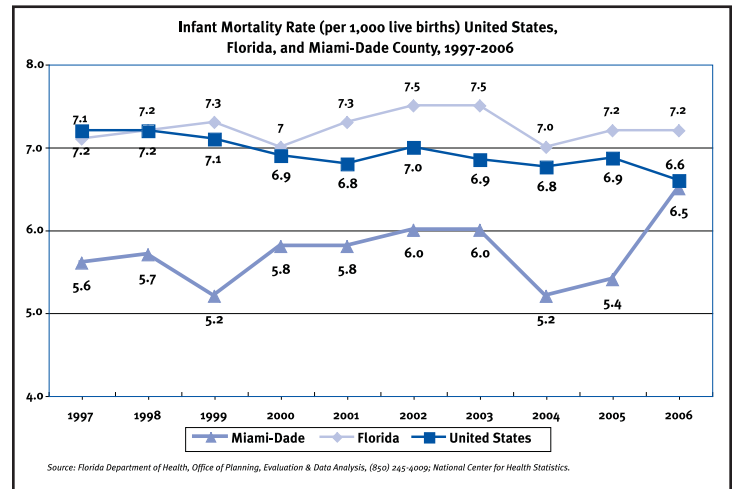
In 2006, Miami-Dade County had a fetal mortality rate of 8.2 fetal deaths for every 1,000 live births compared to 7.3 for the state of Florida.

Significant differences in rates between Whites and Blacks/African-Americans continue to plague the county. In 2006, the fetal mortality rate for whites in Miami-Dade was 6.7/1,000 live births compared to 12.6/1,000 for Blacks/African-Americans.

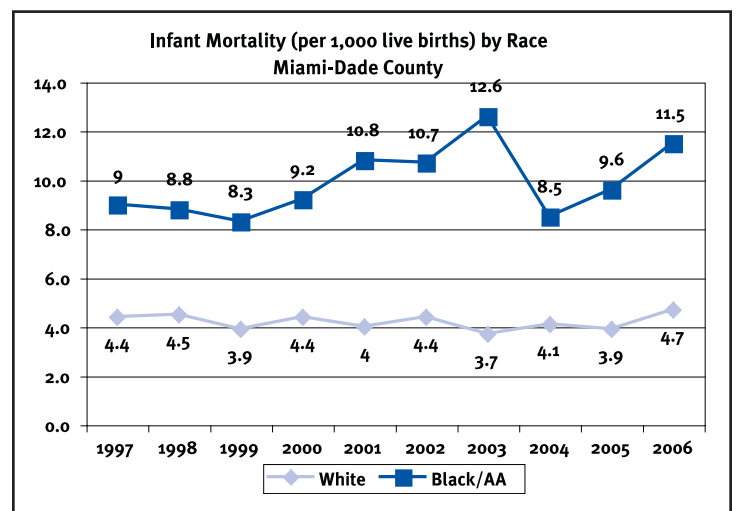


Infant Deaths

Infant mortality includes deaths to live born babies during their first year of life. Because of its association with a variety of factors such as maternal health, quality and access to health care, socioeconomic conditions and public health practices, the infant mortality rate is often considered the primary indicator of the health of a nation.



In 2006, the overall infant mortality rate in Miami-Dade County was recorded at 6.5 infant deaths per 1,000 live births. Although this rate is lower than the rate for Florida and for the Nation as a whole, it is the highest recorded infant mortality rate in Miami-Dade in over 10 years.



The infant mortality rate for Blacks/African Americans (11.5 deaths per 1,000) was more than twice as high as the rate for whites (4.7 deaths per 1,000).

Although Miami-Dade's Infant Mortality Rate is lower than the state rate, there is still much work to be done in reducing

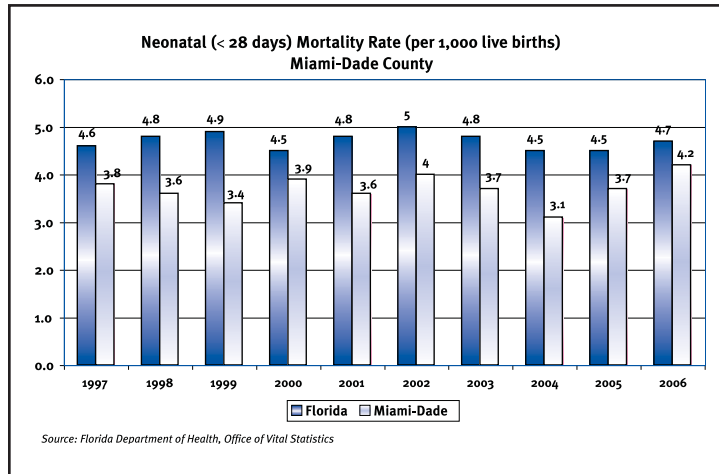
STILLBIRTHS AND INFANT LOSSES

the overall Infant Mortality rate, and disparities among racial/ethnic groups.

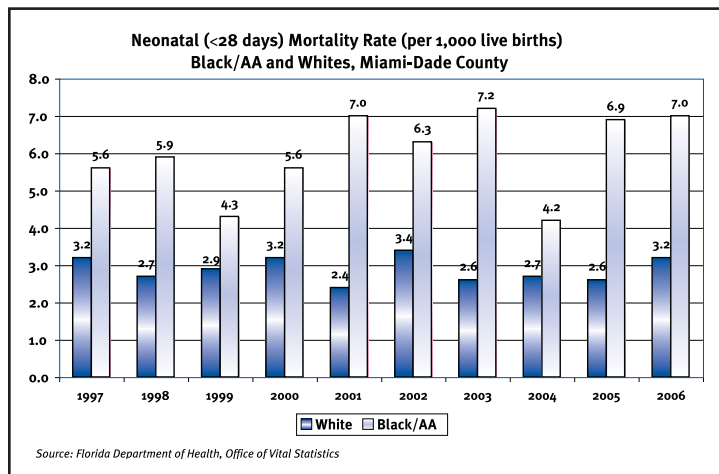
Infant mortality is divided into two periods, 1) neonatal mortality are deaths to infants less than 28 days old, and 2) post-neonatal mortality includes deaths to infants between 28 and 364 days old.

Neonatal Mortality (<28 Days) Rates

Neonatal mortality includes deaths occurring to infants before they are 28 days old and is generally associated with events surrounding the prenatal period and labor/delivery. In 2006, the neonatal mortality rate in Miami-Dade County was 4.2 deaths per 1,000 live births.



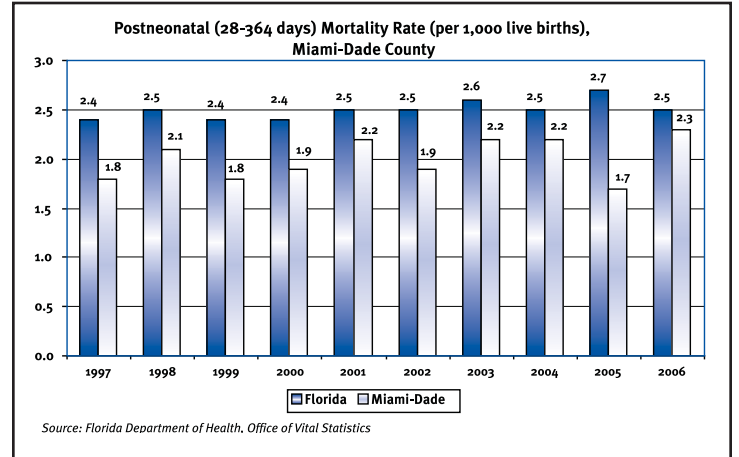
The neonatal mortality rate for whites was 3.2 deaths per 1,000, and for Blacks/African-Americans the rate was 7.0. Statewide, the neonatal mortality rate in 2006 was 4.7/1,000. Most of the infants (over 60%) who die in the neonatal period die within the first 24 hours of life. Prematurity or low birth weight are the primary causes of neonatal mortality.



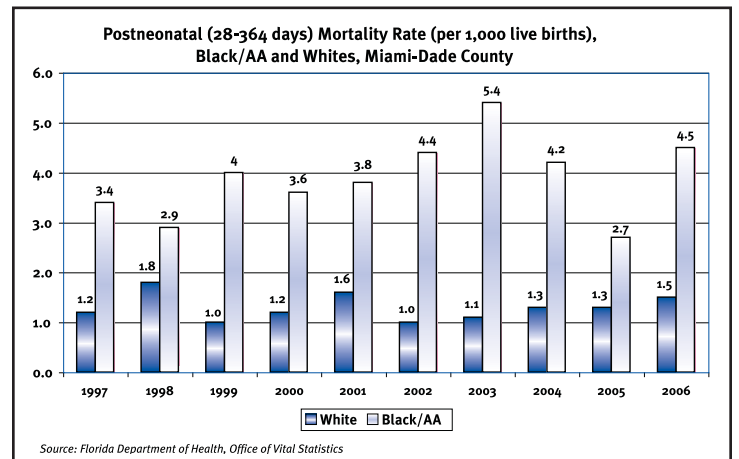
The post-neonatal death rate in Miami-Dade County was slightly lower than that of the State.

Post-neonatal Mortality

Post-neonatal mortality includes deaths of infants from 28 days to 364 days of age. It has traditionally been associated with the condition or events that occur after delivery and is usually indicative of environmental factors impacting the birth.



In 2006, Miami-Dade County had a post-neonatal death rate of 2.3 per 1,000 live births. The post-neonatal death rate in the County was slightly lower than that of the State, 2.5 per 1,000 live births. Leading causes of post-neonatal death in the County include prematurity, congenital anomalies, and sleep-related deaths, including Sudden Infant Death Syndrome (SIDS) and Sudden Unexplained Infant Deaths (SUIDS).

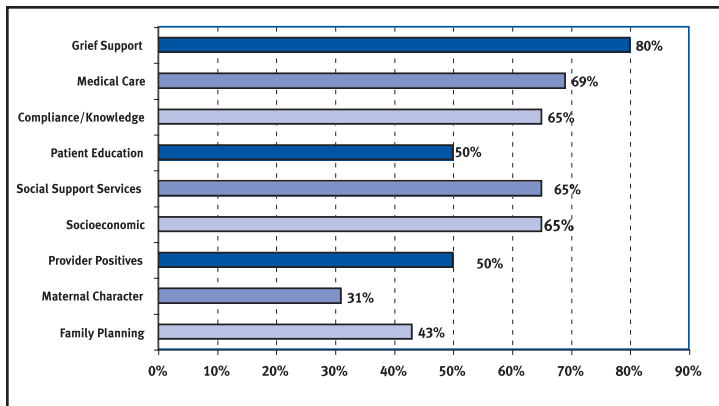


Differences in the rate between Whites and Blacks/African-Americans was notable, with Blacks/African-American rates 3 times as high as the rates for Whites, 4.5/1000 compared to 1.5/1000, respectively.

SUMMARY OF FIMR REVIEWS

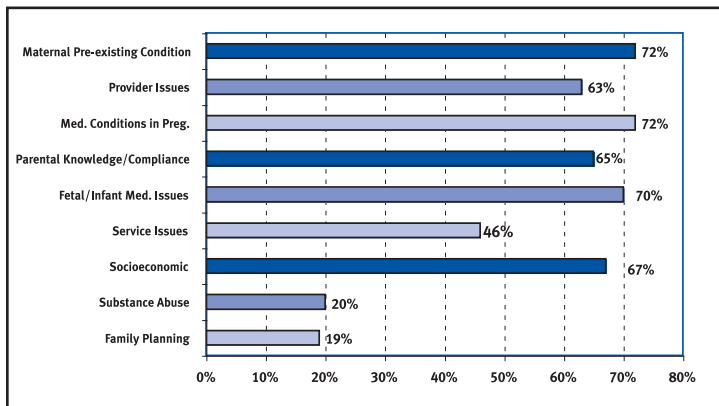
Community Strengths

The purpose of FIMR is to improve maternal-infant health outcomes by identifying contributing causes of infant deaths. However, the FIMR Case Review Team (CRT) operates from a strength-based perspective, and identified several community strengths that help protect pregnant women from poor outcomes. These factors include the availability of grief support, quality medical care, patient education, and the availability of social support.



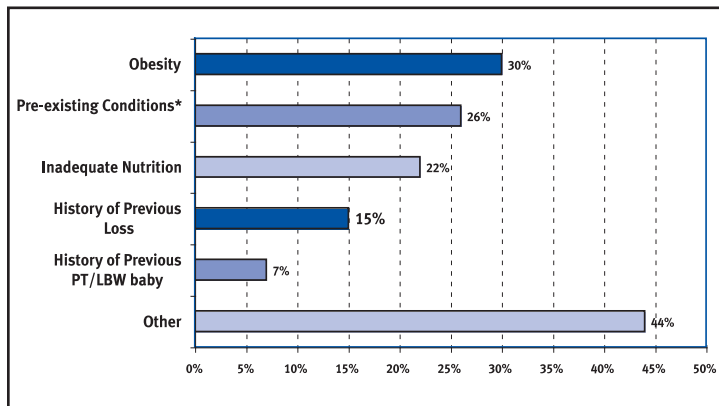
Summary of Key Contributing Death Factors

Maternal pre-existing conditions, such as diabetes and hypertension, were a major contributing cause of death from 2005-2006, appearing in 26% of cases. Other major contributing causes were diseases that the pregnant woman developed during her pregnancy. Provider issues were also a significant problem, with 63% of cases involving gaps in care.



Maternal Preexisting Conditions

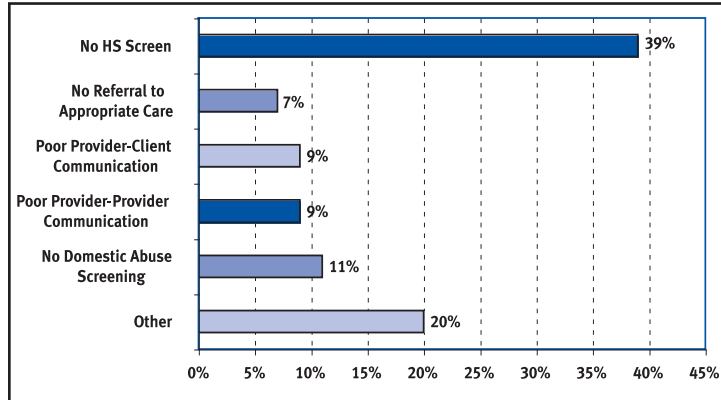
The growing obesity epidemic had an impact on infant mortality in Miami-Dade County, with obesity being the major pre-existing condition affecting mothers with an infant death. Other pre-existing conditions, marked with an asterisk, include asthma, hypertension, diabetes, and mental health disorders. Inadequate nutrition and a history of poor outcomes were also factors.



SUMMARY OF FIMR REVIEWS

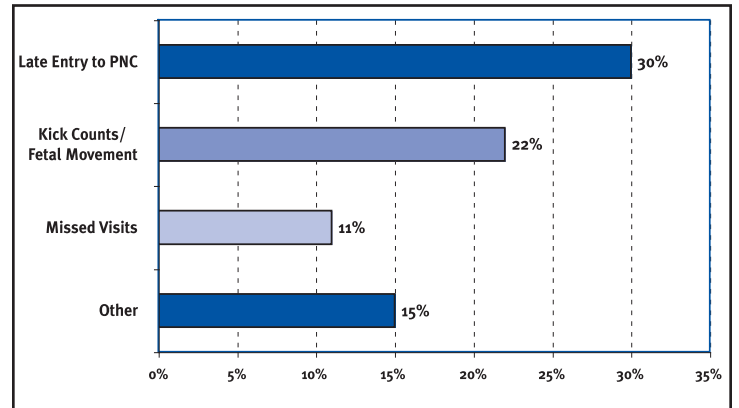
Provider Issues

Among the contributing causes of death related to provider issues, the most significant factor was a lack of Healthy Start Prenatal Risk Screenings. Other significant factors included a lack of appropriate referrals, poor communication, and gaps in screening for domestic violence issues in the family.



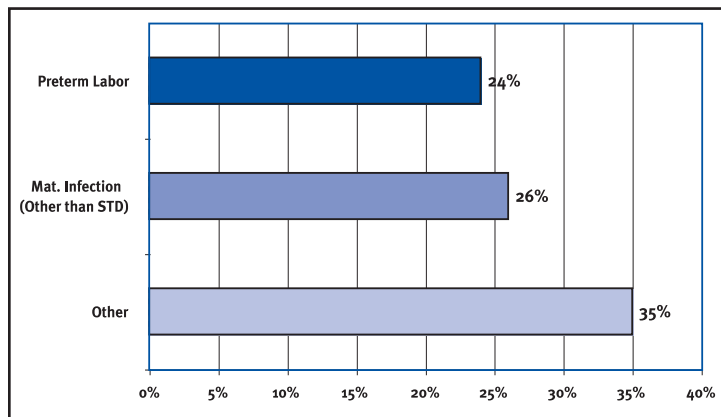
Prenatal Care

Lack of parental knowledge and compliance were implicated in a significant portion of infant deaths. The most common cause was late entry into prenatal care (PNC), which occurred in 30% of these cases. Other critical factors include the mother being unaware of the importance of kick counts/monitoring fetal movement, and inconsistent prenatal care (missed visits).



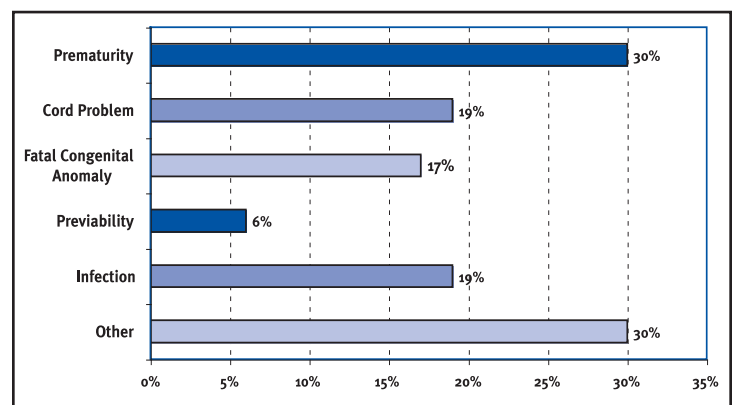
Maternal Conditions During Pregnancy

The two major causes of infant death related to maternal condition during pregnancy were preterm labor and maternal infections. Other causes were implicated in 35% of cases; these causes included inadequate or excessive weight gain and pregnancy-induced hypertension.



Fetal/Infant Health Issues

In cases where fetal/infant health issues were contributing factors prematurity was the single largest contributor, at 30%. Other causes include cord problems and fatal congenital anomalies. Birth prior to viability and infection were identified in 14% of these cases. Miscellaneous other causes were implicated in 30% of cases.



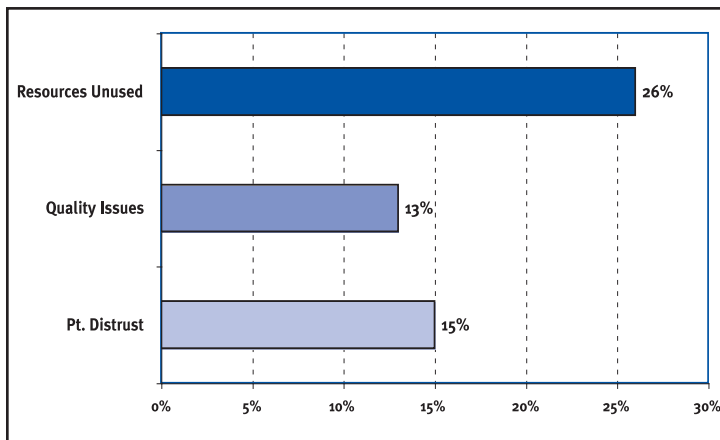
The purpose of FIMR is to improve maternal-infant health outcomes by identifying contributing causes of infant deaths.

Figures reflect completed case reviews for 2005 and 2006.

SUMMARY OF FIMR REVIEWS

Service Issues

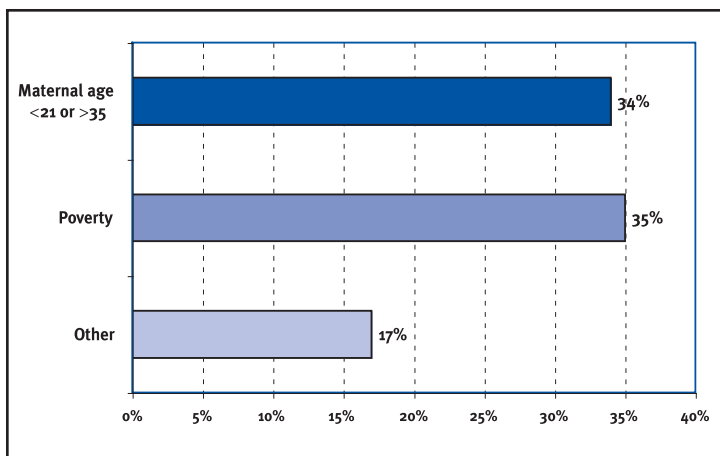
Utilization of services was a contributing factor in some of the infant deaths in Miami-Dade County. In 26% of these cases, health resources were available but not accessed by the client. Quality issues and patient distrust of, or dissatisfaction with, the health care system may have contributed to this problem.



Other Factors

Research has shown that adolescents and women over the age of 35 have an elevated risk of poor pregnancy outcomes. This was the case in Miami-Dade County, with maternal age being a factor in 34% of deaths.

Poverty, also a prominent factor, was implicated in 30% of the cases.



Service Issues

- Improve the linkages between private prenatal care providers, the Healthy Start Coalition of Miami-Dade and other community-based programs that provide nutrition counseling and social services.
- Better information is needed on the common practices in private OB offices to plan for interventions and coordinate with other programs and services. It may be helpful to undertake a survey of OB office practices to better inform the Healthy Start Coalition of Miami-Dade and other programs that interface with private physicians.
- All clinics should have a community resource list that can be given out to pregnant women regardless of insurance status.
- Develop an easy access referral process so that OB providers can enroll mothers with all eligible service programs, including Healthy Start.
- Link between prenatal care provider offices and the Healthy Start Coalition of Miami-Dade to locate women for prenatal care appointments. Make this referral step easy for providers to access.
- Home visits for women missing prenatal care appointments and or those women who are identified as high-risk due to pre-existing medical conditions.
- Look into variability of clinical practices in high-risk OB management.
- Review some of the referral practices for obtaining a perinatology consult.

Maternal Pre-existing and Conditions during Pregnancy

- A notable proportion of the women had sub-optimal health such as significant chronic medical conditions, significant past obstetric history of a poor pregnancy outcome or poor lifestyle choices at the time of pregnancy. For women with a history of poor pregnancy outcomes or significant risk factors, provide wrap-around services such as case management to prolong inter-pregnancy intervals and modify risk factors. Such services should include nutrition counseling, family planning, genetic counseling, general health exams, psychosocial screening and bereavement support as appropriate and based on level of risk.
- Home visits for women missing prenatal care appointments and or those women who are identified as high-risk due to pre-existing medical conditions.



Prenatal Care & Education

- There should be a comprehensive strategy to expand the vision and the provision of preconception and interconception – between pregnancies – care to encompass all women and not only those who want to become pregnant. This may involve developing a public education campaign to promote women’s health especially among groups at risk for poor health and pregnancy outcomes.
- A consistent message on healthy lifestyle should be repeated in many venues where women access the healthcare system. All points of contact are potential opportunities for identifying risk factors and counseling women on risk modification.
- Expand prenatal care education campaigns to include families, not just pregnant women. Educate community leaders in issues such as fetal movement and kicks counts.

Fetal/Infant Health Issues

- All pregnant women should be educated on the risks of prematurity and fetal death. Knowing some of the risks and complications of these outcomes may help women process information if confronted with such a situation in the future and make better, informed decisions. The education may occur as classes or videos for viewing in clinic waiting rooms.
- There needs to be a paradigm shift in the community about planning for a pregnancy. To change cultural perceptions, families need to be educated not just women.

RECOMMENDATIONS FROM FIMR CASE REVIEW TEAM

Access & Utilization

- Generate and disseminate a mini screening tool for OB providers or office staff to screen or distribute to all pregnant women for health and social assistance needs, including WIC, Healthy Start, food stamps, etc.
- Every prenatal care provider or their staff should be able to do a brief social service intake assessment and be aware and knowledgeable of how to initiate a referral.
- Services need to be culturally competent and acceptable as stigma/discrimination is a major barrier to accessing and utilizing health care and social services.

Advanced Maternal Age (>35 years)

- Case management is needed for some women at high-risk for subsequent poor pregnancy outcomes. This case management could be provided through OB offices, the Healthy Start Coalition of Miami-Dade or insurance companies. The case management may be tiered for level of risk.

Poverty

- Create and disseminate an informational brochure on Medicaid, WIC, Food Stamps and other financial assistance and social service programs.
- Work towards universal coverage of prenatal services for all by all health insurance policies and government funded programs, including Medicaid.

Medical Records

- To eliminate confusion as to whether medical records issues are directly related to documentation and not quality of care, make prenatal care providers aware of the importance of adequate documentation in prenatal medical records.

Improved documentation will reduce the frequent challenges encountered with the lack of adequate documentation in medical records/prenatal care files forwarded to hospitals for new moms.

- Complete and legible documentation will reduce the most common problems identified in the case reviews involving inadequacies in such fundamental patient care aspects as performing complete diagnostic assessments, responding to changes in the patient's clinical condition, ordering and securing timely and accurate test results and documenting patient status and the care provided.
- Educate prenatal care providers on the importance of forwarding their medical records/prenatal care files to hospitals where respective deliveries take place.
- Inadequate documentation in the vital records, particularly in the fetal death certificate, is a prominent and consistent challenge faced by the Case Review Team (CRT). The majority of fetal death certificates list the cause of death as "fetal demise", making it difficult for the CRT to assess whether the "cause of death" could have been prevented.
- Poor or absent documentation and notation in medical records is a consistent challenge faced by the Case Review Team (CRT). Challenges related to missing documentation in medical records both from the prenatal care provider and the hospital makes the case abstraction process results in gaps in information that prevent the CRT from completing the case review in a comprehensive manner.



MOVING FORWARD

For over 12 years the Fetal Infant Mortality Review (FIMR) Project and its members have sought to gain insight and shed light on the issues related to fetal and infants death in Miami-Dade County. The outstanding and committed FIMR members, alongside Coalition staff, have worked tirelessly to examine contributing factors. A special thanks must be extended to the dedicated group of professionals who make up the FIMR Case Review Team (Page 11) for their energy, insights and commitment to this project.

Moving forward, we hope to continue our efforts and depend on the support of our community to maintain the success of the FIMR Project. The Healthy Start Coalition of Miami-Dade is committed to the continuance of FIMR and recognizes the benefits it provides by dissecting the causes of fetal and infant deaths, identifying gaps in maternal and infant services and promoting future improvements.

Every fetal and infant loss is a loss for the entire community we serve.

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*We dedicate this report to all the women and families
that have suffered a fetal or infant loss and to the experts
who have toiled for years to address the issues related to these deaths.*



*Special thanks to the
Dade County Medical Association
for their ongoing support of the Fetal Infant
Mortality Review Project of Miami-Dade County.*

A publication of



The Fetal Infant Mortality Project of Miami-Dade is a collaborative effort with a goal to improve infant survival by understanding the occurrence of fetal/infant death in Miami-Dade County. Funding for the Fetal Infant Mortality Project of Miami-Dade is provided by the State of Florida Department of Health. The Florida Department of Health, the American College of Obstetricians and Gynecologists (ACOG) and the Federal Bureau of Maternal and Child Health provide guidance and support to our efforts.