MATERNAL-FETAL ATTACHMENT (MFA) IS A TERM USED TO DESCRIBE THE RELATIONSHIP BETWEEN A PREGNANT WOMAN AND HER FETUS. QUALITATIVE DESCRIPTIONS OF MATERNAL ATTITUDES AND ADAPTATION TO PREGNANCY INDICATE THAT MFA IS BASED ON COGNITIVE REPRESENTATIONS OF THE FETUS. THESE MAY INCLUDE IMAGINED SCENARIOS BETWEEN MOTHER AND CHILD, AS WELL AS THE MOTHER'S ATTRACTION OF PHYSICAL AND EMOTIONAL CHARACTERISTICS TO THE FETUS. MFA IS MANIFESTED IN BEHAVIORS THAT DEMONSTRATE CARE AND COMMITMENT TO THE FETUS AND INCLUDE NURTURANCE (EATING WELL, ABSTAINING FROM HARMFUL SUBSTANCES, SUCH AS ALCOHOL), COMFORTING (STROKING THE BELLY), AND PHYSICAL PREPARATION (BUYING BABY CLOTHES AND EQUIPMENT).

THE CONCEPT OF MFA IS RELATIVELY NEW AND HAS NOT BEEN WELL STUDIED OR DEFINED. INQUIRY INTO A WOMAN'S PSYCHOLOGICAL REACTION AND ADJUSTMENT DURING PREGNANCY BEGAN IN THE 1970s. PRIOR TO THAT TIME, THERE ARE FEW SCIENTIFIC DATA AVAILABLE ON WOMEN'S THOUGHTS OR FEELINGS ABOUT THEIR PREGNANCIES. HISTORICAL AND LITERARY ACCOUNTS OF WOMEN'S EXPERIENCES IN CHILDBIRTH PRIOR TO THE 20TH CENTURY REVEAL THAT WOMEN WERE PRIMARILY CONCERNED WITH ENDURING AND SURVIVING PREGNANCY. LETTERS WRITTEN BY WOMEN IN THE 19TH CENTURY SHOW EVIDENCE OF MATERNAL PROJECTIONS ABOUT THE EXPECTED CHILD AS WELL AS FEELINGS OF LOSS FROM A MISCARRIAGE OR INFANT DEATH. WRITINGS OF THEIR OWN PHYSICAL SUFFERING AND FEAR OF DEATH WERE MORE COMMON.

THE DECLINING MORTALITY RATE AND TECHNOLOGICAL DEVELOPMENTS IN WESTERN NATIONS OVER THE PAST 30 TO 40 YEARS HAVE CHANGED CONCEPTIONS ABOUT PREGNANCY AND THE FETUS. WOMEN CAN DETECT PREGNANCY EARLIER AND ARE ABLE TO VIEW HIGH-RESOLUTION IMAGES OF THEIR FETUS AT EARLIER DATES. THIS KNOWLEDGE MAY SERVE TO ALLOW WOMEN TO ADOPT OPTIMAL HEALTH PRACTICES EARLIER. THE IMPLICATIONS OF MFA FOR MATERNAL AND FETAL HEALTH ARE NOW STUDIED IN OTHER COUNTRIES AND ACROSS CULTURES OF DEVELOPED NATIONS, INCLUDING CHINA, GERMANY, SWEDEN, ISRAEL, AND JAPAN. MFA HAS NOT BEEN STUDIED IN DEVELOPING NATIONS IN WHICH THE MORTALITY RATE FOR WOMEN AND INFANTS REMAINS AT OR ABOVE 40%.

A BROAD SPECTRUM OF MFA HAS BEEN OBSERVED DURING PREGNANCY. THE FREQUENCY AND INTENSITY OF MFA BEHAVIORS INCREASE WITH ADVANCING GESTATIONAL AGE, PARTICULARLY AFTER QUICKENING AT APPROXIMATELY 18 TO 22 WEEKS OF GESTATION. THE RATE AND DEGREE OF MFA DEVELOPMENT APPEARS TO BE INFLUENCED BY GESTATIONAL AGE AT QUICKENING, AMOUNT OF FETAL MOVEMENT, PREGNANCY HISTORY, AND THE MOTHER'S OWN ATTACHMENT HISTORY.

THREE SCALES MEASURING PSYCHOMETRIC PROPERTIES HAVE BEEN DEVELOPED TO QUANTIFY MFA. WHILE ORIGINAL VERSIONS OF THE 3 SCALES MAY BE LIMITED IN THEIR SENSITIVITY TO CULTURAL EXPERIENCE, REVISIONS IN OTHER COUNTRIES SUGGEST THAT ADEQUATE ADAPTATION OF THESE SCALES MAY BE POSSIBLE.

MFA AS MEASURED BY THESE SCALES IS CONSISTENTLY RELATED TO PREGNANCY PLANNING, STRENGTH OF THE MARITAL RELATIONSHIP, GESTATIONAL AGE, AND MATERNAL DEPRESSED MOOD. THE VARIABLES OF MATERNAL AGE, PARITY, SELF-ESTEEM, AND SOCIOECONOMIC STATUS ARE INCONSISTENTLY RELATED TO MFA ACROSS STUDIES. SOCIAL SUPPORT OF FAMILY MEMBERS AND PEERS IS A SIGNIFICANT PREDICTOR OF MFA. PERCEIVED SUPPORT OF PRENATAL CARE PROVIDERS WAS CORRELATED WITH MFA AT 0.74, PROVIDING FURTHER EVIDENCE THAT PSYCHOSOCIAL SUPPORT IS A CRITICAL COMPONENT OF PRENATAL CARE.

MATERNAL MOOD STATE HAS ALSO BEEN CONSISTENTLY RELATED TO RATINGS OF MFA. IT HAS BEEN REPORTED THAT DEPRESSION DURING PREGNANCY IS RELATED TO POOR PRENATAL HEALTH DEMONSTRATED BY POOR WEIGHT GAIN, DRUG ABUSE, AND SMOKING. THE RELATIVE PAUCITY OF RESEARCH ON MFA IS LIMITED DUE TO METHODOLOGICAL PROBLEMS, INCLUDING INADEQUATE OPERATIONAL DEFINITION OF THE CONSTRUCT; SMALL, HOMOGENEOUS SAMPLES; AND LACK OF SENSITIVITY TO CULTURAL ISSUES. LITTLE IS KNOWN ABOUT THE PROCESS BY WHICH MFA DEVELOPS, INCLUDING PSYCHOLOGICAL AND PHYSIOLOGICAL MECHANISMS THAT COULD SHAPE THE DEVELOPMENT OF MFA. FUTURE STUDIES SHOULD FOCUS ON IMPROVED MEASUREMENT OF MFA IN LARGE, DIVERSE SAMPLES.

REFERENCES