Thomas W. Hilgers, MD

Thomas W. Hilgers, MD, Dip ABOG, ABLS, SRS, CNFPMC, CNFPE, is an alumnus of the University of Minnesota Medical School, and trained in obstetrics and gynecology at Mayo Medical School. He is past faculty member at St. Louis University School of Medicine, and is currently on the clinical faculty of Creighton University. He is the founder, director, and senior medical consultant of the Pope Paul VI Institute for the Study of Human Reproduction. He is the author of numerous articles and books, and has done extensive research in natural family planning, including the foundational research for the Creighton Model Ovulation Method.

Michael W. Sullivan, MD

Michael W. Sullivan, MD. is an Associate Medical Consultant, Obstetrics and Gynecology, Pope Paul VI Institute for the Study of Human Reproduction

Abstract:

NAPROTECHNOLOGY AND POSTPARTUM DEPRESSION: A CLINICAL ASSESSMENT OF THE THERAPEUTIC EFFECTS OF PROGESTERONE

Postpartum depression is a somewhat controversial condition. It has been suggested that seven to twelve percent of women following childbirth will have relevant depressive disorders by six weeks following delivery. Attention has been focused on the role of unwanted pregnancies, major marital difficulties, other situational aspects or long-standing problems as important etiological factors in this condition. However, not much attention has been placed on the role of hormonal changes and subsequent hormonal treatment.

Katarina Dalton, over many years of working with premenstrual syndrome, noticed that postpartum depression responds to progestrone treatment. In our work with the NaProTechnology™ applications of progestrone in premenstrual syndrome, there was a natural interest in using progesterone for the treatment of postpartum depression as well. This study is a report of 15 patients who experienced postpartum depression and who were treated subsequently with progesterone. These patients range in age from 27 to 41 with a mean of 32.4. They had a mean gravidity of 4.5 (with a range of 2 through 10) and parity of 3.3 (with a range of 1 through 6) and previous miscarriage of 1.4 (with a range of 0 to four). Eleven out of thirteen patients in which information was available had a previous history of premenstrual syndrome and eight out of twelve had a history of previous postpartum depression. Some of these occurred following miscarriage.

The most common symptoms observed in our patients with postpartum depression were depression, anxiety/panic disorder, uncontrollable crying, fatigue, insomnia, suicidal thoughts, poor appetite, night sweats, shaking and a "freezing" sensation along with some lesser symptoms of feeling wired, mind racing, hot flashes, strange thoughts, rapid heartbeat and nausea.

These patients were all treated with progesterone using different programs of treatment. This latter factor was due to the lack of knowledge of the exact doses to use and the routes of administration that might be best. Some were treated during pregnancy with progesterone along with being treated postpartum. Intramuscular, oral and/or vaginal progesterone were all used at various doses. From this, basic results could be observed and a program for improved management could be elicited.

In these 15 patients, there were 18 episodes that were treated. Fifteen of these (83.4%) had either excellent (n=12, 66.7%) or very good outcomes (n=3, 16.7%) and three had minimal improvement outcomes (16.7%). In each of the three cases of minimal improvement, the patients had had previous severe episodes of postpartum psychosis and/or the entry for the use of progesterone occurred several weeks after the beginning of symptoms prior to treatment. In other cases, where treatment was initiated early and aggressively, these symptoms were alleviated with excellent or very good results in all cases.

In studying these cases there are a number of treatment factors that have been identified. First of all, the use of progesterone for the treatment of postpartum depression and anxiety is dramatic when used early in the symptom complex. We had patients telling us that "This is a miracle," "Feeling great," "Feeling considerably better," "I cannot believe how good I feel within two hours of the progesterone injection." Secondly, there is a significant history of premenstrual syndrome and previous episodes of postpartum depression that occurred in our population with postpartum depression. If those can be identified in advance of pregnancy and treated appropriately, the anticipated difficulties with postpartum depression can be significantly reduced. Thirdly, if one has knowledge of premenstrual syndrome or postpartum depression in previous history following either a full term delivery or miscarriage then treatment during the pregnancy with progesterone can help considerably to decrease the recurrence of postpartum depression. Fourthly, the results with progesterone treatment are most dramatic with the use of intramuscular progesterone. The treating physician must be willing to titrate that dose against the occurrence of the patient's symptoms. On many occasions we have had patients tell us that the symptoms disappear within minutes or hours following the injection of progesterone. Oral progesterone and vaginal progesterone also have a role but only as supplements to intramuscular progesterone.
Abstract:

**CLINICAL TRIAL OF A RELIABLE, INEXPENSIVE OVULATION PREDICTION DEVICE**

Researchers interested in natural family planning from two US universities have been working for several years to develop a user-friendly instrument that would enable women to self-monitor their fertility reliably and objectively.

Such an instrument has now been developed and is in the clinical trial phase. It is based on measurements of water content of cervical mucus, which has been proven to be a reliable biomarker of women's fertility. Because water content of cervical mucus is one of the determinants of fertility, detecting changes in the percentage of water gives accurate and reliable information on fertility. This device can detect the changes in mucus hydration that happens up to four days before ovulation. This is enough to allow for the known viable life of human gametes.

The device is intended for self-use by women in their homes. It is very simple to use and the information is presented to the woman in a clear, easy to understand way.

The design incorporates characteristics of ruggedness and durability so the consumer version of the device can last for several years of frequent use in the home environment. It needs no maintenance other than cleaning, which can be done with water.

It is intended for wide distribution including users in developing countries. The technology used and the design are such that will allow the device to be sold for under $10 US. It operates on universally available batteries. It requires no supplies.

This paper will describe the results of clinical trials carried out at medical centers of the two universities where research is going on. These trials include application by trained health personnel as well as by women themselves in a variety of environments.

The paper will also describe the information obtained from women on functional and physical characteristics of a consumer version for the device.
Biosketch:

Rebecka Lundgren, MPH
Operations Research Manager, Institute for Reproductive Health, Georgetown University

Ms. Lundgren is responsible for the development and oversight of the Institute’s Operations Research agenda, including study design and implementation. She has over ten years of experience in the Mexico and Central America conducting operation research in family planning and reproductive health. Prior to joining the Institute, Ms. Lundgren worked for six years in Honduras providing training and technical assistance to organizations conducting operations research to improve and expand reproductive health services. Her professional experience has focused on the incorporation of family planning and breast-feeding services into community development programs, the use of combined qualitative and quantitative research methods to improve service delivery, and the design and evaluation of programs for special groups such as rural families, men, adolescents and indigenous groups.

Luis Amendola, MD, MPH
Save the Children Honduras

Abstract:

INCREASING ACCESS TO NATURAL FAMILY PLANNING SERVICES:
A COMPARISON OF SERVICE DELIVERY MODELS

Data from surveys in both developed and developing countries show that approximately 15% of couples worldwide who use any method of family planning state that they are using a natural method correctly. A very small percentage of these are actually using a natural method correctly. There also exists significant unmet need for family planning, which may partially be met by expanding the availability and accessibility of natural family planning methods to develop partnerships between organizations which provide only NFP and multi-method providers. In order to provide guidance in the development of such initiatives a study was conducted in Honduras of the experience of RENAFE-MOB a program of the Catholic Church, in main streaming NFP services with the Ministry of Health and Save the Children.

Information was collected and analyzed to permit comparisons between four service delivery models: 1) non-integrated NFP services provided by RENAFE volunteer instructors; 2) NFP services provided by paid RENAFE instructors in MOH centers; 3) NFP services provided by paid Auxiliary Nurses in Ministry of Health centers; and 4) NFP services provided by health volunteers affiliated with Save the Children. Information was collected through: 1) interviews with policy makers, program managers and service providers; and 2) time series analysis of available service statistics.

This paper will summarize the key findings regarding the relative effectiveness of the four models studied. The effectiveness indicators utilized include the number of instructors, informed individuals, learning users, and promotional activities. An analysis of the characteristics of high and low performing centers will also be presented to identify the determinants of program success.

Conclusions from this analysis of distinct experiences in the provision of the Billings method in Honduras will be discussed, including recommendations for successful collaboration between NFP-only and Public Sector organizations. Essential elements of the integration of NFP services identified include competency based training for instructors, and an information system which provides feedback on the quality of services to program managers. The ability of a program to reach both men and women, a particular challenge for the public sector, was also identified as critical to program success. Finally, a system, which provides effective support and follow-up at every level of the organization, emerged as an essential element of NFP services.
Abstract:

HISTOLOGY OF THE UTERINE CERVIX THROUGH THE MENSTRUAL CYCLE

Study design and methodology:

The cervix belonging to hysterectomy specimens obtained from non-malignant conditions are serially studied by common histological methods. The anterior lip is sectioned transversally, and the posterior one, longitudinally. Changes in endocervical gland shape, mucus content and characteristics, storm cellularity, vascularization, inflammatory infiltration, endocervical cells, subcylindrical cells, presence of squamous and tubal metaplasia, and others are specified in a semi-quantitative protocol. All these morphological data are correlated with the following clinical antecedents: age, fertility history, day of menstrual cycle, variations of mucus production, symptoms and previous medication.

Previous reports have focused on the possibility of dating the cycle searching variations in endocervical cell morphology. It has been established that endocervical glands utilize apocrine and merocrine methods of secretion. During follicular phase endocervical columnar cells are taller in response to estrogen stimulation, changing from 20 to 60 microns in height. At ovulation there is a burst of apocrine secretion with reduction in size of the cells to 40 microns. A second wave of growth in mid lute phase, not as great as the first one is observed in some areas of the endocervix, and finally a marked reduction of size until a new follicular phase begins again. Certain characteristics of luminal border and position of nuclei helps also in staging the different weeks of the menstrual cycle. The luminal border shows protrusions during days of merocrine secretion and the mucus just secreted can be noticed different from an older one. The nuclei are usually situated at the base of each cell, but immediately after the ovulation, they can be seen in the middle of the cell.

Present protocol allows a more detailed topographic analysis of all components of the cervical microanatomy and a better understanding of secretions’ events. Preliminary results of 3-4 cases obtained in each week of the menstrual cycle are planned to be presented at the annual Meeting of the AANFP.
Biosketch:

Andrew C. Pollard

Andrew C. Pollard is a graduate student of Sociology at the State University of New York at Buffalo. His paper, “Discourse of Fertility: Towards a Sociosemiotic Conceptualization of Natural Family Planning,” is a preparatory inquiry for his dissertation on the application of sociological theory to natural family planning. Andrew previously served as director of Campus Ministry and Instructor in the Religious Studies department of Villa Maria Academy in Buffalo, New York.

Abstract:

DISCOURSE OF FERTILITY: TOWARDS A SOCIOSEMIOTIC CONCEPTUALIZATION OF NATURAL FAMILY PLANNING

Sociological considerations of natural family planning to date have focused mainly on empirical demonstrations of marriage enrichment self-esteem, spiritual well-being and related effects of NFP on user couples (McCusker 1977; Tortorici 1979; Boys 1989; Fehring, Lawrence, Sauvage 1989; Borkman & Shivanandan 1984; Fehring & Lawrence 1994). However, little sociological analysis has been undertaken in an effort to situate these effects theoretically or to relate natural family planning to the broader context of contemporary sociological though, particularly in relation to the condition of postmodernity.

Adapting the methodology of “sociosemiotics” developed by M. Gottdiener, this paper analyzes natural family planning by describing the manner in which the biological “sign of fertility” articulates with a posited “discourse of fertility” to structure the relationship of NFP-using couples. All modern NFP teaching models are founded upon the biological “sign of fertility” and all teach couples how to recognize this sign. Furthermore, Pope John Paul II has made extensive use of a “language of the body” conceptualization in presenting Roman Catholic teaching on marriage and sexuality in which natural family planning figures prominently. The paper presents a theoretical structure for situating the relational effects attributed to the natural family planning in terms of the manner in which the “sign of fertility” acts as a material signifier of acceptance with the sexual relationship of the couple. When the “sign of fertility” is recognized and allowed to structure the couple’s “discourse of fertility,” as opposed to being suppressed through contraceptive intervention, fertility acceptance becomes a foundational “text” that generalizes beyond the sexual relationship, articulating with and conditioning other aspects of the couple’s relationship.

The paper concludes by discussing natural family planning as one way out of the fragmentation of sexual meaning characteristic of postmodern contraceptive society. Specifically, the theme of NFP-use as a “discourse of fertility” is extended to the notion of natural family planning as pedagogy that empowers couples to “read” the “text” of their own fertility and thereby disengage from the contraceptive system of signification. Possibilities for further theoretical extension of the sociosemiotic conceptualization of NFP are briefly discussed, as are potential future directions for empirical research in the sociology of natural family planning.
Science and Research Forum

Biosketch:

David Wachs MD

Medical Education – University of South Dakota School of Medicine 1977-1981
Family Practice Residency – University of North Dakota Bismarck North Dakota 1981-1984
Private Practice – Aberdeen Family Physicians, Aberdeen, South Dakota since 1985 Group practice of family medicine including obstetrical care.
Creighton Model of the Ovulation Method Medical Consultant 1993 to present
Personal Information-Married 22 years, wife Marilyn presently at home full time and also is a Creighton Model practitioner. 7 children ages 3 through 21

Abstract:

INSTITUTION OF THE CREIGHTON MODEL AS AN EDUCATIONAL TOOL IN THE DIOCESE OF EASTERN SOUTH DAKOTA

With the new millennium approaching, reproductive health care must be challenged to change. Artificial reproductive technologies have permeated medicine and society. Medicine has artificially separated procreation from the marital act of intercourse and has weakened its unitive role. Infertility clinics seek not to diagnose problems, but elect to specialize in artificial reproductive technologies. Millions of dollars are spent for contraception and ironically also for artificial creation of new life. The contraceptive mentality is destructive to the institution of marriage, undermines the God given gift of sexuality to marriages, and wounds the heart of physicians. The ill effects of this medical regimen are reflected in the increases of numbers of abortions, sterilizations, divorce rates, promiscuity, and infertility. We as physicians have an obligation to correct this multitude of wrong doings as we move into the next millennium.

The vocatio doctoris (vocation of the doctor) is not to suppress life, but care for it and favor it as much as possible. As physicians, our vocation is to be custodes et servi vitae (guardians and servants of life). We are called to witness this to our patients by being unconditionally pro-life in our medical practice including reproductive health care. The etymology of the words “doctor” and “physician” reveals that the vocatio doctoris requires us as physicians to teach and to heal. To be teachers and healers, Humanae Vitae, calls physicians to persevere in promotion of, and discovery of, moral solutions in reproductive science. We must strive to arouse in our associates the conviction of being pro-life. Physicians are called to give married couples wise and healthy direction in family planning. Teaching couples the concept of fertility appreciation will enhance their ability to live the true conjugal married life to the fullest. This response to our vocatio doctoris will counteract the destructive ways of the contraceptive mentality that has wounded the healing art of medicine and eats at the heart of married life in our society.

The Creighton Model of the Ovulation Method provides a standardized system of education. Prior to 1993 the Creighton Model was absent in eastern South Dakota. This paper reviews the past five year effort implementing the Creighton Model across the Eastern Diocese of South Dakota. Also presented are core statistics generated by the program. The institution of the education model has been a combined effort of individual practitioners (teachers) of Creighton Model, physicians familiar with the Creighton Model, the Avera Catholic Health Care system, and the Diocesan Office of Family Life. Current involvement includes four physicians, eleven practitioners located in seven different communities, four Catholic hospitals and the Family Life Office. Physicians challenged by their vocatio doctoris can help establish the creation of a reproductive health care environment that includes the proper instruction of fertility appreciation for married couples and guards the sanctity of life in reproductive medicine.
Biosketch:

Rose Fuller, M.T.S.


Co-authored Project Genesis, a kindergarten through eighth grade Catholic virtue and chastity family life series which includes twenty-two books: student and teacher text, a parent handbook, a student book covering the changes associated with puberty, and two family workshops (one on fertility appreciation and one on the practice of chastity). Published by Leaflet Missal, 1996.


George Sugai, Ph.D., and Tary Tobin, Ph.D.

Youth Solutions Evaluators, Departments of Education, University of Oregon

Abstract:

YOUTH SOLUTIONS DEMONSTRATION PROJECT

Unmarried teenage pregnancy rates remain at very high levels and the incidence of sexually transmitted diseases is at epidemic proportions among U.S. teenagers. Premarital abstinence is an effective strategy to eliminate these consequences. The Youth Solutions project is an abstinence-only prevention demonstration project investigating the efficacy of three different levels of intervention. A previous evaluation of the FACTS curriculum found its participants had a 45 percent lower transition rate into sexual activity than comparison school students.

Youth Solutions is an expansion of Northwest Family Services’ FACTS abstinence curriculum and includes: Level One: a new assembly program suitable for both middle and high school age students, Promises, which can be presented as a "stand alone" program, Level Two: Promises combined with the FACTS lessons, Level Three: Promises combined with the FACTS lessons and supplemented by media projects related to premarital abstinence led by high school age peers.

In the 1997-1998 school year, questionnaire data for 1,366 matched pre- and post-test students was collected from four groups including a control group (Level 4) and groups (Levels 1, 2, and 3) representing the three variations of the Youth Solutions project.

In addition to having the advantage of linked pre- and post-test data and a control group, the evaluation design also has the advantage of using measures that have been tested in previous evaluations of the FACTS. The dependent variables for adolescents include mediating variables that have been linked in previous research to sexual activity and subsequent pregnancy including attitudes related to (a) an understanding of potential for negative effects of early sexual activity on future goals, (b) acceptance of premarital abstinence for adolescents, (c) personal standards, (d) refusal and conflict resolution skills, and (d) awareness of social support - or the lack of support - for premarital abstinence among teens.

Although plans are underway for collecting follow-up data on behavioral measures in future evaluations, because the original call for proposals for the current project requested a one year design, the current evaluation does not include follow-up data.

The results of the Youth Solutions Survey for the 1997-1998 school year provides convincing evidence that:

All levels of FACTS are valuable for (a) improving an understanding of the potential for negative effects of early sexual activity on future goals and (b) increasing acceptance of premarital teen abstinence.

Both Levels 2 and 3 are effective in raising students' feelings that there is support for waiting until marriage.

For Level 3, personal standards related to rejecting permissive attitudes shows a statistically significant change in the desired direction.

Finally, the control group shows an increase in the belief that they are surrounded by people who think that premarital sexual activity is "okay" for adolescents, which was not the case for any of the FACTS groups and which indicates that not only has the FACTS program, at all levels, helped students to have more positive attitudes, it has also helped prevent the erosion of values that would be expected if nothing were done to prevent it.
Biosketch:

Joyce Kelly-Lewis, Ph.D., MSW, LCSW

Ph.D. -- The Heller School of Advanced Studies in Social Welfare, Brandeis University, Waltham, MA. Focus -- Youth and Family Policy. M.S.W. -- The University of Arkansas Graduate school of Social Work, Little Rock, AR. BS- The University of Arkansas

Present employment – Associate Professor, Social Work Department, Benedict College -- Columbia, SC.


Abstract:

THE USE OF TRIANGULATION METHODOLOGY TO STUDY PREGNANCY AMONG AFRICAN AMERICAN ADOLESCENT FEMALES

Data on adolescent pregnancy and childbearing indicate that over the last 36 years there have been over 36 million pregnancies and 18 million birth to females under 20. The teen birth rate reached a low of 50.2 in 1986; however, it rose to 62.1 in 1991 (Facts at a Glance, 1997). The majority of these pregnancies and births are unwanted and are to unmarried teens: 78-82 percent of pregnancies among teens are unwanted; 76 percent of births occur outside of marriage (The Guttmacher Report, 1998; Facts at a Glance, 1997; Facts in Brief, 1998). Nearly four in 10 teen pregnancies end in induced abortions (Facts in Brief, 1998).

Teen pregnancy and childbearing rates in the United States remain higher than those in other industrialized countries despite a steady decline in recent years. Forty-six states reported a drop in pregnancies and childbearing rates among adolescents between 1991 and 1994. Researchers attribute the decline to two key factors: fewer teens are having sex and more adolescents are using contraceptives (The Guttmacher Report, 1998).

Foster (1997), however suggests that the rates are not declining among the vulnerable population: young African American females residing in low-income female headed households. Other factors associated with teen pregnancy are early behavior problems, early school failure, and family dysfunction. There is a need to identify effective primary prevention strategies for this population because of the social and economic cost associated with teenage pregnancy and childbearing. Social scientists must identify and examine the complex and interrelated causes of the phenomena unique to African American adolescent females.

This article reports the strategies used to construct and field test an instrument to measure African American adolescent females perception of pregnancy risk. A triangulation methodology was used. The first phase of the study used qualitative methods to identify factors influencing the sexual and reproductive behaviors of 13 never pregnant and 13 pregnant/parenting adolescents. Analyzed data from in-depth interviews with participants were then used to construct a culturally sensitive instrument to measure adolescents' perception of factors that place them at-risk of unwanted pregnancies.

An initial field testing of the instrument was done with 20 adolescents and then revised using input from adolescents and professionals in adolescent health. After final revision, the instrument was field tested with 144 adolescents between the ages of 14-17.

The adolescent Perception of Pregnancy Risk Survey contain seven sub-scales that measure: sense of self, quality of mother/daughter relationship, neighborhood and school support, peer influence, family functioning, and sexuality practices. The instrument also contains questions from the CDC Youth risk Behavior survey. The reliability of the total instrument as well as each sub-scale was assessed using Cronbach's Alpha. Discrimination Analysis was used to determine if the two groups differed on the seven sub-scales. Findings from both the qualitative and quantitative study will be given. Recommendation for pregnancy prevention programs and future research are given.