LOUISIANA MONTHLY MORBIDITY .. LHSRSA

DISEASES REPORTED DURING THE MONTH OF JUNE, 1974 BY PARISH OF RESIDENCE

# MISCONCEPTIONS OF INFANT CARE AMONG A GROUP OF SCHOOL-AGE MOTHERS: A PRELIMINARY REPORT

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Teenage childbearing has been the subject of many special studies which have attempted to document the incidence and consequences of births to parents under 20 years of age. A Louisiana State Conference on Teenage Parenthood was held in New Orleans on March 29 and 30, 1973, and data presented then indicated that Louisiana resident mothers under the age of 20 gave birth to 16,562 infants in 1971. A specific goal of this conference was "to promote the

BUREAU OF VITAL STATISTICS DIVISION OF HEALTH MAINTENANCE AND AMBULATORY PATIENT SERVICES

| Prepared by: TABULATION AND ANALYSIS | ASEPTIC MENINGITIS | DIPHTHERIA | ENCEPHALITIS | ENCEPHALITIS, POST INFECTIOUS | HEPATITIS A AND UNSPECIFIED | HEPATITIS B | TUBERCULOSIS, PULMONARY | MENINGOCOCCAL INFECTIONS | PERTUSSIS | RABIES IN ANIMALS | RUBELLA * | SEVERE UNDERNUTRITION | SHIGELLOSIS | TYPHOID FEVER | OTHER SALMONELLOSIS | TETANUS | MEASLES | GONORRHEA | SYPHILIS, PRIMARY AND SECONDARY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL TO DATE 19 73 | 56 | 0 | 11 | 4 | 343 | 73 | 302 | 26 | 9 | 25 | 99 | 29 | 142 | 5 | 79 | 3 | 84 | 11051 | 423 |
| TOTAL TO DATE 19 74 | 57 | 0 | 12 | 1 | 302 | 111 | 281 | 27 | 7 | 17 | 62 | 17 | 59 | 3 | 73 | 1 | 12 | 12413 | 331 |
| TOTAL THIS MONTH | 27 | 0 | 2 | 1 | 55 | 16 | 53 | 6 | 2 | 8 | 4 | 0 | 8 | 1 | 18 | 0 | 1 | 1960 | 48 |
| ACADIA | | | | | | | 2 | 1 | | | | | | | | | | 5 | |
| ALLEN | | | | | | | 1 | | | | | | | | | | | 4 | |
| ASCENSION | | | | | | 1 | | | | | | | | | | | | 1 | |
| ASSUMPTION | 1 | | | | | | | | | | | | | | | | | 7 | |
| AVOYELLES | | | | | | | | 1 | | | | | | | | | | 6 | |
| BEAUREGARD | | | | | | | | | | | | | | | | | | 4 | |
| BIENVILLE | | | | | | | | | | | | | | | | | | 1 | |
| BOSSIER | | | | | | | | | | 1 | | | | | | | | 9 | |
| CADDO | | | | | 3 | | 2 | | | | | | | | | | | 195 | |
| CALCASIEU | | | | | | | 1 | | | | | | | | | | | 90 | |
| CALDWELL | | | | | | | 2 | | | | | | | | | | | | |
| CAMERON | | | | | | | | | | | | | | | | | | 2 | |
| CATAHOULA | | | | | | | | | | | | | | | | | | 2 | |
| CLAIBORNE | | | | | | | | | | | | | | | | | | | |
| CONCORDIA | | | | | 1 | | | | | | | | | | | | | 5 | |
| DESOTO | | | | | | | | | | 1 | | | | | | | | | |
| EAST BATON ROUGE | | | | | 7 | 2 | 2 | | | | | | | | 2 | | | 121 | 6 |
| EAST CARROLL | | | | | | | | | | | | | | | | | | 6 | |
| EAST FELICIANA | | | | | | | | | | | | | | | | | | 5 | 1 |
| EVANGELINE | | | | | | | | | | | | | | | | | | | |
| FRANKLIN | | | | | | | | | | | | | | | | | | 8 | 1 |
| GRANT | | | | | | | | | | | | | | | | | | 3 | |
| IBERIA | | | | | 5 | | | 1 | | | | | | | | | | 9 | 1 |
| IBERVILLE | | | | | | | 2 | | | | | | | | | | | 2 | |

* INCLUDES RUBELLA, CONGENITAL SYNDROME

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**Prepared by:**
**TABULATION AND ANALYSIS**

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JACKSON | | | | | | | | | | 3 | | | | | | | | 15 | |
| JEFFERSON | 3 | | 1 | | 1 | 1 | 4 | | | | | | 2 | | 5 | | | 97 | 3 |
| JEFFERSON DAVIS | | | | | | | | | | | | | | | | | | 3 | |
| LAFAYETTE | 2 | | | | 1 | | 3 | | | | | | | | | | | 37 | |
| LAFOURCHE | | | | | | | | | | | | | | | | | | 16 | |
| LASALLE | | | | | | | | | | | | | | | | | | | |
| LINCOLN | | | | | | | | | | 2 | | | | | | | | 54 | |
| LIVINGSTON | | | | | | | | | | | | | | | | | | 2 | 1 |
| MADISON | | | | | | | | | | | | | | | | | | 8 | |
| MOREHOUSE | | | | | | | | | | | | | | | | | | 12 | |
| NATCHITOCHES | | | | | | | 1 | | | | | | | | | | | 3 | |
| ORLEANS | 17 | | | | 11 | 7 | 16 | 2 | | | | | 4 | | 4 | | 1 | 733 | 23 |
| OUACHITA | | | | | 5 | | 2 | | | | | | | | | | | 71 | 6 |
| PLAQUEMINES | | | | | 1 | | | | | | | | | 1 | | | | 1 | |
| POINTE COUPEE | | | | | | | | | | | | | | | | | | | |
| RAPIDES | | | | | | | | | | | | | | | | | | 74 | |
| RED RIVER | | | | | | | | | | 1 | | | | | | | | 5 | |
| RICHLAND | | | | | | | | | | | | | | | | | | 18 | |
| SABINE | | | | | | | | | | | | | | | 1 | | | 2 | |
| ST. BERNARD | | | | 1 | | | 1 | | | | | | | | | | | 1 | |
| ST. CHARLES | 1 | | | | | | | | | | | | | | | | | 4 | |
| ST. HELENA | | | | | | | | | | | | | | | | | | 4 | |
| ST. JAMES | | | | | | | 2 | | | | | | | | | | | 4 | |
| ST. JOHN | | | | | | 1 | | | | | | | | | | | | 7 | 3 |
| ST. LANDRY | | | | | | | 6 | | | | | | | | | | | 14 | 1 |
| ST. MARTIN | | | | | 1 | | 1 | | | | | | | | | | | 13 | |
| ST. MARY | 2 | | 1 | | | | | | | | | | | | | | | 5 | |
| ST. TAMMANY | | | | | | | | | | | | | | | | | | 34 | |
| TANGIPAHOA | | | | | 16 | 2 | | | | | | | | | 4 | | | 45 | 2 |
| TENSAS | | | | | | | | | | | | | | | | | | | |
| TERREBONNE | 1 | | | | 1 | 1 | | 1 | | | | | | | | | | 19 | |
| UNION | | | | | | | | | | | | | | | | | | 17 | |
| VERMILION | | | | | | | 1 | | | | | | | | | | | 5 | |
| VERNON | | | | | | 1 | | | | | 4 | | 2 | | | | | 56 | |
| WASHINGTON | | | | | | | 3 | | | | | | | | | | | 29 | |
| WEBSTER | | | | | | | | | 2 | | | | | | | | | 20 | |
| WEST BATON ROUGE | | | | | | | | | | | | | | | | | | 15 | |
| WEST CARROLL | | | | | | | 1 | | | | | | | | 2 | | | 1 | |
| WEST FELICIANA | | | | | 2 | | | | | | | | | | | | | 28 | |
| WINN | | | | | | | | | | | | | | | | | | 2 | |
| OUT OF STATE | | | | | | | | | | | | | | | | | | 1 | |

From January 1 through June 30, 1974 the following cases were also reported:
3-Brucellosis; 2-Malaria (contracted outside the U. S. A.)

establishment and improvement of comprehensive services for school-age parents and their infants."[1]

Over 9 percent (6,714) of the 73,014 Louisiana resident live births in 1971 were to school-age mothers (herein defined as 17 and under). Data for 1972 show that the number of births to these young mothers increased to 7,159, or 10.5 percent of the total 68,340 resident live births recorded in the state that year. Thus, although total births decreased by 4,674 under the preceding year, births to school-age mothers increased by 445.

Many correlates such as poverty, low educational level, illegitimacy, and poor nutritional status impair the chances of optimal gestation, delivery, and early childhood for these babies born to very young mothers. A patent assessment of this constellation of factors is afforded by the higher incidence of low birth weight babies born to teenage mothers. A study of Table 1 reveals that in the United States during 1968, the immaturity* rate for babies with mothers under 20 was 107.4 per 1,000 live births, over 31 percent higher than the total rate, 81.8. Louisiana statistics for 1972 followed a similar pattern: the immaturity rate for babies born to resident mothers under 20 was 123.3 , over 23 percent higher than the state rate of 100.2; and the rate for infants with mothers 17 and under exceeded the total rate by almost 43 percent.

**Table 1**

**LIVE BIRTHS AND IMMATURE BIRTHS (2,500 GRAMS AND UNDER) BY AGE OF MOTHER**

| AGE OF MOTHER | UNITED STATES, 1968 | | | LOUISIANA, 1972 | | |
|---|---|---|---|---|---|---|
| | LIVE BIRTHS | IMMATURE BIRTHS | | LIVE BIRTHS | IMMATURE BIRTHS | |
| | | NUMBER | RATE* | | NUMBER | RATE* |
| ALL AGES | 3,501,564 | 286,528 | 81.8 | 68,340 | 6,848 | 100.2 |
| Under 15 | 9,504 | 1,720 | 181.0 | 407 | 64 | 157.2 |
| 15 - 19 | 591,312 | 62,792 | 106.2 | 16,516 | 2,023 | 122.5 |
| 20 - 24 | 1,306,872 | 100,372 | 76.8 | 24,861 | 2,295 | 92.3 |
| 25 - 29 | 903,890 | 64,074 | 70.9 | 16,095 | 1,346 | 83.6 |
| 30 - 34 | 419,696 | 32,740 | 78.0 | 6,852 | 666 | 97.2 |
| 35 - 39 | 206,062 | 18,820 | 91.3 | 2,816 | 339 | 120.4 |
| 40 and Over | 64,228 | 6,010 | 93.6 | 782 | 115 | 147.1 |
| Unknown | – | – | – – | 11 | – | – – |
| SELECTED GROUPS | | | | | | |
| 15 - 17 | | | | 6,752 | 959 | 142.0 |
| 18 - 19 | | | | 9,764 | 1,064 | 109.0 |
| "SCHOOL-AGE" (17 and Under) | | | | 7,159 | 1,023 | 142.9 |
| "TEEN-AGE" (Under 20) | 600,816 | 64,512 | 107.4 | 16,923 | 2,087 | 123.3 |

* Rates equal immature births per 1,000 live births.

* A live born infant weighing 5 lbs. 8 oz. (2,500 grams) or less at birth is classified as immature.

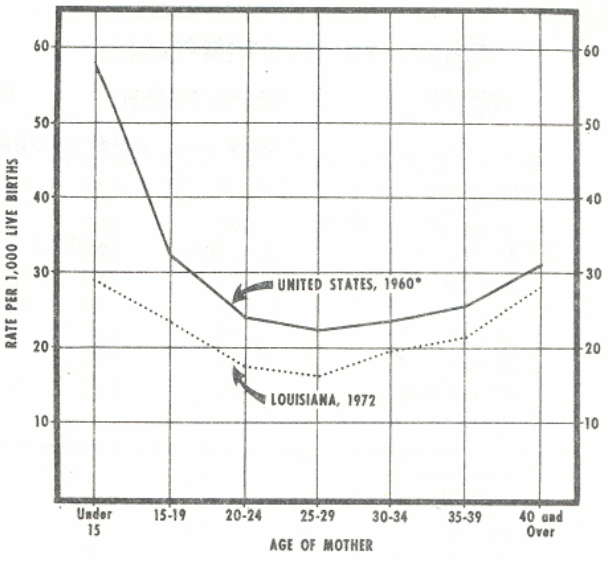
The risk of dying during their first year of life appears to be greater for babies with teenage mothers. This is at least partially attributable to the higher incidence of low birth weight among these infants, for as indicated in Infant Death: An Analysis of Maternal Risk and Health Care, "Infant mortality rates are related more closely to infant birth weight than to any other major maternal or infant characteristic."[2]

Dr. A.B. Dott has shown that a relationship also exists between prenatal care and infant death, and his studies have indicated that young teenage girls receive less prenatal care than older women. In addition, Dott showed that "there is a steady decline in infant mortality, both neonatal and postneonatal, with increasing education, regardless of racial differences."[3] Thus, since teenage mothers often have their education interrupted early and tend to receive fewer prenatal visits, their babies experience a poorer chance of survival.

Figure 1 graphically displays the increased risk of infant death for children born to teenage mothers. Only babies born to women 40 and over come close to experiencing as high an infant death rate.

**Figure 1**

**INFANT MORTALITY RATES BY AGE OF MOTHER UNITED STATES, 1960,* AND LOUISIANA, 1972**




* Latest year data available for United States infant deaths by age of mother.

Fetal death ratios are also demonstrably higher for mothers under 15 than for mothers

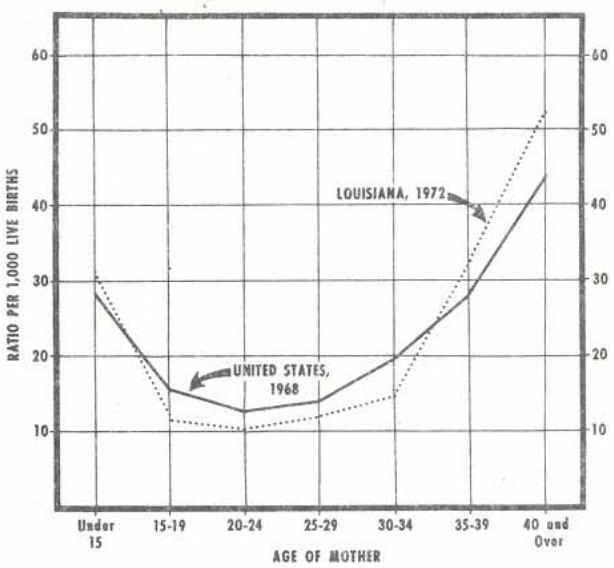
15 - 29 in both the United States and Louisiana (See Figure 2). It should be noted, however, that mothers 40 and over experienced the greatest risk of having their pregnancy terminate with a fetal death. Additional information available for Louisiana for 1972 showed that the fetal death ratio for school-age mothers (17 and under) was 14.9, in contrast to the total state rate of 13.0.

Table 2 summarizes the foregoing data for live births, infant deaths, and fetal deaths.

These data suggested a need to assess the level of understanding of infant care and general knowledge of health that young mothers possess. The author (a pediatrician) has met in informal teaching and discussion groups with girls attending Margaret Haughery School in Orleans Parish (a special public school for pregnant school-age women) and asked open-ended questions to get ideas of common beliefs held by the students. The average age is about 15 (range 10 to 19 years) and the average grade level is 9 (range 6th to 12th grade). The level of intelligence as measured by group tests is

Figure 2

**FETAL MORTALITY RATIOS BY AGE OF MOTHER UNITED STATES, 1968 AND LOUISIANA, 1972**




## Table 2

## INFANT DEATHS AND FETAL DEATHS BY AGE OF MOTHER

| AGE OF MOTHER | UNITED STATES | | | | LOUISIANA | | | |
|---|---|---|---|---|---|---|---|---|
| | 1960 | | 1968 | | 1972 | | | |
| | INFANT DEATHS | | FETAL DEATHS | | INFANT DEATHS | | FETAL DEATHS | |
| | NUMBER | RATE* | NUMBER | RATE* | NUMBER | RATE* | NUMBER | RATE* |
| ALL AGES | 107,038 | 25.1 | 55,293 | 15.8 | 1,453 | 21.3 | 891 | 13.0 |
| Under 15 | 398 | 58.7 | 273 | 28.7 | 12 | 29.5 | 13 | 31.9 |
| 15 - 19 | 19,240 | 32.8 | 8,865 | 15.0 | 402 | 24.3 | 193 | 11.7 |
| 20 - 24 | 34,472 | 24.2 | 16,476 | 12.6 | 435 | 17.5 | 257 | 10.3 |
| 25 - 29 | 24,443 | 22.4 | 12,610 | 14.0 | 262 | 16.3 | 187 | 11.6 |
| 30 - 34 | 16,275 | 23.7 | 8,296 | 19.8 | 135 | 19.7 | 99 | 14.4 |
| 35 - 39 | 9,194 | 25.5 | 5,945 | 28.9 | 60 | 21.3 | 91 | 32.3 |
| 40 and Over | 3,016 | 31.2 | 2,828 | 44.0 | 22 | 28.1 | 41 | 52.4 |
| Unknown | – | – – | – | – – | 125 | – – | 10 | – – |
| SELECTED GROUPS | | | | | | | | |
| 15 - 17 | | | | | 177 | 26.2 | 94 | 13.9 |
| 18 - 19 | | | | | 225 | 23.0 | 99 | 10.1 |
| "SCHOOL-AGE" (17 and Under) | | | | | 189 | 26.4 | 107 | 14.9 |
| "TEEN-AGE" (Under 20) | 19,638 | 33.1 | 9,138 | 15.2 | 414 | 24.5 | 206 | 12.2 |

* Rates equal infant deaths or fetal deaths per 1,000 live births

equal to that of the girls attending Orleans Parish Public Schools. Most girls attend Haughery from their third month of pregnancy through the second postpartal month when transfer is made back to their original school. Emphasis is placed on achievement in a basic academic curriculum, obtaining regular prenatal health supervision, and counseling by a social worker and a school counselor for problems relating to adjustment to the pregnancy. School schedules allow for four classes a day, and hot meals (breakfast and lunch) are served each girl. Informal discussions about pregnancy and delivery are organized by student nurses from LSU School of Nursing, but no regular classes in child care are available to the students at Haughery.

On the basis of the author's discussions with pregnant girls and with Mrs. Eileen Cowart, school principal, thirty multiple choice questions were devised. One response is correct while the other choices are drawn from students' comments and frequently represent extremely erroneous, although commonly held, notions. An example is question number 15, relating to birth marks (see questionnaire). Most of the questions deal with infant care in the first year of life and stress growth and development, nutrition, well child care, illnesses, and safety. The 1973 edition of Health Education, and Welfare's booklet,[4] "Infant Care", was consulted and none of the correct answers is in variance with the booklet. Vocabulary of the questions was made as basic as possible. Preliminary testing indicated a marked improvement in scores occurred if the test was read aloud to the students so that the test could assess information, not reading ability. Thereafter the test was read aloud either by the author or by a teacher.

Two groups of 9th graders were selected on the basis of their desire to attend discussion groups in child care. Fifteen students attending morning classes became the control group, and the tests were administered to them initially and again after six weeks. This group had no contact with the author. An afternoon group, similar in age and also attending 9th grade classes, was selected and had the preliminary test and final test both read by the author. In the interval of six weeks, four classes lasting about 50 minutes each were held in which questions were asked and group participation was encouraged focusing on the four main topics contained in the questionnaire. At no time were the specific questions read or was "coaching" done to raise the scores artificially. A few teaching aids such as cans of infant formulas and prepared baby foods, cardboard demonstration of a thermometer, and a brief baby care hand out prepared by a manufacturer of baby products were used. Open discussion was encouraged and frequently the students used observations of their own infants or young relatives as examples. The eleven students in this experimental group attended an average of 2.6 sessions (range 0 to 4, median 3).

Tables 3 and 4 summarize the test results for the experimental and control groups, respectively.

**Table 3**

**SCORES ACHIEVED BY STUDENTS ATTENDING CHILD CARE DISCUSSIONS WITH A PEDIATRICIAN**

| STUDENT | AGE | SESSIONS ATTENDED | SCORES | | CHANGES |
|---|---|---|---|---|---|
| | | | 1 st | 2 nd | |
| 1 | 15 | 3 | 16 | 24 | + 8 |
| 2 | 15 | 3 | 13 | 19 | + 6 |
| 3 | 17 | 4 | 19 | 23 | + 4 |
| 4 | 16 | 4 | 11 | 17 | + 6 |
| 5 | 16 | 3 | 14 | 15 | + 1 |
| 6 | 14 | 1 | 15 | 19 | + 4 |
| 7 | 16 | 3 | 11 | 15 | + 4 |
| 8 | 16 | 3 | 10 | 12 | + 2 |
| 9 | 16 | 3 | 14 | 15 | + 1 |
| 10 | 17 | 0 | 19 | 21 | + 2 |
| 11 | 16 | 1 | 14 | 19 | + 5 |
| AVERAGE | 15.8 | 2.6 | 14.2 | 18.1 | +3.9 |

**Table 4**

**SCORES ACHIEVED BY STUDENTS NOT ATTENDING CHILD CARE DISCUSSIONS WITH A PEDIATRICIAN**

| STUDENT | AGE | SCORES | | CHANGES |
|---|---|---|---|---|
| | | 1 st | 2 nd | |
| A | 17 | 8 | 14 | + 6 |
| B | 16 | 10 | 6 | − 4 |
| C | 17 | 12 | 10 | − 2 |
| D | 17 | 17 | 19 | + 2 |
| E | 14 | 13 | 15 | + 2 |
| F | 15 | 13 | 15 | + 2 |
| G | 16 | 13 | 10 | − 3 |
| H | 16 | 10 | 12 | + 2 |
| I | 16 | 18 | 17 | − 1 |
| J | 17 | 11 | 18 | + 7 |
| K | 15 | 14 | 15 | + 1 |
| L | 16 | 8 | 15 | + 7 |
| M | 15 | 17 | 18 | + 1 |
| N | 17 | 21 | 22 | + 1 |
| O | 16 | 11 | 10 | − 1 |
| AVERAGE | 16.0 | 13.1 | 14.4 | +1.3 |

The groups are too small to extract conclusive data; but in both groups fewer than half the questions were answered correctly initially, and the increment was larger in the experimental group (+ 3.9) than in the control group (+ 1.3). Also, 5 of the 15 controls decreased in their second score from – 1 to – 4, while none of the experimental group declined or failed to improve.

One question (See No. 21) relates to reproductive physiology. Despite attendance at prenatal clinics and some instruction by student nurses, a majority of both groups did not choose the right answer on the first or second test. Erroneous answers to this question were given by 19 of the 26 students on the first test. Presumably this represents a very significant lack of information.

For comparison the questionnaire was given to 29 low-income mothers attending child health conferences in three locations sponsored by the New Orleans Department of Health. The test was read aloud, names were not required, and assurance was made that this would not become part of the child's health record. The average score was 17.6 with a range of 3 to 28. Altogether 59% of these mothers missed question No. 21, even though most were attending family planning clinics.

Four of these 29 mothers thought that during their pregnancy the baby grows as a result of the mother having regular sexual intercourse! (Question No. 3)

Women attending a meeting of the LaLeche League (an organization which promotes breast feeding) also participated voluntarily, and the average of the 27 members (mothers and expectant mothers) was 27.7 (range 22 to 30). Five women scored a perfect 30 and only 3 of the 27 missed question No. 21.

Fifteen mothers of young children in a private pediatrician's practice averaged 27.6 with a range of 25 to 29. Only one missed question No. 21.

Scores from a group of L.S.U. pediatric residents and staff averaged 28.6 and ranged from 26 to 30.

*Inferences*

These data suggest that many school-age mothers and expectant mothers have a low level of accurate information on health and child care, and could answer fewer than half of the 30 questions correctly. Mothers in low socio-economic levels attending child health conferences scored only slightly better. By contrast, a more advantaged group of mothers with a demonstrated interest in child care (LaLeche League) and mothers able to afford private pediatric care scored very high on this test (almost 28 out of 30 correct), indicating a good level of information available.

For the persons in demonstrated high risk categories, health, and child care education would seem to be an urgent priority. Presently there is considerable interest in revising Louisiana laws which generally prevent teaching family life or any type of sex education in the schools of Louisiana. While the ideal is to have these matters taught within the family, with religious and ethical values entering in, it is apparent that this ideal is not being achieved for many youngsters who are receiving much erroneous, silly or even hazardous information regarding their own health or that of their young children.

Further studies are being planned at Haughery to devise methods of teaching mothers-to-be.

At present it is not possible to determine the level of knowledge in health and child care in the Louisiana school-age population. Based on these data presented and the author's experience in working regularly in several child health clinics in Orleans parish for several years, it is the author's opinion that a great lack of understanding of basic health concepts exists, particularly for those in low socio-economic circumstances. The author feels that that an on-going health, family life, and sex education program would be advantageous for both boys and girls throughout their school years. The course content should be adapted to the varying needs of their developmental age levels and taught in a wholesome manner. Several groups of physicians are in accord with this concept including the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists. The Louisiana State Medical Society's Committee on Public Health has urged that there be "cooperative programs to deal with teenage pregnant girls, illegitimacy, and to urgently seek real cooperation between the school systems, health departments, hospitals, social services, ministerial counseling, vocational counseling."[5] It is the author's hope that this can soon be achieved.

The questionnaire referred to in this article is reproduced below, with the correct answer to each question shown in italics. An asterisk

before the question number indicates that an incorrect answer was chosen by at least half of the 26 students at Haughery School the first time the test was administered to them. The number of those students who chose each response is indicated in the blank preceding that choice. As some questions were not answered by every student, the sum of the responses does not equal 26 for every item on the test.

CHOOSE THE ONE BEST ANSWER.

1. A 2 month old baby should be fed by:
   - 0 (a) propping the bottle on a pillow.
   - 6 (b) feeding four jars of baby food by spoon each day.
   - 4 (c) giving two bottles of juices and two bottles of formula a day.
   - 15 (d) *breast feeding or holding the baby for formula from the bottle.*

2. A baby three months old usually sees:
   - 2 (a) very poorly and should be kept in a dark room most of the time.
   - 18 (b) *well enough to follow someone walking by.*
   - 3 (c) bright colors but these frighten the child and are dangerous.
   - 2 (d) well enough to recognize someone across the street.

3. During pregnancy a baby grows by:
   - 21 (a) *receiving digested food carried in the mother's blood.*
   - 3 (b) having the mother have regular sexual intercourse.
   - 2 (c) taking some of the organs from the mother's body.
   - 0 (d) using the blood of the monthly periods.

* 4. The most common cause of death in a normal 1 year old is:
   - 3 (a) sickle cell disease.
   - 8 (b) *accidents.*
   - 9 (c) pneumonia
   - 6 (d) lead poisoning.

* 5. DTP shots protect a baby from:
   - 4 (a) colds, trenchmouth, and polio.
   - 13 (b) diarrhea, tetanus, and pertussis.
   - 5 (c) *diphtheria, lockjaw, and whooping cough.*
   - 4 (d) diaper rash, tuberculosis, and pneumonia.

* 6. Babies usually need immunizations (shots) only when:
   - 5 (a) they have been exposed to diseases.
   - 6 (b) they are sickly or premature.
   - 11 (c) *they are 6 weeks or older.*
   - 3 (d) their mothers are not healthy.

7. Ordinary homogenized milk from the carton is not as good as a baby's formula for a one month old because:
   - 0 (a) it frequently carries tuberculosis germs.
   - 0 (b) it has too much fat.
   - 22 (c) *it is not as easily digested and doesn't have as many vitamins and minerals.*
   - 4 (d) it gets sour or spoiled faster.

8. A baby six months old should sleep:
   - 4 (a) in bed with the mother.
   - 6 (b) on the parent's bed so there is plenty of room to move around.
   - 15 (c) *in a crib or play pen.*
   - 1 (d) on a sofa so he or she can be always with the family.

* 9. A baby with colic cries and acts as if the stomach is hurting. The mother should:
   - 0 (a) ignore this so the baby won't get spoiled.
   - 5 (b) give the baby some castoria.
   - 12 (c) give the baby some paregoric.
   - 8 (d) *try holding the baby or changing the position.*

*10. A three month old baby's head:
   - 8 (a) is very delicate so the soft spot should never be washed.
   - 7 (b) *can be held up by the baby when lying on the stomach.*
   - 10 (c) should always be protected by wearing a cap.
   - 1 (d) has hair just like it will be when the person is grown up.

11. Most babies are ready for bladder (urine) training when they are:
   - 9 (a) less than 1 year of age.
   - 15 (b) *2 years of age.*
   - 2 (c) older than three years.
   - 0 (d) older than four years.

*12. To teach a one year old how to behave the mother should:

5 (a) spank the child frequently when the child does something bad.

12 (b) explain completely what she wants the child to do.

5 (c) *reward the child with a smile, a hug, or petting whenever the child does something she likes him or her to do.*

4 (d) compare the child to another child the same age and point out the mistakes.

*13. A baby one week old should be bathed:

3 (a) at least twice a day.

7 (b) using a special soap that kills germs.

9 (c) *by using a wash cloth or cotton balls dipped in warm water.*

7 (d) carefully and should have the eyes, ears, and nose cleaned out with cotton tipped sticks.

*14. By the time a child is seven months old:

12 (a) she or he should be spending all the waking time in a crib where the child is safe.

7 (b) *he or she will usually be awake several hours a day and want to play with toys he or she can handle.*

3 (c) toilet training should be started.

3 (d) thumb sucking should be prevented.

*15. Small, flat, red or purple birth marks on the baby's eyelids or neck usually are:

16 (a) signs that the mother ate too much of certain kinds of food while she was pregnant.

8 (b) *not serious and tend to go away as the child gets older.*

1 (c) signs that the baby was damaged during birth.

0 (d) dangerous and often start bleeding for no reason.

*16. Baby food in jars:

8 (a) should be started before the child is one month old.

2 (b) is much cheaper than using mashed table food for a nine month old child.

9 (c) *should be given for the first time only as single foods (not in mixtures or desserts).*

6 (d) can be fed to the baby right out of the jar using a small spoon and the jar can be kept for four days.

*17. Baby's diapers:

7 (a) should be laundered and given a final rinse in chlorine bleach to keep them white.

5 (b) *should be kept off the baby if redness and diaper rash develop.*

12 (c) should always be covered with plastic pants.

2 (d) can be air dried and used again without washing.

18. When in a car a one year old baby should:

3 (a) be held securely in the mother's arms.

0 (b) lie flat on the car seat.

22 (c) *be strapped into a baby carrier that is fastened with seat belts.*

0 (d) be able to sit in the driver's lap to see out of the car.

*19. When a baby's teeth start coming in, the mother should:

17 (a) get a good teething lotion for his sore gums.

5 (b) *let the child chew or suck on something cold.*

4 (c) expect high fever above 102°.

0 (d) know that he is ready to chew popcorn and peanuts.

20. If a baby has a fit (convulsion):

23 (a) *the baby should be brought to a doctor.*

0 (b) the face should be slapped to bring the child out of the fit.

0 (c) the baby should always wear a special string around the neck afterwards.

2 (d) some warm milk should be put in the mouth.

*21. Pregnancy is most likely to occur if sexual intercourse is:

2 (a) *about two weeks after the monthly period.*

4 (b) about two days before the monthly period.

2 (c) during the monthly period.
18 (d) any time.

*22. The navel on a 3 month old baby sticks out when the baby cries. This usually means:
5 (a) it is serious and an operation will be necessary.
3 (b) *it is not serious and will usually go away.*
18 (c) that a Kennedy half-dollar should be taped in to make it go down.
0 (d) the baby should lie on the back so the navel won't stick out so far.

*23. If a baby has had three separate colds by the age of one year.
10 (a) the baby is definitely sickly and needs to be in the hospital.
11 (b) *the number is an entirely normal one for colds at this age.*
5 (c) the baby really needs to be on cod liver oil to prevent colds.
0 (d) the mother should give the baby some penicillin that was prescribed for another child the same age.

24. When a 2 month old baby has a runny nose, the mother should:
2 (a) breathe for him by putting her mouth over the baby's nose and mouth and blow in air.
23 (b) *use a nasal syringe ("nose pump") before feedings.*
0 (c) use antibiotic medicine the mother gets from a neighbor.
0 (d) blow cigarette smoke into the baby's nose to clear out the drainage.

*25. A baby one year old who seems happy but has a fever of 101° rectally for 1 day:
5 (a) *should be kept cool and comfortable.*
14 (b) should be taken to the doctor immediately.
4 (c) should have 2 teaspoons of castoria to clean the child out.
2 (d) should be rushed to the hospital by ambulance.

26. When a 12 month old baby tries to pull open a drawer in a chest the mother should:
0 (a) spank him.
6 (b) slap his hands.
15 (c) *try to get him interested in some safe toy.*
4 (d) keep him in a crib all the time so he won't get into things.

27. When mosquito bites bevelop into large pus sores, the child:
6 (a) should have iodine put on the sores three times a day.
18 (b) *should be taken to a doctor to get penicillin.*
1 (c) needs to have a wet diaper wiped over the sores.
0 (d) probably has very weak skin and needs to be exposed to more mosquito bites.

28. By the time of the first birthday a child probably should:
20 (a) *eat mashed table foods and take some of the milk in a cup.*
0 (b) take two quarts of milk a day.
0 (c) be getting all of his food mixed with milk in the bottle.
4 (d) be able to eat all the same things a grown up person can including popcorn and peanuts.

*29. Healthy babies:
1 (a) all grow at the same rate and should walk and talk at the same time.
11 (b) should all be walking alone by age 12 months.
4 (c) *may vary greatly in their development.*
8 (d) can learn to walk alone at age 6 months if they are trained properly.

*30. Baby teeth:
5 (a) are not important and can get decayed without causing any problems.
10 (b) *may stay in the child's mouth for up to twelve years.*
6 (c) never need brushing or cleaning.
3 (d) usually number 20 by the time the child is six months old.

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The author would be pleased to hear comments, questions, or criticisms from any of the readers. Please address Betty Oseid, M.D., Department of Pediatrics, Louisiana State

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