PURPOSE: The purpose of these three studies was to assess:
1. the prevalence of urinary/anal incontinence and pelvic floor dysfunction
2. the impact of urinary incontinence on the quality of life in mothers of multiples
3. the protective effect of cesarean deliveries

METHOD: A questionnaire handed out at the 2001 NOMOTC convention and at the 2001 state conventions in Illinois, South Carolina, and North Carolina. Women who attended one of these conventions and who had a history of multiple birth pregnancy were asked to fill out this questionnaire.

BACKGROUND INFORMATION

Dr. Goldberg and his associates recruited mothers of multiples to participate in a 77-item questionnaire regarding incontinence and pelvic floor dysfunction. 733 out of 769 women completed the questionnaire, which provided the researchers with an extraordinary response rate of 95.3%. The questionnaire resulted in three different studies. The titles will be listed at the end of this report.

Incontinence is defined as the inability to restrain a natural discharge, like urine or feces. The impact of multiple birth pregnancy and childbirth on the risk of urinary incontinence has not been previously investigated.

According to Dr. Goldberg, incontinence is NOT a part of aging.

Who were the mothers of multiples that filled out this questionnaire?

94% - Caucasian  2.3% - African  1% - Hispanic  0.6% - Asian
Average age – 37  Average weight – 160 lb.  Average number of children – 3
76.3% had 2 – 3 children  23.6% had 4 or more children
Average time since delivery of multiples – 7 yr.
54% of women said multiple birth was the first childbirth
45% reported one or more singleton births preceding the multiple birth
93.4% delivered twins  5.3% had triplets  0.04% had quadruplets
Of those responding, 57% had cesarean and 41% had vaginal delivery
401 women had at least one vaginal birth and 332 had delivered only by cesarean
RESULTS

A. Prevalence of urinary incontinence and pelvic floor problems among mothers of multiples
   1. Three pelvic floor problems in this study
      a. Urinary incontinence – two types are:
         1. urinary incontinence – going to bathroom several times at night; overactive bladder
         2. stress incontinence – leakage with coughing, sneezing, and/or laughing

         Nearly one half (49.8%) of respondents reported at least one type of urinary incontinence.
         Stress incontinence affected 45.5%
         Urge incontinence affected 27.3%
         Mixed incontinence (urge & stress) affected 22.9%

      b. Anal incontinence – defined as:
         1. leakage of stool (liquid, solid, or both)
         2. flatal leakage (intestinal gas)
         3. Urgency of stool (“I’ve got to go now”)

         Anal incontinence affected 27.7% of respondents to some degree
         Number of years of onset – 12 years after delivery
         High risks for developing anal incontinence in mothers of multiples include number of children, age, and one or more vaginal deliveries.

      c. Prolapse – defined as a lack of support and/or weakness of the muscles that support the bladder, uterus and rectum
         1. 20.4% or 1 in 5 mothers of multiples reported vaginal bulging or vaginal pressure (symptoms of prolapse)
         2. 11% of mothers of multiples risk prolapse over their lifetime

B. Impact on urinary incontinence on the quality of life among mothers of multiples
   1. Among mothers of multiples, both urge and stress incontinence was widely prevalent and had a strong and consistently negative impact on the quality of life especially noted at a relatively young age (median age 37 yr.)
   2. Incontinence symptoms were reported to have begun during pregnancy in 41% of mothers of multiples. After delivery symptoms began in 45.4% of mothers of multiples.
   3. The cost of urinary incontinence is approximately $3600/year for about 65 yr.
   4. It was reported if a mother of multiples had urinary leakage 3 months after delivery (3 months was felt enough time for the muscles to get back in shape), it was felt that 92% of those women would continue to have leakage problems for at least 5 years. And these women could possibly have leakage problems for a lifetime.
   5. These findings reinforce the need to identify and inform pregnant mothers of multiples the risk factors, and develop effective strategies for prevention.
C. Protective effect of cesarean deliveries
   1. Dr. Goldberg stated with multiple birth pregnancy, your pelvis is under extraordinary pressure. These pressures include:
      a. babies being larger in weight and body/head size at birth
      b. difficult labors causing bladder compression and pushing the rectum to the tailbone
      c. 15 – 20 years ago, most multiple birth pregnancies were automatically delivered by cesarean section. But now, with improvements in medicine, a large percentage of women are having vaginal birth delivery with multiples.
   2. Study findings show:
      a. Strong and consistent associations between stress incontinence and previous vaginal delivery
      b. Cesarean delivery reduced the risk of urinary incontinence by 52%. In other words, cesarean delivery prevented injury to the pelvic floor.
      c. Delivering “only by cesarean” was associated with the strongest protection against subsequent urinary stress incontinent symptoms
      d. 50% risk reduction (for urinary incontinence) was noted among women delivering by cesarean only
      e. These findings highlight the need for doctors and women to consider the impact of obstetrical choices (cesarean vs. vaginal delivery) on preventing pelvic floor problems
      f. A poll of British female doctors, 1 out of 3 would elect to have a cesarean for their own pregnancy
      g. More research is needed in this area

CONCLUSION

The highly reliable and valid findings of Dr. Goldberg, et. al. reinforces the need to identify risk factors of incontinence and other pelvic floor problems among mothers of multiples. And to develop effective strategies for prevention. Also to consider the impact of obstetrical choices (cesarean vs. vaginal, avoiding use of forceps or vacuum delivery, avoiding episiotomies as they do not prevent pelvic floor problems, and positioning for labor i.e. squatting vs. standing vs. lying down) on post-reproductive pelvic floor problems especially in mothers of multiples.

Based on these findings, pelvic floor outcomes should be considered when evaluating multiple birth pregnancies from a medical, economic, and public health standpoint.

Pelvic floor problems are remarkably common in mothers of multiples even at a young age (average - 37 years old). Among mothers of multiples both urge and stress incontinence was widely prevalent and has a strong and consistently negative impact on their quality of life. Just about half of the mothers of multiples reported urinary incontinence and half reported anal incontinence to some degree. Although these are benign conditions, prevention is possible. These problems are not a part of aging.

If you consider leakage a problem, then seek medical help. Dr. Goldberg highly recommends further research.
Research titles
1. Prevalence of Urinary Incontinence, Anal Incontinence, and Pelvic Floor Dysfunction Among “Mothers of Multiples”
2. Impact of Urinary Incontinence on Quality of Life, Among Women with Previous Multiple Childbirth
3. Urinary Incontinence Among “Mothers of Multiples”: The Protective Effect of Cesarean Delivery, and Assessment of Obstetrical Risk Factors

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