Prenatal Care Utilization: Differences Between Rural and Urban Adolescents

by Tabitha Hanson, M.S., M.P.H., RN

Rural teens are a unique population. Where a teen lives is very important in determining many of the circumstances related to the health of the adolescent. For pregnant rural teens in particular, challenges to health care access include reduced availability of health services, fewer primary health care providers, greater travel distances, lack of public transportation, and fewer hospital services. My personal experience as a rural teen and my current interest in maternal/child health of rural populations led to my choice of this topic for my Plan B paper.

Previous research in the area of rural teen pregnancy is limited. However, researchers have identified adolescents and rural residents as two specific subgroups in the general population who are less likely to receive adequate prenatal care.

For this study, secondary data from the National Center for Health Statistics vital record file (live birth certificates) were utilized. The purpose of this study was to examine all live births to adolescents 10-17 years of age in 1991 (N=197,726) in order to determine rural and urban variations in patterns and predictors of

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Sexual Orientation Among Native American Adolescents

by Elizabeth M. Carlson

There are American Indian tribes with historical or current traditions of positive non-heterosexual, alternate-gender identities in every Indian Health Service Area in the United States. Examples include the Aleut shopan, the Arapaho a-whok, the Cheyenne hemaneh, the Navaho nadle, the Sac & Fox i coo coo a, the Lakota winkte, and the Ojibwe a go kwa.1 Many tribes have spiritual legends of gods or heroes who exhibited "two spirit" traits.2 Some famous American Indian healers, shamans, and tribal leaders have been identified with alternate gender or sexual roles; one of the most famous was the Zuni We'wha, who travelled to Washington D.C. to negotiate treaties on behalf of the Zuni people during the late 1800's and who is pictured in the Smithsonian.3

Such tribal members were considered sacred, creative, lucky, or especially skilled mediators between men and women. While many traditions have been lost due to U.S. government and Christian missionary interventions, some tribes continue to teach tribal legends and have members currently identified in these roles. Other Native Americans self-identify as Two Spirit and are active in GAI, the Gay American Indian organization founded in San Francisco in 1975.

Does this heritage affect the way American Indian teens today conceptualize their sexual identities and sexual behaviors? While recent studies have explored patterns of sexual

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WELCOME

Welcome to the following student, who started Winter Quarter:

Mary Mach Long B.S.N., RNC, received her baccalaureate degree from the College of St. Benedict in 1990. She has worked since then as a medical intensive care nurse at St. Mary's Hospital/Mayo Foundation, in Rochester, Minnesota. She spent a quarter in 1992 taking graduate nursing coursework at Winona State University and since Fall Quarter has been enrolled in the Graduate School here at the University of Minnesota in public health nursing.

Welcome also to Melanie Murdoff, student secretary, who will be the GSAN program secretary half time during Mary Beth's maternity leave. Mel is a first year student in the College of Liberal Arts with several years of secretarial experience; she plans to major in business or accounting.

ACTIVITIES OF FACULTY & STAFF
Linda Bearinger, Ph.D., M.S.: In February, served as a Visiting Mentor at the Child & Adolescent Health Research Center, School of Nursing, University of Michigan at Ann Arbor. The center is funded in part by the National Institute of Nursing Research. As part of her visit, Bearinger lectured on the development of interdisciplinary and multicultural interventions research and on designing successful programs for vulnerable populations of young people.

Bearinger's abstract, "Dimensions of Protective Factors Among American Indian Youth," was presented at the Society for Research on Adolescence (SRA) annual meeting in March 1996.

In March, Bearinger was also appointed to the Research Committee of the University of Minnesota School of Nursing.

Elizabeth Carlson: Carlson's paper, co-authored with Bearinger and other University of Minnesota colleagues, "Demographics of Sexual Orientation Among Native American Adolescents," has been accepted for presentation at the National Conference on Undergraduate Research in Asheville, NC in April. A shorter version of the paper was presented in February at the Undergraduate Research Fair at the University of Minnesota.

Carlson was awarded $1050 for her third funded Undergraduate Research Opportunities Project, "Sexual Orientation as a Risk Factor for Teen Pregnancy among Native American Adolescents," which began in January. The study is a secondary data analysis utilizing a national sample of reservation-based American Indian adolescents.

Carlson was also nominated for membership in the Zeta Chapter of Sigma Theta Tau, the Nursing Honor Society.

Tabitha Hanson, M.S., M.P.H., RN: Completed her research study, "Differences in Patterns and Predictors of Prenatal Care Utilization Between Metropolitan and Nonmetropolitan Adolescents," as part of her degree requirements. Hanson also graduated from the University with a Master's of Public Health and a Master's of Science in Nursing on January 18th.

In January, she was hired as the Immunization Coordinator for the Chisago County Public Health Department. She also began instruction of a Peer Mentoring course for 9th through 12th graders in a community setting.

Renee Sieving, M.S., RNC, PNP: Conducted several guest lectures at the University of Minnesota School of Nursing, including "Prevention of Adolescent Substance Abuse" to Public Health Nursing students in February, "Adolescent Sexual Behavior: Clinical Applications" to Nurse-Midwifery and Women's Health Nurse Practitioner students in February, and "Techniques of the Adolescent Pelvic Exam" to Pediatric Nurse Practitioner Students in March.

CONGRATULATIONS!

Welcome to Sarah Beth Aydinalp, the new daughter born to program secretary Mary Beth Aydinalp. Sarah was born on February 15, weighing 8 pounds, 13 ounces. Mary Beth will be on maternity leave until mid-May.

Congratulations to Tabitha Hanson, MS, MPH, RN, GSAN's Coordinator of Outreach and Student Services. In January, Ms. Hanson graduated from the GSAN program with the Dual-Degree, MS/MPH option. She will continue her position with GSAN through the end of Spring Quarter.

MCH CONSORTIUM DIVERSITY SEMINAR APRIL 12

On Friday, April 12, the MCH Consortium will be, "Learning to be Anti-Ableist: Issues Facing Individuals with Disabilities." The program will be from 1-2:45pm in room 1A367 Mayo Building. Attendance is required of all GSAN students.
DUAL DEGREE, continued from page 1

grounded in nursing and the basic sciences of public health.

GSAN students considering the dual degree option enroll in the Public Health Nursing area of study with the emphasis in adolescent nursing and select a major in the School of Public Health. Students may seek admission simultaneously, or they can wait until they are comfortable with the academic coursework in one school before applying to the second school. Both degrees can be completed in approximately 24 months of full-time work, depending on previous background.

Currently, two GSAN students have completed the Dual Degree program option, and two more have applied. Tabitha Hanson, a recent graduate of the program, felt it offered a unique perspective in public health. She began her master’s work initially from the School of Public Health, in an effort to enhance her understanding of interdisciplinary efforts of health at a larger level than the bedside. In the coursework that followed, however, she felt something was missing: a community-as-client focused strategy for health that included a concern for the health of the individual, and addressed how best to reach that individual through community program planning.

When she entered the Dual Degree program, Hanson said she found courses in Public Health Nursing provided that missing element. "The School of Public Health focuses more on the larger policy scope of health care," she said, "but Public Health Nursing made community-focused health care real."

One of the greatest benefits she found to the Dual Degree program was the opportunity to work and study with people from a variety of disciplines: health care administration, medicine, psychology, public health administration, research, social work, and teaching.

"The nurse is in such a powerful position to influence and work with all of these disciplines," she said, "because she/he is not concerned with only one system of a client's health. The nurse can coordinate efforts across disciplines in order to meet the multiple needs of the client." Hanson felt in order to do this effectively, nurses must be trained with members of these disciplines, so they are equipped with the paradigms, vocabulary, understanding and strategies from these other disciplines.

However, she added that the outcome goal of the public health nurse may be different for the client than other public health professionals because nurses are strong advocates for the public. "As public health was originally initiated by nurses over 100 years ago," she stated, "I still believe that public health nurses are in a perfect position to advocate for the health of the public."

A dual M.S./M.P.H. degree provides masters students with the opportunity to extend beyond nursing’s perspectives into an understanding of the differing perspectives of public health among the different disciplines. Many disciplines must work together in a variety of avenues on different levels to affect the health of the public, and according to Hanson, the Dual Degree program is an excellent way to learn to work together.

"The dual degree gave me a unique perspective," she said, "an understanding of how nursing fulfills a component of public health, but also how it depends on other disciplines to jointly achieve the goal of a healthy community."

For more information on the specific components of the Dual Degree program, or for application information, please contact the GSAN program office.

GSAN'S WWW HOME PAGE MOVES

GSAN's Home Page on the World Wide Web of the Internet has a new location; now that the University of Minnesota School of Nursing Home Page is officially launched, you can reach us through them as well as directly. The new URL for the GSAN Home Page is:

http://www.nursing.umn.edu/MS/Adolescent

The URL for the School of Nursing Home Page is:

http://www.nursing.umn.edu

Check us out and let us know what you think!
Prenatal Care Utilization
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Prenatal care use.

Definitions of "Rural"

Unfortunately, there is no universal definition of "rural." The terms "rural" and "nonmetropolitan" appear to be interchangeable in the literature. Live birth certificate data is gathered by region, division, state, county, and city of maternal residence. Population size of city and county with places of 100,000 or less are grouped in the smallest category of residence.

Using the Office of Management and Budget definitions, counties are defined as metropolitan or nonmetropolitan based on population and economic/social integration. With only these options for this data, “rural” was defined as maternal residence in a city of less than 100,000 and a nonmetropolitan county. According to this definition, 23.4% (46,243) of live births were to rural teens.

Rural and Urban Characteristics and Patterns

The analysis compared rural and urban teens on a variety of maternal characteristics (marital status, race, educational status, age, smoking, alcohol use, gravidity and parity) and on their prenatal care utilization patterns (by trimester of initiation, number of visits, and a graduated index which controlled for gestational age).

This analysis found that 28% of rural teens were married as compared to 18.3% of urban teens. A greater percentage of rural teens had a low educational status, defined as 2+ years below expected grade level for age (48.3% vs 45.8%). A higher percentage of rural teen mothers smoked (17.1%) than did urban teens (10.7%). More rural teens also admitted to using alcohol (1.3% vs 1.0%). A greater percentage of younger teen mothers (10-14 years) were from metro areas (6.2% vs 5.3%).

For prenatal care variables, a greater percentage of urban teens received no prenatal care (4.1% vs 2.7%). Likewise, a greater proportion of rural mothers started prenatal care in the first trimester (52.4%). However, overall, only 38.3% of rural mothers and 35.6% of urban mothers exhibited adequate prenatal care utilization.

It should be noted that this was not a sample, but a population (all teen moms in 1991) and that all the differences noted above are statistically significant.

Risk and Protective Factors

In order to look more closely at the sociodemographic characteristics and residential characteristics that affect prenatal care adequacy of pregnant teens, logistic regression was used to compare differences within three levels of prenatal care: 1) Any prenatal care vs No prenatal care; 2) Early vs Late prenatal care initiation; and 3) Early initiation and adequate care vs Early initiation and inadequate care.

In each of these separate analyses the only risk factor identified in every analysis was younger age (10-14 years).

The only protective factor identified in every analysis was primparity. In other words, younger teen moms were more likely than older teen moms (15-17 years) to receive no prenatal care, to start care later, or to receive inadequate care even if initiated early in the pregnancy. Teen moms who were having their first baby were more likely than "experienced" moms to receive any prenatal care, to initiate care early, and to receive adequate care when they initiated care early.

In 8 of the 9 analyses, smoking was noted as a protective factor for receiving any, early, and adequate prenatal care. However, teen moms who admitted to drinking alcohol were at greater risk for receiving no prenatal care.

And finally, teens who lived in a rural area were more likely than their urban counterparts to receive any prenatal care.

Implications

This research suggests a need to focus particularly on the younger pregnant teens and the use of alcohol in adolescence. Peer education may be particularly successful in the two areas in light of prevention of use and in providing older role models for younger teens.

When holding all other variables constant, rural residence was not found to be a risk factor for lack of any, early, or adequate prenatal care for the teen mothers in this study. Further research is needed on the factors of rurality that positively influence prenatal care utilization and adequacy. Decision-making surrounding policy and planning should be grounded on a clearer definition of rural in order to fully understand the impact of residence on health care access and utilization.

In addition, the findings of this study call for a clearer empirical understanding of perceptions of teenagers of the current health care system, particularly those teens who are younger or less educated. Provision of prenatal care for these teens may need to be reevaluated and redesigned to be more sensitive to the cultural, economic, and social forces that interrelate to determine the adequacy of prenatal care for adolescents.
SEXUAL ORIENTATION, continued from page 1.

orientation and sexual behaviors among adolescents, none have examined difference between Anglo and Native American teens.

The purpose of this study was threefold: to explore ethnic differences in the prevalence of non-heterosexual orientations and behaviors among American Indian and Anglo teens; to compare the experiences of heterosexual, non-heterosexual, and unsure Native American teens to each other; and to consider the cultural relevance of the survey for studying American Indian conceptions of sexual identity.

Study Participants
The respondents included a national sample of Native American adolescents (n=13,035) living on reservations who participated in an anonymous school-based survey of health and risk behaviors in 1990, and a comparison group (n=11,247) of rural Anglo students drawn from a state-wide survey of Minnesota youth conducted in 1987. Both the Native American and Anglo samples were similar in age and gender.

Five items pertaining to sexual attraction, fantasy, behavior, intentions and self-labeling were included in a 170-item survey that also included questions about sexual experience, age at first sexual intercourse, history of pregnancy involvement, and history of sexual abuse. In this survey, sexual orientation was defined along a heterosexual-bisexual-homosexual-unsure continuum. Since the focus of this analysis included the cultural relevance of this instrument, non-responses to questions were included.

Findings show significantly higher prevalence in the American Indian sample of non-heterosexual and "unsure" respondents, of same-gender and bisexual attractions and intentions, and of same-gender or bisexual fantasies. Findings also show higher prevalence of same-gender sexual experience for Native American teens, a significantly lower prevalence of opposite-gender sexual experience, and a similar prevalence of sexual experience with more than one gender in both groups.

As well, Native American teens had significantly higher non-response rates to all questions analyzed.

With the American Indian group, adolescents who did not identify as heterosexual were less likely to have opposite-gender sexual experience, more likely to have same-gender sexual experience, and more likely to report sexual experience with both males and females.

Likewise, non-heterosexual Native American teens with heterosexual sexual experience were more likely to report an earlier age of sexual debut and more likely to report a history of sexual abuse.

Bisexual and "mostly homosexual" girls were more likely than heterosexual girls to have had one or more pregnancies, while girls identifying as "100% homosexual" were significantly less likely to report a pregnancy. Conversely, bisexual boys were as likely as their heterosexual counterparts to report having caused one or more pregnancies, but "mostly" and "100%" homosexual boys were more likely to have caused one or more pregnancies.

Subjects who were unsure of their sexual orientation had less sexual experience overall, and had lower prevalence of sexual abuse and pregnancy history.

Implications for Researchers

According to the findings of this study, there are distinct differences in the way reservation American Indian teens conceptualize and report their sexual identities and sexual behaviors as compared to rural Anglo teens. As well, given the high non-response rates among Native American respondents, the survey method of research may not be as useful, and the wording of the questions may not be culturally appropriate.

More research into the ways American Indian teens view gender, sexuality, and sexual behaviors is necessary to understand the variation in prevalence.

Implications for Health Care Providers

For health care providers who work with American Indian teens, it is important to realize your understanding of sexual orientation and healthy sexual behaviors may not be the same. A comprehensive assessment should include questions that elicit information about their perceptions. Likewise, not all American Indian tribes have similar cultural traditions, so it is important to avoid stereotyping.

Finally, labels may mean different things to individuals, and so it is better to ask questions that pertain to more than one dimension of sexual orientation: self-labeling, sexual fantasies, attractions, intentions, actual sexual behaviors, and current relationships. Finally, if a tribal cultural norm includes third or fourth genders such as the nadle, questions that define gender as binary (as in same-gender and opposite-gender behaviors and attractions) may not make sense to teens.

References:
UPDATE ON GSAN'S SUMMER INSTITUTE:
ADVANCED HEALTH ASSESSMENT AND
INTERVENTIONS WITH ADOLESCENTS

GSAN's Summer Institute, scheduled for June 10-14, 1996, is a 3 credit graduate course (also available for 3.0 Continuing Education Units) to develop assessment and intervention strategies for working with vulnerable teens. The course will include daily dialogue with community-based clinical and health promotion experts and interaction with adolescent actors to enhance interviewing skills.

The course will be held from 8:30 to 4:30 Monday through Thursday, and from 8:30 to 12:30 on Friday, on the Minneapolis campus. It will be taught by Renee Sieving and Linda Bearinger.

The registration brochure includes information about course objectives, daily course topics, accreditation, available hotel or dormitory housing, fees, and parking and travel arrangements. Maps, entertainment and sightseeing information will be sent with registration confirmation.

Enrollment will be limited, so reply early. To request a registration brochure, call the GSAN program office at (612) 624-3938 or Boni Petrich, Professional Development and Conference Services, at (612) 625-1832.

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