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The Need for an Effective Student-Athlete Pregnancy and Parenting Policy

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Unintended pregnancy creates significant problems for college student-athletes. Reports over the last five years indicate that pregnant student-athletes conceal pregnancy, feel forced into abortion, or lose scholarships because of pregnancy. Health risks associated with participation in intercollegiate athletics while pregnant, new NCAA guidelines protecting pregnant athletes' financial aid and wide variation among institutional practices make it essential for every college and university to have its own published policy about student-athlete pregnancy. A well-crafted pregnancy policy protects the health of mother and fetus, addresses continuing athletic participation eligibility, and guides institutional response. Further, such a policy needs to address the needs of the male student-athlete who is the father of the child. College health professionals involved in intercollegiate sports are particularly qualified to advise in this arena. A suggestion is made for college health professionals to help create a safer health environment by advocating for pregnant and parenting student-athletes.

The rate of unintended pregnancy in college student-athletes can only be estimated from the rates of unintended pregnancy in all college students. Unintended pregnancy ranges from 1.5% to 45% of college students aged 18-25 years (Finer & Henshaw, 2006; Moos, 2003). In a large study of college students (n = 16,832; mean age 22.6 ± 6.5 years), 1.4% reported pregnancy (theirs or their partner's), 74% reported sexual behavior in the prior 12 months, and 10% reported using emergency contraception (American College Health Association, 2005). In the same sample, 40% of men and 53% of women reported vaginal intercourse in the prior 30 days; 3% of this subset reported unintended pregnancy (American College Health Association, 2005). In a convenience sample of female college students aged 18-25 years (n = 92; mean age 20.4 ± 1.6 years), 62% reported being sexually active, 10% said they were pregnant, and 48% thought

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they might have been pregnant at some time (Naber & Perlow, 2006). In college students aged 18-24 years, 15% reported pregnancy (theirs or their partner's) (U.S. Department of Health and Human Services, 1997). For women in the United States, unintended pregnancy is highest in the age group 20-24 years, with 10% experiencing more than one unintended pregnancy and 5% experiencing unintended pregnancy each year (Finer & Henshaw).

For high school athletes and teens, participation in athletic activity has been linked to lower rates of sexual activity and pregnancy, and more consistent use of birth control (Miller, Sabo, Farrell, Barnes & Melnick, 1999; Sabo, Miller, Melnick & Heywood, 2004). Women high school athletes were less likely to become pregnant than their non-athlete peers (Dodge & Jaccard, 2002) a finding supported across racial and ethnic categories (Sabo, Miller, Farrell, Barnes & Melnick, 1998). The same protective effect of sports participation may apply at the college level. In a study of human immunodeficiency virus in sexually active women college students, 1% of women athletes reported ever experiencing a pregnancy compared with 11% of non-athletes (Kokotailo, Koscik, Henry, Fleming & Landry, 1998). On the basis of limited evidence suggesting sexual activity and unintended pregnancy differ between college student-athletes and student non-athletes, pregnancy and parenthood in college student-athletes may range from 1.4% to 45%, with 10% to 15% being a reasonable estimate (Hogshead-Makar & Sorensen, 2008). Thus, for a theoretical college athletic department which may include 300 student-athletes, pregnancy (their own or their partner's) and parenting may be reasonably expected to occur to 30 - 45 student-athletes per year.

Although the frequency of pregnancy may or may not differ between athletes and non-athletes, anecdotal accounts over the last five years suggest that experiencing unintended pregnancy creates several problems for college student-athletes. This subset of the college student population has recently reported concealing pregnancy to continue training and competing (Ford, 2004; Lehman College, 2001; Potts, 2001; Schonbrun, 2007; Willis, 2001), feeling forced to abort (Anonymous, 1998; Portnoy, 2004; Rovegno, 2007), feeling forced to choose between their financial aid and pregnancy (Rovegno), and fearing expulsion or other negative stereotyping (Anonymous, 1998). In other circumstances, female student-athletes were required to sign statements relinquishing their financial aid if they become pregnant (Rovegno) or submit urine samples "on reasonable suspicion of pregnancy" (Rainey, 2006). In 2007, two freshmen student-athletes were arrested for the homicides of their term infants (Barrouquere, 2007; Plushnick-Masti, 2007). These outcomes are clearly not in the best interests of college student-athlete health, fetal health, the college or university itself, or society-at-large.

Sorensen (personal letter to R. Stallman, Director of Education Outreach, NCAA, 2003) identified the problem of pregnant and parenting student-athletes to the NCAA and initiated national dialogue by sharing recommendations. Local and national responses to this problem have been slow but steady. In the six years between 2003 and 2009, a steady rise has been documented in student-athlete pregnancy policies in colleges and universities (from 3 to 85), yet currently approximately 90% of colleges and universities still lack written policies (See Table 1).

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Table 1 - *College Athletic Pregnancy Policies by Competitive Category*

Category	Total number of policies	Total number of schools in category	Percent of schools in category
NCAA Div I	50	327	15.3
NCAA Div II	18	295	6.1
NCAA Div III	8	444	1.6
NAIA	7	280	2.1
NJCAA	1	unknown	
International	1	unknown	

During June 2007, the Office of Civil Rights (OCR) called for Athletic Directors and Compliance Officers to cease withdrawing financial aid from pregnant or parenting student-athletes (Monroe, 2007). In July 2007, the National Collegiate Athletic Association (NCAA) Committee on Women's Athletics called for the development of gender-equitable pregnancy policies (NCAA, 2007a), and in September 2007 the NCAA Academics/Eligibility/ Compliance Cabinet sponsored emergency legislation in an effort to correct flaws in existing bylaws and recommendations (NCAA, 2007b). In October 2007 this legislation was defeated in the NCAA Division I Management Council (NCAA, 2007c) but in January 2008 the Division I Board of Directors unanimously approved protection of financial aid for student-athletes with "injury, illness, or medical conditions [including pregnancy]" (NCAA, 2008a). In November 2008 the NCAA published *Pregnant and Parenting Student-Athletes:Resources and Model Policies* (Hogshead-Maker & Sorensen, 2008), a handbook of best practices designed to assist NCAA member institution athletic departments with policy development. While these most recent actions were very important first steps, much work is still needed to implement this legislative change and address other facets of the problem.

An athletic department, like the larger university community, should strive to accommodate the needs of pregnant or parenting college students in order to promote health, protect academic progress, and comply with federal law (e.g., Ohio State University, 2006; University of North Carolina at Chapel Hill, 2003; Wright State University, 2008). Title IX, an

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amendment in 1972 to the Civil Rights Act of 1964 (Code of Federal Regulations, 1972), prohibits discrimination against male and female students engaged in educational programs, scholarships, *and athletics*: "No person in the United States shall, on the basis of sex, be excluded from participation in, or denied the benefits of, or be subjected to discrimination under any educational program or activity receiving federal assistance." Title IX, which will be discussed at greater length below, prohibits revocation of financial aid from pregnant or parenting student-athletes. Athletic department policies which fail to address student-athlete pregnancy and parenting may represent barriers to the university's missions of education as well as compliance with federal law.

According to Wendy McGonigal, a registered nurse and Wright State University Director of Student Health Services, the physical, emotional, and financial consequences of being pregnant make it a major reason many female college students leave school (W. McGonigal, personal correspondence, January 2007). Just over 60 % of all students who have children after enrolling in college do not finish their education, compared with a 37 % dropout rate for those who do not have children while in college (U.S. Department of Education, 2002). The student, university, and society all lose when academic progress is abandoned. College health professionals outside of athletics may be surprised to learn that female student-athletes still encounter pregnancy discrimination - revocation of financial aid, negative stereotyping, loss of participation, and loss of academic progress - while for male athletes, parenting is a non-event or a celebrated event (Archdeacon, 2007; Harris, 2007). No published reports were found of male athletes being forced to relinquish financial aid or athletic participation as a result of becoming a parent. Current athletics practices (perhaps unintentionally) create an unsafe environment in which pregnant college student-athletes fear retribution against their financial aid, continue to train and compete without appropriate healthcare supervision (unacceptably risking their health and the health of their fetus), or feel forced into abortion (Rovegno, 2007). These practices are clearly not in the best interests of anyone involved. Unarguably, college students and student-athletes are personally responsible to prevent pregnancy if they are sexually active and do not desire to have children. However, pregnancy in college students may result from consensual or non-consensual sexual activity and/or from responsible or irresponsible birth control use. The student-athlete, institution, and society all benefit when college health service professionals act to protect the rights and health of all college students *when pregnancy occurs*. In an athletics environment where revealing pregnancy results in loss of financial aid, loss of athletic participation, and negative stereotyping by their coaches, peers, and the campus community, these risks to health will persist. Change is needed.

While the NCAA and university athletic departments limit their focus to student-athletes, college health professionals by virtue of their health expertise with all college students are particularly well prepared to contribute to local athletics policy development. The possibility of adverse health outcomes, steady rise in policies, recognition of the problem by local and national organizations, and opportunity to lend professional expertise all underscore the importance of college health professionals mobilizing to help their own colleges develop and implement written policies addressing student-athlete pregnancy and parenting. The college health professional's ability to detect, respond to, and treat risks to physical or psychological health depends heavily upon the institutional environment. A supportive institutional environment has effective policies

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that address safety and health, provider-client trust relationships, and college health professionals with sufficient administrative authority to advocate and intervene appropriately. The absence of any one component leads to increased health risk for the college student. The environment is unsafe and of our own making if individuals fail to protect health, promote safety, act ethically, and comply with the law. It is time for college health professionals to advocate for these college student-athletes. Four propositions are offered that frame a call for college health professionals to analyze existing athletics policy related to pregnancy, advocate monitoring and protecting student-athlete health, participate in policy development, assist the university to comply with the law, and protect pregnancy of and parenting by intercollegiate student-athletes in the same way as non-athletes are protected. One purpose herein is to raise awareness of existing risks to college student-athletes' health (physiological, psychological, and financial), provide contemporary information, suggest the need for advocacy, and point out resources available for a solution.

Proposition 1: Unacceptable Health Risk

Both biophysical and psychosocial components of health need to be addressed. Student-athletes have reported concealing pregnancy (Ford, 2004; Lehman College, 2001; Potts, 2001; Schonbrun, 2007; Willis, 2001), feeling forced to abort (Feminist Women's Health Center, 1998; Portnoy, 2004; Rovegno, 2007), feeling forced to choose between their financial aid and pregnancy (Rovegno), and fearing expulsion or other negative stereotyping (Anonymous, 1998). Student-athlete infanticide has been reported (Barrouquere, 2007; Plushnick-Masti, 2007). Thus, unacceptable physical and emotional health risks are not uncommon. Concealing pregnancy results in delayed or absent prenatal care, lack of essential ongoing monitoring, and inability for college health professionals to detect a possible increased risk during pregnancy if it is present. An unsafe environment – one in which student-athletes do not feel safe seeking help - has resulted in tragedy in at least two instances (Barrouquere; Plushnick-Masti).

Biophysical concerns

Pregnant student-athletes need effective, ongoing healthcare monitoring for five main physiologic concerns which affect the safety of sports participation: stage of pregnancy, overheating, level of exertion, risks of injury, and pre-pregnancy health status (American College of Obstetricians and Gynecologists, 2002). In early pregnancy, physical risk from athletics is low to both mother and fetus, again given appropriate health monitoring and intervention. First trimester nausea and vomiting ("morning sickness") may be more or less bothersome depending on the individual. High level athletic activity, under the guidance of a health care professional and in conjunction with the athletic trainer and the coach, using sensible and monitored training methods, does not ordinarily place the mother or her fetus at risk before 14 weeks of gestation (Sports Medicine Australia, 2001). The normal physiologic changes of pregnancy which affect athletic training and performance (e.g., weight gain, need for increased caloric intake, cardiac output, and joint hyper-mobility) begin after the 14th week (Edwards, 1986). Specific exercise precautions after the 14th week include avoiding training and competition in the supine (lying on the back) position, avoiding holding one's breath and straining to increase abdominal pressure as

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in coughing, sneezing, or having a bowel movement (i.e., Valsalva straining), and avoiding activities with a high risk of falling (American College of Obstetricians and Gynecologists; Sports Medicine Australia). Additionally, the occurrence of certain objective physical changes during pregnancy can be predicted (e.g., progressively enlarging uterus and abdomen, changes in blood cell counts and hormone levels). Other changes are specific to the individual and occur only *somewhat* predictably, depending on pre-pregnancy height, weight, and nutritional status; e.g., individual athletes may gain more or less weight overall compared to other pregnant athletes. Monitoring by professionals with expertise in maternal-child healthcare is essential during early pregnancy to detect, respond to, and treat risk situations in order to optimize pregnancy outcomes for both mother and baby. Most women are pregnant for two to four weeks before pregnancy testing yields a positive result; thus, many athletes may have trained and competed while having undetected pregnancies.

Overheating, or an increase in core body temperature, is one effect of exercise. Sports Medicine Australia (2001) cautions that the fetus may be particularly susceptible to sustained increases in the mother's core body temperature, but the results of research are not consistent. While some older studies showed high maternal fevers during the first trimester affected fetal neural tube development (Edwards, 1986; Milunsky, Ulcickas, Rothman, Willett, Jick & Jick, 1992), researchers investigating a large group of pregnant Danish women (n = 27,432; 18.5% experienced hyperthermia and 4.8% experienced miscarriage or stillbirth) found no association between hyperthermia and fetal mortality in the first 16 weeks of pregnancy (Andersen, Vastrup, Wohlfahrt, Andersen & Melbye, 1992). Two systematic reviews of hyperthermia studies in pregnant athletes indicated that no actual fetal abnormalities or adverse birth outcomes had been associated with hyperthermia during exercise (Lewis, et al., 2008; Pivarnik, Perkins & Moyerbrailean, 2003). Compared to non-athletes, women who were extremely physically fit had improved body temperature regulation and decreased core body temperatures during pregnancy (Pivarnik, et al.).

Level of physical exertion has been measured by heart rate. While Sports Medicine Australia (2001) suggested that a pregnant woman’s heart rate not exceed 140 beats per minute (bpm), a German study tracking one 25-year old pregnant competitor determined that higher heart rates had no detrimental effect on her fetus (Bung, Spatling, Huch & Huch, 1988). The woman, regularly active as a runner for 12 years, was tested through 150 bpm and 170 bpm. At 150 bpm her fetus showed no problems; at 170 bpm the fetal heart rate had slowed, but to a level deemed non-dangerous. One effect of consistent athletic training on heart rate is a slowed maternal resting heart rate, often as much as 30 bpm slower than non-athletes (Bung, et al.). Thus, pregnant competitive athletes may have greater beginning cardiac economy and greater exercise tolerance overall compared to non-athletes. The American College of Obstetricians and Gynecologists (2002) currently recommends that perceived level of exertion is a more accurate indicator of physical exertion than heart rate *per se* for pregnant individuals. Given the absence of contraindications, an athlete’s pre-pregnancy level of exertion is safe to continue during pregnancy (American College of Obstetricians and Gynecologists).

The risk of injury during pregnancy varies by sport contact level. Basketball, for example, is a higher contact sport than swimming; thus, a pregnant swimmer might be able to compete safely longer than a pregnant basketball player. Depending upon the sport, the athlete's

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safety risk will be affected differentially as the pregnancy progresses. The timing of the pregnancy relative to sport season may also affect participation ability. If an athlete's competitive season will be completed before her 14th week of healthy pregnancy, or her season begins six to eight weeks after she delivers her child, she might well be able to meet training and competitive athletic performance goals for the entire season. The Victorian Soccer Federation in Australia (2003), for example, recommends that if the pregnancy is progressing normally in the first trimester, then ongoing consultation with the physician or obstetrician may make athletic participation possible into the second trimester.

The athlete’s pre-pregnancy health status and early prenatal care will affect her health and the health of her fetus during pregnancy. Careful professional monitoring of pre-existing medications and health conditions (e.g., asthma, cardiac conditions, and diabetes) and training plans (e.g., training diets and exercise programs) become more important for the pregnant athlete. They require a health care professional’s early intervention to optimize health and prevent injury.

Furthermore, female athletes experience a “female athlete triad” of health disorders more frequently than non-athletes: disordered eating, amenorrhea, and osteoporosis (American College of Sports Medicine, 2007). Disordered eating ranging from simple dieting to clinical eating disorders like anorexia nervosa or bulimia nervosa and from inadvertent (forgetting to eat or lacking time to eat appropriately) to intentional (willful restriction of calories) (American College of Sports Medicine) can seriously impair maternal health and fetal development during pregnancy. Disordered eating is often accompanied by negative psychological moods and self-image. Amenorrhea if preexisting before a pregnancy has as its most serious consequence systemic skeletal demineralization, increasing the risk for stress fracture especially in the bones of the legs and feet (American College of Sports Medicine). Disordered eating contributes to decreased bone density when the diet does not include enough calcium. Disordered eating and osteoporosis may seriously affect maternal and fetal health during pregnancy. The potential effects of each of these conditions warrant special attention. Furthermore, a student-athlete recovering from amenorrhea may ovulate before her menses are restored, resulting in unintended pregnancy (American College of Sports Medicine). Early prenatal care and continuous healthcare monitoring are essential for the pregnant athlete, and these interventions can *only* be initiated if athletes feel safe revealing they are pregnant.

Psychosocial concerns

In addition to physical risk, unintended pregnancy is a crisis event for the female student-athlete or the male student-athlete who learns of his partner’s pregnancy. Student-athletes who attain intercollegiate status have sacrificed thousands of hours in focused training and competition honing physical skills to compete at the intercollegiate level. The fact of pregnancy necessitates the athlete’s re-examination of personal, athletic, and academic goals. In addition to the physical changes of pregnancy, the female athlete must deal with overwhelming psychological and social challenges, throwing the athlete into disequilibrium as the individuals attempt to solve perceived problems (Davidson, London & Ladewig, 2008). The pregnant athlete must decide what to do about the pregnancy (whether to carry or abort), how to

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pay for medical bills, how to cover living expenses, and how to tell her coach, peers, partner, clergy, and parents. Most pregnant women turn to their partners as their primary source of support (Davidson, et al.). Realistically, while most will support her, she may fear abandonment by individuals significant in her life when they learn of her condition. She may think that years of athletic training and sacrifice have been wasted. She must place the pregnancy and her resulting actions into the matrix of her own personal moral, ethical, and/or religious beliefs. Role changes include shifts from student-athlete to parent, from self-perceptions of a physically fit individual to the realities of weight gain and body image changes, from high level athletic performance to reduced performance and cessation of athletic participation over time, from "body as self" to "body as host to another," from immediate gratification of athletic goals to delayed gratification, and from present-time orientation to future orientation (Davidson, et al.). Significant psychological conflict, as well as time and energy strains, accompany the roles of full-time student, scholarship-athlete, and prospective mother. Usual defense mechanisms lose their effectiveness and maladaptive behaviors may result (Davidson, et al.). Unintended pregnancy is a risk factor for depression, which can contribute to perceptions of life events as being more stressful than women with intended pregnancies (Messer, Dole, Kaufman & Savitz, 2005). In an isolative athletic environment where she feels she cannot seek help, the female athlete may not realize that she has time to decide what to do before action is needed. Elective abortions are performed at any time between verification of pregnancy and viability of the fetus. Although there is currently no concrete medical or legal agreement about the age of fetal viability, in general a fetus is not considered viable before 20 weeks of pregnancy and is considered viable after 27 weeks of pregnancy (Trupin, 2008). How or why a student-athlete has become pregnant is less relevant than what institutional response is most appropriate when it occurs.

While other college students may readily turn to university resources and older student role models for advice and perspective, student-athletes' seek help from coaches, teammates, and athletics trainers (Maniar, Curry, Sommers-Flanagan & Walsh, 2001). Coaches and athletic trainers are individuals who are possibly pressured to focus on financial aid, athletics contribution, and a winning season rather than on a larger life context. Although college student-athletes may have close relationships with athletic trainers, coaches, and peers, they may not feel safe enough to reveal information as sensitive as pregnancy, especially knowing the risk of such revelation. When coaches, the campus community, and the media learn of an athlete's pregnancy, they may place additional psychological pressures on her with negative stereotyping. Pregnancy may be viewed as the athlete's own fault, getting caught having unprotected sex, taking advantage of scholarship funds, the result of immoral behavior, or simply an unfortunate mistake. The coach must deal with disappointment, anger, and frustration at the loss of the scholarship-supported individual's athletic contribution to the team. The athletics department and university community must deal with the expense of non-replaceable funds for an athletic and academic career that may be delayed or abandoned. Anticipating negative views held by her coaches, teammates, and campus community may motivate the pregnant athlete to conceal her condition or feel forced to choose abortion prematurely (Anonymous, 1998), which may not meet her needs or be in the best interests of all involved. In contrast, a male athlete's involvement in pregnancy and parenting is usually seen as a non-event or a celebrated event

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(Archdeacon, 2007; Harris, 2007).

Every university has excellent interdisciplinary resources outside the athletics department (i.e., "neutral counsel") available to pregnant and parenting student-athletes, often without additional cost (e.g., Boston College Pregnancy Services, 2007; Wright State University, 2004). Knowledge of these resources should be actively shared with student-athletes. Professionals in college health services, clergy, legal services, medicine, nursing, psychological counseling, and women's centers can provide valuable information, support, and perspective to assist the athlete in making difficult life decisions about her pregnancy *if the athlete knows about them and feels she is safe coming forward for help*. For example, the student-athlete may lack knowledge about pregnancy options and their related timing, or understand that time is available before decisions or actions are needed. Most of these arguments seem to focus on the women's experiences; however male athletes whose sexual behaviors result in their partner's pregnancy and/or in parenthood also may have very real psychological needs including concerns about the health of his pregnant partner, the fetus, and his readiness for fatherhood, as well as his concerns about his personal and financial obligations as a result of the pregnancy. Both male and female student-athletes will need parenting support after birth, if the pregnancy is continued. College health professionals are needed to educate student-athletes, advocate for environments and resources that reduce their health risk, and are needed to help institutions develop gender-equitable, gender-inclusive policies.

Proposition 2: Leadership is Needed at Every Level

Most college health professionals and faculty are honestly surprised that pregnancy discrimination among college student-athletes is still occurring, given that Title IX laws were enacted over 35 years ago and given that most institutions currently provide a supportive environment for college student, faculty, and staff pregnancy and parenting, e.g., the development of university Women's Centers and Women's Studies, women- and parent-friendly restroom facilities, lactation rooms, and so on, which have resulted in part from advocacy efforts by college health professionals. Put into this perspective, how did college health professionals fail to include the needs of pregnant and parenting student-athletes since student-athletes represent a subset of college students who are not, to date, being reached by the advocacy efforts initiated by college health professionals? Who would advocate for them and ensure ethical, high quality care?

Institutions of higher learning, athletes, and athletics departments look to the NCAA for guidance on every aspect of athletics participation. As it enters its second century, the NCAA expressly ". . . governs, promote[s], and furthers the purposes and goals of intercollegiate athletics . . . ," (NCAA, 2005a) and it identifies academic, social, and athletic experiences; integrity; sportsmanship; and, equitable participation opportunity among its core values. Applicable NCAA Division I Bylaws (NCAA, 2008b) discussed below offer limited and conflicting guidance to the pregnant athlete and institution. A short explanation of the Bylaws is needed in order to lay out the argument. Five different Division I Bylaws are relevant to this discussion: Bylaw 15.3.3 which describes the terms of athletic *financial aid* awards, Bylaws 15.3.2.2 and 15.3.4.3 which specify situations in which the student-athlete's aid is *protected* but do not mention pregnancy, Bylaw 15.3.4 which outlines situations under which financial

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aid may be *reduced or cancelled*, and Bylaw 14.2.1.3 which allows an institution to permit an *additional year of athletic eligibility for pregnancy*.

Technically, Division I Bylaw 15.3.3.1 means institutions may not guarantee financial aid for more than one year at a time, a point generally misunderstood by university faculty and the media. In actual practice, during the recruiting phase coaches (and institutions) often state their *intent* to support the student-athlete financially for the duration of the athlete's academic college degree, often four years, because no recruiting effort would be successful if an athlete knew their aid was awarded for only one year at a time. Communicating the intent to provide financial aid until graduation supports the institution's commitment to the mission of education (e.g., Ohio State University, 2008; Wright State University, 2007). Thus, although university athletic departments are only permitted to *guarantee* financial aid for only one year at a time (as opposed to four or more years), in reality many individual athletes receiving athletic financial aid are probably attending with the unwritten but clear understanding of institutional support for their entire college education. Athletes who fear that pregnancy may result in withdrawal of their financial aid may also fear that financial aid withdrawal will affect their entire college career rather than just one year.

Two NCAA Bylaws specifically *protect* a student-athlete's athletic financial aid by prohibiting the institution from reducing or canceling it in certain situations. Athletic aid "may not be reduced or cancelled if the athlete reports in *poor physical condition*, even if the athlete's lack of physical conditioning prevents him or her from participating in intercollegiate athletics" (Bylaw 15.3.2.2). Bylaw 15.3.4.3 states that "institutional financial aid that is based in any degree on athletics ability may not be reduced or cancelled during the period of its award: Because of an injury, *illness, or physical or mental medical condition* (except as permitted pursuant to Bylaw 15.3.4.2) or for any other athletic reason." The words *illness, or physical or mental medical condition* were unanimously approved for addition by the NCAA Division I Board of Directors on January 14, 2008; the revision took effect August 1, 2008 (NCAA, 2008a). It has been argued for more than five years that pregnancy is a healthy, but unexpected, physical condition is equivalent to an unanticipated injury (Bylaw 15.3.4.3) and furthermore that Title IX specifies that pregnancy must be considered the same as a temporary disability: both injury and pregnancy temporarily limit athletic participation but do not mean an athlete is unable to recover or resume athletic participation.

NCAA Bylaw 15.3.4 provides conditions under which the athlete's financial aid *may be reduced or revoked*: "if an athlete renders himself or herself ineligible for competition; fraudulently represents any information on an application, letter of intent, or financial aid application; *voluntarily withdraws from a sport at any time for personal reasons*, or engages in *serious misconduct* warranting substantial disciplinary action." Many student-athletes do not realize that any voluntary statement they may make to any athletics personnel *they believe they can no longer participate in athletics* for any reason constitutes sufficient grounds for the institution to withdraw athletic financial aid without any further discussion, referral, or advocacy. This problem is compounded if an institution's code of student conduct identifies premarital sexual activity or pregnancy as *serious misconduct* which constitutes grounds for dismissal (e.g., Oral Roberts University, 2007). If disciplinary action were taken against a female athlete who become pregnant but not male athletes who impregnate females (athletes or otherwise) during college, such a response would be discriminatory under Title IX.

NCAA Bylaw 14.2.1.3 allows an institution to permit an *additional year of athletic eligibility for pregnancy.* In Bylaw 14.2.1.3 the NCAA *seems* sympathetic to additional support for the pregnant

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student-athlete, but the Bylaw contains no guidance to the athlete or institution about protecting the athlete's health, what to do with their financial aid, how to act equitably, or how to respond to multiple pregnancies in the same student-athlete (M. Paul, Head Athletic Trainer, University of Nevada, personal correspondence, January 14, 2008).

In its 2008-9 Sports Medicine Handbook, the NCAA published Guideline 3b: Participation by the Pregnant Student Athlete (NCAA, 2008c), a document which briefly addresses the risks and benefits of continuing with athletic training while pregnant. The Guideline stipulates that "each member institution should have a written policy that clearly outlines the rights and responsibilities of the pregnant student-athlete" and that a written policy should include information about confidential counseling, medical care, NCAA rules extending athletic eligibility, and the effect of pregnancy on financial aid and participation. The Guideline does not carry the authority of a Bylaw, thus institutions may or may not decide to follow it.

Thus, the current NCAA Division I Bylaws provide ambiguous guidance for the student-athlete and/or institution seeking authoritative guidance about pregnancy. The current Bylaws direct the institution to protect the athlete's financial aid for the remainder of one year in the event of injury, illness, or physical or mental medical condition (including pregnancy); allow the institution to cancel or reduce financial aid if pregnancy is defined as serious misconduct; and allow a student-athlete unknowingly to invite revocation of financial for voluntary withdrawal; while sympathetically allowing an additional year of competitive eligibility for pregnancy. Often, becoming pregnant is a result of risk-taking behavior associated with young adulthood—but so is being injured while playing casual pick-up sports. Accidents happen, and pregnancy is as much a crisis event to an athlete as is a season-ending or career-threatening injury. Accidents happen; unlike other accidents, pregnancy and parenting are conditions specifically protected by federal law (discussed below).

Before 2007 the NCAA was largely silent on this issue. In 2003 a letter was written to the NCAA Director of Education Outreach (Sorensen, unpublished letter, 2003) requesting changes in NCAA Bylaws to include pregnancy as protected condition under which financial aid removal is prohibited. In 2004 the NCAA Division I Student-Athlete Advisory Committee (comprised of student-athletes from every Division I athletic conference) discussed "requesting amendment of Special Assistance Fund and Student-Athlete Opportunity Fund guidelines to identify pregnancy-related expenses as permissible use of these funds" (NCAA, 2004). As late as 2006 the NCAA maintained its current Bylaws were sufficient (Rainey, 2006).

In May 2007 a presentation entitled *Best Practices: Pregnancy Policies* (Sorensen, Sincoff & Siebeneck, 2007) was given at the NCAA Gender Equity and Issues Forum. In June 2007 NCAA President Myles Brand charged the Committee on Women's Athletics with studying this issue, calling for university athletic administrators to submit their policies for review. On July 24, 2007 the Committee produced a Statement (NCAA, 2007a) calling for NCAA institutions to "conduct their intercollegiate athletics programs in a manner designed to protect and enhance the physical and educational well-being of student-athletes," including treating "female student-athletes . . . who may be pregnant in accordance with federal law" [Title IX law, which is discussed in the fourth proposition]. In September 2007 the NCAA Division I Academics/Eligibility/Compliance Cabinet proposed emergency legislation #2007-110 to the NCAA DI Management Council. This proposal requested the addition of the words "illness or medical condition" to Bylaw 15.3.4.3 to read, "Reduction or cancellation [of an athletic scholarship] is not permitted on the basis of a student's injury, *illness or medical condition*; a

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student's ability to perform athletically, or for any other athletic reason" (NCAA, 2007b). In October 2007 the NCAA Division I Management Council defeated this legislation (NCAA, 2007c) but forwarded a request to the Division I Board of Directors.

On January 14, 2008 the Division I Board of Directors unanimously approved the change to Bylaw 15.3.4.3 to include *injury, illness, or medical conditions* (NCAA, 2008a) as reasons for which revoking of the student-athlete's one year financial aid is prohibited. This change (which took effect August 1, 2008) will still require individual colleges and universities to develop and implement internal policies affecting pregnancy and parenting. This is where college health professionals' advocacy on behalf of pregnant and parenting student-athletes is most needed.

In summary, even though the NCAA may be clarifying its Bylaws to protect the financial aid of pregnant and/or parenting athletes, institutions—especially those that receive federal funds and are thus subject to Title IX—will need to not only implement the NCAA's legislative changes but also look beyond NCAA Bylaws to ensure compliance with Title IX regarding an appropriate response to student-athlete pregnancy. A simple, obvious answer would be to ensure *pregnancy and parenting are supported in the same way regardless of whether the college student is an athlete or non-athlete*. Pregnancy in non-athlete college students or college faculty and staff is accommodated readily. College health professionals (not the NCAA or athletics administrators), by virtue of their expertise and experience responding to pregnancy in non-athlete college students, are *uniquely qualified* to examine national athletics policy and advocate for the changes described above.

Colleges and Universities

College health professionals write university policies to reduce uncertainty, reduce interpretation, and guide uniform, organized actions in response to an event which threatens health. For example, most colleges have communicable disease or tornado policies which they hope they will never need to use, yet the policies are accorded fundamental importance.
Student-athlete pregnancy and parenting are *known to occur* (again, the question is not *how, why*, or *if* but *when* pregnancy will occur). College health professionals would be well served to recognize the need for an organized, pre-planned, legal, ethical, gender-equitable response to this health risk.

In 2003, exhaustive searches yielded only three existing college athletics policies relating to pregnancy. The scarcity of policies and lack of professional discussion supported the need to develop wide, interdisciplinary professional dialogue on student-athlete pregnancy. This dialogue, which has occurred primarily since 2003, resulted in a growing number of collegiate pregnancy policies and increasing comprehensiveness of language and situations addressed within them. Since 2004 the related research file has been requested by 170 universities and individuals. The work has received citation in 32 publications including the *Chronicle of Higher Education*, ESPN *Outside the Lines* television show, the NCAA, and nursing journals. College health professionals could contribute significantly to national dialogue and to policy development on campus.

Currently, 85 athletics policies addressing student-athlete pregnancy exist. While the number of colleges with pregnancy policies is gradually increasing, the data reflect that 85% of NCAA Division I schools and more than 94% of NCAA Division II, Division III, and NAIA colleges lack student-athlete pregnancy policies (Refer to Table 1)

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The existence of a student-athlete pregnancy policy does not guarantee its appropriateness. Existing policies vary widely across these spectra: from zero to full institutional support, from requiring to encouraging a student-athlete to reveal pregnancy (which may have HIPAA implications), from forced removal to allowing athletic participation while pregnant, from canceling financial aid to protecting it, from using medical language and jargon that athletes may not understand to writing clearly and directly, from using a legal waiver releasing the university from liability to disregarding the waiver, from ignoring the NCAA's one-year extension for pregnancy to mentioning it, from avoiding discussion of "neutral resources" within the university to encouraging their use, from stipulating who bears financial responsibility to ignoring the issue, and from active counsel making withdrawal mandatory to permitting voluntary withdrawal.

For example, 10 of the 37 policies that address the student-athlete's *obligation to reveal pregnancy* encourage her while 27 require or mandate the athlete reveal pregnancy. Of the 46 policies that address *participation while pregnant*, four prohibit participation in any form, 39 allow participation with a physician's approval, two allow participation "dictated by the demands of the sport," and seven differentiate participation by length of time or level of contact. Of the 58 NCAA Division I and II schools (only NCAA Division I and II schools offer athletic financial aid) with pregnancy policies, only 23 specifically *protect the pregnant athlete's financial aid* for the remainder of the granting year; two of these make this protection conditional based upon adherence to a "plan" (NCAA, 2005b).

Many policies seem to be written to benefit the institution rather than the athlete. Of the 85 total policies, 9 contain advanced *medical terminology (*e.g. "teratogenic," "postpartum") which student-athletes probably do not understand and thus are of limited benefit to the athlete. At present 8 of the 85 policies require student-athletes to sign *legal waivers releasing the athletics department and university* from legal liability in case of injury.

Only 24 of the 85 policies remind the athlete that the NCAA allows, for pregnancy, a *sixth year* to complete the usual four years of athletic eligibility (NCAA Bylaw 14.2.1.3). Twenty-two of the 85 address *financial responsibility for pregnancy*: in 14 policies, the student-athlete bears all financial responsibility; four indicate that pregnancy is covered under student health insurance. Eight of the 85 policies form a *neutral decision-making team* to support the athlete. Seven of the 85 policies *actively counsel against voluntary withdrawal* (NCAA Bylaw 15.3.4) before seeking administrative help.

While some variation in policies from school to school and nationally is expected (e.g., faith-based schools may wish to avoid mentioning abortion as a pregnancy outcome option), a greater degree of congruence is needed to establish a *safe, ethical standard of care*, create a safe environment, promote optimal health, and help institutions comply with the law. Too many institutions lack a policy altogether. Some athletics administrators flatly refuse to develop such policy. Those institutions that decline to develop policies when others are doing so may risk negligence. Institutions with existing policies that fall short of establishing a safe health environment, unethically infringe on individual student rights, or violate federal law need critical reexamination. Lack of uniformity in current intercollegiate policies supports the need for college health professionals to analyze their own athletics policies and advocate for more cohesive national and institutional policy development. A written policy will be most useful if it accurately reflects the institution's values, ensures a safe environment for the athlete to reveal her condition, protects health, and encourages consistent, equitable, legally defensible institutional response to pregnancy. The policy needs to be guided by a thorough knowledge of Title IX

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regulations which apply to any institution receiving federal funds. Lastly, policy should be clearly written and made available to student-athletes, athletics staff, and the campus community. Initiatives and models at Wright State University may be used to help college health professionals build effective, ethical student-athlete pregnancy and parenting policies.

Proposition 3: Federal Law

Negative participation and financial aid consequences for pregnant and/or parenting student-athletes are specifically prohibited by federal law. Federal Title IX Educational Amendments to the Civil Rights Act of 1964 that were enacted in 1972 prohibit any institution from receiving federal funds if it engages in gender discrimination in any campus activity (Code of Federal Regulations, 1972). To the point of our position, Title IX explicitly prohibits discrimination against student-athletes on the bases of pregnancy or legal abortion. Moreover, Federal regulations clarify rules for implementing Title IX. They prohibit “discrimination or exclusion of any student from any class, program, or extracurricular activity on the basis of pregnancy, childbirth, false pregnancy, termination of pregnancy or recovery from pregnancy unless the student voluntarily requests to participate in a separate activity” (Code of Federal Regulations, 1972). Section 106.40(b)(4) directs the institution receiving federal funds to “treat pregnancy, childbirth, false pregnancy, termination of pregnancy, and recovery from pregnancy in the same manner as temporary disability,” including stipulating “justification for a leave of absence as medically necessary and reinstatement to the status which she held when the leave began.” Thus, Title IX and its enabling regulations provide very clear guidance on how institutions that receive federal funds should address student-athlete pregnancy and/or parenting.

The authors suggest that gender inequity results when an institution’s response to student-athlete pregnancy and/or parenting differs by gender; e.g., if an institution requires only female athletes to sign “no-pregnancy” or “loss of financial aid if I become pregnant” statements (Rainey, 2006) or assesses *serious misconduct* (NCAA Bylaw 15.3.4) and imposes scholarship consequences on female, but not male student-athletes. Although “it takes two to tango,” only females undergo the hormonal and obvious physical changes associated with pregnancy. Only female athletes encounter restriction or loss of financial aid and cessation of athletic activity as a result of pregnancy and/or parenting. Male athletes’ involvement in pregnancy does not affect their ability to participate in athletics and may be undetected if it is not voluntarily offered. If an institution “assesses serious misconduct warranting substantial disciplinary action” (NCAA Bylaw 15.3.4) and reduces or cancels the scholarship of a female athlete who becomes pregnant, but does not assess similar penalties on either a male athlete who impregnates a woman or on a pregnant college student who is not an athlete, then the institution is acting inequitably and may be in violation of Title IX gender equity rules. This position is supported by a recent federal Office of Civil Rights “Dear Colleague” letter dated June 26, 2007 (Monroe, 2007).

Furthermore, only those female athletes who elect to remain pregnant—and not those who elect to terminate their pregnancies or have unexpected miscarriages—encounter scholarship and participation consequences if the institution revokes their financial aid. Theoretically, and often in practice, if the pregnant athlete quietly seeks an elective abortion without telling anyone, then her athletic scholarship, training regimen, and participation continue unaffected although there may be a psychological price to pay (Anonymous, 1998). Some female athletes have successfully concealed their pregnancies and continued competing (Barrouquere, 2007; Ford, 2004; Lehman College, 2001; Anonymous, 1998;

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Plushnick-Masti, 2007; Portnoy, 2004; Potts, 2001; Rovegno, 2007; Schonbrun, 2007; Willis, 2001) but this decision carries serious health risks. This argument is not to suggest that male athletes who impregnate women, or pregnant female athletes who elect abortion, should lose their financial aid, but rather that a gender equitable institutional response to student-athlete pregnancy is needed. A policy to protect the financial aid of a pregnant female athlete corrects all of the potential gender equity issues in institutional response. Well-meaning athletics administrators who in good faith comply with current NCAA Bylaws may unknowingly maintain inequitable policies which violate federal law, bringing civil liability *to the entire university,* potentially absorbing essential funds which may be sorely needed elsewhere. This leaves one to wonder whether university legal counselors are aware of current athletics policies regarding pregnancy, as it seems remarkable that policies which violate federal law continue to persist. College health professionals might be well-served to analyze internal athletics policy and advocate for fair, equitable treatment of pregnant athletes.

The Title IX legal argument alone nearly obviates the need for any other arguments, yet is rarely appreciated for three reasons: because college health professionals may not clearly understand the law's concrete directives in applying to student-athletes, because the legal argument may not be persuasive until it is well-tested in the courts and large sums of money are involved, and because those student-athletes who are wronged are young adults who not only encounter serious negative social pressure when they are pregnant, but also generally lack power, experience, and perspective compared to the influential force of the institution. A successful use of the legal argument would require a student-athlete who has been wronged to bring successful legal action against an institution. Recently, such legal action has been successful (e.g., Grossman, 2003) and may become more commonplace in the future. College health professionals may also consider advocating for the student-athlete on an *ethical* basis, bringing to bear the benefits of their greater knowledge, life experience, perspective, and professional power in support of the less-powerful student-athletes, effectively leveling the playing field. Formulating a policy to protect the pregnant student-athlete's financial aid and athletic participation could effectively prevent institutional Title IX violations, supporting both the letter and spirit of the law.

Proposition 4: Degree Completion

The university's manifest objective is to enable every college student, including the student-athlete, to work towards and achieve completion of her/his college education. College health professionals focus on optimizing students' physical and psychological health in the pursuit of university objectives. The university, supported by college health services, has a primary interest in encouraging all students' continued academic progress even during difficult circumstances, which include injury, disability, and pregnancy. When institutions retain the appropriate focus on health and on academic progress, similarly supporting pregnant students regardless of athlete status, then the student, the university, and society all win. Rather than loss of athletic financial support and increased psychological stress halting the pregnant student-athlete's academic progress, a policy to protect the financial aid and provide supportive resources creates a safe environment for the athlete to reveal she is pregnant, thus enabling college health professionals the opportunity to provide early prenatal care and ongoing monitoring, and the opportunity to detect increasing risks during pregnancy. Academic progress and health are not competing goals.

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Summary and Recommendations

The biophysical experiences of pregnancy in athletes have been well studied, but little or no research exists on the psychosocial experiences of pregnant and parenting college student-athletes or the forces which shape their decisions. Anecdotal reports indicate that unintended pregnancy may result in increasingly serious problems and unhealthy decisions. The rising number of colleges and universities writing protective policies and recent NCAA actions (e.g., Hogshead-Makar & Sorensen, 2008) suggest that the problem is significant, thus college health professionals are called to advocate for pregnant and parenting student-athletes in the same way as other college students are supported.

Limited NCAA bylaws about protecting pregnant athletes, wide variation among institutional policies addressing pregnancy, athletes' motivation to conceal pregnancy, and the need for healthy participation in sports make it essential for every college and university athletics department to have a comprehensive, published policy addressing student-athlete pregnancy. College health professionals are uniquely qualified to help develop clear, gender-equitable student-athlete pregnancy policies which reduce unacceptable health risk to the athlete, comply with federal legislation, and optimize educational goals. College health professionals need to reinvigorate their advocacy for high standards of care to all college students regardless of athlete status and aggressively implement a safer environment.

A policy providing protection for the pregnant and/or parenting student-athlete's financial aid and providing supportive health care resources costs the institution little yet yields high returns. The costs to the institution include the already-granted current year of financial support and possible loss of athletic contribution if the student elects to continue her pregnancy. The benefits include clear, gender-equitable guidance for athletics directors, coaches, trainers, and athletes; creation of a safe environment for student-athletes to reveal their need for pregnancy and/or parenting support; appropriate medical intervention to optimize the health of mother and fetus; emotional and informational support to athletes in crisis; continued academic progress; and a plan for return to sport. These strategies will potentially improve student-athlete health, retention and graduation rates.

A pregnancy policy should create a safe institutional environment that encourages the athlete to reveal rather than conceal her pregnancy, identify "neutral" institutional resources outside the athletics department, suggest a sequence of actions to guide and influence the athlete's decisions, and comply with federal law (e.g., Wright State University Athletics, 2007). The policy should contain immediately relevant information in sufficient detail with sufficient clarity to answer the initial questions of all parties involved. It should direct the athlete, coach, administration, and institution as to the steps to be taken. Although pregnancy policies will vary from institution to institution, at a minimum a pregnancy policy should answer these questions for the student-athlete: What do I do if I become pregnant? To whom can I turn for help? What happens to my scholarship? Can I continue participating in intercollegiate athletics? Will my health insurance cover my pregnancy? What happens if I am a male athlete whose partner becomes pregnant? College health professionals might begin by surveying their university for the pregnancy information and resources provided to all college students, and ensuring that these resources are provided to student-athletes as well, and that their written descriptions (e.g., brochures) are accurate, complete, and timely.

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The policy should be developed jointly with input from college student health services, university legal counsel, athletics administration, women's centers, psychological services, professional maternal-child health care providers, coaches, athletic trainers, student-athletes, plus others who may be important constituents within a particular college or university. Pregnancy should be clearly defined by the institution as *a temporary medical condition which does not result in the loss of financial aid* not only for the remainder of the current scholarship year as defined by the NCAA (July 1 - June 30) but also allowing for a leave of absence as long as medically necessary and reinstatement to the position held before pregnancy (Code of Federal Regulations, 1972). Athletes who become pregnant should be permitted to continue training and competing for up to 14 weeks of gestation, and longer if physically able, with the approvals of their physician and obstetrician (NCAA, 2008c). The athlete should receive patient, nonjudgmental neutral counseling on her pregnancy options and necessary role changes. Pregnant or parenting athletes should be actively counseled *against* voluntarily withdrawing from their sport as student-athletes may not know about the financial aid jeopardy of voluntary withdrawal (Bylaw 15.3.4). The policy should gender-inclusively address the needs of male athletes in addition to those of women, and should be written in understandable language (e.g., avoiding medical jargon, legalese, or obfuscation). The policy should be published and made readily available to student-athletes, athletics staff, and the campus community. If a policy currently exists, it should be critically reviewed to determine whether it fails to create, or sustain, an environment supportive of the student-athlete.

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