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Sport and Health

PARISSA SAFAI

OVERVIEW

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In 2003, the United Nations General Assembly adopted 'Resolution 58/5: Sport as a Means to Promote Education, Health, Development and Peace' and designated 2005 as the International Year of Sport and Physical Education (IYSPE) in its recognition of sport's ability to contribute positively to healthy human, and in particular childhood, development. In promotional materials about the IYSPE, the United Nations General Assembly (International Year of Sport and Physical Education, 2005) repeatedly drew links between sport and health, arguing that:

Sport and physical education play an important role at the individual, community, national and global levels. For the individual, sport enhances one's personal abilities, general health and self-knowledge. On the national level, sport and physical education contribute to economic and social growth, improve public health, and bring different communities together. On the global level, if used consistently, sport and physical education can have a long-lasting positive impact on development, public health, peace and the environment. (5)

The glowing and affirmative descriptions of the relationship between sport and health continued:

Sport and play improve health and well-being, extend life expectancy and reduce the likelihood of several non-communicable diseases including heart disease. Regular physical activity and play are essential for physical, mental, psychological and social development. Good habits start early: the important role of physical education is demonstrated by the fact that children who exercise are more likely to stay physically active as adults. Sport also plays a major positive role in one's emotional health, and allows ... valuable social connections, often offering opportunities for play and self-expression. (7)

Such positive comments resonate with our commonplace assumptions about sport's power to improve our health. However, a closer examination and analysis of these statements in light of existing research in the socio-cultural study of sport on the relationship between sport and health reveal a number of concerns that problematise the conventional wisdom that 'sport is good for one's health'. This chapter explores the relationship between sport and health and, in particular, focuses on the ways in which participation in sport contributes to increased rates of morbidity and mortality. The central argument here is that while sport may have the potential to enhance and augment health, it is currently structured in ways that foster the production and reproduction of health-compromising norms and behaviours. Divided into three parts, this chapter first draws attention to some of the positive health associations that accompany increased participation in non-sport forms of physical activity. The second section focuses on the negative associations between sport and health in an attempt to demonstrate how the structure and production of sport can facilitate ill health, while the last section of this chapter explores the provision of therapeutic care to athletes and, in particular, the development and implications of the medical/paramedical field of practice known as sports medicine.

DISTINGUISHING THE BENEFITS OF PHYSICAL ACTIVITY

One of the most significant challenges to our understanding of the negative relationship between sport and health resides in the ways in which sport is often discursively wrapped up with and within other types of physical activities. In the United Nations description of sport cited above, 'sport', 'physical activity', 'physical education', 'exercise' and 'play' are blended together in the excerpts without consideration of the differences between each form of activity. Sport is a physical activity; sport is often used in physical education curricula; it incorporates exercise; and may even involve an element of play. However, this does mean that sport is the same as physical education, exercise or play. Sports are 'institutionalized and competitive activities that involve rigorous physical exertion or the use

of complex physical skills by participants motivated by personal enjoyment and external rewards' (Coakley and Donnelly, 2004: 5), and the conflation of sport with physical education, exercise and play obscures its differences in intensity, frequency and duration of participation from other forms of physical activity. We must be cognisant of these differences since the institutionalised, competitive, rigorous and complex nature of sport has markedly different consequences for health than physical education, exercise or play. As Waddington (2000: 20) fittingly notes:

In short, to suggest that a 30-minute gentle swim three times a week is good for one's health does not mean that running 70 miles a week as a means of preparing for running marathons is good for one's health in an equally simple or unproblematic way.

The IYSPE and the UN commitment to the promotion of physical activity is admirable and welcomed; however, the loose use of sport in the whole-scale promotion of the positive health benefits of physical activity is problematic. In order to better understand the relationship between sport and health, we must firmly distinguish between sport and other forms of physical activity.

In our effort to examine critically the consensus that 'sport is good for one's health', we cannot overlook the positive health benefits associated with some, specifically mild to moderate, forms of physical activity. A cursory survey of press releases, publications and policy documents from such organisations as the World Health Organization, Health Canada, the Public Health Agency of Canada, the United Kingdom's Department of Health, and the United States Centers for Disease Control and Prevention highlights the ways in which many national and international organisations (and initiatives) echo one another in their support and promotion of 30–60 minutes of moderate physical activity most, if not all, days. There is compelling evidence from all over the world that supports the physiological and psychological benefits of regular rhythmic exercise and physical activity for people of all ages (Bouchard et al., 1990; Department of Health, 2004; Donnelly and Harvey, 1996; Health Canada, 2004; Health Education Authority, 1995; Intersectoral Healthy Living Network, 2005; Kesaniemi et al., 2001; Pate et al., 1995; Quinney et al., 1994; US Department of Health and Human Services, 1996; World Health Organization, 2002, 2004). Such health gains include improved quality of life, improved self-esteem, increased strength and flexibility, increased energy, improved mental health and reduction in stress, and continued independent living in later life. There is also significant evidence supporting the risks associated with physical inactivity such as increased risk for cardiovascular diseases including stroke and hypertension/high blood pressure, osteoporosis, depression, adult-onset diabetes, some forms of cancer, and premature death and disability. The 2002 World Health Report (World Health Organization, 2002) noted that such chronic/non-communicable diseases accounted for 60 per cent of all deaths and 47 per cent of the global burden of disease in 2001 and estimated that

figures would rise to 73 and 60 per cent, respectively, by 2020. In a research brief heavily laden with martial metaphors, Booth and Chakravarthy (2002: 2) go as far as to coin the term 'Sedentary Death Syndrome (SeDS) to categorize the emerging entity of sedentary lifestyle-mediated disorders that ultimately result in increased mortality. We believe this term is appropriate to describe the nature of the war we are fighting.' On another war-front, although scholars are beginning to turn a critical eye towards the social construction of fat and fatness (e.g. Gard and Wright, 2005), our current preoccupation, or rather panic, with the 'epidemic of obesity' is supported by a growing body of evidence endorsing daily moderate physical activity as a way in which to control weight and reduce the risk of, if not prevent, obesity (e.g. Centers for Disease Control and Prevention, 2005; World Health Organization, 2003).

In addition to the epidemiological evidence supporting the physiological and psychological benefits of mild to moderate forms of physical activity, there is also a growing volume of data on the economic benefits of increased participation in exercise and physical activity for national economies and health care systems (e.g. Colditz, 1999; Conference Board of Canada, 1996; Mokdad et al., 2001; Pratt et al., 2000; see Donnelly and Harvey, 1996, for a discussion of the limitations of such data). In many developed and developing nations, chronic disease has become the most significant threat to population health compared with acute traumas and infectious/communicable diseases (World Health Organization, 2004). In Canada, two-thirds of all deaths annually are attributed to chronic disease (Canadian Population Health Initiative, 2002; Federal/Provincial/Territorial Advisory Committee on Population Health, 1999; Intersectoral Healthy Living Network, 2005). In economic terms, combining direct medical costs (C\$38.9 billion) and indirect productivity losses (C\$54.4 billion), the total economic burden of seven types of chronic illnesses (cardiovascular disease, cancer, chronic respiratory ailments, diabetes, musculoskeletal disorders, diseases of the nervous system and sensory organs, and mental illness), exceeds C\$93 billion a year (Mirolla, 2004). Given the list of health benefits associated with mild to moderate physical activity and the risks associated with physical inactivity cited above, the economic argument for physical activity is clear. In Canada, the Mills Report (1998) suggests that the Canadian health care system would see savings of C\$150 million annually if the number of physically inactive Canadians is reduced by 10 per cent and Katzmarzyk et al. (2000; see also Katzmarzyk and Janssen, 2004) estimate that physical inactivity cost the Canadian health care system approximately C\$2.1 billion annually in direct health care costs.

The arguments and staggering figures in favour of regular moderate physical activity are quite persuasive, but are not immune to scrutiny. As Donnelly and Harvey (1996: 5) note, such 'numerous, almost miraculous claims for the benefits of physical activity' often do not take systemic barriers to participation for disadvantaged and marginalised populations (e.g. low-income groups, visible racial/ethnocultural minority groups, the elderly, women and persons with a disability) into account. Physical activity does not exist in a

social vacuum nor is it a panacea for all health problems (e.g. see Smith et al., 2004). Canada's 'Active Living' initiative encourages the integration of physical activity into daily life in ways that meet people's schedules, interests and abilities, but does so in ways that neglect broader social determinants of health and which '[absolve] neo-conservative governments from committing additional resources into fitness and health' (Bercovitz, 2000: 35).

Social determinants of health (SDOH) are social and economic conditions that influence the health of individuals and communities. A wealth of research on SDOH, as summarised by Wilkinson and Marmot (2003), provides evidence that: health follows a social gradient; stress damages health; the health impacts of early development and education last a lifetime; poverty and social exclusion cost lives; stress in the workplace increases the risk of disease; job security improves health; unemployment causes illness and premature death; social supports and supportive networks improve health; alcohol, drug and tobacco use are influenced by the social setting; healthy food is a political issue; and healthy transport means walking and cycling and good public transport. Other basic determinants of health, such as genetics, interact with SDOH to present a broad overview of why some individuals and communities are healthy while others are not (Evans et al., 1994). SDOH are directly related to the ways in which resources are organised and distributed among members of a society, and all the determinants identified above impact and influence participation in physical activity and, in turn, are impacted and influenced by, in varying degrees, participation in physical activity (cf. Donnelly and Harvey, 1996). Marmot (2004) raises a pivotal question when he asks: 'What good does it do to treat people's illnesses and then send them back to the conditions that make them sick?' We can ask a similar question with regard to physical activity: 'What good does it do to encourage brisk walks around the block to improve health when a person is struggling financially to survive or is marginalised because of their age/sex/race/disability or lives in a polluted neighbourhood and then goes back to work in unsafe conditions that makes them sick?' This question is raised here as a polemic to stimulate much needed discussion on broader social determinants of health and their relationship to and with participation in physical activity.

Furthermore, and as noted above, even though there is compelling evidence supporting mild to moderate physical activity, in practice, physical activity is often operationalised in sport terms even though, as will be discussed below, the evidence to support the health benefits of sport is tenuous. An excerpt from the Report from the United Nations Inter-Agency Task Force on Sport for Development and Peace (2003: 6–7) exemplifies the continued and misleading overlap between non-sport forms of physical activity and competitive sport:

In Canada, it is estimated that physical activity increases productivity by the equivalent of \$513 (CAN) per worker per year, resulting from reduced absenteeism, turnover, and injury, as well as an increase in productivity. Therefore, sports have significant economic benefits for business, communities, and nations.

Based on available research, 'a 30-minute gentle swim three times a week' can contribute to reduced absenteeism, turnover and injury but this does not mean that 'running 70 miles a week as a means of preparing for running marathons [can do so] in an equally simple or unproblematic way' (Waddington, 2000: 20). And yet sport, and its 'significant economic benefits for business, communities, and nations', is uncritically and problematically conflated with other forms of physical activity (see Bloom et al., 2005). The following section will take a closer look at the negative associations between sport and health and the ways in which sport can facilitate pain, injury and ill health.

THE RISKS OF SPORT

Despite the conventional wisdom that greater participation in sport enhances health and the quality of life for many individuals, researchers from a number of academic disciplines are beginning to identify and investigate the ways in which the health benefits of intense participation in sport are questionable and the ways in which intense sport participation may in fact contribute to increased rates of morbidity and mortality (Waddington, 2000; White and Young, 1999). Epidemiological research into the costs of injury from sport is slowly getting off the ground (e.g. McCutcheon et al., 1997; Young, 2004; see White, 2004, for a comprehensive overview of research in this area); however, this area remains in its infancy and empirical and methodological inconsistencies and deficits plague the existing literature:

Although there are statistics for incidence of injury for most sports and active pursuits, it is more difficult to find data on the numbers of people who take part in those activities and how frequently. Secondly, there is a lack of prospective studies on this topic. Thirdly, it is difficult to identify rates of injury accurately. (Department of Health, 2004: 73–4)

For example, admission records at doctors' office and emergency wards are a primary way of tracking the number of sport-related injuries per year, but not everyone who twists their ankle while participating in a sport goes to see a physician for treatment. Even with these limitations, the available data provide some insights into the patterns and costs of sport-related injury that support the argument that 'sports injuries are not uncommon, [they] affect a large number of people and make considerable demands on the nation's health services' (Nicholl et al., 1993: foreword). Large-scale surveys from Australia, Canada, the United Kingdom and the United States support arguments that injuries sustained in sports present a serious public health problem; that the greatest risks are associated with vigorous competitive (in particular, contact/collision) sport and those who do 'excessive' amounts of exercise; and that there are gender differences in patterns of sport injury (Finch and McGrath, 1997; Hume and Marshall, 1994; Marshall and Guskiewicz,

2003; Nicholl et al., 1995; Shepard, 2003; Sport and Recreation Research Communiqué, 1996; Tator et al., 1993; White and Young, 1999). Economically, estimates of direct treatment (e.g. medications, medical/dental/paramedical professional services, supplies, rehabilitation services) and indirect (e.g. reduced worker productivity, increased morbidity, increased mortality) costs of sports injury are astonishing. Nicholl et al. (1993, 1995) estimated the annual cost of sport injuries in the UK at £997 million, whereas, in Canada, the cost of sport injuries was estimated at C\$637 million (at 1996 prices) for the province of Ontario alone (Sport and Recreation Research Communiqué, 1996). In a cost-benefit analysis of injuries associated with sport and exercise, Nicholl et al. (1994) offer what may be one of the most interesting conclusions about the costs and benefits of sport. They argue that while there are clear economic benefits associated with exercise for adults aged 45 years and older, the medical costs from participation in sports by younger adults between the ages of 15 to 44 years greatly exceed the costs avoided by the disease-prevention benefits of participation. In other words, 'there are strong economic arguments in favour of exercise in adults aged 45 or over, but not in younger adults' (Nicholl et al., 1994: 109).

Nowhere is the argument against the health benefits of sport more evident than for athletes participating at the extreme end of vigorous competitive physical activity – high-performance sport (e.g. see Pipe, 2001). The ideology of excellence within high-performance sport demands the instrumentally rationalised and calculated pursuit of the linear record on the world sporting stage which in turn demands, on the part of the athlete, the development of levels of disregard for the body in the pursuit of sporting excellence (Beamish and Ritchie, 2004; Kidd, 1988). Given the intense and rigorous training and competition regimens involved in the production of high-performance sport, it is somewhat ironic that while athletes are often seen as symbols of strength and vitality, they often sacrifice their health and well-being in the pursuit of success and idealised athleticism (Hoberman, 1992; Hughes and Coakley, 1991; Young and White, 1995; Young et al., 1994). Simply put, as athletes move up the competitive ladder, they often wear down their bodies through a variety of health-compromising behaviours such as the uncritical tolerance of pain/injury, dangerous dieting practices, or the use and abuse of drugs. Athletes' immersion in, what is referred to as, sport's 'culture of risk' (Nixon, 1992) sees their often unquestioned acceptance and re/production of norms and behaviours that endanger health. The concept of the 'culture of risk' has great utility in examining the relationship between sport and health, but it is important to recognise that while there is widespread acceptance and tolerance of health-compromising norms and behaviours in competitive sport, researchers also acknowledge the varied and complex ways in which athletes and other sport participants (e.g. coaches, administrators) produce and respond to this culture (e.g. Howe, 2004; Pike, 2005; Roderick et al., 2000; Safai, 2003; Walk, 1997). Bearing in mind Donnelly's (2004) caution about the loose use of the term 'culture of risk' in the socio-cultural study of sport, the term is used in this

chapter as shorthand for the negative consequences of risk taking in sport, and while this chapter focuses on sport-related pain and injury, athletes' immersion in the 'culture of risk' applies in many ways to other health-endangering practices such as disordered eating (Johns, 2004).

Many athletes come to understand pain and injury as physical and symbolic cues of identity, such that pain tolerance and the disregard of bodily limits are often seen as reflections of strength of character. The pervasiveness of this ideology extends into the lives of male and female athletes (White and Young, 1999) and becomes part of the construction of athletic identity for many of these individuals. In short, it becomes part of their 'sport ethic' (Hughes and Coakley, 1991). In their seminal study, Hughes and Coakley (1991: 308) characterise the acceptance of pain and injury in sport as 'positive deviance', which they suggest is 'caused by an unqualified acceptance of, and unquestioned commitment to a value system framed by ... the sport ethic'. Positive deviance refers to a form of overconformity that goes so far in 'following commonly accepted rules or standards that it interferes with the wellbeing of self or others' (310). Much of the positive deviance in sport involves an unqualified acceptance of and overconformity to the value system embodied in the sport ethic, as defined by Coakley and Donnelly (2004: 157) as 'a cluster of norms that many people in power and performance sports have accepted and reaffirmed as the dominant criteria for defining what it means, in their social worlds, to be an athlete and to successfully claim an identity as an athlete'. Hughes and Coakley (1991) identify four beliefs that make up the sport ethic: (1) being an athlete involves making sacrifices for 'the game'; (2) being an athlete involves striving for distinction; (3) being an athlete involves accepting risks and playing through pain; and (4) being an athlete involves refusing to accept limits in the pursuit of possibilities. Not all athletes overconform to this ethic, but these norms make up the mindset and culture of many athletes in competitive sports. It is in this framework that athletes learn to expect, accept, minimise and/or ignore pain and injury as a normal part of the game, and even take pride in their pain threshold as proof of their character as athletes and their dedication to the team (Nixon, 1992). As Hughes and Coakley (1991: 316) stress, 'it [should be] emphasized that the norms of the sport ethic are positive norms; it is under the condition of uncritical acceptance and extreme overconformity that they are associated with dangerous and destructive behaviour'. Overconformity to the sport ethic becomes part of the overall participation experience, and although it varies between sports and athletes, it appears to be both common across sport and emphasised in particular sport cultures (White and Young, 1999).

Immersion in the 'culture of risk', overconformity to the sport ethic, and the uncritical tolerance of pain and injury, have become the purview of both male and female athletes. Much of the early socio-cultural research in this area focused on men and pointed to, as noted above, gender differences in patterns of sports-related pain and injury (see Box 7.1).

Box 7.1 Men and sports-related pain and injury

White and Young (1999: 74) highlight a wide range of literature to support their arguments that:

[There] is something about the ways in which boys and men experience and play sport that exposes them to greater risk of injury than their female counterparts ... the greater incidence of injury among males is explained by a number of factors, including the fact that more boys and men play sport than women and girls, that males play sports that are more conducive to injury, and that males play in ways that pay insufficient attention to physical self-preservation.

Sport remains one of the most important sites for the construction of hegemonic forms of masculinity, within which the use of violence and force, as well as the practice of tolerating pain, become part of the masculinising process (Young, 1993; Young et al., 1994). In short, men have championed the physical basis of gender difference through the paradoxical identification of the male body as a weapon to cause harm and to be harmed (see Messner, 1990; Sabo and Panepinto, 1990). But, a growing body of research on women's experiences of sport-related pain and injury shows that girls and women are beginning to adopt similar norms and patterns of behaviour with regard to overconformity to the sport ethic and the 'culture of risk', such that Young and White (1995: 51) suggest, 'if there is a difference between the way male and female athletes ... appear to understand pain and injury, it is only a matter of degree' (see also Charlesworth and Young, 2004; Pike and Maguire, 2003; Theberge, 1997). The evidence suggests that as women intensify their participation in sport and 'colonize "new" sport territory' (Young and White, 1995: 96) – for example, the increased number of women participating in such sports as ice hockey, rugby and wrestling; what Theberge (1997: 70) describes as the 'flag carriers of masculinity' – they adopt and reproduce the underlying masculinist meanings of sport structures and 'appear to [contribute] to an already defined sport process replete with violence, excessive and compromising health behaviour' (Young and White, 1995: 56). As Young and White (1995) show, some of the very strategies that women use in discussing the tolerance of pain and injury represent 'the cornerstones of the dominant male model of sport, and are adopted for a number of reasons: to show courage or character; to consolidate membership or kudos in a group; to avoid being benched; [or] to help make sense of compromised health in a lifestyle that reveres health and fitness' (53). This discussion of the role of pain and injury in the construction of gender and athletic identity leads us back to the paradox of competitive sport described above. Many people see sport (often overlapped with non-sport forms of physical activity) as building, enhancing and improving the body, but it also hurts and damages the

body. This destructive process implicates other participants in the sport system such as coaches, administrators and, given our focus on the relationship between sport and health, medical and paramedical health care practitioners.

SPORTS MEDICINE AND THE PROVISION OF HEALTH CARE TO ATHLETES

In Canada, as in many other nation states competing in the world's high-performance sporting arena, the provision of clinical/therapeutic support to athletes has become naturalised and institutionalised as part of the high-performance sport system and sports medicine has come to assume expertise and authority on the health of the sporting body. The Canadian Olympic Committee (COC) acknowledges this in its recognition that: 'Health care practitioners play an increasingly significant role in the performance of Canadian athletes and are an essential component in the preparation and performance of Canadian athletes for high performance competitions' (COC, personal communication, August 2004). Such a statement is not unique to the COC, but rather a telling marker of the built-in assumption that high-performance athletes train and compete to the physiological (and psychological) limit at all times in the pursuit of excellence. As Donnelly (1999) and Young (2004) note, critical analysis of the provision of health care to athletes, specifically sports medicine, has been relatively absent (Box 7.2) in the socio-cultural study of sport (exceptions to this include the foundational works of such scholars as Berryman and Park, 1992; Hoberman, 1992; Nixon, 1992; Waddington, 1996).

Box 7.2 Why does the high rate of sports-related injuries receive so little attention?

The rates of injury in many sports are quite astonishing, but do not seem to have attracted the type of social criticism necessary to bring them to the forefront of public attention. If a similar rate of injury, and even death, existed in other areas of social life (e.g., in schools, factories, or the fast-food industry) it would warrant major legal and policy attention. Imagine a fast-food industry where there are regular accidents such as burns from the hot fat fryer, or falls on grease-covered kitchen floors; where there is a whole sub-specialty of medicine ('fast-food medicine') which included designated clinics, and therapists and specialists in the treatment of such injuries; and where particularly dangerous restaurants have a clinician attached to the workplace. While this may seem absurd with regard to fast-food, it is normal practice in sport. (Donnelly, 2004: 33)

This last section of the chapter will explore in greater depth the provision of therapeutic health care to athletes and, in particular, the development, role and practices of sports medicine and sports medicine occupational groups (e.g. sports medicine physicians, athletic therapists, sport physiotherapists, sport chiropractors, sport massage therapists) in mediating the relationship between competitive sport and health.¹

Sports medicine, as we know of it today, emerged in Germany in the early 1900s (Hoberman, 1992; Riordan, 1987) at a time when the athletic body was seen mainly as a tool in the pursuit of scientific knowledge. By the early twentieth century, technological advances in science and medicine were enlisted in the pursuit of athletic success and while it is important to acknowledge the ways in which the development of sports medicine was intertwined with the broader growth and development of physical education and sport sciences, it cannot be emphasised enough that the care, treatment and rehabilitation of athletes are decidedly a phenomenon of the mid-twentieth century (Berryman and Park, 1992). One of the main reasons for this has to do with the transformation of the production of sport, specifically high-performance sport, following World War II, since a number of scholars acknowledge the strong connections that exist between high-performance sport and the growth and development of sports medicine (e.g. Hoberman, 1992; Waddington, 1996). A rapidly changing international socio-cultural, political and economic climate post-war, both within and outside of sport, saw the adoption of an ideology of excellence in sport in many nation states (cf. Beamish and Ritchie, 2004). This ideological shift transformed the nature and culture of high-performance sport – privileging the professionalised, commercialised, bureaucratised and instrumentally rationalised production of sport and fostering, as Hoberman (1992: 25) puts it, the ‘promise of limitless performances’. The single-minded and focused pursuit of sporting success as espoused by this ideology has come to define how high-performance sport should be produced and conducted (Kidd, 1988). But, the promise of ‘limitless performance’ does have its limits. Athletes, in subscribing to the ideology of excellence and in uncritically accepting and overconforming to the ‘sport ethic’, regularly train and compete at the borders of physical breakdown (Theberge, 2005; Young and White, 1995; Young et al., 1994).

Another reason for the accelerated development of sports medicine since the 1950s has to do with the broader medicalisation of life, including sport (Waddington, 1996). Medicalisation refers to the process whereby a larger number and broader range of human conditions are brought under the medical ‘gaze’, such that both medical intervention and the emergence of medical specialties ready to intervene are justified. In a provocative statement, Waddington suggests that ‘one can see here the development of the idea, now very widespread, that athletes require routine medical supervision, not because they necessarily have any clearly defined pathology but, in this case, simply because they are athletes’ (1996: 179). We must approach this statement cautiously since there is simply not enough empirical research on the extent and nature of medical supervision of athletes in competitive sport contexts. In fact, in light of the above discussion on

the 'culture of risk', one could argue that athletes may avoid medical supervision and intervention because it goes against their sport ethic. Existing research demonstrates that there is a continuum of ways in which athletes negotiate with clinicians when such help is available and accessible and that context is a key determinant of how negotiations can and do proceed (see Roderick et al., 2000; Safai, 2003; Walk, 1997; Young, 2004). The medicalisation of sport is not definite or all encompassing but has been facilitated by a number of factors including the broader medicalisation of life and the professionalisation of the production of high-performance sport such that athletes may actively turn to clinicians for ways of improving performance.

It is against this socio-cultural, political, economic and ideological backdrop that contemporary sports medicine developed. In Canada, discussion of the care, treatment and rehabilitation of athletes did not gain focused attention until the late 1960s and since that time the therapeutic aspect of sports medicine, including the occupational groups that comprise the field of sports medicine, has enjoyed accelerated, uncritical and unquestioned development in the high-performance sport system. Banks (1983: 860) writes:

During the 60's and 70's we ... saw a huge increase in sports participation at all levels. The so-called 'fitness explosion' caused a complete change in our way of life – more leisure time and recreation, more exercising, a rapid development of organized sports, tougher competitions and more rigorous and sophisticated training techniques. And, of course, more injuries and health problems. From out of this time frame has emerged an athlete who is better educated and at least somewhat more knowledgeable of the medical care he needs and deserves. It's obvious that each country must provide superb health care for its athletes – before, during, and after – major games.

The obviousness of the need for sports medicine is problematic here. The ideological transformation of the high-performance sport system in this period of time and the shift towards 'tougher competitions and more rigorous and sophisticated training techniques' supported and welcomed the unquestioned proliferation of various sport experts, including sports medicine clinicians. But the transformation of the high-performance sport system, specifically the production of high-performance sport, also supported 'more injuries and health problems'. In many countries around the world, this rise in injuries and health problems was not met with critique but rather with support for the professional development of the field of sports medicine and its various disciplines. In the late 1970s, the Canadian government created and funded the Sport Medicine Council of Canada (later known as the Sport Medicine and Science Council of Canada) in response to these changing dynamics. This Council was a platform on which sports medicine and science occupational groups boosted and accelerated their professional development, but its mandate was fairly limited to the provision of care to athletes at major games – in order to maintain peak performance (cf. Theberge, 2005) – rather than the prevention of injury in high-performance sport (Safai, 2005). There *was* genuine concern about athletes' health

and well-being – it would be inappropriate to suggest that there was not a real desire to help athletes with their pain and injuries. However, a more critical reading highlights a greater concern over the poor performance in relation to and the risk of defeat at the hands of athletes from other nation states (see Safai, 2005). If success in high-performance sport was seen as a way in which to bolster pan-Canadian identity and nationalism in the international arena, thus legitimating increased state intervention in sport (Kidd, 1988), then state support and subsidisation of sports medicine was a way in which to ensure that success by minimising the risks to the athletes' 'limitless performances'. See Box 7.3 for a brief discussion of sports medicine outside the context of high-performance sport.

Box 7.3 Sports medicine beyond high-performance sport

Whereas the naturalisation of sports medicine within the high-performance sport system, from the late 1960s onwards, helped in legitimating state intervention into sport, the current field of sports medicine extends well beyond the elite athlete. There is a significant, and significantly under-researched, sports medicine industry (including clinics, medications and orthopaedic products) that operates, conservatively, in the hundreds of millions of dollars annually in North America alone (see Donnelly, 1999). There is a cyclical relationship here in that as the need for sports medicine is stimulated (i.e. the need for 'expert' knowledge to manage the negative risks of sport), the institutionalisation of sports medicine is legitimated. In other words, sports medicine stimulates a need for its services, provides the means with which to meet the needs of patients who have to come to accept sports medicine's expertise, and in turn further secures its authoritative position on the health of the athletic body. For non-high-performance athletes, sports medicine is a body of knowledge and area of expertise for sale and people – albeit only those with disposable income and a particular cultural capital that recognises the specialised expertise of sports medicine as somehow better – are buying. In this light, it is not far-fetched to suggest that the profitable economic aspect of sports medicine supports injury treatment and rehabilitation, but not necessarily prevention (cf. Donnelly, 2004).

CONCLUSION

This chapter has been concerned with exploring the relationship between sport and health and, in particular, focused on the ways in which sport contributes to pain, injury and ill health. One of the challenges to our better understanding of this relationship remains the continued conflation of the positive benefits of mild to moderate forms of physical activity with organised, competitive sport. The empirical evidence for the positive benefits of sport is tenuous,

and yet many people, including health and sport policy makers, continue to tout the commonplace assumption that 'sport is good for one's health' (cf. Waddington, 2000). There are a number of positive health associations that accompany increased participation in non-sport forms of physical activity, but the increased intensity, frequency and duration of participation involved in competitive sport often negate those benefits and produce risks of their own in the form of health-compromising norms and behaviours. It would be wrong to paint a completely bleak picture of the health benefits of sport – participation in sport can and does have a positive transformative health effect for many people. However, the structure of sport – its 'culture of risk', its dependence on aggression and violence in the construction of gender and athletic identity, its commitment to an ideology of excellence – makes these positive health effects the exception and not the rule. The structure and production of competitive sport facilitate ill health, and this implicates the ways in which health care is provided to athletes. Sports medicine and the occupational groups that comprise the field of sports medicine have come to assume expertise and authority on the sporting body and have created a niche for themselves in the sport and health care systems of many countries. However, we must question how much of a role they have played in the prevention and reduction of sport injury and the implications of their more curative role in the treatment and care of sport injury. Much more research is needed in this area in order to ensure the good health of sport participants and to give credence to the belief that 'sport is good for one's health'.

CHAPTER SUMMARY

- » There is compelling evidence supporting the health benefits of mild to moderate forms of physical activity but despite the conventional wisdom that 'sport is good for one's health', research on the negative health benefits of sport is growing.
- » A challenge to our understanding of the negative relationship between sport and health resides in the ways in which sport is often conflated with non-sport forms of physical activity.
- » In overconforming to the sport ethic, athletes are often immersed in a 'culture of risk' that fosters the uncritical acceptance and tolerance of health-compromising norms and behaviours.
- » Sports medicine has become naturalised and institutionalised in high-performance sport and supports, directly and indirectly, the ideology of excellence and the dedicated pursuit of success. This is problematic since the dedicated and focused pursuit of success demands that athletes train and compete at the physiological and psychological limit, the edge of pain and injury, at all times.
- » While there remain a number of research gaps in the critical study of sports medicine in high-performance sport, even less is known about sports medicine beyond the high-performance sport arena.

FURTHER READING

Young's (2004) edited volume, *Sporting Bodies, Damaged Selves*, provides a strong overview of the state of knowledge in the socio-cultural study of sport on sport-related pain and injury. With regard to sports medicine, Berryman and Park (1992), Hoberman (1992) and Waddington (2000) provide important foundational readings on the socio-historical development of sports medicine from the nineteenth century onwards in parts of Europe and North America.

NOTE

1 An exploration of the sociological debates around professions and professionalisation falls beyond the scope of this chapter, but the term 'occupational group' is used quite intentionally here as a type of 'neutral' terminology for all clinician groups, since the word 'profession' is loaded with signifiers of status, prestige and social closure.

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