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# History of Sports Medicine in Germany. Some Preliminary Reflections on a Complex Research Project

*Michael Krüger\**

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**Abstract:** »Die Geschichte der Sportmedizin in Deutschland. Einleitende Reflexionen zu einem vielschichtigen Forschungsprojekt«. The paper presents the concept underlying a research project on the history of sports medicine in Germany. The origins and most intensive development of sports medicine have been in Germany. In fact, sports medicine in Germany is associated with various doping scandals from the past, beginning with the Sports Medical Service in the former East Germany, which consistently delivered so-called "sustaining means" to East German athletes. However, so too were there the West-German networks of doping doctors like those at Freiburg University, represented by such protagonists as Joseph Keul and Armin Klümper. However, (West-) German society has made these and other sports physicians into celebrities, which seems to be unique compared to other countries. Yet the history of German sports medicine is by no means limited to unethical or even illegal doping. Sports doctors also initiated anti-doping concepts. Beyond doping and anti-doping, the history of German sports medicine reveals a broad spectrum of genuine medical aid and research, all located somewhere between prevention, medical and social aid, medication, trauma surgery, and rehabilitation by means of physical exercise, education, and sports. Sports medicine, not only in Germany, "sells" movement and sport as the most effective and legitimate drug against diseases of every kind, and for health and well-being. The project aims to research the remarkable and ambivalent history of German sports medicine by studying new and complex historical documents and oral history. The first and main part of the article provides essentially a state of the art history of German sports medicine, including an overview of the essential steps comprising its complex historical development. The second part is an attempt to conceptualize the current research project with respect to the various issues within this history.

**Keywords:** Sports medicine, doping, Germany, history of sport.

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# 1. Introduction

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The German word “*Sportarzt*” – doctor of or for sports – was at first used in about 1900 according to Hoberman (1992, 240 et seq.). Arthur Mallwitz, one of the pioneers of sports medicine, used this word in his PhD thesis in 1908. Regarding this date, it seems that sports medicine, as part of the medical sciences, developed analogously to the social phenomenon of modern sport on the one hand, and to the progress of medical science on the other. The 20th century was to become the century of sport. Some intelligentsia characterized sport ironically as a “new religion.”<sup>1</sup> Amongst others, in his book “*Sportlandschaften*,” the historian Noyan Dinçkal focuses on the simultaneous development of modern sport and modern science, implementing new body concepts in modern society with respect to a sporting habitus, a healthy lifestyle, and the increasing relevance of medical support by physicians, various therapists, and drugs. All of these elements were part of an era which Dinçkal (2013, 2014) refers to as “*klassische Moderne*” (classical modernity), which extends from 1900 until the 1930s. Usually, this term seems to be dedicated to arts and literature. However, new sporting habitus and body concepts are even evident in famous works of art and literature, like that of the authors and artists of the so-called *Neue Sachlichkeit*.<sup>2</sup>

Modern sports and sciences could both gain from each other. Sporting athletes, coaches, officials, media, and so on were busy improving their performance through the support of medical experts. Doctors tried to improve their knowledge of the human body and its physiological achievement. Among other aspects of life, including high demands of bodily achievement like manual labor in factories or soldiers at war, sport at the limit of human capability was an ideal field of experience for scientific purposes. Optimizing human performance is undoubtedly a major legitimation for sports medicine as a branch of the medical sciences. Another perspective is that human exercise, movement, gymnastics, and moderate sports are useful as a means of preventing diseases. This preventive concept through movement and exercise seems to be much older than that of the modern *Sportarzt*. However, the idea of preventing diseases by means of movement, exercise, and training remains and may be so more than ever part of the profession of a *Sportarzt*.

Therefore, the German word *Sportarzt* has different perspectives in the field: Firstly, a doctor to help athletes improve their performance; secondly, a doctor

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<sup>1</sup> For example, the journal *Der Querschnitt* (6/1932), read mostly by the educated classes of Berlin, dealt with modern sports in 1932. The introductory article was titled “Sport – world religion of the 20th century.”

<sup>2</sup> An example for the literary reception of sport as phenomenon of modernity is the German poet Bertolt Brecht and his poems on the boxer Samson Körner (1926). Examples of modern art include the paintings of Willi Baumeister on the female runner (Brecht, Willett and Manheim 1983; Grohmann 1963).

promoting rehabilitative (or curative) opportunities to treat sick people, including athletes, by means of movement, exercise, training, and sport; thirdly, a doctor in the sense of a health educator who tries to prevent diseases through movement and sport; and, finally, a scientist interested in furthering knowledge about the human body and its limits, with special respect to better sport performances. Sports medicine can be both an applied science or art, and a theoretical discipline of medical and/ or sport sciences.

These numerous perspectives on sports medicine, including its effects on institutionalizing sports medicine in Britain were exemplarily researched by Vanessa Heggie in her *History of British Sports Medicine* (2011). This work is, in another sense, an example of best practice for all who intend to work and write about the history of sports medicine. Heggie reflects on this exciting history from a pluralistic and critical perspective. By contrast, in Germany, such an independent and critical overview of the history of that discipline does not yet exist. Actually, there are several historical contributions in that field, but this work is either fragmentary with respect to individual physicians or doctors, or is dependent in a sense that active sports doctors and scientists wrote their own history.<sup>3</sup> Therefore, these contributions can indeed be regarded less as serious and objective historical research, and more as “anniversary publications” or similar.

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## 2. A Short History of German Sports Medicine

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In Germany, the society of sports doctors is a fairly strong association including round about 9000 members. It is called the *Deutsche Gesellschaft für Sportmedizin und Prävention* (DGSP) – German Society for Sports Medicine and Prevention. In terms of the number of members, the DGSP is one of the largest medical societies of specialists in Germany.<sup>4</sup> However, its relevance within the scientific community of German doctors is limited. Whereas in East Germany, during the now defunct communist GDR, the profession of a sports doctor was officially accepted as a medical specialist with a comparable status to that of surgeons. By contrast, in West Germany, the society of sports doctors did

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<sup>3</sup> The work of Hollmann and Tittel (2008) is typical. Both authors were leading sports physicians and professors in both parts of Germany: Hollman in Cologne, and Tittel in Leipzig. Their common work on the history of German sports medicine can be interpreted on the one hand as a sign of the successful re-unification of sport medicine in Germany during the course of political change in 1989/90. On the other hand, the work can also be seen as proof of their common incompetence und lack of goodwill, which prevented them from writing a critical and independent history of German sports history, including their dark sides in both German dictatorships and in West Germany.

<sup>4</sup> For further information see the homepage of the DGSP <<http://www.dgsp.de/index.php?>> (Accessed March 3, 2015).

not succeed in gaining similar status. Until today, after German reunification, a sports doctor is neither academically nor publicly acknowledged as being comparable to other specialists like cardiologists, orthopedic or other surgeons, or psychiatrists. Sports medicine is simply not at the same level of the system of medical sciences in other specific disciplines.

Not least, various recent and earlier doping scandals have contributed to the loss of authority and public credibility of sports medicine. Especially historical research on doping activities by sports doctors of the former GDR contributed to the bad or at least ambivalent general image of German sports medicine. German sports medicine was unable to eradicate the public opinion that doping is more than the result of unethical behavior by some “black sheep,” rather than a systemic malaise. Beyond the genuinely complex problem of doping and the involvement of sports doctors, the history of sports medicine in Germany reveals more than just this ugly spot on the would-be clean slate of German sports medicine. However, the German Society for Sports Medicine and Prevention celebrated its 100st birthday in 2012 in a highly self-conscious and confident manner. No word of self-criticism was evident either at the jubilee or in various publications (Hollmann and Tittel 2008; Arndt 2012).<sup>5</sup>

In 1912, when the association of German sports doctors was founded, its initial name was “*Reichskomitee zur wissenschaftlichen Erforschung des Sports und der Leibesübungen*” (Reichs Committee for the Scientific Research of Sport and Physical Exercise). Sport was to be a new subject of modern medical science. The foundation of the society took place immediately after the famous international *Dresdener Hygiene Ausstellung* (Dresden Hygiene Exhibition) of 1911 where a sports laboratory had initially been equipped and exhibited (Mosse 1911). At that time, medical science in Germany was the world leader, and its international reputation was excellent. The process of institutionalizing sports medicine in Germany was then to be pushed by implementing sports medical laboratories at various universities. In Berlin, an exemplary best practice science laboratory for sport was to be equipped. Additionally, “*sportärztliche Beratungsstellen*” – offices for medical support in sports – would be introduced by local health authorities. When the *Deutsche Hochschule für Leibesübungen* (DHfL) – the German University for Bodily Exercise – was opened in Berlin in 1920, the famous surgeon Dr. August Bier became its first president. As a matter of course, sports medicine, healthcare, health prevention, and rehabilitation through sports and exercise became essential elements of student teaching and research by this unique sports university. Bier himself strove for the leading role of sports medicine in the developing field of the sports sciences (Court 2014).

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<sup>5</sup> Hollmann and Tittel (2008) and Arndt (2012) are examples of such self-opinionated, uncritical historiography of German sports medicine. See Eggers (2013).

The comparably early start of the institutionalization and scientification process of sports medicine in Germany is not only explained by the growing influence of public sports activities and in society as a whole. A major factor was the political situation in Germany after World War I. The empire had been completely defeated by the allied forces. The population was starving, millions of soldiers had died, and those who had survived were hungry and mostly wounded in both body and soul. Medical care was hopelessly insufficient. In addition, right wing, nationalist branches of German society called for revenge and the revival of a strong Germany. In their opinion, the new Republic of Weimar, in fact the first democratic republic of Germany, was unable to regain real power and strength.

## 2.1 Body Exercises, Health and Disease – A History before the Take-Off of German Sports Medicine

The fact that a professional institution of German sports physicians could be founded in 1912 does not mean that doctors and educators did not already respect body exercises and gymnastics as relevant for health, physical (and mental and social) well-being, and the prevention of diseases. Since ancient times, bodily exercises were regarded as a means of maintaining the balance of various “forces” within the human being. The German philosopher Hans-Georg Gadamer, who analyzed in his book *Die Verborgenheit der Gesundheit (The Enigma of Health)* the work of ancient physicians like Galen, Paracelsus, and Hippocrates, asserted that the paradigm of balance was crucial for the understanding of health and diseases in ancient times (Gadamer 1994, 55 et seq.). Logically, diseases were regarded as the result of some form of trouble or problem in one’s life, disturbing the natural balance of life the longer run. The best one could do for one’s health was to live a life in balance. Such was the message of ancient health experts. Doctors were obliged to educate and advise their patients to retain, acquire, or regain this balance. Not until the genesis of modern medical science as part of the natural sciences did a new concept of health and, in consequence, of the professional self-concept of physicians, become apparent. Modern sciences promised to “create” health. Diseases were no longer accepted as an inevitable fate, but as challenges to doctors to combat them by all possible means, including artificially or chemically produced drugs. Ancient physicians had recommended natural remedies and gave more or less helpful advice like that of Paracelsus, with his famous prescription: “It is just the dosage that makes a poison no longer a poison.” The obligation of a doctor was essentially to “keep the body healthy,” and less to cure diseases (cf. Schipperges 1984, 32).<sup>6</sup>

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<sup>6</sup> This classic quotation of Paracelsus may also apply to the medication of modern top athletes with drugs (and even with bodily training).

Until the change of this fundamental paradigm, bodily exercises were essentially regarded as a means of maintaining the natural balance of life between body, mind, and soul, or in other words, between the physical, mental, and emotional challenges of life. Medieval physicians trod in the footprints of their ancient idols. Since the 18th century in Europe, during the period of enlightenment when people became more aware of their own responsibility for the success or failure of life and health, guidebooks for healthy living spread throughout Europe, at least among the educated classes, or they were written by proponents of the Enlightenment for the lower, uneducated classes. Authors like John Locke or Jean Jacques Rousseau recommended a natural life, including natural bodily movement, play, and exercises (Rousseau 1963 [1762]). According to Rousseau, modern civilization, which was his main subject, is lacking in natural movement, play, and exercises, and thus responsible for all the evils of mankind, and prohibits the *pursuit of happiness*, a topos which became part of the constitution of the United States of America.

Bodily strength and health were regarded as fundamentals of both personal and social happiness. This was a crucial message of the Enlightenment. In Germany, successors of the ideas of Rousseau called themselves philanthropists. They were in fact educators, doctors, authors, Protestant priests, generally intellectuals who propagated living with full awareness and rationality. Lower-class people needed to be educated and enlightened by rational recommendations and guidebooks. The most famous of these was the *Gesundheitskatechismus* of Bernhard Christoph Faust (1755-1842) from 1795, which contained clear behavioral rules, similar to those of the Bible, on how to live healthily (Fuhmann 2005). Faust was just one representative of a new generation of doctors who felt like and acted as educators of the common people in assisting them to live a happy and healthy life. He ranked together with famous physicians like Samuel Auguste Tissot (1728-1797), Johann Peter Frank (1745-1821), and Christoph Wilhelm Hufeland (1762-1836), of whom the latter's most famous patient was Johann Wolfgang von Goethe (Benaroyo 1988; Dauenhauer and Matheis 2004; Pfeifer 2000).

Among these philanthropists, the German educator Johann Christoph Friedrich GutsMuths propagated gymnastics – as in ancient Greece – to teach the youth a better, healthy life through “*Abhärtung*,” bodily exercise, play, and games in the fresh open air. GutsMuths' book “*Gymnastics for the Youth*” (1793) became a model for similar concepts of health education through bodily exercises from various European educators (Friedrich 1928). The most famous is Pehr Henrik Ling (1776-1839) in Sweden, who created a system of rational gymnastics, which spread from Sweden throughout the world (Holmberg 1939).

However, the philanthropists and their successors in Europe were not only preachers of a healthy life in a harmonious balance of body, mind, and soul, but they were also in favor of improving the performance of the individual, of the nation, and of mankind by means of better education. Health is not only a pre-

condition for happiness, but also for enhancing body and mind. And, finally, a better future for all seemed possible optimizing the potential of each human being.

Therefore, health education since the period of Enlightenment included work related to enhancing performance of both body and mind. During the 19th century, educators, school teachers, and physicians attempted to improve individual health and well-being in order to improve physical and mental performance. The message of the German Turners and gymnastic teachers during the 19th century was that gymnastics contribute to the *Volksgesundheit* – the health of the people – which is in fact a precondition for the soundness of the German nation and its strength or power, compared to other people and nations.<sup>7</sup>

*Volksgesundheit*, health, and bodily strength, were the most relevant arguments for legitimizing gymnastics as a compulsory school subject. In addition, gymnastics clubs used these arguments to demonstrate their importance for the nation and civil society. Leaders of the *Deutsche Turnerschaft*, the umbrella organization of all gymnastic clubs in Germany, which had about one million members at the turn of the 20th century, were mostly teachers and doctors. The most famous examples were Dr. Ferdinand Goetz (1826-1915) (Ruehl 1901, 86-9), spokesman of the *Turnerschaft* from 1860 until 1915, and Dr. Ferdinand August Schmidt (1852-1929), a physician from Bonn who was the second spokesman of the *Turnerschaft* and the *Zentralausschuss zur Förderung der Jugend- und Volksspiele*, which was a common initiative of various sports and gymnastics federations aiming to support the health and strength of German youth by means of play, games, gymnastics, and sports. In 1924, Schmidt was elected chairman of the *Deutscher Ärztebund zur Förderung der Leibesübungen*, which was a forerunner organization of the *Deutscher Sportärztebund*, the official name since 1933.<sup>8</sup>

The personality and career of F. A. Schmidt clearly demonstrate that the shift from the classical paradigm of sports medicine as a means of maintaining the balance between body and mind, to the modern concept of scientific medical treatment and research, occurred smoothly and gradually from the 19th century to the present.

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<sup>7</sup> *Volksgesundheit* was a term used for a long time in Germany, from the 19th century until the recent past. See Moser (2002). Theodor Lewald (1926), a senior official during the Weimar Republic and leader of the German *Reichsausschuss für Leibesübungen* (DRA), the then umbrella organization of gymnastics and sports clubs and federations, also used this term to legitimize body exercises and sports.

<sup>8</sup> Schmidt (1926) also wrote a fundamental contribution to the history of sports medicine or perhaps rather to the history of hygiene and the role gymnastics and exercises.

## 2.2 The “Barrenstreit” in Prussia and its Impact

The so-called *Barrenstreit in Preußen*, the controversy concerning parallel bars in Prussia in the 1860s, was a crucial step in the development of this new paradigm (The *Barrenstreit* is described, analyzed, and interpreted in detail in Krüger 1996, 185-224). The point was that the Prussian government and military leaders, represented in this case by Major Hugo Rothstein, argued that the system of classical German gymnastics, symbolized by the gymnastics apparatus of parallel bars, were not appropriate for promoting the physical health and strength of the youth. By contrast, Rothstein intended to introduce the “rational” system of Swedish gymnastics without German gymnastics apparatus like parallel bars. This issue of Swedish and German gymnastics was discussed both in public and even in the Prussian parliament. During this debate, a number of famous medical experts were consulted on both sides. The most famous were the physiologist Emile du Bois-Reymond (1818-1896) and the scientist and pathologist Rudolf Virchow (1821-1902) (Wenig, Virchow and DuBois-Reymond 1995; Vasold and Virchow 1990; Ackerknecht and Virchow 1953). Both are regarded as pioneers of modern medical science. Their scientific arguments established the need for sufficient movement and bodily exercises, especially in the form of German gymnastics.

Typical with respect to the *Barrenstreit* was that both political and scientific arguments were used to legitimate gymnastics, sports, and bodily exercises. Virchow, also being a liberal member of Prussian parliament, argued that bodily exercises and strength not only promoted individual health and well-being, but also the very strength of the nation. A strong nation needs healthy and strong citizens, including men and women, children and the youth, and adults as both workers and civilians. Virchow, who is also respected as a founder of modern social hygiene (*Sozialmedizin*), did not respect health and strength for military purposes, but for the process of nation-building in general. This referred to a nation with rational, free, and self-aware people, rather than the obedient and “will-less” subjects of the Prussian state and government. Therefore, during his political life and during the *Barrenstreit*, Virchow, in contrast to the Prussian government, preferred German gymnastics as a means of physical education to the governmental Swedish gymnastic system. Virchow worked for the improvement of the living conditions of the poor and workers in Berlin during the Prussian-German *Kaiserreich* (Empire).

In sum, these arguments during the Prussian *Barrenstreit* on the part of the medical authorities were not forgotten in subsequent years. In fact, when the professional organization of the German sports physicians experienced its peak during the “golden twenties,” health, well-being, and strength by means of physical education, gymnastics, and sports for the individual and the nation, supported by medical experts, remained the crucial reasons to legitimate both gymnastics and sports, and sports medicine.

The classic idea of a balanced life, including both bodily and mental challenges, became a fundamental approach in current concepts of sports and training science with respect to the work of Walter B. Cannon. In 1932, the US American scientist wrote a book entitled “The Wisdom of the Body” (Cannon and Cannon 1967 [1932]). The subtitle was “How the human body reacts to disturbance and danger and maintains the stability essential to life.” In this book, he re-invented the classic idea of life balance as a precondition for health and achievement by means of modern scientific analysis. He created the principle of *homeostasis*, which became a kind of natural law for current sport science. This principle explains how our body adapts to external conditions or to external demands relating to achievement and assorted forms of trouble. The various systems of our body try to adapt their form and functions to these external challenges, and simultaneously strive for a new balance at a higher level. That is why physical training is effective and results in achievements at a higher level after training and – equally importantly – necessary breaks. The “wisdom of the body” includes this autopoietic mechanism of homeostasis. Cannon’s theory of homeostasis was an attempt to explain how we can both live in balance and perform better. Accordingly, the medical work of Cannon became highly relevant and sustainable with respect to modern sports science, training science, and sports medicine. Being aware of the principle of homeostasis, sports doctors and coaches also knew that hard training without sufficient time for recreation is counterproductive with respect to better performance.

Another consequence of this principle was the health concept of salutogenesis – in contrast to the concept of pathogenesis of academic medicine. This concept and terminology of salutogenesis is based on the work of the scientist and sociologist Aaron Antonovsky (1923-1994). In his work, he did not consider how to cure diseases, but rather what conditions enable people to remain healthy, despite hard work and serious problems. He conducted research with survivors of the Holocaust, some of whom succeeded in living to an advanced age, despite their appalling fate during the Third Reich. One answer to this complex question was that these people were able to construct a “sense of coherence” (SOC) for their lives, which seems to be an alternative description for the capability to keep and permanently construct a new balance of life, including body and mind (Jork 2006).<sup>9</sup>

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<sup>9</sup> Independent of the work of Antonovsky in Germany, various similar concepts of health, like that of the so-called *Gestaltkreistheorie* – the theory building circles – propagated by scholars like Victor von Weizsäcker and Erwin Strauß, became popular among alternative scientist thinking in the field of human wholeness (Dressler 1989).

## 2.3 Militarization and the Sportization of Sports Medicine

The peace treaty of Versailles in 1918 did not allow a powerful army in Germany. In that situation, sport and exercise were highly respected by all for various reasons. They could be used as a cheap and effective means of improving the poor level of health and bodily hygiene of the German population. Incidentally, after World War I, gymnastics and sports for disabled veterans was initiated not only in Germany, but in all civilized countries whose armies had been fighting in that barbaric, uncivilized war. All in all, improving health and strength, and raising the “energy” of the population, as well as preventive health education through “*Abhärtung*” – therapies for increasing strength or, in other words, “hardening up” – was certainly a major motivation for sports medicine and sports doctors, and for its legitimization in society. The notion of “*Abhärtung*,” which in modern terms would mean strengthening the immune system, was used since the days of GutsMuths at the end of the 18th century. However, the limiting factor was the catastrophic nutritional situation. In contrast to the present, when most people suffer from being overweight (at least in the wealthy states), people at that time were commonly undernourished and truly hungry.

A further impact of general physical training and exercise was its preparatory function for military purposes. A new and strong Germany needed healthy, strong, and well-trained new soldiers. If training was not allowed in military camps, it could be done in sports clubs and through physical education at schools, and, as a matter of course, supervised by doctors. This was the context in which Wolfgang Kohlrausch (1888-1980), another pioneer of German sports medicine, could argue that sport, including physical training and exercises, is the “*Arzt am Krankenlager des deutschen Volkes*” – the doctor at the (sick) bed of the German people (Uhlmann 2005).

As mentioned above, in 1924, the Reich’s Committee for the Scientific Research of Sport and Physical Exercise changed its name to the *Deutscher Ärztbund zur Förderung der Leibesübungen* – German Association of Sports Doctors for Supporting Physical Exercise, headed by the doctor and gymnastics leader F. A. Schmidt. In 1928, on the occasion of the second Winter Olympic Games in St. Moritz (Switzerland), the International Association of Sports Medicine was founded, officially named the *French Fédération Internationale de Médecine Sportive* (FIMS) (until 1934, *Internationale Médico-Sportive*). German sports doctors played a major role in this international organization. As John Hoberman and other international experts argue, German sports medicine was regarded as leading from an international perspective at that time (Hoberman 1993, 2013). German sports doctors themselves requested a leading position in the FIMS, in science, and in the medical system in general. Sports medicine should be the “first address” with respect to all questions of general health care and physical achievement for both sports and military fitness.

The foundation of an international professional organization of sports physicians on the occasion of Olympic Games is a sign of the ongoing sportization of sports medicine. The introduction of winter games demonstrated that the notion of international Olympic sports competitions of various sports disciplines became familiar to the world as a whole. Olympic Games were not just games “for fun,” but meetings of the best-performing athletes. These athletes were admired because they demonstrated incredible human achievements. For physicians and medical researchers, these athletes were especially relevant because they were looked upon as real, living cases of the limits of human physical achievement. The medical scientists of all developed countries in the world participating at the Olympic Games were interested in these questions with respect to the limits of human performance and even how to extend these limits beyond the usual levels, possibly by external means in the form of drugs.

However, not only sports doctors were researching in and experimenting with these fields of interest. Specialists in all civilized countries were active mainly with respect to the disciplines of work physiology and social medicine (Court 2014). In Germany, parallel to the development of sports medicine, the Research Institute of Work Physiology and Performance Medicine was founded in 1912 in Berlin as part of the *Kaiser-Wilhelm-Gesellschaft zur Förderung der Wissenschaften* (Kaiser William Society for the Support of Science). Experiments and tests were conducted by both physiologists and sports doctors with workers, soldiers and athletes. During the Third Reich, often inhumane and unethical medical tests were additionally conducted with forced laborers and prisoners of war. Until now, we have been unable to find evidence on whether experiments were conducted with respect to performance enhancing drugs for sport and labor.

The history of German and international sports medicine during the Third Reich is another desideratum of historical research. In fact, the Berlin Olympics of 1936 can be regarded as an indicator of the leading role of German sports, including sports medicine in the international, Olympic sports movement. At the Berlin Games, the Germans organized the 4th World Congress on sports medicine which was regarded as a great international success (Ristau 2013).

Dr. Leonardo Conti, a Swiss-German doctor and Nazi, became head of the medical service during the Games of Berlin. After the Games and the successful congress for sports medicine, he was elected as president of the FIMS at its conference in Paris in 1937. Two years later, Conti became *Reichsgesundheitsführer*, leader of the public health service in the Nazi empire, and union leader of the NS society for doctors. He interpreted his office according to the racist and anti-Semitic ideology of the Hitler dictatorship. He was also involved in the Nazi program of euthanasia (“mercy killing”) claiming many thousands of helpless victims in Germany and Europe. After the war, Conti was charged in Nürnberg (Nuremberg) by the Allies as a war criminal for his crimes against humanity. He was found hanging in his cell on October 8th, 1945 (ibid.).

## 2.4 German Sports Medicine under the Swastika

When Hitler and his Nazi party had gained total power in 1933, famous German-Jewish doctors with international reputation, namely Dr. Ernst Jokl (Breslau), Dr. Fritz Duras (Freiburg), and Prof. Dr. Rahel Hirsch (Berlin) had to leave Germany. After the war, these distinguished experts on sports medicine were respected and honored in the worldwide scientific community (Jokl [n.d.]; Uhlmann 1998).

The German society of sports doctors was newly or re-founded in 1950, identically named as before 1945. No public word was spoken by anyone on the dark side of sports doctors and the society during the Nazi period. By contrast, the same concepts by mostly the same people were propagated as in the past. German sport doctors again promised to support physical exercises “*im Dienste der Volksgesundheit*” – for the service of the people’s health (Hollmann and Tittel 2008).

A burdensome heritage and, in fact a ticking time bomb from the war period for the further development of sports, was the experience of soldiers with performance enhancing drugs. These experiences are allegedly usual for every soldier of every country in every war.<sup>10</sup> However, the experiences of World War II were in fact fundamental for the doping history of modern sport. German and international sports doctors recognized this upcoming problem and its fatal dimensions early on. In 1952, German sports doctors proposed, together with the German sport organizations, a definition of doping in order to ban doping or drugs from sport (Krüger 2015, 31-5).

From then on, sports medicine had to deal with the immense problem of doping. Sports doctors were split in two camps of pro-doping and anti-doping, those who supported athletes by all means to improve their performance, and others who warned against doping and tried desperately to prevent athletes and sports in general from unhealthy and unfair drug-taking. In some cases, this split involved the same person, meaning that in his role as a practical sports doctor he supported athletes by dubious means, and in his role as a sports medical scientist, he tried to prevent doping by defining doping and listing forbidden substances. From a political perspective, the East German sports doctors of the communist GDR were even officially required to dope athletes actively and were protected by the East German state (Spitzer 1998). By contrast, at international conferences the same sports doctors argued against doping and for anti-doping policies. In the so-called free West, sports doctors were responsible only to their own conscience. Not every sports doctor was morally strong enough to resist the temptations of doping athletes (Spitzer et al. 2013; Spitzer 2013). However, both

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<sup>10</sup> In fact, Norman Ohler described and analyzed the widespread use of performance-enhancing drugs during the Third Reich and in the German army (Ohler 2015). However, he was unable to prove the systematic use of drugs in Nazi sports by athletes.

were obliged to consider and respect the Hippocratic Oath, renewed by the Declaration of World Conference of Doctors of Geneva in 1948, to help *sick* people and not to support healthy people for better achievement. Doping contradicts these principles.<sup>11</sup>

## 2.5 Sports Medicine in East and West Germany

During the Cold War, sports doctors in both parts of Germany re-established the same fundamentals of sport, science, and medicine that had prevailed since the 1920s. However, due to completely different contexts and conditions of state, politics, and society in the socialist GDR and the capitalist *Bundesrepublik Deutschland*, German sports medicine played different roles and fulfilled different functions in the society and politics of East and West.

In the GDR, sports doctors as individuals, and sports medicine as a contemporary institution with respect to sport and science, were dependent on the communist party SED and the totalitarian socialist state. However, the GDR established a broad-ranging system of so-called *Sportmedizinischer Dienst* (SMD), the sports medical service, in order to ensure the complete care and mentoring of athletes (see the biased work of Strauzenberg and Gürtler 2005). In the early days of the GDR, a collective aim of communist politics was to mobilize the entire population through sports, referred to as “*Massen- und Erholungssport*” (mass and recovery sport). In fact, when the communist leaders of the GDR decided, according to the directives of Moscow, to push top-level sports by all means, the work and function of the SMD changed. It became relevant to control top level athletes and prepare them for international competitions. Control meant both care and supervision on the one hand, and implementing the doping system on the other, under orders of the state. Both elements were to be supervised and controlled by medical experts. East German sports doctors acquired a high reputation and even become acknowledged consultants of sports medicine by the state (see Strauzenberg 1968; Franke 1960).

By contrast, the community of sports doctors in the *Bundesrepublik Deutschland* never succeeded in gaining a similar status among the scientific community of academic medicine. The West German system of medicine and sports medicine was much more independent of state and politics and finally privatized. A similar concept of *Sportmedizinischer Dienst*, comparable with that of the GDR could not be introduced and financed. Every qualified doctor could become a sports doctor, provided that he had undertaken the required (and rather limited) further training for sports medicine. The *Deutsche Sportärztebund* awarded these additional qualifications (Hollmann 1986). The privatized system of sports medicine in West Germany was responsible for the fact that the medical service of top athletes in the West was also dependent on the financial capabili-

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<sup>11</sup> <<http://www.cirp.org/library/ethics/geneva/>> (Accessed October 24, 2015).

ties of athletes, clubs, and federations (Hollmann 1992). During the Cold War, when even West German top sports were massively subsidized by tax revenue, sports medicine for top athletes became a profitable business, even for doctors and sports medical scientists.

It seems remarkable at first glance that even during the four decades of socialism in the GDR and despite the Berlin Wall, the cooperation between East and West German sports medical experts never terminated (Krüger 2015). By contrast, they knew each other, met at international sporting events, medical congresses, and even organized mutual laboratory visits. They were mutually interested in each other's work and results, respected (and spied on) each other mutually, but also tried to keep their mutual secrets. These were indeed doping practices which nobody should know, especially not the IOC *Medical Commission* and the public in general. There were many rumors, but no proof. However, West German representatives of sports physicians at the Universities of Cologne, Freiburg and other university centers for sports medicine should most certainly have known what happened in the GDR with top athletes and the role played by sports doctors. They should have known these open secrets from defected athletes and coaches of the GDR, and even from the reports of West German spies.<sup>12</sup>

With respect to this history of mutual knowledge and cooperation during the Cold War, it seems to be less remarkable that, after the fall of the wall and the end of the GDR, sports doctors from both parts of Germany re-unified quickly and successfully in 1991. Only two meetings of the sports medical organizations of East and West Germany were necessary to unify these organizations. According to a report on the subject, this was “the most peaceful and cooperative unification” which both sides could ever imagine.<sup>13</sup>

As a result, the protagonists of both societies of sports medicine published common books on the history of sports medicine and celebrated jubilees without mentioning or discussing the dark sides of sports medicine and the doping histories in East and West Germany. They preferred to cover up this common and simultaneously contrary history – because they both had been part of hostile political powers – with a wall of silence and bland remarks.

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<sup>12</sup> There is a document on doping activities and doping methods in the GDR, dated 1974, found in various archives, even those of sports federations, which was written by the West German secret service, the BND, revealing what everybody knew at that time: East German athletes were systematically doped by state order. However, nobody dared to make these findings public. The document was also known by the secret service of the GDR and found in the archives of the Stasi. See *Der Bundesbeauftragte für die Unterlagen des Staatssicherheitsdienstes der ehemaligen Deutschen Demokratischen Republik* (BStU), MfS, A 637/79, vol. 2, 45. Sports medicine was a favored subject of Stasi investigations, see in general (*ibid.*, 85–91).

<sup>13</sup> <<http://www.zeitschrift-sportmedizin.de/artikel-online/archiv-2015/aktuelles/dr-hans-stecher-verstorben/>> (Accessed Oktober 31, 2015).

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### 3. How to Research the History of German Sports Medicine – A Preliminary Research Program in Three Steps

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With respect to both the complexity of this phenomenon and the lack of sound historical research based on theoretical considerations, we intend to consider the entire field by means of three fundamental approaches:

The first is rather theoretical and sociological. In the words of Norbert Elias (2009), it is a sociology of knowledge (in German *Wissenssoziologie*) with respect to sports medicine. Our aim is to research, describe and explain the development of German sports medicine, including its pre-history since the 19th century, as a scientific discipline somewhere between medical sciences, sport, and sport sciences. The status as outsiders to the established system and community of medical sciences in Germany will be especially relevant, including the numerous attempts to overcome this outsider existence (with respect to Elias and Scotson 1994). The behavior of several sports doctors with respect to doping and anti-doping may be best explained by considering this social figuration. As a matter of course, the specialization and functionalization of the medical system in general, and especially of sports medicine, will be problematized in that section, including the developing balance between preventive, curative (or rehabilitative), and achievement-orientated dimensions of modern sports medicine.

The second approach is that of a history of organizations and institutions. We expect to provide a better understanding of the complex networks including sports doctors, medical scientists, athletes, sports officials, politicians, pharmacists and others. Institutionalization implies both the organizations of sport doctors as a union or society of individual doctors, and the organizational location of sports medical institutes between medical faculties at universities on the one hand, and physical education institutes on the other. Reasons for, contexts of, developments to, and problems of the early and consequent process of institutionalization of German Sports medicine will be a major research perspective.

The third approach considers the historical, social, and political context of the development of sports medicine. Political demands challenged sports doctors and sports medical science in different ways. Convincing examples are the history of German sports medicine during the Nazi dictatorship (1933-1945) and during the communist GDR (1949-1989/90). Sports medicine had always been part of social life and public health care. This social dimension can be clarified and explained at various times, beginning from philanthropic medical educators at the end of the 18th century, then upcoming public hygiene politics in the 19th century, exposed by authorities like Rudolf Virchow or August Bier, up to modern developments of the sports-for-all movement, challenging new ways of health prevention through movement, play, and exercise.

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