



## Nursing care management in the context of the high performance volleyball player

Gestão do cuidado em enfermagem no contexto do jogador de voleibol de alto rendimento

Gestión de la atención de enfermería en el contexto de jugador de voleibol de alto rendimiento

Rafael Marcelo Soder<sup>1</sup>, Alacoque Lorenzini Erdmann<sup>2</sup>

**Objective:** to understand the relationship between the central phenomenon “care management in the context of the high performance volleyball player: living and surviving in the multidimensionality of the sporting environment” and the categories which involved the perspective of management of health care of the athletes in the context of volleyball. **Methods:** it is a qualitative study, guided by the Theory Grounded in Data, made between February and September 2013, with 34 participants in three sample groups. **Results:** four categories were found, meaning care, health and disease concerning the high performance volleyball athlete; living and surviving on the limit between being a high performance athlete and a human being; waking up to the reality of high performance volleyball; unveiling possibilities and potentialities of health care in high performance volleyball. **Conclusion:** it is evident that there are concrete and tangible possibilities of insertion of the management of health care and nursing in the high performance volleyball.

**Descriptors:** Nursing; Volleyball; Health; Athletes.

**Objetivo:** compreender a relação entre o fenômeno central “Gestão do cuidado no contexto do jogador de voleibol de alto rendimento: (sobre)vivendo na multidimensionalidade do ambiente esportivo” e as categorias que envolveram a perspectiva da gestão do cuidado à saúde do atleta no contexto do voleibol. **Métodos:** estudo qualitativo, guiado pela Teoria Fundamentada em Dados, realizado entre fevereiro e setembro de 2013, com 34 participantes em três grupos amostrais. **Resultados:** quatro categorias foram evidenciadas: Significando o cuidado, a saúde e a doença para o atleta de voleibol de alto rendimento; (Sobre)vivendo no limiar entre o ser atleta de alto rendimento e o ser humano; Despertando para a realidade do voleibol de alto rendimento; Desvelando possibilidades e potencialidades do cuidado à saúde no voleibol de alto rendimento. **Conclusão:** evidencia-se que há possibilidades concretas e palpáveis de inserção da gestão do cuidado a saúde e enfermagem no voleibol de alto rendimento.

**Descritores:** Enfermagem; Voleibol; Saúde; Atletas.

**Objetivo:** comprender la relación entre el fenómeno central “Gestión de la atención en el contexto de jugador de voleibol de alto rendimiento: (sobre) viviendo en la multidimensionalidad del ambiente deportivo” y las categorías que implican la perspectiva de la gestión de la atención de salud del atleta en el contexto del voleibol. **Métodos:** estudio cualitativo, guiado por la Teoría Fundamentada en Datos, realizado entre febrero y septiembre de 2013, con 34 participantes en tres grupos muestrales. **Resultados:** se encontraron cuatro categorías: Significación del cuidado, salud y enfermedad para atleta del voleibol de alto rendimiento; (Sobre)viviendo en el umbral entre ser deportista de alto rendimiento y bienestar humano; Despertando a la realidad de voleibol de alto rendimiento; Descubriendo posibilidades y capacidades de atención de la salud en el voleibol de alto rendimiento. **Conclusión:** hay posibilidades concretas y tangibles de gestión de atención de la salud y enfermería en el voleibol de alto rendimiento.

**Descriptor:** Enfermería; Voleibol; Salud; Atletas.

<sup>1</sup>Universidade Federal de Santa Maria. Palmeira das Missões, RS, Brazil.

<sup>2</sup>Universidade Federal de Santa Catarina. Florianópolis, SC, Brazil.

Corresponding author: Rafael Marcelo Soder

Avenida Independência, 3751, Bairro Vista Alegre. CEP: 98300-000. Palmeira das Missões, RS, Brazil. E-mail: rafaelsoeder@hotmail.com

## Introduction

Looking back into the twentieth century, it can be observed that nursing, in a linear way, occupied and filled new spaces, establishing theoretical and scientific bases to develop and justify its actions.

Among the areas which are still possible for the insertion of nursing, the sporting environment is a possibility, especially volleyball. This statement is based on a thorough exploitation of the existing national and international scientific production from what was described involving nursing and volleyball, confirming the incipient scientific literature on the subject.

From this perspective, it was necessary to deeply explore the theme and develop this study to bare and answer questions not yet answered scientifically, and provide the first steps in scientific production directed to the management of health care and nursing of the high performance volleyball athlete.

The conformation of the study of the following uncertainty: living or surviving from high performance volleyball? It is a slightly tricky and difficult question to answer because in volleyball, the players position themselves in two ways: there are athletes who just survive from volleyball and there are athletes who live from volleyball. But what is the divisor between the living and surviving? In sport, in general and especially in volleyball, the economic power, technical, tactical and physical performance, and doubtless the condition of health care of each athlete make the division between living and surviving.

This scenario goes back and/or recreates volleyball panel as multidimensional as it goes through numberless paths, branches into different ways, moves between the opposites and, especially, opens and closes, includes and excludes the possibilities of spaces for health care management and nursing in its context. This is because the athlete's health conditions are the element that sustains the opportunity to dive into a sea of diversity involving high performance

volleyball.

Along this way, from the flow of analysis the central phenomenon was identified: "care management in the context of high performance volleyball player: living and surviving in the multidimensionality of the sporting environment", built based on the categories that emerged from the study.

From the tangible possibilities, no other designation would fit so properly as the denomination of multidimensionality, because the study of the context pointed different ways, situations, interactions and meanings. Therefore, multidimensionality covers a range of sets and possibilities and the way to see and understand the many aspects that surround volleyball, contemplating a range of unique characteristics in the way to observe and interpret reality. So, it approximates the relations of care management in nursing to high performance sport.

The multidimensionality of care management cuts across the reality of high performance volleyball environment has a direct and indirect influence on the life of the athlete, and can be the element that validates the survival and the living in or from high performance sport. From this perspective, the form, the model and the mechanisms of care management can lengthen or shorten the trajectory of the athlete in volleyball, so it considers and values the multidimensionality as the living center of this study.

The assertion that the athlete just survives in or from sport can cause some weirdness, but this reflection is based on the structural configuration of the volleyball environment. In this space, there is a clear disparity in the organization and structure among the sports institutions and this dissimilarity is the main element that defines who lives and who survives in or from sport.

In this sense, the sudden condition of abstracting something still hidden was a great source of energy when pursuing questions, answers and elements not yet presented to society. From the constant push caused by this source of energy the following objective was delineated in order to understand the

relationship between the central phenomenon and categories involving the perspective of the athlete's health care management in volleyball context. To achieve the goal the following question of research was elaborated: what are the relations of the central phenomenon with the categories that emerged from the study from the perspective of the athlete's health care management in the context of volleyball?

From this perspective, the management of health care and nursing can make volleyball more welcoming and safer, fostering new perspectives of care to the health of the athletes from the nursing science. It is in this domain that nursing can permeate the technical and tactical areas of volleyball, reorganizing and reshaping health facilities in sports institutions, that is, the care management can be an equanimous stratifying agent in the existing gap between living and surviving in volleyball.

## Method

It is a study of qualitative approach, and it is the final product of the doctoral thesis entitled "Promoting health of the volleyball athlete: the perspective of the management of health and nursing care". The study was grounded by using the methodological framework of the Grounded Theory or Theory Grounded on Data, the main feature support concepts from data extracted from the empirical realities involving subjects in processes of constant interaction.

34 subjects participated in this study, respecting the criteria of inclusion: being male; over 18 years of age; a player, former player, coach or a director of high performance volleyball; being in high performance career for at least three year; and willing and agreeing to be a part of this study.

The first sample group consisted of 19 athletes, and by preliminary analysis, it became clear that the participants based their reports in the organization of the volleyball in the 1990s, leading the study to a second sample group consisting of 10 former athletes. From the analysis of the second sample group, data

were directed to the third group, consisting of five coaches and directors of volleyball clubs, once the former athletes showed models of management and technical behaviors, thus totaling 34 participants.

The profile of the interviewees was quite plural and dense, attributing significance to the study. This density can be measured by the representation that the participants have in the national and international scenarios of volleyball. Among the participants there were world champions, South American champions, Brazilian champions, state champions, athletes and former athletes with mention of best player in national and international competitions, players who worked in teams of different countries besides Brazil, including : Japan, Italy, Spain, Portugal, Russia, Colombia, Argentina, France, Poland and Germany.

Data collection occurred in the period from February to September 2013, through interviews guided by a semi-structured script, held in person at a venue time scheduled between the researcher and the interviewee, and also via Skype. All interviews were recorded and later completely transcript, characterizing the beginning of the analysis.

The mechanism of data analysis was the encoding processes. The first step was to open coding, which determined the preliminary codes from the line-by-line analysis of raw data, emerging categories and subcategories; The second step was the axial coding, when the categories and subcategories were defined and grouped; and the last step was the selective coding, when the interconnections between the categories and the revelation of the central phenomenon of the study were made<sup>(1)</sup>.

For the development and the applicability of this study, there was no need to enter in a specific institution to have the data collection, because in the volleyball environment, many institutions are structured on a temporary basis or according to the term of contract of sponsorship. Thus, due to the fact that the athletes are autonomous and make their own decisions and actions, the collection was made directly with them in scheduled and agreed venue between

the researcher and the interviewee, there was no need to ask for authorization for the research at the institutions, which were not involved in the study.

Before the start of each interview, the Informed Consent Form was presented and read to the participants, and all agreed to participate in the study. For the participants via Skype, besides verbal consent, the Informed Consent Form was sent by mail, for their signature and subsequent resending to the researcher. So, all the ethical principles were respected, with the approval of the Committee of Ethics and research of the Universidade Federal de Santa Catarina, with the legal opinion No. 169 327.

## Results

At this stage intended to the presentation of the results, the structure of categories and subcategories is presented, generated through the process of open, axial and selective encoding and subsequent analysis. To better identify and view the configuration of each category, a framework is expressed in figure 1 as follows.

In category 1, originated from the subcategories which include the meanings attributed by the research subjects to health, disease, care and their interrelations, there is the design of the first traces of the construction of the central phenomenon. In category 2 there is its configuration from subcategories permeated by the experience of the participants with physical and psychological pain, caused by the pressure for immediate results and isolation by the lesions and lack of public policies directed to the volleyball athletes.

Afterwards, in category 3 there is the awakening of the athlete for the sport, through the experience and interaction with factors which involve high performance volleyball is evident. And category 4 was established from the analysis of data on the knowledge and understanding of the research subjects regarding nursing and its possibilities of action in volleyball, in order to know the mechanisms that the athlete uses for the promotion of health and prevention of diseases.

Categories	Subcategories	Statements of the subjects
Meaning care, health and disease for the high performance volleyball athlete.	Assigning meanings to health; Assigning meanings to the disease; Assigning meanings to care; Interrelating health, disease and care.	<i>I think athletes should be a synonym of health. We cannot be a normal person; we are that guy who cares who takes care of himself, who has an athletic body.</i>
Living and surviving on the limit between being a high performance athlete and a human being.	Living with the physical and psychological pain; Unveiling the fears, limitations and isolation caused by injuries; Feeling pressed for results and high performance; Perceiving the lack of public policies in volleyball; Experiencing the faces and the gaps in the context of volleyball.	<i>We have injuries, we take anti-inflammatory medicine, we make exams, and we think it's okay ... we lie to ourselves.</i>
Waking up to the reality of high performance volleyball.	Experiencing the beginning of their careers; Living with their victories and defeats; Discrediting the Professional future.	<i>While I was young, I thought that nothing would shake me, that injuries were things of the elders, that my future would be assured if I were an athlete.</i>
Unveiling possibilities and potentials of health care in high performance volleyball.	Providing the significance of nursing to volleyball; Knowing the ways of disease prevention and health promotion in volleyball.	<i>No club worries a lot with this issue of making exams or to see if there is a heart problem or if there is a health problem, blood exam, nothing.</i>

**Figure 1-** Results of the study: Categories, subcategory and statements of the subjects

From the onset of the process of coding and subsequent configuration of categories and subcategories the central phenomenon was originated, called "management of care in the context of a high performance volleyball player: living and surviving in the multidimensionality of the sporting environment". In figure 1, the results that structure and guide the horizontal and transversal nature of the study are highlighted.

## Discussion

Discussing the high performance volleyball athlete context is not an easy task, especially when the discussion involves different biases among health, nursing, management and care, especially when it comes to complex and comprehensive argumentative reasoning, involving different relationships between these thematic axes. The obstacles involved throughout this discussion are converted into attempts to unwind and demystify the ways of management of health care and nursing, in the multidimensionality of the sports environment, which revealed an unexplored and sparsely populated universe unveiling an atmosphere of complex relations.

### **Care management in the context of the high performance volleyball player: living and surviving in the multidimensionality of the sporting environment**

A major challenge for humans is to perform actions involving personal and professional tasks horizontalized by care. Care should permeate the human context as something natural, without reflection and preliminary planning and it should be intrinsic.

The plurality of ways and manners in which care is configured is very similar to a mosaic structure in which the pluralities of objective and subjective components are added so interconnected, giving rise to a set of elements with features of a single format,

supported by different parts which consists the whole. In this analogical reflexive line, care consists of multiple parts that must be seen in an indivisible way, because when it comes to care, to life and to health, reference is made to the holistic care, undivided, after all, the one who cares, cares of the whole and not only parts of this whole.

Therefore, it is essential to develop a culture of care that interlaces all the completeness of the human being. In this context, the care that directs its attention only to the organs, pathology, clinical signs and symptoms, it does not represent the essence of care, because care must go beyond the biological and biomedical vision in order to integrate the various units and multiplicities of beings<sup>(2)</sup>.

It seems easy to understand and live with care, as if care was only a protective action. However, care cannot be minimized and reduced to a simplified tool, because it is complex, dynamic, and inclusive. It is one of the points of balance of vital relationships.

Similar to care, volleyball is complex and dynamic, surrounded by interfaces that take extreme situations, permeated by unconventional elements that cross cuts the context of the high performance athlete, especially his health. From this perspective, one can consider various dimensions involving the care, among them the potential that care represents in the condition of being a health promoter<sup>(2)</sup>.

In the environment of volleyball, care, as a health promoter, can be a tangible, consistent and grounded way, since it fosters structural organization that meets the global needs of athletes. From this understanding, the first step is to establish a department/sector of health consisted of an interdisciplinary team, with capacity and human and physical potentialities able to promote health to the athletes from a wider and dense aspect to the most specific and refined one.

In this interdisciplinary course, nursing can search space for insertion in high-performance volleyball, and perhaps the only professional gateway may be the strongest and illuminated path to approach volleyball and nursing. There is

no possibility for the nurse to outline his path in volleyball in an isolated and lonely way, once nursing without the list of interdisciplinarity does not support strength or science enough to survive in the volleyball environment. And then the following question emerges: Why interdisciplinarity as a possibility? Because it is the point of support to care as health promotion in volleyball. In the affirmative reflection, interdisciplinarity presupposes complementarity, which means on one hand, the transfer of knowledge and methods and, on the other, the combination of areas, opening the possibility of emergence of new fields of knowledge<sup>(3)</sup>.

Interdisciplinarity provides conditions to sail in the limit between the high performance athlete and the non-athlete human being, outlining and understanding the uniqueness of these subjects, answering questions like: What are the physical and mental limits between the athlete and the non-athlete? At what point is the athlete no longer a sportsman and lives like a non-athlete? Or, at what point does a person become a real athlete? The questions are numberless, and so are the answers, however, in volleyball and in life one goes through moments of choice, of abdication, difficulties, joys and sorrows, however, within all of that, the athlete is an atypical human being, non conventional, outside the mold endorsed by contemporary society.

However, in this turbulent relationship, which is non conflicting between the high performance athlete and the human being, there are limits that can appoint and determine what the being-human being is and what the being-athlete being is. In this reflexive view that every being is socially formatted according to the environment he lives in, volleyball is cross cut by numberless unusual situations within the whole, which provides proper characteristics and limits to the athlete.

These features go beyond the lines of traditional living conditions because, throughout the high-performance volleyball, some episodes considered unusual for the traditional society, are considered very common, having as the most representative of

this condition of peculiarity the daily and continuous coexistence with pain, whether it is physical or psychological. There is a pseudo culture in volleyball concerning the cult to pain. Pain became practically a part of the body, with which the athlete must live, or coexist with the pain, feel it; this is the natural condition in the athlete. However, the physical and psychological disability caused by pain, affects many aspects of life and causes suffering in different orders, even to perform activities of daily life, which can lead to removal and/or even social isolation<sup>(4-5)</sup>.

The fact is that there is no athlete in volleyball exercising their activities without feeling any pain or discomfort, living with the pain is part of the activity and reflects the harsh reality of daily life of the high performance athlete, but to what extent can pain be considered normal or common and should be part of the athlete's life? What is the limit of the pain? One might not have one only answer or a precise answer to these questions because the tolerance to pain is an individual feeling of each human being.

In this understanding, the limit is intrinsic with an air of subjectivity, with individual meanings for each being. The high performance volleyball is permeated by numerous challenges, obstacles and limits that may or may not generate interference in the physical and social structure of the athlete, but one has to highlight that pain is not a natural state of the human condition, one cannot test the limits of the athlete through pain<sup>(4-6)</sup>.

Following this path which is not a normal condition of life, people feel pain in the daily exercise of their work, exemplifies with the action of another professional, the nurse, who believed that feeling physical pain caused by the intensity of the work of his daily actions was natural. Even understanding that pain is one of the most common complaints among people seeking health care, similar to athletes in their daily lives, it is worth having a critical reflection on the aspects that characterize pain as it is an element of difficult assimilation and coexistence, regardless the environment they live in<sup>(4,6)</sup>.

From this perspective, if the pain is not normal for other professional segments, why would it be for the high performance athlete? Perhaps the answer is just on the limit between the athlete being and the non-athlete being, because the athlete has learned to mold himself according to circumstances, some more easily and others less easily, because since the beginning of the sports career they acquire knowledge of how to live with the volubility of the high performance athlete being.

In this reflexive line on the limit of pain, particularly on the culture of coexistence with the pain as an existential part of the athlete, there is the possibility of insertion of nursing into volleyball. The evaluation and care of pain are one more promising channel for the construction of systems of care in the sporting context, once the nurse should explore the complaint of pain, collect data on aggravating, mitigating and concomitant factors, explore indicative of discomfort caused by pain and use tools that can help him measure it and evaluate it.

The nursing science has potentiality and knowledge that can qualify the athlete's relations with the process of pain, particularly those arising from traumatic injuries. From this perspective, the theoretical framework that includes the universe of nursing has the ability to understand and unveil that levels of individual tolerance should be considered in the sporting context. In an injury with similar characteristics but in different athletes, the variability of the time of recovery will be different because of the particular organic response, once each body presents peculiarities concerning the pathological advent in the same way it happens with a non-athlete.

This existing plurality among human beings translates and reflects the different faces involving the high performance athlete. The risks of an athlete being attacked by any pathological form are similar to any other person. The chances of becoming ill, of acquiring an infectious process are the same. The illusion in the minds of people that the athlete is a superman must

be undone because the physical stress imposed by the intensity of training, travel and competition, can generate organic imbalance, exposing the athlete to possible complications in his health<sup>(7-8)</sup>.

The organization model of the sports institutions in the development of volleyball exposes the athletes to risks often unnecessary. Commonly, the athlete replaces periods of rest by the intensity of a clinical or physical treatment on their own expenses in the perspective of fast recovery, or he also abdicates moments of family life to have training which are not planned by the technical team, that is, he acts in an irresponsible and autonomous manner, which can enhance even more the pathological processes<sup>(7-9)</sup>.

The autonomous actions occur mainly by the pressure that sports institutions have on the athlete, aiming at the rapid return to activities when injured. Associated to that, there is an evident self pressure of the athlete on his own performance, due to the concern of losing room in the team or not renovating a contract. However, one of the major concerns for the athlete is still to be labeled as a player of risk because of the frequent injuries.

The athlete lives eternal dilemmas when attacked by diseases, particularly the limiting ones, whether they are acute or chronicle, as in these episodes two big questions emerge: Recover fast to go back quickly to the team independently of the kind of treatment? Or have the recovery within the time which the injury establishes and take the risk to lose room in the team? The financial insecurity, the pressure of the team and sponsor provide the answers and the behavior directed to question, that is, the sooner the recovery time, the faster the athlete can go back to the court.

Even knowing the risks of being affected by limiting illnesses, despite all the ways and means of knowledge on the practices of prevention to diseases, promotion and recovery of health, the athlete is resistant to paradigmatic changes in his method of care method and behavior with health. As if by

informal rule, the athlete sustains routines, sometimes mistaken, in the methodological organization of the context of his training, rest, care, whether it is mistaken or not, generating risks or not.

Facing these observations it is possible to state that the injury is one of the final products of the numerous interactions that volleyball sets with the athlete because it derives mainly from the way the athlete exercises care, or for not exercising it. Along with that there is the systematic routine of physical, technical and tactic preparation imposed to the body daily, and allied to the constant trips during the competitions and by the tortuous logistics of health care led by the sporting institutions<sup>(9-13)</sup>.

The feeling of security and insecurity permeates the life relations of the athlete, generating results sometimes positive, sometimes negative. In this relationship, the greater the trust of athletes have in themselves and in what they are living, the lower the insecurity in carrying out the actions will be, and the capacity of decision, the capacity of acting, as well as the control of fears and doubts in the sporting context, consequently, the risks of pathological affection will be smaller<sup>(9-12)</sup>.

The greatest villains of the progress of the development of volleyball in Brazil are the models and forms of management adopted. While there is no structural remodeling in the design of management of the sport in the country, the volleyball organization will follow the same social parameters, and there are teams which have much organization (the minority) and the teams that have little organization (the majority), that is, it is the so called social sportive inequality<sup>(14-15)</sup>.

In this sense, it is no longer possible to conceive the amateurism in volleyball management. The sports organizations have the need to leave the amateur management and adopt a professional one, which is the only model to maximize the benefits of investment in sports sector<sup>(14-15)</sup>. Along this model of qualified management aligns the organization of management

of health care of the athlete, creating physical structures and human resources without health able to sustain the load of occurrences and events that affect the health of high-performance athlete.

Volleyball is a dense, extensive, wide, diversified, dynamic and plural ground, among many other adjectives. It is a fertile environment of possibilities involving simple and complex; it is a space that allows entering multiple forms and structures in its organization<sup>(12,14,16)</sup>. And in this ground of possibilities of insertions nursing ascends, presenting its rich theoretical and scientific framework in the health care system.

The development of a new possibility of working area and of the conquest of new spaces of acting are elements that move the professions, and in this movement through the construction of new forms of work and opportunities, nursing still takes small steps with little intensity, generally surrounding new opportunities from areas already conquered. Perhaps one of the most difficult tasks for nurses is to reinvent itself, to qualify their professional status without losing their essence and their origins, being sure that it is a complex task, but not impossible to achieve. However, it is understood that nursing does not need to be reinvented, just needs to apply all its set of productions, knowledge and technologies in different areas, there is no need to invent a new form of the wheel to spin.

It is worth emphasizing that the nurse assumes an ever more decisive and proactive role when it comes to identifying the care needs of the population and the promotion and protection of the health of subjects in their different dimensions. Nursing care is therefore a key component in the health system and in the formulation of a system of care<sup>(17-18)</sup> that can enter the sportive area with intensity to promote health in its broadest sense.

It is understood that the insertion of nurses in the sporting environment must be well designed before assuming a domain that is still little known



to nursing. However, nursing has the opportunity to operate creatively and autonomously at different levels of health care, whether it is through education and promotion or through rehabilitation of the health of the subjects.

In this context, the structural problems appear again when one enters in the domain of health care of the athletes. The organization of a department or sector to promote and look after the health of athletes is still not a priority in the sporting institutions. In the lack of it, nursing has a wide potential to act, but, unfortunately, it is not yet opened to this rich area of care, not only for nursing, but also for other health professionals who are not traditional in the universe of volleyball.

## Final Considerations

The considerations that close this manuscript are structured breaking the traditional protocol of closing an article which is normally guided by a panoramic reading contextualizing the course of the study. The proposal for the closing of the study was conceived from a quiz among questions and answers involving the possibilities of nursing in the context of high performance volleyball.

Is there room for nursing in volleyball? The areas exist, but what must be carefully thought is the way to use them, how to fill them densely, filling it with knowledge and technologies which involve care as a promoter and protector of the health of a high performance athlete. Entering a new area of knowledge in an empty way is harmful to the profession, occupying the area simply because the area is also fearful. It is believed that nursing can still develop a more substantial know-how in sport and, from this development, enter with strength in volleyball.

What could nursing develop in volleyball? At this point, this is an important question requiring a

more intuitive than affirmative answer. But, certainly, nursing could construct systems of interconnected care and interconnecting different areas of knowledge; it could develop actions and strategies covering the integrality of the athlete involving the social and health context; it could develop actions of promotion and rehabilitation of health and prevention of diseases; it could organize and manage medicine therapies such as guiding athletes about dosages, appointments, pharmacokinetics and pharmacodynamics; it could make the daily control of the vital signs before, during and after physical activities of high intensity; it could individually assess the health status of athletes; it could follow the athletes in clinical evaluations and diagnostic exams; it could foster a systematization of specific nursing care for volleyball, that is, there is a range of important possibilities acting of the nurses in the context of volleyball.

Is there the possibility for nursing to act in volleyball without an interdisciplinary structure? The answer for this question is complex, surrounded by ambiguity, because the question is tricky. However, it is possible for a nurse to act without the support of an interdisciplinary structure, provided that the health professional thoroughly knows the ground on which he is standing. However, the actions would be limited and reduced, there would not be exchanges of knowledge or clinical discussions, and the nurse could run the risk of exceeding the boundary line of nursing and invade other areas of knowledge. The possibility for the nurse to act exists, but it would not be wise, much less effective and efficient.

There is no doubt that the management of health care and nursing in volleyball is complex for their actions; it is dynamic for their relations; it is proactive for their interactions; and interdependent for their bonds. This is because the sporting context is overloaded with dissimilar interactions among the actors involved, transforming this area into an unknown and unusual domain in the universe

of nursing care, setting an important professional challenge in the development of new scientific knowledge that can still fill empty gaps in the context of the health care and nursing in high performance volleyball.

Because it is an unusual and unfamiliar environment for nursing the study aimed at establishing the relations between the central phenomenon and the categories which involve management of care of the athlete in the context of volleyball. In this constructive path, sensible limitations were revealed due to the deepening and thematic innovation, especially in the construction of relations with other studies due to the scientific gap focused on health care management of the high performance volleyball athlete.

Finally, there is still a long way to be explored by nursing in the field of sports, especially volleyball. It is known that there are areas for the insertion of nursing, provided that it is done safely, based on the scientific knowledge and in homeopathic doses so as not to run the risk of drawing an erroneous and unsupported route, leaving the possibility of constructing a new area of knowledge at the edge of the abyss.

## Collaborations

Soder RM contributed for the conception, analysis and interpretation of the data, writing of the article and final approval of the version to be published. Erdmann AL contributed in the assistance, adjustments e revisions in all stages.

## References

1. Baggio MA, Erdmann AL. Teoria fundamentada nos dados ou grounded theory e o uso na investigação em enfermagem no Brasil. *Rev Enf Ref*. 2011; 3(3):177-85.
2. Baggio MA, Erdmann AL, Dal Sasso GTM. Cuidado humano e tecnologia na enfermagem contemporânea e complexa. *Texto Contexto Enferm*. 2010; 19(2):378-85.
3. Furtado JP, Laperriere H, Silva RR. Participação e interdisciplinaridade: uma abordagem inovadora de meta-avaliação. *Saúde Debate*. 2014; 38(2):468-81.
4. Bottega FH, Fontana RT. A dor como quinto sinal vital: utilização da escala de avaliação por Enfermeiros de um hospital geral. *Texto Contexto Enferm*. 2010; 19(2):283-90.
5. Salvetti MG, Pimenta CAM, Braga PE, Correa CF. Incapacidade relacionada à dor lombar crônica: prevalência e fatores associados. *Rev Esc Enferm USP*. 2012; 46(Esp):16-23.
6. Silva CD, Ferraz GC, Souza LAF, Cruz LVS, Stival MM, Pereira LV. Prevalência de dor crônica em estudantes universitários de enfermagem. *Texto Contexto Enferm*. 2011; 20(3):519-25.
7. Pereira C, Soares L, Alves D, Cruz O, Fernandez M. Conhecer as emoções: a aplicação e avaliação de um programa de intervenção. *Estud Psicol*. 2014; 19(2):102-9.
8. Mcknight CM, Juillerat S. Perceptions of clinical athletic trainers on the spiritual care of injured athletes. *J Athl Train*. 2011; 46(3):303-11.
9. Santos ALP, Simões AC. Educação Física e qualidade de vida: reflexões e perspectivas. *Saúde Soc*. 2012; 21(1):181-92.
10. Pucci GCMF, Rech CR, Fermino RC, Reis RS. Associação entre atividade física e qualidade de vida em adultos. *Rev Saúde Pública*. 2012; 46(1):166-79.
11. Bara Filho MG, Andrade FC, Nogueira RA, Nakamura FY. Comparação de diferentes métodos de controle da carga interna em jogadores de voleibol. *Rev Bras Med Esporte*. 2013; 19(2):142-46.
12. Campos LTS, Vigario PS, Lurdof SMA. Fatores motivacionais de jovens atletas de vôlei. *Rev Bras Ciênc Esporte*. 2011; 33(2):303-17.
13. Vieira LF, Vieira JLL, Ferraz CC, Oliveira LP. Análise do autoconceito de atletas de voleibol de rendimento. *Rev Bras Educ Fís Esporte*. 2010; 24(3):315-22.
14. Maroni FC, Mendes DR, Bastos FC. Gestão do voleibol no Brasil: o caso das equipes participantes da Superliga 2007-2008. *Rev Bras Educ Fís Esp*. 2010; 24(2):239-48.

15. Capraro AM. A imagem do atleta: publicidade em ano de Copa do Mundo de Futebol (Alemanha - 2006). *Rev Bras Educ Fís Esporte*. 2011; 25(1):163-71.
16. Borges CNF, Tonini GT. O incentivo ao esporte de alto rendimento como política pública: influências recíprocas entre cidade e esporte. *Rev Bras Ciênc Esporte*. 2012; 34(2):281-96.
17. Backes DS, Backes MS, Erdmann AL, Büscher A. O papel profissional do enfermeiro no Sistema Único de Saúde: da saúde comunitária à estratégia de saúde da família. *Cien Saúde Coletiva*. 2012; 17(1):223-30.
18. Backes DS, Erdmann AL, Büscher A. Nursing care as an enterprising social practice: opportunities and possibilities. *Acta Paul Enferm*. 2010; 23(3):341-7.