

## **An inclusive concept of Physical Education for university students conditioned by medical certificate**

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### **ABSTRACT**

The analysis-synthesis, historical-logical and document analysis methods, facilitated the systematization of the background of Physical Education for university students conditioned by medical certificate. The periodization carried out evidences a series of tendencies that allow contacting that the teaching-learning process of Physical Education has been carried out in the therapeutic area of physical culture as an object of the National Institute of Sports, Physical Education and Recreation (INDER) since its regulations, being schematic, asystemic and excluding, decontextualized for Higher Education in the current conditions, limiting the contribution of the discipline in the correct formation of university students.

**Keywords:** Therapeutic area; University Physical Education; Diversity; conditioned by medical certificate.

### **Introduction**

The basic curricular discipline Physical Education is made up of several subjects in Higher Education and contemplates the course of all students entering this level in Cuba in four of them: Physical Education I, Physical Education II, Physical Education III and Physical

Education IV, even if they present some form of alteration in their state of health. In this article, these students are referred to as university students conditioned by medical certificate for Physical Education, "those who because of their age, between 17 and 25 years old classify as older youth", according to Vargas, A. and Hurtado (2013) assumed by Ruiz (2022 p-1).

The analysis of the results of the research actions of the territorial project PT-2025, "Physical educational actions with therapeutic purposes from the strategic intervention in educational centers and vulnerable communities", presided over by the line called "Attention to more frequent diseases in the Guantanamo population", within the National Program Social Standards of Quality of Life, allows to state that currently, in undergraduate, at the University of Guantanamo (UG), there is a high number of students (319, representing 16%, of the enrollment) who are classified in this category.

The health condition of these students differentiates their formative needs, so, protected by the humanistic character of education in Cuba, they receive in first and second years Physical Education in the therapeutic area of physical culture of the National Institute of Sports, Physical Education and Recreation (INDER), which is considered the main precedent in Cuba of Physical Education for this population at all levels, showing relevant results both in theory and in practice. However, the traditional didactic dynamics used in the aforementioned therapeutic area hinders the contribution of the discipline in the correct formation of the students concerned.

The author of this article states in an intentional factual-perceptual diagnosis, a problematic situation in the teaching-learning process of Physical Education in the therapeutic area of physical culture in the services provided in Higher Education, related to the contribution of the discipline in the training of the above mentioned students according to the requirements of the documents with legal normative basis of the Ministry of Higher Education (MES), showing an unsustainable panorama for being schematic, asystemic, excluding and decontextualized.

The subject of physical exercise for therapeutic purposes, aimed at health care and improving the quality of life, covers different contexts of action. In this sense, contemporary studies include authors such as: Romero (2019) and (2019), Ramos, López, Lago and Ramírez (2019), which present relevant theoretical arguments related to disease care programs. However, these programs do not conceive the attention to cultural diversity referred to diseases that converge in the act of the class in Higher Education and its methodological regulations.

Other authors in Guantánamo and Granma, Ruiz (2021); Ruiz, Garcés and Bayeux (2022), carry out a gnoseological analysis of motor autonomy. In this study, conclusions are assumed on the idea of motor autonomy in the teaching-learning process of Physical Education for university students conditioned by medical certificate.

In the meantime, it is found that authors such as: Bequer, Pascual, Ramos, and Berroa (2013); Escalona, Sanchez, Fayad (2014), among others have addressed the issue of care for this student population conditioned by medical certificate, which links the therapeutic area of physical culture with Physical Education, which denotes its importance, they, have simplified the evolutionary action of Physical Education, where they reflect the work of the referred areas with the support of institutions such as INDER, the Ministry of Education (MINED) and the Ministry of Public Health (MINSAP).

Meanwhile, Suarez (2017); Sánchez (2011); Arambarri (2008), Rodríguez, Ruiz, and De la Osa (2016), make a systematization of the teaching-learning process of Physical Education for this population group in Higher Education. However, in the literature consulted, there is a deficit from the theory, referred to the teaching-learning process of the therapeutic area of physical culture in Higher Education and the conception of the referred process that takes into account the particularities of this context.

For all the above, a historical study is considered necessary to reveal the evolutionary potentialities of Physical Education as a basic curricular discipline of university careers. Therefore, the following problem is posed: how to improve the teaching-learning process of Physical Education for university students conditioned by medical certificate? Based on this problem, a tendential epistemological systematization of the referred process is proposed.

In order to achieve the above objective, it is necessary to use theoretical methods such as historical-logical, analysis-synthesis and triangulation, and other empirical methods such as document analysis. These methods facilitate the collation of information from different researchers related to the organization and evolution of physical education for university students conditioned by a medical certificate for physical education.

## **Development**

## **1.1. Historical background of the teaching-learning process of Physical Education for university students conditioned by a medical certificate.**

This trend study recognizes the contributions of authors who have approached the subject from stages. In this article, these stages are considered antecedents to the periodization, which is assumed based on the following curricula: A, B, C, D, D with modification and E, taking into account the following indicators:

- 1- Conception of Physical Education for university students conditioned by medical certificate.
- 2- Didactic-methodological treatment in Physical Education for university students conditioned by medical certificate.

Researchers such as Bequer, Pascual, Ramos, and Berroa (2013), and Balsinde (2016), agree that an important milestone after the triumph of the Cuban revolution is the university reform, in which Physical Education is recognized as a compulsory discipline in the Cuban educational curriculum, for its formative potential in the cultural, moral, and corporal aspects of students as citizens willing to serve the homeland efficiently. However, they recognize the inexistence until the 1965-66 academic year of analytical programs aimed at achieving the specific objectives of the aforementioned discipline.

Escalona, Sánchez and Fayad (2014, p. 6), state:

The stage between 1967 and 1981 can be characterized as the stage where institutional links are established to promote health with the practice of physical exercise as a therapeutic means, which becomes part of the therapeutic models of MINSAP and also as one of its pillars in the promotion and prevention of chronic diseases, which is a step prior to the creation of the therapeutic areas of physical culture for the care of schoolchildren exempted from Physical Education.

This scientific criterion responds to two relevant milestones that led to a series of transformations in educational institutions: the creation of the National Institute of Sports, Physical Education and Recreation; and the Higher School of Physical Education and the Institute of Sports Medicine, prior recognition of the need for physical exercise as a therapeutic means, in light of this, researchers such as: Escalona, Sanchez and Fayad

(2014), Bequer et, al. (2013), show points of contacts in their works, these are related to the emergence in 1982 of the therapeutic areas of physical culture.

The therapeutic areas of physical culture that by Joint Resolution No. 1, of the National Institute of Sport Physical Education and Recreation (INDER) - Ministry of Education (MINED) provide services with their professionals to the increased number of students with medical certificates, up to pre-university education. This would provide students up to this level with a certain degree of knowledge to achieve self-validation. As posed by Suarez, 2017, p. 2, in this period:

In higher education, the dean of each faculty was requested to exempt students with health problems from the discipline of Physical Education in the four semesters that comprise it". In this sense, this means the exclusion of this university student population from the right to receive the referred discipline and the strengthening of the theoretical gap of the research.

In addition, Suárez (2017 p. 5) states: "During 2006-2007, guidance was received from higher levels that stated that all university students should receive Physical Education and obtain a teaching evaluation through it. In the case of those exempted in a theoretical way". Therefore, conceiving Physical Education as part of the educational strategy for its contribution in the physical and psychosocial spheres in the formation of the students under study, implies a deep analysis of the best curricular option. However, it is assumed as forms of intervention the therapeutic areas and classrooms of physical culture, aimed at meeting the needs of this student population.

Based on the above, it can be stated that in the course of study plan A from 1978 to 1982, study plan B from 1982 to 1989, which coincides with the creation of the therapeutic areas of physical culture, and study plan C, curricular Physical Education for students conditioned by medical certificate in Higher Education is not contemplated, which corroborates the existence of the theoretical gap in the field of research.

According to Arambarri (2008, p. 13):

The therapeutic areas of physical culture arise with the objective of making possible the treatment and functional physical restoration of children, youth and adults, without excluding the elderly, where there are carriers of various diseases, ailments, or simply, adults who present health deviations, according to their genetic code or postural deformities or obesity.

This approach makes clear the objective and non-curricular community character of the therapeutic areas of physical culture, which differs from Physical Education in objective

and intention of physical exercise in Higher Education. Therefore, this conception is feasible to a lesser extent for being exclusive and decontextualized.

In the course of time, the transformations occurred mark an important milestone related to the intention of perfecting Higher Education, for which the Plan of study "D" and "D modified" (1997 -1998 to 2015) is implemented. According to Sanchez (2011 p. 3):

The Ministry of Education set up its working commission, which had a national character, and dealt with the improvement of the Physical Education program. This commission had as guiding documents, among others, the Program for the Development of Physical Culture and Sports in Higher Education approved in the same course, where the different ways for the physical-sports training of students are established.

In order to solve this problem, in Higher Education, the same concept of intervention proposed in Joint Resolution No. 1, INDER-MINED is assumed in the systems of the Ministry of Education (MINED). In this way, the university students under study are summoned to the therapeutic areas of Physical Culture, where prophylactic and therapeutic physical culture programs are applied, directed by INDER professors. According to Bequer et al. (2013 p. 56): "The programs include the specialties of orthopedics, respiratory, angiology, cardiology, diabetes and obesity among others, participating in its conception, medical specialists, physical medicine and rehabilitation technicians, physiologists and graduates in Physical Education".

Meanwhile, the INDER issues the Methodological Indications consecutively (2017- 2022), for the attention to the students under study, where it includes a section for Higher Education, in which it suggests, exempting from Physical Education classes to students who present a medical certificate, in addition, it indicates to take said discipline in the therapeutic area of physical culture. In the hypothetical position of this researcher it is a contradictory indication, since to exempt is "to exonerate" according to Dictionary of the Use of the Spanish of America and Spain (DUSAE) (2018, p. 234).

Regarding the evaluation it states that it will be issued by said institution, attending to the attendance and compliance with the treatment (90% of the qualification) and for their active participation (10%). This is corroborated by the Program of the discipline Physical Education, study plan D.

However, in the opinion of this researcher, in spite of the efforts made to conceive Physical Education for university students conditioned by medical certificate, the therapeutic area of physical culture is not the best option, since it is exclusive when considering the rehabilitation method by physical exercise far from the formative benefits of the university

context and decontextualized, because it exists as an object of INDER, outside the requirements of the normative legal documents of the Ministry of Higher Education (MHE).

Derived from the transformations occurred during the period of improvement in Higher Education, in the 2015-2016 academic year, the Study Plan E in force in 2023 is originated, where it is recognized that the discipline Physical Education is classified as general education and is composed of six subjects. The referred discipline has among its objectives to improve physical condition, the appropriation of methods of systematic and conscious self-preparation, to encourage the formation of the habit of practicing physical exercises and the correct use of free time. Meanwhile, the contents will allow the development of the forms and functions of the organism, will influence the formation of values that will respond to the physical needs of the future graduate in the labor, social and defense of the country.

However, in the Program of the base curricular discipline Physical Education (2016) study plan E, a specific form of intervention for university students conditioned by medical certificate for Physical Education is not raised, which highlights the theoretical gap of the research field as it refers "the subject Therapeutic Gymnastics for students with physical limitations, the instructional objectives must take into account the clinical and biological characteristics of specific pathologies." (p. 4)

The above leads to an ambiguous planning since there is no subject called therapeutic gymnastics in Higher Education, in addition, Physical Education is not conceived in the same way for students with physical limitations as for university students conditioned by medical certificate, since in the former the limitations represent a type of impediment, and in the latter proposed in this research it represents a type of condition in the way of approaching the content.

The rapid evolution of technologies in Physical Education evidences that the therapeutic area conception of physical culture assumed for university students conditioned by medical certificate, due to their characteristics, was an option in its historical moment that represented an advance in the attention to this population group. However, it is necessary to be in tune with the demands that occur in the context and to contribute to the training of students from the university campuses themselves to achieve the expected change related to an inclusive and contextualized approach.

The contemporary approach of the discipline Physical Education (2016) study plan E, offers potentialities to elaborate a developmental and inclusive conception that takes into

account the best of the operative conception recognizing the value of this and is projected in a new approach of the didactic dynamics that recognizes in an inclusive concept the articulation of its subjects for the attention to university students conditioned by medical certificate.

When performing the triangulation in the observations of researchers such as: Escalona, R., et, al. (2010), and Suárez, B. (2017), several shortcomings are found in the teaching-learning process of Physical Education for the students referred to above that also remain valid in 2022 Study Plan E, and that according to them pose are in the genesis of its conception and that are worthy of attention such as:

- Purely therapeutic objectives that hinder the teaching evaluation according to the context.
- The decrease of developmental teaching according to the formative demands in Higher Education.
- Difficulties in the good development and updating of the methodological work, diminishing the contribution of the discipline to the formation as the main function of the university.
- The level of student protagonism in the construction of their learning is minimized.
- Predominance of direct command in the execution of physical teaching tasks.

Summarizing. In the periodization carried out, a series of trends that accentuate the theoretical gap in the field of research are evident, so it is considered necessary to relate below, since many of them are still in force in 2022 Study Plan E. Among them:

- The teaching-learning process of Physical Education for university students conditioned by medical certificate has remained as an object of INDER in therapeutic areas and classrooms of physical culture, negatively affecting the expected formation of the students already referred. By not didactically conceiving the attention to the development of motor autonomy as a necessary competence.
- INDER specialists, in charge of the teaching-learning process of Physical Education for university students conditioned by medical certificate, use a traditional didactic that makes the referred process asystemic, excluding and decontextualized.

Taking into account the results of this epigraph, and in consideration of this researcher,



there is a theoretical fissure in the field of research related to the above mentioned indicators and the documents with normative legal basis in Higher Education, therefore, it is necessary to deepen in the gnoseological and procedural bases to found and elaborate the analysis programs that make possible an inclusive conception of Physical Education for university students conditioned by medical certificate, where the cognitive nodes of Prophylactic and Therapeutic Physical Culture, which appears as subjects of the curricular Discipline base study plan E, are taken advantage of.

## **2. The therapeutic area of university physical education: A contextual idea.**

After the theoretical systematization carried out in the previous epigraph, the solution to the concrete problem can be proposed from a theoretical construct, which marks in the guiding idea the conception of the teaching-learning process, totalizing the discipline Physical Education, given in the possibility of dialectically relating the subject Prophylactic and Therapeutic Physical Culture designed for different years, and the subjects of Physical Education I, II, III and IV, where diversity and inclusion of university students conditioned by medical certificate are profiled.

Guiding idea: the conception of the Therapeutic Area of university physical education allows improving the teaching-learning process of Physical Education for university students conditioned by medical certificate, which is conceived based on three fundamental elements

- It is conceived in the undergraduate modality, which indicates to contextualize and integrate administrative, assistance, research and teaching actions to organize the teaching-learning process in the therapeutic area of university physical education with a developmental and inclusive, productive, problematizing, systemic and participative approach.
- It has a double character: therapeutic act (assistance-research): it allows correcting and compensating diseases through physical exercise, supported by research. Teaching act: it allows the teacher to mediate between the application of the knowledge system contemplated in the institutional programs (diagnose, intervene), and the student's performance mode, and from this to issue an evaluative criterion on the student's performance.
- To develop motor autonomy in students through systematic training, individual exercise and understanding of the different mechanisms of physiological action of exercise:

- a) Mechanism of tonifying action by varying the general tone of the organism, and as a result, the activity of the organ systems is accelerated.
- b) Mechanism of trophic action increasing the energetic reserves, improving the structure of the organs and tissues.
- c) Mechanism of formation of temporary and permanent compensations.
- d) Mechanisms of normalization of the functions, improving the ideomotor movements from the different links of the Nervous System.

The therapeutic area of university physical education is an inclusive conception that allows grouping the aforementioned students in the university context, it also serves as a basis to articulate subjects of the discipline Physical Education with a curricular approach from the dialectical relationships established between the therapeutic area and Physical Education in terms of the intention and objective of physical exercise.

An analysis of the meanings that make up the idea of therapeutic area of university physical education shows that the term area has several meanings depending on the context in which it is used. For this article we assume Ramírez, B. R, and López, L (2015, p. 19), who refer: "Area, is the idea of a portion of the earth's surface, meaning the perspective that implies considering a kind of platform where objects, subjects and phenomena are located, which represents a kind of container of the matter present on Earth". This criterion is assumed by the subjectivity shown, which broadens this concept to a specific area of knowledge as a phenomenon.

In the specific case of physical exercise, this constitutes in itself a method of correction and compensation of the state of health, so it is considered by medicine as a therapy established under the name of prophylactic and therapeutic physical culture, currently in the group of bioenergetic therapies in which changes in lifestyle are assumed in general, and therefore its main actor is the person, so Physical Education should be oriented in this sense to the development of motor autonomy to achieve self-validism.

The term Physical Education has been widely analyzed from different categories by researchers such as Del Canto, C. (2000), López, A. (2006), Ruiz, A. (2007) among others, for which reason we assume the scientific criteria of López, A. (2006 p. 31)

Physical Education represents a particular dimension of the educational process, made up of a semantic unit composed of the noun Education and the adjective physical. It constitutes, therefore, an expression that is not univocally understood, with very different

meanings depending on the historical moment, tradition and sociocultural context, but whose scope is not reduced to a simple education of the physical.

With this scientific criterion, the author suggests the intention and action of the discipline, and also refers to the context of action. Therefore, the teaching-learning process of Physical Education for university students conditioned by medical certificate should be carried out in the therapeutic area of Physical Education and respond to the interests of the context, performing activities that provide essential elements for training. Therefore, it is considered that the didactics should lead to an integral education, which considers the movement beyond the physical commitment, guaranteed by an articulation of the subjects based on the student's self-conductive capacity.

Therefore, the therapeutic area contextualized to the university is open to the model, legislation and broad in the direction of education. In this sense, the MES Base Document (2016, p. 1) by which the E curricula are designed, for training in Cuban Higher Education, states that:

The university is par excellence the social institution with the greatest capacity to preserve, develop and disseminate culture in its broadest sense, so it is expected to put the most advanced knowledge at the service and safeguard of humanity, in the most comprehensive and inclusive way possible.

Therefore, the therapeutic area of university physical education is defined as the space where to exercise the right to curricular Physical Education, where to be able to think, give opinions, dissent and act with motor autonomy through the instructive and educational intention of physical exercise as a prophylactic, therapeutic and self-realization means in the formation towards a profession.

Considering the fact given so far, the teaching-learning process in the therapeutic area of university physical education (TAUPE), constitutes a priority of Higher Education. In this, the formative requirements revealed in the normative documents, and the developmental learning that sustains it, have demands that start from the characteristics and role of the participating teachers and students, which is one of the categories to be taken into account in the research.

However, its conduction through a didactic approach that allows the fulfillment of the objectives set out in the context, must contemplate the attention to the diversity referred to diseases and professional profiles and the dynamic articulation of the subjects of the base curricular discipline Physical Education, becoming a model representation, since it

does not represent any real existing object at this educational level, but rather proposes the creation of a new one.

## **Conclusions**

The analysis of the historical background of the conception of university Physical Education for university students with medical certificate, which conditions them for these practices, shows that the attention to the diversity of the class group has not always been taken into account in the therapeutic area of physical culture and the requirements of the documents with normative legal basis at this educational level.

The theoretical construct of therapeutic area of university physical education shows in its structure the operative relations between the categories therapeutic area, Physical Education in Higher Education and the use of the potentialities shown by this discipline, concretizing in a representation of the new object sustaining the teaching-learning process according to the requirements of the documents with normative legal basis of Higher Education.