

# Educational Strategy for Family Doctors and Nurses in Three Boyeros Areas, 2012-2017

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**Abstract:** Background: structure of educational strategy for improvement the performance family doctors and nurses in three areas the Boyeros municipality in Havana. Objective: to design an educational strategy for improvement the performance family doctors and nurses in three areas the Boyeros municipality in Havana. Methods: project of development, prospective. Used the research of theoretical and empirical levels by means the application of instruments and successful with the utilization the proof McNemar, measure viability the strategy and it is carry out consultant to specialist. Results: the validation of instruments applied the evaluation of doctors and nurses family, for improvement the performance in Wajay, Capdevila and Allende health areas of Boyeros municipality by means the consultation to specialist and carried out pre-experiment, verified the viability the educational strategy proposal, for the improvement the performance in the handling the rabies, to satisfy the necessity of population health, which gets rich the Sciences Medical Education, Nurses Sciences and Medical Sciences theoretical. Conclusions: the design an educational strategy in the dynamic of practices, permits identify the relation of subordination between the Education in the works and education, assistance, research integration stimulates the continuous education and needs in the satisfy of population health and responds Level Attention Medical First the performance in the handling the rabies, which gets rich the Sciences Medical Education, Nurses Sciences and Medical Sciences.

**Keywords:** Educational Strategy, Task Performance and Analysis, Rabies, Education Medical, Ongoing Medical Education

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## 1. Introduction

In the report of year 2017, World Organization of Health (WHO) reports the presence of canine rabies in 40% the animal biting people presumably rabid, in this analysis made by the WOH, deposes that 95% the bitten persons are 15-year-old age minor, although any age group this predisposed to contract the illness, when the person in bite for an animal infected by the virus [1-3].

In Cuba, the prevention and control of illness engage in the promotion, control and education activity in the person's health and handling pet and wild animal, today the diagnostic

remain on the responsibility in the Municipality Center Hygiene and Epidemiology each areas in particular.

In Havana, in the years ninety, tendency to the positivity increase was in the mongoose species. Nevertheless, after the Campaign of canine and feline vaccination, the positives in the canine population comprises the period 2012 and 2017 with 41 for 26%.

The annual average of persons injured in the period from 2012 to 2017, for aggressions of suspicious rabid animals is 4 419, of 98% was for animals could be observed. Of 105 positive species, 63 animals (9,52%); was biter and confirmed with rabies, to predominance 26 canine species (41,26%), continued by 22 mongoose (34,92%), 12 felines

(19, 04%) and three bats (4,76%). 163 bitten persons finished the treatment for 3, 7% and five of nine did not finish it for 52%. To indicate the treatment anti-rabic, the family doctor diagnoses the type of the wound, the animal and the bitten place.

This article takes as a objective to design an educational strategy for doctors and nurses of the family in three areas the municipality of Boyeros, Havana in the improvement of the performance.

## 2. Methods

A pilot development project was realized, qualitative skills were used. The theoretical investigations were the documentary analysis, the modeling and performance observation. The methods empirics were the review and the consultation to the specialist.

The documentary analysis included the following documents: the case history of anti-rabies preventive treatment No. 8407, notification for the information System

and illnesses Obligatory Declaration of suspicious cases rabies and reaction the treatment, papers of anti-rabies treatment post-exhibition to the virus, the leaf clinical the family, document control of focus the area of health, records the organization of systematic activities of health education in the community and prophylaxis the rabies.

In the specialist consultation, 20 professionals considered In the specialist consultation, 20 professionals considered some aspects or phrases given by the authoress, that to criterion or value judgment of every specialist they had to complete (tables 3, 4) as: very suitable (VS) if he considers one exceeds the affirmation, as adapted (A) if it reaches them and inadequately (I) if it does not reach them.

### Ethic Aspect

There must be supported the anonymity, confidentiality, written and voluntary assent the implicit participants, in the previous agreement and negotiation with them. In the table 1, it is possible to appreciate as one has endured the biting species, where the canine species has displaced to the species mongoose.

Table 1. Behavior of the positivity of the biting animals.

Total species positive	Biter animals	canine	mongoose	feline	bats
105	63 (9,54%)	26 (41,26)	22 (34,92)	12 (19,04)	3 (4,76)

Source: Laboratory book of CPHEM. Havana

The designed educational strategy helps to improve the performance of doctors and family nurses of handling of the rabies with the humanist formation, the interest to science, the vocation of the service and the unconditional commitment with the health of the persons.

The work was carried out with 56 doctors and 56 nurses, that there correspond 100% and more than 50% of the Groups Basic of Work and social actors the communities, the table 2.

Table 2. Population and study sample.

Stratum	Health areas		%	Type of sampling
	Capdevila, Allende y Wajay			
	Universe	sample		
doctors	56	-	100	-
nurses	56	-	100	-
Manager	6	4	66,7	simple random
Social actors	40	25	62,5	simple random

Source: survey

Of 56 doctors, 51 are specialists in Integral Medicine General (MGI) for 91,7% two (8,5%) it has teachers, one is a Basic General practitioner for 1,7% and four are residents of Integral Medicine General for 7,14%. As regards the nurses 44 for 78, 5% are licensed, three have masters for 5,3%; 12 are technical for 21, 5% and 30 for 53,5% have more than 20 years of postgraduates.

For evaluation of the cognitive, educational dimensions and intellectual production, one worked with 66,7% (of four) of area Chiefs the health that they are the formal leaders they are like assistant directors of hygiene and epidemiology, Chiefs of Basic Group of Work and 62,5% of social actors the community, between them with a varied composition (five housewives for 20%, six workers for 24%, three university students for 12%, 9 pensioners for 36% and two students for 8%).

To realize the diagnosis of the doctor and nurse of the family

of the handling of the rabies there are evaluated the dimensions and the variable of study; across the results obtained with the elaborated instruments; it is established like evaluation scale in accordance with the per cent of correct answers; a high level 67 to 100% considered to be a suitable being, and inadequate levels of 33 to 66% and under 0 to 32%.

## 3. Discussion

For the description the structure and dynamics of the strategy makes term necessary mentioned traditionally where the strategy has been used in the military art, the politics and the economy and more limited it is known in the military operations and the skill of directing a project.

The strategy comes from the word *stratégia* Greek, *stratégos* that means the art of direction, the plan of final

action, skill and the skill of directing a matter [4, 5].

There are definitions that exist of the strategy, of form general it is tackled like the art or the skill of the imagination, the organization and the direction of actions that they ordered to solve of not rigid form.

Changed there are the definitions that exist of strategy, of form general these tackle it like the art or skill of imagining, organizing and directing actions directed to solve a form not rigid at all the contradictions that arise.

Valcárcel Izquierdo [5] the year 1998, in its contribution to the conceptualization the strategy stands out:

1. continue a sequence the general thing the particular thing. They begin with a place in tendencies the environment and fix global aspirations, which are a question of specifying in targets and specific goals for certain areas.
2. process the derivation of targets, with the intention of establishing a harmony between the wished to length and short term.
3. chased to reach a continuity between three temporary dimensions of existence of an institution (past-present - future), from the already made thing and without be outlining in it, being employed at present to achieve the future.
4. strategy is not given him to aspire to want to advance in all the requirements that appear in the environment organizational. It is necessary in every projection to define point's keys that constitute the priority aspirations that must be solved first to be able then to advance in other areas.
5. conceptualization that receives significance in the proposal that is realized in this investigation, like instrument that allows arranging the action for the securing of the proposed targets.

Inside the young Science of Medical Education, several are the investigators who have tackled diverse strategies, they stand out inside the conceptualized ones: the Characterization of the professional performance for the application of the technological procedures of mammography (Ramos V, 2017) [6], Shape of Evaluation the Professional Performance the Bachelor of Hygiene and Epidemiology (Solís S, 2017) [7] overcoming Strategy for the improvement of the professional performance of Bachelor in imagenology and radiophysical doctor, in the skill of diagnostic ultrasound (Lescaille N, 2017) [8]. Shape of professionalization in epidemiology for the Bachelors of Hygiene and Epidemiology of Havana (Sánchez M, 2017) [9], and others.

In the particular case the educational strategies, there were systematized the works of diverse authors between whom they stand out: Educational strategy on extensionismo agrarian (Rivera T, G. 2008) [10], Educational Strategy to favor the familiar functionality in young couples (Pernas Á, 2010) [11], Educational strategy in infirmary for the biopsychosocial care the biggest hypertense adult. General Hospital "José Martí". Camagüey, 2008-2009 (Gafas G, C. 2011) [12], Strategy psicoeducative for the prevention and control of emotional risks in persons with epilepsy (Rojas G,

2012) [13], Educational strategy for the development of Natural and Traditional Medicine in the secondary health attention. (Martínez O, 2014) [14].

In the same way there were quoted other investigators the Community of Advanced Education, such as interdisciplinary strategy of overcoming (Valcárcel N, 1996), Strategy for the experts' formation (Añorga M, 1999), overcoming Strategy interventive (Bond, MA. 2008), Pedagogic Strategy for the professional performance (Sinclair, ME. 2012), Strategy for the improvement of the professional performance in the Primary education (Pichs G, 2014), Pedagogic strategy for the preparation the Bachelors in nurse the competences investigative (Sixto, A. 2014), Educational Strategy for the development the Natural and Traditional Medicine in the secondary attention of health (Martínez O, 2014)[14], Pedagogic Strategy for the pedagogic professional performance in environmental education the teachers of district of Maianga Luanda, Angola (Fernando Da C, A. 2015) [15], Professionalization strategy for the development the competition intellectual production in the teacher of nurse (Caballero B, 2015) [16], (García C, T de la C. 2016) [17] and others.

The use the historical methods - logical, the documentary analysis and the functional structural systemic approach for the investigations at theoretical level, allowed to the authoress to identify and determine the essential theoretical essentials that sustain the making of the educational strategy that propone.

The systematized theoretical elements constitute an important part of the theoretical essentials to be born in mind; nevertheless, it turns out to be essential to complement them from the integration of the basic elements that contribute the Philosophy, the Sociology, the Psychology, the Pedagogic and Medical Education. From the conception like property Development Company of a continuous ascent in the quality of what is realized, linked inexorably to the personality development.

Likewise, is sustained in the context the higher education of a general way and in particular the Medical Education sustained like the young science that serves as essential theoretical base. It takes up office like axis, like a rector instrument of this discipline.

This foundation made possible design the strategy proposed between the theory, the curriculum and the operacionalization in practice the object and field of tackled study, bearing in mind a set of principles among which there stands out the related the Beginning of study and work. The combination of these two activities - study with the work, fundamental variant of the beginning of link the theory with the practice - has deep roots in the conceptions José Martí on the education, who summed up the most progressive the Cuban Pedagogic Ideology on having postulated the need to erase the existing divorce between the theory and practice, study and work, intellectual work and manual work; and it supports the merger of them [18].

The proposed educational strategy maintains a relation of education, help and investigation; essential in the Doctors of the First help (PCPs) (it is included at all the levels of the medical care) and interdisciplinary form multifactorial

improves the professional performance, the development of the creativity and the decisive capacity. He acquires the maximum expression in the Education in Work, which allows the consolidation, enlargement and application of the knowledge acquired during the development of the teaching process - educationally, together with the formation of skills / practical habits, the acquisition of methods and more advanced routes of the work, as well as the formation of features that have to characterize the professional activity, in the handling of the rabies at present.

The first beginning the Medical sciences is the Education in the Work, it develops in the organizational frame of the teaching integration and investigative, privilege more the primary care physicians (PCPs) and the group work; that promotes the development the creativity and individual and collective decisive capacity of students and teachers, of multiprofessional and interdisciplinary form in the welfare services, allows the development of new styles of performance, perfects the interpersonal relations and encourages the ethical-moral values in intimate interrelation with the community, what allows in the future professional to form in the proper area where he will exercise the profession [19-20].

In Cuba, the medical work rests in the Integral General practitioner (IGP), a human resource that must have different functions and tasks established in the program and mostrar the medical thought in the promotion, prevention, diagnosis and opportune treatment and rehabilitation, completely of the patient who includes social and hygienic aspect - sanitary ware. The development, constant training and the investigation of these specialists are very important to obtain the attention excellence in the process health - illness of the population [21].

The educational strategy proposal is projected according to the identified problems, with the theoretical estimation of different sciences, as: Sciences of the Medical Education, Medical Sciences and the Sciences of the Infirmary; giving him exit in the search of new routes for the preparation of the personnel involved in the handling of this illness.

Dr. C Valcárcel, in the year 1998, it expresses, the proposed strategy possesses particular characteristics with a style participative, that is demonstrated by its flexible, dynamic character and with adjustments to changes [22].

They give the flexible character in the diversity of organizational forms and the possibilities that are offered so that these are used of the characteristics of the doctor and nurse who contemplates the essential aspects, which try to be modified in the context where desrollen (area of the health, community and family). With adjustments to changes, because it offers the aptitude for adapting itself to transformations and for differing in the dependence on the stage where it is applied.

In having had the dynamic character, the organizational forms of the professional preparation that there contribute authors like Añorga J, Valcárcel N, Pine nut kernel J, Castillo T and Pérez To; integrate and use information technologies and communication as the instrument of the work [23].

For the application the strategy contextualiza four stages: the diagnosis, the design, execution and evaluation, which

they are formed by a game of actions that can materialize according to the characteristics the area of health or municipality where it develops.

The first Diagnosis stage.

The characterization the context, identification and hierarchic structure of problems, needs, potentialities and barriers promotes the institutional and individual implication. For it the sensitization activities realized across conversation and discussion, with everything complicated one, for the full conviction, disposition and commitment for the good the preparation in the matter, to guarantee the help of relation and integration - teaching-investigation.

The second Designed Stage.

Since what, the investigation proposes how the current definition the educational Strategy for the progress the yield you unare furious handling of the family doctors and nurses, as a process directed the way the transformation of the yield the family doctors and nurses according to the handling of the anger, of targets put in danger with the formation, development and improvement of the measurement of yield towards the cognitive, educational one, help and intellectual production, like the result of the appropriate yield.

The third stage execution of the activities proposed for the progress of yield in the anger handling as: the courses, seminars, chat and virtual course

The fourth stage of evaluation of the educational strategy has a double function; it will measure results and the process; first it will define the qualitative and quantitative reached results in the related one the anger handling and to the yield, but for his part it allows to diagnose weaknesses and limitations the educational strategy adapted for its later application in other areas of the health.

## 4. Conclusion

The design an educational strategy the dynamic of practices, permits identify the relation of subordination between the Education in works and education, welfare, research integration stimulates the continuous education and needs the satisfy of population health and responds public health services the performance in handling the rabies, which gets rich the Sciences Medical Education, Nurses Sciences and Medical Sciences.

The proposed model can be considered to be an educational Strategy on having proposed a set of sequential and interconnected actions, from the current state family physicians and nurses like educational alternative that helps to improve the performance in the handling the rabies in the Primary Health Care of Health and Educational on having developed, to stimulate or to perfect knowledge, skills and values on the topic.

## Acknowledgements

To all those who of a form or other one helped me to finish the work.

## Appendix

### QUESTIONNAIRE FOR THE CONSULTATION TO SPECIALIST

General date:

Name and last name: \_\_\_\_\_

Specialist: \_\_\_\_\_

Works center: \_\_\_\_\_

Organism: \_\_\_\_\_

Scientific grade: \_\_\_\_\_

Category educational: \_\_\_\_\_

Years of experience: \_\_\_\_\_ Years in the charge: \_\_\_\_\_

Colleague:

For the importance has the research is carried out about the performance in the handling the rabies the family doctors and nurses and knows about its vast work, teaching experience and investigative, as well as its preparation in the area, we put to consideration the proposal so that it expresses evaluation and this way to be able, realize the theoretical ratification of same one.

In advance we are grateful to him for its collaboration!

*Table 3. Aspects to evaluate for the specialists.*

Review aspect	MA	A	I
1. The clear systemic character in the relations between the stages and the components the actions that shape it, is... The social relevancy the educational strategy to perfect the handling the rabies in the community, proves... The design the strategy in accordance with the proper characteristics of health areas and present and future transformations context, allows its adaptability (contextualization) of form ... The flexile character the design allows the contextualization different stages of health areas in the different municipalities, according to the proper characteristics of every health area and territory of form... The elements that compose the structure the strategy, allow of dynamic form the improvement the performance the family doctors and nurses, of form ... The connection between the cognitive, assistance, educational dimensions and intellectual production and actions proposed in the strategy, is... The implementation of strategy proposed in the social context in which it is inserted, is valued as... The organizational forms used for the preparation to the advantage of contributing to the performance in the handling of the rabies, consider... The levels preparation that propitiates the design of educational strategy in the involved subjects, are...			
10. The impact is obtained by the educational strategy in the needs ofbiter persons, family and community could consider it of way...			

Do you consider who should include another element or action in the educational strategy?

\_\_\_ If \_\_\_ Not. In affirmative case, recount it next.

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To its judgment, what knowledge do you possess on the strategies design. For it circulate the value that corresponds to grade of knowledge or information about the topic, in the following increasing scale of the 1 to 10.

*Table 4. Grade of knowledge or information about the topic.*

Disregard	Knowledge								
1	2	3	4	5	6	7	8	9	10

Thanks!

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