



## Self-Care in Primary Health Care in the Nursing Career



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### Abstract

Self-care of health, basic in primary care, deserves to be reinforced in the training of Nursing professionals. The objective of this research was to evaluate the effectiveness of a proposal for teaching self-care in primary health care (PHC) aimed at teachers and students of said career for the promotion of self-care. This analytical, longitudinal, and prospective study, with a pre-experimental design, was carried out at the Universidad Estatal del Sur de Manabí, in Ecuador. 187 5th and 8th grade students were selected. semesters and the total number of teachers (n: 14) who teach PHC-related subjects, in order to make a diagnosis of the level of knowledge about self-care, establish a competency profile and propose organized methodologies in a didactic proposal to be incorporated into Nursing career. The results showed a high level in some of the categories studied, however the design and application of the proposal to strengthen the teaching of self-care in PHC, aimed at career teachers, was feasible in its execution through modules of transversal use related to the aspects of prevention and health promotion, influencing the modification of lifestyles in diet, exercise, hygiene and sleep habits and allowed to improve not only the three categories that were with self-care deficit, but the five categories evaluated, both in teachers and students; evidenced by the effectiveness in the objectives corresponding to the study of self-care capacity, self-care practices and perception of self-care.

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## 1 Introduction

Nursing, since its inception, has been considered as a social product linked to the art of caring, which is why it responds to the need to help people when they do not have sufficient capacity to provide for themselves or the people who depend on them. them, the quality and quantity of care to maintain life, identifying health problems and the real and/or potential needs of the person, family and community that demand care, generating autonomy or dependency as a consequence of the activities assumed by the nurse (Bastías & Stiepovich, 2014).

On the other hand, educating does not only imply socializing content, but also introducing oneself into the meaning of the culture in which the learner is immersed and contextualizing oneself in their own special structures. In this sense, the philosophy of educating and the pedagogy of care are a same. In education it is intended, from the constructivist postulates, that knowledge is not a faithful copy of reality but a construction of the human being from the link of cognitive aspects, with the social aspects of behavior (Achury et al., 2009; Duarte & Anderson, 2013).

Nursing professionals are a social group that fulfills two primary tasks: caring for patients and teaching nursing; and both require a moral commitment to the needs of society. Different authors recognize that nursing is a practical human science that uses the theories of natural and behavioral sciences to understand and develop care practices. Caring is the essence of the discipline, being the core and therefore the object of study, it must be discerned as such, but also recognized by all nursing professionals who decide to be, and exercise it with vocation, duty and human responsibility (Bastías & Stiepovich, 2014; Achury et al., 2009; Duarte & Anderson, 2013; Medina & Castillo, 2006).

Self-care, at present, constitutes a topic of transcendence, because through its knowledge and application it allows to increase the proactivity of workers in the field of health. The practice of self-care requires, to a large extent, a change of attitude in the face of the new challenges of modern life. The new conceptions of health and health promotion propose a new way of assuming self-care with a human face, as a fundamental strategy to promote life and well-being; For this reason, the development of personal skills is required to make healthy decisions, which constitutes one of the five components of health promotion (Manturano & Cabanillas, 2014).

Self-care is, then, an essential tool in primary health care (PHC) since it has the purpose of promoting a healthy life by preventing diseases. With concern we have noticed that self-care is being little encouraged, in patients, by Nursing professionals who limit themselves to complying with treatments indicated by the doctor, omitting additional instructions that lead the patient to worry about recovering and maintaining their health. and that they are the basis of self-care. This reality may have its origin in the lack of emphasis on self-care in the training programs of some health careers, where it should exist, a special insistence on the relevance of this practice which can be promoted from a didactic proposal applicable throughout the degree (Klingberg et al., 2005; Klingberg, 2010). This lack of interest in self-care leads Nursing students themselves to suffer illnesses during their studies since they are not able, in cases where there is theoretical training on self-care, to apply it to themselves, which leads them to become ill with what they should prevent patients or the community in general from suffering (Barrow et al., 2002; Dettmore et al., 2009).

In addition, some research suggests that a deficit in self-care skills increases the risk of chronic non-communicable diseases in university students and the number of years of healthy life lost reaches up to 6.9 years in some regions of Latin America (Bastías & Stiepovich, 2014). That is why we think that teachers should promote self-care skills while developing the professional skills of students during their training. Care as a repercussion in practice needs to be analyzed from the epistemological point of view of nursing knowledge, from the different expressions and meanings of the person who receives it as an integral human being, to the meanings that they symbolize for nurses who they provide it (Mercer, 2006; Jayasekara, 2012).

It is necessary that the nursing professional knows his study and work objective, which consequently guides his practice, this leads us to detail the teaching and learning of these theoretical bases, in which the academic training programs must be integrated and present, that allow the new generations to develop their professional practice (Orem, 1999; Manturano & Cabanillas, 2014; Prado et al., 2014).

Although there is little evidence of the teaching of self-care, the benefits of the didactic strategy in the practice of the profession are highlighted by working on skills such as: self-learning, teamwork, critical thinking, communication, attitudes and holistic vision (Guillamet, 2011). Therefore, the objective of this research was to evaluate the effectiveness of a self-care teaching proposal in primary health care (PHC) aimed at teachers and students of said career for the promotion of self-care.

## 2 Materials and Methods

This present investigation is an explanatory, prospective, longitudinal, and analytical study. It is an experimental investigation. The objective was to evaluate self-care in primary health care in teachers and students of the Nursing Career of the Universidad Estatal del Sur de Manabí. The research design is the plan or strategy adopted by the researcher to respond to the problem posed. Starting from this concept, the present work pursues a pre-experimental design, because the moment before and after the intervention (application of the proposal) was valued.

The total number of students of the Nursing Career of the Universidad Estatal del Sur de Manabí, in Ecuador, located between the 5th and 8th. semesters, for the year 2018 is three hundred and thirteen (N:313) and the total number of professors at the School of Nursing who teach subjects that are handled in the context of primary health care, for the same year, is fourteen (N: 14). By calculating estimates of the total number of students of the course enrolled in the last two years of the same (N: 313) and the number of professors who teach subjects in the context of primary health care (N: 14), it was in a minimum number of samples of 187 students and 100% of the teachers to ensure the representativeness of the sample, taking into account for the calculation of the size of the student sample, a desired precision of 5% and a confidence level of 95%. The purpose, objectives, benefits and risks of the research were explained to the students and professors, and they were asked to sign an informed consent, in compliance with the standards and recommendations for biomedical research with human beings stipulated in the Declaration of Helsinki of the World Medical Association (WMA, 2013).

The previously validated data collection instruments were applied to both students and teachers. The collected data was emptied into data processing files to be statistically analyzed. Based on the results obtained from the previous phase, the phase of design and adaptation of the educational program for the promotion of self-care in primary health care in the nursing career was passed, within an instructional design in which educational objectives were incorporated, contents, learning and evaluative activities, as well as didactic materials, time and time of development of the activities. This didactic proposal included activities that highlight the importance of self-care in the daily life of the student, the patient, and the community (Chaika et al., 2021).

For data collection, an instrument validated by Rebolledo (Garduño et al., 2017) was used, being an instrument composed of four dimensions. The first dimension for the personal history of the subject under study consists of closed questions and short answers in relation to age, sex, with whom they live, religious orientation, participation in social groups, academic, marital status, number of children, ethnicity. The second dimension uses the same methodology as the previous one, seeking to collect information regarding various habits and behaviors. The third dimension corresponds to Esther Gallego's self-care agency capacity assessment scale. The scale is made up of 24 dimensions with a response format of 5 Likert-style alternatives,

The 24 items are grouped into five categories of self-care agency capacity: questions 12 and 22 are part of the social interaction category; questions 2, 4, 5, 7, 8, 14, 15, 16, 17, 19, 21 and 23, correspond to the category of personal well-being where the prevention of risks to human life and the functioning of the body is managed; questions 3, 6, 11, 13 and 20 evaluate the category of activity and rest; Question 9 refers to the category of sufficient food consumption and finally questions 1, 10, 18 and 24 correspond to the category of promotion of personal functioning and development within social groups according to human potential. The interpretation of ranges of the evaluation of the self-care agency capacity was carried out according to the

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score given according to the Likert scale, establishing one as classification ranges: HIGH capacity for self-care agency with a score between 97 and 120 points; a MEDIUM self-care agency capacity between 49 and 96 points and a LOW self-care agency capacity between 1 and 48 points.

The fourth dimension, to access how the Nursing students and teachers surveyed define “self-care”, offers a total of 6 definitions close to the definition of self-care provided by Orem (Orem, 1999): “The practice of activities that individuals initiated and carried out for their own benefit for the maintenance of life, health and well-being”. Finally, a fifth dimension referring to the influence of Nursing training and the development of self-care skills is added to collect the perception of those surveyed about this established relationship. The statistical program GraphPad Prism 5.0 was used. Data were expressed in relative and absolute frequency values, tabulated, and analyzed by the chi-square test, Student's T. The significance level was  $p < 0.05$ .

### 3 Results and Discussions

The table 1 shows the results of the frequency and percentage analysis of the variables of sociodemographic characterization of the population of teachers of the Nursing Career of the Universidad Estatal del Sur de Manabí, which indicates that the predominant population with a 43% of the teachers are between 30 and 40 years of age, followed by 28.5% between the ages of 41 and 60 and in which 78.6% are female. On the other hand, 100% of the informants stated that they are married, have more than 3 children and live in an urban area. Likewise, 86% stated that their home was their own and 7% equally lived in the home of a relative or was rented. Also, 86% practiced the Catholic religion and the rest represented by 14% the Evangelical.

Table 1  
Sociodemographic characteristics of the teachers from the fifth to the eighth semester of the Nursing Career at the Universidad Estatal del Sur de Manabí

Variables	Dimension	no	%
Age (years)	30 to 40	6	42
	41 to 50	4	29
	51 to 60	4	29
	Over 60	0	0
Sex	Male	4	29
	Feminine	10	71
Marital status	Single	0	0
	de facto union	0	0
	Married	14	100
	Divorced	0	0
	Widowed	0	0
Number of children	Childless	0	0
	1 son	0	0
	2 sons	0	0
	3 children or more	14	100
Origin	urban	14	100
	Rural	0	0
living place	own	12	86
	House of a relative	1	7
	lease	1	7
	Others	0	0
Religion	Catholic	12	86
	Evangelical	two	14
	Other	0	0
	Without religion	0	0
Social participation	Religious group	0	0

Sports team	1	7
Volunteering	1	7
student federation	0	0
Theater group	0	0
None	12	86
Others	0	0

Source: Survey applied to teachers

When analyzing the absolute and relative percentage frequencies of the sociodemographic characterization variables of the student population of the Nursing Career at the Universidad Estatal del Sur de Manabí, it was found that the predominant population with 57.2% of the students are between 19 to 22 years of age, followed by 32.6% between the ages of 23 and 26, finding even students over 31 years of age. On the other hand, 56.7% were female and 74.9% were single with no children. Likewise, 65.8% live in urban areas and 48.7% live with their parents, noting that 34.2 are rented. They also indicated that 84.5% practiced the Catholic religion and 7.5% the Evangelical. Regarding their social participation, 47.6% denied doing so, on the 26th, 7% belonged to a sports team or volunteer and 13.9% to a religious group. In addition, 75.9% indicated that their academic situation was satisfactory as they had not failed any prerequisite course and only 24.1% were conditional (Table 2).

Table 2

Sociodemographic characteristics of the students from the fifth to the eighth semester of the Nursing Career at the Universidad Estatal del Sur de Manabí

Variables	Dimension	No	%
Age	19 to 22 years	107	57
	23 to 26 years	61	33
	27 to 30 years	12	6
	Over 31 years old	7	4
Sex	Male	81	43
	Feminine	106	57
Marital status	Single	140	75
	de facto union	22	12
	Married	16	8
	Divorced	9	5
	Widowed	0	0
Number of children	Childless	140	75
	1 son	32	17
	2 sons	12	6
	3 children or more	3	two
Origin	urban	123	66
	Rural	64	3.4
living place	parent's house	91	49
	House of a relative	fifteen	8
	lease	64	3.4
	Others	17	9
	Without religion	3	two
Religion	Catholic	158	84
	Evangelical	14	8
	Other	12	6
	Without religion	3	two
Social participation	Religious group	26	14
	Sports team	fifty	27
	Volunteering	two	1

	student federation	6	3
	Theater group	8	4
	None	89	48
	Others	6	3
academic situation	Satisfactory (without having failed any prerequisite course)	142	76
	Conditional (with having failed a prerequisite course)	Four. Five	24

Source: Survey applied to students

Regarding healthy eating, weight control, it is observed that 59 students (32%) eat healthy and control their weight, while 55 (29%) do it often or sometimes, 7% (n:14) do it rarely and 3% never eat healthy. When investigating the mental capacity and management that the student has in situations of control and balance, it was found that 58 (31%) always have that capacity, while 56 (30%) often, 50 (27%) never 12 (6 %) and rarely 11 (6%) (Table 3). The 32% equivalent to 59 nursing students often exercises and have rest during the day; 49 (26%) sometimes do it, while 48 (26%) always do it, 23 (12%) rarely, and 8 (4%) never.

Table 3

Healthy eating, weight control y Ability to manage situations of control and balance in students of the Nursing Career of the Universidad Estatal del Sur de Manabí

	Alternative	Frequency	Percentage
Healthy nutrition, weight control	Never	5	3
	Seldom	14	7
	Sometimes	55	29
	Often	54	29
	Always	59	32
Ability to manage situations of control and balance	Never	12	6
	Seldom	eleven	6
	Sometimes	fifty	27
	Often	56	30
	Always	58	31
	Total	187	100

Regarding the search for help by students in case of health or other problems, it was evidenced that 70 (37%) always do so, while 57 (30%) often, likewise 43 (23%) sometimes, while 12 (6%) and 5 (3%) rarely and never do it, respectively. When determining the practices of self-care in primary health care of teachers and students of the Career of Nursing, it was possible to observe in the teachers that the majority (71%) do not have tobacco habits, however, 86% consume alcoholic beverages, with a frequency of less than four times a month, through the consumption in their great majority of beer as an alcoholic beverage. None consume illicit drugs and only 29% practice exercises or sports, while 71% spend between 5 and 7 hours sleeping as rest.

Self-care practices in primary health care in students of the 5th. to the 8th semester of the degree Nursing, showed that the majority (65%) do not have smoking habits, however, of those who smoke, 6% consume 1 to 3 cigarettes a day. 66% consume alcoholic beverages, of which 50% get drunk, with 43% with a frequency of less than four times a month, through the consumption of beer as an alcoholic beverage, although the highest percentage does not consume alcoholic beverages. 7% stated that they used illegal drugs and only 27% practiced exercises or sports, while 60% spent between 5 and 7 hours sleeping.

In order to investigate the perception of self-care in primary health care in students of the Career of Nursing, we proceeded to ask how the surveyed students and teachers of the Nursing Career define "self-care", from a total of 6 definitions close to the definition of self-care given by Orem in 2001, observing that students in 26 8 of the cases identified the self-care action as "Take care of yourself". It is a behavior that the person performs or should perform for himself, while 40 (21.4%) students perceive self-care as a "Set of



intentional actions that the person performs to control internal or external factors that may compromise their life and later development”.

The table 4 shows the results of the frequency and percentage analysis of the perception that students have about self-care in primary health care, in the pre and posttest. It indicates that 27% of students perceive it as "Taking care of yourself" and 42.7% associate it with "set of intentional actions" and 20.3% as the one that allows "Make beneficial adjustments for my health and quality of life". The fact stands out in which, the lowest percentages with 5% and 2.5% with the arguments "Mental, physical and social balance obtained from my protective actions" and "Love and respect for my life" respectively.

Table 4  
Perception of self-care in primary health care in students of the Career of Nursing

Options	Pre-test		Post-test		p
	no	%	no	%	
“Set of intentional actions carried out by the person to control internal or external factors, which may compromise their life and subsequent development.”	40	21.4	80	<b>42.7</b>	0.05
“Make beneficial adjustments for my health and quality of life”	38	20.3	38	<b>20.3</b>	-
“Take care of yourself. “It is a behavior that the person performs or should perform for himself	fifty	26.7	fifty	<b>27.0</b>	-
“Recognize protective and risk factors in my habits”	fifteen	8.0	9	<b>5.0</b>	DK
“Love and respect for my life”	twenty-one	11.2	5	<b>2.5</b>	0.05
“Mental, physical, and social balance obtained from my actions protective”	<b>23</b>	12.3	<b>5</b>	<b>2.5</b>	0.05

It can be seen in table N° 10, that when applying the parametric statistics with the Student's T test, the degree of significance was 0.007 in the intergroup comparison (group of students), which shows that there were differences between them with a  $p < 0.5$  significantly, with respect to their means in the variable. It should be noted that the group of students even when the proposal to strengthen the teaching of self-care was not applied; Indirectly through the training of their teachers, it was possible to improve their self-care capacity, improve their own practice of self-care and the perception of their self-care.

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Table No. 5.  
Student's T test: intragroup comparison (students)

	Diferencias relacionadas				t	gl	Sig. (bilateral)	
	Media	Desviación tip.	Error tip. de la media	95% Intervalo de confianza para la diferencia				
				Inferior				Superior
Par variable3-1 variable4	5,84444	5,28598	1,67157	2,06308	9,62581	3,496	9	,007

\*\*It is significant at the 0.01 level (unilateral).

Font: (Macías, 2021)

It can be observed in table N° 6, that when applying the Student's T test, for the intragroup comparison (group of teachers of the Nursing career of the Universidad Estatal del Sur de Manabí) before and after the application of a proposal of teaching self-care in primary health care, the degree of significance was 0.006, which shows that there were significant differences  $P < 0.5$  between the two observations (pretest and posttest), with respect to their means in the variable, which shows that with the application of said proposal if the teaching of self-care can be strengthened, generating an effect in the dimensions: self-care capacity, own practice of self-care and the perception of self-care, rejecting the  $H_0$  and accepting the research hypothesis.

Table 6  
Student's T test: intragroup comparison (teachers) pretest and posttest

	Diferencias relacionadas					t	gl	Sig. (bilateral)
	Media	Desviación típ.	Error típ. de la media	95% Intervalo de confianza para la diferencia				
				Inferior	Superior			
Par variable1pretestexper 1 -variable3	- 6,36111	5,59696	1,76991	- 10,36494	-2,35729	- 3,594	9	,006

\*\*It is significant at the 0.01 level (unilateral).

Font: (Macías, 2021)

The preparation of nursing staff requires the collaboration of trained teachers to create a balance between healthy living and teaching, however, currently this training, although it is received, does not guarantee that students practice it with themselves, due to the individual factors and the environment that surrounds them, customs, habits and attitudes (Bastías & Stieповich, 2014). The results found in the present investigation reflect that the predominant age in nursing students was 22 years in 27% of them, these data are similar to the other study (de Dios Duarte et al., 2017) where his sample of 285 nursing students yielded a mean age of 21 years with a range between 18 to 51 years.

In relation to the sociodemographic characteristics of nursing students, it was found that the majority are young women, from urban areas and from low strata. These results are similar to those found by Castillo (2018), where his sample was 587 nursing students from 3 universities, he obtained that 526 (89.6%) are women, 80.1% of urban origin. Likewise, these results are similar to those found by García et al. (2014), in their study carried out in Malaga, with a sample of 124 nursing students, where 79% were women, with an average age of 24.15 years (SD = 6.7). This indicates that, over time, nursing has been considered female, as stated by Barragán (2013).

No widowers were found within the marital status, however, 75% (140) were single and did not have children, the majority (49%) live with their parents and 64 (34%) live alone; These results are similar to the study by Durán (2009), who describe that 56% of the world population of university students are single and live with their parents despite being of legal age. The results also reflect that the majority of students are Catholic (85%), 26 (13%) belong to a sports team and the academic situation is stable in 142 (76%) students, these results are similar to the study by Bastías & Stieповich (2014), on a review of the lifestyle of Ibero-American university students that highlights that physical activity is little or nil, but their academic records remain high.

The World Health Report (2002) mentions that there are a total of 25 major risks in university life, among the most important worldwide are the following: unprotected sexual practices, high blood pressure, tobacco, alcohol, levels high cholesterol, and overweight/obesity, all linked to lifestyles. The results reflect that 122 students, equivalent to 64%, do not have tobacco consumption habits, while 65 (36%) do, with an average number of cigarettes consumed per day from 1 to 3 (6%), these data are similar to the study by Barra et al. (2015), where they mention in their study with a total of 11,679 university students, that the prevalence of active smoking was 36% without association with sex, age or years, concluding that this depends on the area where they are located, reducing expectations in the area of health; however, 77% of smokers stated the intention to quit or had already begun to quit.



The reflection of the results on the consumption of tobacco of 122 students who do not smoke, 2 of them do not avoid closed spaces with cigarette smoke, this phenomenon is known as passive smoking, according to [Samet & Wang \(2000\)](#), the evidence on the risks for the health due to passive smoking come both from epidemiological studies that have directly assessed the associations of exposures to environmental tobacco smoke (ETS) with disease consequences, and from knowledge of the components of ETS and its toxicities. The association of AHT with lung cancer has currently been evaluated in nearly 40 epidemiological studies. The most recent meta-analysis combined evidence from 37 published studies and estimated the excess lung cancer risk of non-smokers married to a female smoker at 24% (95% CI 13%, 36%) ([Cortés & López, 2014](#)). Of the total number of students who do not consume alcoholic beverages, 103 (55%), 84 (45%) if they do, the type of drink most frequently is beer (27%), of which 45% get drunk. These results are similar to the study by [Ramírez et al. \(2016\)](#), with a frequency of 82.5% in university students from the health area, regarding alcohol abuse. According to [Helmer et al. \(2014\)](#), this practice in young adults can lead to cognitive and neurological impairment; and as a consequence of these, low academic performance, antisocial behaviors, risky sexual practices, as well as physical and psychological damage. These results are similar to the study by [Ramírez et al. \(2016\)](#), with a frequency of 82.5% in university students from the health area, regarding alcohol abuse. According to [Helmer et al. \(2014\)](#), this practice in young adults can lead to cognitive and neurological impairment; and as a consequence of these, low academic performance, antisocial behaviors, risky sexual practices, as well as physical and psychological damage. These results are similar to the study by [Ramírez et al. \(2016\)](#), with a frequency of 82.5% in university students from the health area, regarding alcohol abuse. According to [Helmer et al. \(2014\)](#), this practice in young adults can lead to cognitive and neurological impairment; and as a consequence of these, low academic performance, antisocial behaviors, risky sexual practices, as well as physical and psychological damage.

It was also evidenced that 122 of the students have a frequency of hours of sleep between 5 to 7 hours, without physical activity during the week in 72%, but in the same percentage (72%) do not consume drugs, these findings are similar. Regarding physical activity, the study by [Suescún et al. \(2017\)](#), where 43.1% of the analyzed population performed physical activity for 30 minutes at least three times a week, results similar to those reported in other studies ([Rootman et al., 2007](#); [Muñoz & Cabieses, 2008](#); [Rojas et al., 2013](#)). Students report that they rarely exercise and that they practice it only in the formative sport course, oriented at the university, or by walking as a means of transportation to get to the university ([Muñoz & Cabieses, 2008](#)).

I know revealed that those involved in the research after having received the intervention through the proposal carried out in the teachers, improved their self-care capacity, it was possible to strengthen the initial low level of self-care capacity and that those who were at a medium level before the training, they also improved their self-care capacity, reducing from 35.8% to 14%, which made the high level of self-care agency predominate with 86% after the training. This finding motivates the need to continue training periodically and keep the self-care capacity strengthened, since a deficit in self-care capacities increases the risk of chronic non-communicable diseases.

Likewise, the results exposed in the teachers and students after the application of the Esther Gallego self-care agency capacity assessment scale in students and teachers of the race UNESUM Nursing, coincide with what was reported by meadow and cabbage. [Prado \(2014\)](#), who support the evaluation proposed by [Orem \(1999\)](#), by indicating that the person must be seen holistically from the biological, psychological and social point of view.

Also, from this same perspective of the results, since the highest evaluation percentages in teachers and students are at a high level of self-care agency, they coincide with [Salcedo et al. \(2012\)](#), who suggest that the fundamental axis of the nursing is to identify the deficit between the capacity self-care potential and self-care demands of patients.

In their research the [Gorriti et al. \(2016\)](#), argue that self-care requires a complex series of behaviors with a personal and intentional approach to making decisions for health. These authors conclude that professional training does not contribute significantly to the formation of self-care skills, due to the excessive academic load and the activities that do not make it possible to satisfy the universal self-care requirements.

When evaluating the category "personal well-being and risk prevention" it was possible to observe that the results of the pretest determined that in the six questions that assess this category in teachers, they were in a self-care deficit, since a higher percentage was obtained in the responses whose frequency were never, rarely and sometimes; while the results of the post-test indicate that after receiving the training, the teachers

demonstrated that they had strengthened those weaknesses, which is relevantly beneficial, since what is intended is to improve the lifestyles of those involved and they, in turn, help to do so with society and thus avoid acquiring chronic non-communicable diseases that can be avoided through good self-care (Mainieri, 2011).

In the category of "personal well-being and risk prevention" in the students, a self-care deficit was observed in the questions that are evaluated according to the pretest results, since a higher percentage was obtained in the answers never, rarely and sometimes, while The results of the post-test indicate that the students demonstrated through their responses that they had strengthened those weaknesses, where it is relevant to highlight that the teachers influenced them through health promotion and after receiving the training, creating a positive impact on the students. These results are closely related to the self-care capacity in primary health care of teachers and students, it can be indicated that they are in correspondence with what was exposed by the World Health Organization, where essential health care is considered, based on practical, scientifically sound and socially acceptable methods and technologies, made available to all individuals and families in the community through their full participation and at a cost that the community and the country can endure, at each and every stage of their development in a spirit of self-reliance and self-determination (Beaglehole et al., 2008; Basinga et al., 2011).

According to Orem (1999), They are self-care activities that are learned as the individual matures and are affected by the beliefs, culture, habits and customs of the family and society. The results coincide with those of Martín (2016), in his work on self-care capacity of Nursing students in Palencia, Spain, argues that self-care is a community health issue that has increased in popularity in recent years. Nursing students, due to being young and studying this career, are surrounded by a large number of stressors that constantly put their health at risk. The capacity for self-care is essential to be able to overcome both the theoretical and the practical part without sequelae in your health (Cely et al., 2008).

When evaluating the category "activity and rest", it was possible to appreciate that in the pre-test the answers showed self-care deficits, however, the result of the post-test allowed us to show that the training was beneficial since it managed to improve this category in the teachers of the Career of Nursing and they, in turn, were spokespersons for the students, in which they teach subjects of primary health care. This is intended to generate awareness of the congruence that must exist between theory and practice; above all to educate by example. The learning results obtained on self-care will have a long-term impact on their lives. These results coincide with what was stated by Laguado & Gómez (2014), in whose research the deficit of self-care in mental and physical rest is evidenced, We all know that it is a physiological need and its deficiency constitutes a risk factor in the production of non-communicable chronic diseases; It is of vital importance to motivate students to perform physical activity, for this reason it is necessary to coordinate health promotion, primary prevention and the implementation of physical activity programs in universities, in which all revolve around the change of lifestyles, this research agrees with this author (Mollinedo et al., 2013).

The data from the category of "promotion of personal functioning and development" in the students showed a risk of falling into a self-care deficit and an indicator of a self-care deficit itself according to the pretest results, since a higher percentage of responses was obtained, never, rarely and sometimes; however, the results of the post-test indicate that the students demonstrated through their responses that they had strengthened those weaknesses. These results show that this self-care deficit in students is due to the demand for action that is greater than the ability to act; possibly the reasons being the excessive academic load and the activities that do not allow satisfying the universal self-care requirements. The existence of a self-care deficit is the condition that legitimizes the need for nursing care; assuming it as a regulatory function of man. Regarding the research on changes in self-care of Colombian nursing students, during professional training, the results agree with the studies carried out by Rivas et al. (2019), in which he describes the changes in self-care practices of nursing students nursing during professional training; deficient self-care practices in functioning and personal development such as physical activity, recreation and leisure time, food was interrupted and abandoned.

In the results of the frequency and percentage analysis of the perception that students have about self-care in primary health care, in the pretest and posttest, they showed that 27% perceive it as "Taking care of yourself" and 42.7% associate it with "set of intentional actions" and 20.3% as the one that allows "Make beneficial adjustments for my health and quality of life". The fact stands out in which, the lowest percentages with 5% and 2.5% with the arguments "Mental, physical and social balance obtained from my protective

actions" and "Love and respect for my life" respectively. The exposed results coincide with the position of Mainiere (2011), who expresses that it is important that the nurses handle these concepts, since they allow defining nursing care in order to help the individual carry out and maintain self-care actions to preserve health and life, recover from illness and face its consequences. In view of the results, it is important to indicate that nurses, based on their conception and role that they must manage during self-care, are able to establish which requirements are those demanded by the patient, select the appropriate ways to cover them and determine the appropriate course of action, assess the patient's skills and abilities to meet their requirements, and the patient's potential to develop the skills required for action (Powell et al., 2020).

The results of the present investigation corroborate the influence exerted by this theory in the development of the Nursing profession, and that the self-care deficit theory offers these professionals tools for quality care, in any situation related to the health-disease binomial, both to people sick, as people who are making decisions about their health and healthy people who wish to maintain or modify risky behaviors for their health (Prado et al., 2014).

Notably the parameters of age, development and state of health can affect the ability of the individual to carry out self-care activities, hence, to achieve it and guarantee well-being, health and development, there must be requirements that are basic and common to all, becoming the reasons why self-care is used and allow expressing the desired results (39). It is proposed that they are universal requirements that all individuals require to preserve and maintain their integral functioning as a person and include the conservation of air, water, food, elimination, activity and rest, solitude and social interaction, risk prevention and promotion of human activity.

Grise-Owens et al. (2018), carried out a study with the objective of describing changes in the self-care practices of nursing students from Colombian universities, during professional training on sociodemographic variables, protective practices and health risk, acquired before or during career, or modified during vocational training. These authors conclude that the training process has a positive impact on attendance at health promotion and disease prevention, skin care, life skills and sexual exercise programs and negatively on physical activity, recreation and leisure time, eating patterns, consumption of energy drinks and self-medication, findings that have been confirmed in the present investigation, where it was shown that the lifestyle of university students, specifically Nursing, tends to be unhealthy. This reality forces us to take measures that promote a change towards healthy lifestyles, drawing attention to the low adherence to exercise and sports by university students. The consumption of alcohol and tobacco is high and of similar proportions in the groups studied, while the consumption of drugs, although it is low, is of concern (Wilkinson & Whitehead, 2009; Manns et al., 2005).

Nursing students, despite being studying in a health area, do not apply their knowledge to themselves, however, the applied educational proposal based on the promotion of self-care in teachers and students allowed strengthening different aspects with a positive impact, especially on students, motivating to continue the promotion and training as a transversal axis of the Nursing Career at UNESUM.

## 4 Conclusion

The application of the self-care teaching proposal in primary health care (PHC) by the teachers of the Nursing Career, allowed to improve not only the three categories that were with self-care deficit, but also the five categories evaluated, both in teachers as in students; evidenced by the effectiveness in the objectives corresponding to the study of self-care capacity, self-care practices and perception of self-care, whose impact would be to promote human development and improve the quality of life of those who study or work there and at the same time train them so that act as models or promoters of healthy behaviors at the level of their families, in their future work environments and in society in general.

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