RESILIENT SUPPORT IN CANCER PATIENTS: POST-EARTHQUAKE TRAUMA

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Abstract
A conceptual analysis of resilience is carried out, addressing what is related to the understanding of its concept, where several authors who have studied the subject are examined. We observe the resilient capacity of human beings and the importance of psychological support to cancer patients. The impact of the earthquake on April 16, 2016 on the resilience of residents in the city of Portoviejo is addressed. Exposing the importance of the resilience intervention, where the contents of the Handbook of Intervention in Resilience of Eugenio Saavedra 2011 are investigated. The results of the measurement of resilience are shown in a group of cancer patients who were housed in the foundation. Father Matías "from Portoviejo and the situation that could be verified after applying a series of resilience intervention workshops to said personnel. The objective of the research is to describe the experiences of the resilience intervention, carried out on cancer patients attending the Padre Matías Foundation of the City of Portoviejo, finally the conclusions of the work are presented, where the relevance of the study recommending a group of considerations that are based on the importance of the results achieved in the research.

Keywords:
Intervention in resilience; Cancer patients; Solidarity cooperation; Trauma;

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1. Introduction
The concept of resilience has been developed in recent years, generating an incalculable wealth of ideas and interpretations reflected in innumerable articles, constituting a field of both discussion and research. On the one hand, various concepts are generated, establishing different emphases and focuses of attention, and on the other, critical voices have emerged regarding the relevance of the concept, its precision and its applicability in the social world. But beyond the debate, the new times have brought new challenges, nowadays nobody questions in practice the existence of resilient behavior or the opportunity posed by difficult situations.

Efforts are focused on achieving the systematization of the study on resilience by adapting the instruments and objectives of the study to the socio-cultural contexts in which they are developed, and it is important to have a working instrument that adapts to the conditions of Latin America. Considering the social characteristics that occur in a certain high-risk environment, the study of resilience plays a key role, as it seeks to facilitate the involved society to fully develop their potential, enrich their lives and prevent malfunctions that put at stake the resilience at the level of the social group [1].

Among the advances that socially and economically reported in recent years with the opening of the Citizen Revolution in Ecuador, it is worth noting the increase in the standard of living of citizens in the economic, social and cultural, among which stands out access to public health and education; But there are still sectors of society that live in poverty and extreme poverty, where different risk factors manifest themselves that put at stake the resilience of important social groups [2].

2. Research Method
The inductive method was applied, which allowed us to carry out the logical reasoning of the concepts related to the essences of resilience, to expose the importance of their estimation in human beings who are disadvantaged in life and especially in people with cancer and where some of them were hit by the consequences of the intense earthquake that occurred on April 16, 2016. All of the above was applied to reveal the essence of the scientific problem, in the processing of information and the definition of the central and operative categories system. In
In addition to reaching the corresponding conclusions, which have been useful to recommend the promotion and implementation of motivating programs for the strengthening of psychological skills, through conducting resilience studies and the application of psychology workshops to individuals and groups of them. that are in a situation of disadvantage before life. Resilience tests SV-RES [3] were applied to a group of 16 cancer patients who were housed in the Padre Matías Foundation, which allowed estimating their resilience before carrying out 14 psychological profile activities after the workshops, with results that demonstrate the importance of these activities.

The study is quantitative, descriptive-comparative, of primary data sources, transectional in the collection of information, micro sociological in its sample coverage. The areas of study are psychology and public health. The sample is intentional, looking for the attributes necessary for the study. Composed by 16 individuals of both sexes and ages between 26 and 65 years old, all registered as patients of the SOLCA hospital and housed in the Padre Matías foundation of the city of Portoviejo. The instrument used is the SV-RES (Chile) scale of the authors [3], which consists of 60 items, divided into 12 specific resilience factors.

3. Results and Analysis

Understand the concept of resilience

The human resilience is identified as a capacity that has an individual or a group of these, to overcome great difficulties and grow from them. The diversity of obstacles that can interfere in a subject’s path can range from permanent and structural situations, such as poverty, to specific and personal situations such as a serious illness or a major problem [4]. In this way, it is very likely that examples of resilient capacity can be located in each of the human beings. Apparently the situations of people who succeed, after overcoming the obstacles, are present in different cultures and different countries.

The development of resilience is usually discontinuous or through certain fluctuations. In the same way that it will be a capacity that goes beyond resistance, but implies projecting from the difficulty, sometimes even transforming a negative situation into something positive that facilitates growth. Nor is it an absolute condition, whether one has it or not. It is always dynamic
and in constant construction, which develops in the interaction with others and the environment surrounding the subjects [4].

Resilience will therefore not be alien to the context in which the person lives and, on the contrary, will take into account the sociocultural elements that surround the subject, both in their immediate environment and in the most distant environments. In this same direction it does not appear as a magic solution to problems, nor does it replace an economic or social policy. Rather it is a capacity to mobilize internal and external resources of the person to grow from their own person.

Resilience should not be seen as a simple intervention technique that helps to repair a damage, but rather it is a different global perspective that seeks from the problem, generate resources to reconstruct and reinvent life from an adverse situation [4].

The resilient capacity of human beings

It is necessary to keep in mind that human beings show different reactions under similar stimuli. The same occurs in the face of painful stimuli or situations of adversity or stress, where the reactions of the subjects will be varied and even opposed. This is how three types of reactions to painful or adverse stimuli are described, which are described below [5]:

• People who, in the face of pain or adversity, react with behaviors that are vulnerable to stimulation.
• People who remain indifferent or there is an absence of reaction to the situation.
• Resilient people, resistant to adverse stimulus and who achieve an adequate quality of life despite the negative conditions for their development

In the same line of the definition stated above, it can be added that resilience is not only a phenomenon that we observe at the individual level, but we can speak of families, groups and communities with resilient characteristics. Thus, we can define it as a universal capacity that allows a person, group or community to prevent, minimize or overcome the harmful effects of adversity [6].
Resilience in this sense can transform or strengthen those facing adversity, maintaining adaptive behaviors, allowing normal development or promoting growth beyond the level of present functioning. But for some people who suffer incurable diseases or who have been victims of natural disasters, or both at the same time, the lived circumstances are insurmountable and far from achieving minimum levels of dignified development, they are faced daily with the reality of pain and suffering. Frustration, with a poverty that surpasses them and with high levels of despair. Undoubtedly these cases, have not been able to overcome the adversity of their environment and perhaps the sum of present risks, was greater than the strength to get ahead.

It is important to consider that being resilient does not mean absolute protection, resilience has limits and there are no invulnerable subjects. For the above it is interesting to know what are the factors that put a subject at risk and what situations make vulnerability more likely in the person. Poverty, family disagreements, violence, substance abuse and diseases are among the most frequently mentioned risk factors [7].

The study of risk factors in resilience suggests that there are biological and environmental factors. Among the first can be cited: congenital defects, physical disability, suffer an incurable chronic disease etc. Among the environmental factors mentioned are poverty, family discord, violence, mental illnesses present in the family, losses caused by natural disasters, among others [8]. The existence of certain risk factors does not necessarily imply that they are confronting problems with life; but the presence of these is an important indication that resilience may be at risk. It follows that the control of risk sources is important when carrying out the work based on resilience.

Another element that must be considered when carrying out an intervention in resilience is related to the protective factors that may be present in the individual or collective, among which the following may be indicated: Positive self-esteem, confidence, optimism and sense of hope, autonomy and sense of independence, sociability, ability to experience some range of emotion, positive imitation skills, empathy, positive humor, achievement motivation, sense of competence, warm family and social environment.
Self-esteem is reflected in the coordination that the subject establishes with the others nearby; optimism on its part has its origin in the feeling of well-being achieved in relation to the satisfaction of needs and the sense of competence depends on the conviction that one is sufficiently prepared to be able to cope with any situation that arises, even if unforeseen. The family is the universe in which the subject lives and becomes a protective element, when there is warmth, stability and support. The security it offers is a factor that reduces psychological stress when living in disadvantaged situations. The family should not be understood as the nuclear group only, but the participation of other more distant members (uncles, grandparents), offers alternative models and eventually, they are a source of support and guidance.

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**Resilient support in cancer patients**

The "Padre Matías Mujica" Foundation is located in Portoviejo canton, Manabi province of Ecuador and is very close to the SOLCA hospital. It was created 11 years ago, on the initiative of Father Matías Mujica, with the aim of providing solidarity support to SOLCA hospital patients suffering from cancer. It includes the support to the relatives, that due to the time that the treatments delay and also for the fact that said people live in cantons, even distant provinces of Portoviejo, they must stay for several days in this city, action that obviously would generate cats, that Many times they can not be covered by them.

In the hostel there are people who stay for a few days, while there are others who stay for several months, but the treatment and affection is the same, since through solidarity work, managers, collaborators and patients become one family. The main function of the foundation is to provide
solidarity support for lodging, food (breakfast, lunch and snack) and recreation for the sick and relatives who come to receive treatment at the SOLCA hospital.

The Foundation is cordially attended by missionary collaborators of the Divina Pastora, who day by day give their time and love to the people they welcome, and their mission is also to make known the word of God and to teach their message of love and mercy to all your children. To carry out this noble and great task, the foundation receives collaborations and solidarity donations from charities and people who express their preference to share with sick people and their families, from food clothing and other resources, carrying out three major activities annually:

a) Parties of fifteen years
b) The sale of desserts
c) The Christmas dinner

The festival of quinceañeras or debutantes, consists and invite all young women who have turned 15 at the end of the previous year or in the present, to register and be part of the social work. A dinner is organized where the quinceañeras previously registered with the society are presented. The sale of desserts on the other hand takes place in October, date in which the members of the foundation make dessert of varied and delicious flavors, which are sold in the fair expo, which previously was held at the Technical University of Manabí and currently is carried out on the esplanade of the former Portoviejo airport. The money raised is dedicated to increase the funds of the foundation. Finally, in December, the last activity of the year consists of the Christmas Dinner, which has the same purposes as the previous activities, in order to raise funds for the proper functioning and work of the noble solidarity initiative.

Impact of the April 16, 2016 earthquake on resilience

The consequences of the occurrence of an earthquake on people and society can directly or indirectly affect resilience in all angles of society: directly causing death; injured; Destruction of houses; public and industrial facilities; etc. Indirectly they cause landslides; fires; floods; tsunamis; epidemics; and the economic ruin of the region where it affects [7].
The consequences analyzed above make earthquakes one of the most destructive and most feared natural phenomena, which can represent a difficult challenge for the homeostasis of society. Its intensity can shake the earth 10,000 times more violently than the Hiroshima bomb [8].

The seismic factor is a characteristic of the geology of Ecuador, especially in the coastal zone due to its proximity to the so-called Ring of Fire and therefore, the best way to guarantee resilience to this natural event is that the population and infrastructure are prepared to reduce their effects and in a short period of time recover the functional and operational stability of society, which is often a complex process that takes a long time. After the occurrence of the earthquake on April 16 in the province of Manabí, the city of Portoviejo was among the most affected [9]. Some people were able to fight adversity and overcome difficulties, while others were filled with sadness and despair. These differences in coping can only be explained by the existence of differences in social, cultural, group relationships and sociopolitical conditions that influence the ability of people and communities to recover.

In disaster situations such as occurred in the province of Manabí on April 16, resilience has been supported by national and international solidarity, arising many positive qualities that were even thought to ignore, dedicated to the reconstruction of the city and the offer of Disinterested services, willing to act for collective benefit, is a positive situation that can awaken capacities in those affected and increase the resilience of the community [10]. It was found that the government managed to act quickly in the city of Portoviejo, enabled several evacuation camps, managing to avoid danger to the most affected people who had lost everything and this has allowed to extend solidarity to help these people [9].

**The intervention in resilience**

The study focused on investigating how patients and their families manage resilience in the face of the adversities of their lives, especially where cancer is present and in some cases the trauma caused by the effects of the intense earthquake that occurred on October 16, April 2016. During the execution of the works, 14 workshops of the Resilience Intervention Manual of Eugenio
Saavedra [10] were applied. Figure 1 shows one of the moments during the realization of the resilience workshops with the presence of the sick and their relatives.

![Figure 1. Moments of realization of the resilience workshops](image)

Source: Photo taken by the authors of the work on December 13, 2016

On November 8, 2016 at 3:00 p.m. on the premises of the Padre Matías Foundation, work began under the direction of a teacher from the Technical University of Manabí and the participation of a team of students in Psychology. Clinic. During the works the SV-RES Resilience test was applied to the workshop participants, then three resilience blocks were explained, represented in three categories: I have, I am, I can. Subsequently, 14 workshops were held, where the topics related to: Identity and Autonomy were analyzed; valuation chain; satisfaction and pragmatism; models and goals to follow.

**Results of the measurement of resilience**

En la tabla 1 se muestran los resultados de la medición de la resiliencia antes y después de realizados los talleres.
Table 1
Measuring resilience

<table>
<thead>
<tr>
<th>Level of resilience</th>
<th>BEFORE</th>
<th></th>
<th>AFTER</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>FREQUENCY</td>
<td>PERCENTILE</td>
<td>FREQUENCY</td>
<td>PERCENTILE</td>
</tr>
<tr>
<td>HIGH</td>
<td>2</td>
<td>9.37</td>
<td>13</td>
<td>78.12</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>6</td>
<td>34.37</td>
<td>3</td>
<td>15.6</td>
</tr>
<tr>
<td>LOW</td>
<td>8</td>
<td>46.87</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td></td>
<td>16</td>
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</tbody>
</table>

Analysis of the first take of the resilience test of Saavedra

The analysis of the results of the Saavedra test applied in the first instance on November 8, 2016, to the 16 patients who were in the Padre Matías Mujica Foundation, allowed to verify the following results:

• 2 people who obtained a high level of resilience;
• 6 people obtained an average level of resilience
• 8 people scored low on resilience

According to the rating and following the parameters of the Saavedra test, it can be concluded that most of the patients studied were within a low level of resilience.

The analysis by the 12 dimensions that conform said test, allowed to verify the situation according to three scales: high, average and low, where the following results could be verified: the identity dimension showed a score both low and average; the autonomy dimension experienced an average score; the majority of the population reported average score in the satisfaction dimension; in terms of pragmatism, most of the population scored an average score; in relation of link the result is also average; the dimension of networks qualifies as average; as for models, the result is low; the goal dimension yielded a low result; in the dimension of affectivity the highest results are high and low for part of the surveyed population; the self-efficacy dimension the result is average; the learning dimension experienced an average result; the generativity dimension was average.
In a general way it can be seen that most of the dimensions experienced average and low results, allowing to identify and concentrate the work efforts in the most critical aspects and enhance them. Figure 2 shows the graphic relationship of the results of the study in the first test sesión.

Figure 2. Graphical relationship of the results of the study in the first test taking

**Analysis of the second take of the resilience test of Saavedra**

The analysis of the results of the Saavedra test applied in the second instance on December 20, 2016, to the 16 patients who were in the Padre Matías Mujica Foundation, allowed to verify the following results:

- 13 people who obtained a high level of resilience;
- 3 people obtained an average level of resilience
- No people with a low resilience score were identified

According to the rating and following the parameters of the Saavedra test, it can be concluded that most of the patients studied were within a high level of resilience.

The analysis by the 12 dimensions that conform this test, allowed to verify the situation according to three scales: high, average and low, where the following results could be verified: the identity dimension was identified 14 people with a high score and 2 at the medium level, with a general tendency of high score; the autonomy dimension 14 people experienced a high score and two with an average score, demonstrating a general tendency of high score; 13 participants rated with a high level and 3 an average level in the satisfaction dimension, with a general tendency of high score; in terms of pragmatism, 15 people qualified with a high score and 1 with an average score, also experiencing a high score trend; in relation of link 10 people obtained a
high level and 6 classified with an average score; the dimension of networks qualifies in a general way with a high score, with 13 people who classified with a high level and 3 with an average score; in terms of models, 9 people obtained a high level, while 7 an average level, with a general tendency of high score; the goal dimension yielded a high score, with 11 people who qualified with a high score and 5 with a low score; in the dimension of affectivity 8 people classify with a high score and 8 with an average level; the self-efficacy dimension 11 people show a high level, while 6 classify with an average level; the learning dimension experienced a high result with 14 people who classified with a high level and 2 with an average level; the dimension of generativity obtained a high score, with 14 people with a high level and 2 with an average score.

In general, it can be seen that most of the dimensions experienced a high score, demonstrating the effectiveness of the 14 resilience workshops applied to the staff of the Padre Matías Foundation. Figure 3 shows the graphic relationship of the results of the study in the second test taking.

Figure 3. Graphical relationship of the results of the study in the second test taking

Considering the importance of the study and measurement of resilience and the proven positive effect that derives from the application of the workshops based on the Handbook of Intervention in Resilience of Eugenio [11], to reach and consolidate an adequate level of resilience in the people who are ill with cancer, it is recommended that the Technical University of Manabí continue the deepening of the studies and measurement of resilience, as well as the application of
intervention psychology workshops in resilience, for which other instruments of resilience measurement can be studied.

That the management of the Technical University of Manabí propose to the authorities of the Decentralized Autonomous Government of the province of Manabí, that support be provided with specialized personnel in Clinical Psychology to the Padre Matías Foundation, so that a systematic work can be carried out in the Measurement activities and reinforcement of the resilience to the cancer patients that stay in this foundation. Considering the proven impact that was derived from the study carried out, it is advisable to propose to the management of the SOLCA hospital, to analyze the performance of studies similar to the one carried out in the research, with the cancer patients that the institution attends.

4. Conclusion

The investigation made it possible to determine that the instrument SV-RES 2008, developed by the Saavedra and Villalta researchers, which consists of 60 items, divided into 12 specific factors of resilience, is relevant to perform the measurement of resilience in people who are disadvantaged before life and that have also suffered severe trauma motivated by the consequences of natural disasters.

Through the results of the psychological tests SV-RES 2008 developed by the researchers Saavedra and Villalta, it was found that the content of the workshops based on the Handbook of Intervention in Resilience of Eugenio Saavedra 2011 applied to people with cancer, allowed to elevate the Categories: I have, I am, I can, verifying that the level of resilience of the affected people had risen substantially, with a reinforcement of the protective factors: positive self-esteem; confidence, optimism and a sense of hope; autonomy and sense of belonging; sociability; emotional capacity; positive imitation skills; empathy; positive mood; motivation to overcome difficulties and; competition. It was possible to verify that all this managed to elevate and strengthen the family atmosphere, resulting more understanding and warm.
The Padre Matías Foundation has all the potentialities that are needed to provide important support to people with cancer and their families, however, it does not have specialized personnel that can systematize a continuous work on the issue of resilience to patients and their families.

References


