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**Review Article** 

## Reviewing the psychological impact on adolescent children of parents with non-communicable diseases

Carlos Alberto Avellaneda Penatti<sup>1,2</sup>

(i) https://orcid.org/0000-0002-2547-6051

Danilo de Lara<sup>1</sup>

(i) https://orcid.org/0000-0002-9180-0753

Rodolfo Santos Flaborea<sup>1</sup>

https://orcid.org/0000-0001-8255-7854

**Objective:** to investigate how chronic diseases in parents can interfere with the psychological health of adolescent children. **Methodology:** a bibliographic survey in database platforms such as PubMed and SciELO, conducted between 1990 and 2019. **Results:** adolescent children of parents with long-term cancer, psychiatric diseases and in chronic pain are more likely to suffer anxiety, depression and alcohol, tobacco and drug abuse. Such relevance to the children's psychological health depends on which disease affects the parents, whether it affects the father or the mother, the severity of the disease, and the gender of the adolescent. **Conclusion:** this study assists in warning family members and health professionals about the risk of dysfunction in the lives of children within an environment of chronic diseases.

**Descriptors:** Adolescent; Parents; Neoplasms; Chronic Pain; Mental Health.

## How to cite this article

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 $<sup>^{\</sup>scriptscriptstyle 1}\,$  Universidade Nove de Julho, Vergueiro, São Paulo, SP, Brazil.

<sup>&</sup>lt;sup>2</sup> Grupo Fleury, Fleury Medicina e Saúde, São Paulo, SP, Brazil.

## Reviewing the psychological impact on adolescent children of parents with non-communicable diseases

**Objetivo:** investigar o quanto as doenças crônicas nos pais podem interferir na qualidade de vida e na saúde psicológica dos filhos adolescentes. **Metodologia:** levantamento bibliográfico de artigos indexados em plataformas de bancos de dados como PubMed e SciELO entre 1990 e 2021. **Resultados:** filhos adolescentes de pais com neoplasias sem sucesso de tratamento ou com evolução prolongada, algumas doenças psiquiátricas e estados de dor crônica intensa são mais propensos a terem ansiedade, depressão e a abusarem do álcool, tabaco e drogas. Tal relevância à saúde psicológica dos filhos depende de qual doença acomete os pais, se afeta o pai ou a mãe, da gravidade da doença e do sexo do filho adolescente. **Conclusão:** este estudo serve de alavanca no alerta aos familiares e profissionais de saúde sobre o risco de disfunção na vida dos filhos em meio a doenças crônicas.

Descritores: Adolescente; Pais; Neoplasias; Dor Crônica; Saúde Mental.

# Revisión del impacto psicológico que presentan las enfermedades crónicas no transmisibles de los padres sobre los hijos adolescentes

**Objetivo:** investigar cómo las enfermedades crónicas de los padres y madres pueden interferir en la calidad de vida y la salud psicológica de los hijos adolescentes. **Metodogía:** relevamiento bibliográfico en plataformas de bases de datos como PubMed y SciELO entre 1990 y 2019. **Resultados:** los hijos adolescentes de padres y madres con cáncer de larga duración, enfermedades psiquiátricas y dolor crónico intenso son más propensos a tener ansiedad, depresión y a abusar de drogas. Esto depende de la enfermedad que afecte a los padres, de si afecta al padre o a la madre, de la gravedad y del sexo del adolescente. **Conclusión:** ese estudio contribuye a alertar a los familiares y profesionales de la salud sobre el riesgo de disfunción en la vida de los niños inmersos en el entorno de las enfermedades crónicas.

Descriptores: Adolescente; Padres; Neoplasias; Dolor Crónico; Salud Mental.

### Introduction

The chronic disease scenario actively affects the individuals' quality of life and psychological health. In addition to losing quality of life due to the impact on the health of the patients with chronic conditions or pathologies, there are also emotional, psychological and life-related harms for their families<sup>(1-2)</sup>.

When a family member has a chronic disease, the entire family is burdened mainly in the financial aspect, as the expenses with medical services in these families are higher than those of the general population<sup>(3)</sup>.

The "functional family disease" is evident when we observe the repercussions on the psychological health and quality of life of children with sick fathers or mothers<sup>(4)</sup>. Adolescent children (typically aged from 12 to 18 years old) of parents with chronic diseases are more susceptible to emotional and behavioral imbalances<sup>(5)</sup>, which can destabilize the lives of these young people and, therefore, lead them to present an increased risk of developing psychological morbidities<sup>(6)</sup>

The influence of parental diseases goes beyond psychological morbidities, being recently associated with the abuse of substances such as tobacco, alcohol and drugs by adolescent children<sup>(7)</sup>. Children of parents with chronic pain, for example, are significantly more likely to be smokers or to abuse alcohol when compared to those of parents without chronic pain<sup>(7)</sup>.

Therefore, our paper makes a critical review of the health literature specialized in health sciences on how chronic diseases such as cancer, chronic pain and mental disease of parents can influence the psychological health and quality of life of adolescent children, favoring use of substances such as tobacco, alcohol and drugs.

## Methodology

## Search system

This is an integrative review of the medical-scientific literature on the psychological impact on adolescents

influenced by their parents' chronic non-communicable diseases.

The survey was carried out by collecting data from secondary sources and bibliographic data from articles listed in the PubMed and SciELO (Scientific Electronic Library Online) databases, using the following descriptors in English: "parental", "cancer", "mental diseases", "chronic pain" and "chronic disease", with this bibliographic search being carried out between March 2020 and February 2021.

Selection of the articles took place in 2 stages, the first being reading of the abstracts, in which national and international articles published in journals with an impact factor greater than 1.3 were included. Articles that did not address the topic and those without free access to the original article were excluded. A total of 46 articles were selected after applying these criteria.

The second stage of article selection was based on reading them in full, excluding those that dealt with other impacts of parental diseases of little interest to the article, such as the impact of chronic parental diseases on children under 10 years old. The articles were separated into three blocks of parental diseases: cancer, chronic pain, and mental disorder.

Articles in English, Portuguese and Spanish published between 1990 and 2021 were evaluated. Additionally, we used the evaluation and classification of the Qualis platform as an increment to verify whether the articles selected had a classification between A1, A2 and B1. The list of articles is shown in Figure 1.

#### Results

After applying the inclusion and exclusion factors, we performed a careful analysis of the articles and selected 11 of them (Figure 1) published between 1996 and 2021, as follows: 4 related to parental cancer, 3 referring to parental chronic pain, and 4 related to parental mental disease.

Title	Journal/ Year	Objectives	Туре	Results
The quality of communication between parents and adolescent children in the case of parental cancer.	European Society for Medical Oncology 2005	To investigate how communication between parents and adolescents is in a parental cancer situation, comparing it to the same relationship when the parent is healthy.	Observational study (Case Control)	The results showed that the stress of having a father or mother with cancer can marginally affect parent-child communication, and that the impairment in this relationship can be greater if the parent is subjected to intensive treatments.
Prevalence and predictors of emotional and behavioral functioning of children where a parent has cancer: A multinational study.	Cancer 2009	To evaluate the prevalence and risk factors for emotional and behavioral problems in dependent children of cancer patients.	Cross- sectional and observational study	Children of parents with cancer have more emotional and behavioral problems than the general population. Teenage daughters can be at higher risk when compared to teenage sons.
Primary school achievement and socioeconomic attainment in individuals affected by parental cancer in childhood or adolescence: A Danish nationwide registerbased study.	Journal of Epidemiology and Community Health 2018	To investigate how the experience of parental cancer in childhood or adolescence is associated with performance in elementary school, education and income in early adulthood.	Prospective and observational study (Cohort)	Children whose parents had cancer presented lower grades in ninth grade, higher risk of low schooling and lower available income at age 30 when compared to their peers.
Associations between parental chronic pain and self-esteem, social competence, and family cohesion in adolescent girls and boys - Family linkage data from the HUNT study.	BMC Public Health 2015	To investigate the associations between parental chronic pain and self-esteem, social competence and levels of family cohesion reported by adolescent children.	Cross- sectional and observational study	The results suggest that chronic pain in both parents is an important factor in reducing their children's self-esteem. Most of the associations studied were different between the genders of the adolescents.
Parental chronic pain and internalizing symptoms in offspring: The role of adolescents' social competence – The HUNT study.	Journal of Pain Research 2018	To investigate whether the adolescents' social competence is related to the association between the parents' chronic pain and their children's symptoms of depression, loneliness and anxiety.	Cross- sectional and observational study	Concomitant chronic pain in the parents was significantly associated with anxiety and depression symptoms in adolescent children. The results also suggest that there is a difference in impact depending on the gender of the adolescent.
Adjustment of children and adolescents to parental cancer parents' and children's perspectives.	American Cancer Society 1996	To investigate the relationship between parental cancer and children's psychological and emotional distress.	Prospective and observational study (Cohort)	Parental cancer is an important stressor that generates psychological distress in children, and it can vary according to the gender of the child/parent and to age of occurrence.
Nuancing the role of social skills-A longitudinal study of early maternal psychological distress and adolescent depressive symptoms.	BMC Pediatrics 2018	To investigate whether exposure of children and adolescents to maternal psychological distress can influence the development of depressive symptoms in adolescence.	Longitudinal and observational study	Exposure to maternal distress in childhood predisposed children to more depressive symptoms in their mid-teens. Social skills in adolescence seem to emerge as a protective factor for girls in their mid-teens.
Exploring mediating factors in the association between parental psychological distress and psychosocial maladjustment in adolescence.	European Child & Adolescent Psychiatry 2010	To investigate the association between parental psychological distress and symptoms of depression, anxiety, ADHD, adolescent aggression, and substance and alcohol use.	Cross- sectional and observational study	The greater the parents' psychological distress, the greater the psychological distress in their children. The adolescents' reduced self-esteem was linked to depression and anxiety symptoms.
The relationship between parental depressive symptoms, family type, and adolescent functioning.	PLoS One 2013	To investigate the unique and combined influence of family type and parental depressive symptoms on adolescent functioning.	Cross- sectional and observational study	It was observed that the incidence of psychological distress in children of single parents was higher than in other types of families.
Offspring of Depressed Parents: 20 Years Later.	The American Journal of Psychiatry 2006	To determine the magnitude and continuity of the risk of parental depression for children.	Prospective and observational study (Cohort)	The risks of depression, anxiety and substance dependence were three times higher in children of depressed parents when compared to their peers.
Offspring of Parents with Chronic Pain: A Systematic Review and Meta-Analysis of Pain, Health, Psychological, and Family Outcomes.	Pain 2015	To provide a comprehensive and systematic mixed-methods synthesis of all the available research studies on outcomes in children of parents with chronic pain.	Systematic review and meta- analysis	In all the studies analyzed, children of parents with chronic pain had worse results when compared to other adolescents. Children of parents with chronic pain had more problems with aggression, ADHD, depression and anxiety.

Figure 1 - List of the articles selected indicating title of the article, authors, journal in which they were published, year of publication, objectives, type of study and results

The specialized literature indicates that the groups of parental chronic diseases studied influence the quality of life and mental health of adolescent children. These groups of chronic diseases have proved to be capable of imposing psychological stress conditions on adolescent children, which increases the incidence of mental disorders in these young individuals.

The impact of parental diseases was different between the groups of diseases due to some factors specifically inherent to each group. Comparing the impact of the parental cancer and parental chronic pain diagnoses, we notice that there is a higher incidence of depression and anxiety in children of parents diagnosed with cancer, even if the neoplasm is not aggressive<sup>(8)</sup>.

We consider that this difference can be associated with the negative burden related to the term cancer, which induces a thought of possible physical weakness in the parents and an increased risk of death. The same phenomenon does not occur with the diagnosis of parental chronic pain. Potentiation of the problem and psychological burden due to lack of communication between parents and children about the parental disease<sup>(8-9)</sup> can occur, since the child can draw erroneous conclusions about the seriousness of the parents' disease. Interestingly, cancer patients with dependent children present more psychological distress when compared to patients with malignancies who do not have dependent children<sup>(10-11)</sup>.

In relation to parental mental diseases and other groups of diseases, in addition to the influence of living with sick parents and the change in family dynamics (i.e., environmental factors)<sup>(12-13)</sup>, as is the case in other groups, there are genetic factors involved in the heredity of mental diseases<sup>(14-15)</sup>. The genetic component, not always dimensioned, also favors the incidence and prevalence of psychological morbidities in children of patients with psychiatric morbidities, when compared to those of parents with other chronic diseases.

The greater the severity of the parents' chronic disease, the greater the susceptibility to the development of depression and anxiety in their children. The rates of alcohol, tobacco and illicit drug abuse by adolescents are also increased, as can be evidenced in cases of malignant neoplasms without successful treatment<sup>(16-18)</sup> and in severe parental mental diseases<sup>(19)</sup>. Severity and duration of the disease were important additional indicators of such impact on the health of adolescent children<sup>(19)</sup>.

Among the groups of diseases studied, parental chronic pain was the one that expressed the lowest probability of children developing anxiety and depression. However, parents with chronic pain conditions (i.e., lasting more than six months) showed some characteristics that are inherent to this group of diseases, such as: increased

probability of the children presenting pain complaints and lower scores on general health measures (i.e., physical/nutritional health and school performance and well-being ability)<sup>(20)</sup>.

Some studies showed that there is a difference in impact with regard to parental chronic diseases, depending on whether they affect the father or the mother. The hypothesis of these studies is that, when the mother is affected by a chronic disease, the children are affected<sup>(8-9,21)</sup>. However, there is still no consensus on such proposition<sup>(16)</sup>. The adolescent's gender seemed to be more significant for the onset of psychological morbidities in children than the difference in parental gender. In the three groups of chronic parental diseases studied, the girls were more affected by depression, isolation and anxiety<sup>(6,8,12,21-22)</sup> and the boys, in their turn, tended to abuse more substances such as tobacco, alcohol and illicit drugs<sup>(7,23)</sup> (Figure 1).

#### **Discussion**

#### Impact of parental cancer

Malignant neoplasms in the world context are the second leading cause of mortality in people under 70 years of age in 112 of 183 countries and the third leading cause of death in other 23<sup>(24)</sup>, in some age groups being only behind the mortality rate of cardiovascular diseases, which is declining. The incidence and mortality of all types of cancer has increased significantly worldwide<sup>(24)</sup> and this generates concern for both the patient and their family members<sup>(25)</sup>.

In 2010, it was estimated that 14% of the patients with cancer and diseases under control in the United States of America (USA) had children under 18 who lived with them and needed their care<sup>(26)</sup>. In the circumstance of cancer in parents with adolescent children, even though these young individuals may understand their parents' disease situation better than younger preadolescent children, they are still vulnerable to important psychological stressors. This should probably indicate the need to mature early to take on some household responsibilities<sup>(25)</sup>. And these responsibilities assumed by these adolescents can, over time, inflict on them the burden of being a caregiver similar to that of the adult primary caregiver<sup>(25)</sup>.

Family stress arising from the disease, possibly a predictor of emotional and behavioral imbalances in children (Figure 2), is neglected or not noticed by their parents. There is a significant divergence between the parents' perception about their children's psychological health and these children's self-report of their emotional distress due to the parental disease<sup>(9)</sup>. Added to this is the fact that many parents do not communicate well with their children about the disease.

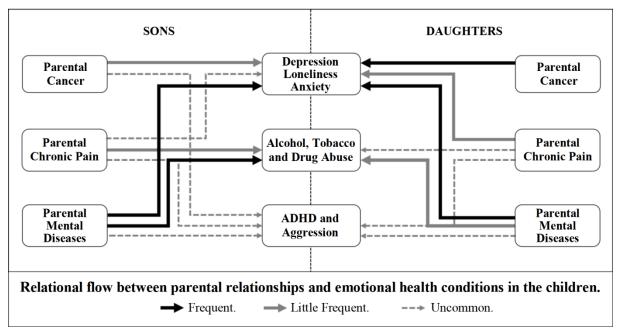


Figure 2 - Correlation between the types of parental impairment and possible harms to the child's health

Cancer interferes in the dynamics of family communication, which, in turn, makes adolescents more susceptible to post-traumatic stress symptoms when compared to teenage children of parents without cancer<sup>(9)</sup>. As the parents' disease generates more complications, communication between parents and children is more affected<sup>(8)</sup>. When patients undergo

non-intensive treatments, there are fewer barriers to family communication<sup>(9)</sup>. The psychological impacts on adolescent children of parents with cancer depend on the adolescent's gender, on whether the father or mother is diagnosed with cancer<sup>(8,27)</sup>, on the number of complications, and on recurrence of the parents' disease<sup>(16)</sup> (Figure 3).

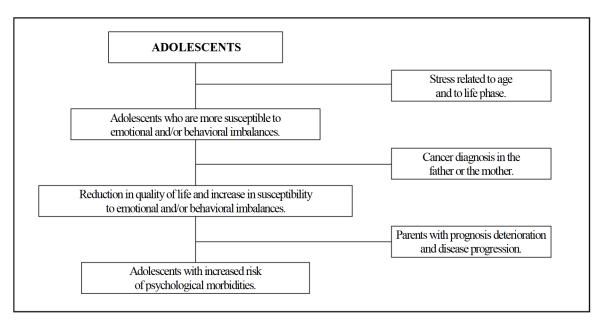


Figure 3 - Relationship between diagnosis of parental cancer and reduction in the quality of life of the adolescent child

The consequences of parental disease on the quality of life of adolescents are diverse. The correlation of parental cancer stress with school performance and subsequent socioeconomic status of the children was substantially demonstrated<sup>(17)</sup>. The cohort study that

monitored children of parents with cancer showed that these adolescent children had a slightly lower school performance at the end of elementary school than those of parents without parental cancer. Likewise, it was noticed that there was a higher overall risk of low schooling when compared to other adolescents<sup>(17)</sup>. Another conclusion of the same research study was to have shown that, in adulthood (around 30 years old), these children increased their risk of having lower possible personal incomes when compared to adults of the same age who had not gone through the stress of having parents with cancer in adolescence<sup>(17)</sup>. The more severe or advanced the parental cancer, the more evident these effects were<sup>(17)</sup>.

Cancer is always at the forefront of new therapeutic frontiers around the world and this is widely accepted and encouraged. However, the reality of living with cancer as a global disease in the context of parents and children creates a horizon of actions more focused on awareness and psychological work within the family environment. This involvement encompasses a perspective that needs to be specialized within Nursing care and in the dialog of medical professionals and psychologists with the family unit in a continuous and growing manner in situations of disease progression. Another point that may be beneficial is the development of techniques in palliative care that involve or at least touch children whose parents have some neoplasm.

## Impact of chronic parental pain

The effect of the chronic pain condition (i.e.: sustained, recurrent and/or persistent manifestation of

pain for more than 3 months<sup>(28)</sup>) on the family has been studied in recent years. Chronic pain can originate from various underlying diseases (e.g.; fibromyalgia, cancer, neuropathy, chronic inflammatory conditions). The presence of chronic pain in many homes mainly affects the adults. We consider the chronic pain condition when painful suffering is continuous or recurrent for more than 6 months. Through epidemiological studies, it is estimated that 19% of the adult population in Europe lives with chronic pain of moderate to severe intensity<sup>(29)</sup>. The prevalence of chronic pain in Brazil becomes significant but, up to the present day, there is a consensus in the medical-scientific literature on such prevalence in the country, which can vary from 12% to 55% of the population depending on the criteria used to define chronic pain<sup>(30)</sup>.

The negative influence of chronic pain in the parents affects the adolescents' self-esteem<sup>(21)</sup>. Sons and daughters who have both parents with chronic pain end up with reduced self-esteem. When only one parent has chronic pain, adolescent daughters are more affected by such behavioral trait<sup>(21)</sup> (Figure 4).

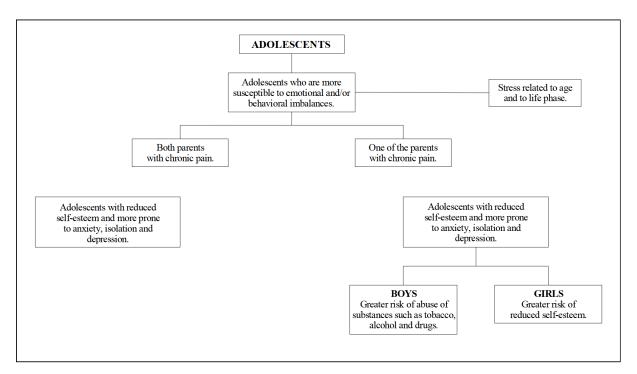


Figure 4 - Influence of the parents' chronic pain on the adolescent's quality of life

In addition to self-esteem, parental chronic pain has been associated with deterioration in the children's general and psychological health (i.e.: psychological well-being, self-acceptance, autonomy) and also in the maladjustment of family life<sup>(20)</sup>. Parental chronic pain affects boys and girls differently. While female adolescents are more affected in terms of self-esteem<sup>(21)</sup>, male adolescents are more likely to abuse substances such as tobacco, alcohol and other

drugs<sup>(7)</sup>. Male children of parents with chronic pain are twice as likely to be smokers when compared to children of healthy parents<sup>(7)</sup> (Figure 4).

The relationship between parental distress and emotional impairment in children is clear. One explanation for this is based on the belief of these children having 'lost their childhood', that is, they had their teenage years irreversibly damaged due to the father's or mother's absence in their lives due to the health conditions of their parents<sup>(20)</sup>. In addition to that, children of parents with chronic pain are more likely to have pain complaints than those of parents without diagnoses that generate or facilitate pain<sup>(20)</sup>.

In situations where both parents suffer from chronic pain, the children are more likely to have symptoms such as anxiety, isolation and depression<sup>(19,31)</sup>. In the situation where only one parent has chronic pain, the anxiety or depression symptoms were not as significant in the offspring<sup>(31)</sup>.

Unlike cancer as a situation that is inseparable from individual and family health care, chronic pain not associated with cancer faces yet another scenario of need for better access to care and treatment/management and, therefore, distress mitigation with the advancement of pharmacological and non-pharmacological therapies. This should focus the efforts for better dynamics in the adolescents' lives.

#### Impact of parental mental disorder

The prevalence of mental diseases is quite significant in Brazilian society and predominates in the population aged between 25 and 54 years old<sup>(31)</sup>. Most of the individuals affected with neuropsychiatric diseases have children. It is estimated that one out of 5 young individuals lives with a parent with a mental disease<sup>(32)</sup>. Similarly to the situation of cancer and chronic pain, parental mental diseases affect the children's quality of life and induce psychological stress in them<sup>(33)</sup>. Having a mother with psychological distress (anxiety and depression, for example) determines a significant risk factor for the development of depression in adolescence<sup>(12)</sup>.

The parents' psychological distress is also closely related to a reduction in their children's self-esteem. Such a reduction is often associated with greater susceptibility to depression, isolation and anxiety<sup>(34)</sup> and, eventually, to attention deficit, hyperactivity and even aggression<sup>(34)</sup>. The greater such feeling of anguish on the part of the parents, the risk of psychological disorders becomes more accentuated in adolescent children<sup>(34)</sup>.

The high incidence of depression and anxiety in children of parents with mental disorders is not due to a single factor, but to their sum. The main factors are the genetic ones, whose mechanisms are not fully understood, but some genes are being studied<sup>(14-15)</sup>, and

the environmental ones, such as place of residence, conviviality and family dynamics<sup>(12-13)</sup>. The genetic factors are more involved in the situation in which the child inherits the same disease as the parents, but this is not always the case, as they can develop other neuropsychiatric disorders, which suggests greater contribution of the environmental factors<sup>(13-14)</sup>.

Children who live with parents affected by mental disorders are subjected to an environment of major emotional vulnerability, loneliness and a perception of lack of support and social acceptance<sup>(13)</sup>. These young individuals experience an early change in family dynamics, becoming their parents' caregivers and not following the same logic as their peers<sup>(13-14)</sup>. The environments in which the children of parents with psychiatric diagnoses live contribute to their being 5.2 times more likely to have depression than other adolescents, as well as 3.7 times more likely to develop anxiety disorders<sup>(13)</sup>.

When the mother has depression symptoms before the child's enters puberty, the chances of that child having depression in early adolescence are amplified<sup>(14,19)</sup>. Among the parents' mental ailments, psychosis, bipolar disorder and Attention Deficit Hyperactivity Disorder (ADHD) tend to make children prone to ADHD, behavioral disorders in society, oppositional defiant disorder and chemical substance abuse<sup>(14)</sup>. Diseases such as parental depression and anxiety tend to favor the development of anxiety and depression disorders<sup>(14)</sup>.

The school performance of children of depressed parents is consequently reduced when compared to other adolescents of the same school age<sup>(22)</sup>. Concerns about life and the future increase during adolescence and, therefore, deficient school performance and manifestations of depression become more noticeable<sup>(22)</sup>. Confronting the influence of parental chronic depression depending on the child's gender, we know that girls present greater signs of depression, anxiety and poor school development and, therefore, we can infer that those most affected by the parents' mental condition are older adolescent daughters<sup>(22)</sup>.

Another prospective study<sup>(23)</sup> monitored, for 20 years, children (from childhood and adolescence to adulthood) separated into two groups: daughters of depressed parents and sons of non-depressed parents. The expectation of that cohort was to establish an effective correlation between the parents' mental illness and the children's psychological health<sup>(23)</sup>. They concluded that, in early childhood, the psychopathology that most affected children of depressed parents were anxiety disorders; while in adolescence, the most evident disease was depressive disorder<sup>(23)</sup>, in addition to the adolescents being more likely to have anxiety and depression when compared to children of non-depressed parents and, when the presence of anxiety and depression is confirmed, they

were more severe<sup>(23)</sup>. This same cohort<sup>(23)</sup> noticed that, in adulthood, children of depressed parents had increased chances of developing panic disorder<sup>(23)</sup>. The study also verified that, even though alcohol and drug consumption were similar in both groups, the chances of alcohol and drug dependence were twice as high and six times greater in children of depressed parents, respectively<sup>(23)</sup>.

In understanding distress in the children whose parents face mental disorder conditions, diverse evidence shows that the association with alcohol and other drugs of abuse fluctuates between the cause and the consequence of the deterioration of the family scenario. Another aggravating factor in the manifestation of mental disorders (presumably greater than cancer as a disease entity in general) is their well-established ability to determine direct parental inheritance. Parents affected by mental disorders or cognitive degenerative neurological conditions (i.e., various types of dementias) increase, although quantitatively well known, genetic characteristics of these affections or those related to their children. Naturally, this will magnify the complexity of the family mental disorder scenario as a whole and its medical, psychological and social follow-up and interventions(35-36). There is evidence that other parental diseases such as multiple sclerosis(37) and stroke(38) also exert an influence on the children's quality of life and psychological health. In this way, social and health agencies have a focus of action for better support and clarification with young people, from school to trying to get to know their social dynamics. Psychiatric conditions must include the entire family in their approach and course of action. In this group, actions aimed at families with social and school conditions that are disaggregated or far from the coordination of broad social action (e.g.: pedagogical, psychological, nursing and medical) are scarce or insufficient and need special attention and continuous work at the local level, preferably municipal.

#### Conclusion

The analysis based on the literature review investigated the three groups of parental chronic diseases: neoplasms, chronic pain and mental disorders, which are significantly associated with the emergence of psychological morbidities in adolescent children. Therefore, we need more studies to assess how other chronic parental diseases, not yet well evaluated in the context of the emotional health of their offspring, can cause similar impacts.

The findings of this study aim at warning the health professionals, responsible for taking care of the underlying disease in the parents, to propose strategies that aim at minimizing such negative impacts on the children, such as serial psychological screening in this population. The warning signs for psychological morbidities in these young

individuals would thus encourage better communication between parents and children about the parental disease and would motivate referral of the adolescents to the care of mental health teams when appropriate, in anticipation of a severe situation or to prevent multigenerational family harms.

Recent guidelines aimed at exercising good clinical practice and at holistic health point to the importance of comprehensive patient care in a multidisciplinary way. They assess how onset of the disease will influence the individual's psychological health.

The study suggests that, to really achieve comprehensive care, it is necessary to screen the risk conditions and possible family history since, when the patients have the perception that they are causing the family to suffer or burdening the family due to their possible disability, they start to present and reflect greater psychological distress. Family distress is only increased by the situation of dependent children living with parents affected by the aforementioned chronic morbidities.

Diverse evidence shows that, if there was a psychological approach aimed at these adolescent children at the onset of the chronic disease in their parents, in addition to possibly reducing the incidence of depression, substance abuse and anxiety, there would also be the possibility of minimizing the parents' rebound distress. The parents' concern about their children's quality of life unfortunately becomes a risk factor for depression and anxiety. On the other hand, minimizing that concern, in the psychological intervention of the offspring, would already configure a therapeutic instrument in alleviating these mental health conditions, per se.

As evidenced in this thematic review, parental chronic diseases exert a negative impact on the quality of life and psychological health of adolescent children. Our study warns the health professionals and family members about the need to launch strategies to minimize the influence of parental diseases in young individuals.

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#### **Authors' contribution**

Study concept and design: Carlos Alberto Penatti. Obtaining data: Danilo De Lara, Rodolfo Santos Flaborea. Data analysis and interpretation: Carlos Alberto Penatti, Danilo De Lara, Rodolfo Santos Flaborea. Drafting the manuscript: Carlos Alberto Penatti, Danilo De Lara, Rodolfo Santos Flaborea. Critical review of the manuscript as to its relevant intellectual content: Carlos Alberto Penatti, Danilo de Lara, Rodolfo Santos Flaborea.

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Corresponding author:
Carlos Alberto Avellaneda Penatti
E-mail: carlospenatti@uni9.pro.br
bhttps://orcid.org/0000-0002-2547-6051