Interrelation between functional constipation and domestic violence

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A B S T R A C T

Introduction: Functional disorders of the digestive system are often related to various forms of abuse and the integral approach of the problem requires a multidisciplinary network. The objectives of this research were: to evaluate the prevalence of domestic violence in adults with functional constipation and to identify the services and standards available to care for the victims.

Methodology: The study was developed in two complementary parts. Part I: A cross-sectional study, which evaluated the prevalence of domestic violence in patients attended in the coloproctology outpatient clinic of the Hospital Materno-infantil Presidente Vargas, from September to December 2016. Part II: A narrative review, with bibliographical and documentary research that sought to identify the services and norms available in Brazil to assist victims of domestic violence.

Results: 146 women were evaluated, 42 of whom had FC and, of these, 26 had a history of domestic violence ($p = 0.007$), with an Odds Ratio of 2.71 (CI95%: 1.29-5.67). A network of services has been identified to assist victims of violence, the Network of Attention to Violence, formed by the health services, social assistance, public security, justice, human rights, and organized civil society. However, a standard system for the operation of this network has not been identified.

Conclusion: The prevalence of domestic violence in women with functional constipation is high and a careful investigation of this possible interrelationship in clinical practice is suggested. Besides that, it is necessary to promote an integration of the Network of Attention to Violence, in order to offer integral care to the victims and a best utilization of the resources.

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Inter-relação entre Constipação Intestinal Funcional e Violência Doméstica

RESUMO

Introdução: Os distúrbios funcionais do aparelho digestivo são frequentemente relacionados a diversas formas de abuso e a abordagem integral do problema requer uma rede multidisciplinar de cuidados. Os objetivos deste estudo foram: avaliar a prevalência de violência doméstica em adultos portadores de constipação intestinal funcional e identificar os serviços e normas disponíveis para atender às vítimas.

Metodologia: O estudo foi desenvolvido em duas partes complementares. Parte I: estudo transversal, que avaliou a prevalência de violência doméstica em pacientes atendidos no ambulatório de coloproctologia do Hospital Materno-infantil Presidente Vargas, de setembro a dezembro de 2016. Parte II: revisão narrativa, com pesquisa bibliográfica e documental, que buscou identificar os serviços e normas disponíveis para atender vítimas de violência doméstica no Brasil.

Resultados: Foram avaliadas 146 mulheres, sendo 42 portadoras de CIF e, destas, 26 tinham histórico de violência doméstica (p = 0,007, com Odds Ratio de 2,71 [IC95% OR: 1,29–5,67]. Foi identificada uma rede de serviços para atender vítimas de violência, a Rede de Atenção à Violência, formada pelos serviços de saúde, assistência social, segurança pública, justiça, direitos humanos e sociedade civil organizada. Porém, não foi identificada uma norma sistematizada de funcionamento dessa rede.

Conclusão: A prevalência de violência doméstica em mulheres portadoras de constipação intestinal funcional é elevada e sugere-se a investigação cuidadosa dessa possível interrelação na prática clínica. Além disso, é necessário promover a integração da Rede de Atenção à Violência, a fim de oferecer um atendimento integral às vítimas e melhor utilização dos recursos.

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Introduction

Over the last decades, several studies have pointed to an interrelationship between domestic violence and functional digestive diseases.1-5 The mechanisms required in this association have also been investigated and research indicates that the stress induced by chronic violence may compromise the regulation of the response of organ systems to a number of stimuli.6-8 Despite this evidence, in many health services, the investigation of domestic violence and an adequate referral of victims are not yet part of their routine of care.9-11

In conceptual terms, domestic or intrafamily violence is understood as that violence practiced between persons with consanguineous or social parental ties, which may occur at home and outside. The most frequent types of domestic violence are: psychological, physical and sexual abuse, neglect and abandonment; and the most vulnerable groups are female adults, children, youngsters, the elderly, besides people with disabilities, notably in an unfavorable socioeconomic scenario.12 A 2002 World Health Organization (WHO) report on violence and health, which presented data from 70 countries, found that about 10–69% of women surveyed in the studies reported having suffered aggression from intimate partners during their lifetime; about 20% of women and 5–10% of men have confirmed sexual abuse in childhood; and 4–6% of the elderly suffered some type of aggression in their homes.13

The consequences of domestic violence on victims’ health are variable, but are often complex ones and can manifest in different ways.14 Among the diseases often related to this type of violence, functional disorders of the digestive tract – those with no apparent cause in the diagnostic evaluation, for example, functional dyspepsia, functional diarrhea, irritable bowel syndrome and functional intestinal constipation, can be observed.15

Intestinal constipation is the most frequent complaint among people who seek care because of digestive problems,16 and FIC was indicated as the subtype with the highest prevalence. Women, the elderly, and people in poor socioeconomic conditions are the most affected groups17 and studies in children and adolescents victims of maltreatment also found a high prevalence of intestinal constipation.18

As can be observed, there is an overlap between population groups with the highest number of victims of domestic violence and those with the greatest number of people with intestinal constipation. Thus, it is necessary to deepen this investigation in order to determine a possible interrelationship of these phenomena, for the sake of better welfare services.

The purpose of this study is to investigate the prevalence of domestic violence in adults with functional constipation and to identify the services and norms available in Brazil to assist the victims.
Methodology

The present study was proposed by the Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA) and performed at the coloproctology outpatient clinic of the Hospital Materno-infantil Presidente Vargas (HMIPV). The study was approved by the ethics and research councils of the two institutions: by UFCSPA, through Opinion No. 168626, under registration CAAE 52245615.4.0000.5345; and by HMIPV, through Opinion no. 1,715,512, under registration CAAE 52245615.4.3001.5329.

This study was carried out in two complementary parts, here designated as Part I and Part II:

Part I

To look into the prevalence of domestic violence in patients with functional intestinal constipation, we carried on a quantitative survey with a cross-sectional design. Sampling was obtained for convenience and the recruitment and data collection occurred from September to December 2016. After due medical care of the ailment which motivated the consultation, all patients aged over 18 years were informed of the nature of the study and concepts of domestic violence and then were invited to participate. Only those with intellectual limitations to understand the study proposal or to answer the questions were excluded. Participants who agreed to take part in the study signed the Free and Informed Consent Term, according to Resolution 466/12 of the National Health Council.

Participants were classified in relation to the main diagnosis; in this study, “main diagnosis” was defined as that which, after medical evaluation, was considered responsible for the patient’s referral and admission to the coloproctology outpatient clinic. Participants then answered the question: “At some stage in your lifetime, have you ever been physically or psychologically assaulted, sexually abused, neglected or suffered abandonment by a member of your household or a close person, at home or outside?”. This question should be answered with a “yes” or “no.” All participants answered a structured questionnaire, based on the Individual Notification/Investigation Form: Domestic violence, sexual violence and/or other interpersonal violence. The questionnaire consisted of four sections: personal and demographic data, violence-related data, abuser-related data, and personal assistance-related data. Participants who denied having suffered violence answered only the first session of the questionnaire, and all participants affected by intestinal constipation were also evaluated by Rome III criteria, and the Bristol Scale for the characterization of Functional Intestinal Constipation (FIC). All participants who met two or more Rome III criteria in 25% of their bowel movements, over three months, during the last six months, and who informed fecal forms of Types 1 and 2 in the Scale of Bristol were considered as FIC sufferers. To estimate the frequency of occurrence of symptoms, the response options were: never, occasionally, frequently, and always. According to literature consensus, as to Rome III criteria we consider that the response “frequently” meant “25% of the time”.

Part II

The investigation of existing services, and norms in Brazil to assist victims of domestic violence was carried out through a narrative review, with bibliographical and documentary research. The channels used for our review were the Portal de Periódicos da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) and the Portal da Saúde do Ministério da Saúde, as well as a manual review of selected studies’ references. In our selection, we took as a basis the theme, which should mandatorily address the services and standards for the care of victims of domestic violence in Brazil. Published scientific articles from 2007 to 2016 in peer-reviewed journals, in Portuguese, and available for reading in full in the channels researched (guidelines, manuals, protocols) developed in the period 2007–2016, and documents (regulations, laws, guidelines and norms) related to the theme were selected. The qualitative analysis of the data was done based on the classification, critical reading, and cross-referencing of the data found in the selected material.

Results

During the recruitment period, 154 patients were attended at the HMIPV Coloproctology outpatient clinic: 152 women and 2 men. Among adult females, two did not want to take part in the study, two were under 18 years of age, one had intellectual limitations so that she could understand the study’s proposals, and one discontinued her consent at a subsequent clinical appointment. Among men, two did not want to participate in the study: one was under 18 and the other did not agree to take part in the study. Therefore, for our study of the prevalence of domestic violence in patients with FIC, the results refer to a sample of 146 women investigated.

Among the participants, the mean age was 52.5 years (SD = 13.2), with a predominance of the age groups of 50–59 years (n = 53, 36.3%) and 60–69 years (n = 32, 21.9%). The majority (n = 102, 70.8%) lived in the city of Porto Alegre and were
predominantly white women (n = 116, 79.5%). As for marital status, the majority were married (n = 99; 67.8%) and the most frequent levels of schooling in the sample were: 42 (28.8%) finished secondary education and 3 (21.2%) finished elementary school.

Domestic violence was confirmed by a substantial number of participants (n = 65, 44.5%); in these women, although psychological violence (n = 62, 95.4%) and physical violence (n = 53, 81.5%) have been confirmed more frequently, almost all victims (n = 59; 90.8%) suffered more than one type of violence throughout their lives. Approximately half of the victims (n = 35, 53.8%) had undergone sexual abuse, and the most frequent type was sexual intercourse against their will (n = 19, 54.3%), followed by rape (n = 12; 3%) and sexual harassment (n = 6, 17.1%). Two women (5.7%) reported having suffered more than one type of sexual violence.

Regarding the number of aggressors, almost half of the victims (n = 30; 46.2%) were harassed by more than one abuser in their lifetimes. Among these aggressors, the most frequent were the former partner (n = 27, 41.5%), father (n = 23, 35.4%), mother (n = 12, 18.5%), and spouse (n = 12, 18.5%). Alcohol abuse by the aggressor was reported by the majority of victims (n = 47; 72.3%). Table 1 lists the complete data regarding types of violence, their occurrences, and the profile of perpetrators.

Of the 65 victims of domestic violence, only about one third (n = 21; 32.3%) sought assistance after the aggressions: the most sought-after places were the health network (n = 12, 18.5%), non-specialized police stations (n = 10, 15.4%), and specialized police precincts (n = 5, 7.7%). Some victims sought assistance in more than one place (n = 10; 14.6%).

Fifty-one participants (34.9%) suffered intestinal constipation, and functional subtype was the most frequent diagnosis (n = 42, 82.4%), accounting for 28.8% of the total diagnoses established in our sample. The other types of intestinal constipation, grouped under the heading “Secondary Constipation” (SC), occurred in 9 women, representing 17.6% of our constipated participants and 6.2% of the total sample. The causes identified for SC were: blockade of evacuation by rectocoele, use of tricyclic antidepressants, hypothyroidism, neurological disease, and diabetes. Table 2 lists the distribution of the other diagnoses established in our sample and the comparison versus domestic violence.

An inferential analysis revealed a statistically significant association between FIC and domestic violence (p = 0.007); the estimated risk of occurrence suggests that victims of domestic violence are 2.71 times more likely to suffer from FIC (95%CI: 1.29–5.67) versus non-victims. When evaluated independently, the other diagnoses did not show a statistically significant association with domestic violence.

The results of our narrative review study, carried out with the aim of identifying the existing services and standards for the care of victims of domestic violence in Brazil, revealed a network of services called Rede de Atenção à Violência (Violence Care Network) to provide care for various types of violence and, among them, domestic violence.25,26 This network consists of health services, social welfare, public safety, justice, human rights, educational network, and organized civil society. Table 3 lists the distribution and assignments of these services.

As for the norms for the Violence Care Network actuation, it was not possible to identify a conduct systematization; on the other hand, low-grade integration was observed among the services that comprise this network.27–29 The mechanisms found, designed to guide care procedures, are targeted at specific portions of the population, or at specific types of violence,30–34 directed to particular professional groups35,36 and, in some cases, with a local or regional scope.37–39

According to the data found, the Violence Care Network is still under the guidelines of the Política Nacional de Redução da Morbimortalidade por Accidentes e Violências (PNR-MAV) (National Policy to Reduce Morbidity and Mortality from Accidents and Violence).27 This policy, established in 2001, aimed to include violence in the health agenda and proposed the implementation of some guidelines, including an intersectoral and multidisciplinary approach to violence, human resources training, and development of prevention and rescue practices.40

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**Table 1 – Absolute and relative distribution of domestic violence and its specific characteristics.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total sample (n = 146)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Domestic violence&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>81</td>
</tr>
<tr>
<td>Yes</td>
<td>65</td>
</tr>
<tr>
<td>Life-time violence&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Childhood</td>
<td>30</td>
</tr>
<tr>
<td>Adolescence</td>
<td>31</td>
</tr>
<tr>
<td>Adulthood</td>
<td>40</td>
</tr>
<tr>
<td>Old age</td>
<td>6</td>
</tr>
<tr>
<td>More than one phase</td>
<td>34</td>
</tr>
<tr>
<td>Aggressors&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>23</td>
</tr>
<tr>
<td>Mother</td>
<td>12</td>
</tr>
<tr>
<td>Stepfather</td>
<td>4</td>
</tr>
<tr>
<td>Stepmother</td>
<td>1</td>
</tr>
<tr>
<td>Spouse</td>
<td>12</td>
</tr>
<tr>
<td>Ex-partner</td>
<td>27</td>
</tr>
<tr>
<td>Ex-boyfriend</td>
<td>6</td>
</tr>
<tr>
<td>Son</td>
<td>4</td>
</tr>
<tr>
<td>Friend</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
<tr>
<td>Place of occurrence&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Residence</td>
<td>64</td>
</tr>
<tr>
<td>Collective housing</td>
<td>6</td>
</tr>
<tr>
<td>Public highway</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Violence type&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Physical</td>
<td>53</td>
</tr>
<tr>
<td>Psychological</td>
<td>62</td>
</tr>
<tr>
<td>Torture</td>
<td>4</td>
</tr>
<tr>
<td>Sexual</td>
<td>35</td>
</tr>
<tr>
<td>Neglect/abandonment</td>
<td>8</td>
</tr>
<tr>
<td>Child labor</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
</tr>
</tbody>
</table>

<sup>a</sup> Percentages obtained based on the total sample.
<sup>b</sup> Percentages obtained based on the number of occurrence of cases.
Other studies have already pointed out the recurrences of violence throughout the life of women in their samples, as well as the occurrence of more than one type of aggression and of abuser, for the same victim. These findings reflect the lack of early and preventive actions for the most vulnerable populations and, in addition, point to an important assistance gap. Alcohol abuse by the aggressor – a frequent occurrence – has also been observed in other studies, which emphasizes the need for a more aggressive approach to the problem. The high prevalence of domestic violence found in our sample, especially among FIC carriers, is an alert for professionals who take care of people with digestive complaints. Although the mechanisms that explain this association are not completely elucidated, it is necessary to go beyond the biomedical focus and approach domestic violence as a possible factor involved, since this will allow the integral and adequate referral for these individuals. Also found in this study was an association between the characteristic of feces and the history of domestic violence, suggesting a greater severity of symptoms in those who suffered some type of violence. The severity and refractoriness of the symptoms have also been pointed out as signs suggestive of a history of abuse.

None of the participants in this study reported their history of violence spontaneously, and some reported that this was the first time a health professional questioned them about it. This approach has already been discussed by other researchers, who discussed the importance of training professionals in this quest and the need to create an efficient victims’ assistance system. As for health services, the diversity of instruments found, aimed at the guidance of professionals dealing with victims of domestic violence, indicates the fragmentation of care, which was perceived in this study as another therapeutic gap. In contrast, one of the factors responsible for the limited compliance of PNRAV guidelines may be its broad scope, since each of its guidelines could be disaggregated into specific public policies.

Although the gender was not a criterion in the selection of participants, the sample consisted only of women; this is one of the limitations of the present study. The justification for this occurrence is the fact that HMPV is a reference hospital for the care of women and children, these being the largest groups attended in the service where this study was performed. Another limitation of our study relates to the criteria adopted for the diagnosis of FIC, since, although they constitute the classification widely used in research on Functional Intestinal Constipation, new revisions are currently underway in Rome criteria. Moreover, observational studies fail to demonstrate a temporality relationship between cause and effect; thus, biases may occur due to uncontrolled variables. In this same line, non-systematic reviews may fail to select the best evidence on certain subjects, being bound to the subjectivity of the researcher.

Despite these limitations, the data found in this study point to very important issues and can create new assistance paradigms, as well as encouraging the creation of programs and public policies to assist victims of domestic violence.

Discussion

In the databases researched, we did not find other studies that have evaluated the interrelationship between domestic violence and functional intestinal constipation, and that have investigated the services and norms of assistance to victims. Ours is a groundbreaking approach.

Regarding the outcome, we noticed a high prevalence of domestic violence among FIC patients in the sample evaluated, and although there are services aimed at the care of victims of domestic violence in Brazil, no systematized norms for the integration of these services were identified.
Table 3 – Violence care network.

<table>
<thead>
<tr>
<th>Component</th>
<th>Assignment</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health services</td>
<td>To shelter; diagnose; notify, treat the acute and chronic damages resulting from violence; refer to other components of the network.</td>
<td>Health care providers, Basic and family health units, Emergency Care Units, Emergency Rooms, Mobile Emergency Care Services, Hospitals, Psychosocial Care Centers, Family Health Care Centers, Prevention Centers for Violence and Health Promotion, Hospitals, Laboratories, Accident and Violence Surveillance System Reference Centers for Social Assistance; Specialized Reference Centers for Social Assistance.</td>
</tr>
<tr>
<td>Social assistance</td>
<td>To shelter; refer; to accompany the victims and their families in situations of violence and social vulnerability; refer to other components of the network.</td>
<td>General and specialized police stations, Medical-Legal Institute.</td>
</tr>
<tr>
<td>Public security</td>
<td>To shelter; register instances of violence; to carry out expert reports; refer to other components of the network.</td>
<td>Judges, Public Prosecutors, Public Defenders, Guardianship Councils, Dial100, Dial 180, Shelters, homes, halfway houses.</td>
</tr>
<tr>
<td>Justice and Human Rights</td>
<td>To shelter; judge; punish perpetrators according to legal ordinances; protect the victims; refer to other components of the network.</td>
<td>Non-governmental organizations.</td>
</tr>
<tr>
<td>Organized Civil Society</td>
<td>To shelter; denounce; represent the population; protect; refer to other components of the network.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Direct research. Prepared by the authors.

Conclusion

Our findings suggest that the investigation of domestic violence and its consequences should be part of the routine of all health services, especially those ones dealing with digestive problems. In addition, there is a need to create mechanisms for integration among the components of the Rede de Atenção à Violência (Violence Care Network), in order to guarantee a comprehensive assistance to its victims.

There are gaps related to the topic addressed in this study that deserve attention so that assistance practices and public policies ensure the best possible use of existing resources. Among these gaps, we can list the mechanisms responsible for the sickness of victims of domestic violence, the prevalence of domestic violence in women with FIC, the role of alcoholism in the occurrence of these phenomena, and possible factors of protection and resilience for the victims. Finally, there is a need for further research in order to obtain answers to these and other shortcomings related to domestic violence.

An omission is also a kind of violence and therefore needs to be eliminated through research, professional training, and the creation of efficient systems of multidisciplinary integration.

Conflicts of interest

The authors declare no conflicts of interest.

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