Self-mutilation: pain intensity, triggering and rewarding factors

Automutilação: intensidade dolorosa, fatores desencadeantes e gratificantes

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ABSTRACT

BACKGROUND AND OBJECTIVES: Self-mutilation is a self-destruction behavior elicited by the desire of self-punishment which may be unconscious and has major impact on individuals' lives. This study aimed at identifying pain intensity which satisfies self-mutilation need the most, in addition to triggering and rewarding factors.

METHODS: Cohort study, carried out by means of a questionnaire with participation of 20 patients aged above 18 years, treated in a Psychiatry ambulatory of a medium-sized city of Vale do Paraiba.

RESULTS: Participants were aged between 16 and 60 years, being 85% females. Depression was the most prevalent disease and sadness was the triggering factor. With regard to feelings, 65% have answered being relieved and the period with large number of occurrences was at night. As to pain intensity according to pain numerical scale, 45% have reported no pain, 35% mild pain, 15% moderate and 5% severe pain. However, when considering pain interpreted outside the moment of crisis, 5% have reported no pain, 45% moderate pain and 50% severe pain.

CONCLUSION: The prevalence of self-mutilation was higher among young females with some psychiatric disorder and the period with large number of occurrences was at night. Pain intensity was low to mild, especially as compared to patients' evaluation outside the moment of crisis.

Keywords: Acute pain, Biological psychiatry, Self-mutilation.

RESUMO

JUSTIFICATIVA E OBJETIVOS: A automutilação é um comportamento de autodestruição oriundo de um desejo de se punir que pode ser inconsciente e apresenta grande impacto na vida do indivíduo. O presente estudo teve como objetivo identificar a intensidade dolorosa que mais satisfaz a necessidade da automutilação, assim como os fatores desencadeantes e gratificantes.

MÉTODOS: Estudo de coorte, realizado mediante resposta a um questionário com participação de 20 pacientes com idade superior a 18 anos; atendidos em ambulatório de Psiquiatria, de uma clínica de uma cidade de médio porte do Vale do Paraíba.

RESULTADOS: Os participantes do estudo apresentavam idade entre 16 e 60 nos, sendo 85% do gênero feminino. A depressão foi a doença mais prevalente e o fator desencadeante foi a tristeza. Em relação ao sentimento alcançado, 65% responderam obter alívio e o período do dia de maior ocorrência foi o noturno. Quanto a intensidade dolorosa, segundo a escala numérica de dor, 45% relataram ausência de dor, 35% dor leve, 15% moderada e 5% intensa. Porém, ao se considerar a dor interpretada fora do momento da crise, 5% relatou ausência de dor, 45% dor moderada e 50% intensa.

CONCLUSÃO: A prevalência da automutilação foi maior em mulheres, jovens, portadoras da algum transtorno psiquiátrico e o período do dia de maior ocorrência ocorreu a noite. Quanto a percepção dolorosa, foi de baixa a leve intensidade, principalmente se comparadas ao que o paciente avalia para o mesmo fenômeno fora das crises.

Descritores: Automutilação, Dor aguda, Psiquiatria biológica.

INTRODUCTION

There has been increasing interest of the scientific community for self-mutilation behavior along the years. Although there is no consensus on the reasons for such behavior, it is associated to mental disorders and generates relative psychic tranquility to cope with mental confusion, representing major impact on the lives of individuals who self-mutilate[1].

Self-mutilation behavior impacts individuals' lives for being a severe chronic disorder with intense associated physical, social and educational risks[2].

Another important factor is the number of annual cases, reaching approximately 140 thousand cases in England and Wales, estimating 15 to 23% recurrence in the year following initial self-mutilation behavior[3].

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Self-mutilation is seen as a self-destruction behavior elicited by a desire of self-punishment which may be unconscious or non verbalized, where aggressive impulses are redirected[4].

Currently, the interest for self-mutilation behavior and the development of different studies seem to result from the concern with the impact of this type of behavior in the life of individuals who sel-mutilate[2].

Such behavior may present as mild injuries, such as scratching the skin with fingernails or burns with cigarette tips; going through moderate forms, such as superficial cuts on arms, or may reach more severe presentations such as ocular self-enucleation and self-castration. Other severe forms of self-mutilation are introduction of foreign bodies in the organism, such as needles, and amputation of ear lobes[5].

Among self-mutilation triggering factors, there are family traumas, such as separation of parents, anguish, sadness, happiness, insomnia, anxiety, fear, frustration, guilt sensation, mental confusion and hallucinations, among others[6].

Major factor related to self-mutilation objectives is the search for anguish, sadness, happiness, anxiety, fear, frustrations, guilt, nostalgia, complete satisfaction and pleasure[6].

Adequate and early management of patients with mutilation behavior may help its control. However, for adequate control, it might be necessary from psychological and pharmacological treatment to hospitalization and contention[7].

This study aimed at identifying pain intensity which meets the most the need for self-mutilation, in addition to triggering and rewarding factors.

METHODS

This was a cross-sectional study carried out by means of a questionnaire on self-mutilation and associated factors. It was carried out as from a non-probabilistic sample of 20 patients, aged above 18 years, seen by a Psychiatry ambulatory of a clinic of a medium-sized city of Vale do Paraíba. Study tool was a questionnaire on self-mutilation meaning, pain intensity, and frequency and time of the day of higher frequency, developed by the investigator. Tool was made up of questions about the meaning of self-mutilation, feelings triggering it and what is obtained; sexuality, compulsiveness, body part affected by the event, object used, period of the day and frequency, affinity for tattoos or piercings, and suicide ideation.

Statistical analysis

Results are shown in figures establishing mean, standard deviation and relative frequencies, using Microsoft Excel software.

This study was approved by the Institution's Ethics Committee under CAAE: 44591815.0.0000.5501.

RESULTS

Participated in the study 20 patients aged between 16 and 60 years, being 3 (15%) males and 17 (85%) females. According to the international classification of diseases, diagnoses were major depression (ICD F32) in 11 patients (55%), bipolar disease (ICD F31) in 3 (15%), personality disorder (ICD F60) in 8 (40%), panic disorder (ICD F41) in 3 (15%), mixed anxiety/depression disorder (ICD F41.2) and psychotic disorder (ICD F23) in 1 (5%) patient. However, since some patients had more than one disorder, total sum of these is higher than the number of participants.

With regard to self-mutilation triggering event or feeling, 14 (70%) have answered sadness, 12 (60%) anguish, 8 (40%) guilt, 6 (30%) anxiety, 4 (20%) anger, fear or frustration, 3 (15%) insomnia or mental confusion, 1 (5%) happiness or hallucination or impotency or memories. It is important to stress that 16 (80%) patients have referred more than one triggering feeling.

When asked about feelings after self-mutilation, 13 (65%) have answered being relieved, 9 (45%) have reached satisfaction, 5 (25%) pleasure, 4 (20%) sadness, 2 (10%) anguish, 2 (10%) happiness, 2 (10%) guilt, 2 (10%) nostalgia, 1 (5%) relaxation, 1 (5%) frustration, 1 (5%) anger, 1 (5%) compulsion and 1 (5%) fear. However, among the 20 respondents, 14 (70%) have referred more than one feeling.

As to sexuality, 14 (70%) have reported being heterosexual, 2 (10%) have reported being homosexual, 2 (10%) have reported being bisexual, 1 (5%) has reported being pansexual and 1 (5%) has reported "others".

When asked about the existence of some commemorative for the self-mutilation ritual to be satisfactory, 10 (50%) have reported the need to lose blood, 4 (20%) have reported needing to be seen by other people, 1 (5%) has answered it should happen within the sexual context, 1 (5%) has answered that there has to be skin loss, 1 (5%) has answered it should be anonymous and 3 (15%) have not answered the question. Some patients have reported more than one commemorative.

About the presence of parallel compulsions, 6 (30%) have referred food compulsion, 3 (15%) cleanliness, 2 (10%) trichotillomania, 1 (5%) compulsion for cleanliness and sex, 1 (5%) sexual compulsion, 1 (5%) compulsion for biting the mouth, 1 (5%) compulsion for drugs, 1 (5%) compulsion for nail biting, 1 (5%) sexual compulsion and alcohol and 3 (15%) have denied compulsions.

When asked about body regions hurt by self-mutilation, 7 (35%) have referred more than one region involving wrist, hands and arms, 5 (25%) face, neck and limbs, 3 (15%) have referred upper and lower limbs, 2 (10%) have referred limbs and trunk, 2 (10%) have referred the whole body and 1 (5%) has referred genital organ.

From 20 studied patients, 13 (65%) have reported having suicide ideation or having already attempted this practice, 2 (10%) have reported not having suicide ideation and 5 (25%) have not answered the question.

When asked about the object used for self-mutilation, 6 (30%) have reported hands and/or fingernails, 4 (20%) use any available object, 3 (15%) have reported using knives and/or stilettos, 1 (5%) uses toothbrush and 6 (30%) have answered using different objects, among them, hands, fingernails, knives, stilettos, teeth, glass, stones, scarf, pens and clips.

About the interest on or the use of tattoos or piercings, 11 (55%) have reported not being interested, 7 (35%) have tattoos and/or piercing and 2 (10%) have reported future interest.

As to the time of the day when there is self-mutilation, 8 (40%) have referred night, 6 (30%) have referred not having specific time of the day, 3 (15%) have reported afternoon and night, 2 (10%) have reported morning period and 1 (5%) has not answered this question.

With regard to self-mutilation frequency, 10 (50%) have reported self-mutilating only during crises, 6 (30%) have reported daily self-mutilation, 3 (15%) have reported fortnightly self-mutilation and 1 (5%) has reported monthly self-mutilation.

Patients were asked which score, according to numerical pain scale (NPS) they would give to their pain when self-mutilating during crises: 9 (45%) have referred zero, 1 (5%) has referred 1, 3 (15%) have referred 2, 3 (15%) have referred 3, 1 (5%) has referred 4, 2 (10%) have referred 5 and 1 (5%) has referred 10. In this sense, 45% have reported no pain, 35% mild pain, 15% moderate pain and 5% severe pain (Figure 1).

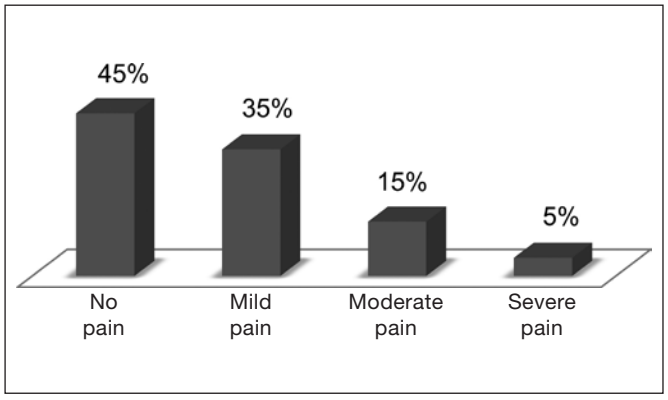

Figure 1. Pain reported by patients during self-mutilation

When considering pain during self-mutilation outside moments of crisis, 1 (5%) has referred score zero, 6 (30%) have referred score 5, 1 (5) has referred score 6, 2 (10%) have referred score 7, 2 (10%) have referred score 8, 1 (5%) has referred score 9 and 7 (35%) have referred score 10. In this sense, 5% have reported no pain, 45% moderate pain and 50% severe pain (Figure 2).

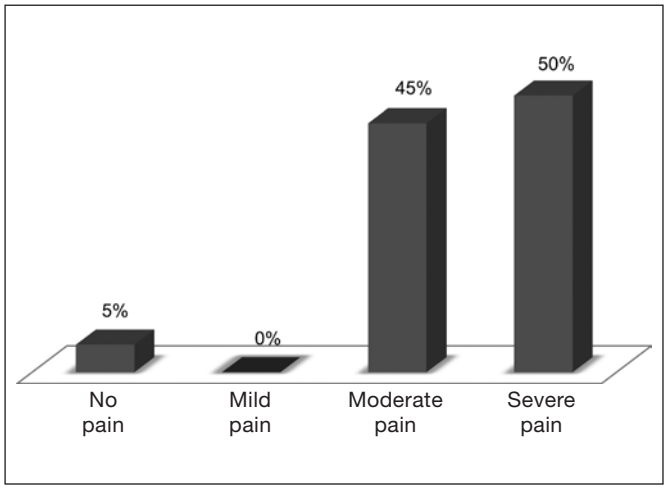

Figure 2. Pain intensity reported by patients after self-mutilation, according to observation of wounds.

DISCUSSION

Among participants with self-mutilation behavior, 30% were aged below 18 years and 85% were females, in line with other studies[8-10].

Self-mutilation has prevalence of 70 to 80% among Borderline personality patients. However, our results have found 40% of patients with this personality disorder.

Although in our study absolute majority of patients had some psychiatric disorder, a study by Le Breton[11] has shown that scarifications may be carried out by adolescents who do not necessarily have psychiatric disorders.

Sadness, as feeling reported by patients as triggering self-mutilation, had prevalence 3 times higher than anxiety or anger, as opposed to a different study which refers self-mutilation as carried out under major anger and anxiety and without any depressive symptom, in the attempt to reach some relief[12].

As to guilt as the desire for self-punishment and as self-mutilation triggering factor, almost half the patients of our study have mentioned it, in line with the study by Castro[4].

Some patients have referred self-mutilation as the attempt to relieve emotional pain or frustration, coinciding with other authors and similar to Freud's famous metapsychological text from 1917, where he reports that when cutting himself, patient is asking for help and is a manner to feel himself and stay alive[11,13,14]. However, according to Duque and Neves[1], there is no consensus among authors with regard to self-mutilation causes and behavior.

With regard to most frequent feeling obtained by patients evaluated in this study, there is tension "relief" and other egodystonic feelings also found by Cedaro and Nascimento[6]. It is worth stressing that 75% of patients have referred "pleasure" as response, in line with Favazza and Conterio[8] who state that self- injury would be a way to minimize anguish and simultaneously generate pain and pleasure.

Considering sexuality, in our study 30% have reported being homo or bisexual, in disagreement with Brazilian estimates where 10.7% of the population is bisexual[15]. According to Vilhena and Prado[16], for each self-mutilation case the event does not matter, but rather the way it relates to psyche and why it is processed, in general representing a fundamental desire of talking, experience with indicates doubt, deciphering and subjective repositioning.

Notably, half the patients have reported that losing blood during self-mutilation validates the act, while just one patient has related it to sexual intercourse and his sexuality, as opposed to a study by Cedaro and Nascimento[6] who refer being automations manifestations of self-eroticism (mimicking masturbation)

There has been higher incidence of food compulsion as parallel compulsion, in disagreement with several other studies[17-19] which, when analyzing the context of manifestations in virtual spaces, have found correlation of self-mutilation habits with compulsive use of drugs.

According to Le Breton[11] and Fortune[20], arm is the preferred place for cuts, which confirms our study which has shown that 95% of patients self-mutilate in arms and also in other body parts.

Among patients answering about ideation or previous suicide attempt, 85% have answered having already attempted and/or idealized it, confirming the study by Bennewith et al.[3] who state that between 3 and 5% of individuals with some type of self-mutilating behavior end up committing consummate suicide acts in the interval of 5 to 10 years. However, differently from Fortune[20] who observed that those adept of scarification are not more susceptible to suicide.

Approximately half the patients have reported having tattoos and/or piercing or being interested in having them, similar to a study by Lundh, Karim and Quilisch[21] who have found in a study with 128 Sweden adolescents, that most practiced behavior is the insertion of sharp objects in the skin by means of piercings and tattoos (32.5%).

With regard to time of the day when self-mutilation is carried out, more than half have referred night. When asked about self-mutilation frequency, half have reported self-mutilating only during crises, while one third have reported daily self-mutilation.

Literature lacks studies on pain evaluation of patients who self-mutilate. In our study, when asked about the score they would give to their pain when self-mutilating during crises, 45% have referred no pain, 35% have referred mild pain, 10% have referred moderate pain and 5% severe pain. When considering pain felt when self-mutilating outside moments of crisis, 5% have reported they believed not feeling pain, 45% have reported moderate pain and 50% have reported severe pain. When asked about the score another person not having self-mutilating habits would give to the same self-mutilation stimulus, 5% believed that others would consider pain as absent, 10% as mild pain, 10% as moderate pain and 75% as severe pain.

CONCLUSION

The prevalence of self-mutilation was higher among young females with some psychiatric disorder, anxiety, anger and desire of punishment and had higher incidence in homo or bisexual patients as compared to the prevalence in the general population. Time of the day with higher occurrence was at night, during crises.

With regard to pain perception during self-mutilation, it was considered low to mild, especially when compared to patients' evaluation of the same phenomenon outside crises or evaluated by third parties.

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