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Characteristics of pain experienced in major depression

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Summary

Background: Even if growing attention is given to pain experienced in depression, the problem still remains poorly recognised. A proportion of the publications are based on outdated diagnostic criteria (ICD-9, DSM-III-R), which were substituted in 1992 and1994 by ICD-10 and DSM-IV. Attempting to fill certain gaps in the knowledge on pain in depression and to update the data, we decided to conduct investigations on the problem in a group of patients with various forms of major depression.

Aims: We firstly aimed at characterising the pain, its duration, location and intensity and secondly to evaluate the relations between major depression and the pain experienced.

Material: Sixty patients treated in psychiatric wards due to an episode of major depression or due to an episode of depression in the course of the bipolar disorder, according to the criteria of DSM-IV.

Methods: Anamnesis, psychiatric examination, computerized ICD-10 symptom checklist, Beck's Depression Inventory, Hamilton Depression Rating Scale, McGill Pain questionnaire and the verbal scale of pain.

Conclusions: 1) In the studied group experiences of pain were quite pronounced, most frequently involved the head and frequently preceded manifestation of fully symptomatic depression; 2) No strict, significant relationship could be disclosed between intensity of the experienced pain on one hand and severity of depression on the other.

Key words: depression, pain

Introduction

Complaints of various somatic ailments are not infrequent in depression, some of them correspond to the term of a somatic syndrome. Even if none of the currently operative classifications (ICD-10 or DSM-IV) lists pain experiences as depression-accompanying symptoms, recent years witness growing interest in the problem. It turns out, that several depressive patients quote pain experiences as symptoms which accompany depression although they do not do it until a detailed anamnesis is conducted.

Manifestation of pain in depression has been variably appraised. The results may be affected by the accepted diagnostic criteria of depression, selection of studied groups and the type of the examined population. In the literature of the subject the incidence ranges from 14% [1] to 92% [2]. Pain affects various body regions, most frequently the head [2, 3, 4, 5, 6].

Causes of pain in the course of depression remain unknown. It was assumed to arise due to a lowered activity of the serotoninergic and adrenergic anti-nociceptoric system [7], as indicated by the analgesic activity of thymoleptics, which inhibit resorption of norepinephrin and serotonin [8, 9]. Other authors have pointed to a lowered activity of the opioid system and a decreased concentration of endogenous opioids in the central nervous system as a cause of pain [10]. Also hyperactivity of the hypothalamic-hypophyseal-suprarenal axis, not infrequently encountered in depression, with the lowered content of brain-derived neurotrophic factor (BDNF) may prove significant. This leads to a reduced protection of the neural tissue, which may be associated with pain [11]. Some authors stress the importance of psychopatological factors, e.g., of anxiety (which increases muscle tonus), hypochondria, and occasionally, of hallucinations and delusions [12, 13, 14].

Material and Methods

The study was performed on 60 consecutive patients, admitted to the Department of Psychiatry Wrocław Medical University and the Psychiatric Hospital in Wrocław, Poland. It was conducted between 14th June, 2002 and 30th January, 2004. An episode of major depression or episode of major depression in the course of major depressive disorder recurrent or in the course of bipolar disorder were diagnosed according to DSM-IV criteria.

All the patients provided written informed consent to participate in the studies.

Exclusion criteria included dependence on alcohol or other psychoactive substances, dementia, mental retardation, coexistence of other mental diseases, inability to provide informed consent or to take part due to mental or physical condition, pain-inducing somatic diseases and use of analgesics before the studies.

The oldest patient was a 69-year-old male, the youngest was a 23-year-old female, the average age amounted to 49 years. The group consisted of 34 women (56.6% of the patients) and 26 men (43.3% of the patients). The patients had undergone education for a mean of 12.5 years. The average duration of the current depression episode was 3 months and 2 weeks. Twenty six of the patients were admitted to a psychiatric hospital for the first time. The highest number of hospital stays amounted to 20 occasions (in one patient) with the mean number of hospitalizations at 2.03 (with the median value of 1). In 17 patients duration of the depressive episode did not exceed one year. The longest duration of the illness was 44 years (in a single patient). In two patients the duration amounted to 42 years. In the entire group (N = 60) the mean duration of major depression was 10.3 years, with the median value of 4 years. The lowest age of manifestation of the first disease episode was 18 years and the highest one was 69 years. The mean age at which the first episode of depression developed was 39 years.

The studies were performed shortly after admission to the hospital. They included: 1) structured anamnesis, including pain anamnesis, 2) psychiatric examination, 3) tests using the computerized ICD-10 symptom checklist, 4) evaluation of depression intensity using Beck's Depression Inventory and Hamilton Depression Rating Scale and 5) evaluation of pain using the McGill Pain Questionnaire and the verbal pain scale [15].

Ad.1 Anamnesis data included: gender, age, marital status, education, profession, main source of income, evaluation of own financial condition, past and present somatic illnesses, hospitalizations, surgical procedures, outpatient treatment, administered drugs, family burden of mental illness, past mental illness, psychiatric in- and outpatient treatment, psychotropic drugs used. The patients were also interrogated for type, location and period of pain experienced. The patients were asked to point the site of the experienced pain on a body scheme. The patients pointed to duration of pain experience selecting the options of: 1-2 weeks, 2-4 weeks, 1-2 months, 2-6 months, 6-12 months or over a year.

Ad.2 Psychiatric examination resulting in diagnosis of depression followed a standardized scheme.

Ad.3 In order to corroborate the clinical diagnosis, apart from the structured psychiatric examination, the mental status of the patient was evaluated using the computerized ICD-10 Symptom Checklist. The ICD-10 Symptom Checklist represents a partially structured questionnaire, containing a vocabulary of the most important terms used in the examination. The tool, worked out by the WHO, allowed for a standardized testing of mental status and standardized diagnosis of mental diseases. The inventory option was used, the questions of which were relevant to the entire life of the patient. The program controlled the course of examination, calculated codes of diagnoses, determined which questions should be posed and which should be bypassed. The obtained data allowed to formulate a diagnosis. The software contained a database of the performed studies, available for statistical packets.

Ad.4. Intensity of depression was established using the widely known diagnostic tools of the Beck Depression Inventory and the Hamilton Depression Rating Scale [16, 17].

Ad.5. The studies took advantage of the Polish version of McGill Pain questionnaire, prepared by K. Sedlak [18]. Most of the questionnaire parameters were used, including the number of words selected, the index of pain evaluation based on average values and the index of pain evaluation based on rank values. The five grade verbal pain evaluation scale was omitted due to the application in the examination of the 10 grade verbal pain evaluation scale, in which 0 denoted absence of pain, 1 corresponded to negligible pain, 2 and 3 indicated slight pain, 4 – slight/moderate pain, 5 – moderate pain, 6 – relatively intense pain, 7 – intense pain, 8 and 9 – very intense pain, 10 – the most intense pain one can imagine. The data was stored in the Microsoft Excel 2000. All calculations were performed using the 'Statistica for Windows' software, version 5.0.

Since the variables did not manifest the normal distribution, nonparametric tests were used as well as nonparametric indices of distribution (median, minimum, maximum values, quartiles). Distributions of independent variables were compared using Mann – Whitney's U test. Dependent variables (e.g. data obtained in the first and the second examination of patients with depression) were compared using the Wilcoxon's test for dependent variables. In calculation of correlation coefficients, Spearman's coefficient was used.

Results

Out of the 60 patients with a diagnosis of major depression, 45 patients (75%), the PP group, experienced pain, including 24 women (70.6% women, FP group) and 21 men (80.7% men, MP group). The pain was manifested periodically. Fifteen patients (25%) – the NP group experienced no pain.

The pain persisted for a week to even over a year before following the time of examination. For details, see the Table below:

Table 1

Duration of pain in the group of patients who experienced pain - PP (N = 45)

Duration of pain:	1-2 weeks	2-4 weeks	1-2 months	2-6 months	6-12 months	over a year
Total number of patients	6	11	2	2	2	22
%	13.3%	24.4%	4.4%	4.4%	4.4%	48.8%
Number of women	4	7	0	1	1	11
% of women	16.7%	29.1%	0%	4.2%	4.2%	45.8%
Number of men	2	4	2	1	1	11
% of men	9.5%	19%	9.5%	4.8%	4.8%	52.3%

Table 2

Duration of current major depression episode in groups PP (N = 45) and NP (N =15)

Duration of present depressive episode:	1-2 weeks	2-4 weeks	1-2 months	2-6 months	6-12 months	over a year
Number of all patients	3	11	19	15	10	2
%	5%	18.3%	31.7%	25%	16.7%	3.3%
Number of PP patients	2	9	12	14	6	2
% of PP	4.4%	20%	26.7%	31.1%	13.3%	4.4%
Number of NP patients	1	2	7	1	4	0
% of NP	6.7%	13.3%	46.7%	6.7%	26.7%	0%

As evident in the Table 1, almost one-half of the PP group (48.8%) experienced pain for over a year. Three patients suffered from pain for a period between 6 months and one year and, thus, 24 patients (53.2% PP) suffered from pain for at least 6 months. The pain lasting for over a year troubled 11 women (45.8 % FP) and 11 men (52.3% MP).

As shown in Figs.1 and 2, the patients pointed to various locations of pain.

Most of the PP group (25 patients, 55.5%) complained of a headache. The other most frequently affected regions included the lumbar region (13 patients, 28.8%), chest (11 patients, 24.4%) and the knees (10 patients, 22.2%). Women complained most frequently of a headache (11 patients, 45.8 % FP), pain in the lumbar region (7 patients, 15.5 % FP), in the chest and knees (6 patients in each site, 13.3 % FP). Men complained most frequently of a headache (14 patients, 66.6 % men), pain in

Fig. 1. **Location of pain in the PP group (N = 45)**

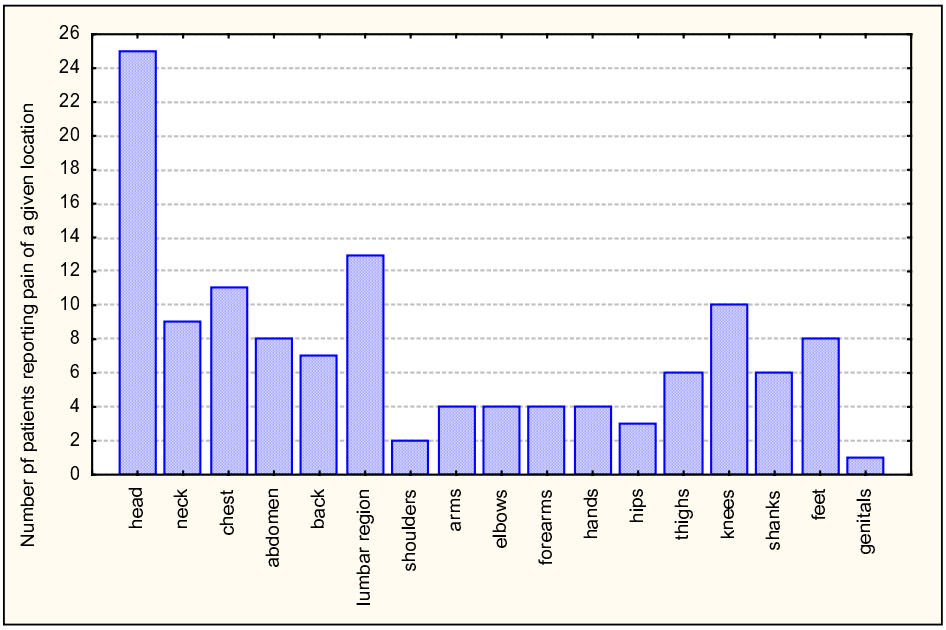
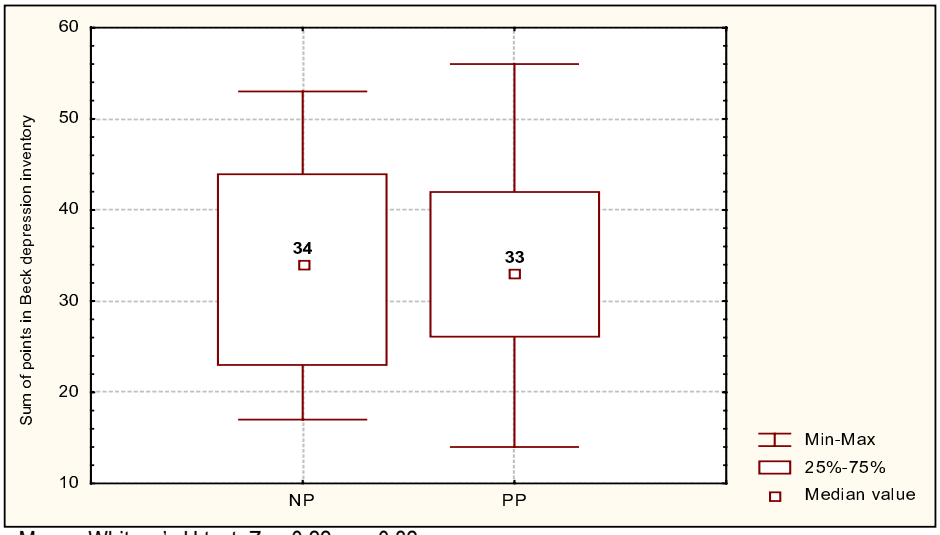


Fig. 2. **Intensisty of depression, meassured by BDI, in the groups of NP (N = 15) and PP (N = 45)**



Mann - Whitney's U test, Z = -0.22, p = 0.82

the lumbar region (6 patients, 28.6 % MP) and in the chest (5 patients, 23.8 % MP). Pain in a single site was reported by 11 patients (24.4%), in two sites by 10 patients (22.2%), in 3 and in 5 sites by 6 patients (13.3%), and in 9 sites by 2 patients (4.4%).

Pain in a single site was reported by 5 women (20.8% FP) and by 6 men (28.5% MP), in 2 sites by 5 women (20.8% FP) and 5 men (23.8% MP), and in 9 sites by a single woman (4.2% FP) and a single man (4.8% MP).

In the verbal scale of pain, the median intensity amounted to 6, or it involved a relatively intense pain. The median value was identical for the groups of women and men experiencing pain. Pain intensity, measured by the verbal pain scale, manifested no correlations with the age of the patient (Spearman's coefficient, R=-0.10, p=0.49), duration of education (Spearman's coefficient, R=-0.17, p=0.25), evaluation of one's own financial status (Spearman's coefficient, R=0.16, p=0.27), marital status (Kendall's coefficient, τ=-0.094, p=0.53), a status of being a pensioner due to major depression (Kendall's coefficient, τ=0.15, p=0.29).

In the McGill Pain questionnaire, the number of words chosen (NWCH) fitted the range of 1 to 20, 50% of the patients selected between 4 and 12 words, with the median value of 7. Women most frequently selected 4 adjectives, and men – 5 adjectives.

Table 3

Adjectives most frequently selected by the group of patients experiencing pain PP (N = 45)

Adjective	Number of patients who selected the adjective	% PP	Number of women who selected the adjective	% FP	Number of men who selected the adjective	% MP
Nagging	21	46.6%	11	45.8%	10	47.6%
Tiring	19	42.2%	10	41.6%	9	42.8%
Pressing	16	35.5%	7	29.1%	9	42.6%
Radiating	16	35.5%	9	37.5%	7	33.3%
Throbbing	15	33.3%	8	33.3%	7	33.3%
Strenous	13	28.8%	6	25%	7	33.3%
Gnawing	12	26.6%	4	16.6%	8	38.1%
Piercing	11	24.4%	8	33.3%	3	14.3%
Stabbing	10	22.2%	5	20.8%	5	23.8%
Hot	10	22.2%	3	12.5%	7	33.3%

In the group of 10 most frequently selected adjectives, six (pressing, radiating, throbbing, piercing, stabbing and hot) were related to the sensory nature of pain and 4 ("nagging", "tiring", "strenuous", "gnawing") were related to emotional nature of pain. The most rare adjectives to be selected by the patients included "vibratile", "stinging", "crushing", "burning", "pinching", "breaking", "ruthless", "killing", "dazzling", "spreading", "shooting" and "beastly". Each of the above adjectives was selected by only a single patient. No patient selected the adjective "flickering". No correlation could be disclosed between pain intensity expressed by the number of selected adjectives (NWCH) in the McGill Pain questionnaire and age (Spearman's coefficient, R=0.20, p=0.18), duration of education (Spearman's coefficient, R=-0.27, p=0.072), evalua-

tion of own financial status (Spearman's coefficient, R=0.05, p=0.74), marital status (Kendall's coefficient, τ=0.24, p=0.11), being a pensioner due to major depression (Kendall's coefficient, τ=0.23, p=0.13).

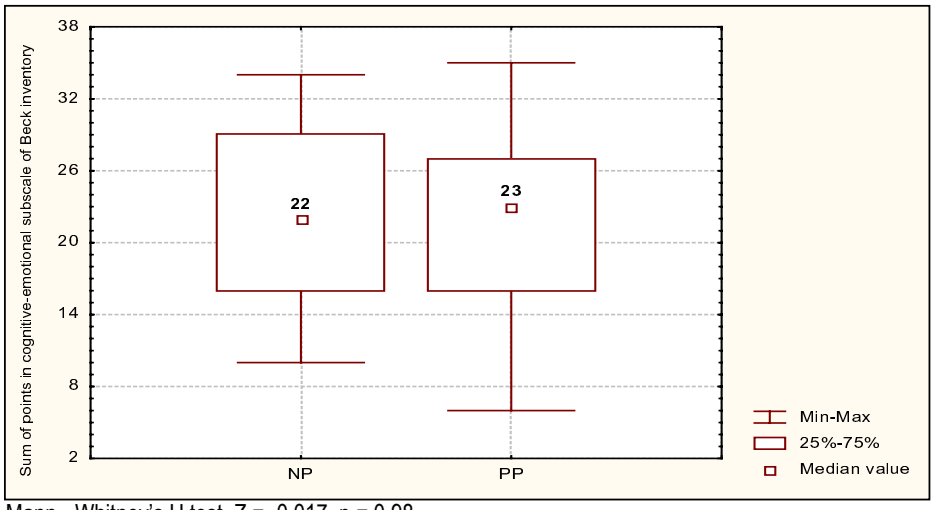
Value of the pain rating index based on average values (PRI a) was calculated summing up pain intensity values ascribed to every selected adjective. PRI a fitted the range of 1.52 to 58.65 points against the potential maximum of 71.6. In 50% members of the PP group it ranged from 9.02 to 34.04 points and the median value was 20.17. In the sensoric subscale, the median value amounted to 8.55 per 34.18 of the potential maximum. In the emotional subscale the median value was 2.89 per 18.44 of the potential maximum. In the subscale of the general evaluation, the median amounted to 2.48 per 4.89 of the potential maximum. Authors of the questionnaire ascribed the highest score values to the following adjectives: "unbearable" (4.89 points), "tormenting" (4.5 points) and "killing" (4.45 points). The adjective "unbearable" was selected by 4 patients (3 women and one man), who comprised 8.89% of the PP group. The adjective "tormenting" was selected by 3 patients (2 women and 1 man), i.e., by 6.67% of the PP group. The adjective "killing" was selected by one female patient or 2.22% of the PP. The authors ascribed the lowest point score to the following adjectives: "dimmed" (1.03 point), "flickering" (1.16 point) and "damped" (1.23 point). The term "dimmed" was selected by 2 female patients (4.44% of PP). The term "damped" was selected by 6 patients (2 women and 4 men), or 13.3% of the PP. No correlation could be disclosed between intensity of pain, expressed in the value of pain evaluation index, based on average values (PRI a) expressed in the McGill Pain Questionnaire, and age (Spearman's coefficient, R=0.17, p=0.24), duration of education (Spearman's coefficient, R=-0.21, p=0.16), evaluation of one's own financial status (Spearman's coefficient, R=0.041, p=0.79), marital status (Kendall's coefficient, τ=0.27, p=0.069) and being a pensioner due to major depression or affective bipolar disturbances (Kendall's coefficient, τ=0.19, p=0.78).

Values of the pain rating index based on rank values (PRI r) were calculated summing up the positions of selected adjectives in individual groups. In the groups, the adjectives were listed in order of the increasing score value and, therefore, the later a given adjective appeared in the list the higher rank value it carried. Values of PRI r in the studied group fitted the range of 2 to 56 points per 74 points of potential maximum. In 50% of the PP group it amounted from 8 to 30.5 points with the median value of 15.5 points. In the sensoric subscale the median amounted to 8.5 per 38 points of potential maximum. In the emotional subscale the median amounted to 2 points per 14 points of potential maximum. In the subscale of general evaluation the median amounted to 2 points per 5 points of potential maximum. No correlations could be disclosed between pain intensity, expressed in pain evaluation index based on rank values (PRI r) and expressed in the McGill Pain Questionnaire, and age (Spearman's coefficient, R=0.17, p=0.26), duration of education (Spearman's coefficient, R=-0.20, p=0.18), evaluation of one's own financial status (Spearman's coefficient, R=0.043, p=0.78), marital status (Kendall's coefficient, τ=0.28, p=0.062) or being a pensioner due to major depression or affective bipolar disturbances (Kendall's coefficient, τ=0.15, p=0.32).

Analysis of relations between major depression and the experienced pain

In the studies, no significant differences could be detected in the intensity of depression, expressed in Beck's Depression Inventory (BDI) and depression subscales as well as by the Hamilton Depression Rating Scale (HDRS), between groups of patients who experienced pain as compared to those who did not experience any pain (Figs.2 to 5). In the group of patients who experienced pain no correlation could be detected between depression intensity, expressed in BDI and intensity of pain, measured in the verbal pain scale (Spearman's coefficient, R=0.10, p=0.41). Also no correlation was detected between the intensity of depression, measured in the Hamilton rating scale, and intensity of pain measured in the verbal pain scale (Spearman's coefficient, R=0.09, p=0.49).

Fig. 3. **Point score in the cognitive-emotional subscale of BDI in the NP group (N = 15) and the PP group (N = 45)**



Mann - Whitney's U test, Z = -0.017, p = 0.98

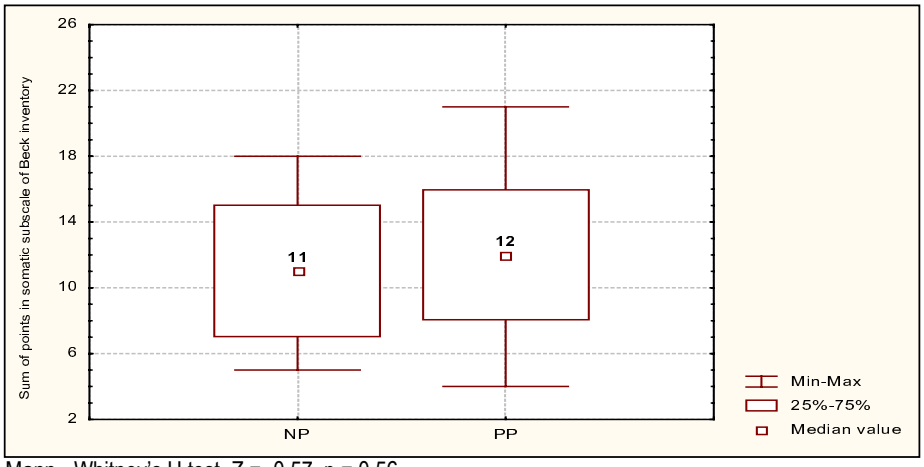
The obtained results suggested that no significant correlation between the intensity of depression on one hand and manifestation or intensity of pain on the other could be shown in the studied depressive patients.

In the PP group (N=45) the mean duration of major depression disorder amounted to 10.15 years, with a median duration of 4 years. In the NP group (N=15), the mean duration of major depression disorder amounted to 11.4 years, and the median was 6 years. The difference proved insignificant (Mann - Whitney's U test, Z = -0.35, p = 0.72).

In the PP group, the mean number of psychiatric hospitalizations amounted to 1.71, with the median value of 1. In the NP group, the mean number of psychiatric hospitalizations amounted to 3, with a median value of 1. The difference proved insignificant (Mann -Whitney's U test, Z=-0.30, p=0.76).

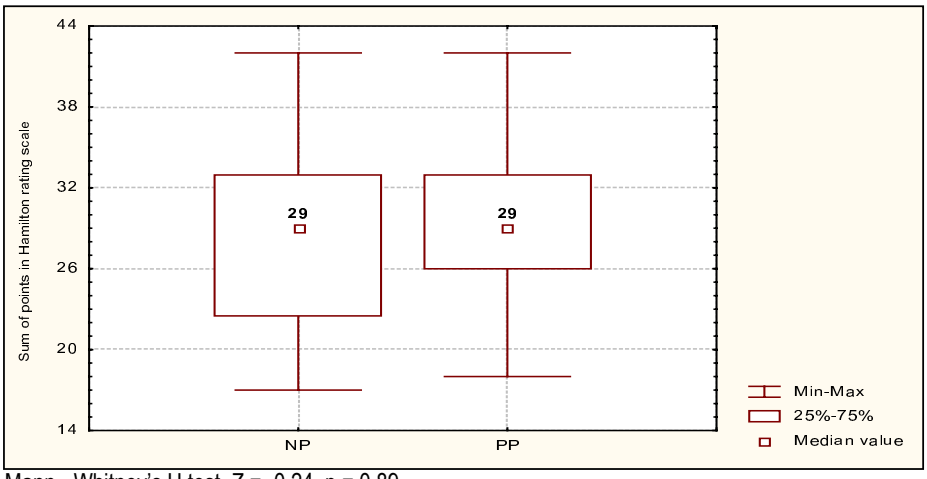
In the PP group, a very weak correlation was noted between the number of words chosen (NWCH) in the McGill Pain Questionnaire, and duration of depression (Spearman's coefficient, R = 0.309, p = 0.038) as well as between the NWCH and the number of stays in a psychiatric hospital (Spearman's coefficient, R = 0.34, p = 0.02).

Fig. 4. **Point score in the somatic subscale of BDI in the NP group (N = 15) and the PP group (N = 45)**



Mann - Whitney's U test, Z = -0.57, p = 0.56

Fig. 5. **Intensity of depression in HDRS in the NP group (N = 15) and the PP group (N = 45)**



Mann - Whitney's U test, Z = -0.24, p = 0.89

Discussion

Pain was experienced by 45 out of the 60 patients (75%) who were included into the studies in the course of such an intensity of the depression episode that their hospitalization proved indispensable. Thus, the results of studies, even if based on a relatively small group of examined patients, confirmed reports in literature on the universality of pain experiences in major depression [1, 2]. Obviously, a low numerical force of the studied group had not allowed to establish the incidence of pain in major depression but the occasional till now studies on frequency of pain, conducted on much more nu-

merous groups of patients, including patients with major depression, have documented similar proportions of patients with major depression who experienced pain [19].

Pain was experienced by 24 female (70.6% of all the females) and 21 male patients (80.7% of all the males). The lower proportion of females who experienced pain may reflect higher resistance to pain, reflecting more frequent pain experiences in women (menstruation pain, deliveries). In this respect, present data differ from those obtained in studies of NIMH ECA (The National Institute of Mental Health multisite Epidemiologic Catchment Area), edited by Silverstein [19], in which proportion of major depression females with somatic symptoms, who complained of pain has been higher and amounted to 60.9%, while in male patients it amounted to 48.9%. The divergence may be explained by the small size of our group, which has distorted the rule, well known from other studies and clinical observations that female patients with depression complain of pain more frequently.

Duration of pain in the studied group of depressive patients

Almost all of the patients who experienced pain (PP, N=45) reported that the pain persisted for over a year (22 patients or 48.8% of patients in the PP group). Two patients experienced pain for a period between 6 months and a year and, thus, 24 patients (53.3% of patients in the PP group) suffered from pain for at least 6 months and 21 of them were troubled by pain for a period shorter than 6 months. The pain appeared periodically, surfaced and disappeared, intensified and subsided.

As it can be seen in tables 1 and 2, in 26 patients (57.8% of PP group) duration of the current depression episode fitted the range of 1 to 6 months and in 2 patients (4.4% of the PP group) it exceeded 12 months. Thus, the average duration of pain markedly exceeded the duration of the current episode of depression. Twenty patients, who experienced pain for over a year were troubled by pain already before the present depression episode started and in only two patients symptoms of depression were accompanying the pain for over a year. The long duration of pain in a significant proportion of patients is worth noting. Possibly, in some cases pain experiences may represent the earliest prodrome of major depression relapse. The interesting problem will require an in-depth investigation on a larger group of patients.

Site of pain in major depression

Both in females and males, pain most frequently involved the head, less frequently other body parts (lumbar region, chest). Female patients complained most frequently of a headache and of pain in the lumbar region and chest. Male patients most frequently reported headache, pain in the lumbar region or in the chest. Thus site of the pain was basically similar in males and females.

Frequent headaches in patients with major depression have been noted in literature of the subject [1, 3, 5, 14, 20]. Corruble and Guelfi [2] diagnosed headache in 46.6% patients with major depression. In the literature of the subject, apart from headaches, pains in lumbar region and in the chest have been observed most frequently in patients with major depression [1, 2, 3, 5, 14].

Intensity and quality of pain in major depression

The highest number of patients appraised the experienced pain as a relatively pronounced one. Pain intensity was noted in the same way by female and male patients: for each gender the median of score in the verbal pain scale amounted to 6. Even if pain has not been listed in the DSM-IV classification among basic diagnostic criteria of major depression or in the description of somatic signs of major depression, in the examined group of patients with major depression pain has been evaluated as a nasty and, thus, an important symptom.

Using the McGill Pain questionnaire, patients were selecting most frequently approximately 1/3rd of the available adjectives: NWCH median amounted to 7. First of all, the patients stressed and accented the sensoric traits of their pain. The two most frequently selected adjectives – "nagging" and "tiring" (each one selected by almost every single patient) are both related to an emotional aspect of pain but the 10 most frequently selected adjectives include six adjectives related to the sensoric nature and four adjectives refer to the emotional nature of pain. In the sensoric subscale of the pain evaluation index, based on average values (PRI a) the median value amounted to 8.55 against the maximum value in the subscale amounting to 34.18 points and, thus, the obtained result represented approximately 25% of the maximum value. In the emotional subscale, the maximum value of PRI a amounted to 18.44, and the median obtained in the present study was 2.89, or around 15% of the maximum value. The above described ration of proportions (25% against 15%) points to a prevalence of adjectives related to the sensoric nature of pain. A similar tendency has been demonstrated by analysis of sensoric and emotional subscales of the index based on rank values (PRI r). Maximum PRI r value in the sensoric subscale amounted to 38 points and the median obtained in the study was 8.5, or around 22% of the maximum value. In the emotional subscale the maximum value of PRI r amounted to 14 points and the median in the study was 2 points or around 14% of the maximum value.

The extensive divergence in the number of adjectives selected by individual patients is worth noting: it ranged from the minimum of 1 adjective to the maximum of 20 adjectives. The divergence was reflected by a significant scatter of PRI a results (from 1.52 to 58.65 points) and PRI r results (from 2 to 56 points). Even if only one adjective corresponding to pain quality has not been selected ("flickering"), the most frequently selected adjectives have been redundant. The most frequently selected adjectives: "nagging" (2.7 points), "tiring" (2.71 points), "pressing" (1.95 points), "radiating" (2.89 points), "throbbing" (1.9 points) corresponded to average or low point scores. The adjectives which were given the highest point scores, such as "tormenting" (4.5 points) and "killing" (4.45 points) and those given the lowest point scores, such as "dimmed" (1.03 point scores), "flickering" (1.16 points) or "damped" (1.23 points) have been selected much less frequently. Thus, the number of selected adjectives showed extensive scatter. No such a divergence has been noted in the type of adjectives. Most of them have been related to pain of moderate intensity.

Intensity of the pain experienced by the patients has manifested no significant relationships with age, marital status, duration of education, evaluation of patient's own financial status or the status of a pensioner.

Relationship between major depression and pain experiences

Comparison of clinical traits of major depression with results of BDI and HDRS in the PP and NP groups has shown no significant relationship between depression and the manifestation of pain. No correlation has also been detected between pain intensity (measured by verbal pain scale and NWCH) and intensity of depression (measured by BDI and HDRS). No significant differences have been disclosed in the mean duration of major depression disorder, mean number of psychiatric hospitalizations and duration of current major depression episode between the PP and NP groups. In the PP group, on the other hand, a faint correlation has been disclosed between NWCH and the duration of major depression episode (Spearman's coefficient, $R=0.309$, $p=0.038$). In the PP group, also a very weak correlation has been shown between the NWCH and number of psychiatric hospitalizations (Spearman's coefficient, $R=0.34$, $p=0.02$). The very faint correlation and low numerical force of the examined group indicate that the relationship may be casual and that it requires further studies. In the PP group no correlation has been noted between pain intensity, measured in the verbal pain scale, and duration of major depression or between pain intensity in the verbal pain scale and number of stays in a psychiatric hospital.

Intensity of depression, measured in BDI, has been very similar in the PP and NP groups. The main BDI score has amounted to 33 points in the PP group and has been insignificantly higher (34 points) in the NP group. Also the BDI mean point scores in the cognitive-emotional subscale and in the somatic subscale had not significantly differed the PP and NP groups. In the PP group no correlation between depression intensity, measured by BDI, and pain intensity, measured in verbal pain scale could be shown.

Mean number of points in the HDRS has been the same for PP and NP groups and has amounted to 29 points. In the PP group no correlation between depression intensity, measured by HDRS, and pain intensity, measured in the verbal pain scale could be shown.

The absence of clear-cut differences in point results of BDI and HDRS and in selected clinical variables between the PP group (N=45) and NP group (N=15) may indicate that no strict relationship exists between a lowered mood and pain experiences. This absence of a relationship may explain the markedly earlier appearance of pain experiences than of depression episodes. Analysis of dynamics in pain experiences as compared to depression disturbances leads to a suggestion that they may represent independent disturbances or, rather, disturbances coexisting with depression, in correspondence to the current perception of reciprocal relationships between anxiety and depression. The problem is important from cognitive and practical points of view and requires studies on larger groups and during a longer period of time.

Conclusions

1) In the studied group experiences of pain were quite pronounced, most frequently involved the head and frequently preceded manifestation of fully symptomatic depression;

2) No statistical, significant relationship could be disclosed between intensity of the experienced pain on one hand and severity of depression on the other.

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