Anxiety and Depression Disorders in Chronic Non-Specific Low Back Pain in Lomé (Togo)

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Abstract

Chronic non-specific low back pain has an important psychological impact.

Objectives: To determine the prevalence of anxiety and depressive disorders (ADD) and factors associated to their apparition in patients suffering from chronic non-specific low back pain in rheumatological consultation in Lomé.

Patients and Methods: It was a cross-sectional study, conducted from October 1st, 2015 to 31st March 2016. This study focused on all patients suffering from common chronic low back pain without psychiatric history in the Rheumatology Ward at the Sylvanus Olympio’s Teaching Hospital of Lomé and who have given their consent. The psychological evaluation was carried out through Hamilton scale. The processing, the statistical treatment and analysis of our data have been carried out using Epiinfo software, version 7.1.5. The investigation was approved by the local Ethics Committee.

Results: 48 (39 women and 9 men) out of 123 patients with chronic lower back pain presented anxiety and depressive disorders accounting for a prevalence rate of 39%. Their average age was 50.3 years old. The most frequent ADD was: psychic anxiety (58.6%), depressive mood (51.3%), difficulties to feel asleep (47.9%) and disturbed or agitated sleep (43.1%). Factors associated with the anxiety and depressive disorders in common chronic low back pain were: female gender (p = 0.02), dependent children (p = 0.02), occupation (reseller (p = 0.002), liberal profession (p = 0.009), monthly financial income (p = 0.002), surroundings family (0.009), medical history (p = 0.0002) and pain’s intensity > 7 (p = 0.04).

Conclusion: This study shows the high frequency of anxiety and depressive disorders in common chronic low back pain and their influence by socio-economic and demographic factors.
1. Introduction

Low back pain (LBP) is a public health problem in the developed countries [1]. Its prevalence is high in France [2] and England [3]. In Africa, its prevalence is also high and estimated in Nigeria, Benin and Togo respectively to 40%, 36% and 35.5% [4]. In Togo, the non-specific LBP is the first reason for consultation of patients with degenerative pathology spine [5]. Psychological factors seem to play important role in the prognosis of LBP than in its onset [6]. The frequency of the LBP patients with mood disorders, hypochondriacs or hysterical tendency is more important than in the general population [7]. Anxiety and depressive disorders (ADD) greatly influence chronic LBP, raise and fuel it. Anxiety and depressive disorders should not be also minimized in the context of organic pathology, in order to enable the adaptation of early and global care, regular evaluation and especially the prevention of suicidal risk. The prevalence of anxiety disorders in the general population ranges from 10% to 20% and the incidence of depressive disorders varies in the general population from 10% to 25% for women and from 5% to 12% for men [8]. In Morocco, the anxiety component of pain was found in 34.6% as against 17.3% for the depressive component of pain in chronic low back pain patients [9]. The prevalence of ADD is elevated in the populations of patient with chronic pain [8].

The prevalence of the ADD in non-specific chronic LBP in Ivory Coast was 30.7% and was dominated by anxiety (85.9%) and depressive mood (39.8%) is equally high [10]. Considering the importance of these disorders in the patients and the fact that no study has been conducted in Togo, this study has been initiated to determine the prevalence of ADD and the etiological factors which might influence their occurrence in patients suffering from non-specific chronic LBP in Lomé.

2. Patients and Methods

2.1. Data Source

It is a single cross-sectional study from October 1st, 2015 to 31st March 2016 that is 6 months duration, conducted in the Rheumatology ward at the Sylvanus Olympio’s Teaching Hospital of Lomé.

2.2. Patient Selection

We included 123 patients with common chronic low back pain who have consulted during the study period and given their consent. The study was approved by the local Ethics Committee. We excluded from this study, patients suffering from specific or post traumatic LBP, and those with proven history of psychia-
tric illness or cognitive disorder. The sample size was determined by the SCHWARTZ formula [11]. A questionnaire was prepared in collaboration with the psychiatrist and administered to each patient seen or consulted and hospitalized with LBP during the study period.

2.3. Patients’ Background Characteristic

A questionnaire filled out by an investigator, and which included on the one hand the collection of clinical and socio-demographic data (age, gender, marital status, level of education, occupation, number of child support, environment, existence of financial income, medical history, Acute LBP characters) and on the other hand the Hamilton scale for anxiety and depressive disorders evaluation.

2.4. Definitions of Standard

The diagnosis of chronic low back pain was retained on the clinical arguments (LBP or mechanical lombo-radiculopathy evolving for more than 3 months; Spinal cord syndrome; Lumbar root syndrome), radiographic (Degenerative lumbar spinal lesions) and biological (absence of biological inflammatory syndrome) arguments. The pain assessment was made through the Visual Scale Analog (VSA). The French version of Hamilton’s scale [12] has been used to identify the ADD. It was composed of 17 sides items each either from 0 to 2 or from 0 to 4. The symptoms were studied as magnitude. Rating = 0 means not present of symptoms; quotes ≥ 1 reflect the presence of the symptoms according to an order of magnitude. The addition of the different quotes sets up an overall score that when it is equal to or more than 10 determined ADD. The ADD are light when the score is between 10 and 13; moderates when the score is between 14 and 17 and severe when the score is more than or equal to 18. Obesity was defined by a BMI higher or equal to 30 kg/m².

2.5. Statistical Analyses

Data have been processed and analyzed using Epi info software, version 7.1.5. The chi 2 test was used to compare qualitative variables and the student test to compare averages. P value less than 0.05 was considered statistically significant.

3. Results

3.1. Characteristics of the Studied Population

One hundred twenty-three patients were included in this study; 85 women (69.1%) and 38 men (30.9%), accounting for a sex ratio of 0.44. The average age was 51.7 ± 13.1 years old with extremes from 20 to 82 years. The age group of 50 to 59 was the most represented in 29.3%. More than half of the patients were married (69.9%) and had on average three children with extremes of 1 to 9 children. The main school studied levels of study were secondary (32.5%) and primary (27.6%). Reseller occupation was the most represented 31.7%. One hundred and nine patients (88.6%) lived in family and the 14 others (11.4%)
lived lonely. Forty-one patients (33.3%) had a monthly financial income against 82 patients (66.7%) who did not have. Eighty-four patients (68.3%) had financial assistance contrary to 39 others (31.7%) who didn’t have. The average weight of the studied population was 70.1 ± 13.1 with extremes of 46 kg and 125 kg. The average height was 164 ± 7 cm with extremes of 143 cm and 190 cm. The average BMI was 26.1 ± 4.98 Kg/m² with extremes of 16.5 and 47.6 kg/m². Twenty-six patients (21%) showed obesity with a body mass index (BMI) ≥ 30 Kg/m². Three patients (2.4%) were smokers and a patient had smoked 25 Pack-years. Thirty patients (24.4%) were hypertensive and five (4.1%) were diabetic.

3.2. Prevalence and Risk Factors of Anxiety and Depressive Disorders

According to Hamilton scale, ADD have been observed in 48 out of 123 patients with non-specific LBP (39%). The ADD were slight in 14% of cases, moderate in 12% of cases and severe in 13% of cases. The ADD associated with low back pain were dominated by anxiety (58.6%), depressive mood 51.3%, difficulties to feel asleep (47.9%) and by disturbed or agitated sleep (43.1%) as highlighted in Table 1. Somatic symptoms were represented by the loss of energy and fatigue (31.7%), feelings of failure or incapability regarding to activities (26%), loss of appetite (24.3%), loss of weight (22%), the decline in libido (12.2%) and headaches (9%). Risk factors that significantly favored the appearance of ADD were: female gender (p = 0.02), dependent children (p = 0.04), occupation (reseller (p = 0.002), liberal professional (p = 0.009), absence of monthly financial income (p = 0.0004), family circle (0.009), medical history (p = 0.0002), severe pain (p = 0.04) and existence of irradiation (p = 0.0000). The relative risk of occurrence of

<table>
<thead>
<tr>
<th>Table 1. Prevalence of anxiety and depression symptoms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Psychicanxiety</td>
</tr>
<tr>
<td>Depressivemood</td>
</tr>
<tr>
<td>Sleepdifficulties</td>
</tr>
<tr>
<td>Troubled or restless sleep</td>
</tr>
<tr>
<td>Psychomotor retardation</td>
</tr>
<tr>
<td>Subjective tension and irritability</td>
</tr>
<tr>
<td>Tearfulness</td>
</tr>
<tr>
<td>Loss of interest in activities</td>
</tr>
<tr>
<td>Auto guilt</td>
</tr>
<tr>
<td>Death Thought</td>
</tr>
<tr>
<td>Concern about his health</td>
</tr>
<tr>
<td>Denial</td>
</tr>
<tr>
<td>Delusions of guilt</td>
</tr>
<tr>
<td>Idea or suicide gesture</td>
</tr>
</tbody>
</table>
anxiety-depressive disorders is threefold in women with LBP. The risk of developing anxiety-depressive disorders is multiplied by 5 in patients who do not have a monthly financial income. There is a twofold increase in the risk of TAD in patients with severe pain and a 7-fold increase in those with radiculalgia. These results are detailed in Table 2-4.

4. Discussion

4.1. Limitation of the Study

Our study has certain biases and limitations (the subjective nature of certain data, in particular the assessment of the socioeconomic and occupational level, the way in which pain began, its intensity, loss of physical autonomy; the retention of information related to the reluctance of some patients to talk about their experiences and psycho-affective condition; the difficulty in interpreting the signs linked to the involvement of painful emotional events in patients with low back pain) which must be taken into account for an optimal interpretation of the results.

Table 2. Association between anxiety and depressive disorders and demographic factors.

<table>
<thead>
<tr>
<th>ADD</th>
<th>n (%)</th>
<th>RR [IC95%]</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oui</td>
<td>Non</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>39 (45.8)</td>
<td>46 (54.2)</td>
<td>2.7 [1.2 - 6.5]</td>
</tr>
<tr>
<td>Male</td>
<td>09 (31.0)</td>
<td>29 (69.0)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;40 ans</td>
<td>08 (34.8)</td>
<td>15 (65.2)</td>
<td></td>
</tr>
<tr>
<td>40 - 49 ans</td>
<td>11 (42.3)</td>
<td>15 (57.7)</td>
<td></td>
</tr>
<tr>
<td>50 - 59 ans</td>
<td>18 (50.0)</td>
<td>18 (50.0)</td>
<td>1.8 [0.8 - 4.2]</td>
</tr>
<tr>
<td>≥60 ans</td>
<td>11 (28.9)</td>
<td>27 (71.1)</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>02 (20.0)</td>
<td>08 (80.0)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>37 (43.0)</td>
<td>49 (57.0)</td>
<td>1.7 [0.7 - 4.1]</td>
</tr>
<tr>
<td>Divorced</td>
<td>01 (14.3)</td>
<td>06 (85.7)</td>
<td></td>
</tr>
<tr>
<td>Widower</td>
<td>08 (40.0)</td>
<td>12 (60.0)</td>
<td></td>
</tr>
<tr>
<td>Study level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>12 (44.4)</td>
<td>15 (55.6)</td>
<td>1.3 [0.5 - 3.1]</td>
</tr>
<tr>
<td>Primary</td>
<td>20 (38.8)</td>
<td>14 (41.2)</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>14 (35.0)</td>
<td>26 (65.0)</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>02 (20.0)</td>
<td>08 (80.0)</td>
<td></td>
</tr>
</tbody>
</table>

1 Anxiety and depressive disorders; 2 Relative risk; 3 Confidence interval (see Appendix for interpretation); 4 Correlation coefficient.
Table 3. Association between anxiety and depressive disorders and socio-professional characteristics.

<table>
<thead>
<tr>
<th></th>
<th>ADD(^1) n (%)</th>
<th>RR(^2) [IC(^95%)](^3)</th>
<th>p(^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oui</td>
<td>Non</td>
<td></td>
</tr>
<tr>
<td><strong>Profession</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trader</td>
<td>23 (58.9)</td>
<td>16 (41.1)</td>
<td>3.3 [1.5 - 7.5]</td>
</tr>
<tr>
<td>Housewife</td>
<td>06 (26.1)</td>
<td>17 (73.9)</td>
<td>0.9 [0.4 - 2.0]</td>
</tr>
<tr>
<td>Frame</td>
<td>03 (17.6)</td>
<td>14 (82.4)</td>
<td>1.1 [0.5 - 2.6]</td>
</tr>
<tr>
<td>Professional</td>
<td>11 (68.7)</td>
<td>05 (31.3)</td>
<td>4.1 [1.3 - 14.0]</td>
</tr>
<tr>
<td>Police/Military</td>
<td>02 (28.6)</td>
<td>05 (71.4)</td>
<td>1.9 [0.7 - 5.1]</td>
</tr>
<tr>
<td>Retirement</td>
<td>00 (00.0)</td>
<td>11 (99.9)</td>
<td>0.02 [0.0 - 0.5]</td>
</tr>
<tr>
<td>No occupation</td>
<td>03 (33.3)</td>
<td>06 (66.7)</td>
<td>1.5 [0.6 - 4.0]</td>
</tr>
<tr>
<td><strong>Monthly financial income</strong></td>
<td></td>
<td></td>
<td>0.0004</td>
</tr>
<tr>
<td>Yes</td>
<td>07 (17.1)</td>
<td>34 (82.9)</td>
<td>4.7 [1.9 - 12.9]</td>
</tr>
<tr>
<td>No</td>
<td>41 (50.0)</td>
<td>41 (50.0)</td>
<td>1.0 [0.6 - 1.7]</td>
</tr>
<tr>
<td><strong>Financial assistance</strong></td>
<td></td>
<td></td>
<td>0.2</td>
</tr>
<tr>
<td>Yes</td>
<td>12 (30.8)</td>
<td>27 (69.2)</td>
<td>1.6 [0.7 - 3.6]</td>
</tr>
<tr>
<td>No</td>
<td>36 (42.9)</td>
<td>48 (57.1)</td>
<td>1.6 [0.7 - 3.8]</td>
</tr>
<tr>
<td><strong>Family environment</strong></td>
<td></td>
<td></td>
<td>0.009</td>
</tr>
<tr>
<td>Family</td>
<td>47 (47.1)</td>
<td>62 (52.9)</td>
<td>9.7 [1.6 - 2.15]</td>
</tr>
<tr>
<td>Lonely</td>
<td>01 (7.1)</td>
<td>13 (92.9)</td>
<td>0.1 [0.0 - 1.1]</td>
</tr>
<tr>
<td><strong>Dependent child</strong></td>
<td></td>
<td></td>
<td>0.04</td>
</tr>
<tr>
<td>Yes</td>
<td>42 (43.8)</td>
<td>54 (56.2)</td>
<td>2.7 [1.0 - 7.9]</td>
</tr>
<tr>
<td>No</td>
<td>06 (22.2)</td>
<td>21 (77.8)</td>
<td>0.5 [0.2 - 1.6]</td>
</tr>
</tbody>
</table>

\(^1\)Anxiety and depressive disorders; \(^2\)Relative risk; \(^3\)Confidence interval (see Appendix for interpretation); \(^4\)Correlation coefficient.

4.2. Prevalence of Anxiety and Depressive Disorders

The prevalence of anxiety and depressive disorders in our study was 39%. This rate is relatively high compared to that found by Diomande [10] and Joukamaa [13], respectively 30.7% and 31% in Ivory Coast and Japan. Actually, the perpetuation and the chronicity would reveal the absence of a radical treatment. Therefore, this arises in these patients a feeling of incurability of the disease leading to a gloomy future. In addition, everything that is not curable in black Africa is often associated with mystical beliefs or witchcraft. In general, the underdevelopment marked by poverty, the precariousness of health systems (lack of health insurance or social assistance) especially with chronic pathologies, increases the socioeconomic feeling of chronic LBP patients.

Sixty-five LBP patients had a depressive mood (51.3%) in the studied population. Boudali et al. [14] in Morocco found a prevalence of depressive mood (60%) higher than our results. In fact, if many epidemiological studies underline
Table 4. Association between anxiety and depressive disorders and clinical characteristics.

<table>
<thead>
<tr>
<th></th>
<th>Oui</th>
<th>Non</th>
<th>RR</th>
<th>IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical history (HTA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>07</td>
<td>35</td>
<td>5</td>
<td>2.0 - 13.6</td>
</tr>
<tr>
<td>No</td>
<td>41</td>
<td>40</td>
<td>1</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>IMC</td>
<td></td>
<td></td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Skinny</td>
<td>01</td>
<td>02</td>
<td>1.7</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>Normal</td>
<td>19</td>
<td>33</td>
<td>1.7</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>overweight</td>
<td>20</td>
<td>22</td>
<td>1.7</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>Obesity</td>
<td>09</td>
<td>17</td>
<td>1</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>Disease duration</td>
<td></td>
<td></td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>&lt;12 months</td>
<td>19</td>
<td>25</td>
<td>1.3</td>
<td>0.6 - 2.7</td>
</tr>
<tr>
<td>&gt;12 months</td>
<td>29</td>
<td>50</td>
<td>1.3</td>
<td>0.6 - 2.7</td>
</tr>
<tr>
<td>Pain intensity</td>
<td></td>
<td></td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>No pain</td>
<td>01</td>
<td>08</td>
<td>1.7</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>mild pain</td>
<td>07</td>
<td>23</td>
<td>1.7</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>moderate pain</td>
<td>19</td>
<td>24</td>
<td>1.7</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>severe pain</td>
<td>21</td>
<td>20</td>
<td>1.7</td>
<td>0.8 - 3.6</td>
</tr>
<tr>
<td>Installation</td>
<td></td>
<td></td>
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<tr>
<td>Progressive</td>
<td>47</td>
<td>69</td>
<td>4.0</td>
<td>0.5 - 35</td>
</tr>
<tr>
<td>Brutal</td>
<td>01</td>
<td>06</td>
<td>4.0</td>
<td>0.5 - 35</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td></td>
<td></td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>25</td>
<td>33</td>
<td>1.3</td>
<td>0.6 - 2.7</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>42</td>
<td>1.3</td>
<td>0.6 - 2.7</td>
</tr>
<tr>
<td>scoliosis</td>
<td></td>
<td></td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>12</td>
<td>10</td>
<td>2.1</td>
<td>0.8 - 5</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>65</td>
<td>2.1</td>
<td>0.8 - 5</td>
</tr>
<tr>
<td>radicular pain</td>
<td></td>
<td></td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>19</td>
<td>06</td>
<td>7.3</td>
<td>2.7 - 22</td>
</tr>
<tr>
<td>No</td>
<td>29</td>
<td>69</td>
<td>7.3</td>
<td>2.7 - 22</td>
</tr>
</tbody>
</table>

1Anxiety and depressivedisorders; 2Relative risk; 3Confidence interval (see Appendix for interpretation); 4Correlation coefficient.

the importance of the comorbidity between chronic pain and depression [15],
the risk for a chronic algic patient to have a major depressive episode (MDE) would be variable from 15% to 54.5% [16]. The causal relationship between chronic pain and depression is bilateral: chronic pain depresses the patient and depression promotes chronic pain [17]. In a literature review about the comor-
bidity between pain and depression, Williams et al. [15] had found that pain is a physical symptom, affecting about 65% of patients with depression. Chronic pain and depression of mood is for one another a triggering or aggravating factor.

Seventy-two patients presented a state of anxiety accounting for a prevalence of 58.6%. This rate is higher than the one of Laxmaiah et al. [18] who have observed 20% of anxiety cases in 40 chronic LBP patients and that of Boudali et al. [14] who have found 37% in 100 chronic LBP patients. However, Diomande et al. [10] have found a very high prevalence of anxiety of 85.9% of a population of 323 chronic LBP patients. These differences in results can be explained by the differences in the size and socio demographics of the studied populations; the variability of the perception of anxiety by the patient himself at different moments of the same day; Besides the fact that anxiety rating scales are varied Anxiety is normal and banal to some degree of danger. The limit between normal and pathological anxiety is not that easy to define than it may seem; but after crossing this limit, the too much important quantity of anxiety psychic component turns into anguish which is a somatic component.

4.3. Psychopathological Symptoms

Guerrière et al. [19] had found the anxiety and depressive symptoms in more important proportions: sleep disorders (67.8%), suicide idea (34.6%), and difficulties in achieving social activities (63.9%) as well as in relationships with other people (47.5%). Diomande et al. [10] had highlighted the psychomotor slowing (25.5%), suicide ideas (6.1%) and delirious ideas (4.1%).

Somatic symptoms (neurological, digestive, genital and general disorders) are sources of diagnosis wandering in general medicine or even in specialized consultation [20]. Bacon et al. had previously listed more than 12 somatic symptoms in 25.8% LBP patients as somatic complaints. According to Cathebras et al. [21], such complaints should not be considered as a literal description of somatic symptoms, but as a way to tell the interlocutor some social and psychological motives of distress.

4.4. Factors Associated to the ADD

- **Female gender** \( (p = 0.02) \)

Several authors including Hachimi et al. [22] and Diomande et al. [10] had already found female gender as receptacle of depression installation in the LBP patient. The most alerts women would be more likely to install ADD. Although the attributes of the woman in our modern society have changed, some particularities remain: She identifies herself by her ability to take care of her home. The loss or difficulty in fulfilling this role is a source of anxiety. In addition, the incidents of hormonal life (menstrual cycles, menopause, and osteoporosis), social vulnerability, and obstetric problems are all stress elements that can be a source of anxiety and depression.

- **Number of children in care** \( (p = 0.04) \)
In the past, a child was considered in Africa especially in the rural areas as a source of wealth for the family, for they are available for farm works. Today with the modernization of society mainly the urbanization, a large number of dependent children are source of important socio-economic constraints, which result in an unfavorable family background (family conflicts, lack of cohesion, and lack of independence). This explains the fact that for a LBP patient, these constraints are a source of concern directly related to the expression of anxiety and depression in the patient. Moreover, Finkelstein et al. [23] had already found an association between the number of children and spinal pain.

- **Subject living alone (p = 0.009)**

  Many authors note that a good family support reduced the risk of depression in back pain patients [24]. But a living subject alone, from the extra stress that was a family environment relatively unfavorable, will develop less often than other anxiety and depressive symptoms.

- **Lack of financial income (p = 0.0004)**

  Management of chronic pain creates significant financial impacts both the individual and the whole society: either through the inability to work, by the consumption of medication or by the frequent use of health care services. Lack of financial income corollary of economic situation, especially in absence of assistance was also found in Ivory Coast [10] as a factor favoring the ADD at the pain.

- **Intensity of pain (EVA ≥ 7) (p = 0.04)**

  Simon and Von Korff [25], had net observed correlation between indices of severity of pain and depressive intensity. On the other hand, Genet et al. [26] had not found link between depression and pain intensity. Thus studies on the intensity of the pain as a factor favoring the depression are mixed. We can think that the depression would probably at a later stage of evolution, with a further short time pain is severe. Chronicity would be the determining factor in the appearance of the ADD.

- **Existence of a radiation dose (p = 0.0000)**

  The relative risk of ADD at a pain chronic is multiplied by 7 in the event of existence of irradiation. Diomande et al. [10] had also made the observation that the existence of a radicular pain was correlated with the ADD. The appearance of the radicular pain marks for the subject a degree more in the course of his disease. Ignorance of its mechanism (pathophysiology) reinforces the already present conviction at the pain that the back pain is mystical origin (spell); for proof the radicular pain and other unexplained paresthesia. Fear of becoming is a perpetual anguish for the subject.

### 5. Conclusion

The prevalence of the Anxiety and Depressive Disorders in chronic low back pain is important. The expression of anxiety and depression symptomatology in the low back pain patient is diverse and varied. The individual, socio-professional and clinical factors influence the occurrence of Anxiety and Depressive Disord-
ers in the patients. The identification of these factors is as important as it could be determinative for a better support/treatment of the chronic low back pain patient. A research of the influence of low back pain duration and the occurrence of depressive condition would be good. It is judicious that studies should be carried out in order to establish a new approach of patient suffering from chronic low back pain, by emphasizing on multidisciplinary treatment.

References


Appendix

Fact Sheet: Anxiety and depression disorders in chronic non-specific low back pain in Lomé (Togo)

I. GENERAL INFORMATION
No file: ... Contact: ....... Language: ......... Hospitalized: yes/no Date: 
Age (years): ... Gender: M F Marital status: single [___] married [___] 
divorced [___] widow (er) [___] 
Educational level: illiterate primary secondary university 
Number of dependent children [___] 
Profession: executive/Employee Police officer House wife merchant/reseller 
Retired Liberal without activity 
Monthly income: yes/no Financial assistance: yes/no Entourage: lives in family 
lives alone 
Attitude of the family: rejection indifference acceptance

II. SPECIFIC INFORMATION (low back pain)
Starting date (month): Installation: progressive/brutal EVA (0 to 10): 
Trigger factors: prolonged sitting/standing Heavy load bending Walking 
Impulsivity: yes/no Cough Defecation Laugh sneeze 
Nighttime wake-up: yes/no 
Irradiation: left or right bilateral L3 L4 L5 S1 
Paresthesia: numbness (yes/no) tingling (yes/no)cramp (yes/no) 
Other: .................. 
Claudication: yes/no Walking perimeter: ............meter 
Sphincter disorders: yes/no 
Weight loss: ...kg Appetite retained: Yes/No Fever: Yes/No 
Diabetes: yes/no if yes how many years: 
HTA: yes/no if yes how many years: 
Obesity: yes/o if yes how many years: 
Menopause: yes/no if yes how many years: 
Psychiatry disorders: yes/no Neurological disorders: Yes/no Lumbar surgery: 
Yes/No 
Tobacco (Package/year): Alcohol (quantity):

III. CLINICAL
Weight (kg) [….] Size (m) […] BMI (kg/m2) […] 
DMS (Distance hand ground): Schoeber: Scoliosis: yes/no 
School attitude: yes/no 
Painful Palpation: yes/no Painful mobilization: yes/no Spinal stiffness: 
Sonnette sign: positive/negative Leri sign: positive/negative Lasegue sign: positive/negative 
Motor deficit: yes/no Sensory Disorder: yes/no Reflex Disorders: yes/no

IV. PARACLINIC
Rx lumbar spine: Discopathy: yes/no Inter-apophyseal osteoarthritis: yes/no 
Spondylolisthesis: yes/no 
lombarthrosis: yes/no Spine discal: yes/no Other: ........
White blood cells (mm³): Hemoglobin (g/dl): vs (sedimentation rate (1 h): mm
Creatinine (mg/l):
Blood glucose (g/l): SRV: positive/negative type: VIH1/VIH2

Hamilton Depression Rating Scale (HDRS)
PLEASE COMPLETE THE SCALE BASED ON A STRUCTURED INTERVIEW
Instructions: for each item select the one “cue” which best characterizes the patient. Be sure to record the answers in the appropriate spaces (positions 0 through 4)

1  DEPRESSED MOOD (sadness, hopeless, helpless, worthless)
   0  |___| Absent.
   1  |___| These feeling states indicated only on questioning.
   2  |___| These feeling states spontaneously reported verbally.
   3  |___| Communicates feeling states non-verbally. i.e. through facial expression, posture, voice and tendency to weep.
   4  |___| Patient reports virtually only these feeling states in his/her spontaneous verbal and non-verbal communication.

2  FEELINGS OF GUILT
   0  |___| Absent.
   1  |___| Self reproach, feels he/she has let people down.
   2  |___| Ideas of guilt or rumination over past errors or sinful deeds.
   3  |___| Present illness is a punishment. Delusions of guilt.
   4  |___| Hears accusatory or denunciatory voices and/or experiences threatening visual hallucinations.

3  SUICIDE
   0  |___| Absent.
   1  |___| Feels life is not worth living.
   2  |___| Wishes he/she were dead or any thoughts of possible death to self.
   3  |___| Ideas or gestures of suicide.
   4  |___| Attempts at suicide (any serious attempt rate 4).

4  INSOMNIA: EARLY IN THE NIGHT
   0  |___| No difficulty falling asleep.
   1  |___| Complains of occasional difficulty falling asleep. i.e. more than 1/2 hour.
   2  |___| Complains of nightly difficulty falling asleep.

5  INSOMNIA: MIDDLE OF THE NIGHT
   0  |___| No difficulty.
   1  |___| Patient complains of being restless and disturbed during the night.
   2  |___| Waking during the night—any getting out of bed rates 2 (except for purposes of voiding).

6  INSOMNIA: EARLY HOURS OF THE MORNING
   0  |___| No difficulty.
   1  |___| Waking in early hours of the morning but goes back to sleep.
   2  |___| Unable to fall asleep again if he/she gets out of bed.
7  **WORK AND ACTIVITIES**

0  |___| No difficulty.
1  |___| Thoughts and feelings of incapacity, fatigue or weakness related to activities, work or hobbies.
2  |___| Loss of interest in activity, hobbies or work—either directly reported by the patient or indirect in listlessness. Indecision and vacillation (feel she/she has to push self to work or activities).
3  |___| Decrease in actual time spent in activities or decrease in productivity. Rate 3 if the patient does not spend at least three hours a day in activities (job or hobbies) excluding routine chores.
4  |___| Stopped working because of present illness. Rate 4 if patient engages in no activities except routine chores, or if patient fails to perform routine chores unassisted.

8  **RETARDATION** (slowness of thought and speech. Impaired ability to concentrate. Decreased motor activity)

0  |___| Normal speech and thought.
1  |___| Slight retardation during the interview.
2  |___| Obvious retardation during the interview.
3  |___| Interview difficult.
4  |___| Complete stupor.

9  **AGITATION**

0  |___| None.
1  |___| Fidgetiness.
2  |___| Playing with hands, hair, etc.
3  |___| Moving about, can’t sit still.
4  |___| Hand wringing, nail biting, hair-pulling, biting of lips.

10  **ANXIETY PSYCHIC**

0  |___| No difficulty.
1  |___| Subjective tension and irritability.
2  |___| Worrying about minor matters.
3  |___| Apprehensive attitude apparent in face or speech.
4  |___| Fears expressed without questioning.

11  **ANXIETY SOMATIC** (physiological concomitants of anxiety) such as:
gastro-intestinal—dry mouth, wind, indigestion, diarrhea, cramps, belching; cardio-vascular—palpitations, headaches; respiratory—hyperventilation, Sighing; urinary frequency sweating

0  |___| Absent.
1  |___| Mild.
2  |___| Moderate.
3  |___| Severe.
4  |___| Incapacitating.

12  **SOMATIC SYMPTOMS GASTRO-INTESTINAL**

0  |___| None.
1  |___| Loss of appetite but eating without staff encouragement. Heavy feel-
ings in abdomen.

2  [___] Difficulty eating without staff urging. Requests or requires laxatives or medication for bowels or medication for gastro-intestinal symptoms.

13  GENERAL SOMATIC SYMPTOMS
0  [___] None.
1  [___] Heaviness in limbs, back or head. Backaches. Headaches, muscle aches. Loss of energy and fatigability.
2  [___] Any clear-cut symptom rates 2.

14  GENITAL SYMPTOMS (symptoms such as loss of libido, menstrual disturbances)
0  [___] Absent.
1  [___] Mild.
2  [___] Severe.

15  HYPOCHONDRIASIS
0  [___] Not present.
1  [___] Self-absorption (bodily).
2  [___] Preoccupation with health.
3  [___] Frequent complaints. Requests for help, etc.
4  [___] Hypochondriacal delusions.

16  LOSS OF WEIGHT (RATE EITHER a OR b)
a) According to the patient:  b) According to weekly measurements
0  [___] No weight loss.  0  [___] Less than 1 lb weight loss in week.
1  [___] Probable weight loss 1  [___] Greater than 1 lb weight loss in week
Loss associated with, present illness.
2  [___] Definite (according to patient) weight loss.
3  [___] Not assessed.  3  [___] Not assessed.

17  INSIGHT
0  [___] Acknowledges being depressed and ill.
1  [___] Acknowledges illness but attributes cause to bad food. Climate. Overwork. Virus. Need for rest. etc.
2  [___] Denies being ill at all.

Total score:  [___]  [___]  [___]
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