Komorbiditas Penyakit Psikiatri Pada Nyeri Neuromuskuloskeletal Kronis Di Rumah Sakit Atma Jaya

Psychiatric Disorder Comorbidity In Chronic Neuromusculoskeletal Pain In Atma Jaya Hospital

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KATA KUNCI
Pain, chronic pain, neuromusculoskeletal, psychiatric, comorbidity

KEYWORDS
Rasa Nyeri, Sakit Kronis, Neuromuskuloskeletal, Psikiatri, Komobiditas

ABSTRAK
Penelitian ini memberikan gambaran gangguan psikiatri terutama gangguan depresi, cemas, dan kesulitan tidur pada pasien nyeri neuromuskuloskeletal kronis. Tujuan penelitian ini adalah mengukur prevalensi penyakit komorbiditas psikiatri pada pasien nyeri neuromuskuloskeletal kronis. Penelitian ini merupakan penelitian potong lintang dengan metode pengambilan data konsekutif. Data diambil di klinik rawat jalan departemen saraf di rumah sakit Atma Jaya, Jakarta, antara bulan Juli-Desember 2015. Kriteria Diagnostic and Statistical Manual of Mental Disorder (DSM) V digunakan dalam mendiagnosis gangguan psikiatri. Didapatkan 55 sampel penelitian, terdiri dari 12 laki-laki (21,8%), 43 perempuan (78,2%). Tiga puluh diantaranya berusia ≥ 60 tahun (55%) dan 25 lainnya < 60 tahun (45%). Nyeri yang paling sering adalah nyeri punggung bawah 30 pasien (55%). Nyeri non-neuropatik 12 pasien (22%), dan nyeri neuropatik 43 pasien (78%). Intensitas nyeri paling banyak tergolong berat, Visual Analog Scale (VAS) ≥8 (43%). Penyakit psikiatri tersering adalah gangguan tidur (20%), diikuti gangguan cemas disertai insomnia (16,3%) dan gangguan cemas (12,7%). Sebagian besar nyeri kronis disertai komorbiditas gangguan psikiatri, kondisi ini harus dipertimbangkan dalam evaluasi, diagnosis, dan terapi. Nyeri kronis sering disertai dengan gangguan psikiatri, sehingga harus dilakukan evaluasi, diagnosis, dan terapi yang menyeluruh untuk mencapai fungsi optimal dan kualitas hidup yang baik. Peneliti menyarankan untuk penelitian selanjutnya untuk mengumpulkan data dari beberapa rumah sakit dan melakukan penelitian analitik sehingga mampu menjelaskan hubungan antara faktor-faktor yang berpengaruh terhadap munculnya penyakit komorbiditas.
ABSTRACT

This study describes comorbid psychiatric disorders, especially in depressive disorder, anxiety disorder, and sleep disturbance in chronic neuromusculoskeletal pain patients. The aim of this study is to measure the prevalence of psychiatric comorbidity in chronic neuromusculoskeletal pain. Cross-sectional study with consecutive sampling method is used in this study. The data are collected in the neurology clinic at Atma Jaya Hospital, Jakarta between July – December 2015. Diagnostic and Statistical Manual of Mental Disorder (DSM) V criteria was used to diagnose the psychiatric condition. The data were obtained from 55 study samples, consisting of 12 males (21.8%), 43 females (78.2%). Thirty of them are ≥ 60 years old (55%) and 25 are < 60 years old (45%). The most common is low back pain (55%). Non-neuropathic pain 12 patients (22%), and neuropathic pain 43 patients (78%). The most common pain intensity is severe, Visual Analog Scale (VAS) ≥ 8 (43%). The most common psychiatric disorder is insomnia (20%), followed by anxiety and insomnia (16.3%), and anxiety (12.7%).

Majority of chronic pain has psychiatric disorder comorbidity, coexisting condition should be considered in evaluation, diagnosis, and therapy. Chronic pain usually accompanied by psychiatric disorder, so thorough evaluation, diagnosis and therapy have to be fully addressed to achieve optimum functionality and good quality of life. Next study should collect samples from some hospitals and design the analytic study that can explain association between factors that can influence the comorbidity.

INTRODUCTION

The term comorbidity refers to the coexistence of an index disease with another clinical entity (Fishbain et al., 1998). Comorbidity is important for some reasons. First, the presence of comorbid disease with the index can interfere, complicate or worsen the treatment. Second, in medical research especially in statistics, failure to classify and analyze the comorbid disease may mislead the medical statistics and may cause spurious comparisons between planning and evaluation of patient treatment. In this study we will assess the comorbidity of psychiatric disorder in chronic pain.

The triad of chronic pain, sleep disturbance, depression/anxiety must be fully addressed in treating chronic pain for optimum result. It will be difficult to restore patient optimum functionality if we ignored this triad (Nicholson and Verma, 2004).

It was believed that patient can control their sensitivity of pain. Who believed they can resist the pain can do daily activity and mediate adaptation with their pain (Jensen et al., 1991).

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In Europe, chronic pain with moderate to severe pain intensity occurs in 19% adult population, seriously affect their daily activity and quality of life (Breivik et al., 2006). In America, patient with major depressive disorder (MMD) have higher proportion of chronic pain than those without MMD (66% versus 43%) (Arnow et al., 2006). In Indonesia, study of psychiatric disorder comorbidity (depressed mood, anxiety, and sleep disturbance) in chronic neuromusculoskeletal pain never been studied. Meanwhile, the statistic prevalence of chronic pain remain high. Multicenter study in Indonesia found that there is 25% visite of chronic pain in that month (Meliala, 2003). Based on previous survey, there is 55% visite of pain disorder in Neurology outpatient clinic of Atma Jaya Hospital in 2014. For this concern, the researchers curious to find another impact of chronic pain in patient psychological function. The aim of this study is to measure the prevalence of psychiatric comoridity in chronic neuromusculoskeletal pain.

**METHODS**

The method of this study is cross sectional with consecutive sampling. The samples were collected in the outpatient neurology clinic setting in Atma Jaya Hospital, Jakarta between July – December 2015. Every patient was collected based on chief complain of chronic pain more than 12 weeks. The neuromusculoskeletal pains include cervical pain, shoulder or back pain, extremity pain and etc. (diabetic neuropathy, central post stroke pain, fibromyalgia, trigeminal neuralgia). Headache is excluded in this study. Visual Analoge Scale (VAS) is used to assess pain severity. Mild pain (1-4), moderate pain (5-7), severe pain (≥ 8) (Boonstra et al., 2014; Hawker et al., 2011). Psychiatric disorder comorbidity include depressive mood, anxiety disorder, and sleep disturbance which meet the criteria of DSM V.

Inclusion criteria in this study :
1. Patient who come to visite outpatient neurology clinic in Atma Jaya Hospital with the chief complain of chronic pain
2. Patient with chronic neuromusculoskeletal pain more than 12 weeks.

Exclusion criteria in this study :
1. Patient who have psychiatric disorder before chronic neuromusculoskeletal pain occur.

The data are shown in table and pie diagram and processed using SPSS 17.0 program.

**RESULTS**

Table 1. Percentage of Psychiatric Disorder Comorbidity

<table>
<thead>
<tr>
<th>Psychiatric Disorder Comorbidity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>3</td>
<td>5,4%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>7</td>
<td>12,7%</td>
</tr>
<tr>
<td>Insomnia</td>
<td>11</td>
<td>20%</td>
</tr>
<tr>
<td>Depression and Anxiety</td>
<td>2</td>
<td>3,6%</td>
</tr>
<tr>
<td>Depression and Insomnia</td>
<td>1</td>
<td>1,8%</td>
</tr>
<tr>
<td>Anxiety and Insomnia</td>
<td>9</td>
<td>16,3%</td>
</tr>
<tr>
<td>Depression, Anxiety and Insomnia</td>
<td>5</td>
<td>9%</td>
</tr>
<tr>
<td>No Psychiatric Disorder Comorbidity</td>
<td>17</td>
<td>30,9%</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100%</td>
</tr>
</tbody>
</table>
The data were obtained from 55 study samples, consisting of 12 males (21.8%), 43 females (78.2%). Thirty of them are ≥ 60 years old (55%) and 25 are < 60 years old (45%). The most common is low back pain 30 patients (55%). Non-neuropathic pain 12 patients (21.8%), and neuropathic pain 43 patients (78.2%). The most common pain intensity is severe, VAS ≥8 (43%). The most common psychiatric disorder is insomnia (20%), followed by anxiety and insomnia (16.3%), and anxiety (12.7%).

The results of this study show that patient <60 years old suffer chronic neuromusculoskeletal pain more than patient ≥60 years old. The most common chronic neuromusculoskeletal pain is low back pain. This result agree with previous study that the most common pain in general population is low back pain (Tsang et al., 2008). This chronic pain has close association with psychiatric disorder especially anxiety and depression (Bair et al., 2008; Dieleman et al., 2008; Tsang et al., 2008). along with sleep disorder as this study shown (Mulla et al., 2014). So, in daily practice in outpatient clinic, chronic pain must be assessed further, whether the patient has psychiatric disorders and consult a psychiatrist if needed.

Results of this study show that the most common psychiatric comorbidity in chronic neuromusculoskeletal pain is sleep disorder (20%). This result is different with previous study in Germany which is the most common psychiatric comorbidity is depression (Gerrits et al., 2012).

One of the most common neuromusculoskeletal pain is fibromyalgia. The etiology is still idiopathic and affecting more female than male. Mood disorder and anxiety disorder can worsen this condition. Previous fibromyalgia clinical trials have included clinical assessments to identify psychiatric disorder and determine the impact of comorbidity on treatment responses. The results are decrease pain severity using antidepressant and SSRI. Other treatment on anxiety and sleep disorder associated with chronic pain is anticonvulsants (ex. Pregabalin and
Gabapentin) that decrease pain severity, increase slow-wave sleep and have some anxiolytics effects (Arnold, 2006).

Some of drugs that used in this study are anticonvulsants (ex. Pregabalin and Gabapentin, 52.5%) and tricyclic antidepressant (TCA) (ex. Amitriptilin, 7.5%). These drugs also have therapeutic effect on depression, anxiety and sleep disorder (Boyle et al., 2012). Bolyle reported in their randomized controlled trial, 83 patient with diabetic neuropathy shown sleep continuity improvement with pregabalin (p<0.001), and increased wake and reduced total sleep time with duloxetine (p<0.01 and p<0.001). Despite negative effects on sleep, duloxetine can stimulate central nervous system and increase sensory-motor ability.

One of the fundamental question “Is there any diffrence in psychiatric disorder prevalence rate in non-neuropathic pain and neuropathic pain?”. Short answer is yes, there is! Researchers (Ohayon and Stingl, 2012), reported in 3011 patients shown that patients with neuropathic pain have higher pain severity and limitation in daily activity compare to non-neuropathic pain. Patients with mayor depression disorder have 3 times risk higher to have non-neuropathic pain and 6 times higher in having neuropathic pain.

Another question is “Is chronic pain has another pain and psychiatric comorbidity ?”. The answers is yes. Researchers (Gore et al., 2012) studied in 101,294 patients with chronic low back pain had a greater comorbidity burden (p<0.0001) of musculoskeletal and neuropatic pain conditions and psychiatric condition depression, anxiety and sleep disorder significantly higher compare to control group (13% vs 6.1%; 8% vs 3.4%; 10% vs 3.4% respectively). Others psychiatric comorbidity are affective disorders, substance-related disorders, and personality disorders (Fishbain et al., 1998).

The differences in prevalence rate and comorbidity in non-neuropathic pain and neuropathic pain show how important this condition to be concerned along with vary modalities used in pain assessment.

This study has superiority which is the samples of this study quite many that collected only in one hospital in 6 months duration, and this study can describe the most psychiatric disorder that occur in chronic neuromusculoskeletal pain patients. Beside, this study has some inferiority which are this study is descriptive that can not explain association between factors that can influence the comorbidity and samples collection only from one hospital.

Researchers suggested that for the next study to collect samples from some hospital and the study design is analytic that can explain association between factors than can influence the comoridity.

**CONCLUSIONS**

Very high prevalence of chronic pain needs concern about comorbid disorders. Chronic pain usually accompanied by psychiatric disorder, so thorough evaluation, diagnosis and therapy have to be fully addressed to achieve optimum functionality and good quality of life.
REFERENCES


