Introduction

• Chronic pain and depression can impact quality of life and adherence to treatment regimen among patients with end-stage renal disease (ESRD).  
• Previous research has demonstrated that patients with ESRD experience pain and depression more frequently than the general population.  
• From 2016, CMS has required that all eligible ESRD patients are evaluated regularly for pain and depressive symptoms.  

Objective

The objective of this study was to assess pain and depression among patients with end-stage renal disease (ESRD).  

Methods

• We assessed pain and depression symptom scores among patients of an LDO over the period 01 March - 31 October 2016.  
• Pain is assessed monthly by LDO nurses using the Wong-Baker pain scale that asks patients to rate their pain from 0-10. – Pain medication use is assessed in a follow-up survey administered to patients responding with pain scores > 0.  
• Depression screenings are conducted biannually by LDO social workers using the PHQ-2 scale.  
• Patients are asked to rate from 0-3 how often they have felt depressed in the past 2 weeks (Table 1). – Patients were asked to rate from 0-3 how often they have felt depressed in the past 2 weeks (Table 1). – The PHQ-2 consists of two questions about depression.  
• In order to monitor and provide support for depressed patients, the LDO depression screen program is being revised such that: – Patients with an existing diagnosis of depression will no longer be excluded from PHQ-2 screening.  
• Patients with a positive total depression score (≥ 3) will have a follow-up screen with the more comprehensive PHQ-9 questionnaire.

Results

• A total of 688,346 pain responses from 160,626 individual patients were considered.  
• A score of 5 (no pain) was reported for 82.8% of pain responses and 65.7% of patients had a 0 score in all pain assessments (Figure 1).  
• A score of 10 (most severe pain) was reported at least once during the study period by 3.3% of patients (Figure 1).  
• Patients with a pain score of 10 were more frequently: – Female vs male – Using ICHD or HD vs PD – Ages 40-69  
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• A total of 223,421 depression screening responses from 158,172 patients were considered.  
• These excluded 5829 patients who already had an active diagnosis of depression.  
• A depression score of 0 was reported for 69.1% of all responses and 62.6% of patients had a 0 score in all assessments (Figure 2).  
• 1.8% of patients had at least one score of 6 (patient responded 3 to both questions; Figure 2).  
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• 9.7% had at least one score of 3 or more (Figure 2).  
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• 9.7% had at least one score of 3 or more (Figure 2).  

Objective

The objective of this study was to assess pain and depression symptom scores among patients at a large dialysis organization (LDO).

Table 1. Patients Characteristics by Pain Score

<table>
<thead>
<tr>
<th>Pain Score</th>
<th>Gender</th>
<th>Age, years</th>
<th>PD</th>
<th>ICHD</th>
<th>HHD</th>
<th>10% Pain</th>
<th>10-12</th>
<th>13-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>Male</td>
<td>40-49</td>
<td>69.4%</td>
<td>94%</td>
<td>5%</td>
<td>12.2%</td>
<td>4.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>0-2</td>
<td>Female</td>
<td>40-49</td>
<td>68.4%</td>
<td>94%</td>
<td>5%</td>
<td>12.2%</td>
<td>4.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>3-5</td>
<td>Male</td>
<td>40-49</td>
<td>79.4%</td>
<td>94%</td>
<td>5%</td>
<td>12.2%</td>
<td>4.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>3-5</td>
<td>Female</td>
<td>40-49</td>
<td>78.4%</td>
<td>94%</td>
<td>5%</td>
<td>12.2%</td>
<td>4.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>6-10</td>
<td>Male</td>
<td>40-49</td>
<td>83.4%</td>
<td>94%</td>
<td>5%</td>
<td>12.2%</td>
<td>4.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>6-10</td>
<td>Female</td>
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<td>5%</td>
<td>12.2%</td>
<td>4.3%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Table 2. Patient Total Depression Score by Gender

| Gender | Total Depression Score | n (%)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0 77.6% (95.5)</td>
<td>13.9%</td>
</tr>
<tr>
<td>Female</td>
<td>0 86% (95)</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

Conclusions

• The majority of ESRD patients did not report pain symptoms. 
• Among those not excluded from screening due to an existing diagnosis or other reason, the majority did not report symptoms of depression.  
• Routine assessment of pain and depression enables the timely identification of new or increased symptoms, thus allowing earlier implementation of interventions that may improve patient experience.  
• In order to monitor and provide support for depressed patients, the LDO depression screen program is being revised such that: – Patients with an existing diagnosis of depression will no longer be excluded from PHQ-2 screening.  
• Patients with a positive total depression score (≥ 3) will have a follow-up screen with the more comprehensive PHQ-9 questionnaire.

References


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*Correspondence: Kathryn.AebelGroesch@davita.com  
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