The Effect of Benson’s Relaxation on Depression, Anxiety, and Stress in Patients undergoing Hemodialysis: A Review

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INTRODUCTION

Maintenance hemodialysis has associated with psychological problem

Depression, anxiety and stress among hemodialysis patient

Mental Health Problem in hemodialysis patients remains under-recognized and under-treated

Many types of non-pharmacology treatment

The effect of Benson’s relaxation on depression, anxiety, stress is still debatable

Benson’s relaxation
PURPOSE

- To summarize the effectiveness of Benson’s relaxation on depression, anxiety, and stress in patients undergoing hemodialysis.
METHOD

- Search literature through online search engines, mainly PubMed, Medline, Google Scholar, ProQuest and a mainstream Google search, as well as reference list of relevant articles
METHOD

The search keyword related to:

- Benson’s relaxation, Benson’s relaxation among hemodialysis patients, Benson’s relaxation and depression, Benson’s relaxation and stress, Benson’s relaxation and anxiety as well as similar combination of these terms
METHOD

Inclusion Criteria

- Full text available
- English Language
- Published from 2010 until 2018
- Randomized control trial design
- Having the control group
- Human participants
- Have the same outcome
- Have the same intervention
- Abstract and case report were not considered
**METHOD**

**Database Search and Manual**
- Articles retrieved 1857
- Screening for inclusion/exclusion (n=46)
- 17 articles were selected for detailed review
- 10 peer review studies included

**Recorded excluded based on title**
- (n = 1811)

**Records excluded based on abstract and Full-text (n = 29)**
- Full-text article excluded
  - Not having control group (n=3)
  - Not related outcomes (n=5)
<table>
<thead>
<tr>
<th>Author, Year</th>
<th>Country</th>
<th>Number of Participants (I/C)</th>
<th>Intervention Group</th>
<th>Duration of Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Heshmatifar, Sadeghi, Mahdavi, Shegarf Nakhaie, &amp; Rakhshani, 2015)</td>
<td>Iran</td>
<td>65 (33/32)</td>
<td>Twice a day (morning and evening) for 20 minutes</td>
<td>4 weeks</td>
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<tr>
<td>(Rambod, Sharif, Pourali-Mohammadi, Pasyar, &amp; Rafii, 2014)</td>
<td>Shiraz, India</td>
<td>81 (41/40)</td>
<td>Twice a day (morning and evening) for 20 minutes</td>
<td>4 weeks</td>
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<tr>
<td>(Kiani, Zadeh, &amp; Shahrakipour, 2017)</td>
<td>Zahedan, India</td>
<td>102 (51/51)</td>
<td>Twice a day (morning and evening) for 15 to 20 minutes</td>
<td>4 weeks</td>
</tr>
<tr>
<td>(Gorji, Davanloo, &amp; Heidarigorji, 2014)</td>
<td>Mazandaran, Iran</td>
<td>80 (40/40)</td>
<td>Twice a day (morning and evening) for 20 minutes</td>
<td>4 weeks</td>
</tr>
<tr>
<td>(Feyzi, Khaledi, Hadadian, Rezaei, &amp; Ahmadi, 2015)</td>
<td>Kermansha, Iran</td>
<td>60 (30/30)</td>
<td>One time a day for 15-20 minutes</td>
<td>8 weeks/ 2 months</td>
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<tr>
<td>(Otaghi, Borji, Bastami, &amp; Solymanian, 2016)</td>
<td>Ilam, Iran</td>
<td>70 (35/35)</td>
<td>Twice a day (morning and evening) for 15 minutes</td>
<td>8 weeks/ 2 months</td>
</tr>
<tr>
<td>(Mahdavi, Gorji, Gorji, Yazdani, &amp; Ardebil, 2013)</td>
<td>Mazandaran, Iran</td>
<td>80 (40/40)</td>
<td>Twice a day (morning and evening) for 20 minutes</td>
<td>4 weeks</td>
</tr>
<tr>
<td>(Kurniasari, Kustanti, &amp; Harmilah, 2016)</td>
<td>Yogyakarta, Indonesia</td>
<td>30 (14/16)</td>
<td>Twice a day (morning and evening)</td>
<td>2 weeks</td>
</tr>
<tr>
<td>(Tsai et al., 2015)</td>
<td>Taiwan</td>
<td>64 (32/32)</td>
<td>One time for 20 minutes, 2 times weekly</td>
<td>4 weeks</td>
</tr>
<tr>
<td>(G. Maheswari &amp; Sam, 2014)</td>
<td>Erode, India</td>
<td>30 (15/15)</td>
<td>One time a day for 30 minutes, 3 times a week</td>
<td>3 weeks</td>
</tr>
</tbody>
</table>
RISK OF BIAS ASSESSMENT

- Researcher evaluated the risk of bias using the CEBM critical appraisal worksheet for Randomized Control Trial Design
RESULT

**Study Characteristic**
- Participant's age above 18 years old men and women
- End-stage renal disease receiving hemodialysis for more than 3 months

**Benson’s Relaxation Intervention**
- 1-2 times a day
- Each session was between 15 to 20 minutes
- During hemodialysis days or on a non-dialysis days
RESULT

✓ All the articles demonstrated that Benson’s relaxation had significant effect on reducing depression, anxiety and stress.

✓ There were no differences between experimental and control groups in depression, anxiety and stress rate at the beginning of the study, but there was significant difference after intervention.

✓ Two articles used Beck Depression Inventory (BDI), three articles used DASS 21, two articles used Spielburger State Anxiety Inventory (STAI-S), and one article used Analog Anxiety Scale, one article used QLI, and one article used Kidney Disease Quality of Life Short Form (KDQOLSF).
DISCUSSION

1) Benson’s relaxation training can train the body by regulating the breathing rhythm properly and correctly so that concentration of mind and appreciation will further speed healing and eliminate anxiety, stress, depression or maintain and improve health.

2) Benson’s relaxation has positive effect for reducing depression, anxiety and stress in hemodialysis patients.

3) Further research in this area specifically to explore the long-term feasibility, appropriate relaxation frequency, and relaxation effective duration for hemodialysis patients are needed.
IMPLICATION IN PRACTICAL

- This review is expected to add the information to health professional about the benefits of Benson’s relaxation on depression, anxiety, and stress in patients undergoing hemodialysis.

- It will be better to apply the Benson’s relaxation in these patients but should be accompanied and monitored by a health professional who knows about the Benson’s relaxation techniques properly.
REFERENCES


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- King-Wing Ma, T., & Kam-Tao Li, P. (2016). Depression in dialysis patients. *Nephrology, 21*(8), 639-646. doi:https://doi.org/10.1111/nep.12742
REFERENCES

• King-Wing Ma, T., & Kam-Tao Li, P. (2016). Depression in dialysis patients. Nephrology, 21(8), 639-646. doi:https://doi.org/10.1111/nep.12742
THANK YOU