

VRAAG 5G: Depression

Systematic reviews

Study ID	Method	Patient characteristics	Intervention(s)	Results	Critical appraisal of review quality
Nagler 2012	<ul style="list-style-type: none"> • SR • Funding/Col: None declared • Search date: December 2011 • Databases: Cochrane Renal Group Specialised Register, CENTRAL, MEDLINE, EMBASE, PsychINFO, International Pharmaceutical Abstracts, Clinical trial registries • Study designs: RCTs and observational studies • N included studies: 28 	<ul style="list-style-type: none"> • Eligibility criteria: Adults or children with chronic kidney disease stages 3-5 	Antidepressant drug treatment	<p><u>Depression</u>: CRITICAL OUTCOME no MA-results</p> <p><u>Quality of life</u>: IMPORTANT OUTCOME no MA-results</p>	<ul style="list-style-type: none"> • Moderate quality: only one reviewer, inclusions and exclusions not transparent • Included RCTs: Pervin (2006), Blumenfield (1997)
Rabindranath 2005a	<ul style="list-style-type: none"> • SR • Funding/Col: Funded by National Kidney Fund (UK) • Search date: March 2006 • Databases: Medline, Embase, Psychinfo, The Cochrane Library • Study designs: RCTs • N included studies: 1 	<ul style="list-style-type: none"> • Eligibility criteria: Patients with ESRD on chronic dialysis and older than 18 years • Patient characteristics: <ul style="list-style-type: none"> ◦ Age range: 18-70 years 	Antidepressants vs. placebo or no treatment or a comparison of drugs	<p><u>Depression</u>: CRITICAL OUTCOME no MA-results</p> <p><u>Quality of life</u>: IMPORTANT OUTCOME no MA-results</p>	<ul style="list-style-type: none"> • High quality • Included RCTs: Blumenfield (1997)

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Rabindranath 2005b	<ul style="list-style-type: none"> SR Funding/Col: funded by the National Kidney Research Fund Search date: October 2003 Databases: Medline, Embase, PsycInfo, The Cochrane Library Study designs: RCTs N included studies: 0 	<ul style="list-style-type: none"> Eligibility criteria: patients who are dialysed for ESRD older than 18 years diagnosed with depression 	Psychosocial interventions vs. control or no intervention	<u>Depression</u> : CRITICAL OUTCOME no MA-results <u>Quality of life</u> : IMPORTANT OUTCOME no MA-results	<ul style="list-style-type: none"> High quality Included RCTs: -

Primaire studies

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Cukor 2014	<ul style="list-style-type: none"> Design: Randomized crossover trial Funding/Col: Supported by National Institute of Health (K23DK076980) /none Setting: 2 dialysis units in Brooklyn, USA Sample size: N=65 Duration: 6 months 	<ul style="list-style-type: none"> Eligibility criteria: Haemodialysis patients with ESRD and with elevated depressive affect <i>A priori</i> patient characteristics: intervention vs. control <ul style="list-style-type: none"> Male 27% Mean dialysis treatment: 50 months 	Cognitive behavioural therapy first (n=33) vs. Wait-list control first (n=26)	<u>Depression</u> : CRITICAL OUTCOME BDI-II: Treatment first: baseline 24.7 (9.8), after treatment 11.7 (9.8), after 2 nd phase 9.9 (8.5) Wait-list first: baseline 21.9 (8.9), after wait-list 14.5 (8.5), after treatment 9.1 (6.5) Model-estimated mean change score during treatment: treatment first -11.7 (SD 1.5; p<0.001), wait-list first -4.8 (SD 1.4; p<0.001) Model-estimated mean change score during wait-list: untreated group -6.7 (1.7; p<0.001) HAM-D: Treatment first: baseline 15.7 (6.8), after treatment 6.5 (6.8), after 2 nd phase 6.7 (5.8) Wait-list first: baseline 12.9 (5.3), after wait-list 10.9 (5.4), after treatment 5.0 (4.3) Model-estimated mean change score during treatment: treatment first -9.1 (SD 1.1; p<0.001), wait-list first -5.9 (SD 1.1; p<0.001) Model-estimated mean change score during wait-list: untreated group -1.9 (1.2; p<0.17) SCID: Treatment first: baseline 54, after treatment 5, after 2 nd phase 10 Wait-list first: baseline 33, after wait-list 31, after treatment 4 <u>Quality of life</u> : IMPORTANT OUTCOME	Level of evidence: high risk of bias <ul style="list-style-type: none"> Randomization method and allocation concealment not described Patients not blinded, but blinded assessors 6 drop-outs, no ITT analysis

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				KDQOL: Treatment first: Baseline: 99.5 (27.9) Treatment: 115.3 (25.5) Follow-up: 118.3 (27.7) Wait-list: Baseline: 105.1 (23.7) Wait-list: 110.6 (25.1) Delay: 119.7 (24.7) Pooled estimated treatment effect: 11.7 (2.0)	
Duarte 2009	<ul style="list-style-type: none"> Design: Randomized clinical trial Funding/Col: project supported by Fundacao de Amparo a Pesquisa do Estado de Sao Paulo (04/08710-8)./ authors declare no competing interests Setting: 2 dialysis units in Brasil Sample size: N=85 Duration: 9 months 	<ul style="list-style-type: none"> Eligibility criteria: Patients with ESRD receiving outpatient hemodialysis treatment <i>A priori</i> patient characteristics: intervention vs. control <ul style="list-style-type: none"> Age mean: 53 years Male 41% Diabetes 34% 	Cognitive-behavioural group therapy (n=41) vs. Control (n=44)	<u>Depression</u> : CRITICAL OUTCOME BDI Cognitive Subscale Intervention: Baseline : 13.7±7.1 After 3 mths: 7.1±5.9 After 9 mths: 6.3±7.1 Control: Baseline : 16.7±7.9 After 3 mths: 12.1±6.4 After 9 mths: 10.8±7.1 (intervention vs. control at 3 months: p<0.001) BDI Somatic Subscale Intervention: Baseline : 10.6±4.0 After 3 mths: 7.0±3.8 After 9 mths: 6.1±3.2 Control: Baseline : 10.6±4.1 After 3 mths: 9.1±3.8 After 9 mths: 9.5±3.9 (intervention vs. control at 3 months: p=0.012) BDI total Intervention: Baseline : 24.2±9.7 After 3 mths: 14.1±8.7 After 9 mths: 10.8±8.8 Control: Baseline : 27.3±10.7 After 3 mths: 21.2±9.1 After 9 mths: 17.6±11.2 (intervention vs. control at 3 months: p=0.001)	Level of evidence: high risk of bias <ul style="list-style-type: none"> Central randomization Patients not blinded, but blinded assessors No ITT analysis

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				<p>Major depression module MINI: Intervention: Baseline : 6.4±1.3 After 3 mths: 1.9±2.8 After 9 mths: 2.0±3.1</p> <p>Control: Baseline : 6.4±1.2 After 3 mths: 4.3±2.9 After 9 mths: 3.5±2.9 (intervention vs. control at 3 months: p<0.001)</p> <p>Suicide Risk module MINI: Intervention: Baseline : 2.2±5.1 After 3 mths: 1.2±4.2 After 9 mths: 0.6±1.2</p> <p>Control: Baseline : 1.4±3.5 After 3 mths: 0.7±1.9 After 9 mths: 0.6±2.0 (intervention vs. control at 3 months: p=0.433)</p> <p><u>Quality of life: IMPORTANT OUTCOME</u> Burden of kidney disease: Intervention: Baseline : 28.7±22.4 After 3 mths: 43.6±27.1 After 9 mths: 43.2±28.8</p> <p>Control: Baseline : 22.9±22.8 After 3 mths: 27.0±27.3 After 9 mths: 27.3±26.8 (intervention vs. control at 3 months: p=0.004)</p> <p>Cognitive function: Intervention: Baseline : 64.4±23.0 After 3 mths: 77.2±25.1 After 9 mths: 81.1±20.5</p> <p>Control: Baseline : 69.1±24.7 After 3 mths: 71.4±26.3 After 9 mths: 76.0±23.8 (intervention vs. control at 3 months: p=0.261)</p>	

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				<p>Quality of social interaction: Intervention: Baseline : 65.2±23.3 After 3 mths: 81.1±19.3 After 9 mths: 81.7±18.7</p> <p>Control: Baseline : 70.0±22.2 After 3 mths: 66.5±22.3 After 9 mths: 71.2±24.4 (intervention vs. control at 3 months: p=0.002)</p> <p>Sleep: Intervention: Baseline : 58.1±21.5 After 3 mths: 67.6±23.0 After 9 mths: 73.1±19.1</p> <p>Control: Baseline : 58.4±18.7 After 3 mths: 58.4±17.8 After 9 mths: 62.8±19.3 (intervention vs. control at 3 months: p=0.034)</p> <p>Mental component summary: Intervention: Baseline : 37.4±11.6 After 3 mths: 47.3±12.1 After 9 mths: 46.3±12.3</p> <p>Control: Baseline : 41.1±11.2 After 3 mths: 39.3±11.9 After 9 mths: 38.6±11.7 (intervention vs. control at 3 months: p=0.002)</p>	
Hosseini 2012	<ul style="list-style-type: none"> Design: Randomized controlled trial Funding/Col: supported by grant from Mazandaran University of Medical Sciences / none declared Setting: Imam Khomeini Hospital, Iran Sample size: N=44 Duration: 3 months 	<ul style="list-style-type: none"> Eligibility criteria: Hemodialysis patients with ESRD A priori patient characteristics: intervention vs. control <ul style="list-style-type: none"> Age mean: 50.5 years Male 42% 	Citalopram (n=22) vs. psychological training (n=22)	<p><u>Depression</u>: CRITICAL OUTCOME</p> <p>HADS Depression Psychol. Training: Pretest : 9.58 ± 3.47 Posttest : 7.33 ± 4.80</p> <p>Citalopram: Pretest : 9.42 ± 3.11 Posttest : 6.26 ± 4.18</p> <p><u>Quality of life</u>: IMPORTANT OUTCOME Not reported</p>	<p>Level of evidence: high risk of bias</p> <ul style="list-style-type: none"> Randomization method and allocation concealment not described No blinding No ITT analysis

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Erdley 2014	<ul style="list-style-type: none"> Design: Randomized controlled trial Funding/Col: without funding/ no Col Setting: Geisinger medical center, USA Sample size: N=36 Duration: 6 weeks 	<ul style="list-style-type: none"> Eligibility criteria: haemodialysis patients with age 60 or older <i>A priori</i> patient characteristics: intervention vs. control <ul style="list-style-type: none"> Age mean: 74 years Male 64% Diabetic 67% 	<p>Problem-solving therapy (n=15)</p> <p>vs.</p> <p>Usual care (n=18)</p>	<p><u>Depression</u>: CRITICAL OUTCOME</p> <p>BDI</p> <p>PS-therapy: Baseline: 15.7 (8.0) 6 weeks : 9.3 (3.1)</p> <p>Usual care : Baseline: 10.7 (6) 6 weeks : 11.3 (7.4) (PS-therapy vs. Usual care, p=0.6)</p> <p>PHQ-9</p> <p>PS-therapy: Baseline: 10.5 (4.9) 6 weeks : 3.3 (1.9)</p> <p>Usual care : Baseline: 6.1 (4.1) 6 weeks : 5.83 (4.2) (PS-therapy vs. Usual care, p=0.1)</p> <p><u>Quality of life</u>: IMPORTANT OUTCOME Not reported</p>	<p>Level of evidence: high risk of bias</p> <ul style="list-style-type: none"> Allocation concealment not described No blinding