BEST
in Mental Health
BEST.awp.nhs.uk

Best Evidence Summaries of Topics in Mental Healthcare

BEST *in* MH *clinical question-answering service*

Question

In adults with mental health and financial problems, how effective are interventions for mental health problems, compared to any other or no intervention, in improving patient outcomes?

Clarification of question using *PICO* structure

Patients: Adults with mental health and financial problems
Intervention: Interventions for mental health problems
Comparator: Any other or no intervention
Outcome: Improving patient outcomes

Plain language summary

Limited research evidence suggests that some mental health interventions such as CBT, psychotherapy and antidepressants can be beneficial in improving symptoms of depression in adults with mental health and financial problems. More research into interventions for people with mental health conditions and financial problems in the UK is needed.

Clinical and research implications

Evidence from four, mixed quality trials found that individual psychotherapy, group CBT with or without clinical case management, and antidepressant medication can reduce symptoms of depression and improve social functioning in low income adults with depression. All the research was conducted in the USA in low income populations and may not be generalisable to the UK as some results applied to specific populations such as those with Spanish as their first language. In addition it was in lower income populations who may not have had financial problems associated with low income.

Further research is needed to address the reluctance of low income, minority populations to access mental health services. Engaging low income, minority women in services through trusted care providers could prove to be beneficial. More research into interventions for people with mental health conditions and financial problems in the UK is needed.

What does the evidence say?

Number of included studies/reviews (number of participants)

Four randomised controlled trials (RCTs) were included with a total of 666 participants, all were conducted in the USA. Two RCTs were in women, one compared individual psychotherapy with usual treatment as offered in the community in 128 women with a young infant and a major depressive disorder, living at or below the poverty line (Toth). The other trial compared antidepressants (paroxetine or buproprion) and CBT to referral to community care in 267 low income women with current major depression (Miranda (1)).

Two trials evaluated CBT with case management. One trial was of 72 low-income adults aged 60 years or older with major depression or dysthymia, and compared group CBT with clinical case management to CBT or case management alone (Arean). The other trial compared CBT with case management to CBT alone in 199 low-income adults with a diagnosis of major depression attending a hospital depression clinic (Miranda (2)).

Main findings

In low income women with depression, individual psychotherapy significantly reduced depressive symptoms over at least 8 months compared to treatment as usual in mothers with young infants (Toth). Another trial of young, low income women found that both antidepressants and CBT significantly reduced depression over 6 months compared to referral to community care. There was no statistically significant difference between medication and CBT in depression symptoms. Antidepressant medication significantly improved role functioning and social functioning compared with community referral, and CBT significantly improved social functioning compared with community referral (Miranda (1)).

In older low income adults, CBT combined with case management significantly reduced depression at 12 months compared with CBT alone, but not in comparison to case management alone. However, these benefits were not seen at the earlier time of 6 months when there were no significant differences in depression between the three treatment groups (Arean). The final trial reported results separately for participants who were English (n = 122) or Spanish-speaking (n = 77),

attending a hospital depression clinic (Miranda (2)). The groups were not well-balanced at baseline as the CBT with case management group had significantly higher levels of depression and lower functioning than the CBT only group, which does not appear to have been accounted for in the analysis. CBT with case management appeared to be more effective in Spanish-speaking participants with significantly greater improvements in depression symptoms and social functioning compared with CBT alone. There were no significant differences between treatments in depression or social functioning in the English-speaking population.

Authors' conclusions

In young women: Toth concluded that interpersonal psychotherapy was effective for decreasing depression in low-income, racially diverse young women with young children. These effects were maintained at 8 months after treatment and perceived support and stress were significant mediators of the reduction in depression. Miranda (1) concluded that care for major depression including medications and psychotherapy following recommended guidelines, are superior to community referral for low socioeconomic status young women.

Arean concluded that disadvantaged older adults with depression may benefit from increased access to social services, alone or with psychotherapy.

Miranda (2) concluded that adding clinical case management to group CBT was effective in reducing depression symptoms and improving functioning in Spanish-speaking impoverished outpatients with depression, but was less effective in those whose first language was English.

Reliability of conclusions/Strength of evidence

The largest RCT (n = 267 women) was also the highest quality trial, the only limitation was the lack of blinding of the participants but as the women would have been aware of whether they were receiving medication, CBT or community care referral this was not possible (Miranda (1)). The other trial in women was of moderate quality as the participants were also not blinded, it was not clear if all the women were included in the analysis and not all the outcome measures were fully reported (Toth). Both other trials were low quality, again the participants were not blinded but in addition the methods of randomisation and allocation concealment were unclear, in one not all participants were included in the analysis (Arean) and in the other trial the results were not very clearly reported (Miranda (2)).

Overall there appears to be a moderate amount of mixed quality evidence that individual psychotherapy, group CBT with or without clinical case management, and antidepressant medication can reduce symptoms of depression and improve social functioning in low income adults with depression.

What do guidelines say?

NICE guidelines do not make recommendations for adults with mental health problems and financial problems.

Date question received: 06/05/2016

4

Date searches conducted: 10/05/2016
Date answer completed: 19/07/2016

References

Randomised controlled trials

Toth, S. L., Rogosch, F. A., Oshri, A., Gravener-Davis, J., Sturm, R., & Morgan-López, A. A. (2013). The efficacy of interpersonal psychotherapy for depression among economically disadvantaged mothers. *Development and psychopathology*, *25*(4pt1), 1065-1078.

Areán, P. A., Gum, A., McCulloch, C. E., Bostrom, A., Gallagher-Thompson, D., & Thompson, L. (2005). Treatment of depression in low-income older adults. *Psychology and Aging*, *20*(4), 601.

Miranda, J., Chung, J. Y., Green, B. L., Krupnick, J., Siddique, J., Revicki, D. A., & Belin, T. (2003). Treating depression in predominantly low-income young minority women: a randomized controlled trial. *Jama*, *290*(1), 57-65.

Miranda, J., Azocar, F., Organista, K. C., Dwyer, E., & Areane, P. (2003). Treatment of depression among impoverished primary care patients from ethnic minority groups. *Psychiatric services*.

Results

Randomised controlled trials

Author (year)	Inclusion criteria	Number of participants	Summary of results	Risk of bias
Toth et al. (2013) USA	**Participants**: Non-treatment seeking women from primary care clinics, with 12 month old infants, who were at or below the poverty line, had a major depressive disorder according to Diagnostic Interview Scale and scored ≥ 19 on the BDI-II. **Intervention**: Individual interpersonal psychotherapy (IP), treatment addressing symptoms associated with interpersonal aspects of depression. It was delivered according to a manual in weekly sessions lasting one hour, for 14 weeks **Comparator**: Treatment as usual as offered in the community. Women were not required to be in treatment unless they chose to. **Outcome**: Depressive symptoms (BDI-II, HRSD), other psychiatric conditions (DIS-IV), stress and trauma (PSS, CTQ), social support behaviours (SSB), social	N = 128 (n=99 IPT, n=29 control)	The two groups of women were similar at baseline, with an overall mean maternal age of 25.5 years, 2.5 children at home, mean baseline BDI-II score of 30.4, and a mean family income of around $18,000. Approximately 13% were married, 58% had a high school education, 59% were black and 84% reported some form of maltreatment during childhood. For the IPD group 60.6% of women were classed as treatment compliant (attended 12 or more sessions) and the rest were non-compliant (attended 3 or fewer sessions). The statistical analysis used methods designed to account for treatment compliance. In the control group 66.5% of the women received individual counselling or psychotherapy, 52.6% received medication, 42.1% attended support groups, 10.5% attended family counselling and 21.1% received day treatment. Women receiving IPT had significantly greater decreases in depression over time, measured by the BDI-II (Cohens d = -0.519, p = 0.005) and the HRSD-II	Moderate The methods of randomisation and allocation concealment were reported and appropriate. It was not possible to blind participants to treatment. Outcomes were assessed by trained interviewers who were unaware of group assignment. It was not clear if all randomised participants were included in the analysis

			(Cohens d = – 0.384, p = 0.038).	and some outcomes were not reported.
	adjustment (SAS-SR). Measured at baseline, 14 weeks (end of treatment) and 8 months post-treatment.			
Arean et al. (2005) USA	**Participants**: Adults aged 60 years or older with a household income less than or equal to $15,000, meeting the criteria for major depression or dysthymia according to DSM-IV and cognitively intact (score ≥ 24 on MMSE). **Intervention**: Cognitive behavioural group therapy (CBGT) with clinical case management (CCM). CGBT was given in groups for 6 months, weekly at first then monthly for 18 sessions in total. Case managers were available to participants for 6 months with treatment consisting of needs assessment followed by treatment planning and weekly sessions as required. **Comparator**: CCM alone or CBGT alone for 6 months. **Outcome**: Depressive symptoms (HDRS), physical and mental health functioning (SF-36. Measured at baseline, 6 and 12 months.	N=72 (n=25 CBGT+CCM, n=20 CBGT, n=27 CCM,)	67 out of the 72 (93%) randomised participants started treatment. The mean participant age was 65.3 years, 64.2% were female, 58.2% were white, 20.9% were black, 17.9% were married, 40.3% were divorced or separated and the mean baseline MMSE score was 28.2. Seventeen participants dropped out, mostly within the first 4 weeks, and were equally split between the three groups. After 12 months participants receiving both CBGT and CCM had significantly lower depression scores than CBGT alone (mean HDRS score 7.77 vs. 16.96, p = 0.01). However there were no significant differences between these two groups and CCM alone (mean 10.83), or between any of the three groups at 6 months. After 6 months CBGT with CCM (mean score 39.75) and CBGT participants (mean score 44.30) both had significantly greater improvements in physical functioning than the CCM group (mean score 36.27). At 12 months the CBGT group (mean score 43.29) had significantly greater improvements in physical functioning than either the CCM (mean score 38.90) or CCM with CBGT groups (mean score 37.96)	High No details were reported about the methods of randomisation and allocation concealment. The participants were not blinded to treatment as they would have been able to tell which group they were in. It was stated that the follow-up interviews were conducted by doctoral level graduate students who were unaware of treatment group. Not all participants were included in the analysis and it was

				unclear if it was by intention-to-treat. All outcomes were reported.
Miranda, Chung, Green et al. (2003) USA (1)	**Participants:** Women with current major depression and a low income who attended a Women, Infant and Children food subsidy programme or family planning clinic. **Intervention:** 1) Antidepressant medication, 10 to 50 mg paroxetine daily for 6 months, changed to buproprion if not tolerated or lack of response. 2) CBT: manual-guided CBT therapy for 8 weeks. **Comparator:** Referral to community care, including education about mental health treatments available in the community. **Outcome:** Depression symptoms (HDRS), instrumental role and social functioning (Social Adjustment Scale, SF-36). Measured at baseline, 3 and 6 months.	N=267 (n=88 medication, n=90 CBT, n=89 community referral)	The women were predominately poor with 60% at or below the federal guidelines for poverty. At baseline the mean age was 29.3 years, 46.4% were married or living with a partner, 43.8% were black, 50.2% were white, 18% were not working or disabled, and 49.2% had experienced domestic violence. In the medication group 20% of the women switched to buproprion; in the CBT group 53% received at least 4 sessions and 36% received at least 6 sessions of CBT; and in the community referral group participation rates were low with 83% failing to attend one session. Women receiving medication (mean HDRS score at 6 months 5.2) and CBT (mean HDRS score 7.2) both had significant decreases in depression over time compared with the community referral group (mean HDRS score 10.1). There was no significant difference in depression between medication and CBT. After 6 months role functioning was significantly	Low The methods of randomisation and allocation concealment were reported and appropriate. Due to the nature of the interventions it was not possible to blind the participants. It was reported that the telephone interviewers collecting outcome data were blinded to the random assignment All participants appear to have been included in the analysis and all

			improved with medication (mean 1.7) compared with community referral (mean 2.3) and also CBT (mean 2.2). Social functioning was also significantly improved with medication (mean 88.0) and CBT (mean 83.7) compared with community referral (mean 74.5).	outcomes were reported.
Miranda et al. (2003) USA (2)	**Participants**: Adults at a hospital depression clinic with a diagnosis of major depression and who were not abusing alcohol or drugs. **Intervention**: Group CBT, a manual-guided intervention for 8 weeks. **Comparator**: CBT and case management (CM). This involved working with a case manager focussing and setting goals on problematic housing, employment, recreation, relationships and work. The case management was flexible and took place over 6 months. **Outcome**: Depression symptoms (BDI) and social adjustment (SAS). Measured at baseline and 4 and 6 months after the initial group treatment session. Outcomes were reported separately for people with Spanish or English as their first language.	N=199 (n=103 CBT (61 English and 42 Spanish), n=96 CBT and CM (61 English and 35 Spanish))	Eighty percent of the Spanish-speaking participants and 58% of the English-speaking participants were female, the overall mean age was 49 years, mean annual incomes ranged from $5,600 to $8,100, 45% had poor health, 32% had current anxiety and most had suffered from depression for at least 15 years. At baseline the participants had high levels of depression and poor functioning, the CBT and CM group had significantly higher BDI scores (p = 0.01) and lower functioning (p = 0.04) than those receiving CBT alone.

Drop-out rates were not significantly different between English and Spanish-speaking participants. For CBT, 40% of Spanish and 44% of English participants dropped out. For CBT and CM, 17% of Spanish and 28% of English participants dropped out.

CBT and CM management showed significantly greater improvements in depression symptoms (p = | High

The methods of randomisation and allocation concealment were not reported.

Due to the nature of the interventions it was not possible to blind the participants and it was not reported if the outcome assessment was blinded.

All participants were included in intention-to-treat analyses.

Not all outcomes were fully reported, as |

| | | | 0.04 for treatment by language interaction) compared to CBT alone in Spanish-speaking participants, but there was no statistically difference between treatments in English-speaking participants. Spanish-speaking participants also had a significantly greater improvement in social functioning with CBT and CM compared to CBT alone (p = 0.03 for treatment by language interaction) but there was no significant difference for English-speaking participants. | corresponding standard deviations or 95% CI were not provided. |

Risk of bias

Randomised controlled trials

Study	RISK OF BIAS					
	Random allocation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective Reporting
Toth et al. (2013)	☺	☺	☹	☺	?	☹
Arean et al. (2005)	?	?	☹	☺	☹	☺
Miranda et al. (2003) (1)	☺	☺	☹	☺	☺	☺
Miranda et al. (2003) (2)	?	?	☹	?	☺	☹

☺ Low risk   ☹ High risk   ? Unclear risk

Search details

Source	Search Strategy	Number of hits	Relevant evidence identified
Guidelines			
NICE	Finance Mental health and financial	80	
Systematic Reviews			
MEDLINE	1 (financial adj2 (stress* OR debt* OR problem* OR difficult* OR concern*)).ti,ab 2 poverty*.ti,ab 3 debt*.ti,ab 4 exp POVERTY/ 5 (depress* OR anxi* OR mani* OR bipolar* OR schizo* Or psychos* OR psychotic OR (personality adj2 disorder*)).ti,ab 6 (mental adj3 (problem* OR disorder* OR diagnos* OR condition*)).ti,ab 7 exp DEPRESSION/ 8 exp ANXIETY/ 9 exp SCHIZOPHRENIA/ 10 exp MENTAL HEALTH/ 11 exp BIPOLAR DISORDER/ 12 exp PERSONALITY DISORDERS/ 13 21 OR 22 OR 23 OR 24 14 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 15 33 AND 34 16 35 [Limit to: (Document type Meta-analysis or Review)]	498	
EMBASE	1 FINANCIAL DEBT/ OR exp FINANCIAL MANAGEMENT/ OR exp FINANCIAL SUPPORT/ 2(financial adj2 (stress* OR debt* OR problem* OR difficult* OR concern*)).ti,ab	25	

	3 poverty*.ti,ab 4 debt*.ti,ab 5 exp POVERTY/ 6 1 OR 2 OR 3 OR 4 OR 5 7 (depress* OR anxi* OR mani* OR bipolar* OR schizo* Or psychos* OR psychotic OR (personality adj2 disorder*)).ti,ab 8 (mental adj3 (problem* OR disorder* OR diagnos* OR condition*)).ti,ab 9 exp DEPRESSION/ 10 exp ANXIETY/ 11 exp SCHIZOPHRENIA/ 12exp PSYCHOSIS/ 13exp BIPOLAR DEPRESSION/ OR exp BIPOLAR DISORDER/ OR exp BIPOLAR I DISORDER/ OR exp BIPOLAR II DISORDER/ OR exp BIPOLAR MANIA/ 14 exp MANIA/ 15 exp PERSONALITY DISORDER/ 16 MENTAL HEALTH/ 17 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 18 6 AND 17 20 18 [Limit to: Cochrane Library and (EBM-Evidence Based Medicine Meta Analysis or Systematic Review)]		
PsycINFO	1(financial adj2 (stress* OR debt* OR problem* OR difficult* OR concern*)).ti,ab 2poverty*.ti,ab 3debt*.ti,ab 4exp POVERTY/ 5 (depress* OR anxi* OR mani* OR bipolar* OR schizo* Or psychos* OR psychotic OR (personality adj2 disorder*)).ti,ab 6 (mental adj3 (problem* OR disorder* OR diagnos* OR condition*)).ti,ab 7exp ANXIETY/ 8exp SCHIZOPHRENIA/	146	

	9exp PSYCHOSIS/ 10exp MANIA/ 11exp MENTAL HEALTH/ 12exp FINANCIAL STRAIN/ 13exp BIPOLAR DISORDER/ 14exp "DEPRESSION (EMOTION)"/ 15exp PERSONALITY DISORDERS/ 1638 OR 39 OR 40 OR 41 OR 49 17 42 OR 43 OR 44 OR 45 OR 46 OR 47 OR 50 OR 51 OR 52 18 53 AND 54 19 55 [Limit to: (Methodology Literature Review or Meta Analysis or Systematic Review)]		
Primary Studies			
MEDLINE	1 (financial adj2 (stress* OR debt* OR problem* OR difficult* OR concern*)).ti,ab 2 poverty*.ti,ab 3 debt*.ti,ab 4 exp POVERTY/ 5 (depress* OR anxi* OR mani* OR bipolar* OR schizo* Or psychos* OR psychotic OR (personality adj2 disorder*)).ti,ab 6 (mental adj3 (problem* OR disorder* OR diagnos* OR condition*)).ti,ab 7 exp DEPRESSION/ 8 exp ANXIETY/ 9 exp SCHIZOPHRENIA/ 10 exp MENTAL HEALTH/ 11 exp BIPOLAR DISORDER/ 12 exp PERSONALITY DISORDERS/ 13 21 OR 22 OR 23 OR 24 14 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 15 33 AND 34	249	

	16 [Limit to: (Document type Controlled Clinical Trial or Randomized Controlled Trial)]		
EMBASE	1 FINANCIAL DEBT/ OR exp FINANCIAL MANAGEMENT/ OR exp FINANCIAL SUPPORT/ 2(financial adj2 (stress* OR debt* OR problem* OR difficult* OR concern*)).ti,ab 3 poverty*.ti,ab 4 debt*.ti,ab 5 exp POVERTY/ 6 1 OR 2 OR 3 OR 4 OR 5 7 (depress* OR anxi* OR mani* OR bipolar* OR schizo* Or psychos* OR psychotic OR (personality adj2 disorder*)).ti,ab 8 (mental adj3 (problem* OR disorder* OR diagnos* OR condition*)).ti,ab 9 exp DEPRESSION/ 10 exp ANXIETY/ 11 exp SCHIZOPHRENIA/ 12exp PSYCHOSIS/ 13exp BIPOLAR DEPRESSION/ OR exp BIPOLAR DISORDER/ OR exp BIPOLAR I DISORDER/ OR exp BIPOLAR II DISORDER/ OR exp BIPOLAR MANIA/ 14 exp MANIA/ 15 exp PERSONALITY DISORDER/ 16 MENTAL HEALTH/ 17 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 18 6 AND 17 19 18 [Limit to: (Clinical Trials Randomized Controlled Trial)]	573	
PsycINFO/CINAHL	1(financial adj2 (stress* OR debt* OR problem* OR difficult* OR concern*)).ti,ab 2poverty*.ti,ab 3debt*.ti,ab 4exp POVERTY/ 5 (depress* OR anxi* OR mani* OR bipolar* OR schizo* Or psychos* OR psychotic OR (personality adj2 disorder*)).ti,ab	20	

	6 (mental adj3 (problem* OR disorder* OR diagnos* OR condition*)).ti,ab 7exp ANXIETY/ 8exp SCHIZOPHRENIA/ 9exp PSYCHOSIS/ 10exp MANIA/ 11exp MENTAL HEALTH/ 12exp FINANCIAL STRAIN/ 13exp BIPOLAR DISORDER/ 14exp "DEPRESSION (EMOTION)"/ 15exp PERSONALITY DISORDERS/ 1638 OR 39 OR 40 OR 41 OR 49 17 42 OR 43 OR 44 OR 45 OR 46 OR 47 OR 50 OR 51 OR 52 18 53 AND 54 19 55 [Limit to: (Methodology Treatment Outcome/Clinical Trial)]		

Disclaimer

BEST in MH answers to clinical questions are for information purposes only. BEST in MH does not make recommendations. Individual health care providers are responsible for assessing the applicability of BEST in MH answers to their clinical practice. BEST in MH is not responsible or liable for, directly or indirectly, any form of damage resulting from the use/misuse of information contained in or implied by these documents. Links to other sites are provided for information purposes only. BEST in MH cannot accept responsibility for the content of linked sites.