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PMH34 - Cost-Effectiveness of Guided Internet-Based Treatments for Depression In Comparison With Control Conditions: An Individual-Participant Data Meta-Analysis

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published in

Value in Health
2017

DOI (link to publisher)

[10.1016/j.jval.2017.08.1898](https://doi.org/10.1016/j.jval.2017.08.1898)

document version

Publisher's PDF, also known as Version of record

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citation for published version (APA)

Kolovos, S., van Dongen, J. M., Riper, H., van Tulder, M. W., & Bosmans, J. E. (2017). PMH34 - Cost-Effectiveness of Guided Internet-Based Treatments for Depression In Comparison With Control Conditions: An Individual-Participant Data Meta-Analysis. *Value in Health*, 20(9), A714-A715.
<https://doi.org/10.1016/j.jval.2017.08.1898>

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as well as cognitive-behavioral therapy for PwD-caregiver dyads, demonstrated effectiveness and cost-neutrality. **CONCLUSIONS:** There is some evidence on cost-effective non-pharmacological interventions for PwD. However, the included studies showed a high degree of methodological heterogeneity with regard to outcomes, sample size, perspective and time horizon. In particular, quality-of-life values of PwD should be interpreted cautiously, this holds as well for proxy-rated values. This research work was funded by the Karl and Veronica Carstens-Foundation as part of the national graduate college 'Optimisation strategies in Dementia – OptiDem'.

PMH28

INTERNET BASED TREATMENT OF DEPRESSIVE SYMPTOMS – A HEALTH ECONOMIC EVALUATION OF COSTS AND BENEFITS

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OBJECTIVES: Despite differentiated guidelines, depressive episodes often stay undiagnosed or are treated inadequately. Online-based self-help-, consulting- and treatment-services may reduce deficits in treating depressive disorders and reduce disease-related costs. This study aimed to examine the potential of the internet-based cognitive behavioural therapy “deprexis” to reduce total costs of statutory health insurance. Secondary, changes in depression severity, health-related quality of life and impairment in functioning were examined. **METHODS:** Participants with mild to moderate depressive symptoms were recruited from a huge German sickness fund and randomized to either a 12-week internet intervention (deprexis) or care as usual (CAU). The primary outcome measure was costs of statutory health insurance (excluding outpatient costs), secondary outcomes were depression severity (PHQ-9), health-related quality of life (SF-12 and EQ-5D-3L) and impairment in functioning (Work and Social Adjustment Scale). Outcomes were assessed at baseline, three months and six months, using an online based questionnaire. Additionally, health insurers' administrative data were included in the analyses. **RESULTS:** A total of 3.806 participants were randomized. In both groups, total costs of statutory health insurance decreased during the study period, but the changes from baseline differed significantly between groups. In the intervention group the total costs decreased by 32% from 3.139€ per year at baseline to 2.119€ in the study year (vs. a mean reduction in total costs of 13% in CAU-group; $p < 0.002$). In comparison to the CAU-group, the intervention group also showed a significant greater reduction in PHQ-9, a significant greater decrease in impairment in functioning and a significant greater increase in health-related quality of life. **CONCLUSIONS:** The study underlines the potential of innovative e-mental-health programs in treating depressive disorders. The results suggest that the use of deprexis over a period of 12 weeks leads to a significant improvement of symptoms with a simultaneous reduction in cost of statutory health insurance.

PMH30

EARLY ECONOMIC EVALUATION OF THE NEW ATYPICAL ANTIPSYCHOTIC

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OBJECTIVES: To assess the economic viability of the new atypical antipsychotic and to establish what price is required for an economically viable drug. In this study early economic modeling was used to estimate the price per course for difluoroclozapine, a new atypical neuroleptic drug in the treatment of resistant schizophrenia. **METHODS:** An early Markov model was developed, based on the data derived from preclinical and clinical trials, to estimate costs and effectiveness of the antipsychotic therapy. Comparison of new neuroleptic drug with standard therapy with clozapine was performed with the use of cost-utility analysis. Costs of clozapine therapy and management of agranulocytosis were estimated as costs of medical care according to the standards of therapy. Utility for both drugs was measured in terms of quality-adjusted life years (QALYs). The headroom method was used to calculate the acceptable price for 1 course treatment with difluoroclozapine. It was estimated using utility difference between 10-years therapies and cost of 1 QALY for clozapine. **RESULTS:** Analysis showed that the discounted QALY difference between difluoroclozapine and clozapine was 0.02 (ΔQALY). Estimated cost per 1 QALY for clozapine was 4 735.78\$. Based on COST/1QALY the difluoroclozapine price in comparison with clozapine can't be more than 1.14%. **CONCLUSIONS:** According to assumption about same efficacy of difluoroclozapine and clozapine and only safety advantages of difluoroclozapine (the ability to reduce agranulocytosis rate) the cost of difluoroclozapine course shouldn't be more than the cost of clozapine course (over 1.14%).

PMH31

THE COST OF DIALECTIC BEHAVIOUR THERAPY (DBT) FOR PEOPLE DIAGNOSED WITH BORDERLINE PERSONALITY DISORDER (BPD): A REVIEW OF THE LITERATURE

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OBJECTIVES: To produce a systematic literature review on the cost of dialectic behaviour therapy (DBT) for people diagnosed with Borderline Personality Disorder (BPD). People with BPD require extensive healthcare resources and services. This review evaluates existing literature to determine the cost of providing DBT treatment for persons with BPD. **METHODS:** Using the PICOS framework, cost studies of DBT for a population of persons diagnosed with BPD were included for review. The evidence was combined and summarised using a narrative synthesis. The methodological quality of the economic studies was evaluated using appropriate checklists. **RESULTS:** Providing BPD patients with DBT treatment has shown to have a positive effect on reducing health care utilization and related health care costs. Across the included studies, the mean average cost per patient was shown to be reduced by 21 – 35% from pre-DBT-treatment to post-DBT treatment. A reduction

in inpatient hospital days, shorter inpatient stays and reduced emergency room visits were reported as the most significant savings in terms of costs for BPD patient care and health care services. **CONCLUSIONS:** Provision of DBT for patients with BPD is shown to incur reduced healthcare costs, particularly regarding inpatient hospital days and emergency room visits. This result was consistent in the studies included for review when comparing costs incurred in the pre-DBT-treatment year and post-DBT-treatment year.

PMH32

PHARMACOECONOMICS ANALYSIS OF SERTINDOLE USE IN THE TREATMENT OF SCHIZOPHRENIA IN RUSSIA

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OBJECTIVES: to conduct a comparative pharmacoeconomic analysis of atypical antipsychotics for the treatment of schizophrenia – sertindole (SRT) versus quetiapine (QTP) and paliperidone (PAL). **METHODS:** the primary outcomes for analysis were relapse and rehospitalization rates. Using the odds ratio (OR) of prehospitalization we calculated the related risk (RR) for three drugs. The cost of the annual drug therapy of schizophrenia in the outpatient setting, costs of hospital readmission and total costs were calculate. One-way sensitivity analysis was performed on 7 scenarios. Willingness to pay threshold (WTP) for Russian health care system was estimated at €26,383 (1648924 RUB), exchange rate mean in 2017 - €1 = 62.5 RUB. **RESULTS:** the drug cost for annual therapy was the lowest for SRT – €1,550 (96856 RUB) – by 6% and 45% less than for QTP and PAL respectively. The RR of rehospitalization was 2.0% for PAL, 2.13% for SRT and 16.24% for QTP, so the cost for rehospitalisation was 7 times less for SRT versus QTP and only by 6.5% greater than for PAL. Therefore SRT therapy was the most cost saving by total cost – 13.8% less vs QTP and 31% versus PAL. Cost-effectiveness ratio (CER) for 1 patient treated without rehospitalization was €1,608 (100472 RUB) for SRT, €2,180 (136226 RUB) for QTP. SRT has higher CER versus PAL, but incremental cost-effectiveness ratio (ICER) for PAL more than 20 times higher than WTP (ICER= €532,542 (33 283 846 RUB). The most influential variable in the sensitivity analysis was dosage regimen. **CONCLUSIONS:** SRT is the most cost-effective treatment versus QTP (CER less than CER QTP) and versus PAL (SRT has insignificant deferenens in treatment effectiveness -0,13%, but will be more cost saving treatment, ICER for PAL more than 20 times higher than Russian WTP threshold).

PMH33

AN ECONOMIC EVALUATION OF A PSYCHOEDUCATIONAL SUICIDE INTERVENTION PROGRAMME

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OBJECTIVES: The Eden Programme is a psycho-educational programme targeting people who have attempted suicide or experienced suicidal ideation. The programme, developed by an Irish charity, Suicide or Survive. A licensed Eden programme is being rolled out on a pilot basis in Ireland. This study's objective is to undertake a cost-effectiveness analysis of the Eden Programme from the perspective of the Ireland's health care provider. **METHODS:** Researchers identified all relevant resources and utilised a combination of micro-costing and gross costing to measure resources. A net cost per programme and per participant were calculated, accounting for the current maximum intake for an Eden Programme (n=14). To measure effectiveness, average BDI scores from pre- and post-Eden Programme surveys were used. BDI scores were mapped onto the EQ5D-3L using an algorithm developed by Grochtdreis et al., (2016). To account for uncertainty, a Monte Carlo simulation was used to do a probabilistic sensitivity analyses. A cost-effectiveness ratio was used to determine the probability of the programme being cost-effective compared to usual care. **RESULTS:** Preliminary results indicate an improvement in average BDI scores from baseline to end of programme. Mapping these scores onto the EQ5D-3L showed utility improvement. As the Eden programme is a complement to usual care, there are additional costs. In addition, scenario analyses reveal that should economies of scale (e.g. dual-site training) be realised, there is the potential for cost savings. There is a less than 60% Probability of cost effectiveness of the Eden programme compared with usual care. **CONCLUSIONS:** As a therapeutic area, mental health has long been underfunded. As decision makers increase funding for programmes in mental health, it is important to ensure that resource allocation decisions are appropriate. One means of informing such decisions is to conduct economic evaluations to determine if the additional benefits are worth the additional cost.

PMH34

COST-EFFECTIVENESS OF GUIDED INTERNET-BASED TREATMENTS FOR DEPRESSION IN COMPARISON WITH CONTROL CONDITIONS: AN INDIVIDUAL-PARTICIPANT DATA META-ANALYSIS

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OBJECTIVES: Previous studies have shown the effectiveness of guided Internet-based interventions for depression compared to control groups. It is often hypothesized that Internet-based treatments are associated with lower costs, because face-to-face time with therapist is reduced. The objective of this study was to conduct an individual-participant data meta-analysis (IPD-MA) evaluating the cost-effectiveness of guided Internet-based interventions for depression compared to controls from a societal perspective. **METHODS:** A systematic literature search was conducted in electronic databases from 2000 to January 1st 2017. Studies were included if they were randomized controlled trials (RCTs) in which the cost-effectiveness of a guided Internet-based intervention for depression was compared to a control. Cost-effectiveness analyses were conducted for improvement in depressive symptoms measured by CES-D, response to treatment, and Quality-Adjusted Life-Years (QALYs) at 8-weeks, 6-months, and 12-months follow-up. **RESULTS:** IPD

from five studies, including 1,426 participants were used. The guided Internet-based interventions were more costly than the controls, but not statistically significantly so (e.g. 12-months mean difference = €406, 95%CI: -611 to 1,444). Cost-effectiveness acceptability curves indicated that high investments are needed to reach an acceptable probability that the intervention is cost-effective compared to control for CES-D and response to treatment (e.g., at 12-month follow-up the probability of being cost-effective was 0.95 at a ceiling ratio of 2,000 €/point of improvement in CES-D score). For QALYs, the intervention's probability of being cost-effective compared to control was low at the commonly accepted willingness-to-pay threshold (e.g., at 12-month follow-up the probability was 0.29 and 0.31 at a ceiling ratio of 24,000 and 35,000 €/QALY, respectively). **CONCLUSIONS:** Guided Internet-based interventions for depression were not considered cost-effective compared to control. However, only a minority of RCTs investigating the clinical effectiveness of guided Internet-based interventions also assessed cost-effectiveness. Therefore, it is important that future RCTs measure resource use and productivity losses alongside clinical effectiveness.

MENTAL HEALTH – Patient-Reported Outcomes & Patient Preference Studies

PMH35

EVALUATION OF BARANYA COUNTY DRUG AMBULANCE'S AND BARANYA COUNTY POLICE'S SCHOOL BASED DRUG PREVENTION ACTIVITY

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OBJECTIVES: The aim of our research was to evaluate two school based drug prevention program which have been operated by Baranya County Police and Baranya County Drug ambulance. **METHODS:** The research program was carried out with standard questionnaire at schools which were part one of in these drug prevention programs. 220 students were involved into the study. Students filled in the questionnaire twice: several days before (pre-test) and 10 days after (post-test) the drug prevention program. We processed our data with the help of SPSS and we designed a paired-sample T-test. **RESULTS:** The rate of those, who know more about drugs after Police's program have increased by 24.6% and Drug ambulance's result was 20%. Drug ambulance's program reached significant ($p=0.048$) change in self-knowledge among the students. About the Police's program we can not report the same significant result in the same case ($p=0.569$). The effect of the Drug ambulance's program also changed the student's sense of danger regarding drugs significantly. There was a significant change in the trying of marihuana ($p=0.008$), hallucinogenic drugs ($p=0.012$) and herbal drugs ($p=0.001$). However the effect of the Police's program only changed the student's trying of designer drugs regarding drugs significantly ($p=0.071$). **CONCLUSIONS:** Continuous evaluation of prevention programs are essential. It would be important that only monitored and professionally suggested programs are realised.

PMH36

STIGMATISATION LEVEL TOWARDS MENTAL ILLNESS PATIENTS AMONG MALAYSIAN URBAN AND RURAL COMMUNITIES

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OBJECTIVES: This study investigated the level of stigmatisation among urban and rural Malaysian communities towards mental illness patients, and assessed study variables that differentiate and predict their stigmatisation. **METHODS:** In this cross-sectional study, the reliable and validated self-administered questionnaires proven by Rasch analysis consisted of socio-demographic and other ($n = 11$ items) and attribution questionnaire (AQ-9) ($n = 9$ items; 9 stereotypes), were disseminated post ethics approval to urban (Shah Alam, Selangor) and rural (Rembau, Negeri Sembilan) adults (≥ 18 years old) using convenience sampling method. Data (February to May 2015) were analysed using SPSS version 21.0. **RESULTS:** The mean (SD) scores obtained by urban and rural respondents were 39.40 (9.77) and 42.15 (9.16); both fall into moderate level of stigma (moderate score: 28 - 54). Urban respondents demonstrated significant higher pity level, lower dangerousness, lower blame, lower anger, and lower coercion compared to rural respondents. The mean scores obtained by females were significantly higher than males in referring to dangerousness, fear, segregation and coercion stereotypes. Respondents who were familiar with mental illness tend to have significantly higher pity but lower blame compared to respondents who were not familiar with mental illness. There was a significant decrease in blame among respondents who were familiar towards schizophrenia term compared to respondents who were not familiar. Significant predictors were found in few stereotypes including familiarity with mental illness (pity), gender and highest level of education (dangerousness), gender (fear), familiarity with schizophrenia (blame) and gender and living area (coercion). **CONCLUSIONS:** Rural respondents had significant lower pity level, higher dangerousness, higher blame, higher anger, and higher coercion compared to urban respondents. Gender was the main predictor for stereotypes of dangerousness, fear and coercion. The elements of stigmatisation toward mental illness need to be addressed be it to the public or respective sufferers in creating concerned and responsible communities.

PMH37

PATHWAYS TO DEMENTIA DIAGNOSIS AND POST-DIAGNOSTIC SUPPORT: THE BAVARIAN DEMENTIA SURVEY

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OBJECTIVES: Timely diagnosis and the provision of post-diagnostic information and support are key for persons with dementia (PwDs) and their informal caregivers. Thus, this analysis examined the time span from the onset of symptoms to a dementia diagnosis. Furthermore, the provision of information about treatment

options and support services was assessed. **METHODS:** BayDem is a multi-center, longitudinal study at three different sites in Bavaria, Germany. Participants are PwD and their informal caregivers. Data is collected by means of standardized, face-to-face interviews in close cooperation with local dementia institutions. **RESULTS:** In total, 139 informal caregivers (67% female; $M=60$ years, $SD=12$; $Min=23$; $Max=86$) of PwDs were interviewed within three months of the first dementia diagnosis. Of those, 48% were children and 42% were spouses or life partners of the PwD. The median time span from initial recognition of dementia symptoms to presentation to a health professional was 12 months. 36% of the PwDs received a diagnosis within one year, 61% within two years from symptom onset. 56% of the informal caregivers reported to be given information on the syndrome and 44% stated to have obtained information about the course of dementia. 51% felt informed about pharmacological treatment options; whereas 42% of the informal caregivers indicated that they received information about non-pharmacological treatments. Solely, 21% reported to have received information about local support centers. Compared to spouses and life partners, children felt less informed. **CONCLUSIONS:** These results suggest that from the caregiver's perspective, there is a need to optimize the provision of post-diagnostic support to newly diagnosed PwDs and their relatives, since knowledge and uptake of support services are important for the prevention of caregiver burden. This research was initiated by the Bavarian State Parliament and is funded by the Bavarian State Ministry for Health and Care (StMG) under the grant number G42-G8092.9-2014/10-146.

PMH38

PSYCHOSOCIAL DETERMINANTS OF DEPRESSIVE ILLNESS AMONG WOMEN ATTENDING IN PSYCHIATRIC OUTPATIENTS DEPARTMENT OF BANGABANDHU SHEIKH MUJIB MEDICAL UNIVERSITY(BSMMU) DHAKA, BANGLADESH

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OBJECTIVES: The rapid increasing number of depression patients in both developed and developing countries is a potential medical and health concern. There are many factors are related with depression, of which socio-demographic, socio-cultural and socio-economic factors are the potential cause of depression, especially in developing countries and generally, women are more prone to depression than men. **METHODS:** Since Bangladesh is a developing country and majority numbers of people live below normal economic condition, the number of depression patients is increasing drastically. Therefore, this study was design to assess the mental health level of women patients who attended for consultation or treatment at the department of psychiatric outpatient (OPD) at Bangabandhu Sheikh Mujib Medical University (BSMMU), Bangladesh. This study conducted following the international classification of disease (ICD-10) and diagnostic and statistical manual for Mental Disorder (DSM-iv) and maintaining inclusion and exclusion criteria. **RESULTS:** This study revealed that among 160 women attending the psychiatric outdoor of BSMMU, 70% patients were suffering from severe depression. Proportion of severe depression decreased with the increasing educational level which was maximum among the illiterates (87.5%) and minimum that crossed higher secondary level (60.0%). However, highly significant association between depression and family income was observed. There was no relation of family type-nuclear and joint family with depression. But family income was significantly associated with depression and low income family suffered severe depression (84.6%). Gender discriminated women (85.4%) were suffered significantly more than the no gender discriminated women (63.4%) in the family. Statistically significant relation was also found in victimized family (92.6%) compared to the family who has no history of victimization (65.4%). **CONCLUSIONS:** We identified some factors such as women who early marriage, victimize and live low earning family as potential factors that have statistically highly significant association with depression level.

PMH39

DEPRESSION ASSESSMENT IN PATIENTS DIAGNOSED WITH PARKINSON'S DISEASE FOR CLINICAL PRACTICE

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OBJECTIVES: To show the complexity of patients with Parkinson's disease (PD) by illustrating an accurate profile based on the prevalence of depression and other complications, as well as differences observed among patients from UK and USA, for further good practices recommendations. **METHODS:** A cross sectional descriptive study was conducted using an electronic survey among patients from UK and USA diagnosed with PD. Patients ($n=104$) were screened for depression by using the Zung Self-Rating Depression Scale (ZSDS). Prevalence of movement and nervous system symptoms was assessed by using multiple choice questions and the distress of each category was scored from 0 to 3 (0=no, 1-mild, 2-moderate, 3-severe) where a higher score indicates greater distress. Comparisons between patient groups were made with ANOVA and two-tailed t-test, correlations were interpreted based on calculations of Pearson's R and descriptive statistics summarized the features of the sample. **RESULTS:** Most of the patients were from UK (65.38%), 50.96% were female and 54.81% showed depression according to the ZSDS. Comparisons between UK and USA patient groups disclosed no significant differences (all $p>0.05$). Patients aged 40-50 showed a higher incidence of depression and a more severe stage ($p=0.025<0.05$). Prevalence of movement and nervous system symptoms as well as the distress of these symptoms are up to two times higher in patients with depression than in those without ($p<0.05$). In patients with depression according to the ZSDS, 50.88% consider themselves not being depressed and in those that do not have depression according to the ZSDS, 14.89% consider themselves depressed. **CONCLUSIONS:** All patients with PD revealed a complex profile and require good management of frequent comorbidities. Prevalence of depression calls for medical professionals to be vigilant in the screening process.