



Review Article

Effects of physician therapy sessions on depression – Evidence-based practices

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ABSTRACT

This research study investigates the impact of physician therapy sessions on individuals suffering from depression. It examines the effectiveness of therapy as an evidence-based practice in the management of depression. Three distinct research papers were reviewed to investigate the effects of therapy sessions on physician burnout. Each study employed various methodologies, including surveys, interventions and qualitative analyses. Gender differences were also examined as a potential variable. Paper one concluded that despite being valuable support mechanisms, debriefing sessions did not significantly reduce burnout syndrome. In contrast, Paper Two and Paper Three reported a significant decrease in burnout following the interventions. All three papers found that gender was the only variable that changed. While the scores of the Maslach Burnout Inventory did not change in Paper One, the debriefing sessions were appreciated and accepted by the participants. Paper Three provided in-depth information, including examples, to enhance comprehension. Two out of the three papers concluded that implementing therapy sessions, such as counselling, cognitive-behavioural therapy, mindfulness-based stress reduction, group therapy, and mindfulness workshops, for physicians can prevent burnout syndrome. The third paper showed no significant change, suggesting that exclusive therapy sessions may need to be combined with other solutions, such as mindfulness practices or reduced working hours. These findings have the potential to inform practice changes, including updated clinical guidelines, new term protocols, enhanced screening and prevention strategies, quality improvement initiatives, training and education feedback, adaptation, monitoring, and evaluation. Overcoming barriers such as knowledge, skills, resources, motivation, attitude, and organisational culture is crucial for the successful implementation of evidence-based practices (EBP). Further, international research is needed to identify local limitations and advantages. This topic offers valuable insights into EBP and its role in improving patient outcomes, with the ultimate goal of reducing physician burnout and enhancing the quality of patient care.

Keywords: Depression, Physician therapy, Evidence-based practice, Mental health, Treatment

INTRODUCTION

The healthcare industry is centred around patient well-being. The main aim of the healthcare industry is to provide quality care treatment that is the most beneficial to the patient. Doctors form the backbone of the healthcare industry. Hence, to provide the best quality of treatment to the patients, doctors must be in their best element.

While the doctors have dedicated their lives to the well-being of their patients, there have been concerns through the years regarding the long working hours and consequent lack of sleep expressed by physicians. It has since been reported that such situations create a stressful environment at work. Prolonged exposure to such work environments leads to depression

in many physicians. This, in return, causes physicians to burnout. Resident doctors are more susceptible to burnout syndrome.

Depression, in the simplest terms, is a state of apathy that affects a person's thoughts, behaviour, emotions and a general sense of well-being. Depression is one of the most neglected or underdiagnosed mental disorders. Depression has been reported to be one of the major causes of morbidity worldwide.^[1] Hence, there are high chances of the disorder escalating to a state of emotional, physical, and mental, sometimes leading even to suicide.

According to a survey conducted, about 28% of the resident physicians in hospitals suffer from depression.^[2] Studies have stated that training physicians have a fourfold increase in suicide ideation, especially during the first three months of residency.^[3] Apart from affecting the personal well-being of the physician, depression also takes a toll on the work performance in the hospital. This, in turn, affects the quality of treatment that is provided to the patients. Therefore, finding a solution to this issue can help improve the quality of care that is provided.

SEARCH STRATEGY

Using a five-step process,^[4] the evidence for the issue was collected. The first step in forming the right question is first identifying the problem. The PICO model was used as a guiding tool to define the question. Where P stands for population or problem, I for intervention, C for comparison and O for outcome. Using this model, the question can be formed as described in Table 1.

Hence, the question would be formed as, 'what are the effects of physician therapy sessions on depression?'

To attempt to answer the question, it was first typed as is on Google Scholar. Results of about 15,600 articles were obtained. The results contained both relevant and irrelevant articles. After this, specific electronic bibliographic databases such as PubMed, Scopus and Web of Science were searched to find up-to-date quality reports efficiently. Initially, the key terms produced a huge array of articles, and the use of Boolean operators enabled a more refined search based on the key terms. The use of 'AND' and 'OR' aided in further narrowing of the results. The table below shows the keywords and the synonyms that were used [Table 2].

Using the keywords, the search results were more specific and limited. Inclusion and exclusion criteria were further added to gain relevant articles.

Once the key terms, inclusion and exclusion criteria were identified [Table 3], two general databases were used to search. The search was further narrowed by subject

keywords. Articles with keywords such as occupational stress, mental depression, cognitive therapy, antidepressants, social support, management, stress, residents, internship and residency, anxiety, physicians, burnout, mental depression, and mental health, while other subject terms were excluded from the study. The initial search items yielded the following results after the limitations were imposed [Table 4].

The articles were further refined by manually reading and excluding the irrelevant articles.

A total of 23 articles were found [Table 5], and the hierarchy of evidence was used to narrow the search results [Appendix 1]. Following the hierarchy, the articles forming the lower spectrum were excluded from the study.

Table 1: PICO.

P – Problem	Increased depression among practising physicians
I – Intervention	Therapy sessions
C – Comparison	No comparison/no mandatory therapy sessions
O – Outcome	Better work-life balance leads to effective professional care for patients

Table 2 : Keywords and synonyms.

Keywords	Synonyms
Resident doctors	Resident clinicians and resident physicians
Burnout syndrome	Burnout, depression and anxiety
Therapy	Counselling and support group

Table 3: Inclusion and exclusion criteria.

Inclusion criteria	Exclusion criteria
Written in English-language	Non-English language
Published literature	Unpublished literature
Research published since 2008	Research published before 2008
Empirical research papers	Non-empirical research papers

Table 4: Initial search results.

Database	Articles found after limitations imposed
PUBMED	38
DELPHIS	215

Table 5: Search results after manual exclusion.

Database	Articles found after manually excluding irrelevant articles
PUBMED	9
DELPHIS	14

PAPER SELECTION

Three papers that were selected for detailed critical appraisal are reducing stress and burnout in Junior Doctors: The impact of debriefing sessions,^[5] a 3-year cohort study of the relationship between coping, job stress, and burnout after counselling intervention for help-seeking physicians^[6] and 'Group' meetings for oncology residents as a tool to improve therapeutic communication skills and reduce burnout level^[7] [Table 6]. These papers were largely selected based on the hierarchy of evidence.^[8]

CRITICAL APPRAISAL

While different clinical questions give rise to different research evidence, it is the researcher's responsibility to select the appropriate research design.^[9] Using a proper critiquing tool, the papers can be systematically critiqued. However, critiquing tools lack standardisation, and different interpretations can be formed.^[10] The critical appraisal skills program (CASP) is used as the critiquing tool for these papers. It is a set of ten questions that can be used to review any research study.^[11]

Out of the three papers that were selected paper, one is a randomised control trial (RCT), paper two is a cohort study, and paper three is a group study. Paper one is the highest in the hierarchy of evidence, this is described as level two of the gold standard. While papers two and three are at level two of the hierarchy of evidence^[12] [Appendix 1]. Hence, the papers that are selected are of acceptable integrity.

Paper one is a RCT, Badenoch and Heneghan^[13] have stated that even if the RCT is of poor quality which can also be included in the review as they can always duplicate any weaknesses and limitations from the studies that can answer the question. Paper one does not address the region of the study conducted, which may be addressed as a limitation.

Paper one was an RCT conducted in Australia, and paper two was a cohort study and was conducted in Norway. Paper three was a blind group study conducted in Israel. Even though these papers may have some differences between the health cultures, they can be used as a part of the review as

they address the same issues and can be replicated locally to provide the same conclusions.

The titles of the papers are compact and they give concise but sufficient information on the aims and objectives of the papers. Paper one and paper two give a clear abstract that summarises the aim, method used, results, and the conclusion of the paper. In addition, paper three includes the keywords that are used in the article.

METHODOLOGY

To guarantee the validity of the research in a systematic review, a predetermined method for assessing the quality and integrity of the papers included should be used.^[14]

Each study identifies and measures burnout rate in physicians by measuring the three dimensions: Emotional exhaustion, depersonalisation, and reduced personal accomplishment. The burnout rate is then calculated using the Maslach Burnout Inventory (MBI) tool [Appendix 2]. The MBI, a validated tool, is a questionnaire that comprises the three dimensions of burnout.

Paper one is an RCT using quantitative and qualitative methods. The sample is made up of postgraduate year one doctor in a single hospital. The study was conducted during the third term of a 5-year in 2011. The sample only included doctors who were based in the hospital during term three. Each participant completed the MBI questionnaire at the start of the term, which was again repeated approximately two weeks after the completion of the trial. The participants were divided into intervention groups or control groups by a computer-generated randomisation code and were given a unique identification number to maintain anonymity. The doctors from the intervention group were asked to complete an evaluation essay. A focus group of six participants underwent a debriefing session. The session was recorded and converted to an audio file that was then electronically transcribed for analysis. The results from the three methods were then triangulated.

Paper two is a cohort study consisting of 227 physicians. The physicians chose to participate in one of the two forms of

Table 6: Selected articles.

Article	Author (s) and year of Publication	Title of Article	Journal Title
Paper 1	Gunasingam N, Burns K, Edwards J, Dinh M, Walton M. (2015)	Reducing stress and burnout in junior doctors: the impact of debriefing sessions	Postgraduate Medical Journal
Paper 2	Ro KE, Tyssen R, Hoffart A, Sexton H, Aasland OG, Gude T. (2010)	A 3 year Cohort Study of the relationship between coping, job stress and burnout after counselling intervention for help seeking physicians	BMC Public Health Journal
Paper 3	Bar-Sela G, Lulav-Grinwald D, Mitnik I. (2012)	'Balint Group' meetings for oncology residents as a tool to improve therapeutic communication skills and reduce burnout level	Journal of Cancer Education

intervention, the first being a single day, 6–7 h counselling session for one physician with a psychiatrist or a specialist in occupational medicine. In contrast, the second was a 5-day, group-based course for eight participants. Seventeen items from a modified version of the Cooper job stress questionnaire were selected using principal component analysis.

Paper three was a blind study conducted for 17 resident oncologists, out of which two left early on in the study. The rest were divided into two groups that were divided into two groups – eight were in the first part of their residency, while seven were in the second part. The sessions were held under the guidance of a clinical psychologist and the head of the palliative care unit. Meetings that lasted about one and a ½ h were conducted once a month as a part of the academic seminar program. The participants completed an MBI questionnaire at the beginning of the year and the end of the year. A comparison of MBI scores and group contribution between the beginning and end of the year questionnaires was analysed using the Mann–Whitney non-parametric test.

Using the CASP checklist, Paper One gave the most information regarding the population studied, the intervention given, and the outcomes that were considered. The paper mentions a clear definition between the test and control group. Paper two gives the participant a chance to opt for their desired group. While this option may be more fondly accepted by the physicians due to their time restrictions, the results might have varied if the selection was a random choice. The presence of a control group is only mentioned in the results. Hence, this did not provide adequate information earlier in the article. Paper three provided information on the population studied and the intervention given, but there did not have a control group thus limiting the outcomes.

ETHICS

Paper two out of the three papers gives the most appropriate information on the ethical aspect of the study. Paper two mentions in a separate section the ethics that were followed, making it easier for the reader to understand the ethical practice that was followed. Participants of the study in paper two were asked to sign an informed, written consent. The study has also been approved by the Data Inspectorate; however, the Regional Ethical Research Committee did not find special consent necessary for this study.

Whereas, the authors in paper one gave all the participating physicians a unique identification number to maintain anonymity. The debriefing sessions were not recorded for privacy purposes, and ethics approval was granted. No other methods for maintaining confidentiality have been mentioned or discussed.

Paper three provides the least information on the topic of ethics. Paper three mentions one sentence stating that all

issues discussed in the group were considered confidential. This again offers insight neither into the methods used to maintain confidentiality nor into the approvals acquired to pursue the study. However, it does not breach the Cochrane Collaboration Guidelines.^[15]

RESULTS

The validity of the results can be good, but they need to be obtained by sound scientific methods.^[8] Appropriate statistical tests and analytical software were used in each study, and the findings were accurately recorded and summarised. All three papers used the MBI questionnaire as the gold standard for identifying burnout in the medical research literature. The scores are calculated by summing the exhaustion and cynicism scales and then subtracting the professional efficacy score. The higher the score obtained, the higher the level of burnout.

Paper one analysed the quantitative data by SAS, descriptive statistics, mean scores, and multivariable linear regression. Repeated measures mixed models were used to account for the correlation between longitudinal data and missing values. *P*-values represented the significance values of the interaction variable with the debriefing sessions analysed. An electronically transcribed audio file was scanned for key theme analysis. About 68% of participants displayed evidence of burnout in the pre-intervention measures. In the post-intervention data, it showed that 55% of the participants displayed signs of burnout. The study also found that the mean pre-intervention burnout scores were significantly higher in women than compared with men. Themes emerging from the debriefing sessions included managing staff relationships, inadequate communication, and diminished supervision. The evaluation survey found that the formal debriefing sessions were well received, with 60% suggesting they would recommend this strategy to future junior doctors. 90% of the participants claimed that the debriefing sessions were a source of emotional and social support.

The data analysis method was clearly explained. The authors used simpler terms hence making it easier to comprehend the analytic process. Similar results of the studies included are displayed. Reasons for variations are not discussed.

Paper two tested repeated parameters with repeated measures Analysis of Variance (ANOVA). The sequential relationships between changes in emotional exhaustion relative to changes in job stress, coping, and neuroticism were examined using the structural modelling program. The overall ANOVAs indicated that the results were not incidental. About 81% of the participants completed the 3-year follow-up. The group with the intervention showed a reduction in emotional exhaustion, whereas the group with no intervention showed a reduction in the stress levels in the 1st year, it did not reduce

further from 1 to 3 years. The method of data analysis was explained, and the steps taken to conclude were explained adequately. Paper two also indicated a higher result in women as compared to men, similar to paper one. Paper two included the results of the different studies that were similar.

Paper three measured a comparison of MBI scores and group contribution between beginning and end questionnaires and was analysed using the Mann–Whitney non-parametric test. A comparison of MBI scores showed that higher measures of burnout were noted in junior residents at the beginning of the year. However, by the end of the year, their burnout scores decreased. This paper had the least information on the data that were analysed as well as the methods used for the calculation. No other papers or studies were included in the study. Hence, compared to the other two papers, this is the least appropriate paper.

DISCUSSION

In the discussion of paper one, the authors have concluded that the debriefing session, even though they were a valuable support mechanism, did not significantly diminish the burnout syndrome. Paper two and paper three have concluded that there was a significant decrease in burnout post-intervention. Paper one also found that gender was the only variable that changed, this finding is consistent with paper two as well as paper three. While the scores of the MBI did not change, the debriefing sessions were appreciated and accepted. Paper three provides the most information in the discussion. The authors provide examples that make the paper easy to comprehend. Bar-Sela *et al.*^[6] commented that qualitative contributions that may not be measured in questionnaires can be demonstrated by the processes that take place throughout the study. Situations were discussed and theoretically implemented in different situations. This helped the residents cope with new and uncertain situations.

All three papers also talk about the limitations and how it may have affected the result. While paper one offers the most information on the limitations, paper two and paper three provide adequate information on the limitations.

Gunasingam *et al.*^[5] mention that burnout is not only an individual responsibility but also an organisational responsibility as well. Since therapy sessions are of a low cost and can be easily coordinated, they can potentially help bring down stress levels and, hence, avoid burnout syndrome. Only a few interventions are currently available, and these studies demonstrate that with further investigation therapy sessions have merit. Nevertheless, this strategy can be easily implemented locally as well as internationally, and the benefits are worth the cost and time.

CONCLUSION

These three papers provide evidence-based answers to the question that was asked. Two out of the three papers concluded that implementing therapy sessions, such as counselling, cognitive-behavioural therapy, mindfulness-based stress reduction, group therapy, and mindfulness workshops, for physicians can prevent burnout syndrome. While the other paper showed no significant change even after therapy. However, exclusive therapy sessions may not bring out highly desired change but need to be combined with other solutions. Some of the solutions that could be suggested are the practice of mindfulness or a decrease in long working hours. However, the results acquired from these three papers can pave the way for practice change, such as Updated Clinical Guidelines, new term protocols, enhanced screening and prevention, quality improvement initiatives, training and education feedback, and adaptation, monitoring, and evaluation. Barriers such as knowledge, skills, resources, motivation, attitude, and organisational culture need to be overcome to conduct a successful implementation of evidence-based practices (EBP).^[16] More international papers are to be referred to identify the limitations and the advantages locally. This topic has provided valuable insight into the process of EBP and its value in improving patient outcomes. This will help to decrease the burnout syndrome in physicians, which will, in turn, improve the quality of treatment for the patients.

Ethical approval

The Institutional Review Board approval is not required.

Declaration of patient consent

Patient's consent was not required as there are no patients in this study.

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Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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