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# Overview of Causes and Management of Anxiety and Depression in Young Adults: A Systematic Review

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**Original Research Article**

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**Abstract:** ***Objectives:*** To thoroughly evaluate the causes, associated risk factors, and management of anxiety and depression (AD) among young adults by synthesizing current literature. ***Methods:*** A thorough search of pertinent databases was done in order to find studies that satisfied the requirements for inclusion. A thorough search of PubMed, Web of Science, SCOPUS, and Science Direct was conducted to find pertinent literature. ***Results:*** Nine studies, including a total of 13628 participants diagnosed with anxiety or depression or both, and 4972 (63.2) of them were males, were included in our data. Earlier use of cannabis, poverty, romantic love, and internet addiction were found to be associated with AD in young adults. Brief psychodynamic therapy seems to be a promising strategy for young adults experiencing mild to moderate AD. Cognitive behavioral therapy (CBT) classes, even for short durations, are also beneficial in treating student patients' AD. Referring patients with more severe symptoms to a psychologist skilled in CBT may be beneficial. ***Conclusion:*** The development of AD among young adults is multifactorial. Psychodynamic therapy was recommended for mild to moderate AD, while CBT was proposed for young adults with severe forms. Longitudinal, prospective, and randomized trials are needed to study the interventions that may improve AD among young adults as well as the possible causes.

**Keywords:** Anxiety; Depression; Young adults; Causes; Risk factors; Management Systematic review.

## INTRODUCTION

People of all ages are susceptible to the incapacitating disorders of depression and anxiety [1]. The overlap between these two illnesses may be more than a coincidence, as there is evidence that they share risk factors in later life [2]. There is extremely little study on the effectiveness of psychological therapies and much less epidemiological research on these issues conducted outside of Western nations.

The obstacles that older persons and young adults have in accessing treatment are similar. These include the financial and nonfinancial expenses of care, the distance to suitable resources, and the stigma that surrounds mental health in both the public and private spheres [3, 4]. Young adults also face other obstacles, such as mistrust of service providers, bad past experiences, and a shortage of medical personnel with the necessary training to work with this demographic [5]. Calls to create "youth-friendly" services have resulted from this [6].

Untreated AD symptoms in young adults raise the risk of developing chronic mental health issues later in life and are linked to worse living standards, income, and labor involvement by the time they are 30 years old [7]. Regretfully, compared to other adult age groups, treatment-seeking is far less common among young adults [6].

Growing interpersonal intimacy, increasing autonomy, and the formation of a cohesive sense of self and personal identity are traits of emerging adulthood. As young adults navigate the obstacles of completing important developmental goals, increased mental health issues frequently characterize this stage of emerging adulthood. It has been demonstrated that at this stage of development, the prevalence rates of AD climb quickly [8].

This systematic review aims to thoroughly evaluate the causes, associated risk factors, and management of AD among young adults by synthesizing current literature, identifying knowledge

gaps, and offering insights for future research and clinical practice.

## METHODS

We followed the recommendations in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [9] for this systematic review. An electronic search was performed on databases like PubMed, Web of Science, SCOPUS, and Science Direct in order to find English-language research that looked at the causes and management of AD among young adults. Relevant keywords were included in the search strategy for these situations. Independently, reviewers went through the search results, chose pertinent papers, collected data, and used the right assessment methods to determine how good the included research was.

### Eligibility Criteria:

### Inclusion Criteria:

1. Studies published in the English language.
2. Studies reported both anxiety and depression in one context.
3. Studies reporting causes or management approaches of AD.
4. Only young adults aged 18-29 years.
5. Studies involving human participants.
6. Randomized controlled trials, cohort studies, case-control studies, and cross-sectional studies.

### Exclusion Criteria:

1. Studies not published in English.
2. Animal studies, in vitro studies, and review articles without original data.
3. Studies with insufficient data or unclear methodology.
4. Case reports and case series with fewer than five participants.
5. Studies with overlapping data or duplicate publications.

### Data Extraction

Rayyan (QCRI) was used to validate the search results in order to guarantee accuracy [10]. The inclusion and exclusion criteria were used to determine the relevancy of the titles and abstracts that the search produced. Papers that satisfied the inclusion requirements were carefully examined by the study team. Consensus was used to settle disagreements. Using a predetermined data extraction form, key study data, such as titles, authors, publication year, study location, gender distribution, participant demographics, diagnostic tool of depression, diagnostic tool of anxiety, causes, management approaches, and main outcomes were documented. To evaluate the possibility of bias, an impartial assessment instrument was created.

### Data Synthesis Strategy

Summaries of the research findings and elements were created utilizing information taken from pertinent studies in order to offer a qualitative assessment. The best method for making use of the data from the studies that were included was decided upon after the data collection for the systematic review was finished.

### Risk of Bias Assessment

The Joanna Briggs Institute (JBI) [11] critical assessment criteria for studies reporting prevalence data were utilized to assess the study's quality. This tool had nine questions. A score of one was given for a positive response, while a score of zero was given for a negative, ambiguous, or irrelevant response. The following scores will be categorized as low, moderate, and high quality, respectively: below 4, between 5 and 7, and above 8. The quality of the studies was evaluated by researchers independently, and differences were settled through discussion.

## RESULTS

### Systematic search outcomes

After 840 duplicates were removed, a total of 1516 study papers were found through a systematic search. After 676 studies had their titles and abstracts evaluated, 599 papers were discarded. Merely 3 articles were not located out of the 77 reports that were required to be retrieved. 74 articles passed the screening process for full-text evaluation; 39 were rejected due to incorrect study results, 21 due to incorrect population type, 2 articles were editor's letters, and 2 were abstracts. Ten research publications in this systematic review satisfied the requirements for eligibility. An overview of the procedure used to choose the research is illustrated in **Figure 1.**

### Sociodemographic features of the comprised studies

The research publications' sociodemographic information is displayed in **Table 1.** Nine studies, including a total of 13628 participants diagnosed with anxiety or depression or both, and 4972 (63.2) of them were males, were included in our data. Four studies were prospective cohorts [12-14, 20], three were cross-sectional [15-17], and one was a randomized control trial [19]. Three studies were conducted in Australia [12, 14, 19], one in Finland [13], one in Switzerland [15], one in Malaysia [16], one in the USA [17], and one in the UK [20]. The earliest study was conducted in 2006 [13] and the latest in 2016 [16].

### Clinical outcomes

### Causes/ Risk factors

The clinical features are displayed in **Table (2)**. The scales used for diagnosing AD varied from one study to another. Six studies investigated the causes and potential risk factors for developing AD in young adults. Earlier use of cannabis [12], poverty [14],

romantic love [15, 17], and internet addiction were found to be associated with AD in young adults.

**Management**

Three studies proposed management approaches to AD. Brief psychodynamic therapy seems to be a promising strategy for young adults experiencing mild to moderate AD [18]. CBT classes, even for short durations, are also beneficial in treating student patients' AD. Referring patients with more severe symptoms to a psychologist skilled in CBT may be beneficial [19, 20].

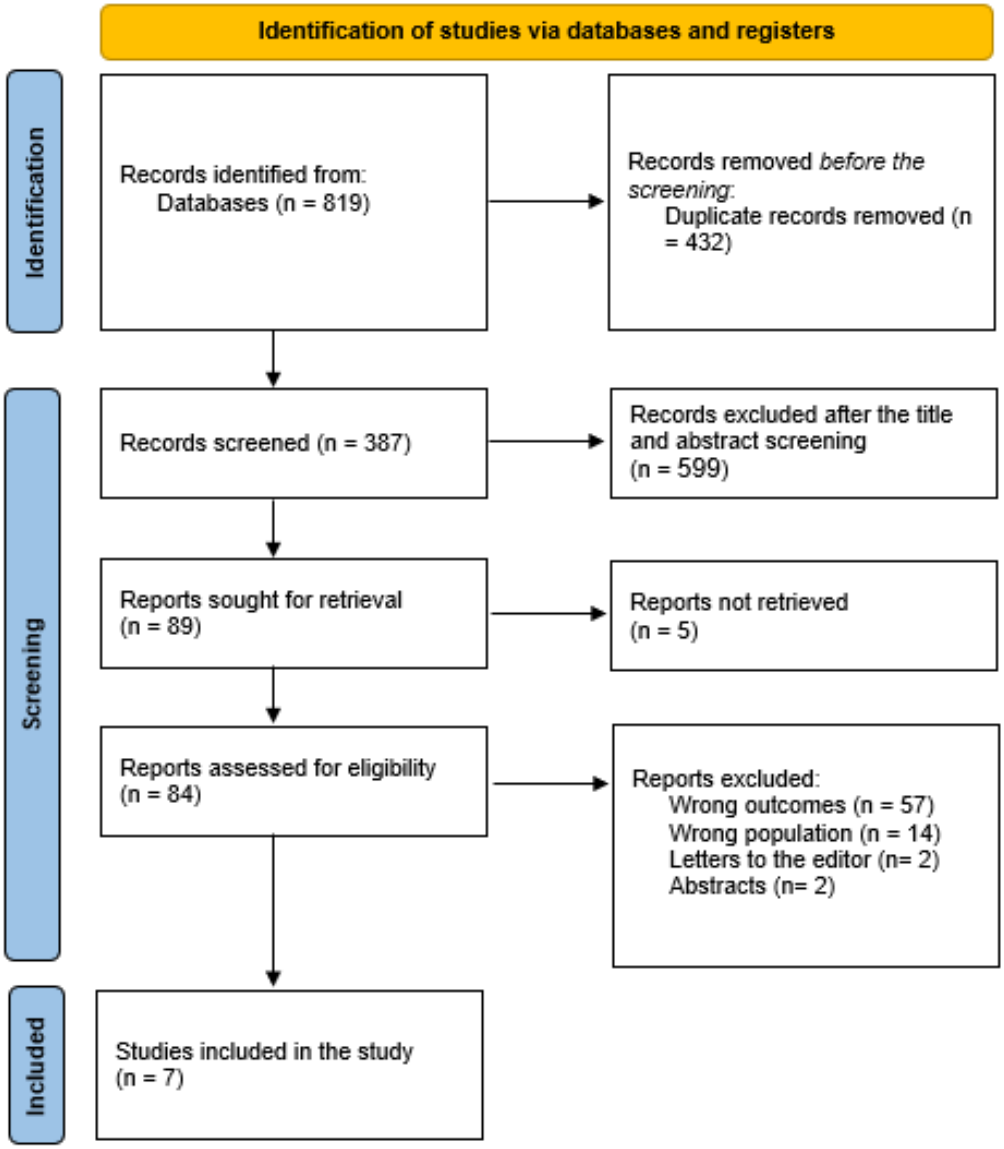


**Figure (1): Study decision is summed up in a PRISMA diagram**

**Table (1): The sociodemographic attributes of the participating populations**

| Study | Study design | City | Participants | Mean age/ range | Males (%) |
|---|---|---|---|---|---|
| **Hayatbakhsh *et al*., 2007 [12]** | Prospective cohort | Australia | 3239 | 18-29 | 1547 (47.8%) |
| **Herva *et al*., 2006 [13]** | Prospective cohort | Finland | 5,698 | 18-29 | 2515 (44.1%) |
| **Najman *et al*., 2010 [14]** | Prospective cohort | Australia | 2609 | 18-24 | 0 |
| **Bajoghli *et al*., 2014 [15]** | Cross-sectional | Switzerland | 100 | 25.6 | 53 (53%) |
| **Ostovar *et al*., 2016 [16]** | Cross-sectional | Malaysia | 1052 | 32.3 | 624 (59%) |
| **Brand *et al*., 2015 [17]** | Cross-sectional | USA | 844 | 24.8 | 204 (24.2%) |
| **Heidari *et al*., 2013 [18]** | NM | Iran | 20 | 19-24 | 9 (45%) |
| **Johnston *et al*., 2014 [19** | RCT | Australia | 18 | 18-24 | 4 (22%) |
| **Dickson *et al*., 2015 [20]** | Prospective cohort | UK | 48 | 24.5 | 16 (33.3%) |

**Table (2): Clinical features and results of the included research**

| Study ID | Depression scale | Anxiety scale | Cause under investigation/ Management approach | Conclusions | JBI |
|---|---|---|---|---|---|
| **Causes/ Risk factors** | | | | | |
| **Hayatbakhsh *et al.*, 2007 [12]** | Young Adult Self-Report (YASR) | YASR | Cannabis use | When confounding variables were taken into account, those who began using cannabis before the age of 15 and continued to use it often after the age of 21 had a higher likelihood of reporting early adult AD symptoms (odds ratio 3.4; 95% CI 1.9-6.1). | Moderate |
| **Herva *et al.*, 2006 [13]** | Hopkins Symptom Checklist-25 (HSCL-25) | HSCL-25 | Metabolic syndrome | Anxiety or depression were not linked to metabolic syndrome. | Moderate |
| **Najman *et al.*, 2010 [14]** | YASR | YASR | Poverty | Higher rates of AD in adolescents and young adults are predicted by family poverty. | Moderate |
| **Bajoghli *et al.*, 2014 [15]** | The Beck Depression Inventory (BDI) | The State-Trait Anxiety Inventory | Romantic love | The positive aspects of hypomania, more intense depressive and anxiety symptoms, and improved sleep quality were all linked to higher romantic love states. | High |
| **Ostovar *et al.*, 2016 [16]** | DASS-21 | DASS-21 | Internet Addiction | There is a gender difference in the danger of online addiction, with Iranian men being more likely than females to develop an addiction, and male online addicts are more likely to experience loneliness, stress, worry, and sadness. | Moderate |
| **Brand *et al.*, 2015 [17]** | BDI | The State-Trait Anxiety Inventory | Romantic love | The bright vs. dark side of hypomania in young adults in love was linked to a distinct quality of sleep and psychological functioning. Romantic love may be a significant life event linked to anxious, depressive, and insomniac symptoms. | Moderate |
| **Management approaches** | | | | | |
| **Heidari *et al.*, 2013 [18]** | DASS-21 & ASS | DASS-21 & ASS | Psychodynamic therapy | Brief psychodynamic therapy seems to be a promising strategy for young adults experiencing mild to moderate AD. | High |
| **Johnston *et al.*, 2014 [19** | Patient Health Questionnaire 9-item (PHQ-9) | Generalized Anxiety Disorder 7-item (GAD-7) | Internet-delivered CBT | Young individuals find the Mood Mechanic Course to be effective and acceptable when treating their anxiety and despair. | Moderate |
| **Dickson *et al.*, 2015 [20]** | PHQ-9 | GAD-7 | CBT | CBT classes, even for short durations, are beneficial in treating student patients' AD. Referring patients with more severe symptoms to a psychologist skilled in CBT may be beneficial. | Moderate |

*NM=Not-mentioned

## DISCUSSION

This comprehensive review stated that earlier use of cannabis [12], poverty [14], romantic love [15, 17], and internet addiction were found to be associated with AD in young adults.

Regarding the relationship between cannabis usage and AD, there are still unanswered problems. To explain this relationship, three hypotheses have been put forth [21]. The first is a common factor model, which suggests that shared biological and/or environmental etiologies explain the correlation between cannabis use and AD [22]. These determinants include environmental [23] and genetic [24] factors such as alcohol use, cigarette smoking, parental marital status, and socioeconomic position. After looking at this theory, a number of researchers [25, 26] proposed that the association is unrelated to third factors.

However, nothing is known about whether exposure to poverty may have significant and lasting effects at certain times throughout pregnancy, childhood, or adolescence. It has been suggested that the relative lack of resources that the poor face on a daily basis negatively impacts their emotional and mental well-being [27]. However, it's possible that living in poverty has an impact on a variety of lifestyle traits, which may then contribute to higher rates of AD. Because they are linked to various developmental and environmental exposures as the kid grows older (e.g., parental marital strife, poor school performance, difficulties obtaining job), cumulative experiences of poverty over the early life stage may be significant [28-30].

More and more biological and neuroimaging investigations of young adults falling in love in recent years have shown that falling in love is more than just a cognitive-emotional state; the changes in cognition and emotion have also been linked to changes in the nervous system. For instance, Marazziti and Canale demonstrated that going through an early stage of intense RL was linked to higher cortisol and testosterone levels in females, but lower testosterone levels in males [31]. In a similar vein, young adults going through an early stage of intense RL had higher levels of NGF (nerve growth factors) than young adults who were not going through this experience at the time [32].

We found that psychodynamic therapy and CBT were demonstrated as management approaches for mild and severe AD, respectively. Psychodynamic treatment may be useful in the Iranian cultural context because of its emphasis on developmental, familial, and interpersonal themes. The importance of attachment type is further highlighted by the complexity of intrafamilial relationships in the Iranian cultural setting. Overall, this indicates that an examination of psychodynamic treatment's acceptability and effectiveness in an Iranian cultural setting is necessary. Psychodynamic therapy was established primarily in Western contexts.

A variety of fundamental theoretical, philosophical, and clinical presumptions about the goal, methodology, and therapeutic process form the basis of CBT [33]. These include, in short, the following: (i) the importance of cognitive formulation; (ii) a focus on the patient's phenomenological experiences; (iii) guided discovery that forms the basis of the therapeutic dialogue between the patient and the therapist; (iv) collaboration, structure, focus, and an emphasis on homework; (v) work that is time-limited and problem-oriented; (vi) active patient involvement that is critical to the success of the therapy; and (vii) the patient's commitment to complete important tasks like behavioral work is emphasized. NICE states that CBT is a clinically and financially viable solution for individuals presenting with common mental health issues like depression and anxiety [34].

## CONCLUSION

The development of AD among young adults is multifactorial. Psychodynamic therapy was recommended for mild to moderate AD, while CBT was proposed for young adults with severe forms. Longitudinal, prospective, and randomized trials are needed to study the interventions that may improve AD among young adults as well as the possible causes.

## REFERENCES

1. Almeida, O. P., Alfonso, H., Hankey, G. J., & Flicker, L. (2010). Depression, antidepressant use and mortality in later life: the Health In Men Study. *PLoS One*, *5*(6), e11266.
2. Gale, C. R., Sayer, A. A., Cooper, C., Dennison, E. M., Starr, J. M., Whalley, L. J., ... & HALCyon Study Team. (2011). Factors associated with symptoms of anxiety and depression in five cohorts of community-based older people: the HALCyon (Healthy Ageing across the Life Course) Programme. *Psychological medicine*, *41*(10), 2057-2073.
3. Collins, K. A., Westra, H. A., Dozois, D. J., & Burns, D. D. (2004). Gaps in accessing treatment for anxiety and depression: challenges for the delivery of care. *Clinical psychology review*, *24*(5), 583-616.
4. Corrigan, P. W., & Rüsch, N. (2002). Mental illness stereotypes and clinical care: do people

avoid treatment because of stigma?. *Psychiatric Rehabilitation Skills*, *6*(3), 312-334.
5. Rickwood, D. J., Deane, F. P., & Wilson, C. J. (2007). When and how do young people seek professional help for mental health problems?. *Medical journal of Australia*, *187*(S7), S35-S39.
6. Beyondblue. (2010). *Clinical Practice Guidelines-Depression in Adolescents and Young Adults*. beyondblue.
7. Gibb, S. J., Fergusson, D. M., & Horwood, L. J. (2010). Burden of psychiatric disorder in young adulthood and life outcomes at age 30. *The British Journal of Psychiatry*, *197*(2), 122-127.
8. Grant, J. E., & Potenza, M. N. (Eds.). (2010). *Young adult mental health*. Oxford University Press, USA.
9. Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., ... & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Annals of internal medicine*, *151*(4), W-65.
10. Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—a web and mobile app for systematic reviews. *Systematic reviews*, *5*, 1-10.
11. Eddy, K., Jordan, Z., & Stephenson, M. (2016). Health professionals' experience of teamwork education in acute hospital settings: a systematic review of qualitative literature. *JBI Evidence Synthesis*, *14*(4), 96-137.
12. Hayatbakhsh, M. R., Najman, J. M., Jamrozik, K., Mamun, A. A., Alati, R., & Bor, W. (2007). Cannabis and anxiety and depression in young adults: a large prospective study. *Journal of the American Academy of Child & Adolescent Psychiatry*, *46*(3), 408-417.
13. Herva, A., Räsänen, P., Miettunen, J., Timonen, M., Läksy, K., Veijola, J., ... & Joukamaa, M. (2006). Co-occurrence of metabolic syndrome with depression and anxiety in young adults: the Northern Finland 1966 Birth Cohort Study. *Psychosomatic medicine*, *68*(2), 213-216.
14. Najman, J. M., Hayatbakhsh, M. R., Clavarino, A., Bor, W., O'Callaghan, M. J., & Williams, G. M. (2010). Family poverty over the early life course and recurrent adolescent and young adult anxiety and depression: a longitudinal study. *American journal of public health*, *100*(9), 1719-1723.
15. Bajoghli, H., Keshavarzi, Z., Mohammadi, M. R., Schmidt, N. B., Norton, P. J., Holsboer-Trachsler, E., & Brand, S. (2014). "I love you more than I can stand!"–Romantic love, symptoms of depression and anxiety, and sleep complaints are related among young adults. *International journal of psychiatry in clinical practice*, *18*(3), 169-174.
16. Ostovar, S., Allahyar, N., Aminpoor, H., Moafian, F., Nor, M. B. M., & Griffiths, M. D. (2016). Internet addiction and its psychosocial risks (depression, anxiety, stress and loneliness) among Iranian adolescents and young adults: A structural equation model in a cross-sectional study. *International Journal of Mental Health and Addiction*, *14*, 257-267.
17. Brand, S., Foell, S., Bajoghli, H., Keshavarzi, Z., Kalak, N., Gerber, M., ... & Holsboer-Trachsler, E. (2015). "Tell me, how bright your hypomania is, and I tell you, if you are happily in love!"—Among young adults in love, bright side hypomania is related to reduced depression and anxiety, and better sleep quality. *International journal of psychiatry in clinical practice*, *19*(1), 24-31.
18. Heidari, S., Lewis, A. J., Allahyari, A., Azadfallah, P., & Bertino, M. D. (2013). A pilot study of brief psychodynamic psychotherapy for depression and anxiety in young Iranian adults: The effect of attachment style on outcomes. *Psychoanalytic Psychology*, *30*(3), 381.
19. Johnston, L., Dear, B. F., Gandy, M., Fogliati, V. J., Kayrouz, R., Sheehan, J., ... & Titov, N. (2014). Exploring the efficacy and acceptability of internet-delivered cognitive behavioural therapy for young adults with anxiety and depression: an open trial. *Australian & New Zealand Journal of Psychiatry*, *48*(9), 819-827.
20. Dickson, J. M., & Gullo, M. J. (2015). The role of brief CBT in the treatment of anxiety and depression for young adults at a UK university: A pilot prospective audit study. *The Cognitive Behaviour Therapist*, *8*, e14.
21. Degenhardt, L., Hall, W., & Lynskey, M. (2003). Exploring the association between cannabis use and depression. *Addiction*, *98*(11), 1493-1504.
22. Brook, D. W., Brook, J. S., Zhang, C., Cohen, P., & Whiteman, M. (2002). Drug use and the risk of major depressive disorder, alcohol dependence, and substance use disorders. *Archives of general psychiatry*, *59*(11), 1039-1044.
23. Gilman, S. E., Kawachi, I., Fitzmaurice, G. M., & Buka, S. L. (2003). Family disruption in childhood and risk of adult depression. *American Journal of Psychiatry*, *160*(5), 939-946.
24. Kendler, K. S., & Prescott, C. A. (1998). Cannabis use, abuse, and dependence in a population-based sample of female twins. *American Journal of Psychiatry*, *155*(8), 1016-1022.
25. McGee, R., Williams, S., Poulton, R., & Moffitt, T. (2000). A longitudinal study of cannabis use and mental health from adolescence to early adulthood. *Addiction*, *95*(4), 491-503.

26. Fergusson, D. M., Horwood, L. J., & Swain-Campbell, N. (2002). Cannabis use and psychosocial adjustment in adolescence and young adulthood. *Addiction*, *97*(9), 1123-1135.
27. Davidson, S., Judd, F., Jolley, D., Hocking, B., Thompson, S., & Hyland, B. (2001). Cardiovascular risk factors for people with mental illness. *Australian & New Zealand Journal of Psychiatry*, *35*(2), 196-202.
28. Séguin, L., Xu, Q., Gauvin, L., Zunzunegui, M. V., Potvin, L., & Frohlich, K. L. (2005). Understanding the dimensions of socioeconomic status that influence toddlers' health: unique impact of lack of money for basic needs in Quebec's birth cohort. *Journal of Epidemiology & Community Health*, *59*(1), 42-48.
29. Ben-Shlomo, Y., & Kuh, D. (2002). A life course approach to chronic disease epidemiology: conceptual models, empirical challenges and interdisciplinary perspectives. *International journal of epidemiology*, *31*(2), 285-293.
30. Wood, D. (2003). Effect of child and family poverty on child health in the United States. *Pediatrics*, *112*(Supplement_3), 707-711.
31. Emanuele, E., Politi, P., Bianchi, M., Minoretti, P., Bertona, M., & Geroldi, D. (2006). Raised plasma nerve growth factor levels associated with early-stage romantic love. *Psychoneuroendocrinology*, *31*(3), 288-294.
32. Emanuele, E., Politi, P., Bianchi, M., Minoretti, P., Bertona, M., & Geroldi, D. (2006). Raised plasma nerve growth factor levels associated with early-stage romantic love. *Psychoneuroendocrinology*, *31*(3), 288-294.
33. Blackburn, I. M., & Twaddle, V. (2011). *Cognitive Therapy in Action: A Practitioners' Casebook*. Souvenir Press.
34. Anderson, I., Pilling, S., Barnes, A., Bayliss, L. & Bird, V. (2010). The NICE guideline on the treatment and management of depression in adults. National Collaborating Centre for Mental Healt, National Institute for Health and Clinical Excellence. *London: The British Psychological Society & The Royal College of Psychiatrists*.