

Peer Review File

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Reviewer A

Comment 1: The authors report advances in pharmacotherapy for treatment of depression and suicidal behavior in children and adolescents, focusing on the role of social media especially in the time of Covid-19. A wide range of pharmacotherapeutic strategies are currently in use for the treatment of depressive disorders and self-injurious behaviors. Due to the adverse effects associate with existing pharmacotherapy and treatment resistant cases there is an increasing interest in pharmacological options. The manuscript covers the topic in ad objective and analytic manner. However, I have a few small suggestions that the authors may be introducing in their paper. I think that it would be optimal to better specify in the method section how they proceeded to the extraction of data, and inclusion and exclusion criteria for the research strategy.

It would be good to know how many papers they screened, and how many papers were excluded from the review based on inclusion and exclusion criteria.

Reply 1: Table 1 has been included that outlines the inclusion and exclusion criteria per the Narrative Review checklist. Unfortunately, due to the nature of the original search strategy, the number of papers screened and excluded were not recorded and could not be added to the paper.

Changes in the text: Line 472-473

Comment 2: Furthermore, I suggest to describe diagnostic criteria and definition of depressive disorders in the introduction section. It is important to specify that comorbidities such as substance abuse, personality disorders, or other general medical conditions may influence the overall prognosis of patients and interfere with remission.

Reply 2: We have added the diagnostic criteria and influence of other conditions in affecting the treatment prognosis in the text. We have also added a new reference (#16)

Changes in the text: Lines 137-145

Comment 3: Considering the different treatment strategies for depressive disorders, it is important to mention that lithium is also used for preventing recurrence of mania and depressive disorders. Moreover, augmenting antidepressants with anticonvulsants has shown variable effects in clinical trials. Atypical antipsychotics (e.g. risperidone, olanzapine) are actually prescribed by many clinicians to augment the effect of SSRIs. I think that it is important to report the option of brain stimulation therapies for relieving depression. In conclusion, a more specific detailed description of treatment options for these psychiatric disorders is needed.

Reply 3: We have clarified that SSRIs remain first line as monotherapy for depressive and other related affective disorders. We have previously listed the role

of second generation antipsychotics as augmenting agents for depression but note the limitation of FDA approved indications for use in pediatric populations. We have limited discussion of all treatment options that are available and approved for use in adults since the scope of this paper was limited to pediatric population. We have added lithium's role in augmenting antidepressants as well.

Changes in the text: Line 240, 250, 394

Reviewer B

Comment 1: This is a very nice and well written review of the relationship between social media use, mental health problems, suicidal ideation, self-injury, suicidal behavior and suicide in children and adolescent.

Some minor suggestions: The conclusion should be revised. I believe at this stage of the evidence-based knowledge, it is not justified to recommend to treat suicidality or self harm Behavior I with a combination of psychotherapy and medication first line,. much more you should recommend first to use psychotherapy and if it's not working, then to switch to a combination of augmentation with medication.

Reply 1: We have added language to reflect that psychotherapy should be first line. Changes in the text: Lines 443-446

Comment 2: Furthermore in the table you differentiate between FDA approved, and non-FDA approved recommendations for the use of pharmacotherapy. I think if you recommend the use of a certain age that is not approved by the FDA, you should cite the reference you refer to.

Overall, this is a very nice review!

Reply 2: References are cited in the Table header. We will defer to the editor if this is an appropriate way to cite.

Changes in the text: Line 474, 482

Reviewer C

Drs. Lee and Tifenthaler provide a comprehensive and well written review of pharmacotherapy options for youth with depression and suicidal behavior. The topic is contextualized within the broader environment including connections to the pandemic and social media. I have a few minor suggestions:

Comment 1: Title - consider minor modification to Advances in pharmacotherapy for depression and suicidal behavior in 'youth' with 'the' era of heightened social media.

Reply 1: We have changed the title as suggested.

Changes in the text: Lines 1-2

Comment 2: The authors should clarify in the methods whether they are presenting this as a systematic or narrative review (seems systematic). Perhaps adding a specific "methods" subsection may be helpful for readers.

Reply 2: We have added a method section as suggested.
Changes in the text: Lines 221-234

Comment 3: the first paragraph of the introduction reads as more of an intro to social media vs an introduction to the whole paper. I suggest introducing the global scope of the paper prior to the other lead-in material that focuses extensively on the current mental health of youth and the contributing factors of social media and the pandemic.

Reply 3: We have rearranged some of the text at the end to the beginning.
Changes in the text: 71-80

Comment 4: the submission is very text heavy. The tables are very informative. A figure or two might be helpful to relay some conceptual connections. This is not 100% necessary but would help attract more attention to the article.

Reply 4: Thank you for the comment. Unfortunately, the nature of the review did not lend themselves to adding additional tables/figures.

Changes in the text: N/A