Effect of intervention on self-esteem levels among rural adolescent girls during COVID-19 in Telangana state

Sana Bari, G Swarupa Rani, M Sarada Devi and R Geetha Reddy

Abstract
The coronavirus (COVID-19) disease spread globally, generating intense fear of infection and death, may lead to enduring anxiety. At the same time measures like lockdown, quarantine and physical isolation can exaggerate feelings of loneliness due to disconnection from others which can trigger intense anxiety leading to low self-esteem. The aim of the current study was to find the effect of intervention on levels of self-esteem during the COVID-19 pandemic. A sample of 60 rural adolescent girls were selected for the study. An experimental design was used with a self-esteem scale which was developed to measure the self-esteem levels of the rural adolescent girls during pre-test and post-test. The results of the study revealed that the COVID-19 pandemic had adversely affected the self-esteem levels of the rural adolescent girls with its various measures like closure of educational institutions, ceasing the classroom activities, lockdown, isolated learning environment, absence of teacher who is the greater resource for these children. The results of the study depicted that, the self-esteem levels of the majority of the rural adolescent girls have significantly improved during the post-test. Further the findings also found the paired t-test value was 26.23** which indicates a high significant difference in pre and post-test scores at 0.01 level of probability. Therefore, it was concluded from the results of the study that the intervention on self-esteem levels was effective during the COVID-19 pandemic.

Keywords: COVID-19, self-esteem, rural adolescents, intervention

Introduction
The COVID-19 pandemic is inflicting multiple shocks on adolescents by disrupting their education and having serious impact on their psychological well-being. This disruption resulted in increased feeling of loneliness and suicidal rates exceptionally among adolescents due to the measures taken like quarantine, lockdown and isolation to reduce the spread. Further the other associated measures like shutting down of educational institutes created isolated learning environments, and lead to over use of mass media, prone to unverified information which led to limited understanding of the pandemic is creating panic and fear for death which had immensely impacted the students all over the world. There is a strong relationship between loneliness and depression associated with low self-esteem in young people both in the immediate and the longer term (Dunne, 2020) [7]. Self-esteem is being associated with stressors, thus people who suffer the most during the COVID-19 crisis, are people with low self-esteem (Dolan and Sanchez 2020) [9]. Studies also found that individuals in rural communities are with normal level of self-esteem (Kasturi et al., 2020) [10] and it is eventually creating anxiety, stress and hopelessness which can further lead to suicide (Tan et al., 2019) [18]. Self-esteem refers to an individual’s perception or subjective appraisal of one’s own self-worth, one’s feelings of self-respect and self-confidence and the extent to which the individual holds positive or negative views about self (Sedikides & Gress, 2003) [16]. Self-esteem is important for rural adolescent girls in general and especially in this time of pandemic because, this is an important stage of transition from adolescence to adulthood that causes substantial changes in many spheres of life when they are invested in social connections and in separating from their parents.

Rural adolescent girls, situated at the intersection of three thematic areas – being rural, girl and youth – whose needs and challenges are often rendered invisible. Stressful life events which are unique to rural environments are linked to feelings of depression and worthlessness in many rural communities. High levels of stress may be the result of limited access to the resources required to meet both personal and interpersonal needs during the pandemic times. Rural adolescent girls being vulnerable are facing many challenges during the pandemic due to rapid social change like school closure leading to isolated learning environment, getting...
disconnected with peer group and more time spent at home which might increase the instances of social exclusion, gender discrimination and gender disadvantages - like getting married at young age, domestic burden and a decrease in the autonomy and opportunities given to girl by their critical parents during the amplified stressful situation like COVID-19 lead to lower self-esteem levels among the rural adolescent girls.

Most of the Studies have found that rural adolescent girls have low self-esteem which can have an adverse effect on their physical and mental health during the pandemic. The studies of intervention had a positive impact on self-esteem (Asma et al., 2020; Ribeiro et al. 2020) [2, 14]. Self-esteem can be enhanced by raising rural adolescent girl’s social relationships, feeling of self-worth and by improving their knowledge regarding self, improving positive self-views and utilization of time effectively through self-motivation, improving their confidence and independence. The adolescents need to be ready acceptance the change and their self during such time with enough self-care and kind-ness and the ability to cope such stress through being resilient to bounce back to their normal state of well-being. Self-esteem also appears to be an essential antecedent for the development of self-compassion (Donald et al., 2018) [6].

Many researchers and theories have suggested intervention programs can enhance the self-esteem levels (Akbari et al., 2018; Pothula et al., 2020) [1, 13] but not much attempts were made on studying this aspect. In view of the above considerations we have taken up the present research aimed to study “Effect of intervention on self-esteem levels among rural adolescent girls during COVID-19 in Telangana State” with the following objectives to fill the research gap.

**Objectives of the study**

1. To study the existing self-esteem levels among rural adolescent girls during COVID-19.
2. To develop an intervention programme on self-esteem levels among rural adolescent girls during COVID-19.
3. To offer the intervention programme to enhance the self-esteem levels among rural adolescent girls during COVID-19.
4. To study the effect of intervention programme on self-esteem levels among rural adolescent girls during COVID-19.

**Methodology**

**Sampling Procedure**

**Sampling criteria**

Rural adolescent girls in the age of 10-19 years of age were selected for the study.

**Technique for sample selection**

Purposive sampling technique was adopted for the study (Rural adolescent girls who were willing to participate in the intervention were purposively selected).

**Size of the sample**

60 rural adolescent girls were selected for the study.

**Tools for the study**

A self-developed questionnaire was prepared and finalized after consulting the subject matter specialists to study the self-esteem levels of rural adolescents’ girls during COVID-19. Each statement was arranged on a three-point rating scale such as Agree, Neutral and Disagree with weightage of 3, 2, 1 and 1, 2, 3 for positive items and negative statements respectively. The score of positive and negative statements were added up to get the total score. The total score was divided into high, average and low self-esteem levels.

**Procedure**

The rural adolescent girls belonging to the age range of 10-19 years were purposively selected from the four villages of two mandals of Mahbubnagar district in Telangana to conduct the study. The data was collected in two phases, one is pre-test before the intervention and post-test after two weeks of the intervention. The collected data was coded and analysed using, paired t-test, percentages and frequencies to identify the effect of intervention on the self-esteem levels among the rural adolescent girls during COVID-19 pandemic.

**Intervention**

Intervention was given to the respondents in 4 groups, comprised of 15 respondents in each group for 60 days. Intervention package was developed based on the needs identified during the pre-test focusing on COVID-19, through various instructional methods like PPT presentations, videos, posters, games, activities, role plays, story-telling success stories. The intervention was focus on determinants of self-esteem found through theories like self-awareness, self-confidence, self-regard, self-motivation, self-competence, self-reliance, self-acceptance, self-compassion, self-assertion and self-resilience.

**Results**

Initially, in order to assess whether the COVID-19 had an effect on self-esteem levels we used the frequencies and percentages of the self-esteem from the pre-test as in Table 1. After the intervention to see the changes occurred were observed through comparison of percentages and frequencies of pre and posttest as in Table 2. Then we have assessed and analyzed if the intervention was effective in enhancing the self-esteem levels. We compared the means displayed in Table 3 to determine if there were significant differences between pre and post-test scores using paired t-test.

<table>
<thead>
<tr>
<th>Scores of Self-esteem</th>
<th>Pre-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td>High</td>
<td>0</td>
</tr>
<tr>
<td>Average</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>30</td>
</tr>
</tbody>
</table>

**Note:** ‘F’ represents frequency and ‘P’ represents percentage.

![Fig 2: Levels of Self-esteem among rural adolescent girls before intervention](image)
Data given in the table 1 reveals that about half (50%) of the rural adolescent girls had low self-esteem levels and another half (50%) of them had scored average on self-esteem levels. It was interesting to note that no participant found on high self-esteem levels.

The COVID-19 pandemic markedly impacted the rural adolescent’s self-esteem which was observed in terms of its determinants which concluded that the respondents were confused about their feelings, moods and reactions, had negative self-views with a lot of self-doubt which hindered their school performance. The respondents further seen comparing themselves with friends, lack of independence, and were not competent at time management, goal setting and planning. They were also tough on themselves with fewer self-care habits, tried to please people and were unable to tackle pandemic stress vigilantly.

From the results it can be concluded that self-esteem was lacking among rural adolescent girls. This finding is supported by the study conducted by (Dhillon et al., 2017) [4] and (Kahrynn et al., 2014) [5] who stated that the self-esteem drops sharply in adolescence, and girls had low self-esteem than boys. This might be due to their introvert personality type as mentioned by Patel (2013) [6] who stated that students with low self-esteem were introverts. The COVID-19 related restrictions lead to lower perceived social support, decreased sleep quality and exploring excessive pandemic related news which might impacted them to focus on themselves and their thoughts. Further, these feelings associated with loneliness, anxiety and depression among the rural adolescent girls and finally ended up in low self-esteem. This finding is on par with the study conducted by (Rossi et al., 2020) [15] which stated that self-esteem had a buffer effect protecting against adverse psychological consequences like anxiety and depression triggered by a fear of COVID-19 and dispositional loneliness. Another study also supported the findings by stating that depression, anxiety and low self-esteem were the mental health problems among the COVID-19 affected individuals (Hossain et al., 2020) [8].

Thus, from the results it can be understood that COVID-19 pandemic and lockdown has left many individuals with low self-esteem and struggling to their real self and move on in life. In this context an immediate intervention is necessary to enhance the levels of self-esteem and decrease the adverse effects of the COVID-19 pandemic among the rural adolescent girls.

Table 2: Distribution of rural adolescent girls based on the Self-Esteem levels after the intervention

<table>
<thead>
<tr>
<th>Scores of Self-estees</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Ave</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td>Low</td>
<td>30</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: ‘F’ represents frequency and ‘P’ represents percentage

The above table 2 depicts the changes in the self-esteem levels among the rural adolescent girls during COVID-19 before and after the intervention. It can be found from the table that there is a drastic change in the percentage of adolescent girls half the respondents in the low category in the pre-test had decreased to 2% after intervention which clearly shows that the respondents self-esteem levels have increased. The increase in self-esteem was also observed in the high category where none of the respondents noticed before the intervention have now increased to 20% on high level of self-esteem after the intervention. In the average category 50% of the respondents were observed before the intervention which was increased to 78% after the intervention. This showed that most of them in the low category had moved to average and high self-esteem levels category. This altogether determines that the rural adolescent girl’s self-esteem levels were increased after attending the intervention programme. This proves that the intervention was effective. From the results it can be understood that the rural adolescent girl’s self-esteem levels were enhanced. The increased self-esteem has confronted their confusions about their feelings, moods, reactions and enhanced their positive self-views, curbed self-doubt, minimized social comparisons and became independent to some extent. They became competent enough to utilize their time well with proper planning and organizing. They improved but, still they need a regular practice and more attention towards loving and valuing themselves, practicing assertiveness and self-care habits like yoga and meditation was felt even after the intervention. They were now able to set their goals and committed towards them.

From the results it can be concluded that the intervention helped the rural adolescent girls to improve the levels of self-esteem. This might be the result of the interventions on the determinants of the self-esteem which included self-knowledge, self-regard, self-confidence, self-motivation, self-reliance, self-competence, self-acceptance, self-compassion, self-assertion and self-resilience. Various activities like success stories, puzzles, activity sheets, being me, affirmations, STFAC (Stress, Thoughts, Feelings, Action, Coping) model etc. to practice through the mix of methods like ice breakers, brain storming, interactive discussions, videos, oral storytelling, role plays, scenario analysis and posters etc. were utilized to make the intervention to reach the respondents effectively. However, the intervention on self-
esteem helped the adolescents to realize how unique they are and their potentials enhanced wellbeing and reduced anxiety and stress created due to COVID-19 loneliness by giving scope to enhance their self-esteem in this pandemic. This finding is on par with the study conducted by (Boomsma et al., 2013) [3] which stated that nursing interventions with crisis-oriented care dominated Self-esteem Enhancement. Thus, from the results it can be understood that intervention provided on components of self-esteem was effective in enhancing the self-esteem during COVID-19 pandemic.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Self-esteem</th>
<th>Pre-test</th>
<th>Mean</th>
<th>SD</th>
<th>Post-test</th>
<th>Mean</th>
<th>SD</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Self Esteem</td>
<td>170.22</td>
<td>22.74</td>
<td></td>
<td>207.45</td>
<td>24.78</td>
<td></td>
<td>26.23**</td>
</tr>
</tbody>
</table>

**p≤0.01 level of significance,*p≤0.05 level of significance

The table 3 represents the mean score differences in self-esteem levels among rural adolescent girls during COVID-19 before and after the intervention. It was evident from the table that the mean scores on self-esteem levels was 170.22 with SD 22.74 before the intervention which was later increased to 207.45 and 24.78 after the intervention. The calculated paired t-test value was 26.23** which was found to be significant at 0.01 level of probability. It was fascinating to note that the mean scores had increased drastically after the intervention which were low during pre-test. This means there was a significant change in the respondent’s view of self, their confidence, independence behaviour, be more resilient, assertive, kind and competent gaining a clear understanding of self, resulting altogether in enhanced self-esteem.

Previously the low mean scores on self-esteem levels might be due to their introvert personality type, rural areas culture, gender stereotypes, and also the measures of COVID-19 pandemic which created anxiety and depression due to loneliness. Parents were also not literate which might also have affected hindered the proper guidance and information providing to the adolescents to practice behaviours that lead to psychological wellbeing and self-esteem. Thus, through the intervention these gaps were identified and focus was made on improving all the determinants through various activities to practice and by enhancing the knowledge of these concepts. Hence, it can be concluded from the results that there was a significant positive effect of the intervention on the self-esteem of the respondents. This finding is on par with the study conducted by Inoue (2020) [9] which stated that interventions like Free Being Me improved self-esteem in young adolescent girls.

**Major finding of the study**

- Self-esteem levels of the rural adolescent girls during COVID-19 has increased after the intervention.
- They were able to understand and cope up the challenges of uncertainty.
- The present study helps to understand the effect of pandemic on self-esteem among rural adolescent girls.
- This study also provides an insight to the rural adolescent girls to work on self-improvement and enhance their self-esteem in times of crisis.
- The present study can be used as an inference to the researchers working for adolescents to plan and implement a greater number of intervention programmes to enhance their self-esteem levels.
- Based on the empirical outcomes of this research various intervention programmed could be developed to curb the effects of the any pandemic in future like COVID-19.
- The present study also provides an important insight on which determinants of the self-esteem are affected more during a pandemic and need to be given immediate attention and focus to formulate strategies accordingly.
- This study may be useful to policy makers who are working for the adolescents in providing crisis intervention programmes focused on self-esteem.
- The intervention package developed in the present study can be translated in to other languages and supplied to rural adolescent girls through schools in different states of India.
- Similarly, it is helpful for parent educators to plan education programmes for parents of adolescents.
- The intervention package developed for the purpose of the study is being converted to VCD that can be used as an ICT tool for the training programmes in various personality development trainings for the adolescent girls.

**Conclusion**

Self-esteem during times of crisis like the COVID-19 pandemic is an essential aspect that could help an adolescent to overcome the infuriating effects on their mental health and wellbeing. The findings of the study revealed COVID-19 has adversely affected the self-esteem levels of the rural adolescent girls and the intervention was found to be significantly effective in enhancing the self-esteem levels of the rural adolescent girls during COVID-19. Thus, it is imperative to provide awareness and promote intervention programmes so that they can improve self-esteem and work for self-improvement and adjustment in the situations like pandemic ceasing the ill effects, the pandemic had on the psychological wellbeing.

**References**


