Evidencing the need for psycho-socio-economic action to support the rural upskilled youth to cope with the COVID-19 health crisis: a state-wide audit [version 1; peer review: 1 approved]

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Abstract
Background: The impact of the COVID-19 pandemic extends beyond morbidity and mortality to social, psychological, and economic implications. This study aims to determine the grouping of modifiable impacts of COVID-19 among the rural poor youth working in unorganized sectors in Kerala, India.

Methods: We conducted a state-wide telephonic survey, in the context of a COVID-19 national lockdown with 14430 youth, who had been trained through the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), a skill development program of the Government of India, in the last year. Economic, health and health care, social and emotional issues, basic amenity needs, and interpersonal issues were explored in detail. We further prioritized the needs of vulnerable subgroups; pregnant women, people living alone, and those living with comorbid health conditions within this population.

Results: All the participants were aged between 18-35 years and were economically poor rural residents. Only 28% had a permanent job and 6.8% of the participants were not working due to the COVID-19 related lockdown. Among the issues shared, the five domains with the highest frequency were financial toxicity, such as loss of income (32.99%), poor financial backup and debt (31.29%), concerns regarding the future job opportunities (23.92%) and fear of losing their current job (14.75%). 98% of the respondents expressed interest in following up with supportive engagements.

Conclusion: This research aims to voice students’ needs to the concerned authorities to design a multi-sectoral, multi-disciplinary, and multi-systemic approach to reduce their distress in the context of
pandemic outbreak.

**Keywords**

COVID 19, Upskilled youth, psychological distress, Kerala

This article is included in the Coronavirus collection.

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Introduction
The impact of the COVID-19 pandemic, a public health emergency (WHO, 2020), is beyond morbidity and mortality, and there will certainly be massive social, psychological and economic ramifications for a large population around the world (Li et al., 2020; Wang et al., 2020; Xiao et al., 2020a; Xiao et al., 2020b). Pandemic-related actions such as social distancing and contact restrictions have hampered daily schedules, collapsed many industries and lowered GDP, which has further resulted in financial distress, job loss, job insecurity, temporary/permanent unemployment, unavailability of community services, social isolation, poor mental health outcomes and so on (Cao et al., 2020; Kar et al., 2020; Panchal et al., 2020; Pulla, 2020; Rubin & Wessely, 2020). It has also put a halt to emergency medical services and transportation facilities (The Indian Express, 2020), causing social disruptions worldwide. Concerns around the exacerbation of pre-existing mental health issues and greater difficulty in accessing health support and services have also been reported (The Academy of Medical Sciences, 2020). In addition, an increase in domestic abuse and violence against women is also widely prevalent (Qantarade, 2020).

The impact is much more disastrous for low and middle-income countries like India where more than 90% of the population depends on daily wage jobs or represent the informal job sector (Buheji et al., 2020). The economic loss imparted by pandemic related restrictions further imposes major mental health problems of depression, anxiety, and even suicidality for the people within the low-income group (Panchal et al., 2020). The quarantines and economic shutdowns speed up unemployment, leading to poverty and a minimum standard of living. A recent UN study pointed out that global poverty could increase for the first time since 1990, posing a major threat to the UN Sustainable Development Goal of ending poverty by 2030 (Sumner et al., 2020). To minimize the crisis, the world should aim to overcome the negative impacts of COVID-19 by focussing initially on the poorer communities (Buheji et al., 2020).

This study is conceptualized in the context of the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) program of the Government of India (GoI). DDU-GKY is one of the clusters of initiatives of the Ministry of Rural Development (MoRD), spread across 28 states of India, with 1575 projects, implemented through 771 Project Implementing Agencies (PIAs), which seeks to promote rural livelihoods by upskilling the rural youth (aged between 15-35), who are poor, and provide them jobs with regular monthly wages.

The current study is the first to describe the grouping of modifiable factors within the different domains of impact for youth belonging to impoverished backgrounds engaged in the unorganized work sector. The aim of DDU-GKY involves training unemployed youth from rural poor households with employable skills (DDUGKY, 2020). Measures are built into the guidelines to ensure exclusivity in the recruitment of the poor and the vulnerable for participation in the program. It is for the first time that the Participatory Identification of Poor (PIP) strategy has been used to identify vulnerable groups. Additionally, support strategies including placement services, placement counselling and job tracking for one year after course completion are mandated in this scheme (DDUGKY, 2020). This process is facilitated by PIA driven call centres. PIAs are further coordinated through state and district coordinating agencies of DDU-GKY. This audit is an attempt to optimize its ecosystem to achieve its well-defined goals. In addition, our study helps to identify the key issues faced by the participants in the context of pandemic, thus helping to make a positive difference in the lives of the youth and their families by reengaging this productive workforce into the economic system for their improved economic outcomes.

Methods
Ethical statement
The study was approved as an exploratory study by the Institutional Review Board of Rajagiri College of Social Sciences (Autonomous) with number RIRB201906. Obtaining written consent was impossible due to COVID-19 related lockdown and, realizing the urgency of the study, the Institutional Review Board permitted the researchers to obtain oral consent from the participants. Oral consent was obtained from participants and their consent was audio recorded. Participants were informed about the voluntary nature of participation prior to the data collection.

Study design and participants
The aim of the study was to identify, clarify and quantify the issues and challenges faced due to the COVID-19 related lockdown and resulting economic toxicity in recently upskilled youth trained through DDU-GKY centres across Kerala. The issues were grouped under job related concerns and health domains. This multi-site cross-sectional audit included all 90 PIAs across the State of Kerala, India, and a total of 723 PIA staff members within 35 working days, from 4th May 2020 to 19th June 2020. Eligibility criteria for the recruitment of PIA staff members for data collection included a minimum educational qualification of graduation from university or above. Information about all pass out students upskilled through the DDU-GKY program from 1st April 2019 to 31st April 2020, aged above 18 years were retrieved from student records kept at various agencies. For this study, census method was used, where all 15200 students who passed out from these 90 PIAs during the specified period were contacted over telephone and an average of 30 minutes were spent on each participant. A total of 14430 respondents shared their experience, with 770 who did not consent.

Audit process
The state coordinating agency organized a series of virtual training programs for the PIA staff members about the context, purpose, process and content of the project and details of what their individual participation would entail. Staff members were trained to use the audit tool for the purpose of data collection. Additional training was given to the PIA project leads and professional social workers (liaison team) working in these agencies, to address the questions and queries of the program implementing staff.
Individual audit sheets were collected from each agency after the completion of the audit. Data entry training was provided to staff members and staff were instructed to perform data entry on the day of the interview. The study data was collected and managed at the Research Centre of Rajagiri College of Social Sciences (Autonomous).

Quality check mechanisms
A two-layer supervisory process was introduced to ensure data quality. In the first layer, the resource institute navigated the whole process through a direct link with the liaison team working in these PIAs. In the second level, the liaison team supervised their staff members. The liaison team allocated 20–25 students to each eligible staff member randomly using a systematic sampling technique. The staff members proactively engaged with their allotted students over telephone. Upon the completion of two interviews, a brief feedback session was conducted by the liaison team to clarify doubts and sort out any issues faced by the interviewers. This process helped in standardizing the process of completion of the study tool. Almost 10% of collected data was then randomly checked by the liaison team for any missing information, wrong entries or unrecorded data. For this purpose, systematic sampling technique was used, where every 6th person in the list was contacted to verify the accuracy of the data.

Development of the audit tool
The audit tool (Saju et al., 2020) captured data across multiple domains including general physical health, mental health and emotional stressors, social issues, economic and job-related concerns, interpersonal conflicts and other practical concerns. The demographic profile included gender, marital status, working status and course attended under the DDU-GKY scheme. Health-related concerns were about health of family members, their own health, fear of accessing hospital care due to fear of infection, concerns about higher mortality of COVID-19 infection in chronically ill family members, fears of higher risk in old and very young family members, sedentary lifestyle and pregnancy-related worries. Financial concerns were related to loss of income, poor financial backup, future job opportunities, current job loss, debts, inability to access basic amenities like food and medicine, pay rent, financial resource crunches, pay-cuts and not being permitted by their family to undertake a job due to fear of COVID-19 spread. Situational stressors included concerns regarding community spread, geographical alienation from family members (due to lockdown and travel restrictions), and anxiety about family members working in COVID-19 hotspots. Psychological issues included feelings of loneliness, boredom, screen addiction, disrupted routine activities and disconnect from others. Issues with extended family members and other marital issues were elicited under this heading, interpersonal issues and attitudes to interstate migrant workers were also explored.

Statistical analysis
Study data was collected and managed using the Excel 2016 database hosted at Rajagiri College of Social Sciences (Autonomous). Data from all the 90 PIAs were aggregated and quantitatively analysed. A descriptive analysis of this aggregated data is detailed in this paper. All statistical analysis procedures were performed using Stata 14 and R version 3.6.3. Chi-square tests and t-tests were performed to test the significance of the study variables.

Results
Basic demographics
The current study explored the issues and concerns of 14430 rural upskilled youth from 90 PIAs of the DDU-GKY programme (Saju et al., 2020). More than half of the participants were males (55%) and the majority were unmarried (87%) (Table 1). Participants opted for a variety of courses, including food and beverage (12.8%), technician related courses (12.1%), courses related to banking and accounting (11.9), and hospitality (11.9%). Among the participants, 28% of them had permanent jobs, 6.8% were not working due to the COVID-19 related lockdown

| Table 1. General demographics of the respondents (n=14430). |
|-----------------------------|-------------------------|
| Demographics               | Frequency (%)           |
| Gender                      |                         |
| Male                        | 8,064 (55.88%)          |
| Female                      | 6,366 (44.12%)          |
| Marital status              |                         |
| Married                     | 1,736 (12.03%)          |
| Unmarried                   | 12,674 (87.83%)         |
| Widowed/separated           | 20 (0.14%)              |
| Working status              |                         |
| Working                     | 4,107 (28.46%)          |
| Not working*                | 10,323 (71.54%)         |
| Course studied              |                         |
| Automobile                  | 1,844 (12.78%)          |
| Food/beverage               | 1,753 (12.15%)          |
| Banking/accounting          | 1,714 (11.88%)          |
| Medical related courses     | 1,712 (11.86%)          |
| Courses related to managerial posts | 1,683 (11.66%) |
| Hospitality                 | 1,309 (9.07%)           |
| Technician                  | 1,155 (8.00%)           |
| IT                          | 1,024 (7.10%)           |
| Sales                       | 1,022 (7.08%)           |
| Others                      | 1,214 (8.41%)           |

*Not working includes all the participants who are students, participants who are unemployed, and participants who had lost their job due to COVID-19.
and 0.5% had permanently lost their job due to the pandemic situation. Out of the 77 respondents who permanently lost their job, 77% were males and 97% were unmarried. The highest percentage of people who had lost their job permanently were from the automobile industry (59.7%), followed by other technicians (16.9%).

Concerns expressed by the participants

A range of 28 different issues were shared with the staff (Table 2, Table 3 and Table 4).

The six issues with the highest frequency were related to economic issues such as loss of income, poor financial backup (31.29%), concerns regarding future job opportunities (23.92%), and insecurity regarding current job (14.75%). Second level issues were related to health: fear of future (27.55%) and concerns regarding COVID-19 spread. 7.67% of the respondents had food scarcity. Interpersonal issues included problems with extended family members (1.37%) and marital issues (0.2%).

Male participants generally expressed concerns regarding finance, employment, and basic needs, while the major concerns of female participants were related to health and interpersonal issues. It is to be noted that psychological issues and concerns were expressed more by males than females. Unmarried respondents had more concerns in all the domains studied when compared to married respondents.

Issues specific to vulnerable populations

Figure 1 demonstrates major issues expressed by vulnerable populations among the respondents. Some of the major issues expressed by pregnant women were concerns regarding their health, concerns about the baby, potential COVID-19 infection during check-ups and other hospital engagements, poor financial

### Table 2. Financial and employment related concerns of participants.

| Issues expressed                              | Total     | Gender | \(X^2, P^*\) | Marital status | \(X^2, P\) |
|----------------------------------------------|-----------|--------|--------------|----------------|------------|
|                                              | Female    | Male   |              | Married        | Unmarried  |
| **Financial concerns**                       |           |        |              |                |            |
| Loss of income                               | 4,760(32.99%) | 2082(43.74%) | 2678(56.26%) | 0.41,p=0.52   | 495(10.40%) | 4265(89.60%) | 17.86,p<0.000 |
| Poor financial background                    | 4,515(31.29%) | 1879(41.62%) | 2636(58.38%) | 16.7,p<0.000  | 391(8.66%)  | 4124(91.34%) | 0.002,p=0.96  |
| Concerns regarding debts                     | 535(3.71%) | 252(47.10%) | 283(52.90%)  | 2.01,p=0.16   | 64(11.96%)  | 471(88.04%)  | 0.002,p=0.96  |
| Unable to pay rent                           | 132(0.91%) | 56(42.42%) | 76(57.58%)   | 0.15,p=0.69   | 19(14.39%)  | 113(85.61%)  | 0.70,p=0.402  |
| **Employment related concerns**             |           |        |              |                |            |
| Concerns regarding future job opportunities  | 3,451(23.92%) | 1380(39.99%) | 2071(60.01%) | 31.4,p<0.000  | 254(7.36%)  | 3197(92.64%) | 93.48,p<0.000 |
| Insecurities regarding current job           | 2,129(14.75%) | 769(36.12%) | 1360(63.88%) | 64.7,p<0.000  | 209(9.82%)  | 1920(90.18%) | 11.56,p=0.001 |
| Concerns due to pay-cut                      | 1,195(8.28%) | 501(41.92%) | 694(58.08%)  | 2.54,p=0.11   | 85(7.11%)   | 1110(92.89%) | 29.77,p<0.000 |
| Family not permitting them to go for a job (due to COVID-19) | 93 (0.64%) | 61 (65.59%) | 32 (34.41%) | 17.5,p<0.000 | 15 (16.13%) | 78 (83.87%) | 1.49,p=0.223 |
| **Basic needs**                              |           |        |              |                |            |
| Food scarcity                                | 1,107(7.67%) | 511(46.16%) | 596(53.84%)  | 2.03,p=0.154  | 86(7.77%)   | 1021(92.23%) | 20.57,p<0.000 |

*Chi-square test was employed to find the statistical difference and a p value of <0.05 was considered significant.
background and loss of income due to the pandemic. The major issues expressed by participants who were living alone included loss of income, poor financial backup, fear of the future in the context of the epidemic, future job concerns and loneliness. Food scarcity was reported by 24.5% of the respondents who were living alone. People with comorbid health conditions had fears of the future, concerns regarding COVID-19 infection, loss of income, poor financial backup, conflict with family, future job concerns and job insecurity.

Discussion
This research has the potential to identify the felt needs of socially and economically vulnerable youth in the context of the COVID-19 pandemic. This inquiry was developed based on a resilience and strength perspective, which assumes that even though people have existing strengths and motivations, there are situations where they might need a helping hand in solving problems in their life. Recent research found that youth from rural areas, families without a steady income, and people living alone were associated with increased COVID-19 related impacts (Cao et al., 2020). Therefore, the information gathered from the current study on the needs of the vulnerable youth will guide service navigation, helping them to better cope with the pandemic situation.

A total of 14430 upskilled youth from DDU-GKY centres across Kerala participated in this audit and shared their issues. A range of 28 major issues were identified. All these issues were further grouped under five different domains. Firstly, were issues related to financial toxicity, such as loss of income (32.99%), poor financial backup and debt (31.29%), concerns regarding future job opportunities (23.92%) and fear of losing their current job (14.75%). The second group of issues were related to health, which included anxiety about health (27.55%) and concerns about the fast spread of COVID-19 (22.20%). The other three domains were the adjustment to pandemic situations, family and social relationships and psychological distress. These five domains and their subcategories demonstrate the complexity of the range of issues participants faced. These study findings are in agreement with the findings of recent studies conducted in similar areas, where almost 25% experienced psychological issues and perceived COVID-19 as a threat to their existence (Chakraborty & Chatterjee, 2020). The study highlights that unmarried male youths had higher levels of financial, employment, and psychological concerns, whereas young females were more concerned about their own and their family member’s health. These concerns included issues related to both physical health as well as difficulty in accessing different health care services. Previous studies also found that females experienced greater psychological impacts due to the pandemic (Varshney et al., 2020; Wang et al., 2020).

Financial crunches and concerns regarding future job opportunities and the security of current jobs were the major reasons for financial and employment-related worries among the participants, as most of these youth are working in sectors, such as aviation, travel, hospitality, retail, manufacturing, and automotive, which are most affected by the COVID-19 pandemic (Thomas, 2020; Wang et al., 2020). The economic domain was the most affected domain of the married participants. Consistent with

| Issues expressed | Total | Gender | X², P | Marital status | X², P |
|------------------|-------|--------|-------|----------------|-------|
|                  |       | Female |       | Male           |       |
| Health related concerns |       |        |       |                |       |
| Worries about health of other family members | 959 (6.65%) | 480(50.05%) | 479(49.95%) | 14.7, p<0.000 | 110(11.47%) | 849(88.53%) | 0.304, p=0.581 |
| Worries about own health | 720 (4.99%) | 353(49.03%) | 367(50.97%) | 7.41, p=0.006 | 94(13.06%) | 626(86.94%) | 0.75, p=0.38 |
| Difficulty in accessing hospital care | 142 (0.98%) | 82(57.75%) | 60(42.25%) | 10.8, p=0.001 | 8(5.63%) | 134(94.37%) | 5.54, p=0.019 |
| Family member with other health conditions | 132 (0.91%) | 50(37.88%) | 82(62.12%) | 2.10, p=0.41 | 12(9.09%) | 120(90.91%) | 1.08, p=0.297 |
| Sedentary lifestyle | 124(0.86%) | 42(33.87%) | 82(66.13%) | 5.32, p=0.021 | 5(4.03%) | 119(95.97%) | 7.56, p=0.006 |

*Chi Square statistics was employed to find the statistical difference and a p value <0.05 was considered significant.*
Table 4. Social and interpersonal issues of the participants.

| Issues expressed                                        | Total | Gender | \(X^2, P^*\) | Marital status | \(X^2, P\) |
|--------------------------------------------------------|-------|--------|--------------|----------------|------------|
|                                                        |       | Female | Male         | Married        | Unmarried  |
| **Situational stressors**                               |       |        |              |                |            |
| Fear of future (in the context of the pandemic)         | 3,976 | 1707   | 2269         | 3.12, p=0.08   | 314(7.90%) | 3662(92.10%) | 88.58, p<0.000 |
| Concerns regarding COVID-19 spread                     | 3,203 | 1371   | 1832         | 2.88, p=0.09   | 321(10.02%)| 2882(89.98%) | 15.69, p<0.000 |
| Geographically distant family (due to COVID-19 lockdown)| 511   | 258    | 253          | 8.73, p=0.003  | 58(11.35%)  | 453(88.65%)  | 0.23, p=0.63   |
| Family member working in COVID-19 prone areas           | 374   | 164    | 210          | 0.01, p=0.92   | 71(18.98%)  | 303(81.02%)  | 17.54, p<0.000 |
| **Other issues**                                        |       |        |              |                |            |
| Media addiction                                        | 830   | 209    | 621          | 128.1, p<0.000 | 77(9.28%)  | 753(90.72%)  | 6.31, p=0.012  |
| Disrupted routine activities                           | 868   | 319    | 549          | 20.32, p<0.000 | 86(9.91%)  | 782(90.09%)  | 3.93, p=0.047  |
| **Interpersonal Issues**                               |       |        |              |                |            |
| Issues with extended family member                     | 282   | 152    | 130          | 11.17, p=0.001 | 68(24.11%) | 214(75.89%)  | 39.68, p<0.000 |
| Living alone (single/divorced/deparated)               | 192   | 96     | 96           | 2.73, p=0.098  | 22(11.46%) | 170(88.54%)  | 0.06, p=0.80   |
| Marital issues                                         | 29    | 25     | 4           | 20.88, p<0.000 |           |            |                |
| **Cultural context**                                   |       |        |              |                |            |
| Presence of interstate migrant workers                  | 145   | 48     | 97           | 7.21, p=0.007  | 6(4.14%)   | 139(95.86%)  | 8.62, p=0.003  |

*Chi-square test was employed to find the statistical difference and a p value of <0.05 was considered significant.

In agreement with other studies, the situational stressors like fear of infection and rampant spread of the virus were worrisome for many. Chakraborty & Chatterjee (2020) also found that the majority of participants were “preoccupied with the idea of getting infected with COVID-19”. Additionally, those with physical comorbidities had concerns regarding their own health, resulting in increased distress. This coincides with previous findings (Fu et al., 2020; Varshney et al., 2020). In addition, Cao et al. (2020) reported that those with a relative or an acquaintance infected with COVID-19 were more likely to experience severe anxiety. Inadequate access to hospital care, as a result of the halt to emergency medical services and transportation facilities, was also found to be an area of worry (The Indian Express, 2020), which was found to be a cause of distress in all participants, but especially female participants, of this study.

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Mass quarantine and nation-wide lockdown have wide consequences on mental health and well-being, especially for vulnerable populations. A lack of supplies of basic essentials, financial crunches, job related uncertainties and families needing separation (Brooks et al., 2020; Dubey et al. 2020; Hawryluck et al., 2004; Maunder et al., 2003) were some of the significant contributors of stress. Stressors like living alone, conflicts with extended family members, marital issues resulting in increased worry were also found in this study and it is consistent with previous findings that social support reduced psychological pressures during epidemics (Cao et al., 2020; Chen et al., 2020). These findings propose an ecosystem framework which
acknowledges the socio-economic environment of the students (Green & McSermott, 2010), and consequently adds value to the DDU-GKY program. It advocates for positive change by initiating early economic and social engagements. This proactive empathetic engagement has twin benefits; this initiative gives this program a positive support service reputation, where the students and families maintain their long term trust in the institution and the program. Secondly, it helps the staff members to be sensitive to the needs of the students and become responsive to their needs through developing pathways of care. They become empowered to voice students’ needs to the concerned authorities and advocate for them in mobilizing internal resources as well as external community resources for achieving the goals of this program.

Our study also has its limitations. The current study explored the various domains of issues from the perspective of the researcher. A qualitative study on the experience of the DDUGKY participant is necessary for a clearer understanding of the issues from the participant’s perspective.

Conclusion
This staff engagement facilitates speedier reengagement of students through the navigation of both formal and informal support systems, to address their psycho-socio- economic needs. This proactive engagement is a unique model that encourages the PIAs to engage with their alumni to offer support to sustain them in their jobs. This cost-effective support model can be replicated to similar programs to ensure their sustainability and to achieve stipulated goals and objectives.

Data availability
Underlying data
Figshare: Evidencing the need for psycho-socio-economic action to support the rural upskilled youth to cope with the COVID-19 health crisis: a state-wide audit, https://doi.org/10.6084/m9.figshare.13258826.v4 (Saju et al., 2020).

This project contains the following underlying data:
- DATA_FILE.xls (participant characteristics and responses)

Extended data
Figshare: Evidencing the need for psycho-socio-economic action to support the rural upskilled youth to cope with the COVID-19 health crisis: a state-wide audit, https://doi.org/10.6084/m9.figshare.13258826.v4 (Saju et al., 2020).

This project contains the following extended data:
- Audit tool.docx (copy of audit tool)
- CODE BOOK.docx (code book for underlying data)

Data are available under the terms of the Creative Commons Zero “No rights reserved” data waiver (CC0 1.0 Public domain dedication)

Figure 1. Major issues expressed by vulnerable participants.
on general population in West Bengal: A cross-sectional study. Indian J Psychiatry. 2020; 62(2): 266.

Chen Q, Liang M, Li Y, et al.: Mental health care for medical staff in China during the COVID-19 outbreak. Lancet Psychiatry. 2020; 7(4): e15-e16.

Pulla P: Covid-19: India imposes lockdown for 21 days and cases rise. BMJ. 2020; 368: m1251.

Rubin GJ, Wessely S: The psychological effects of quarantining a city. BMJ. 2020; 368: m313.

Rubin GJ, Wessely S: The psychological effects of quarantining a city. BMJ. 2020; 368: m313.

WANG C, Pan R, Wan X, et al.: A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. Brain Behav Immun. 2020; 87: 40–48.

WHY upskilling will be important in post COVID-19 job scene. The Week. 2020; Retrieved from Reference Source.

Varshney M, Parel JT, Raizada N, et al.: Initial psychological impact of COVID-19 and its correlates in Indian Community: An online (FEEL-COVID) survey. PLoS One. 2020; 15(5): e0233874.

Xiao H, Zhang Y, Kong D, et al.: The Effects of Social Support on Sleep Quality of Medical Staff Treating Patients with Coronavirus Disease 2019 (COVID-19) in January and February 2020 in China. Med Sci Monit. 2020a; 26: e923549.

Xiao H, Zhang Y, Kong D, et al.: The Effects of Social Support on Sleep Quality of Medical Staff Treating Patients with Coronavirus Disease 2019 (COVID-19) in January and February 2020 in China. Med Sci Monit. 2020a; 26: e923549.

Xiao H, Zhang Y, Kong D, et al.: Social Capital and Sleep Quality in Individuals Who Self-Isolated for 14 Days During the Coronavirus Disease 2019 (COVID-19) Outbreak in January 2020 in China. Med Sci Monit. 2020b; 26: e923921.
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The contribution brings up-to-date results of the research evidencing the need for psycho-socio-economic action to support the rural upskilled youth to cope with the COVID-19 health crisis. It was carried out using a significant sample of such young people. I appreciate the appropriate methodology and design of the research. The research provides significant and even alarming results (lack of food, pregnant women's concerns, 25% of the respondents having experienced psychological problems during the pandemic, fears caused by inadequate access to healthcare due to the standstill of medical services and transport facilities, Covid-19 pandemic being an existential threat, etc.). As the aim of the research was to obtain this data, the application section of the research is absent in the report. I believe that the authors, the involved institutions, and the government of India will all further process the outcome of the research and put them into practice to reduce the impact of the pandemic on the vulnerable groups of population.

Minor comments:
- It is not clear from the published research report whether and how the outcome of the research could have been affected by the fact that the respondents were participants of an educational program.
- Some of the interpretations could be broader. For instance, the connections resulting from the finding that the unmarried respondents are more concerned about all the examined domains compared to those married, are only formulated partially, as the factor of social support.

Is the work clearly and accurately presented and does it cite the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Partly

If applicable, is the statistical analysis and its interpretation appropriate?
Yes

Are all the source data underlying the results available to ensure full reproducibility?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Social Work, Counseling, Supervision, Psychotherapy, Theories of social Work, Social research in the fields of social work, young people, seniors, poverty, voluntary simplicity and others

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

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