



Original Research Article

ASSESSMENT OF WELL-BEING AND ITS SOCIO-DEMOGRAPHIC CO-RELATES AMONG ADOLESCENTS IN RURAL AND URBAN AREAS OF ALIGARH

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ABSTRACT

Background: Physical, social, and psychological development undergo a complicated and crucial shift during adolescence. Adolescence is a distinct, formative stage of human development; it is not a stage at which children are older or adults are younger. Assessing adolescents' well-being and exploring how socio-demographic characteristics relates to wellbeing were key objectives of the study. **Objective:** To assess wellbeing and its socio-demographic co-relates among adolescents in rural and urban areas of Aligarh.

Materials and Methods: A cross-sectional survey was conducted among 310 adolescents (aged 10–19 years) residing in field practice areas of JNMC, AMU, Aligarh from January to July 2022. Simple random sampling method was used and adolescents from both rural and urban areas were included. Self-administered questionnaire was used to collect Socio-demographic data and other determinants of adolescent well-being.

Results: Out of 310 adolescents' majority were male 165(53.2%) and the mean age of adolescents are 14.63(SD=2.8) years. Greater number (41.9%) of the participants belonged to the lower middle class. 73.9% of adolescents had comparatively good well-being assessed using the WHO-5 questionnaire. It was found that age, religion, education and socio-economic status were the significant ($p < 0.05$) determinants of well-being.

Conclusions: The general well-being of adolescents is observed to improve with an increase in education and socioeconomic status.

Keywords: Well-Being, Adolescents, psychological development, Physical development.

INTRODUCTION

Adolescence is the period between 10 and 19 years of life.^[1] It is divided into three phases: early(10-13yr), mid(14-16yr), and late(17-19yr) puberty.^[2] India has the largest population of adolescents in the world, being home to 253 million adolescents, constituting 20 % of the total population.^[3] Adolescence is a critical development period characterized by rapid biological, emotional, and social development with long-term implications on health and well-being.^[4] Adolescence is time when people become independent individuals, build new relationships, develop social skills, and learn behaviors that will last the rest of their lives.

Adolescents form behavioral patterns that can either protect their health and the health of others or jeopardize their health now and in the future. These behaviors include diet, physical activity, substance use, and sexual activity.^[5,6] Adolescents were mentioned 12 times in Sustainable Development Goals (SDGs) indicators relevant to health, including nutrition, reproductive health, sexual and intimate partner violence, child marriage, education, and employment.

Two conceptual approaches to well-being dominate discussions: subjective and objective.^[7] Subjective constructs value personal experiences and individual fulfilment, such as eudaemonic well-being (finding purpose in life and having a sense of personal

growth), hedonic well-being (feeling happy and satisfied with one's own life), and others (e.g., optimism). Objective approaches define well-being in terms of Quality-of-life indicators such as material resources (e.g., income, food, and housing) and social attributes (e.g., education, health, political voice, social networks, and connections).^[8,9,10,11] Well-being is understood to emerge through the dynamic interplay of personal, societal, and environmental structures and processes.^[12] Well-being predicts attitude and performance, productivity, and innovations. It allows people to realize their aspirations, satisfy their needs, and develop personal resilience to live a long and fruitful life.

MATERIALS AND METHODS

This study is a larger cross-sectional study conducted in the field practice area of Dept. of Community Medicine, JNMC, AMU, Aligarh from January to July 2022. Localities under Urban health training center (UHTC) and Rural Health Training Centre (RHTC) were included in the study. Sample size was calculated from the formula:

According to the comprehensive National Nutrition Survey (2016-18) conducted by the Ministry of Health and Family Welfare, malnutrition in adolescents was found to be 24%.

Applying the formula, $N = [(1.96)^2 \times P(1-P)] / L^2$

where, P = Prevalence of malnutrition=24%

L = Allowable error=5%

$N = 280.28 + 10\%$ non-response rate (28.02)

$N = 308.30$ rounded off to 310

Final Sample Size = 310

Adolescents in the age group 10-19 years, registered households in RHTC and UHTC and head of households giving consent were included in the study whereas individuals with chronic illness, adolescents not willing to participate and head of the household not giving consent were excluded from the study.

Line listing of adolescents between 10 through 19 years of age, in each area, was done. The sample to be drawn from each area was calculated according to PPS (Probability Proportionate to Size). Since a listing of every unit of the accessible population was available, simple random sampling was performed. Parents of adolescents were informed about the purpose of the visit and the study and their consent was obtained to participate in the study. A structured questionnaire with close-ended questions was used to obtain the required information.

Data collection tools: Data was collected regarding the socio-demographic variables like age, sex, religion, caste, education, school attendance, occupation, area of residence, type of family and

social class¹³. For these data collection, a pre-tested preformed self-administered questionnaire was used. Beside this WHO-5 questionnaire was used for assessment of well-being. It consists of 5 questions which enquire into the adolescent's psychological and mental functionality. Based on the Likert scale, the response varies for each question in a graded fashion like a numeral is assigned for each response, viz. 0 (At no time), 1 (Some of the time), 2 (Less than half the time), 3 (More than half the time), 4 (Most of the time), 5 (All of the time). After the response is noted the aggregate out of 25 is multiplied by 4. The score varies from 0 (the least) to 100 (the maximum). According to the available literature a score below 50 is assigned as poor well-being and a score ranging from 50 to 100 is indicated as good well-being. If the raw score is less than 13 or the patient responds 0 to 1 to any of the five items, it is recommended that they take the Major Depression (ICD-10) Inventory.

Well-being - A score above 50 is considered to be good well-being and below is poor.^[14]

Statistical analysis - Data was analyzed using IBM 20.0 Package (Statistical Package of Social Science). Descriptive data was shown with the help of frequency, percentages and charts. Chi square test was used for categorical data and association was said to be statistically significant if $p < 0.05$.

Ethical considerations- Prior permission was taken from institutional ethical committee, Faculty of Medicine, J.N. Medical College, AMU, Aligarh.

RESULTS

In this study, out of 310 adolescents, there were 53.2% of males and 46.8% of females. Males and females were equally distributed.

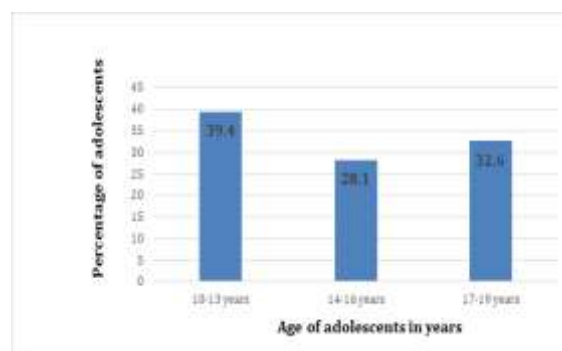


Figure 1: Distribution of the study population according to their age(N=310)

In our study, adolescents are almost equally distributed between the age groups 10 to 19 years as shown in figure 1. The mean age of adolescents studied was 14.63 ± 2.79 years.

Table 1: Distribution of study population according to socio-demographic profile

Characteristics	Frequency (N)	Percentage (%)
Place of Residence		
Rural	195	62.9
Urban	115	37.1
Religion		
Hindu	150	48.4
Muslim	160	51.6
Caste		
General	93	30
OBC	160	51.6
SC	57	18.4
Marital status		
Unmarried	307	99
Married	3	1
Family type		
Nuclear	232	74.8
Joint	31	10
3-generation	47	15.2
House ownership		
Owned	283	91.3
Not owned	27	8.7
Education		
Illiterate	10	3.2
Primary school	86	27.7
Middle school	106	34.2
High school	61	19.7
Intermediate/diploma	47	15.16
School attendance		
Never attended school	10	3.2
Currently attends school or college	256	82.6
Drop out	44	14.2
Reasons for never attending school (N=10)		
Education not considered necessary	5	50
Required for work on the family farm or in the family business	1	10
Costs too much money	4	40
Reasons for dropping out (N=44)		
Required for household work	14	31.8
Required for work on the family farm or in the family business	14	31.8
Failed exams	11	25
Illness or death of family member	4	9
Got married	1	2.27
Living with parents		
Yes	300	96.8
No	10	3.2
Socio -Economic Status (Modified BG Prasad -2020)		
Upper class	16	5.2
Upper Middle	56	18.1
Middle class	95	30.6
Lower Middle	129	41.9
Lower Class	13	4.2

In the present study as shown in table 1, most of the adolescents were from rural area (62.9%) than urban area (37.1%). Since, rural area is larger and more populous, we have taken proportionally more children from rural area. It also shows that 160 (51.6%) adolescents belonged to backward castes followed by 93 (30%) general caste and 57 (18.4%) from scheduled castes. In our study, most adolescents belonged to the nuclear family (74.8%), 15.2% belonged to 3-generation family and only 10% were living in a joint family. In this study only 3.2% of adolescents were illiterate; had never attended school and 14.2% had dropped out of school. 27.7%, 34.2% and 19.7% of adolescents were going to primary, middle and high

schools respectively. 15.16% were either pursuing their intermediates or some sort of diploma or a higher degree like graduation. The majority of adolescents (82.6%) were currently attending schools or colleges. Adolescents who had never seen the school, 50% of them or their families considered education to be unnecessary and 40% cited that education costs too much money and 10% were required for work. 44 (14.2%) of our study population dropped out of school because of a multitude of reasons viz. required for household work (31.8%), required for work on the family farm or in family business (31.8%), failed exams (25%), illness and death of a family member (9%) and 2.27% because they got married.

Study population was classified into five social classes according to Modified BG Prasad Classification 2020. It was observed that 41.9% of adolescents belonged to class IV and 30.6% were

from middle class III. 18.1% belonged to upper middle class II. 4.2% were part of class V. Only 5.2% of adolescents belonged to social class I.

Table 2: Distribution of study population based on the grade of well-being

Well-being of adolescents	Frequency (N)	Percentage (%)
Good well-being (Equal or more than 50)	229	73.87
Poor well-being (Less than 50)	81	26.1

In our study, it was observed that 73.9% of adolescents had comparatively good well-being assessed using the WHO-5 questionnaire as shown in table 2.

Table 3: Association of well-being with socio-demographic factors (n=310)

Age (years)	Well-being of Adolescents				Total
	Good well-being (>50) (N=229)		Poor well-being (<50) (N=81)		
	n	%	n	%	N
10-13	99	81.15	23	18.85	122
14-16	68	78.16	19	21.84	87
17-19	62	61.39	39	38.61	101
Total	229	73.87	81	26.12	310
$\chi^2 = 12.332$, df=2, p<0.05, Significant					
Sex					
Male	120	72.7	45	27.3	165
Female	109	75.2	36	24.8	145
$\chi^2 = 0.239$, df=1, p>0.05, non-significant					
Religion					
Hinduism	119	79.3	31	20.7	150
Islam	110	68.8	50	31.3	160
$\chi^2 = 4.493$, df=1, p<0.05, Significant					
Caste					
General	71	76.3	22	23.7	93
OBC	112	70.0	48	30.0	160
SC	46	80.7	11	19.3	57
$\chi^2 = 2.915$, df=2, p>0.05, non-significant					
Education					
Illiterate	2	20	8	80	10
Primary school	65	75.6	21	24.4	86
Middle school	84	79.2	22	20.8	106
High school	42	68.9	19	31.1	61
Intermediate/ diploma	36	76.6	11	23.4	47
$\chi^2 = 18.969$, df=5, p<0.05, Significant					
School attendance					
Never attended	2	20	8	80	10
Currently attends	199	77.7	57	22.3	256
Drop out	28	63.6	16	36.4	44
$\chi^2 = 19.403$, df=2, p<0.05, Significant					
Occupation					
Yes	19	70.4	8	29.6	27
No	210	74.2	73	25.8	283
$\chi^2 = 0.188$, df=1, p>0.05, non-significant					
Area					
Rural	149	76.4	46	23.6	195
Urban	80	69.6	35	30.4	115
$\chi^2 = 1.756$, df=1, p>0.05, non-significant					
Type of family					
Nuclear	172	74.1	60	25.9	232
Joint	20	64.5	11	35.5	31
Three generation	37	78.7	10	21.3	47
$\chi^2 = 1.987$, df=2, p>0.05, non-significant					
House ownership					
Owned	209	73.9	74	26.1	283
Not owned	20	74.1	7	25.9	27
$\chi^2 = 0.001$, df=1, p>0.05, non-significant					
Living with parents					
Yes	221	73.7	79	26.3	300
No	8	80	2	20	10
$\chi^2 = 0.201$, df=1, p>0.05, non-significant					

Table 3 shows that the well-being of adolescents progressively decreases across all the age groups as the age increases. The overall good well-being was 81.15% in the age range 10-13 years, which decreased to 61.39% in the age group 17-19 years. This association was found to be significant. No statistically significant association has been found between sex and well-being. It can be seen that males have been reported to have lower levels of well-being (72.7%) as compared to females (75.2%). Adolescents belong to Hindu community were found to have a higher well-being (79.3%), while 68.8% of adolescents from Muslim community were reported to have good well-being. This difference between religion and well-being was found to be significant. Highest level of well-being

was observed among the scheduled caste adolescents (80.7%) followed by general castes (76.3%) and OBC (70%). A higher level of education shows a positive association with elevated state of well-being, as in our study the well-being of graduation pursuing adolescents is 100%. The association of education with well-being was found to be statistically significant in the study. It was found in the study that the majority of adolescents who never went to school had a proportionally poor state of well-being (80%). 77.7% of participants who were currently attending a school or college had good well-being. The association between school attendance and well-being was calculated to be statistically significant.

Table 4: Association of well-being with family class

Family class	Well-being of Adolescents				Total
	Good well-being (>50)		Poor well-being (<50)		
	n	%	n	%	N
Class 1	16	100	0	0	16
Class 2	44	78.6	12	21.4	56
Class 3	64	67.4	31	32.6	95
Class 4	99	76.2	31	23.8	130
Class 5	6	46.2	7	53.8	13
Total	229	73.9	81	26.1	310
$\chi^2=13.907$, $df=4$, $p<0.05$. Significant					

The adolescents belonging to the higher family class had a better state of well-being as compared to those coming from the lower family class. Using the updated BG Prasad classification, 2020 for determining the family class, it was found that with an increase in family class there was progressive increase in well-being of adolescents. Class 1, 2 and 3 had 100%, 78.6% and 67.4% well-being respectively while class 3 and 4 had 76.2% and 46.2% of well-being respectively in adolescent population. The association between well-being and family class was found to be statistically significant. [Table 4]

DISCUSSION

In this study, it was found that 73.9% of adolescents had good well-being. The mean well-being of adolescents was 60.93 ± 13.69 . This may explain why a quarter of our participants had poor well-being. A considerable size of adolescents having poor well-being at such a young age could have deleterious consequences in the coming years for the society and nation at large. Earlier studies conducted by Agbesanwa et al shows that 65% of the adolescents in southwestern Nigeria reported being in good psychological health [15]. Maheshwari et al observed that 62.2% of their adolescent participants had average mental health. [16] Pranita et al (2013) in their study measuring the well-being of adolescents in Pune, India found that 73% of adolescents had good well-being. [17]

The overall good well-being was 81.15% in the age range 10-13 years, which decreased to 61.39% in the age group 17-19 years. This association was statistically significant. Similar results have been seen in other studies. Pulickal T in their study on 60 adolescents between the ages of 10 and 19 in Kerala reported that despite not being statistically significant, girls outperformed boys in terms of psychological well-being overall in the disadvantaged families of Kerala slums. [18] Adolescents from the Hindu community were identified as having a higher level of well-being (79.3%), whereas Muslims were found to have a lower level of good well-being (68.8%), in comparison. A major reason could be an investment in early education and better primary socialization. Social support may be another plausible functional component for the better well-being of Hindu adolescents as reported by Torrecillas et al. [19] The analysis showed that there is a statistically significant relationship between schooling and well-being. It could be because of the involvement of adolescents in a positive learning environment and hence making them less vulnerable to toxic socialization. The majority of adolescents who never attended school were found to have a poor state of well-being (80%). According to the study 77.7% of participants who were enrolled in a school or college at the time reported being in good health, this might be because of social security and promoting health-seeking behaviors and also re-enforcing good hygiene practices and preventing delinquent behaviors. Adolescents who were

involved in any kind of job/work had a lower level of well-being (70.4%), in comparison to those who were not involved in any occupation (74.2%). It could be possibly because of shouldering responsibilities at such a tender age. The study found that adolescents in rural areas had comparatively higher well-being (76.4%) than those residing in urban areas (69.6%). Similar results were found in other studies, Bhat (2018) in his study carried out on a sample of 519 adolescents in Kashmir reported that there was a significant difference in psychological well-being between rural and urban students, with rural students scoring higher than urban students.^[20] The adolescents belonging to the higher family class had a better state of well-being as compared to those coming from the lower family class. Similar findings were noted in studies carried out by Khalid et al (2018) on a sample of 1124 adolescents from Rawalpindi, Pakistan who concluded, people from low SES are more likely to experience poor well-being.^[21] Tiwari et al (2020) in their cross-sectional study on adolescent students in Patna mentioned that adolescents from low socioeconomic backgrounds (41.6%), 12.9 percent and 13.3 percent of upper middle and high-class individuals experienced mental health issues.^[22]

CONCLUSION

This study demonstrates a positive relationship between socio-demographic variables and wellbeing of the adolescents. Education, school attendance and Socio-economic status influence the well-being of adolescents, which indicates that a higher level of education and disciplined school attendance is central to the well-being of adolescents.

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