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An Exploratory Study to Find Out the Association Between the Nutritional Status and Psychological Well Being Among Adolescents

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***Abstract*: Background: Human needs will only be fulfilled one level at a time. Abraham Maslow, famous American Psychologist described human needs as ordered in a prepotent hierarchy with physiological needs are factored into internal motivation. According to Maslow's theory, humans are compelled to satisfy physiological needs first, to pursue higher levels of intrinsic satisfaction. This means that if a person is struggling to meet their physiological needs, they are unwilling to seek safety, belonging, esteem, and self-actualization on their own. Physiological needs are the base of the hierarchy for human survival. Research conducted and funded by the National Institute of Mental Health (NIMH) has found that A good nutrition status is important for maintaining normal body function. Nutrition deficiency often results in impaired function and has significant effect on mood and psychological well–being. Aim: Find out the association between the nutritional status and psychological well-being among adolescents. Setting and Design: A quantitative research approach with non-experimental research design was adopted for the study. The study focused on adolescent from selected school of Bhilai, (C.G.) Material and Methods: Totally 60 students between age 12-18 were enumerated from the selected schools of Bhilai, (C.G.) after obtaining informed consent data was collected using, 28 self-structural questionnaires (3 points Rating Scale) to assess Nutritional status and 32 questionnaires (3-point Rating Psychological wellbeing among adolescents. Results: as the present study aim to find out the association between nutritional status and psychological well-being the mean score of Nutritional status and psychological well-being are 34.56 and 39.58 respectively. As t test calculated between the study variables was 5.98 which is more than table of 't'=2.00 at 0.05 level of significance. There is association between nutritional status and gender. (x2 Cal =13.14>x2 tab =9.49). There is association between psychological wellbeing and area of residence, (x2 Cal = 6.46 > x2 tab = 5.99).**

***Keywords*: Nutritional status, Adolescent.**

1. Introduction

Human life completes its journey through various stages and one of the most vital stages is adolescence. S. Fismen et al. (2022), shown that adolescents, have poor eating habits. adolescents who ate breakfast daily were significantly less likely to be mentally distressed and more likely to have better school grades. A review of breakfast quality and academic performance in children suggests that, a good-quality breakfast with a variety of foods from different food groups can positively impact cognitive function.

2. Objectives

1) To assess nutritional status among adolescents.
2) To assess the psychological wellbeing among adolescents.
3) To associate nutritional status with selected socio demographic variables among adolescent children.
4) To associate psychological wellbeing with selected socio demographic variable among adolescents.

3. Material and Methods

An exploratory study was conducted using non experimental research design. Sample in the study were adolescent students fulfilling the inclusion criteria at the selected settings. Students not regular in class, not willing to participate, having diagnosed mental health issues, were excluded. Individual who gave informed consent were included. Data was collected using. C.G.) after obtaining informed consent Data was collected using self-structural questionnaire (3-point Rating Scale) to assess Nutritional status and self-structural questionnaire (3-point Rating Scale) to assess psychological wellbeing among adolescents. Frequency and percentage analysis was done to describe the demographic characteristic of the students. The Chi-square analysis used to determine the association between nutritional status with selected sociodemographic variables and psychological well-being with selected socio demographic variables Karl Pearson's correlation analysis to find impact of social media and aggression.

4. Results and Discussion

A. Distribution of Subjects According to Socio-Demographic Variables

in the present study adolescents are included and percentage analysis indicated that majority that is (68%) belongs to 14-16 years, and (32%) were of 16-18 years. (52%) participants were males and remaining 48% were females. Majority (48%) of the study subject's parents earn monthly family income less than Rs. 10000 and 30% had an income of Rs.10000-20000/ whereas 22% earn more than 20000/- per month. All participants belong

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to Hindu (religion). majority of participants (75%) belongs to urban area and (25%) participants belongs to rural area. majority (67%) of their mother had higher secondary education and (20%) primary school education and (12%) were graduate and only (1%) were illiterate.

B. Analysis to Assess Nutritional Status of Adolescents

1) Overall analysis of nutritional status of adolescents

Adolescents were categorized into good, average and poor based on their nutritional status using frequency and percentage. It is identified that out of 60 adolescents, n= 15 (25%) possess good nutritional status and a major portion of them were (65%) with average nutritional status and meagre portion (10%) belongs to low nutritional status. Overall mean score obtained was 34.56±4.14 with a mean percentage score of 78.54%.

2) Area wise analysis of nutritional status of adolescents.

nutritional status of adolescents was measured in terms of nutrient intake, in terms of pattern of food intake and in terms of food habit using mean, mean% standard deviation. It depicts that mean percentage score obtained for various areas of assessment like nutrients intake, pattern of food intake and food habit are 78% (12±3.88), 77.81% (12.45±1.68) and 68.8 (9.6±3.29) respectively. It indicates that their intake of nutrients and pattern of food intake were better compared to their dietary habit.

C. Analysis to Assess Psychological Well Being Among Adolescents

1) Overall analysis of psychological wellbeing among adolescents

Overall analysis of psychological wellbeing among adolescents were categorized in to good average poor, based on their psychological well-being using frequency and percentage. it is identified that out of 60 adolescent n=10 (17%) possess good psychological well-being and major portion of them were 42 (70%) with moderate psychological well-being and 8(13%) belongs to poor psychological well-being. Overall mean score obtained was 39.58 ±6.33 with a mean percentage score of 63. 83%.

2) Area wise analysis of psychological wellbeing among adolescents

Area wise analysis of psychological wellbeing among adolescents psychological wellbeing were measured with regard to mental function, with regard to self-control, with regard to relationship, with regard to somatic symptom and using mean, mean percentage, standard deviation, it depict that mean percentage score obtained for various areas of assessment like with regard to mental function, with regard to self-control, with regard to relationship, with regard to somatic symptom are 60.13% (15 ±12.23), 67% (6.1 ±2.79), 66.11% (11.9 ±5.67), 65% (6.58± 3.67)

D. Analysis to Find Out the Associate Between Nutritional Status with Selected Socio Demographic Variables Among Adolescents

The association between nutritional status and gender was tested using (x2 Cal =13.14>x2 tab =9.49) at 0.05 level of significance. As calculated value is higher than the table value, H1 i.e. there is association between nutritional status with gender among adolescent children is accepted.H1 i.e. there is association between nutritional status with gender among adolescent children is accepted.

E. Analysis to Find Out Associate Between Psychological Wellbeing with Selected Socio Demographic Variables Among Adolescents

There is association between psychological wellbeing with area of residence among adolescent children tested using (x2 Cal = 6.46 > x2 tab = 5.99) at 0.05 level of significance. is accepted, Hence H2 i.e. there is association between psychological wellbeing with area of residence among adolescent children is accepted

F. Analysis to Find Out the Effect Between Nutritional Status and Psychological Well Being

Parametric assessments were done using t test to find out the association between nutritional status and psychological wellbeing of adolescents the mean score of Nutritional status and psychological well-being are 34.56 and 39.58 respectively. As T test calculated between the study variables was 5.98 which is more than table of 't'=2.00 at 0.05 level of significance. Hence it is statistically proved that H3There is significant effect between nutritional status and psychological well-being is accepted.

5. Implications

A. Nursing Education

- The nursing education program affects many aspects of life, like physical and psychological development.
- Nurse educator should take responsibility about improving nutritional status of adolescents which can have an effect of psychological wellbeing.

B. Nursing Practice

- Nurse serves as a liaison between family and the community health providers and nurse can educate the public about prevention of deficiency disorders like anaemia, protein calorie malnutrition, night blindness, goitre and nutritional related disease such as diabetes and obesity.
- It is a process by which people gain knowledge and develop confidence and skills needed for establishing good dietary and health practices.

C. Nursing Administration

- It is very essential to integrate the knowledge regarding the nutritional status and psychological wellbeing. There is need to provide adequate knowledge to staff nurses and students. The nurse administrator has a responsibility to provide high-quality care by promoting substantive educational services like conducting workshop, seminar, in-service education and continuous education program on regular basis to upgrade the knowledge of nurse.

- Nurse plays the role of efficient administrator and managers and hence she contributes to decision making at higher level.

D. Nursing Research

- Nursing research is a way to identified new knowledge, and improve professional education and practice.
- In nursing can investigates the metabolic and physiological responses of the body to foods and nutrients.

6. Recommendations

- This study can be replicated on a large sample there by findings can be generalized for larger section.
- A similar study can be carried out by using lecture teaching strategies (video teaching program).
- A similar study can be conducted in different setting and different target population such as urban and rural areas, including adults.

7. Conclusion

Results obtained in the current study that 10(17%) possess good psychological well-being and major portion of them were 42 (70%) with moderate psychological well-being and 8(13%) belongs to poor psychological well-being. And previous studies prove that nutritional status is essential for psychological growth and developments of adolescent. here there is need to take good supplements diets for proper psychological developments of adolescents.

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