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Impact of obesity and overweight upon Student's; Psychosocial development in intermediate school in Baghdad AI-Habibiyah District

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Abstract:

Back ground: the obesity is a complex issue that affects children across all age groups & become a global epidemic but the understanding of the problem in children is limited due to lack of comparable representative data from different countries and varying criteria for defining obesity Since the obesity has emerged as one of the global health problems with 200 million school-aged children worldwide categorized as being overweight/obese, of which 40-50 million are obese. The present study aims to assess the impact of obesity & overweight upon psychosocial status of students of intermediate school at AI-Habibiyah District in Baghdad city.

Methodology: a descriptive cross –sectional study which was carried out at the school in Al-Habibyia district, Baghdad from September 2022 to may 2023, the study sample consisted of 65 participants out of(797)who fulfilled the criteria for participation in the study. Data collected by using of anthropmetry measurement for BMI the result of equation applied on the chart of WHO of BMI and questionnaire formats fillfuled. An interviewing & self administrative as a method used to collect data. Calculatation of the percentage & frequency use for the statistical analysis of the study

Result: Through the study, it was concluded that there is a close link between obesity and social communication for adolescents and its great impact on their mental health until an increase in lack of confidence and lack of self-esteem due to the image of their bodies and thus not practicing their lives properly like the rest of their peers from adolescents, such as forming relationships and friendships and practicing their daily activities, as well as excessive use of social media, which caused them not to participate in sports and motor activities in general.

Conclusions: The studies concluded that the body image affected by obesity was high, and because of it, self-confidence decreased, so that there was a plan to improve the body image, and exposure to bullying because of obesity occurs at school.

Recommendations: Developing school services programs to support obese students to improve their quality of life, educational courses for school teachers on obesity-related social disorders that affect the psychological and social status of students & providing psychological counselling to students who suffer from obesity-related social disorders

Key words: Impact, obesity and overweight, Student's; Psychosocial development

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1. INTRODUCTION

Children obesity is a serious condition that affects children and adolescent (Assalla, A. D. N. P. 2019). children obesity and overweight has become a worldwide epidemic (WHO,2013) According to a 2010 report on the analysis of 450 nationally representative surveys consisting of 144 countries, approximately forty-three million preschool chidden under the age of five were estimated to be obese or overweight. Furthermore, this report estimated that approximately ninety -two million children were at risk for becoming overweight as more children are becoming obese. (Green, M. J. 2015).Obesity is a complex issue that affects children across all age groups. There is no single element causing this epidemic, but obesity is due to complex interactions between biological, developmental, behavioral, genetic, and environmental factors. The role of epigenetics and the gut microbiome, as well as intrauterine and intergenerational effects, have recently emerged as contributing factors to the obesity epidemic. The rising prevalence of childhood obesity poses a significant public health challenge by increasing the burden of chronic non-communicable diseases (Kansra at el., 2021).In general, overweight and obesity are assumed to be the result of an increase in caloric and fat intake, on the other hand, there are supporting evidence that excessive sugar intake by soft drink, increased portion size, and steady decline in physical activity have been playing major roles in the rising rate of obesity all around the world (Kansra at el., 2021).Obese children tend to miss significantly more school which has an Impact on academic performance children obesity can profoundly affect children's physical health, social and emotional well-being, and self-esteem it is also associated with poor academic performance and lower quality of life experienced by the child , Many co-morbid conditions like metabolic, cardiovascular, orthopedic, neurological, hepatic, pulmonary and renal disorder are also seen in association with childhood obesity (Sahoo et al.,2015). Obesity increases the risk of developing early puberty in children, menstrual irregularities in adolescent girls, and sleep disorders such as obstructive sleep apnea (OSA), cardiovascular risk factors that include Prediabetes, type 2 diabetes, high Cholesterol levels, hypertension, and metabolic syndrome. Moreover, obese children and adolescents can suffer from psychological issues such as depression, anxiety, poor self-esteem, body image and peer relationships, and eating disorders. (Kansraat el., 2021).

Methodology:

The study design was a descriptive cross – sectional approach & conducted in Baghdad Al –Habibiya sector from the period of September 2022 to June 2023. Two middle schools in the Habibiya area located on the side of Rusafa, Al-Thuaraa for Boys and Al-Naqaa for Girls were selected to be the setting of collecting data which started from December 30, 2022 to May30, 2023. The sample of the study was chosen from the school for boys (35) students out of a total of (385) and (30) students from the school for girls out of a total of (412), that mean (65) students considered the final sample were chosen out of the total of 797 students in both schools. The final sample (65) students meet the criteria used to choose the obese children by using the measurement tools like the anthropometric electronic weight scale to measure the weight of students and adopted a bar scale to measure the student's height and using of anthropmetry measurement for BMI the resultof equation applied on the chart of WHO of BMI. In edition, a questionnaire format consisting of 62 questions was adopted & categorize to many sections which revealed the psychosocial problems the obese children may have due to the obesity. An interviewing & self administrative as a method used to collect data. Calculation of the percentage & frequency use for the statistical analysis of the study.

Results:

Table 1: Distribution of the sample according demographic characteristics

VARIABLES		NO.	%
1. GENDER	MALE	35	53.84
	FEMALE	30	46.16
2. Years	11-13	24	36.9
	13-15	38	58.4
	15 – older than 15	3	4.7
3. Social status for the family	Live together	52	80
	Separated	6	9.2
	One of the parents is dead	7	10.8
4. which of people around	Mother	15	23

you have obseity	Father	23	35.3
	Grandmother	3	13.8
	Grandfather	3	13.8
	Sister	5	7.6
	Brother	5	7.6
	Best friend	11	16.9

F) Frequency, (%) percentage and (NO) number.

The demographic data of the participants, according to BMI categories, are shown in (Table 1) Thus a total of 65 Adolescent with mean age (11±15) years participated in this study, among them, 30 (46.16%) were girls and 35(53.8%),item (3) living to gother (80%), item (4) father was obses (35.3%)recpectively .

Table 2: Distribution of the sample according to the Health coditions

VARIABLES		NO.	%
1. Do you have a medical condition, for example?	High blood pressure	5	7.6
	Diabetes	1	1.5
	Cardiovascular disease	3	4.5
	Hormonal disorders	3	4.5
	None	53	81.9
2. Do you use any medication	Psychiatric medications such as antidepressants and epilepsy	3	4.6
	Diabetes medication	7	10.7
	Other medicines	7	10.7
	don't take medication	48	74
3. What factors affect your health in general?	Pressure nervous	19	29.2
	lack of energy	14	21.5
	Lack of support from friends	11	16.9
	Lack of parental support	15	23
	economic side	3	4.6
	Other	3	4.6
4. Why do you think that cases obesity	Hormonal imbalance	9	13.8
	Excessive eating of fast foods	16	24.6
	Lack of exercise	28	43
	Lack of exercise	12	18.6

(F) Frequency, (%) percentage and (NO) number.

Table 2. Present of health status for both adolescent gender the high item no medical condition was (81.9%), item (2) not used any medication (74 %), item (3) pressure nervous (29.2%), item (4) excessive eating of fast food (43%) in both gender respectively.

Table 3: Distribution of the sample according of life style

variables		no.	%
1.sleeping hours	4-6	17	26.1
	6-8	28	43
	8-10	17	26.1
	More than 10	3	4.8
2.Which activities do you like to do while eating	Watching TV	18	27.6
	use the computer	31	47.6
	Study	0	0
	Non	16	24.6
3. How often do you eat breakfast?	Always	23	35.3
	Sometimes	23	35.3
	Seldom	11	16.9
	Never	8	12.5
4. Who would you like to eat with?	Family	43	66.1
	Friends	7	10.7
	Alone	15	23.2
5.At school ,you usually	Bring lunch from home	10	15.3
	Buy a meal from the cafeteria	18	27.7

	Buy fast food	13	20
	Only eat snacks	16	24.6
	skip lunch	8	12.4
6.Which of the following foods do you eat when you feel dissatisfied	Salty snacks	7	10.7
	Baked goods	11	16.9
	Specific sweets	24	36.9
	Ice cream	5	7.6
	Fruit and vegetables	0	0
	Dairy products such as cheese/ yogurt	0	0
	Meat and chicken	2	3
	I don't eat anything when I feel resentful	16	24.6
7.Are you currently doing anything to improve your heath or lose weight	Eat healthy foods	10	15.3
	Exercise	21	32.3
	Follow a diet with a plan	8	12.3
	I don't doing anything	28	43
8.How often do you exercise each week	I don't practice	0	0
	Once or twice	50	76.9
	Three or more	15	23
9. How happy are you with the amount of exercise/physical activity you do	Very happy	13	20
	Happy	41	63
	I feel miserable	9	13.8
	Sad	2	3
10. Nutrition vs. physical activity which do you think is more important for your health and well being	Nutrition	18	27.6
	Physical activity	21	32.3
	Both	26	40
11.How would you rate you self about the amount of screen time ex. playing video/computer games, TV, Wi-Fi internet you are exposed to	Fully addicted	13	20
	Addicted	28	43
	Minimal	16	24.6
	IDon't bother with it	8	12.3
12.Do you have any hobby	Constantly eating food greedily	5	7.6
	watched TV	29	44.6
	Read books	15	23
	Other	16	24.6
13.Do you have an ideal	Yes	34	52.3
	No	31	47.6

(F) Frequency, (%) percentage and (NO) number.

The life style of the participants were also assessed (Table 3) among study participants, doing sport as activity reperasent item (8) once to twice /weak most of student the doing sport as activity only in the school as sports lesson(76.9%) , item (1)sleeping hour (6-8) (43%), item (2)use the computer (47.6%), item (3) eating breakfast always and sometime equal (35.3%) , item (4) family to perder to eat with (66.1%) , item (5)buy ameal from cafeteria (27.7%) , item (6) eat specific eat (36.9%), item (7) doing excersice to lose weight (43%), item (9) happy of doing excersice (63%), item (10) both nutrition and physical activity important (40%), item (11) addicted of screen time (43%) , item (12) watched TV(44.6%), item (13) the ideal (52.3%) respectively.

Table 4: Distribution of sample according to emotional, Self –esteem and confidents

variables		no	%
1.What kind of clothes do you like to wear	Wide	34	52.3
	Cramped	5	7.6
	Middle	26	40
2.Do your parents use food as a means of rewarding or punishing you	Yes	21	32.3
	No	44	67.6
3.Do you suffer from anger when the food cut off by your family	Yes	23	35.3
	No	42	64.6
4.When you get anger about something do you prefer to eat	Yes	22	33.8
	No	43	66.1
5.Do you feel you are obese	Yes	26	40
	No	17	26.1
	May be	22	33.8
6.Do you consider yourself	Underweight	7	10.7
	Normal	18	27.6
	Overweight	30	46.1
	Obesity	10	15.3
7.What are the feeling about yourself	Satisfied	37	56.9
	Loneliness	16	24.6
	Isolation	12	18.4
8.If your family members are overweight how does that make you feel	Frustrated	18	27.6
	I became strength	29	44.6
	I don't care	24	36.9
	My family members are not overweight or obese	10	15.3
9.When you feel fat, does it make you broken	Yes	36	55.3
	No	29	44.6
10.How do you feel when your friends call you fat	I get anger and sad	29	44.6
	I don't feel anything	12	18.4
	I am kidding them	24	36.9
11.Are you satisfied with your current look	Yes	37	56.9
	No	28	43.0
12.Do you have problems in the home because of you weight	Yes	27	41.5
	No	38	58.4
13.Do you have behavior problem in the house or school and like what	Disobedience	17	26.1
	Aggressive behavior	11	16.9
	Verbal abuse	15	23.0
	Physical abuse	7	10.7
	Nothing	15	23.0

(F) Frequency, (%) percentage and (NO) number.

The psychosocial factors, in relation to BMI categories. Among study participants (65) suffered from emotion, self-esteem and confident , the high item (2) was the reword and punishment by parent was No 44 (67.6%), item (1) kind of clothing was wide (52.3%),item (3) I don not have anger (64.6%), item (4) I do not have anger when prefer food is cutting (66.1%),item (5) I feel obsess (40%),item (6) overweight (46.1%),item (7)satisfied about my look (56.9%),item (8) I become strenght (44.6%),item (9) yes I feel of become broken was(55.3%),item (10) I get anger and sad (44.6%),item (11)I satisfied with the current look (56.9%),item (12) no problem about the obesity (58.4%),item (13) disobedience (26.1%) in both gender respectively.

Table 5: Distribution of sample according to body image

verbalizes		No	%
1.Do you went to get better shape	Yes	54	83.0
	No	11	16.9
2.Do you feel embracement from you look	Yes	33	50.7
	No	32	49.2
3.Do you have any hint at changing yourself	Yes	46	70.7
	No	19	29.2
4.At the moment is there abarriertha prevent progress from changing towards to yourself	Yes	20	30.7
	No	45	69.2

(F) Frequency, (%) percentage and (NO) number.

The body image of the participants was important factor related to BMI were assessed in this table among study participants t went to get better shape (83%), item (2) yes I feel embracement because of obesity (50.7%), item (3) yes I have hint to changing (70.7%),item (4) there are no barrier to changing myself (69.2%) in both gender respectively.

Table 6: Distribution of sample according to bullying

variables		no	%
1.How much you bulling from the student	Always	17	26.1
	Sometime	17	26.1
	Don't accepted the bulling	31	47.6
2.What kind of bullying do you face at school	Verbal abuse	47	72.3
	Written abuse	11	16.9
	Deliberate exclusion from activities or social event	1	1.5
	Physical abuse or coercion	6	9.2
3.Do you face bullying used as an incentive to lose weight as a benign irony that gives a person to follow a dietary group	Yes	37	56.9
	No	28	43.0
4.Are you given nicknames because of obesity	Yes	30	46.1
	No	35	53.8
5.Do you except the advices as bully or constructive criticism	I except	43	66.1
	I don't except	22	33.8
6.When they bully you ,can you express your feeling to your family	Yes	21	32.3
	No	44	67.6

(F) Frequency, (%) percentage and (NO) number.

The psychosocial factors, in relation to BMI categories. Among study participants, the kind of bullying do you face in the school most of them was item (2) verbal abuse (72.3%), item (1) do not accepted the bulling (47.6%), item (3) yes

I face the bullying to lose my weight (56.9%), item (4) yes I have nicknames because of obesity (53.8%), item (5) I except the bully as advices (66.1%),item (6) no I con not express my feeling to my family when I exposure to bully (67.6%) in both gender respectively.

Table 7: Distribution of sample to the social stigma and discrimination

1.Do you feel that society views you as a lazy and irresponsible person for the obesity	**Yes**	**37**	**56.9**
	No	28	43.0
2.Do you think teachers differentiate between you and your colleagues	Yes	12	18.4
	No	**53**	**81.5**
3.Do you feel embarrassed and unable to play with your colleagues permanently	Yes	21	32.3
	No	44	67.6

(F) Frequency, (%) percentage and (NO) number.

Presents the psychosocial factors, in relation to BMI categories and imported to adolescent was study social stigma and discrimination that item(2) (81.5%) teachers no differentiate between normal weight and the obesity, item(1) yes I feel lazy and irresponsible in the society (56.9%),item (3) no I do not feel embarrassed when I play with the friend (67.6%) in both gender respectively.

Table 8: Distribution of sample to the depression, suicidal ideation and anxiety

variables		no	%
1.have you tried to vomit the food	Yes	28	43.0
	No	37	56.9
2.Do you have ideas of hurting yourself or hurtng others because the obseity	Yes	18	27.6
	No	47	72.3
3.How worried are you about being overwight/ obses	Worried	41	63
	Iam not worried	24	36.9
4.How concerned are you about adolescent obseity as social issue	Concerned	41	63
	Not concerned	24	36.9

(F) Frequency, (%) percentage and (NO) number.

In this Table 8 we discuss about the most important factor in psychological depreeion and suiside, they do not have any of suicide ideation or hurt others the reperasent the high item (2) no I do not have any ideas to hurt myself or other (72.3%), item (1) no I do not try to vomit the food (56.9%), item (3) worried of bcome obesity (63%), item (4) I concerned about obesity in social issues (63%), in both adolescent genderrespectively.

Table 9: Distribution sample of school performance and unjustified absence

variables		no	%
1.What Are Your Level Of Study	Weak	7	10.7
	Excepted	23	35.3
	Good	24	36.9
	Very good	6	9.2
	Excellent	5	7.6
2.Do you think bullying affects your academic level	Yes	26	40
	No	39	60
3.Can you focus and pay attention in the classroom to the teacher	Can	56	86
	Cant	9	13.8
4.What is your relationship with teacher	Good	45	69.2
	Bad	3	1.5
	Acceptable	17	26
5.Do you prefer to stay in bed	Yes	22	33.8

instead of going to school	No	43	66.1

(F) Frequency, (%) percentage and (NO) number.

Concerning school performance and unjustified absence in (table 9) that does not effect on their level, the ability of focus in the class was they can represent item (3) I can focus on the lessons (86%),item (1) good (36.9 %), item (2) no the bullying do not affects on the academic level (60%), item (4) good in relationship with teacher (69.2%) ,item (5) no I do not prefer to stay in the bad (66.1%)in both gender respectively.

Table 10: Distribution of sample social relationship and friendship

variables		no	%
1.What do you prefer to be in your relationships	Social	52	80
	Unsocial	13	20
2.Do your friends influence your life style	Yes	27	41.5
	No	38	58.4
3.What kind of effect does it have on you	Positive	56	86.1
	Negative	9	13.8
4.Have you diffecult to get friends	Yes	25	38.4
	No	40	61.5
5.Do you like to paly with peers	I don't like	16	24.6
	I like	49	75.4
6.Do you like to play with self or with friends	I like to paly with friend	51	78.4
	I like to play with myself	14	21.5

(F) Frequency, (%) percentage and (NO) number.

The peer relations of the participants were also assessed **(Table 10)** among study participants, item (3) was positive impact on the relationship high (86.1 %), item (1) I prefer become social (80%), item (2) no the friends do not influence in the life style (58.4%), item (4) no I do not have any difficulty of getting friend (61.5),item (5) I like to play with peers (75.4%), item (6) I like to play with my friend (78.4%) in both gender respectively.

Discussion:

For the purposes of completing the research and reaching the results, the questionnaire was distributed to 65 students in the educational sector out of the total sample of the study of 797 of both sexes, the participation of the percentage of males was (54%) and the percentage of females was (48%), The study showed that the practice of sports is weak for both sexes, as the percentage of non-participants in sports was (76.9%) and the reasons for this are due to the excessive use of social media, as indicated by some Arab studies, including the study of the Saudi National Center for Mental Health Promotion for the year 2021, where social media has become stealing long hours of their day, The study showed that (65%) suffered from emotion, self-esteem and confidence, as the excessive use of social media caused an increase in the hormone melatonin, which is directly responsible for feeling disorder, anxiety, lack of self-esteem and lack of confidence, and that the high percentage of re-response and punishment was by the parent represent (67.6%), With regard to the shape of the body image, the current study indicated that body image is an important factor, as it formed a percentage of (83%), and at the level of psychological and social factors, the current study indicated that most of the bullying faced by the study sample was of the verbal type, as this situation constituted in the study a percentage of (72.3%) .

According to the latest studies, including the study of Marah Mahmoud in 2022, is the inability of the student in the research sample to communicate real social with other individuals because he is used to communicating through social media, so when he is placed in real communication with individuals, the study report that an introverted personality differs from his personality on social media, The current study result indicated that the sample surveyed does not have

any idea of suicide or harming others, as the percentages were positive and amounted to (72.3%) while the level of school performance and unjustified absence, the present study indicated that the performance of the sample surveyed is good, as the percentage was positive by (86%) while there is a small group whose performance is weak and cannot

focus, as their percentage reached (13.8%) and this good performance, from a good relationship with the teacher, and this is confirmed by paragraph (4) of the questionnaire, where the answers to Relationship with the teacher (69.2%) This result considered one of the factors of success in the educational process, as it contributes significantly to improving the behavior of students with their peers and pushes them to make a greater effort in their academic achievement, according to the study of the (Journal of Scientific and Educational Horizons for the year 2021) , and the head indicated that most students prefer to go to school and not stay at home, as the percentage was (66.1%) and this indicates a positive moral correlation with the relationship of students with professors (Hosni 2021).

Conclusions and Recommendations:

The study concluded that:

1. Students "body image affects by obesity, they went to get better shape represent 54 (83%) & they have ambition to change there self image 46(%70.7)
2. their life style reflects in their answer do nothing to improve health , doing sport as activity was 50 (76.9%) once to twice /weak most of student the doing sport as activity only in the school as sports lesson , they feeling good of doing the sport & was about (%63)41
3. In regard to emotional, self –esteem and confident the type of clothing was wide 34 (52.3%) the feeling of become frustrated represent 36,(%55.3)
4. While being bullying most of them face this in the school & represent 47(%72.3)
5. The sample with the social stigma and discrimination they do think that teachers not differentiate between them and their friends in related to obesity they answer was no 53,(%81.5)
6. the students have no feeling of depression, suicidal ideation and anxiety they do not have any or hurt others the represent 47(72.3)%
7. the sample answers about school performance and unjustified absence & their ability of focus in the class their answer were good &represent
8. ,(%86) 56the relationship with teacher was good relation represent 45(69.2)
9. Social relationship of the student and friendship revealed positive impact represent 56.(% 86.1)
10. The sample also mentioned that social relationship and friendship was positive impact 56 (86.1 %) 6.1. Conclusions
11. Hosni Ayesh. (2021) "importance of a good teacher – student relationship". Scientific and educational horizons journal.

Recommendations:

The study recommended the following:

1. Health educating programs offered in the schools for students about the dangers of obesity at the health and psychological condition status.
2. Classes of Education courses for the school's teachers about the social disorders related to obesity that effects student's psychosocial status.
3. Provide psychological counseling for the students who are facing social disorders associated with obesity
4. School services programs develop to support obese students to improve their quality of life.

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