A qualitative analysis of the Parliamentary questions on the issue of obesity raised over the past two decades in India

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ABSTRACT

Background: Obesity is a major health issue that is drastically affecting the Indian population in the recent years. It is a major predisposing factor for non-communicable diseases. **Introduction:** The parliament is a powerful organization that holds sessions on regular basis and allows a question hour at the end of each session. Members ask varied questions on major issues and these documented questions are a valuable source of data for policy analysis. Material and Methods: Questions on obesity were collected from the official websites of Lok Sabha and Rajya Sabha and thematic analysis was done with inductive reasoning. Themes and $subthemes \ were \ categorized \ and \ questions \ were \ coded \ into \ nodes \ using \ N\ Vivo \ software. \ \textbf{Results:}\ A\ total\ of\ 134\ questions \ on\ obesity$ were asked in both the houses, out of which 101 questions were from Lok Sabha and 33 questions were from Rajya Sabha. Majority of the questions were asked to the ministry of health and family welfare. Only a total of 48 unique parliamentarians from 13 states have asked questions on obesity in the past two decades. Discussion: The questions were of competing interests with majority of questions on incidence of obesity. A number of questions on school and community based interventions were asked and new suggestions were given by members. Questions on BMI documentation of individuals and gender predisposition showed presence of awareness and knowledge among the members on obesity. Most of the existing policies are malnutrition based and obesity has not been adequately addressed. More questions with stronger representation from all states of the country can help in effective policy planning and implementation of programs to eliminate obesity.

Keywords: Obesity, parliamentarians, questions, sub-themes, thematic analysis

Introduction

Obesity has emerged as a raging epidemic that is a major contributor to the alarming increase in non-communicable diseases (NCDs) across the world. India in particular has witnessed a steep rise in the overweight and obese population. According to the ICMR INDIAB study 2015, the prevalence

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of obesity ranged from 11.8% to 31.3% and central obesity ranged from 16.9% to 36.3% respectively.[1] When we trace the trends along the past few decades we find an expounding change in lifestyle and diet over the recent years. The prevalence of overweight women increased from 8.4% to 15.5% between the years 1998 and 2015 and the prevalence of obesity among women increased from 2.2% to 5.1% in the same period. [2-4] Studies say that the incidence of obesity has coincided with demographic and epidemiological transitions wherein mortality and fertility have decreased and lifestyle-related diseases have increased. Obesity is a major predisposing factor for the occurrence of NCDs like cardiovascular diseases, diabetes, hypertension, musculoskeletal disorders like osteoarthritis, and cancers like breast, ovarian,

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prostate, liver, gallbladder, kidney, and colon.^[5] There are several etiological factors for obesity ranging from genetics, environmental factors, socioeconomic factors, and personal behaviors like food consumption patterns and sedentary lifestyles. Recent studies on childhood obesity in India reveal the subtle existence of a phenomenon called "urbanization in situ" which refers to an increasing prevalence of obesity not only in big cities but also in smaller towns.^[6] Factors like "Macdonalidization," sedentary lifestyle and the constant exposure to convenient, energy dense, palatable foods have resulted in a highly obesogenic environment for children and adolescents.

The parliament is a powerful Institution that allows the representatives to voice their concerns and also demand accountability of actions taken against predominant issues. The federal democracy of India allows representatives from every state/Union territory to be a part of the parliament such as to function through a highly organized constitutional mechanism. The present study aimed to review the questions asked by the parliamentarians in both the upper and lower houses from 2001 to 2020 concerning obesity and analyze the context qualitatively.

Material and Methods

The present qualitative analysis was executed following the Standards for Reporting Qualitative Research (SRQR) guidelines recommended by the EQUATOR network. The questions about obesity, that were available on the official websites of the upper (Rajya Sabha) and lower houses (Lok Sabha) were collected. The advanced search engines of Rajya Sabha and Lok Sabha were used to search for the terms, 'obesity' and 'obese'. All the questions documented between the years 2001 and 2020 that were relevant to obesity were included. The transcripts were downloaded and organized categorically using NVivo software (version 12, 2018 developed by QSR International). All the questions were arranged according to the date and year of the question, the name and electoral constituency of the parliamentarian, the ministry to which the question was posed, and the content of the question. Thematic analysis of the content was done using open coding along with inductive reasoning. A total of 134 questions on obesity were coded. The total nodes obtained were 258. These nodes were exported to MS excel and further coding was done manually using Braun and Clarke's phases for thematic analysis. Five main themes were identified for obesity namely epidemiology, health inequality, adverse health outcomes, research avenues, and public health measures. Sub-themes were categorized for each theme and examples of questions falling under all the themes and sub-themes are given in Table 1. Since the study involved no human subjects, and utilized data from a public domain, no ethical approval was obtained. The same has been communicated with the Editor prior to acceptance of the article.

Results

A total of 134 questions on obesity were asked in both the houses, out of which 101 questions were from Lok Sabha and

33 questions were from Rajya Sabha. [Tables 2 and 3] The total number of questions posed in the Lok Sabha in the study period (2001-2020) in all ministries and categories was 296,552. Of all the various topics discussed, a total of 101 questions were about obesity (0.034%). Out of 16054 questions asked in the Lok Sabha to the Ministry of Health and family welfare (MOHFW) on various topics, 86 questions (0.53%) were on obesity. Apart from the MOHFW, a total of 4 questions on obesity were posed to the ministry of women and child development, and 11 questions were submitted to the ministry of Human resources development (HRD). A total of 48 unique parliamentarians from 13 unique states have asked questions on obesity from 2001 to 2020.

Epidemiology

The first theme discusses all questions asked about the incidence, prevalence, socio-economic factors, gender predisposition, and risk factors of obesity.

- A. INCIDENCE: Incidence-related questions accounted for the majority of questions asked by the members in the past two decades. Parliamentarians questioned the prevalence of obesity across the country at various periods. They demanded survey results to substantiate any results or numbers. Questions also comprised of particular references to WHO reports, articles in leading newspapers, and an article in the Lancet journal that discusses the rising incidence of obesity in Indians. Specific questions were asked about the prevalence of obesity in children especially the school goers. The prevalence of obesity among the middle-aged population was also enquired owing to the rise in chronic diseases in this specific age group. All of the questions were asked to the MOHFW.
- B. SOCIO-ECONOMIC FACTORS: The parliamentarians were concerned about the factors increasing the risk of obesity like economy raise and westernization especially present in the urban population. The probability of higher chances of unhealthy weight gain among school children in the urban cities was repeatedly queried. Question on economic transition and urban influence was asked by representatives of Gujarat and West Bengal only.
- C. FEMALE SUSCEPTIBILITY: Questions were asked to the ministry of women and child welfare about the rising incidence of overweight female children and if there is evidence-based gender predisposition in our population. The members asked if any surveys or studies investigating the average health status of an Indian female child were conducted. The questions regarding the obesity crisis in female children were asked only between 2016 and 2020 and no related questions were found before this period.
- D. RISK FACTORS: Members questioned the various risk factors for obesity and whether the government was aware of them. The most repeated question in this sub-theme was whether junk/fast foods, non-alcoholic beverages were a predisposing factor to unhealthy weight gain. The parliamentarians raised their concerns on the increased consumption of junk food especially

	Table 1: Theme and sub-themes on obesity with examples					
Epidemiology						
Incidence	Whether the Government is aware of the rising trends in obesity in the country					
Urban influence	Whether the population in urban parts of the country has seen an increase in obesity					
Female susceptibility	susceptibility Whether it is a fact that girl children of the country are suffering from obesity and are deprived of basic nu					
Causes of obesity	whether unhealthy foods and non-alcoholic beverages are the major factors for obesity in the children in developi world and if so, the details thereof					
Health Inequality	Whether the Government has prepared any plan to bring out the Indian household particularly poor ones from this double burden of malnutrition and obesity, if so, the details thereof					
Adverse health outcomes	Whether obesity and chronic diseases have become very common in the country and if so, the details thereof					
	Research					
Obesity outcomes	Whether the Government has conducted/proposes to conduct any research/study to assess the severity of the proble of obesity and its ill effects on health					
Demographic	if so, Whether Government has received any survey report on paucity of credible and authentic information on the					
determinants	reminants health status of girl children					
Food consumption	Whether the Government is taking any measure to conduct any studies to give proper guidance to people to consume					
patterns	healthy food, if so, the details thereof?					
	Public health measures : A. Prevention					
Awareness programs	The specific activities envisioned by Government to improve and promote healthy eating habits among school children					
Food industry regulations	Whether the Government has constituted a Working Group on addressing consumption of foods High in Fat Salt and Sugar (HFSS) and promotion of healthy snacks in schools of India					
Fund allocation	The funds spent during the last decade for the schemes being run by the Ministry to eradicate malnutrition and obesity, State/UT-wise					
Need for policies	Whether the Government has nutrition policies in place to ensure access to healthy and affordable food in schools and communities, and if so, the details thereof					
	B. Intervention					
School and College level interventions	Whether Government's attention has been drawn towards the report that the problems of obesity amongst school going children is increasing due to consumption of fast food and whether Government intends to issue any directives in this regard or to impose a ban on such items?					
Community level interventions	Whether the Government proposes to launch a nationwide public awareness campaign to combat obesity, improve health of our children and empower parents and caregivers with the tools and information to make healthy food choices for the children					

Table 2: Trends in questions, state -wise, year-wise								
YEAR	State with highest questions on obesity	No of questions	State with highest questions on junk food	No of questions				
2001-2005	Andhra Pradesh	5	Punjab	4				
2006-2010	West Bengal	10	Tamil Nadu	5				
2011-2015	Maharashtra	5	Uttar Pradesh	10				
2016-2020	Karnataka	19	Uttar Pradesh	13				

Table 3: Trends in the total number of questions asked by all parliamentarians in a given time period

YEAR	Questions	on Obesity	Questions on Junk food		
	Lok Sabha	Rajya Sabha	Lok Sabha	Rajya Sabha	
2001-2005	9	0	3	11	
2006-2010	31	2	0	21	
2011-2015	8	12	40	13	
2016-2020	53	19	51	18	

among children and all these food consumption-related questions were submitted to the ministry of HRD.

Health inequality

The dual issue of obesity and malnutrition which is lurking our nation was raised by various members. They interrogated if the government was aware of the health inequality existing due to overnutrition in

economically developed parts of the country and undernutrition persisting in downtrodden populations. The first question on the dual burden of obesity and malnutrition was raised in 2006 in the Rajya Sabha after which questions were submitted only in 2018.

Adverse health outcomes

Several questions were aimed at the high prevalence of non-communicable diseases among the population that could be linked to obesity. The members enquired about obesity and the increased prevalence of cardiovascular diseases, diabetes, and hypertension. The majority of the questions were asked between the years 2016-2020.

Research avenues

Research-based questions were further classified into three sub-themes namely: research on obesity sequelae, demographic

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determinants, and food consumption patterns. Many questions were asked on the various research initiatives taken by the government to investigate obesity and its underlying risk factors. Lack of research was brought to light by a few members. Questions were asked about a few research done on obesity sequelae and its association with lifestyle diseases like diabetes in children below 9 years and adolescents between 10 to 19 years. As obesity is a predictor of mortality, the need for a national database on obesity-related deaths was suggested. Also, questions were asked on whether research on the health status of female children and various factors influencing the growing patterns of female children was conducted. Research-related questions were asked between the years 2011-2020. Parliamentarians repeatedly questioned if the government had a database of individuals especially school and college goers with BMI ≥25 and if the state-wise details of the same were available.

The majority of these questions were asked to the ministry of MOHFW followed by a few questions to the ministry of HRD. Future research proposals on nutrition, micronutrients, macronutrients, and healthy alternatives were suggested. Questions on research avenues in obesity were asked by members from West Bengal, Maharashtra, Tamil Nadu, and Haryana with the majority of questions from Tamil Nadu.

Public health measures

Public health measures were classified into prevention and intervention. Under prevention the sub-themes included were awareness programs, nutrition policies, and fund allotment. The intervention was further classified into school-based and community-based interventions.

- A. PREVENTION: Questions on the number of major awareness programs on obesity and its outcomes were raised. Questions were asked on whether any nutrition awareness program was planned and executed in primary health care centers. Also, questions were raised on implementing nationwide public awareness campaigns on healthier lifestyle choices. Nutrition education for parents, caregivers, and teachers on healthy nutrition choices for children was proposed. The state-wise/UT-wise allotment of funds for obesity awareness was interrogated by a few members.
- B. SCHOOL LEVEL INTERVENTIONS: A high number of questions were asked about plans to ban junk food in school canteens and places in the vicinity. Repeated questions were asked about the rising sales of junk in school and if any steps were taken to discourage unhealthy eating culture among school goers. Plans to encourage affordable healthy food in schools and ban junk food on school and college campus through UGC regulations were suggested. A large number of these questions were asked in the period between the years 2017–2019. School-level interventions-related questions were asked by members from Karnataka and Tamil Nadu only.
- C. COMMUNITY LEVEL INTERVENTIONS: Questions on community-level interventions included urging the MOHFW to collaborate with other departments and reduce

the number of fast/junk food outlets and their availability in entertainment spots and public places. Reference to the UK Government's policy that implemented mandatory calorie/nutrient labeling with "multiple traffic lights label" was made. Members queried on whether the government has planned similar policies in our nation. Increased fat, sugar, and salt content in junk/fast foods and their regulations and stricter quality control were discussed. Many questions were directed towards food industry regulations for food processing companies, soft drink companies, and agrochemical factories. Details of violations of these industries in the past three years were asked and strict guidelines to ensure quality food products were recommended. A majority of questions were concerning the need for physical activities and nutrition education. These kinds of community interventional questions were first asked in the year 2000 after which there was a steady increase in similar questions. Questions on nutrition-based interventions were directed to the MOHFW and a few questions on food processing industries and junk food regulations were directed to the ministry of HRD. The majority of the questions on community-based interventions in tackling obesity were from Karnataka, Kerala, West Bengal, Gujarat, and Maharashtra. Parliamentarians from Karnataka asked the highest number of questions on nutrition policies followed by members from Maharashtra.

Discussion

Questions on obesity that were asked between the years 2001–2020 were analyzed in this study. When the total number of questions asked to the MOHFW was analyzed, the questions on obesity were very less (0.53%). Considering the magnanimity of the issue, the number of times this issue was represented does not justify it. Only a total of 48 unique parliamentarians from 13 states have asked questions on obesity. There was no representation even once from the rest of the states. This shows a lack of awareness about the issue among majority of the members. The documented questions were of varying competing interests and there was heterogeneity in the questions with mild overlap.

Questions on socioeconomic factors like economy and urban influence were asked by members from only two states. While there has been rapid urbanization seen in many parts of India with changes in food patterns due to western influence, it is alarming that there is a lack of discussion on the influence of urban geography and obesity prevalence. The states/union territories with the highest numbers of the obese population according to NFHS-4 were Puducherry, Goa, Andhra Pradesh, Andaman, Telangana, Tamil Nadu, and West Bengal. He were states or Union territories on socioeconomic factors in the past two decades. When we look at gender predilection, questions on the higher prevalence of obesity among female children were repeatedly raised in the recent years of 2016–2020. These questions correlated with a striking increase in female obesity in

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recent years in our nation. According to the WHO report, the prevalence of the overweight female population in India was 12.9% in 2000 which exponentially increased to 21.1% in 2016. In the same year, the overweight male prevalence was estimated to be 17.5% showing the clear trend of female predisposition.^[7] This explains that the members were knowledgeable and had awareness on obesity and gender association.

Questions on the dual paradox of obesity and malnutrition were not raised for a long period of ten years from 2007 to 2017. However, the results of the National Family Health survey-4 in 2015-16 found that there was a sharp increase in the prevalence of malnutrition and obesity between 2005–2006 and 2015–2016. Lack of questions and representation on this lurking matter in the parliament over ten years is alarming and explains the need to shift towards incorporating raging health issues in parliament discussions so that adequate solutions can be implemented.

Under the theme of adverse health outcomes, various members asked questions on the association between obesity and non-communicable diseases like cardiovascular disorders, hypertension, and diabetes. However, none of the members asked about the role of obesity in other conditions like cancers of the esophagus, colon, pancreas, endometrium, renal system, prostate, ovaries, and gall bladder. Obesity is a predisposing factor that leads to wound complications, decubitus ulcers, and community-acquired infections like pneumonia, influenza, and bacteremia. Apart from the physical impact, it is a leading cause of poor mental health too.^[9] None of the above conditions were mentioned nor was the role of obesity in their etiopathogenesis interrogated which suggests a lack of awareness among the members.

When the questions under the research theme were evaluated, there was a good representation of various aspects of research with members suggesting unique ideas. The need for BMI documentation was stressed by many members repeatedly. The need for BMI documentation is crucial as per internationally used guidelines of metabolic syndrome in which abdominal adiposity is used to estimate if a person is susceptible to dysmetabolic conditions that predispose to cardiovascular diseases. [10] Such questions suggest that the members had good knowledge regarding BMI and its application as a predictor of health status.

There is a clear shift in the competing interest of the members after 2010 when most of the questions were based on policies, awareness programs, and interventions. Many questions were asked about school-based interventions especially in the past 5 years. Questions repeatedly emphasized the immediate need for a ban on junk foods in schools. And, subsequently, a massive intervention in the form of FSSAI's regulations came out in 2020 banning junk food in school canteens and in a vicinity of 50 meters around the school areas. The food authority also encouraged a comprehensive program, "Eat right campus" on creating awareness about balanced food for school children. It

further disallowed companies selling foods with high saturated fat, trans-fats and high sugar from sponsoring school-related events. [11] This implementation suggests that the number of times an issue is repeatedly raised in the parliament, correlated with higher possibilities of interventions or implementations by the concerned ministries.

When questions on community-based interventions were analyzed, many questions from various states were asked from the year 2000. There has been a steady increase in questions, with many members suggesting new policies for physical fitness and monitoring of balanced nutrition. Accordingly, the National Health Policy 2017 proposed strong recommendations for the introduction of yoga in schools and workplaces. However, the existing nutrition-sensitive policies like the Integrated Child Development Services, National Nutrition Mission or POSHAN Abhiyan 2018, National Health Mission, SABLA scheme for adolescent girls, have strong objectives focused on alleviating malnutrition only. Newer policies need to be uniquely developed for the problem of obesity and its eradication.

Conclusion

Obesity is a rapidly evolving health issue across all age groups and needs immediate attention. Various studies done on Indian school children reveal high prevalence of generalized obesity and abdominal obesity among adolescents with normal BMI.[12] The parents of such children often are unaware of the health status of their wards as they may seem apparently healthy. In such a scenario, primary care physicians play a paramount role in delivering information on the issue of obesity in a sensitive and supportive manner to young parents. Such a holistic approach by all stakeholders of the healthcare system is pivotal as early indicators of obesity and metabolic syndrome may be preclinical and may not be visibly observed. The above strategy coupled with active case finding and effective management of obesity can help prevent obesity. The present work can be a tool for policy planners and public health officials in understanding the present status of obesity-related issues across the nation and in executing new policy reforms. Periodic surveillance of the obesity status, maintenance of a database on obesity-related outcomes, and introduction of policies that advocate a healthy lifestyle can help combat obesity. The implementation of a national task force for obesity may be pivotal for exclusive management of this issue. Policy makers have to consider the magnanimity of this issue and work towards framing effective solutions including the development of mandatory physical education in schools, laws and regulations for marketing complementary foods and also introduce subsidy on healthy foods.

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Conflicts of interest

There are no conflicts of interest.

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