

Food preference and health habits of Grade 8 students

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Abstract: The primary purpose of this study was to determine the food preference and the health habits of Grade 8 students in the Province of Capiz. A validated and reliability tested researcher-made questionnaire was used to gather the needed data. There were 221 students who were invited to participate in this study. Simple Random Sampling technique was adopted to determine the participants. Based on the data of the study, the findings are as follows: The statement with the highest mean score was considered to be very nutritious food. This indicates that the participants preferred to eat fresh fruits. In terms of their health habit, the participants generally practice healthy habit regardless of the sex, family income, no. of siblings and health status.

Keywords: Food Preference, Health Habits, High School

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INTRODUCTION

Adolescence is a critical phase in the development of lifelong dietary patterns, making it essential to understand the food preference, health habit, and health status of this demographic. It is a period of rapid growth and development, and nutrition plays a crucial role in supporting these processes. Understanding the food preference, health habit and health status of Grade 8 students are vital for identifying potential health risks and developing targeted interventions.

Important health-related behaviors initiate at this period and track into adult life, herby playing an important role for vulnerability in later life. For example, higher amounts of alcohol consumption in adolescence increased he odds of being a heavy drinker in the early years of adulthood. The World Health Organization puts out the four major risk factors for chronic disease during adulthood are alcohol consumption, poor nutrition and diet, physical inactivity, and tobacco consumption. This could mean that a healthy lifestyle in adolescence can minimize chronic diseases in adulthood (World Health Organization, 2014)

Well-fed students learn better. In connection to this, students may improve their thinking abilities, acquire, or earn great marks, and they will surely show an interest in listening, participating in various school activities, and, most importantly, studying more and absorbing knowledge more easily (Collen et. al, 2021). However, their dietary habits and food consumption are influenced by a variety of circumstances, such as sensory reactions to food's taste, smell, and texture, individual factors (cooking abilities, food taste, food taboos, and knowledge and views), societal influences (peer influence and social standards), school variables (campus culture and examination frequency), and environmental determinants (availability of cooking supplies and facilities, as well as food pricing) (Kabir, et. Al, 2018). In this regard, the food that high school students consume is entirely dictated by their familiarity with it, which includes food color, form, and feel. Another factor that could influence is also the locale of the learners. For example, learners located in areas where food supply is available would have better options of food choices, as compared to those with no options for healthful food. For example, in Alcuizar's study in 2016, nutrition was considered

as one of the determinants of academic performance among learners in upland communities in Iligan City, Philippines. Among upland schools in Capiz, it has been observed that students are picky eaters and most of the Grade 8 students are malnourished.

Grade 8 students, typically aged 13-14 years, represent a pivotal group in this regard, as their dietary choices can significantly influence their health trajectories. This grade level is an opportune moment to implement nutrition education programs. By pinpointing specific food preferences and knowledge gaps, educators and health professionals can design interventions that resonate with students and promote healthier eating habits. Such interventions can have a lasting impact on their lifelong dietary choices. In addition, school based feeding program has been implemented among learners in public schools, however, budgetary allocation for the said program is only limited to elementary students and Junior and Senior High School students only resort to the availability of funds from the School Maintenance and Other Operating Expenses (MOOE) fund which is also not enough for the operation of the school.

Based on these observations, the researcher was prompted to research on food preference and health habit and health status of Grade 8 students. It aims to not only uncover the current state of adolescent nutrition but also to inform interventions and policies that promote healthier eating habits among this age group, potentially safeguarding their future health and well-being. Understanding the factors influencing their dietary choices is a necessary step toward addressing the complex issue of adolescent nutrition.

Statement of the problem

The primary purpose of this study was to determine the food preference and health habits of Grade 8 students in the First District of Capiz. Specifically, this study sought to answer the following questions:

1. What is the food preference of the participants?
2. What is the level health habits of the participants?

LITERATURE REVIEW

Food preference among adolescents

Food choice is a broad term, which includes frequent, multifaceted, situational, dynamic, and complex decisions, which lead to food behaviors where people acquire, prepare, serve, give away, store, eat, and clean up. There are multiple factors creating food choices, which are leveled into the categories of food-related features (characteristics of the product), individual differences (associated with the consumer), and society-related features (culture, economy, and related norms). Within individual differences, Chen and Antonelli (2018) describe also various types of determinants, as they include personal-state factors (biological features, physiological needs, psychological components, habits, and experiences), and cognitive factors (knowledge and skills, attitude, liking and preferences, anticipated consequences, and personal identity) (Sawyer et al., 2018).

Some eating habits are commonly measured in national surveys, including fruit and vegetable consumption, consumption of snack foods, intakes of added sugar and methods for dieting or weight loss (Költő, Gavin and Molcho 18,35, Reference McNamara, Murphy and Murray) . There are subtle but important differences in the diet habits and food choices in adolescents compared with younger children and adults, likely based on the level of independence, autonomy and skill they have about food. While we have a relatively strong understanding of the content of what Irish adolescents are eating, we need to understand more about the context in which they eat, and what the motivating or influential factors are that drive their food choices (Sawyer et al., 2018).

The obtained results from the study of Glabska, et al.,(2021) confirmed the association between food preferences and food choice determinants in adolescents, as well as allowed clustering adolescents according to their food preferences and food choice determinants to define various needs and motives among the identified segments. It was stated that for public health purposes, it may be crucial to educate a cluster named “hedonists” (with a high preference of meat/fish, dairy, and snacks, accompanied by convenience, sensory appeal, and price as the most important determinants of their food choices).

The study conducted by Metelev, in a group of Russian adults, indicated that for consumers segmented based on their food preferences, their food choice motives defined the clusters in which they were grouped. However, for adolescents, such research was not conducted so far (Sawyer et al., 2015).

Factors influencing adolescent food preferences vary. One is biological factor. Adolescents experience significant physiological changes, including hormonal fluctuations, which can impact their food preferences. These hormonal shifts can lead to increased appetite, cravings for specific foods, and a heightened sensitivity to taste. Genetics also play a role, influencing a person's ability to perceive different flavors, which can affect their food choices (Patton et al., 2017).

Another factor that affects the food preference among adolescents is psychological factor. Adolescents often grapple with self-image issues and body image perceptions. Peer influence and societal norms regarding attractiveness can lead to dieting or restrictive eating behaviors. For psychological well-being, the body image concerns and peer pressure can lead to disordered eating behaviors, such as restrictive diets or binge eating. These issues can negatively affect mental health and self-esteem. Meanwhile, long-term health consequences explore dietary patterns established during adolescence often persist into adulthood.

Emotional factors, such as stress or boredom, can drive emotional eating and affect food choices. Additionally, cognitive development plays a role as adolescents gain a better understanding of nutrition and its connection to health. Sociocultural factor is also another thing to consider. The family food environment significantly shapes adolescents' food preferences. Parental modeling and the types of foods available at home can strongly influence their choices. Socioeconomic status can also play a role, as access to healthy foods may be limited in certain communities. Cultural and ethnic backgrounds contribute to food preferences, introducing adolescents to different culinary traditions and preferences (Rippinet al., 2019).

The impact of digital culture has also seen the proliferation of digital media, including social media and food influencers. This presented a significant impact on food trends. Adolescents are exposed to a plethora of food-related content, which can influence their food choices. The visually appealing nature of food on platforms like Instagram and TikTok can encourage experimentation with new and sometimes less nutritious foods (Vineret al., 2015). Furthermore, in terms of health and sustainability, there is a growing interest among adolescents in healthier eating patterns and sustainable food choices. Many are adopting plant-based diets and showing increased awareness of the environmental and ethical implications of their food choices.

Worth looking into, as well, are the implications for adolescent health and well-being. The food preferences of adolescents have profound implications for their health and overall well-being. Nutritional outcomes, for example, extols that food preferences influence what adolescents eat, impacting their nutrient intake. Poor food choices can lead to nutrient deficiencies or excesses, potentially affecting growth and development (Viner, et al., 2015). Lastly, policy implications should highlight evidence-based food policies that target adolescents are essential. These policies can include regulations on food marketing and

advertising, nutrition labeling, and efforts to increase access to nutritious foods in underserved communities (Sawyer et al., 2015).

Unhealthy food preferences can increase the risk of diet-related chronic diseases, including obesity, diabetes, and cardiovascular conditions. With all these discussed, the role of educators in ensuring that learners are made aware of the right choices of the food to eat is important. Addressing adolescent food preferences and their implications requires a multifaceted approach. One, school-based nutrition programs play a crucial role in promoting healthier food environments. Nutrition education programs and the provision of nutritious meals can encourage healthier eating habits among adolescents. Also, involving parental and family support for adolescents helps creating a positive food environment at home, modeling healthy eating behaviors, and involving their children in meal planning and preparation (Rippinet et al., 2019).

Health habits among students

According to the study of Dominguez (2018), high malnutrition results in a low school survival rate. This shows that malnutrition is an important factor that affects the ability of a child to stay in school, thereby strengthening the importance of school-based programs that attempt to fight severe child waste. Malnutrition, as predicted, has a negative relationship with cognitive development and educational achievement. This reinforces the role of food in the academic life of a child in such a way that it can either promote or impede growth and development, depending on the quality of the child.

As cited by Aceron & Beredo (2019), Wanjohi (2015) revealed in his study that lack of sufficient food and a balanced diet were the main cause of malnutrition among children in the area. Poverty among children was also found to be a root cause of malnutrition. Moreover, Aceron, et. al. (2019), the study of Santanu Ghosh and Haradhan Saha (2015) found that malnutrition had a negative impact on children's academic performance and growth rates. Knowing more about what nutritional deficiencies can lead to, parents should help their children to be successful in the classroom. It indicates that food in the students' academic performance is of paramount importance.

According to the study of Hunt (2015), fruit consumption is directly proportional to alertness. In the same manner, a decrease in fruit consumption will result to a negative increase in the "sometimes alertness" of the respondents. The data appear to suggest on a surface level that increased fruit consumption has a positive effect of stimulating the mind. How this is accomplished beyond this study's scope; however, what is known is that fruits help the brain process and more efficiently recall information.

Comparing the diet of students who consume one to two meat servings a week to those who eat it five or more times a week, the data suggest that the majority of the former group has an average "A," while the latter majority has an average "C." But one thing has been pointed out: people whose diets contain high amounts of fruits and minimal animal products have outperformed their peers in all areas (i.e., class alertness, frequency of sickness, feeling after meals, and academic performance) (Hunt, 2015)

In the study of Alcuizar (2016), it was mentioned that to elementary-age children, academic achievement is important as a resource to productive adult life. Academic excellence for schools is also a key mandate. On the other hand, proper nutrition for the children is a construct in which the individual as an indivisible being achieves a positive state of mind, body, and spirit integration with the context of the environment. In the development of proper nutrition and wellbeing, academic achievement for children arises as there is shared control for a child between academic factors and non-academic factors. According to Murray, Low, Hollis, Cross and Davis (2015) as cited by Alcuizar, R. (2016) said that adequate food has been described as key elements influencing the academic performance of children.

Meanwhile, Magulod and Capili (2019) showed that students' academic achievement is accounted on healthy eating habits and nutritional status. Moreover, academic achievement of the college students is significantly predicted by eating habits and BMI. To predict students' academic performance, the Body Mass Index (BMI) is found. This indicates that they demonstrate good academic performance when students have a normal body status. The predicted learning achievement of students would increase with good nutritional status. Furthermore, Magulod et.al. (2019) confirms that to predict students' academic performance, the Body Mass Index (BMI) is used. The healthy eating habits of the students, therefore, predict their academic performance. This indicates that students can perform academically if they have good eating consumption.

Poor health habits in adolescents seem to affect their optimal academic performance; the possible effect associated behavior patterns may be added to this. Adolescence is a crucial period in life and accompanied by important physiological and psychological changes that can subsequently have a significant influence on adult life. During this period, it is particularly important for adolescents to adopt appropriate life habits to ensure a healthy lifestyle, including aspects such as doing the right amount of physical exercise, eating healthily and maintaining a good standard of hygiene. Complementarily, numerous studies have shown the positive impact that is associated to the development of guidelines as well as to the negative effect that stems from the non-adherence to those and, on the other hand, the existence of risk behavior starting to manifest at this stage, such as the consumption of alcohol, tobacco and other types of addictive substances. Making a choice about a lifestyle conditions the development of school life and more specifically, academic performance (Taras, 2016).

Studies by Valiente-Barroso (2014) revealed that there was an increase in alcohol and drug consumption as the age in adolescents increased in keeping with previous research. Thus, it is known that drug consumption is a phenomenon related to human development, increasing almost linearly from the beginning to the end of adolescence. This tendency is also detected in other latitudes, as shown by social and demographic research carried out in Mexico. On the other hand, the body mass index also showed this increase with the age. In this case, our sample shows a statistical trend as, according to some social-demographic studies generated in our country, the percentage of children (6-10 years of age) that are overweight and obese increases in comparison to the percentage detected for adolescents (Martínez et al., 2014).

Furthermore, academic performance was higher in students with lower rates of alcohol consumption. In this regard, we recall that alcohol problems can affect the psychological development of adolescents and negatively influence both their school environment and their leisure time. Besides, it has been shown that the consumption of addictive substances affects school performance and early school leaving. At the same time, the level of performance would be linked to good eating habits; as it has been shown, nutritional deficiencies (malnutrition from a lack of proteins/energy, iron, vitamin A and iodine deficiency), affect participation and learning at school. It should be pointed out that, at these ages and due to different circumstances, it is a must to frequently check for poor breakfast among learners and be aware of the repercussion of school performance as it is the most important meal of the day. On the other hand, the correlation between learners with good hygiene and better school results, corroborates what previous studies show. For instance, it is known that oral and dental hygiene can prevent pain and discomfort thereby learners can intake food adequately, whereas poor oral health may affect the children's capacity to communicate and learn. As previously mentioned, more than 50 million school hours a year are missed due to oral health issues. In turn, the association between higher scores with delayed reward and attentional efficiency is consistent with what would be expected, given that attentional

capacity represents a cognitive support for other learning processes. At the same time, this correlation refers to the importance of executive functioning in academic performance, as has been shown in previous studies for these two specific subjects (Valiente-Barroso and García García, 2014).

As such, Valiente-Barroso (2014) affirmed that there was a close relationship between academic performance and good health habits during adolescence. Positive standards are frequently presented as being associated, like the negative ones, with the establishing of two profiles (healthy vs. abnormal) in the adolescent population. It is crucial for these considerations to be taken into account by those responsible for health and education, for the repercussions that they could represent in adolescent development and the undoubted influence that they could have in later adult life.

METHODOLOGY

Research design

This study used the descriptive correlational method of research to gather information. In using this method, the researcher employed the descriptive approach as the quantitative data gathering method. The descriptive research method is a systematic approach that seeks to describe and analyze the characteristics, behaviors, or phenomena of a specific subject or group. It focuses on observing and recording existing conditions, relationships, and patterns without attempting to establish cause and effect or manipulate variables.

Locale of the study and respondents

The study was conducted in three large schools in the First District of the Province of Capiz for School Year 2023-2024. The participants were 221 Grade 8 students coming from these schools who were selected by the researcher using stratified random sampling method.

Research instruments

A questionnaire was used in gathering the data and was composed of three (3) parts. Part 1 of the questionnaire was the socio-demographic profile of the students-participants in terms of sex, number of siblings, family income, and height and weight for the Body Mass Index (BMI). Meanwhile, Part 3 determined the health habits of the participants containing 25-item statements with responses of strongly agree, agree, moderately agree, disagree, and strongly disagree.

The questionnaire was submitted to the Advisory Committee for review and critique. Once their suggestions and input were considered, the researcher revised the questionnaire. Then, she will submit the questionnaires to a panel of Physical Education teachers for content validation. Once the instrument was faced and content validated, this was pilot-tested to 30 randomly identified Grade 8 students from a public national high school. The result of the pilot testing was used in determining the computer-processed reliability testing of the research instrument using the Statistical Package for Social Science (SPSS) software. Kulkarni (2016) contends that an instrument with a reliability index of 0.700 and above is considered reliable. In this study the result of Cronbach alpha showed a reliability index of 0.825. the results of statistical tests indicate that the instrument of this study was reliable and acceptable beyond doubt. The participants were instructed to indicate their responses on their food preference based on scoring variables

Data gathering procedure

The researcher sought approval to formally conduct the research in the Office of the Schools Division Superintendent of the Department of Education Division of Capiz. Parental consent

were sought before starting the official data collection was secured. The students were oriented prior to the conduct of the survey that participation in this study was voluntary and that their identity and any personally information obtained in the duration of the study will not be divulged and will be treated with utmost confidentiality. After necessary permissions were obtained the researcher personally distributed the questionnaire with complete confidentiality using face to face method.

Data analyses procedure

The questionnaire was processed, encoded, analyzed, and interpreted using the Statistical Package for Social Sciences (SPSS). Mean was used to determine the food preference and health habits of the participants. Frequency count and percentage were used to determine and describe the health status of the participants.

FINDINGS AND DISCUSSION

Food preference of Grade 8 students

The mean score on the food preference of Grade 8 students was 3.75 and suggests that the participants generally preferred nutritious foods. This further implies that the participants value a balanced and health-conscious approach to their diet. They prioritize consuming nutritious foods such as fruits, vegetables, fish, and calcium-rich items, indicating awareness of the importance of these food groups for overall health and well-being. Additionally, their preference for healthy snacks like nuts and Yakult suggests a commitment to making nutritious choices even between meals. However, there is also a recognition of the convenience and taste appeal of certain fast foods and processed snacks, indicating a balance between health-conscious choices and occasional indulgences. Overall, the implication is that the individual strives for a well-rounded diet that prioritizes health while also allowing for enjoyment and convenience.

Furthermore, on average, the participants exhibited a strong preference for certain types of foods. This preference may indicate a tendency towards selecting and consuming specific food items or categories over others. While individual preferences may vary, the overall mean score suggested a consistent pattern of food preference among the student population. However, several factors may have contributed to the mean score. For one, taste preferences. Food preferences are often influenced by taste preferences, with individuals gravitating towards foods that they find enjoyable or satisfying. Students may prefer certain flavors, textures, or culinary styles based on their personal preferences and experiences. Cultural background and traditions can also play a significant role in shaping food preferences. Students may have preferences for foods that are commonly consumed within their cultural or familial context, reflecting dietary practices and culinary traditions passed down through generations.

Social factors, including peer influence and social norms can impact food preferences among adolescents. Students may be influenced by the food choices of their peers, as well as societal trends, advertising, and media portrayals of food and eating behaviors. The availability and accessibility of food options within the school environment, local community, and home setting can influence students' food preferences. Exposure to a variety of foods and access to nutritious options may shape students' preferences over time. Nutrition education and knowledge about the health benefits of certain foods may also influence students' food preferences. Students who are aware of the nutritional value of different foods may be more inclined to prefer healthier options over less nutritious alternatives. In spite of multiple factors influencing food choices, the preferences are by many researchers believed to be of

the highest significance and to be the most important predictor of food choices, if the availability and economic factors are not interfering. Food preferences are also created by multiple factors, while both genetic and environmental ones play a role.

Moreover, the preferences are not stable, as prepuberty children often reject many food products which they previously enjoyed, but after puberty, they commonly begin to prefer some food products which they did not enjoy before. Taking this into account, adolescence is important for food choices that are developed before that time and for food preferences that are established during this period, as their determinants are quite similar during adolescence and throughout adulthood. Understanding these food preferences can inform efforts to promote healthy eating behaviors and provide opportunities for students to make informed choices about their diet and nutrition. Findings of this study are supported by Rippin, Hutchinson, Jewell (2019). The authors explained that adolescence is a time of physical, mental and social development and habits established during these years tend to continue into adulthood. Adolescent nutrition is gaining increasing attention for its role as a crucial stage in life to optimize health and health-related behaviors. Much research on adolescent nutrition addresses the content of what is being eaten, in terms of food sources and nutrient intakes, with adolescent diets rarely meeting nutrition recommendations. Whilst measuring dietary intake is a crucial aspect to understanding diet and health, more work is needed to fully understand the practical, social and psychological considerations of adolescents when choosing foods (Rippin,et. al, 2019).

Health habits of Grade 8 students

The mean score for the health habits of Grade 8 students was 3.85 and suggests that they generally practice healthy eating habits. This positive mean score indicates that, on average, students exhibit behaviors and choices related to nutrition that are conducive to good health and well-being.

Findings imply that the respondents value a balanced and health-conscious approach to their diet. They prioritize consuming nutritious foods such as fruits, vegetables, fish, and calcium-rich items, indicating awareness of the importance of these food groups for overall health and well-being. Additionally, their preference for healthy snacks like nuts and Yakult suggests a commitment to making nutritious choices even between meals. However, there is also a recognition of the convenience and taste appeal of certain fast foods and processed snacks, indicating a balance between health-conscious choices and occasional indulgences.

Furthermore the individuals strive for a well-rounded diet that prioritizes health while also allowing for enjoyment and convenience. They also exhibited overall very healthy habits and behaviors, particularly in areas related to substance abuse prevention and personal hygiene. The high mean scores for statements indicating non-engagement in substance abuse, such as drug use and cigarette smoking, suggest a strong commitment to maintaining a healthy lifestyle free from addictive behaviors.

Additionally, the consistent practice of personal hygiene habits, including cleaning the body before bedtime, regular teeth brushing, hand washing, and nail cleaning, reflects a conscientious approach to maintaining cleanliness and preventing the spread of germs and infections. However, there are areas where improvement may be needed. The lower mean scores for statements related to sleep duration, regular eating habits, balanced nutrition, vaccination status, and alcohol consumption suggest potential areas for intervention or education. Encouraging students to prioritize sufficient sleep, regular meals, a balanced diet, and staying up to date with vaccinations can contribute to further enhancing their overall health and well-being.

Hence, while the Grade 8 students demonstrate commendable health behaviors in certain areas, there is an opportunity for targeted interventions to address areas of concern and promote holistic health and wellness among this population. Healthy eating habits encompass a range of behaviors, including consuming a balanced diet rich in fruits, vegetables, whole grains, lean proteins, and healthy fats, while limiting the intake of processed foods, sugary snacks, and high-calorie beverages. They also involve aspects such as portion control, mindful eating, and regular meal patterns. Achieving a mean score of 3.85 reflects a positive trend among the students towards adopting these healthy eating behaviors. It suggests that a majority of students are making conscious efforts to prioritize nutrition and make choices that support their overall health and well-being. This is encouraging, as healthy eating habits established during adolescence can have long-lasting effects on health outcomes throughout life, reducing the risk of chronic diseases and promoting optimal growth and development.

While the overall mean score suggests a commendable adherence to healthy eating habits among students in the First District of Capiz, it is imperative to continue promoting and supporting these behaviors through ongoing education, environmental changes, and community engagement initiatives. By fostering a culture of health and nutrition, we can empower students to make choices that contribute to their overall health and well-being, both now and in the future. Adolescents are particularly receptive to positive influences from social and emotional learning and behavioural modelling since the adolescent brain is still developing rapidly. However, they can also be easily influenced by the negative behaviors of peers. Behaviors and habits developed during adolescence tend to persist into adulthood, particularly in relation to health and eating behaviors (Sawyer, et. al, 2013).

CONCLUSIONS AND RECOMMENDATION

Participants demonstrate a clear and consistent preference for specific types of foods, indicating a potential inclination towards selecting and consuming certain food items or categories over others. This finding suggests an opportunity to leverage these preferences as a foundation for promoting healthier eating habits within the student population. By tailoring nutrition education programs, incorporating preferred foods into school feeding programs, if there are any, aligning with dietary guidelines, introducing healthier alternatives, providing cooking and food preparation workshops to parents and community members, and engaging the wider community, initiatives can effectively encourage students to make more nutritious choices while still accommodating their tastes. By capitalizing on existing food preferences, interventions can be strategically designed to foster a culture of health and well-being among students in the district.

Given the participants' commitment to a balanced and healthy habit, the finding suggest to continue promoting and supporting these behaviors through ongoing education, environmental changes, and community engagement initiatives. By fostering a culture of health and nutrition, we can empower students to make choices that contribute to their overall health and well-being, both now and in the future.

Based on the finding that participants are within the normal weight range, there remains a notable proportion who are underweight, overweight, or obese, it is recommended to prioritize comprehensive health initiatives that cater to the diverse needs of students across all BMI categories. Implementing strategies to encourage healthy eating habits, regular physical activity, and access to healthcare services, including regular health screenings and appropriate support, is crucial for promoting overall health and well-being among students.

Future researchers may delve deeper into understanding how individual characteristics, environmental influences, and health outcomes interact to inform targeted

interventions. While promoting healthy habits remains vital, it is clear that a broader perspective is needed. This includes addressing social determinants of health, enhancing healthcare access, and implementing policies to address structural inequalities and promote health equity.

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