



Review Article

A Review Study of the Role of Socioeconomic Status and its Components in Children's Health

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Received : 19 September 2021

Accepted : 12 October 2021

Published : 09 November 2021

DOI

10.25259/GJMPBU_10_2021

Quick Response Code:



ABSTRACT

The impact of socioeconomic status (SES) on children is among the most debated issues in human rights. By reviewing the literature, this study aims to identify socioeconomic mechanisms affecting children's health. The child's economic operations are influenced by adults. According to several studies, children from middle- and high-SES families, unlike low-SES children, have precise and logical policies, because their parents provide logical explanations in response to their children, and consequently, their children have more cultural capital. This is the family that gives the child sociolinguistic competences. This review study showed that growth rate, nutritional quality, mental health, academic performance, intelligence quotient, mortality rate, and accidents were associated with the economic status of parents, especially mothers. Therefore, it is necessary to implement training programs on proper nutrition, accident prevention, dental health, and psychological interventions for families with low SES.

Keywords: Children, Economic, Socioeconomic, Nutrition, Mortality, Health

INTRODUCTION

The impact of economic status on children is among the most debated issues in human rights. Economics is defined as the science concerned with fighting poverty, the science governing wealth that is the study of the production, distribution, and consumption of wealth, the study of human well-being, and the science of using scarce resources.^[1,2] In other words, economics is the science of the behavior of goods and services. All the main elements of economics are somehow gathered in the commodity, and the process of commodity production, distribution, and consumption are among the topics discussed in economics.^[3-5]

The way children learn economic behavior in childhood is among the important factors affecting their economic behavior in adulthood. Family is the primary institution for individuals' attitude formation and learning, and later these teachings are strengthened, reproduced, and evolved.^[6]

There is a direct relationship between children's knowledge of money and the extent to which they have experience with it as well as between parents' attitudes toward money and their spending habits. Children's awareness of money and economic issues is formed, developed, and consolidated during the process of socialization. Therefore, educating children and familiarizing them with economic behaviors seem to be necessary to enable them to manage money responsibly and use it in the right way.^[7-9]

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Obviously, there is a direct relationship between the economic status of the family and the health level of individuals, because, first, the ease of access to health care services increases with the improvement of the family's economic status. Second, the economy both directly and indirectly affects the social components of health.^[10,11] Socioeconomic factors have been considered to be more than 50% effective in children's health.^[12] However, some studies have reported the role of social factors up to 70%.^[13] Parents play an important role in children's health, and various physical and environmental factors, beliefs, socioeconomic status (SES) of households, etc., are among the factors affecting it.^[14] Some believe that parents' level of education as a socioeconomic factor is a more stable criterion than economic variables such as income, because household income changes from year to year and is not stable, and some maintain that education is the main factor affecting children's health, because parents with high level of education have enough information about children's health and nutrition, so they provide healthier food and environment and have healthier children.^[15-17] Moreover, the parents with higher education usually have better health status and then provide the necessary conditions for better health status of their children.^[15-17]

"Parental employment" is another factor affecting children's health. The effect of maternal employment on children's health is theoretically very vague. There are some contradictory hypotheses. One of the simplest mechanisms is that maternal employment has a positive effect on children's health, as it is associated with an increase in household income and ultimately leads to increased household spending on the health of family members. However, the physical presence of mothers at home makes it possible for them to spend more time with their children and care more about them, which affects children's mental health. Providing nutritious meals, clean and healthy home environment, and the absence of anxiety caused by the work environment and its transmission to children lead to the hypothesis that maternal employment has a negative impact on children's health. Another assumption is that mothers' involvement in the labor market may be associated with their education, skills, preferences, and abilities which provide greater potential for raising healthy children. By reviewing the literature, this study aims to identify socioeconomic mechanisms affecting children's health.^[18-22]

NUTRITION

Malnutrition is a general term that describes an inadequate or excessive intake of food and can be due to low calorie/protein intake for cell growth and health or the body's inability to use the food consumed. Furthermore, high calorie intake as well as unbalanced intake of some nutrients can cause eating disorders. According to the World Health Organization (WHO), malnutrition is the most important threat to general

health in the world. Approximately, half of all deaths in children under 5 years are attributable to undernutrition; undernutrition puts children at greater risk of dying from common infections, increases the frequency and severity of such infections, and delays recovery.^[23,24]

Food insecurity refers to a lack of access to food and encompasses perceptual aspects such as insufficient quantity and quality of food and its social unacceptability.^[25,26] It is a consistent experience that starts with worrying about food at the household level and progresses to the onset of hunger in children. In other words, one-fifth of low-income households have energy deficiency and half of the population has micronutrient deficiency.^[27] Food insecurity ranges from concerns about access to adequate food at the household level to severe hunger among children with no access to food. The WHO estimated that approximately 60% of child mortality in developing countries is due to chronic hunger and malnutrition.^[28] Poverty and insecurity reduce mental, physical, and brain development in children and efficiency in adults and ultimately decrease the rate of economic, social, and national development.^[29,30]

Rahman *et al.* (2018) investigated the nutritional status and eating habits of 302 primary school children in association with SES of households in Dhaka, Bangladesh. They found that there was a statistically significant correlation between body mass index (BMI) and family size and income, maternal education, and dietary diversity score (HDDS).^[31]

Karaoglan *et al.* (2017) studied the socioeconomic factors affecting the children's health in Turkey. They considered location (city or village), number of family members, father's presence, parents' education, employment status, and wealth index based on household assets as SES indicators. In this study, living in the city was introduced as a factor facilitating access to health services, even without considering other SES components. The maternal education was also considered important in determining the child's health status, because educated mothers are more likely to have specialized information to care for their children.^[32]

In a cohort study, Poulain *et al.* (2019) examined the relationship between SES and health of 2998 children aged 3-18 years old. In this study, the strengths of the relationship between SES and children's health did not differ depending on SES indices (education, occupation, and income).^[33]

By conducting a cross-sectional study, Safarpour *et al.* (2014) investigated food insecurity in households of 400 female students aged 9-11 years old in Bandar-e Anzali, Gilan province, Iran. The prevalence of food insecurity was 51% in this population. There was a significant correlation between food insecurity and economic status of the family, the number of employed family members, the number of children in the family, parents' level of education, and home ownership. The

mean weight of children in families with food insecurity was significantly lower than the other group.^[25] Madvari *et al.* (2013) carried out a cross-sectional study on 500 households with children aged 4–5 years old under the auspices of urban health centers and health houses in Mehriz, Iran. The prevalence of food insecurity in the studied households was 39.6%. In this study, there was a statistically negative correlation between food insecurity and parents' education, parents' job position, monthly household income, and mother's height. Furthermore, there was a significantly direct correlation between food insecurity and maternal age and household size.^[34] Yeganeh *et al.* (2018) studied 400 mothers with children aged 1–2 years old in Bushehr, Iran, and reported food insecurity rates as 51.5%, 22.3%, and 11.3% at household, individual, and child levels, respectively.^[35] Dorosty *et al.* evaluated food insecurity in households with children aged 6–11 years old in Yazd, Iran, and reported the prevalence of food insecurity as 30.5%.^[36] Furthermore, according to a study conducted on residents of Asadabad, Tabriz, the prevalence of food insecurity was estimated to be 36.3%.^[37] Poverty and food insecurity increase mortality and disability, decrease mental, physical, and brain development in children and efficiency in adults, and ultimately reduce the rate of economic, social, and national development. Based on traditional thinking, symptoms such as underweight and slimming have been introduced as consequences of food insecurity. However, nowadays, another model has been proposed, suggesting the possibility of obesity.^[38–40] Sotoudeh *et al.* found that food insecurity along with extreme hunger in overweight short children was significantly correlated with poor economic status, living in a rented house, employment of the household head as a worker, mother's employment, and low level of education of the household head.^[41] In their study, Honarpisheh *et al.* reported that 161 children (16.2%) were malnourished and 31.1% lived in families of 7 or more and there was a statistically significant correlation between children's malnutrition and monthly household income, family size, and maternal education.^[42] In the study by Beni *et al.*,^[43] the relationship between malnutrition in children under 5 years of age and the factors affecting was evaluated in Chadegan, Iran. The results showed that the prevalence of malnutrition based on wasting, underweight, stunting, and obesity indices were 17.8%, 34.5%, 37%, and 2.2%, respectively. There was a statistically significant correlation between wasting index and child's age, place of residence, onset of complementary feeding, history of disease, and history of hospitalization of child. A significant correlation was also observed between underweight index and child's age and gender, ethnicity, place of residence, history of disease, and history of hospitalization of child. There was a statistically significant relationship between stunting index and child's gender, father's occupation, maternal education, ethnicity, place of residence, and history of disease [Table 1].

GROWTH

Although growth and development are two separate categories, they occur simultaneously. Growth and development are specific in every individual and starts from head to toe and from midline to periphery in spurt, slow, and critical growth periods. During the formation of the sexual organs, growth is very rapid. It progresses until the age of 5 and then remains constant. The growth rate increases again during puberty, after which it remains almost constant. Growth and development are progressive changes. In other words, their process is always ascending and irreversible. During the embryonic stage, the growth rate is higher than ever and, then, the growth increases in the first year of life and during puberty. The girls' height and weight suddenly grow around ages 10–11, while it occurs a little later in boys that is at the ages of 12–13. Sun exposure, good housing, adequate lighting and ventilation, psychological factors, parasitic infections, and socioeconomic factors such as age gap between children, birth order, birth weight, and parents' level of education affect growth and development. Measuring children's weight, height, and head and arm circumference is the best way to assess their growth.^[44,45]

Kabiri *et al.* conducted a study to investigate the relationship between physical growth of children aged 0–2 years old referring to health centers in Karaj, Iran, and their parents' economic, social, and cultural status, and found that there was a statistically significant correlation between children's weight and maternal education and father's employment status. This suggests that the economic status of the family (father's employment) was effective on the child's weight gain.^[46] Ahmadvour *et al.* studied factors affecting the growth of 250 toddlers in Ardabil, Iran. The results showed that there was a statistically significant correlation between child growth and socioeconomic factors, maternal education, and place of residence. The maternal education, family size, birth order, time interval from the previous birth, and age of starting complementary food, as SES indicators, indicated the extent of care and attention to the child and were significantly correlated with the child growth.^[47]

MOTOR PROFICIENCY

SES is among the most important environmental factors affecting the fetus before birth, infant at birth, and child after birth. SES affects various aspects of life including the type of leisure activities and the rate of sports activities. Starfield suggested that parents' SES from childhood too early and late adolescence may affect their levels of physical activity. Accordingly, it can be argued that SES has a stable relationship with children's levels of physical activity and ultimately has a profound effect on their motor development. According to the study by Chen *et al.*, childhood's stable pattern is among

Table 1: Some studies conducted on nutrition and food insecurity on children's health.

Authors	Year	Country	Outcome	Ref.
Karaođlan <i>et al.</i>	2017	Turkey	In this study, living in the city was introduced as a factor facilitating access to health services, even without considering other SES components. The maternal education was also considered important in determining the child's health status.	[32]
Poulain <i>et al.</i>	2019	Germany	The relationship between SES and health of 2998 children aged 3–18 years old. In this study, the strengths of the relationship between SES and children's health did not differ depending on SES indices (education, occupation, and income)	[33]
Safarpour <i>et al.</i>	2014	Iran	Investigated food insecurity in households of 400 female students aged 9–11 years old in Bandar-e Anzali, Gilan province, Iran. The prevalence of food insecurity was 51% in this population. There was a significant correlation between food insecurity and economic status of the family	[25]
Fallah Madvari <i>et al.</i>	2013	Iran	The prevalence of food insecurity in the studied households was 39.6%. In this study, there was a statistically negative correlation between food insecurity and parents' education, parents' job position, monthly household income, and mother's height	[34]
Yeganeh <i>et al.</i>	2018	Iran	Studied 400 mothers with children aged 1–2 years old in Bushehr, Iran, and reported food insecurity rates as 51.5%, 22.3%, and 11.3% at household, individual, and child levels, respectively	[35]
Dorosty <i>et al.</i>	2008	Iran	Evaluated food insecurity in households with children aged 6–11 years old in Yazd, Iran, and reported the prevalence of food insecurity as 30.5%	[36]
Dastgiri <i>et al.</i>	2006	Iran	According to a study conducted on residents of Asadabad, Tabriz, the prevalence of food insecurity was estimated to be 36.3%	[37]
Sotoudeh <i>et al.</i>	2016	Iran	Food insecurity along with extreme hunger in overweight short children was significantly correlated with poor economic status, living in a rented house, employment of the household head as a worker, mother's employment, and low level of education of the household head	[41]
Honarpisheh <i>et al.</i>	2002	Iran	They found that 161 children (16.2%) were malnourished and 31.1% lived in families of 7 or more and there was a statistically significant correlation between children's malnutrition and monthly household income, family size, and maternal education	[42]
Beni <i>et al.</i>	2011	Iran	The prevalence of malnutrition based on wasting, underweight, stunting, and obesity indices were 17.8%, 34.5%, 37%, and 2.2%, respectively. There was a statistically significant correlation between wasting index and child's age, place of residence, onset of complementary feeding, history of disease, and history of hospitalization of child. A significant correlation was also observed between underweight index and child's age and gender, ethnicity, place of residence, history of disease, and history of hospitalization of child	[43]

the growth patterns for describing the relationship between SES and physical activity, suggesting that differences in SES are established in the early life and its effects remain constant on child and adolescent development. SES is associated with the quality of the living environment, which in turn affects health.^[48,49]

Contemporary views of motor development, despite focusing on environmental and individual contributions to motor development, have considered childhood as an important period. Preschool years (4–6 years old) and the first years of primary school (up to 9 years old) are known as critical periods for the development of basic motor skills. These skills, such as building blocks, are efficient and effective movements that provide the child with a

way to explore the environment and knowledge about the surrounding world.^[48,49] Shahrzad *et al.* conducted a study to evaluate the direct and interactive effect of SES and birth weight on children's motor proficiency, and found that motor proficiency of children with low SES was lower than that of children with high SES. Furthermore, high SES had the ability to moderate the negative effects of low birth weight on motor development. Therefore, it is important to emphasize the role of SES in the health of children with very low and normal birth weight.^[50]

Silva compared the motor development of 9-year-old children with very low and normal birth weight, and showed that there was a significant difference in motor skills between VLBW and NBW children.^[51]

INTELLIGENCE QUOTIENT (IQ)

Intelligence is a very complex concept and manifests itself in many different aspects. Old scholars considered intelligence to be a general factor or trait that manifests itself in a wide range of behaviors. However, later, psychologists stated that intelligence is a set of relatively independent capabilities. Intelligence is a complex combination of hereditary and environmental influences. Studies have indicated that SES and ethnicity, an organized and stimulating environment, and parental affection predict better speech ability and IQ scores in infancy and early childhood. In general, children living in poverty have shown a gradual decline in IQ scores and do not make good academic progress when they reach school age.^[52] Motlagh *et al.* (2015) examined the role of socioeconomic factors in primary school children's IQ in Bandar-e Anzali, Iran. The results revealed that children's IQ was significantly correlated with parental employment status and education, economic status, and number of employed family members. However, there was no significant correlation between children's IQ and the mean weight and height of mother and child, father's employment, home ownership, and the number of children in the family.^[53]

Nejati *et al.* (2016) evaluated the effect of household food security status and some socioeconomic factors on preschool children's IQ in Mashhad, Iran, and reported that the mean verbal, practical, and overall IQs in the food insecure group without hunger were 75.98, 102.94, and 84.100, respectively, which were lower than the mean IQs in the food secure group. IQ was significantly correlated with household head's occupation (being an employee), mother's employment, higher education of the household head and mother, private housing, and good economic status. Therefore, economic status, as a stressor that affects the whole family, can influence IQ through its effect on nutrition.^[54] Tavooisi *et al.* (2005) examined the impact of economic conditions on mathematical abilities of children. The results showed that the accuracy of the answers among children with high economic status was higher than children with low economic status. However, there was no statistically significant difference in the speed of implementation of strategies between students with different socioeconomic conditions.^[55]

DENTAL HEALTH

Obviously, better SES increases access to dental care services. Piroozian *et al.* (2019) conducted a study on 225 preschool children aged 3-7 years old to examine decay-missing-filled (DMF) index and its relationship with socioeconomic factors. The highest mean DMF was observed among children from low SES families.^[56]

In their study, Nematollahi *et al.* (2008) found that children whose parents, especially mothers, had higher levels of

education and better economic status, had lower decayed, missing, and filled teeth (DMFT) index and the prevalence of dental caries was lower among children with working mothers than children whose mothers were housewives.^[57] Gholipour *et al.* (2016) also concluded that children whose parents had higher levels of education, income, and dental insurance had better oral and dental health and mother's employment and living in rural areas were identified as the factors which reduced oral and dental health. The results showed that children's dental caries was associated with parental education (especially mothers). Therefore, it is necessary to implement training programs to prevent dental caries in children, especially in children from low SES families.^[58] Khosravani *et al.* (2013) evaluated the relationship between dental caries and growth indices in 974 children aged 9-11 years old in Shiraz, Iran. The results indicated that there was a significant relationship between DMFT and BMI. Furthermore, the mean DMFT was significantly reduced in underweight children compared to obese children. Underweight and overweight are the most common disorders in childhood and adolescence indicating malnutrition, and malnutrition is among the components affected by low SES.^[59]

Shahraki *et al.* (2015) examined the effect of parents' SES on the health of 400 children under one year of age in Tehran, Iran. The results demonstrated that high educational levels of fathers and mothers increased children's health by 2.6% and 3.5%, respectively. Maternal employment reduced children's health by 6.7% and the probability of health of twin children was 8.97% lower than other children. Furthermore, it was found that parents' high level of education reduced the probability of underweight children by 0.9% and 1.5%, respectively, and mothers' employment increased the probability of underweight children by 4%.^[60]

ACCIDENTS

According to the Declaration of the Rights of the Child, which has been ratified by almost all the governments, children around the world are entitled to live in safe environments and be protected from injuries and violence. Unfortunately, some studies have shown that child mortality from accidents has recently increased worldwide compared to declining child mortality from chronic and infectious diseases. Nowadays, accidents, whether intentional or unintentional, are considered among the most important causes of millions of deaths and disabilities among children around the world and impose a heavy financial burden on the health care system of communities. Accidents are a leading cause of hospitalization among children and account for 13% of the total disease burden among children aged 15 and younger. According to a joint report by the WHO and United Nations Children's Fund, more than 2,000 children die from accidents every day.

In addition, one in four children requires medical care after an injury every year. It is noteworthy that more than 95% of child injury-related deaths occur in low- and middle-income countries.^[61,62]

Hasaniha *et al.* (2015) conducted a study, entitled "Evaluation of Socioeconomic Factors in Injured Children," to investigate 650 injured children under the age of 15 years old referring to Hospitals in Zanjan, Iran. In this study, the variables of parents' education and occupation, place of residence, family income, and housing status were examined. The results showed that mostly those children whose fathers were workers, mothers were housewives, and parents had low levels of education were injured. Furthermore, the frequency of injuries was significantly correlated with family income, population density, and economic status.^[63] According to the study by Abadi *et al.* (2016) unfavorable economic conditions reduce the occurrence of behaviors preventing home injuries in children under 5 years old.^[64]

The results of these studies highlight the importance of implementing training programs for target groups such as students and their parents, especially families with low SES, to reduce the risk factors for accidents in the child's living environment.

PSYCHOLOGICAL FACTORS

Kazemini *et al.* (2012) conducted a study on 50 people, entitled "Study of the Role of Family SES and Educational Level in Delinquent Behavior of Adolescents." Parents' occupation and monthly income, parents' education, and having facilities were among the socioeconomic factors. The results showed that there was a correlation between family SES and educational level and adolescents'

delinquent behavior. The correlation test analysis revealed that there was a significant correlation between adolescents' delinquent behavior and the number of family members, place of residence, parental education, and family SES. Therefore, it can be argued the family SES and educational level can play a crucial role in tendency of individuals to delinquency.^[65] According to the study by Pourhossein *et al.* (2002) self-concept was influenced by the SES; However, gender had no effect on the evolution and organization of self-concept. Furthermore, families with high SES had better condition.^[66] Naji *et al.* (2018) reported that disorders were more prevalent among children who had immigrant or large families, low economic status, illiterate and unemployed parents, or grew up without parents.^[67] The results of study by Mahmoudi *et al.* (2019) showed that the family of children with attention deficit/hyperactivity disorder (ADHD) have low income, inadequate living space, lack of a child's room, low level of education, lack of awareness about child's disorder and single/multi parent. These factors may increase the symptoms of ADHD.^[68]

MORTALITY

Nearly 11 million children die every year in the world that is approximately 30,000 children per day and 20 children per minute before reaching the age of five. However, most of the statistics are not recorded. These deaths occur mainly in low- and middle-income countries, especially those located in sub-Saharan Africa and South Asia. Among the above countries, poor people suffer more deaths than others.^[69] According to the study conducted by Hosseinpour *et al.* (2005), inequality in under-five mortality rate between the lowest and highest quintiles

Table 2: Some studies conducted on some socioeconomic factors on the mortality rate of children.

Authors	Year	Target group	Outcome	Ref.
Hosseinpour <i>et al.</i>	2005	Infant	Inequality in under-five mortality rate between the lowest and highest quintiles was significant in all the provinces and in favor of wealthy groups	[70]
Mohseni <i>et al.</i>	2012	<5 years child	Better parental employment status and increased frequency of prenatal care reduced under-five mortality rate, while maternal age less than 18 years and more than 35 years at delivery and preference for sons increased under-five mortality rate	[71]
Moeni <i>et al.</i>	2010	Infant	The higher the development index of the provinces including socioeconomic factors such as literacy rate of men and women, employment rate, life expectancy at birth, mean monthly household income, and the amount of drinking water supply, the lower the infant mortality rate will be	[72]
Darvazeh Emami <i>et al.</i>	2010	<1 years child	There was a statistically significant correlation between mortality rate of children under 1 year old and parents' education, parents' occupation, breastfeeding, frequency of child care, and prenatal care	[73]
Nejad <i>et al.</i>	2014	Infant	Low economic status of the family was recognized as an influential factor in infant mortality	[74]

was significant in all the provinces and in favor of wealthy groups. However, inequality rate varied between different provinces.^[70] Mohseni *et al.* (2012) evaluated the effect of social, economic, and demographic factors on under-five mortality rate in Gotvand, Iran. This study indicated that better parental employment status and increased frequency of prenatal care reduced under-five mortality rate, while maternal age less than 18 years and more than 35 years at delivery and preference for sons increased under-five mortality rate.^[71] Moeni *et al.* (2010) found that the higher the development index of the provinces including socioeconomic factors such as literacy rate of men and women, employment rate, life expectancy at birth, mean monthly household income, and the amount of drinking water supply, the lower the infant mortality rate will be.^[72] Emami *et al.* (2010) conducted a retrospective, descriptive, and comparative study on two groups of 121 deceased and not-deceased children under 1 year of age supported by health centers in Isfahan, 1996–2000 and reported that there was a statistically significant correlation between mortality rate of children under 1-year-old and parents' education, parents' occupation, breastfeeding, frequency of child care, and prenatal care.^[73] Nejad *et al.*^[74] evaluated the causes of death of 110 infants in neonatal intensive care units (NICUs) of Hospital affiliated with Zabol University of Medical Sciences. In this study, low economic status of the family was recognized as an influential factor in infant mortality [Table 2].

CONCLUSION

The child's economic operations are influenced by adults. According to several studies, children from middle- and high-SES families, unlike low-SES children, have precise and logical policies, because their parents provide logical explanations in response to their children, and consequently, their children have more cultural capital. This is the family that gives the child sociolinguistic competences. This review study showed that growth rate, nutritional quality, mental health, academic performance, IQ, mortality rate, and accidents were associated with the economic status of parents, especially mothers. Therefore, it is necessary to implement training programs on proper nutrition, accident prevention, dental health, and psychological interventions for families with low SES.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

- O'Mahony C. Children's Socio-Economic Rights, Democracy and the Courts. England: Hart Publishing; 2011.
- Nolan A. Children's economic and social rights. Unedited paper due to appear. In: Liefgaard T, Kilkelly U, Hoadley S, editors. International Law on the Rights of the Child. Berlin, Germany: Springer; 2017.
- Backhouse R, Medema S. On the definition of economics. *J Econ Perspect* 2009;23:221-33.
- Feldman M, Hadjimichael T, Lanahan L. The logic of economic development: A definition and model for investment. *Environ Plann C Govern Pol* 2016;34:5-21.
- Almas I, Cappelen AW, Salvanes KG, Sørensen E, Tungodden B. Fairness and family background. *Pol Philosophy Econ* 2017;16:117-31.
- Sutter M, Zoller C, Glätzle-Rützler D. Economic behavior of children and adolescents—a first survey of experimental economics results. *Eur Econ Rev* 2019;111:98-121.
- Andreoni J, Sprenger C. Estimating time preferences from convex budgets. *Am Econ Rev* 2012;102:3333-56.
- Bruni L, Pelligra V. The economic child: Developmental aspects of economic behavior. *Int Rev Econ* 2010;57:255-7.
- Koch A, Nafziger J, Nielsen HS. Behavioral economics of education. *Journal of Economic Behavior and Organization*. 2015;115:3-17.
- Didsbury M, Kim S, Medway M, Tong A, McTaggart S, Walker A, *et al.* Socio-economic status and quality of life in children with chronic disease: A systematic review. *J Paediatr Child Health* 2016;52:1062-9.
- Cameron L, Williams J. Is the relationship between socioeconomic status and health stronger for older children in developing countries? *Demography* 2009;46:303-24.
- Siponen SM, Ahonen RS, Savolainen PH, Tong A, McTaggart SJ, Walker AM, *et al.* Children's health and parental socioeconomic factors: A population-based survey in Finland. *BMC Public Health* 2011;11:457.
- Quansah E, Ohene LA, Norman L, Mireku MO, Karikari TK. Social factors influencing child health in Ghana. *PLoS One* 2016;11:e0145401.
- Truphena M. Influence of Family Background on Pre-school Children's Performance in English Language in Ongata Rongai Zone, Kajiado North District, Kajiado County, Kenya. A Research Project Submitted in Partial Fulfillment of the Requirement for the Award of a Degree in Master of Education in Early Childhood Education. Kenya: Department of Education Communication and Technology, School of Education, University of Nairobi; 2014.
- Rinakit Adhe K, Maulidya R, Arif M, Rachmadyanti P, Faeruz R. Parenting role: Parents' education level and children's life skill development. *Advances in Social Science, Education and Humanities Research*. Vol. 491. United States: Proceedings of the International Joint Conference on Arts and Humanities; 2020.
- Toscano C, Soares I, Mesman J. Controlling parenting

- behaviors in parents of children born preterm. *J Dev Behav Pediatr* 2020;41:230-41.
17. Maleki M, Chehrzad MM, Kazemnezhad Leyli E, Mardani A, Vaismoradi M. Social skills in preschool children from teachers' perspectives. *Children* 2019;6:64.
 18. Frasilho D, Matos M, Santos T, Gaspar T, Caldas de Almeida J. Unemployment as a source of mental distress to individuals and their family: Unemployed parents perceptions during the economic recession. *Int J Soc Psychiatry* 2016;62:477-86.
 19. Vinck J, Van Lancker W. An intersectional approach towards parental employment in families with a child with a disability: The case of Belgium. *Work Employ Soc* 2019;34:228-61.
 20. Parashar S. Moving beyond the mother-child dyad: Women's education, child immunization, and the importance of context in rural India. *Soc Sci Med* 2005;61:989-1000.
 21. Milligan K, Stabile M. Child benefits, maternal employment, and children's health: Evidence from Canadian child benefit expansions. *Am Econ Rev* 2009;99:128-32.
 22. Fitzsimons E, Pongiglione B. The impact of maternal employment on children's weight: Evidence from the UK. *SSM Popul Health* 2019;7:100333.
 23. World Health Organization. *Infant and Young Child Feeding Guidelines*. Geneva: World Health Organization; 2016.
 24. World Health Organization. *Nutrition for Health and Development Protection of the Human Environment*. Geneva: World Health Organization; 2005.
 25. Safarpour M, Dorosty Motlagh A, Hosseini M, Anjbar Noshari F, Safarpour M, Daneshi Maskooni M, *et al.* Prevalence and outcomes of food insecurity and its relationship with some socioeconomic factors. *Knowledge Health* 2014;8:193-8.
 26. Ahmad D, Afzal M, Imtiaz A. Effect of socioeconomic factors on malnutrition among children in Pakistan. *Futur Bus J* 2020;6:30.
 27. Mukuku O, Mutombo AA, Kamona LK, Lubala TK, Mawaw PP, Aloni MN, *et al.* Predictive model for the risk of severe acute malnutrition in children. *J Nutr Metab* 2019;2019:4740825.
 28. Fuchs C, Sultana T, Ahmed T, Hossain MI. Factors associated with acute malnutrition among children admitted to a diarrhoea treatment facility in Bangladesh. *Int J Pediatr* 2014;2014:267806.
 29. Blair C, Raver CC. Poverty, stress, and brain development: New directions for prevention and intervention. *Acad Pediatr* 2018;16:S30-6.
 30. Thomas MM, Miller DP, Morrissey TW. Food insecurity and child health. *Pediatrics* 2019;144:e20190397.
 31. Rahman M, Chakma J, Sultana N, Sima I, Sultana Bari F, Mannan MA. A study on nutritional status and dietary habit of school children associated with socio economic status in Dhaka North city corporation, Bangladesh. *IOSR J Pharm Biol Sci* 2018;13:50-7.
 32. Karaođlan D, řirin Saraçođlu D. Socio-economic factors affecting early childhood health: The case of Turkey. *Child Ind Res* 2018;11:1051-75.
 33. Poulain T, Vogel M, Sobek C, Hilbert A, Kórner A, Kiess W. Associations between socio-economic status and child health: Findings of a large German cohort study. *Int J Environ Res Public Health* 2019;16:677.
 34. Fallah Madvari F, Sadrzadeh yeganeh H, Siasi F, Sotoudeh G, Hosseini SM, Mahdavi rad SV. Food security and factors related to it in households under coverage of urban health centers and health houses in Mehriz, Iran. *J School Public Health Inst Public Health Res* 2015;12:79-93.
 35. Yeganeh S, Motamed N, Bushehri SN, Ravanipour M. Study of demographic characteristics related to food insecurity in Bushehr Iran households with infants aged 1-2 years. *JPEN* 2019;6:9-16.
 36. Dorosty A, Karamsoltani Z, Jazayeri A, Siyasi F, Eshraghian M. Association between obesity, food security and related family factors. *Jodhpur School Public Health* 2008;6:1-9.
 37. Dastgiri S, Mahboob S, Tutunchi H, Ostadrahimi A. Determinants of food insecurity: A cross-sectional study in Tabriz. *Res Sci J Ardabil Univ Me Sci* 2006;6:233-9.
 38. O'Malley JA, Klett BM, Klein MD, Inman N, Beck AF. Revealing the prevalence and consequences of food insecurity in children with epilepsy. *J Community Health* 2017;42:1213-9.
 39. Cook JT, Poblacion AP. Estimating the health-related costs of food insecurity and hunger. In: *The Nourishing Effect: Ending Hunger, Improving Health, Reducing Inequality (2016 Hunger Report)*. Washington, DC: Bread for the World Institute; Health-Related Costs of Food Insecurity and Hunger.
 40. Hartline-Grafton H. *Understanding the Connections: Food Insecurity and Obesity*. Washington, DC: Food Research and Action Center; 2015.
 41. Sotoudeh M, Safarian M, Dorosty A, Dashipour A, Khodabakhshi A, Montazerifar F. The association of food insecurity and dietary patterns with simultaneous obesity and stunting in primary school pupils of Zahedan city Iran. *Iran J Nutr Sci Food Technol* 2016;10:53-62.
 42. Honarpisheh A, Hafizi A, Arbabi M, Sharifi H. Economic indices and malnutrition in children. *Feyz* 2002;6:83-8.
 43. Naderi Beni M, Lak R, Jazaeri S, Eftekhari Ardebili H. Prevalence of malnutrition under five years in Chadegan (Area district city) Iran 2011. *Indones Res J Educ* 2013;9:22-8.
 44. Alinejad V, Hajizadeh E, Rasekhi A, Khalkhali H. Evaluation of the factors affecting growth impairment of children aged below 6 years by using marginal models. *Iranian J Pediatr* 2019;29:90520.
 45. Ebrahimzadeh F, Hajizadeh E, Baghestani AR, Nazer MR. Effective factors on the rate of growth failure in children below two years of age: A recurrent events model. *Iran J Public Health* 2018;47:418-26.
 46. Kabiri M, Parsia M, Goodarzi M, Babai Roahi GH. Relationship between physical development of 0-2 years old children referring to Karaj health centers with their economic, social, cultural status and their parents using logistic regression model. *Iran J Pediatr Dis* 2003;13:1-8.
 47. Ahmad Pour P, Alhavaridi Zadeh M, Amani F, Vosoughi N. Effective causes on toddler's physical growth in Ardabil. *Ardabil Student Research Committee Journal* 2010;10:4-9.
 48. Mulazimoglu-Balli O. Motor proficiency and body mass index of preschool children: In relation to socioeconomic status. *J Educ Train Stud* 2016;4:1302.
 49. Gosselin V, Leone M, Laberge S. Socioeconomic and gender-based disparities in the motor competence of school-age children. *J Sports Sci* 2020;39:341-50.

50. Shahrzad N, Salahi N, Ghadiri F. Effects of socioeconomic status on motor proficiency of 4-6 years old Tehran children with very low and normal birth weight. *J R Soc Med* 2018;8:61-9.
51. Silva JK, Sargi AM, Andrade IC, Araújo CC, Antonio TD. Motor development of preterm and term infants in the fundamental movement phase: A cross-sectional study. *Fisioter Mov* 2016;29:581-8.
52. Lee KS, Kim BN, Cho J, Jang YY, Choi YJ, Lee WS, *et al.* Associations between surrounding residential greenness and intelligence quotient in 6-year-old children. *Sci Total Environ* 2020;759:143561.
53. Motlagh AR, Safarpour P, Hosseini M, Moamma N, Safarpour H. The role of socioeconomic factors on primary school students, intelligence quotient in Bandar anzali. *J North Khorasan Univ Med Sci* 2015;7:761-70.
54. Nejati F, Nemati M, Rezaei Ardani A, Soleimani D, Khosravi M, Salehi Fadardi J, *et al.* Investigating the relation of household food security status and some socio-economic factors with children intelligence quotient in 2016-mashhad-Iran. *Mashhad Univ Med Sci J* 2016;60:691-700.
55. Mohtaram NT. Developing strategic accounting capabilities in Iranian children: The impact of socioeconomic conditions. *Psychol Stud* 2005;1:55-72.
56. Piroozian RR, Raf M. Evaluation of DMF Index And Its Relationship With Breast Milk Consumption, Suckling And Socioeconomic Factors In 3-7 Year Old Children, 9th Iranian Congress of Nutrition. Iran: Tabriz University of Medical Sciences; 2019.
57. Nematollahi H, Mehrab Khani M, Ismaili H. Evaluation of dental caries experience of 2-6 years old children and their relationship with socioeconomic status of their parents in Birjand kindergartens-Iran 2006. *J Mashhad Dent School* 2008;32:325-32.
58. Emamgholi Pour S, Arab M, Biglarian A, Mir Rezaei S. Socioeconomic factors affecting oral health of children upon entering primary school. *Iran J Pediatr Dent* 2016;12:14-20.
59. Khosravani R, Golkari A, Memarpour M. Assessing the relationship between dental caries and anthropometric indices in 9-11- year-old primary school children of Shiraz. *Armaghan E Danesh Yasuj Univ Med Sci J* 2013;18:787-69.
60. Shahraki M, Agheli L, Assari Arani A, Sadeqi H. Children's health and parental socioeco-nomic factors: A population-based survey in Finland. *BMC Public Health* 2011;11:457.
61. Nanjunda DC. Impact of socio-economic profiles on public health crisis of road traffic accidents: A qualitative study from South India. *Clin Epidemiol Global Health* 2021;9:7-11.
62. Rok Simon M, Korosec A, Bilban M. The impact of family socioeconomic factors on child safety. *Eur J Public Health* 2018;28:35.
63. Hasaniha M, Khoda Bandeh Loo M, Skandari F, Mazloom Zadeh S. Investigation of socioeconomic factors in injured children referred to ayatollah Mousavi and Valiasr hospitals in Zanjan. *J Soc Health* 2015;2:165-71.
64. Meimanat Abadi S, Ghofranipour F, Yousefi F, Moradpour F. The effect of educational intervention based on health belief model on the damage caused by accidents among children less than 5 year old of women referred to health centers in qorveh in 1392. *Jorjani Biomed J* 2016;4:30-41.
65. Kazemeini T, Nazar Zadeh F. The Role of Family Socioeconomic Status and Educational Status in Juvenile Delinquency Behavior, National Congress of Child and Adolescent Psychology. Iran: Ferdowsi University of Mashhad; 2012.
66. Poorhossein R, Dadsetan P, Ejdehei J, Kiamanesh A. Transformational study of self-concept in 6-12 year old children and its relation with social class and gender. *J Psychol* 2002;6:21-7.
67. Naji B, Ahmadipour A, Mohammadi M, Khaleghi A, Alavi S, Ahmadi A, *et al.* The profile and comorbidities of mental disorders among children and adolescents in Bushehr province. *J Iran Med Council* 2018;1:55-62.
68. Mahmoudi N, Mousavi R, Lavasani MG, Gobari Bonab B. Investigating the effective factors and family structure on children's ADHD. *JCR* 2019;18:230-53.
69. Van Malderen C, Amouzou A, Barros AJ, *et al.* Socioeconomic factors contributing to under-five mortality in sub-Saharan Africa: A decomposition analysis. *BMC Public Health* 2019;19:760.
70. Hosseinpoor AR, Mohammad K, Majdzadeh R, Naghavi M, Abolhassani F, Sousa A, *et al.* Socioeconomic inequality in infant mortality in Iran and across its provinces. *Bull World Health Organ* 2005;83:837-44.
71. Mohseni RA, Pakzad H. Effect of social-economical conditions on mortality rate of under 5 years children, Khuzestan-Iran. *J Gorgan Univ Med Sci* 2012;14:128.
72. Moeni S, Tamjidzad Z. Child mortality rate and its causes in rural areas of ardabil province with emphasis on pars Abad city. *J Health* 2010;1:52-8.
73. Darvazeh Emami S, Abdyazdan Z, Montazeri M, Bashardoost N. An investigation of some social factors related to infant mortality. *J Shahrekord Univ Med Sci* 2010;3:67-72.
74. Aref Nejad M, Jaberi N, Khalili Pour E, Isfahani P. Survey of neonatal mortality in NICU in amiralmomenin hospital of Zabol university of medical sciences in 2014: A short report. *JRUMS* 2016;15:91-8.

How to cite this article: Baharvand P, Nejad EB, Karami K, Amraei M. A Review Study of the Role of Socioeconomic Status and its Components in Children's Health. *Glob J Med Pharm Biomed Update* 2021;16:9.