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Shaban Mohamed, M.A.[a] , AbouKhatwa, M.M.[b] , Saifullah, A.A.[c] , Hareez Syahmi, M.[c] , Mosaad, M.[d] , Elrggal, M.E.[e] , Dehele, I.S.[f] , Elnaem, M.H.[g]

Risk Factors, Clinical Consequences, Prevention, and Treatment of Childhood Obesity
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[a] Department of Pediatrics, Faculty of Medicine, International Islamic University Malaysia, Kuantan, 25200, Malaysia
[b] Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmacy, Alexandria University, Alexandria, 5372066, Egypt
[c] Faculty of Medicine, International Islamic University Malaysia, Kuantan, 25200, Malaysia
[d] Faculty of Medicine, Widad University College, Kuantan, 25200, Malaysia
[e] College of Pharmacy, Umm Al-Qura University, Makkah, 21955, Saudi Arabia
[f] School of Pharmacy, University of Birmingham, Birmingham, B15 2TT, United Kingdom
[g] School of Pharmaceutical Sciences, Universiti Sains Malaysia, George Town, 11800, Malaysia

Abstract
Obesity might adversely affect the health and well-being of children and their families. Childhood obesity has crucial implications for health, both during childhood and as they age. It is highly associated with many acute problems and is commonly present during childhood, making visits and hospital admissions polarized in this group of children. The problems that may affect these children can be medical, such as asthma, chronic inflammation, orthopedic abnormalities, liver disease, diabetes mellitus or dyslipidemia. Long-term consequences of cardiovascular risk factors, the persistence of obesity and premature mortality are common among adults who had obesity during their early lives. Additionally, they could also suffer from psychological issues, such as low self-esteem, which puts them at risk of a much more serious psychosocial problem that may lead to depression, as well as a disruption in educational achievements and social relationships. Ahealthy diet, physical activity, adequate sleep, and limited screen time are all preventive measures that should be implemented at the family and community levels, preferably through well-structured programs. Furthermore, pharmacological management of childhood obesity is limited and only used after non-pharmacological interventions have failed or in the late stages of obesity. However, recent guidelines advocate the early use of medical interventions. Approved pharmacotherapeutic options include orlistat, phentermine/topiramate combination and liraglutide. There are several other options approved primarily for other specific forms of obesity or for other indications, including setmelanotide, metformin, lisdexamfetamine, zonisamide and fluoxetine. Bariatric surgery is a safe and effective option in cases with extreme obesity and comorbidities considering the need for long-term monitoring and support for cases and their families post-surgery. This review aims to discuss and highlight the recent evidence regarding risk factors, clinical consequences, prevention, and treatment of childhood obesity. © 2022 by the authors.

Author Keywords
childhood; obesity; prevention; risk factors; treatment

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amfebutamone, fluoxetine, liraglutide, lisdexamfetamine, metformin, naltrexone, phentermine plus topiramate, setmelanotide, tetrahydrolipstatin, zonisamide; bariatric surgery, birth weight, breast feeding, caloric intake, child nutrition, childhood obesity, comorbidity, dietary intake, energy consumption, healthy diet, heredity, human, lifestyle, physical activity, Review, risk factor, screen time, sleep quality, sleep time, social status, treatment indication

Chemicals/CAS
amfebutamone, 31677-93-7, 34911-55-2, 144445-76-1; fluoxetine, 54910-89-3, 56296-78-7, 59333-67-4, 57226-07-0; liraglutide, 204656-20-2; lisdexamfetamine, 608137-32-2, 608137-33-3, 819871-04-0; metformin, 1115-70-4, 657-24-9; naltrexone, 16590-41-3, 16676-29-2; phentermine plus topiramate, 960078-81-3; setmelanotide, 920014-72-8, 2324799-41-7, 1504602-49-6; tetrahydrolipstatin, 96829-58-2; zonisamide, 68291-97-4

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Correspondence Address
Elnaem M.H.; School of Pharmaceutical Sciences, Malaysia; email: drmelnaem@gmail.com

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