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# A Review on Health Promotion and Disease Prevention in Children and Adults

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Article History:	Abstract
Received on: 11 June 2023 Revised on: 23 July 2023 Accepted on: 25 July 2023	The risk of developing chronic diseases and other morbidities is decreated by health promotion and disease prevention. Systemic meta-analysis we used to produce review articles that were published between 2019 and 20. The study's goal is to review the literature on illness prevention and heat promotion for both adults and children. The data regarding dise prevention in children in 2019 (Diabetes Mellitus), 2020 (Obesity, Disabili 2021 In 2019, the focus was on physical activity and emotion management
<i>Keywords:</i> Severe acute respiratory syndrome, SARS associated corona virus, SARS-COV	in 2020, it was on reducing salt, smoking, alcohol, and increasing physical activity; in 2021, it was on reducing salt, smoking, alcohol, and increasing physical activity; in 2022, it was on positive wellbeing, resilience among individuals, and positive mental health; and in 2023, it was on lifestyle behaviours and COVID-19 preventive behaviours. In summary, this review article concludes that promoting health to both adults and children can help prevent disease by providing information on both acute and chronic conditions, which can reduce risk and prevent the disease state from worsening.

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#### INTRODUCTION

The goal of health promotion is to empower individuals to take charge of and make improvements to their own health. It is a constructive idea that emphasizes one's physical capabilities as well as institutional, social, political, and personal resources [1].

#### **Disease Prevention**

The focus of disease prevention is on particular initiatives to lessen the onset and severity of chronic diseases and other morbidities, which sets it apart from health promotion. The promotion of health and prevention of disease is linked to wellness [2] (Figure 1).

Health promotion is "the process of enabling people to increase control over and to improve, their health," according to the Ottawa Charter for Health Promotion (1986). The five objectives for health promotion are as follows: Developing sound public policy is the first step, followed by fostering a healthy atmosphere, bolstering community action, honing personal skills, and reorienting health services. Primary health care (PHC) is the cornerstone of a sustainable health system that offers universal health coverage and empowers people and communities, according to the 2018 Astana Declaration [3] (Figure 1).

increasing healthy behaviours Bv and empowering people to take charge of their health and its determinants through multisectoral action and health literacy initiatives, health promotion is achieved. This procedure involves undertaking initiatives for the general public or for populations that are growing. The danger of unfavorable health consequences. In addition to the behavioural risk factors of obesity, diet, physical inactivity, and tobacco use, health promotion typically addresses men. The goal of (early detection) prevention is to reduce the number of illnesses and risk factors that go along with them [4] (Figure 3).

Primary prevention is defined as taking steps to



Figure 2: Rural health promotion and disease prevention

prevent a disease from manifesting. These steps can include modifying the way that social and economic determinants of health affect health, educating people about behavioural and medical health risks, counselling them on how to reduce those risks at the individual and community levels, providing nutritional and food supplements, educating people about oral and dental hygiene, and providing clinical preventive services like vaccinations and immunizations for adults, children, and the elderly, as well as vaccinations or post-exposure prophylaxis for those exposed to communicable diseases [5].

Early detection increases the likelihood of favourable health outcomes, which is the focus of secondary prevention, which includes actions like health, injury prevention, drug and alcohol abuse prevention, HIV-related health behaviour, and sexual health.



Figure 1: Health Promotion in Children's



**Figure 3: Health Promotion in Adults** 

For many years, the effectiveness and usefulness of health promotion and harm reduction in addressing public and population health issues have been widely acknowledged. These related methods exchange concepts and methods that enable people to alter their environment for improved health. A forward-thinking tactic for promoting and defending health by strengthening people's coping mechanisms, health promotion is

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more effectively organized and delivered in a well-functioning primary healthcare system with a registered population, which is why it should be

Table 1: Distinguish health promotion from prevention				
Health promotion	Prevention			
Resource oriented	Burden oriented			
Non-specific	Specific			
Health Sciences	Medicine			
Patients/citizens more active	Patient/citizen is more passive			
Focus: Health	Focus: Disease			

#### Table 2: Differences between primary, secondary, and tertiary prevention

	Primary prevention	Secondary	Tertiary prevention
		prevention	
Time of intervention	Based on the onset of the diseases	During the early stages of a disease	After manifestation/acute
	ule ulseases	of a disease	treatment of a disease
Goal of the	Reduce the incidence	Prevent the	Prevent after effects or
intervention	of diseases	progression or chronification of a disease	relapses
Targets of the intervention	Healthy people display no symptoms	Acute patients/clients	Patients with chronic impairments and individuals in rehabilitation

rooted in systems thinking and resilience [6].

Disease prevention is defined as targeted interventions for primary and secondary prevention that are both population- and individual-based (Table 1 and Table 2).

such as evidence-based screening initiatives for congenital malformation prevention or early disease detection; and preventive medication regimens that have been shown to be successful when started early in the course of a disease) [7].

It should be mentioned that secondary prevention cannot be carried out independently of capacity-building in other healthcare services, whereas primary prevention activities can. If abnormalities cannot be promptly corrected or treated through services from other parts of the health care system, then screening and early detection are of limited value, and may even be harmful to the patient. Furthermore, accessible population-based screening programs can be actively promoted [8].

Numerous objectives of health promotion and disease prevention are similar, and their roles often overlap. At the conceptual level, it is helpful to identify services that focus mainly on the healthcare industry as disease prevention services and services that depend on intersectoral actions and/or address the social determinants of health as health promotion services [9].

Disease prevention and health promotion are acknowledged as effective strategies in the current healthcare system to improve care and lower growing costs. 75 per cent of chronic diseases and 75 percent of health care expenses are caused by tobacco use, inactivity, and poor nutrition. Healthy People 2020 has advocated for more worksite health promotion programs in light of the rising costs and burden of chronic disease on the public health system . There is ample proof that companies that produce employees' financial circumstances improve when evidence-based initiatives supporting employee wellness are implemented. A review of the literature shows that savings on employee healthcare costs will amount to \$3 to \$5 for every \$1 invested in excellent leadership, programs, and facilities for health promotion [10].

Nursing practice has included health promotion since Florence Nightingale's time. In the current literature, health promotion is a significant part of nursing roles (Figure 4).

The World Health Organization claims that health promotion gives individuals greater power over their well-being. It encompasses a broad spectrum of social and environmental interventions intended to prevent and address the underlying causes of poor health rather than concentrating solely on treatments and cures. This will improve and safeguard everyone's health and quality of life. People's quality of life can be enhanced, their physical and mental health can be managed, and their social, familial, and personal relationships can all be strengthened [11]. It also lowers waste and needless medical costs while extending the average healthy life expectancy. According to the World Health Organization (WHO), being healthy is more than just not being sick or disabled; it is a state of total physical, mental, and social well-being. This model proposes an ecological viewpoint, meaning that health is a condition in which the social, biological, and physical environments are in balance or harmony (Figure 5).

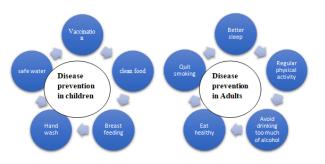


Figure 4: Disease Prevention in Children and adults

S.No Year Au		Author	Children		
			Health Promotion	<b>Disease Prevention</b>	
1	2023	Esther salangseloilwe	Providing screening, education and management support to diabetics. patients providing services through government aid or individual medical insurance, management.	Mental disorder	
2	2022	Mansha Mirza	Sports-based exercise programs Active video gaming Diet Life style Aquatic exercise	Obesity	
3	2021	ShoshShahrabani	Nutrition habits Balanced and healthy diet	Obesity	
4	2020	Jia-chain	Nutrition habits consuming products that are high in salt and sugar	Obesity Disability	
5	2019	Risa Jaslow	Physical Activity Emotion Management.	Diabetes Mellitus	



### Figure 5: Benefits of Health promotion and disease prevention

Nursing practice has included health promotion since Florence Nightingale's time. Health promotion is a key component of nursing roles and is referred to as "nursing health promotion" and "health-promotion nursing practice" in the literature currently in publication. Family health promotion is the process by which families work to enhance the mental and physical well-being of their members. Numerous disciplines, including psychology, sociology, medicine, family therapy, and family nursing, have studied health promotion. It investigated how family health promotion led to a heterogeneity of literature involving health behaviour, family members' roles, and terminology. Childhood is a time to promote health and prevent disease. Folks are more adept at managing and encouraging health [12].

In order to synthesize the extensive and diverse literature on the theoretical models and mechanisms of physical health behaviour influence that have been investigated in studies on family health promotion, we conducted a scoping review. By looking at the possible paths of influence between family members in encouraging healthy behaviours, our second goal was to map the roles of family members in an individual's health behaviours. Unidirectional influences from parents to children or reciprocal influences between couples and siblings are two examples of these directions [13].

#### Programs for wellness, illness prevention, and health promotion often involve the following activities

Communication: Educating the broader public

S.No	Year	Author	Adults	
			Health Promotion	Diseases Prevention
1	2023	Deep Shikha	<ul> <li>lifestyle behaviours (e.g., exercise, alcohol consumption, medical check-ups, and smoking) and preventive behaviours related to COVID-19 (e.g., wearing masks, hand washing, crowd avoidance, and taking the COVID-19 vaccination).</li> </ul>	♦ COVID 19
2	2022	Akash Kumar	<ul> <li>positive wellbeing</li> <li>resilience among individuals</li> <li>positive mental health</li> </ul>	<ul> <li>Mental disorder</li> </ul>
3	2020	Ching-Ju Chiu	<ul> <li>Reduction in salt consumption, smoking, alcohol use, and increased physical activity</li> </ul>	<ul> <li>Diabetes Mellits</li> </ul>
4	2021	Jinhee Shin	<ul> <li>Reduction in salt consumption, smoking, alcohol use, and increased physical activity</li> </ul>	<ul> <li>hypertension</li> </ul>
5	2019	Rodrigo Fernangez- Jimenez	<ul> <li>Physical Activity ,body and herat.</li> <li>Emotion Management</li> </ul>	<ul> <li>Mental disorder</li> </ul>

 Table 4: Determination of Health Promotion and Disease Prevention in Adults

about healthy lifestyle choices. Public service announcements, health fairs, mass media campaigns, and newsletters are a few instances of communication strategies [14].

Education: Providing knowledge to enable actions and changes in behaviour. Strategies for health education can include training, support groups, and courses.

Policy, Systems, and Environment: Encouraging, facilitating, and enabling healthy choices through the implementation of improved laws, rules, and regulations (policy), functional organizational components (systems), and the physical, social, and/or economic environment.

#### Health Promotion: Nurses' Role

In the public sector, nurses are vital to the promotion of health. Every community has unique customs, values, and beliefs. In this instance, a nurse's job is to comprehend the values and viewpoints of the community in which they are working as clinical professionals. The use of medication and how it interacts with other prescriptions are topics that nurses advise patients on. In order to respect and value the rights of the populace, they must also become familiar with the community's beliefs regarding birth, initiation, and death rituals [15].

Similarly, nurses assist in giving medications to inpatients and outpatients; this helps to promote health because patients receive the right amount of medication at the right time. A theoretical idea known as the "health belief model" enables nurses to forecast how members of a community will behave and think about medical care.

#### **Benefits of health promotion**

- 1. Chronic disease awareness and prevention.
- 2. Injury and violence prevention.
- 3. Maternal and infant health.
- 4. Mental and behavioural health.
- 5. Nutrition, exercise and obesity prevention.
- 6. Tobacco use and substance abuse [16]

#### Benefits of disease prevention

- 1. Longer Lifespan.
- 2. Decreased Cost of Disease Management.
- 3. Better Quality of Life.

- 4. Cuts Down on the Risks and Health Problems.
- 5. Keeps you fit and active.
- 6. Detection of Illnesses at an Early Stage [17].

#### Mental Health and Welfare

A total of 26 review articles that included 762 original articles with ~806,389 students were about students' mental health and well-being. Table 3 presents the research question and the primary findings of the review articles categorized bv epidemiological and interventional review articles [18]. Nine epidemiological review articles focused primarily on mental health, while seventeen review articles examined the efficacy of various strategies aimed at enhancing the mental well-being of the student body. In nursing school, the subject of "stress" is mainly covered under the heading of "mental health." It was critical to identify stressors, estimate prevalence, and evaluate how wellcoping mechanisms reduced anxiety or stress. But subjects like "mental health prevention programs" and "suicidal thoughts" in other students Additionally, collectives were assessed.

#### **Nutrition and Diet**

Six review articles total of 148 original articles with approximately 50,698 students included discussed student nutrition and diet. review Epidemiological and interventional articles are arranged according to the research question and the primary findings of the review articles. Two epidemiological review articles focused primarily on diet and nutrition, while four review articles examined the efficacy of various strategies aimed at enhancing the dietary intake of the student body. An eating disorder is a possibility for one in ten medical students [19]. Additionally, there is a correlation between increased rates of food insecurity and students' age, race, child-bearing status, and financial independence. Numerous tactics, such as media strategies, in-person interventions, and nutrition labelling, show promise in enhancing the dietary behaviours of college students.

#### Exercise's Significance in Promoting Health

Individual guidelines are provided by recent recommendations for incorporating physical activity throughout the life cycle: adults should incorporate 2.5 hours of moderate intensity physical activity or 75 minutes (1 hour and 15 minutes) of vigorous aerobic activity per week, while children and adolescents should engage in 1 hour of physical activity per day. The same recommendations should be given to older adults as well, taking into account any pre-existing medical conditions [20].

#### **Importance of Health Promotion**

- 1. Health promotion improves the health status of individuals, families, communities, states and the nation.
- 2. Health promotion enhances the quality of life for all people
- 3. Health promotion reduces premature deaths [21]

#### Strategies Can Lead To Better Quality Of Life

- 1. Dying young
- 2. Developing a chronic disease
- 3. Suffering complications of the disease
- 4. Suffering infectious diseases such as COVID 19
- 5. Experiencing pain
- 6. Going to the hospital or taking regular medications
- 7. Becoming overweight or obese
- 8. Developing high blood pressure, high cholesterol or diabetes
- 9. Being injured

## Benefits of Disease Prevention for Physical Health

- 1. Reducing tobacco and alcohol consumption
- 2. Improving diet
- 3. Increasing physical activity levels
- 4. Reducing sitting time [22].

#### METHODS

#### Eligibility Criteria

We included a systemic meta-analysis that reported health promotion and disease prevention in children and adults reviewed by research articles [23]. The health promotion and disease prevention data were collected from published review articles after they had been included as eligibility criteria. The data was shown in review articles as information which is useful to this review article.

#### **Selection Process**

According to the systemic meta-analysis was first independently reviewed all published review articles to get an idea about health promotion and disease prevention in children and adults [24]. After review the articles included data about on health promotion and disease prevention in children and adults. Finally, the review article is prepared and sent as a guide to rectify the mistakes in my systemic meta-analysis review article.

#### **Data Analysis**

The data were collected about health promotion and disease prevention in children and adult populations after it had been analysed the data to make results by using SPSS version 23.0 statistical models [25]. The data was selected as information about health promotion and disease prevention in children and adults from existing review articles. The data is shown in Table 3 and Table 4.

#### **RESULTS AND DISCUSSION**

The discussion of this review article was determined by the data from the review articles about on health promotion and disease prevention in children and adult populations.

The data were collected and finalised by using previous data about health promotion and disease prevention in children from published articles.

The disease prevention in childrens in 2019 (Diabetes Mellits), 2020 (Obseity,Disability), 2021 (Obesity ), 2022 (Obesity) and 2023 (Mental disorder).

The health promotion in children in 2019 (Physical Activity, Emotion Management), 2020 (Nutrition habits), 2021(Nutrition habits, Balanced and healthy diet, consuming products that are high in salt and sugar), 2022(Sportsbased exercise programs, Active video gaming, Diet, Lifestyle, Aquaticexcercise) and 2023 (Providing screening, education and management support to diabetic . patients providing services through government aid or individual medical insurance, management.) The disease prevention in adults in 2019 (Mental disorder), 2020 (Diabetes Mellits), 2021 (hypertension), 2022 (Mental disorder) and 2023 (COVID 19).

The health promotion in adults in 2019(Physical Activity, emotion Management), 2020(Reduction in salt consumption, smoking, alcohol use, and increased physical activity), 2021(Reduction in salt consumption, smoking, alcohol use, and increased physical activity), 2022(positive wellbeing, resilience among individuals, positive mental health) and 2023(lifestyle behaviours (e.g., exercise, alcohol consumption, medical check-ups, and smoking) and preventive behaviours related to COVID-19 (e.g., wearing masks, hand washing, crowd avoidance, and taking the COVID-19 vaccination).

#### CONCLUSION

The conclusion of this review article is about health promotion and disease prevention in children and adult populations. The disease can be prevented when initially providing health promotion to the children and adults about their chronic and acute conditions of diseases information that leads to minimising the risk and also avoiding the further involvement of the disease state.

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The authors declare no conflict of interest, financial or otherwise.

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#### REFERENCES

- [1] An Ali, and D L Katz. Disease prevention and health promotion. *Am J Prev Med*, 49(5 Suppl 3): S230-40, 2015.
- [2] B Bader, M Coenen, and C Jung-Sievers. Evaluation of community-based health promotion interventions in children and adolescents in high-income countries. *J of*

*BMC Public Health*, 845(3250):54-72, 2023.

- [3] B Giri ,S Kumar Dash, and S Dutta. Role of nutraceuticals on health promotion and disease prevention. *J of Drug Delivery and Therapeutics*, 8(4):42-47, 2018.
- [4] M Grysztar, M Rodzinka, and M Duplaga. The scoping review of health promotion and disease prevention interventions addressed to elderly people. *J of BMC Health Services Research*, 16(5):455-465, 2016.
- [5] Ching- Ju Chiu, Jia Chain Hu, Yi- Husan lo et.al. Health promotion and disease prevention interventions for the elderly. Int J Environ RES Public Health, 17(15):5335-5339, 2020.
- [6] C Hawk, J Adams , and J Hartvigsen. The role of CAM in public Health, Disease Prevention, and Health Promotion. *J of Hindawi*, 22(5):345-348, 2015.
- [7] D R Evans, and S S Kazarian. 4- Health Promotion, Disease Prevention, and Quality of Life. *J of Hand of Cultural Health Psychology*, 15(2):91-97, 2021.
- [8] V Fuster , I Carvajal, and R jaslow. Health promotion in children. *J of JACC*, 72(25):3310 -3319, 2018.
- [9] D Donev, G Pavlekovic, and L Z Kragelj. Health promotion and disease prevention. *J of Stability Pact for South Eastern Europe*, 64(45)543-562, 2007.
- [10] M Mirza, J P Brown-Hollie, and S Magana. Interventions for health promotion and obesity prevention for children and adolescents with developmental disabilities. *J of Autism and Developmental Disorders*, 26(5):68-84, 2022.
- [11] M D Barnes, G Bradford, and L B Novilla. Family-Centred health promotion: perspectives for Engaging families and Achieving better health outcomes. J of PMC, 57(11):65-82, 2020.
- [12] M Duplaga, M Grysztar, and A Kopec. Economic and institutional perspectives on health promotion activities for older people. *J of BMC*, 61(453):675-684, 2018.
- [13] M Rubens, J Attonito, and N Shehadeh. Health promotion and disease prevention strategies for today's physicians. *J of plumX Metrics*, 349(1):73-79, 2015.

- [14] R Ferreira,T Mestre, and L Sousa. Health Promotion and Disease prevention in the elderly. *J of MDPI*, 12(2);305-322, 2022.
- [15] R Fernandez, M AI-Kazaz, R Jaslow, and V Fuster. Children Present a Window Opportunity for Promoting Health. J of JAAC, 72(25):3310-3319, 2018.
- [16] R M Kaplan and A A Stone. Bringing the Laboratory and Clinic to the Community: Mobile Technologies for Health Promotion and Disease Prevention. *J of Pub Med*, 64(3):471-498, 2013.
- [17] R Mendes, and E Costa Dias. Health protection, health promotion and disease prevention at the workplace. *J of OXFORD ACADEMIC*, 10(5);342-354, 2011.
- [18] S Sagui-Henson, E Wang, and F Semaan. Disease Prevention and health promotion. *J of Sage*, 87(9):567-678, 2023.
- [19] T Boyce, S Peckham, and A Hannet. A proactive approach.Health promotion and ill-health prevention. *J of The King's Fund*, 34(4):234-249, 2010.
- [20] V Singh, A Kumar, and S Gupta. Mental Health Prevention and Promotion Narrative Review. *J of Frontiers*, 13(338):92-122, 2022.
- [21] Y H Lo, and C J Ching. The health promotion and disease prevention interventions for the elderly. *J of JMIR*, 6(234):34-44, 2023.
- [22] Y C Lynn HO, D Mahirah, and C Z Hao HO. The role of the family in health promotion. *J of Healthpromot int*, 37(6):83-85, 2022.
- [23] L A Green, G E Fryer Jr, B P Yawn, D Lanier, and S M Dovey. The Ecology of Medical Care Revisited. N Engl Med, 344(26):2021-2025, 2001.
- [24] D Satcher. Ethnic Disparities in Health: The Public's Role in Working for Equality. *PloS Medicine*, 3(10):1683-1685, 2006.
- [25] A Kleinman, and P Benson. Anthropology in the Clinic: The Problem of Cultural Competency and How to Fix it. *PLoS Medicine*, 3(10):1673-1676, 2006.

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