



A Narrative Review of Lifestyle, Dietary Behaviors, and Non-Communicable Disease Prevalence in South Asia

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ABSTRACT

Background and objectives: In South Asia, there is a fragmented amount of data sources on lifestyle behaviors, dietary patterns, and their association with non-communicable diseases (NCDs). This review aims to synthesize existing evidence across South Asia to support the development of effective health policies and interventions at the regional level.

Methods: A narrative review was performed using peer-reviewed studies from Bangladesh, India, Pakistan, Sri Lanka, Bhutan, the Maldives, and Nepal, covering publications from 2010 to 2022. Afghanistan was excluded because of its different socio-cultural ties with Central Asia and the Middle East. Searches were carried out in Google Scholar, PubMed, ScienceDirect, and open-access journal databases. After a thorough quality assessment, we got 84 primary studies that met the inclusion criteria.

Key content and findings: The analysis demonstrated substantial variations in the prevalence of overweight, obesity, and non-communicable diseases (NCDs) across the region. The major risk factors identified include insufficient physical activity, frequent consumption of fast food and high-calorie foods, along with a markedly low intake of fruits and vegetables. These lifestyle choices are strongly correlated with the rising rates of cardiovascular diseases, diabetes, hypertension, and certain cancers.

Conclusions: To address the significant burden of non-communicable diseases (NCDs) in South Asia, we must implement integrated strategies that actively promote balanced diets, regular physical activity, and robust community health awareness. These findings provide a strong foundation for policymakers, healthcare providers, and public health practitioners to design culturally relevant interventions and confidently strengthen preventive health policies across the region.

INTRODUCTION

South Asia accounts for approximately 25% of the global population and comprises Bangladesh, India, Pakistan, Sri Lanka, the Maldives, Nepal, and Bhutan. Cultural diversity in diet, physical activity, and healthcare access among South Asian populations leads to varying rates of non-communicable diseases (NCDs), such as cardiovascular diseases, cancers, and diabetes. These NCDs are the leading causes of morbidity and mortality in the region, resulting in about 8.5 million deaths annually (WHO, 2021). In 2019, only South Asia recorded almost two million diabetes-related deaths, with the second-highest burden globally, according to the International Diabetes Federation (IDF, 2021).

The increasing prevalence of NCDs in South Asia has been attributed to significant shifts in lifestyle and dietary behaviours, driven by urbanisation, globalisation, and demographic changes (Mohan et al., 2023). Traditional diets, once rich in whole grains, legumes, and vegetables, are progressively being replaced by energy-dense, nutrient-poor fast foods and sugar-sweetened beverages. Concurrently, sedentary lifestyles and

reduced physical activity have become widespread, further compounding the risk. Studies report that less than 4% of South Asians meet the WHO-recommended intake of fruits and vegetables, with even lower rates in rural settings (Afolabi et al., 2013). These patterns are exacerbated by socio-cultural and economic factors that influence individual and community behaviors.

Such dietary patterns are associated with a 20% increased risk of coronary heart disease, as well as insulin resistance and dyslipidemia (Renzella, J. A. 2021). Alarming, adults in South Asia are more likely to develop coronary artery disease compared to those in high-income countries (Cazzaniga et al., 2022). By 2030, the incidence of diabetes had notably increased in developing regions, particularly in South and East Asia, surpassing rates in other areas (Sun et al., 2022). These trends have serious consequences for the healthcare systems and result in substantial social and economic costs from lost productivity and premature death. Given the well-known links between obesity, diabetes, and heart diseases, there is a pressing need for changes in dietary and lifestyle practices (Banik et al., 2017). A significant body of research indicates that a higher intake of fruits and vegetables greatly lowers the chances of developing NCDs (Jayawardena et al., 2021). However, research shows that less than 4% of South Asians meet the advised daily servings of fruits and vegetables, with the lowest consumption rates found among rural communities in India (Afolabi et al., 2013).

Many previous reviews have predominantly centred on countries such as India or Bangladesh or on specific diseases like diabetes, thereby missing a broader regional comparison. They often disregard less-studied nations like Bhutan, the Maldives, and Nepal, and fail to consider the significant changes in dietary and lifestyle patterns over the past 12 years, particularly in light of globalization and the effects of the COVID-19 pandemic. This research examines peer-reviewed studies and official health data from Bangladesh, India, Pakistan, Sri Lanka, Nepal, Bhutan, and the Maldives, published between 2010 and 2022. Using the Social Ecological Model (SEM), it explores how individual, interpersonal, community, and policy factors influence health outcomes. The goal is to gather regional evidence on lifestyle, diet, and chronic illnesses to inform culturally sensitive interventions and health policies to reduce the rising NCD burden in South Asia.

METHODOLOGY

2.1 Data search strategy

In our effort to enhance understanding of global lifestyles and dietary behaviors, with a specific emphasis on South Asia, we undertook a narrative review. This comprehensive analysis utilized databases, including Web of Science, PubMed, Google Scholar, Science Direct, and ResearchGate, to ensure a broad and informative perspective. To enhance our research, we strategically utilized keywords such as “lifestyle,” “dietary behavior,” “obesity,” “NCD diseases,” and “South Asia. We set a publication year from 2010 to 2022, but we exclude Afghanistan due to its geographic location. Research from this period offers valuable insights into food habits and public health challenges to recognise that dietary trends and disease patterns have changed significantly due to globalization and lifestyle shifts. To ensure accuracy, we imported all citations into the Mendeley software and screened the documents to remove duplicates that did not meet our criteria. We identified 800 records through comprehensive database searches on Google Scholar, ScienceDirect, Web of Science, and PubMed. After removing duplicates, 279

records were available for screening. We assessed 148 full-text articles for eligibility, and confidently selected 84 studies that met the inclusion criteria for data extraction.

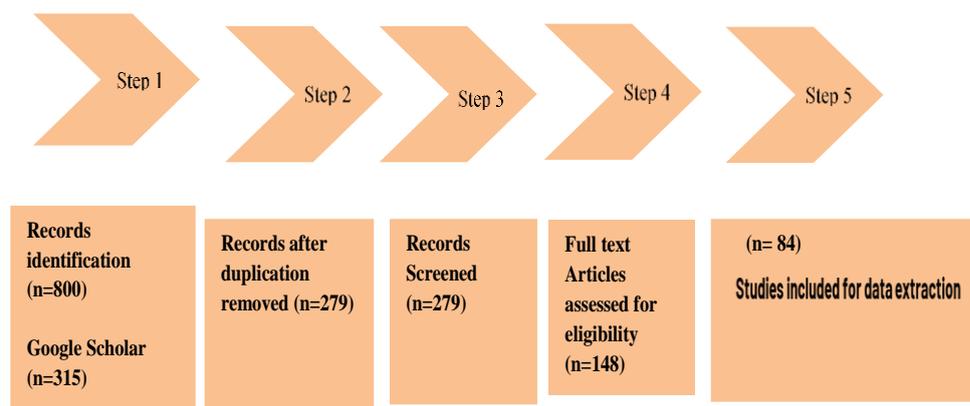


Figure 1: Data search from literature

2.2 Inclusion and exclusion criteria

A checklist was used to review titles and abstracts based on three questions: Is the research original? Does the article focus on leading a healthy lifestyle? Does it discuss eating habits? Additional criteria assessed aspects such as the realities of healthy lifestyles, physical activity levels within the population, disease prevalence, and nutritional status.

Full-text screening was conducted for articles that passed the initial review, focusing on dietary patterns linked to chronic diseases and the nutritional status of South Asian individuals. The inclusion criteria required that publications must be from the period between 2010 and 2022 and published in English. Records that were not peer-reviewed or that did not relate to the research question were excluded. Ultimately, only 84 articles meeting these criteria were selected for data collection and analysis.

2.3 Selection process

We confidently conducted a thorough review of titles and abstracts, alongside an extensive literature search. Our full-text screening followed a systematic approach, effectively assessing the variations in the number of records at each stage of the selection process. We strategically performed the literature search across multiple databases and websites to eliminate bias and resolve any potential disagreements regarding the selection criteria, such as database searches and article inclusion or exclusion. We meticulously entered the data into the Mendeley program to identify and remove duplicates. After this, we employed a checklist for a robust preliminary screening of the remaining articles. We then conducted a detailed examination of the complete texts that passed this initial screening. Ultimately, we carefully selected the articles that met the inclusion criteria for data extraction.

2.4 Data extraction

STEPS stands for an appropriate approach for efficiently collecting and sharing data among WHO member countries, fostering collaboration, and improving global health outcomes (WHO 2005). We obtained essential country reports and fact sheets from the

WHO website for Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka and Pakistan. This approach enhances data accessibility and supports informed decision-making for public health improvements. We systematically extracted data from the selected publications to investigate the relationship between dietary habits and chronic diseases. Our analysis focused on individuals' dietary and lifestyle practices across various countries. We emphasised key factors such as physical activity, lifestyle risk factors linked to non-communicable diseases, and distinct food consumption patterns.

RESULTS

3.1 Description of the studies:

The studies were conducted over 12 years (2010-2022), and most participants were aged 13-99 years, ranging from urban to rural areas. The size of the study sample and the year of publication varied according to the reference list. For example, the years 2020 to 2022 saw the highest number of publications, possibly due to heightened public health awareness, increased prevalence of non-communicable diseases, and research momentum during the COVID-19 pandemic era. These years witnessed relatively fewer publications, likely because the issue of diet-related NCDs was still gaining prominence in the South Asian research agenda. A moderate rise is visible in the years of 2015-2019, suggesting a transitional period where awareness and research funding began aligning more closely with global health priorities

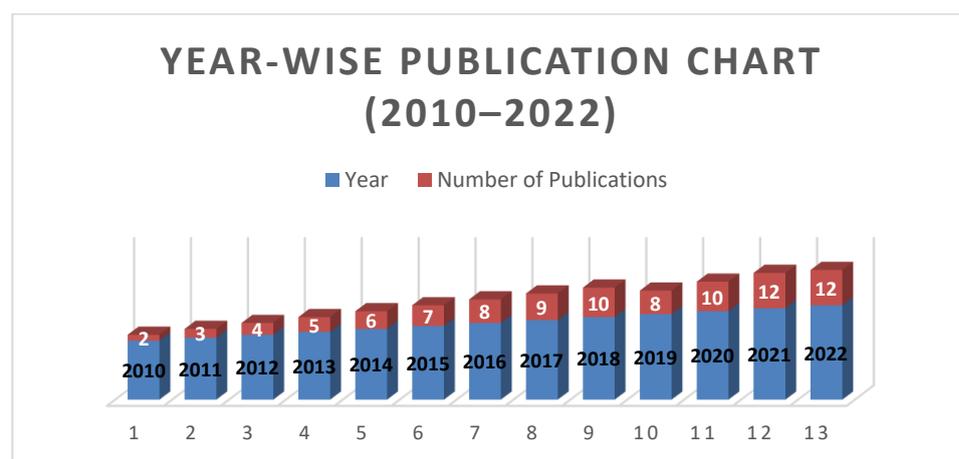


Figure 2: Here is the year-wise publication count chart (2010–2022) based on the reference list.

3.2 Lifestyle patterns and Disease prevalence:

Table 1: Lifestyle, dietary patterns, and disease prevalence in Bangladesh

Types of parameters		Percentages	References
Lifestyle	Alcohol consumption	0.5, 3.6	(98, 26)
	Tobacco use	24, 28.1	(57, 36)
	Physical activity	27, 15.5, 14.8	(57, 26, 53)
Dietary pattern	Fast food	15, 19.9, 48	(45, 16, 54)
	Fruits and vegetables	4.3, 6.5, 12.1	(45, 16, 18)

	Beverage	8.0, 12.0, 12.9	(40, 54, 15)
Disease	Diabetes	2.7, 5.6, 34.1	(98, 36, 53)
	Hypertension	12.5, 13.7, 30.9	(62, 36, 27)
	Cardiovascular	20, 25	(55, 21)
	Cancer	5.7, 11.5	(96, 2)

Table 1 highlights increased alcohol consumption (0.5% to 3.6%), rising cigarette use (24% to 28.1%), and a drop in exercise (27% to 14.8%). Fast food intake surged (10% to 48%), while diabetes (34.1%), hypertension (30.9%), cardiovascular disease (25%), and cancer rates (5.7% to 11.5%) also increased.

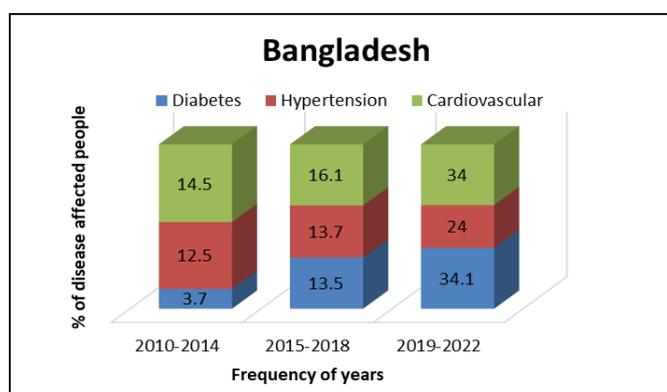


Figure 3: Disease prevalence rate in Bangladesh

Figure 3 shows that, from 2010 to 2014, the rates were 14.5% for cardiovascular disease, 12.5% for hypertension, and 3.7% for diabetes. Between 2015 and 2018, these rates rose to 16.1%, 13.7%, and 13.5%, respectively. The highest prevalence from 2019 to 2022 reached 34% for cardiovascular disease, 24% for hypertension, and 34.1% for diabetes.

Table 2: Lifestyle, dietary patterns and disease prevalence in India

Types of parameters		Percentages	References
Lifestyle	Alcohol consumption	22, 52.5, 48.5	
	Tobacco use	17, 21.5	(57, 36)
	Physical activity	46.9, 15.5, 27.8	(57, 26, 53)
Dietary patterns	Fast food	17.6, 48.6, 65	(43, 94)
	Fruits and vegetables	4.3, 11.6, 24.8	(45, 16, 18)
	Beverage	15.5, 12.9, 25	(40, 54, 15)
Disease	Diabetes	13.4, 16.2, 26.7	(66, 41)

	Hypertension	27.5, 39.2	(62, 36, 27)
	Cardiovascular	24.8, 29.4	(55, 21)
	Cancer	6.8, 9.0	(96, 2)

From 2010 to 2015, alcohol use increased from 22% to 48.5%, and tobacco consumption rose from 17% in 2012 to 21.5% in 2017. Physical activity levels dropped significantly from 46.9% in 2012 to 27.8% in 2020. Fast food consumption surged by 17.6%, while fruits and vegetables increased by 4.3% to 24.8%, and beverages by 15.5% to 25% from 2010 to 2022. Health concerns grew, with hypertension at 39.2% and diabetes around 26.7% in 2022. Cancer rates increased slightly from 6.8% in 2012 to 9% in 2019.

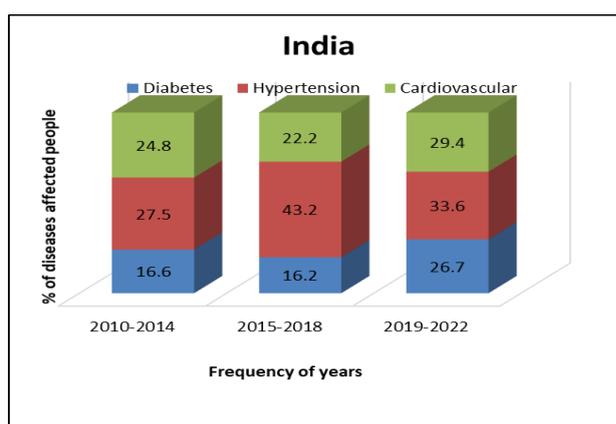


Figure 4: Disease prevalence rate in India

Figure 4 shows the disease prevalence in India, which is higher than in Bangladesh because of rapid urbanization. Between 2010 and 2014, the prevalence of cardiovascular disease, Hypertension, and diabetes was 24.8%, 27.5%, and 16.6%, respectively. In 2015-18, it was 22.2%, 43.2%, and 16.2%. It shows its highest peaks of 29.4%, 33.6%, and 26.7% in 2019-22.

Table 3: Lifestyle, dietary patterns, and disease prevalence in Pakistan

Types of parameters		Percentages	References
Lifestyle	Alcohol consumption	1.5	(28)
	Tobacco use	18, 22	(41, 78)
	Physical activity	46.8, 39, 19.7	(28, 78, 2)
Dietary patterns	Fast food	16, 26.7, 48.7, 46.1	(89, 94, 43, 77)
	Fruits and vegetables	21.2, 14.3, 9.7, 24.3	(45, 44, 17, 46)
	Beverage	10.1, 21.2	(17, 46)
Disease	Diabetes	16.4, 22, 23.1	(28, 66, 41)

	Hypertension	27.5, 21.0, 43.2	(41, 79, 83, 44)
		67.6	
	Cardiovascular	30.3, 51.8	(66, 41)
	Cancer	16.2, 15.9	(79, 2)

In 2010, overall alcohol consumption was 1.5%. Tobacco use rose from 18% in 2011 to 22% in 2014. The percentage of physically active individuals dropped from 46.8% in 2010 to 17.8% in 2022. Fast food consumption increased by 16% in 2010, fruits and vegetables grew from 14.3% in 2013 to 24.8% in 2020, and beverage consumption rose from 10.1% to 21.2% by 2020. Rates of diabetes, hypertension, and cardiovascular disease increased significantly, with hypertension at 67.6% and cardiovascular disease at 51.8% by 2019. Cancer rates decreased slightly from 16.2% in 2018 to 15.9% in 2022.

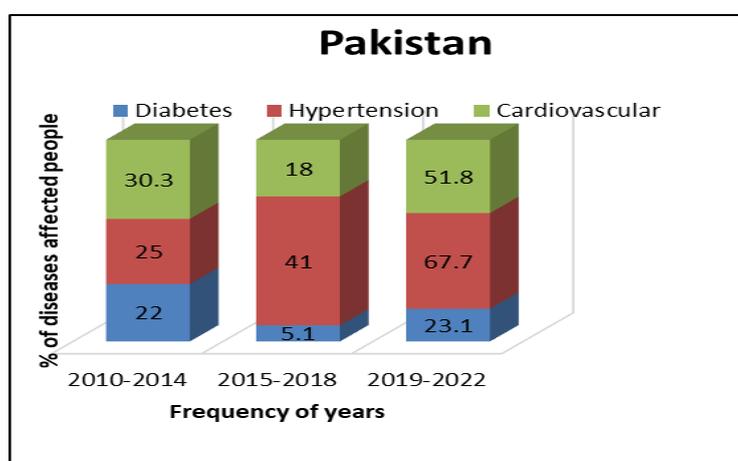


Figure 5: Disease prevalence rate in Pakistan

Figure 5 illustrates the disease prevalence in Pakistan, which is comparable to that in Bangladesh and lower than in India. The prevalence of cardiovascular disease, Hypertension, and diabetes was 30.3%, 25%, and 22%, respectively, between 2010 and 2014. In 2015-18, it was 18%, 41% and 5.1%. It shows its highest peaks of 51.8%, 67.7% and 23.1% in 2019-22.

Types of parameters		Percentages	References
Lifestyle	Alcohol consumption	21.2, 33.0, 32	(25, 67, 68)
	Tobacco use	10.0, 21.9	(25, 52)
	Physical activity	40, 44, 22.6	(25, 52, 67)
Dietary patterns	Fast food	10.5, 21.5, 48, 54.5	(14, 63, 42, 85)
	Fruits and vegetables	4.3, 20, 27.5	(14, 63, 42)
	Beverage	8.7, 18.5	(63, 99)
Disease	Diabetes	16.4, 11.0, 15.6	(25, 52, 69)
	Hypertension	27.5, 26, 40.9	(25, 67, 68)
	Cardiovascular	10.6, 23.0	(52, 68)

	Cancer	13.1	(67)
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Table 4: Lifestyle, dietary patterns and disease prevalence in Sri Lanka

In Table 4, from 2010 to 2022, alcohol consumption rose from 21.2% to 32%. Cigarette consumption increased from 10% in 2010 to 21.5% in 2016. Physical activity decreased from 40% in 2010 to 22.6% in 2015. Fast food consumption grew by 10.6%, produce by 4.3% to 27.8%, and beverages by 8.7% to 18.5%. Meanwhile, diabetes, hypertension, and cardiovascular disease (CVD) prevalence rates dropped from 2010 to 2016, with hypertension increasing to 40.9% in 2022 and CVD at 15.6% in 2019, alongside a cancer rate of 13.1% in the same year.

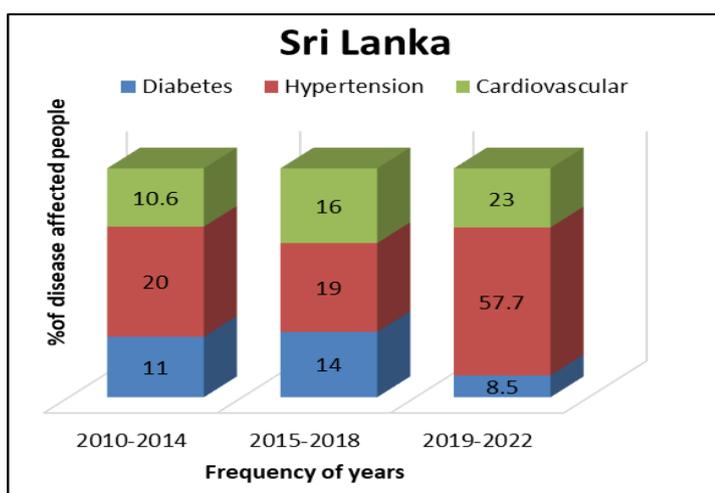


Figure 6: Disease prevalence rate in Sri Lanka

Figure 6 shows the prevalence of the disease in Sri Lanka, which is comparatively lower than the previous three countries. Between 2010 and 14, cardiovascular, Hypertension, and Diabetes prevalence were 10.6%, 20%, and 11%. In 2015-18, it was 16%, 19%, and 14%. It shows its highest peaks of 23%, 57.7%, and 8.5% in 2019-2022.

Table 5: Lifestyle, dietary patterns, and disease prevalence in the Maldives

Types of parameters		Percentages	References
Lifestyle	Alcohol consumption	1.1	(37)
	Tobacco use	24.5, 22	(45, 38)
	Physical activity	28.2, 22.6	(20, 51)
Dietary patterns	Fast food	28.7, 40.7, 12.1	(35, 51, 35)
	Fruits and vegetables	6.4, 10.5, 28.3	(45, 51, 38)
	Beverage	20.0, 11.9	(35, 38)
Disease	Diabetes	4.1, 3.6, 14, 15.6	(37, 98, 80, 22)
	Hypertension	16.6, 31.3	(20, 22)
	Cardiovascular	10.3, 12.5	(98, 22)
	Cancer	14.2	(45)

In 2010, alcohol use was 1.1%, and cigarette consumption dropped from 24.5% to 22% by 2022. Fast food use fell from 28.7% to 12.1%, while fruit and vegetable consumption rose from 6.4% to 28.3%. Hypertension rates surged to 31.3% and diabetes to 15.6% by 2022.

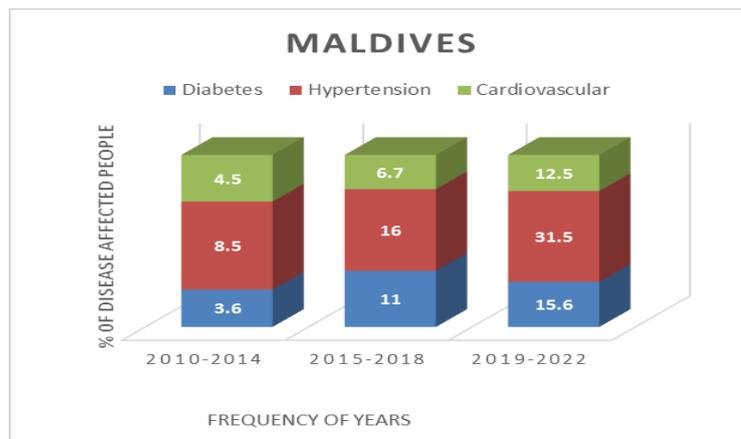


Figure 7: Disease prevalence rate in the Maldives

Figure 7 shows the lower prevalence of the disease in the Maldives due to their growing awareness. Between 2010 and 2014, the prevalence of cardiovascular disease, Hypertension, and diabetes was 4.5%, 8.5%, and 3.6%, respectively. In 2015 and 2018, the rates were 6.7%, 16%, and 11%, respectively. The data reveals significant peaks of 12.5%, 31.5%, and 15.6% in both 2019 and 2022.

Table 6: Lifestyle, dietary patterns and disease prevalence in Nepal

Types of parameters		Percentages	References
Lifestyle	Alcohol consumption	29.4, 23.9	(95,23)
	Tobacco use	21.4, 15.5	(30, 61)
	Physical activity	10, 17.5, 22	(84, 97, 23)
Dietary patterns	Fast food	5.9, 11, 15.5	(95, 31, 23)
	Fruits and vegetables	14.5, 22.2	(45, 97)
	Beverage	12.3, 15.7	(61, 97)
Disease	Diabetes	15.7, 11, 18.5	(31, 30, 23)
	Hypertension	11, 17, 13.5	(84, 61, 23)
	Cardiovascular	23.5	(23)
	Cancer	5.6	(61)

Table 6 highlights that from 2013 to 2022, alcohol consumption accounted for 29.4%. Tobacco consumption reached 15.5% in 2018, increasing to 21.4% in 2019. Physical activity saw a significant rise from 10% to 22%. Fast food consumption grew by 5.9% in 2013, fruit and vegetable intake increased by 11% in 2019, and beverage consumption rose by 12.3% in 2022. By 2022, diabetes prevalence surpassed 18.5%, hypertension was at 13.5%, and cardiovascular disease prevalence hit 23.5%. The cancer rate in 2018 stood at 5.6%.

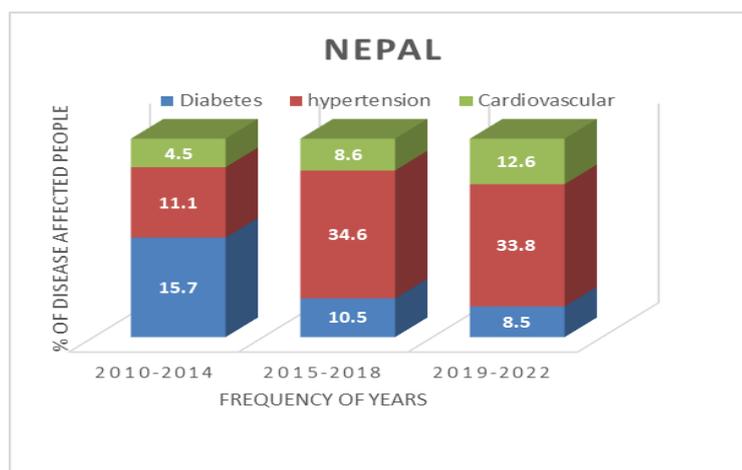


Figure 8: Disease prevalence rate in Nepal

Figure 8 shows the lower prevalence of the disease in Nepal because of its lifestyle and geographic location. From 2010 to 2014, cardiovascular disease, hypertension, and diabetes had rates of 4.5%, 11.1%, and 15.7%, respectively. 2015–2018, these rates rose to 8.6%, 34.6%, and 10.5%. The highest rates from 2019 to 2022 were 12.6% for cardiovascular disease, 33.8% for hypertension, and 8.5% for diabetes.

Table 7: Lifestyle, dietary patterns, and disease prevalence in Bhutan

Types of parameters		Percentages	References
Lifestyle	Alcohol consumption	21, 30	(34, 32)
	Tobacco use	0.2	(34)
	Physical activity	29.1, 26.2	(20, 33)
Dietary patterns	Fast food	32, 32.1	(32, 54)
	Fruits and vegetables	33, 26, 32.4	(91, 32, 58)
	Beverage	40, 40.2	(91, 2)
Disease	Diabetes	8.2, 11, 10.0	(20, 33, 22)
	Hypertension	17.5, 13.5	(20, 33)
	Cardiovascular	17.6	(2)
	Cancer	7.68	(2)

Table 7 outlines that Alcohol consumption increased from 21% in 2017 to 30% in 2020, while tobacco use remained low at 0.2%. Physical activity levels declined from 29.1% in 2011 to 26.2% in 2019. Additionally, fast food, fresh produce, and beverage consumption rose significantly, with increases of 32% from 2016 to 2021, 33% from 2014 to 2021, and 40% from 2014 to 2020. By 2022, diabetes rates neared 10%, hypertension decreased to 13.5% in 2019, and in 2020, cardiovascular disease and cancer rates stood at 17.6% and 7.68%, respectively, indicating ongoing public health challenges.

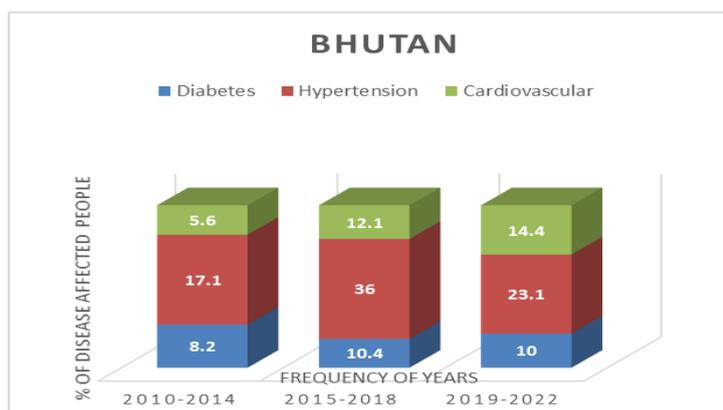


Figure 9: Disease prevalence rate in Bhutan

Figure 9 presents that the prevalence of disease in Bhutan is notably higher than in Nepal due to geographic location. From 2010 to 2014, cardiovascular disease, hypertension, and diabetes rates were 5.6%, 17.1%, and 8.2%, respectively. These increased to 12.1%, 36%, and 10.4% from 2015 to 2018, peaking at 14.4%, 23.1%, and 10% from 2019 to 2022.

DISCUSSION

Over the past twelve years, research has examined dietary and lifestyle patterns across developing South Asian countries, with a particular emphasis on alcohol consumption, tobacco use, physical inactivity, fast food, sugar-sweetened beverages, and limited consumption of fruits and vegetables. Most investigations have been conducted in Bangladesh, Pakistan, India, Sri Lanka, the Maldives, and Nepal. These countries have undergone rapid economic transformation, primarily driven by globalization and concurrent shifts in dietary patterns, with India now recognized as having the world's second-highest economic growth rate (Misra et al., 2011). Such economic progress, accompanied by increasing Western cultural influence, has substantially altered traditional dietary habits in the region.

Social factors play a critical role in shaping eating behaviors; evidence suggests that individuals are more likely to adopt unhealthy eating practices when their peers do so (Lurbe et al., 2016). Studies across Pakistan, India, Bangladesh, Sri Lanka, and Nepal consistently report high frequencies of fast-food consumption among high school and university students (WHO, 2018). For instance, a study in India found that approximately 70% of adolescents consumed fast food three or more times daily (Jayawardena et al., 2021), while in Bangladesh, 32.1% of secondary school students reported consuming fast food at least thrice weekly (Haque et al., 2010). Energy-dense foods such as burgers, pizzas, fried snacks, and sugar-sweetened beverages remain popular among children, adolescents, and young adults. However, fruit and vegetable intake across the region remains critically low, often limited to two or fewer servings per week, far below the levels recommended by the World Health Organization (WHO).

Physical inactivity is another pervasive issue, with sedentary lifestyles observed across all age groups. Pakistan reported the highest prevalence of sedentary behavior, while Bangladesh exhibited the lowest rates (Tariq et al., 2016; Amin et al., 2018). Globally, insufficient physical activity accounts for approximately 6% of all deaths (WHO, 2010). Within South Asia, significant disparities persist even among populations sharing similar socioeconomic backgrounds (Rahman et al., 2017). Earlier studies also identified South Asia, Eastern Europe, and Central Asia as regions with some of the highest cardiovascular disease (CVD) burdens globally (Benziger et al., 2016). As of 2022, Pakistan exhibited the highest CVD prevalence in South Asia, at 51.8% (WHO, 2022).

Worldwide, CVD remains the leading cause of mortality, with notable exceptions in sub-Saharan Africa, where infectious diseases dominate, and countries such as South Korea and Japan, where cancer ranks first (Yusuf et al., 2020). Furthermore, low and middle-income countries demonstrate lower rates of hypertension awareness, treatment, and control compared to high-income nations (WHO, 2019). In Sri Lanka, hypertension prevalence has reached an alarming 40.9% (Gopalan et al., 2017). Dietary patterns in lower-income settings also tend to favor energy-dense, nutrient-poor foods over more nutritious, lower-calorie alternatives (Goon et al., 2014).

Childhood overweight and obesity have shown alarming increases worldwide, rising from 4% in 1975 to over 18% in 2016 (WHO, 2018). In Bhutan, qualitative research attributed rising childhood obesity rates to sedentary behavior, socioeconomic shifts, and the greater availability of unhealthy foods within schools (Dorji et al., 2019). Research in South Asia shows that childhood obesity significantly increases the risk of type 2 diabetes, a condition that has become more common among children due to rising obesity rates. Obesity causes insulin resistance, disrupting blood sugar regulation and contributing to the development of type 2 diabetes (Kotecha et al., 2017). These trends closely align with the escalating prevalence of diabetes, hypertension, and cardiovascular diseases later in life. These patterns suggest that while NCD burdens are increasing region-wide, the rate and extent of this growth vary significantly depending on factors such as urbanisation, dietary transitions, health policy enforcement, and cultural norms. Countries like Pakistan and India face urgent challenges, while others may benefit from early prevention strategies to curb future escalation.

To address these emerging public health challenges, it has been proposed that NCD prevention strategies should focus on Policy-Level Interventions, Community and School-Based Interventions, Primary Health Care Integration, and Urban Planning and Built Environment for promoting sustainable, long-term health improvements and meaningful behavioral changes, such as increasing physical activity and reducing fast food, smoking and alcohol consumption. To effectively implement these interventions, it is important to consider several feasibility factors. First, there should be cultural acceptance to respect traditional dietary norms. Second, cost and resource allocation must be taken into account, especially in South Asian countries with limited health budgets. Lastly, regular monitoring and evaluation should be conducted to assess non-communicable disease (NCD) risk factors, which will help guide necessary policy adjustments.

CONCLUSIONS

This review consolidates and synthesizes data from seven South Asian countries, providing a comprehensive comparative perspective on lifestyle behaviors, dietary patterns, and the prevalence of non-communicable diseases (NCDs) within this culturally rich region. By incorporating studies published between 2010 and 2022, the findings reflect contemporary trends and effectively underscore the impacts of rapid urbanization, globalization, and health dynamics in the wake of the COVID-19 pandemic. The pandemic notably influenced dietary habits and lifestyles in South Asia from 2020 to 2022, largely due to lockdowns and remote work, which resulted in decreased physical activity and increased sedentary behavior and screen time. This study utilizes peer-reviewed articles, WHO country reports, and STEPS surveys, thereby strengthening data triangulation and enhancing the validity of observations concerning health and nutrition trends.

Although this narrative review is not systematic or meta-analytic, it still provides valuable insights, even with the inherent risks of selection bias and variability in the quality assessment across studies. By utilizing aggregated national and study-level data, the review highlights broader patterns without examining individual-level risk factors, causal relationships, or subgroup analyses based on characteristics such as gender, income, or urban versus rural settings. The diversity in methodologies, age groups, and outcome measures among the studies included may present challenges for direct comparisons across countries or pooled statistical analysis. The extensive data presented here offers a strong foundation for understanding the complex health and nutrition trends in South Asia, except for some countries. These essential elements are crucial in ensuring the effectiveness, scalability, and long-term sustainability of public health initiatives aimed at addressing the region's nutritional transition.

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CONFLICT OF INTEREST STATEMENT

The authors declare that there is no conflict of interest regarding the publication of this paper.

AUTHOR'S CONTRIBUTION DECLARATION

Jannatul Ferdousi designed and organized the study, collecting and analyzing the data. Ielias Uddin and Azizul Haque drafted the manuscript. Tanmoy Das and Sazzadur Rahman reviewed the document.

DECLARATION OF COMPETING INTEREST

The authors declare that no conflict of interest exists.

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