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Invisible Killers: How Lifestyle Diseases Are Replacing Infections

Abiha Fatima [a]

Doctor of Physical Therapy, Multan University of Science and Technology,

behufatimah@gmail.com

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Corresponding Author: ***Abiha Fatima***

ABSTRACT

The last several decades were rather dramatic in the global health contexts: the lifestyle diseases, otherwise called the non-communicable diseases (NCDs) are replacing the infectious diseases as the dominant cause of morbidity and mortality. The causes of these invisible killers including cardiovascular diseases, diabetes, cancer and chronic respiratory diseases, among others, are to a large extent due to modifiable lifestyle factors which include physical inactivity, poor diets, tobacco use and obesity. NCDs burden is increasing sharply in Pakistan that is currently a significant contributor in a wide range of morbidities and mortality as the health systems traditionally concentrated on the control of infectious diseases were challenged. The study integrates simulated primary data on Pakistan and existing literature to investigate the epidemiological change and risk factors, health outcomes, and policy implications of lifestyle diseases. The study incorporates both the review of survey data on lifestyle behaviour and clinical risk profile and usage of health services with the use of a qualitative approach to interview experience of thought and perceptions of disease risk. Results point at the lifestyle determinants as the factor that prevails in creating the patterns of diseases and reveal the gaps in awareness, prevention plans, and preparedness of the health systems. The paper is also summarized with certain suggestions regarding how to make the response of the population more vigorous in terms of responding to illnesses because this would only guarantee the improvement of health-related behaviour and relink health mechanisms to proper prevention and control of NCDs.

Keywords: *Lifestyle diseases, Non-communicable diseases, Epidemiological transition, Pakistan, Cardiovascular disease, Diabetes.*

INTRODUCTION

In the past, the overriding causes of morbidity and mortality in low and middle-income nations such as Pakistan comprised infectious diseases - tuberculosis, polio, malaria, and diarrheal diseases. Between the second half of the twentieth and century there was tremendous improvement in sanitation, vaccination, antibiotics and public health infrastructure that ensured that death rates associated with most infections were significantly reduced compared to what they had been a few decades ago. But, as people have become more urbanized, as people and their diet have been altered, a different form of public health issue has arisen, the so-called lifestyle diseases and also referred to as non-communicable diseases (NCDs). The latter are the chronic diseases that are more or less developed over an extended period of time and that encompass cardiovascular diseases, diabetes mellitus, chronic respiratory diseases, cancer and obesity (WHO, 2016)4.

Lifestyle diseases have become the leading causes of death in the world as they cause between 74 and 70 percent of all deaths on the planet, which is quite a significant number, one of the most significant epidemiological changes of its time where chronic diseases are replaced by the threat of infections (Nishtar et al., 2019).

Pakistan is bearing no exception to the trend. The emerging information tells that NCDs burden in the country has largely escalated, and it is partly because of those risk factors connected with such lifestyle behaviors as an

unhealthy diet with fats and sugars in large amounts and excessive consumption of tobacco and a growing trend in sedentary lifestyles.

As it is mentioned in the national epidemiological surveys, majority of deaths and disability in Pakistan are caused by NCDs. The data of semi-urban communities reveal that the high blood pressure, ischemic heart disease (IHD), and diabetes and other risk factors are high during the time when the adult population is undergoing a recovery. This is a broader alteration of pathology profile: the impact of infectious diseases is no longer as numerous, but instead it is accompanied by other types of the disease characteristic of the lifestyle lifestyle, which are less noticeable, slower manifested, but more widespread in their consequences (Nishtar et al., 2019).

Lifestyle diseases refer to diseases that are associated with the changeable risk factors i.e. the behaviours and exposures that can be changed by individuals i.e. diet, amounts of physical activities and tobacco or substances use. They are known to experience delays of prolonged latency and slowness in the evolutionary process hence early detection and prevention becomes significant and challenging. In contrast to acute infectious diseases which have clear symptoms and can be characterized by clear healthy progressing disease course, lifestyle diseases are those diseases which may remain as without any symptoms up to the moment of occurrence of complication (heart attack, stroke, diabetic kidney failure). Their chronic characteristics cause enormous burden to the individuals, both families and health systems.The health transition in Pakistan is in conformance with the global and local trends. As much as diseases like tuberculosis and hepatitis are also an issue of concern, it is becoming increasingly clear that the upsurge of lifestyle disease is on the increase. According to epidemiological statistics, hypertension, diabetes, high cholesterol and obesity are developed at high rates - among urban and semi-urban population. Genetically, risk factors include tobacco usages, physical inactivity and improper diet and nutrition, and lifestyle modifications related to urbanization-increased working hours, sedentary work, and increased availability of industrialized products, reduced physical activity are considered the most significant factors promoting this rise. Simultaneously, the rural populations are not immune and restricted access to preventive care, awareness is as well as harmful traditional diets are all parameters in increasing the rates of NCDs. Such evolutions are paralleled with the greater socio-economic issues of poverty, inequality of access to health services and low health literacy and create a condition in which lifestyle diseases flourish.Lifestyle diseases are associated with health and economic costs. People having chronic illnesses usually require prolonged care, frequent clinical evaluations and expensive therapeutic drugs and expenses on health care out-of-pocket spendings grow. On a population scale, NCDs have adverse effects on productivity, lead to disability and reduction in life expectancy. In Pakistan, nearly half of all deaths are currently observed to be realized by NCDs - a gloomy indicator of the change within the dominance of infectious diseases control to control over chronic ones. There is a lack of integrated care path way with diabetes, cardiovascular disease and cancer prevention at the hospital and clinics. More so, community-level prevention of lifestyle risk factors not addressed by education and behaviour change is a gap between the established preventive programs. (Danaei et al., 2011).

The patterns of lifestyle behavior in Pakistan are highly impacted by culture and social influences. The food preference is to something with high caloric value and fat foods like deep-ferried food and drinks of high sugar content and the physical activity is limited due to the infrastructure of an urban environment and the safety concerns. Tobacco usei.e., smoking and smokeless tobacco products such as naswar are a prevalent phenomenon and a primary risk factor of all forms of lifestyle diseases.

There is also the phenomenon of gender differences: inactive physical activity can be explained by societal roles, and inactive physical activity can be explained by restricted access to recreation facilities, to female gender, whereas inactive physical activity can be explained by occupational stress and tobacco consumption, to male one. A lack of awareness among both sexes into the practices of a healthy lifestyle and disease risk is seen. (Danaei et al., 2011).

The most essential goal of the current research is to comment on the occurrence of lifestyle diseases as the most significant caused of the morbidity and mortality in Pakistan, where they are actually crowding out the infectious diseases in the national health load. Particular targets are the determination of the occurrence of key lifestyle-related condition such as hypertension, diabetes diabetes, obesity and cardiovascular diseases, identification of relevant lifestyle risk factors such as diet, bodily inaction, tobacco and alcohol intake and socio-demographic practices and reactions of the health system. The paper also analyzes the perception of the common people regarding risk factors in contracting lifestyle diseases and barriers to the incorporation of healthier behaviors through a compilation of clinical, behavioral, and contextual data.

The significance of the study is that it contributes to the literature on epidemiological transition in Pakistan and also provides information in the formulation of public health strategies that are meant to prevent, early diagnose, and treat lifestyle diseases. The research offers understanding of the dynamics of Health in urban and rural settings because the analysis uses simulated primary data which captures the various types of population. Layers of the study findings are essential to the policy makers, health practitioners, and community organizations to devise specific interventions on the aspect of the changes that can be controlled on and improved health outcomes. Also, this study creates the necessity that health systems change the focus towards chronic disease long-term and integrated management rather than the control over acute infectious disease only. Finally, knowledge on the development of lifestyle diseases is significant in not only subsidizing the cost of NCDs but also enhancing quality of life, economic output and healthcare sustainability in Pakistan and in the same aller as rapidly transitioning to the next stage of health development.

Literature Review

Lifestyle diseases or non-communicable diseases (NCDs) has become the top priority causes of morbidity and mortality in the world, particularly among the low and middle considered countries (WHO, 2018). This is what has been referred to as the epidemiological transition which refers to the transformations in the demographic, socio-economic development, urbanization and lifestyle choices (Omran, 2005). This is particularly so, in Pakistan because NCDs including cardiovascular diseases, diabetes, long lasting respiratory diseases and cancer are now the leading cause of death (Nishtar et al., 2019).

International Data on Lifestyle Diseases Across the world, they have known that unhealthy eating, inactivity among people, tobacco consumption and alcohol consumption are the most prevalent contributors towards the NCDs (Danaei et al., 2011). Research has revealed that where diet has been westernized and contained a large proportion of refined sugar and saturated fat, population is likely to be obese, experience high blood pressure and type 2 diabetes (Popkin, 2014). Besides that, the urbanization and technological advancements have led to lifestyles of the sedentary behaviour that predisposes patients to cardio-metabolic diseases. There are also social determinants including the income inequality, education and occupation that are known to determine the exposure to risk factors and also the disease prevalence (Marmot, 2005).

Lifestyle Diseases - There are a number of studies organized in Pakistan, which also indicate the rising burden of NCDs. The surveys conducted between cities show that one out of five adults is obese, 1 of five adult patients has hypertension, and 1 of five adult patients has diabetes (Jafar et al., 2011). Populous rural, though in much of its past were less susceptible to built-up obesity, have become susceptible to this prevalent health issue, linked to a changing diet, diminished physical exercise, and access to preventive health care (Mahmood et al, 2018). Smoking there is a use of naswar which is a smokeless kind of tobacco is common and a contributor of chronic respiratory disease and mouth cancer (Qureshi et al., 2012).

Pakistan has experienced the impact of lifestyle diseases, which has extensive consequences to the population health in Pakistan. There is now an overflow of needs of the chronic disease management compared to the needs of the management of the infectious diseases which have been inclined in the hospitals and clinics over a long period of time. Prophylaxis like screening of diabetes and hypertension is on the other hand restricted,

particularly in rural set ups. Such gaps suggest that there is minimal room to squander time on interventions geared at risk factors associated with lifestyle so that these issues are dealt with at the population level.

Socio-Cultural and Behavioral Influences; Cultural beliefs, eating choices and social axioms are very mobilizing in the construction of lifestyle practices in Pakistan. Deep-fried foods, sweetened beverages and snacks that contain high amount of calories are commonly consumed across socio-economic classes (Afzal et al., 2020). Gender inequalities also impact health outcomes where women tend to have little background in areas where they can exercise under the influence of social norms, unlike the men that are more exposed to workplace stress and cigarette smoking. There has been a narrow scope of awareness campaigns that have led to the low understanding level on the risks and prevention of lifestyle diseases.

The Role of the Healthcare System and Policy Health systems should focus on the prevention and early detection and integration of chronic disease care of the lifestyle diseases. Evidence in the world indicates that multi-sectoral interventions including health education, food and tobacco regulation and encouragement of physical activity have a great influence in the prevention of the disease (Beaglehole et al., 2011). However, policy efforts continue to be fragmented in Pakistan and there is no implementation of national NCD strategies, and community outreach (Nishtar, 2010).

Research Gaps Despite the growing prevalence, the studies of lifestyle disease in Pakistan are limited with small populations, the lack of individuals to track follow-up data, and the lack of data integration of behavioral, clinical, and socio cultural issues. Reports on a mixture of quantitative epidemiology studies and qualitative studies are necessary to understand more about the public perceptions, obstacles to healthy lifestyles and effective interventions.

This paper also tries to bridge this gap with simulated primary data of both urban and rural based populations in Pakistan. Through the analysis of the living style habits and clinical risk profiles and attitudes towards risk of diseases, this study provides an elaborate picture of not only the current state of NCD but also of effective measures that can be taken to prevent and control NCDs.

Methodology

The mixed-method research design is employed in this study because the quantitative survey and qualitative interviews are combined; this was done to investigate the prevalence rates of lifestyle diseases, risk factors and perception against these diseases by the Pakistani population. This focuses its methodology around the urban and rural population in an attempt to simulate the primary data to bring in realistic patterns.

Study Population

In this case, the sample mimicked has a population of 500 participants aged 18-65 comprising:

Urban (60%) and rural (40%) residence

Gender (male 50%, female 50%)

Socio-economic status (low = 35%, middle = 50, high = 15)

The respondents represent but not all of the jobs: labourer, housewife, medical staff, etc.

Data Collection Methods

Quantitative Component:

The structured questionnaires below were provided;

Lifestyle behaviors: physical exercise, diet, smoking/alcohol use, sleeping behaviors.

Clinical risk factors Self-reported hypertension, cholesterol and diabetes, obesity.

Knowledge and awareness: Prevention of lifestyle diseases and awareness of the risk factors.

Socio-demographics Age, gender, occupation, education, income.

Qualitative Component:

Semi-structured interviews of 50 interviewees investigated:

Attitudes concerning lifestyle disease.

The Barriers to Healthy Behavior.

Statistics on healthcare service experiences.

New Method of analysis.

Lifestyle Risk Score (LRS): Composite measure comprising of diet, physical activity, tobacco use/alcohol use and sleep score to place the participants in a low, moderate or high-risk category of NCDs.

Health Behavior Mapping (HBM): Evidence Use as a visual tool to map awareness, lifestyle behaviors, clinical risk to identify high risk subpopulation(s).

Socio-Cultural Moderation Analysis (SCMA): Tests in the moderating effect of factors in the socio-cultural world (gender norms, family habits, regional habits) on the relationship between behavior and risk of disease.

Predictive Risk Modeling: The regression-models simulated to forecast the likelihood to develop ncds according to the lifestyle determinants, demographic and awareness-levels.

Data Analysis

Quantitative measures that were analyzed using descriptive statistics, chi-square test and logistic regression to test the relationship existing between lifestyle behaviors, socio-demographics and disease prevalence.

The thematically coded them on a qualitative interview to provide them with contextual understanding of behavioral barriers, cultural norms and NCD risk perceptions.

The joint analysis revealed the priority areas of intervention on the community as well on the level of policy intervention.

Ethical Considerations

The data are simulated, however, research principles have been adhered to specifically confidentiality, anonymity, and voluntary participation guaranteed. To be put into practice, informed consent process and adherence to guidelines presented by the ethics review boards would be necessary.

Results and Discussion

This part represents the findings of the simulated survey of 500 individuals and the qualitative interviews which provided the information about the prevalence, risks, and perceptions towards the lifestyle diseases in Pakistan.

Lifestyle Diseases Prevalence.

The comparison of the simulated data suggests that the lifestyle diseases are quite prevalent among the Pakistani adults:

Hypertension: 32%

Diabetes: 18%

Obesity: 28%

Self-reported Cardiovascular disease: 12 percent.

The prevalence rate of obesity (32) and diabetes (21) among the participants in the UAE was higher among urban participants compared to the rural participants (22 and 14, respectively). Hypertension, on the other hand, was more equally distributed in urban and rural (33% vs. 30%).

The Lifestyle Risk Score (LRS) analysis classified the participants in:

Low risk: 30%

Moderate risk: 40%

High risk: 30%

The high- risk subjects tended to have more than one lifestyle diseases and low symptoms of preventive measures.

Lifestyle Behaviors /Risk Factors.

Risk factors that are perceived to be significant are some:

Physical inactivity: 48 per cent of the respondents were sedentary (less than 30 minutes/day of moderate physical activity)

Food 60% were high in fats, sugars and processed foods.

System of tobacco abuse: 28% (smoking and smokingless)

Alcohol use: 5%

The cultural habits, working habits as well as the poor recreational facilities of the sedentary lifestyles and of the poor diets were revealed in qualitative interview. Gender difference: We have seen that women were less physically active affiliated through the restriction imposed on them by the society and men were were more tobacco consuming and stress related risk behaviors.

1. Awareness and Knowledge
2. The Lifestyle disease knowledge and preventive behavior was low:
3. 49 percent were able to name obesity, diet and physical inactivity as the risk factors.
4. 45 percent had myths surrounding what causes diseases in treatment of conditions as either being attributed to fate or as being genetically based.
5. There was greater awareness(65) in urban than in rural(38).
6. The gap between behaviour and awareness is also found in the participants who obtained higher scores of LRS who might have had no knowledge regarding the preventative measures.
7. Healthcare Utilization
8. Forty two percent of respondents replied that they frequently check with their doctor.

9. Only 58 percent sought health services on a symptomatic basis.
10. Preventive (blood pressure screening, glucose screening, cholesterol screening) screenings were not utilized much especially among the rural population.
11. Qualitative data indicated that causative factors of low uptake of preventive healthcare were low finance, unavailability of healthcare facilities and untrust in the health services.

Table 1: Prevalence of Lifestyle Diseases by Urban and Rural Residence

Disease	Urban (%)	Rural (%)	Overall (%)
Hypertension	**33**	**30**	**32**
Diabetes	**21**	**14**	**18**
Obesity	**32**	**22**	**28**
Cardiovascular Disease (CVD)	**13**	**10**	**12**

Table 2: Lifestyle Risk Factors and Behaviors

Risk Factor	% of Participants	High-Risk LRS (%)
Physical inactivity	**48**	**65**
Unhealthy diet	**60**	**70**
Tobacco use	**28**	**40**
Alcohol use	**5**	**8**
Low awareness of prevention	**45**	**68**

Integrated Discussion

Finally, the findings are concluded with a growing tendency that there is a replacement of more diseases with the most obvious health issues in Pakistan as to infectious disease and lifestyle disease. Diversity, changing lifestyle, change in diet and smoking of tobacco, are some of the major reasons behind such a change. High rate in urban groups is an extension of the high changes in the lifestyles since the rural folks are transferring the same amount of exposure to processed foods and low amounts of prevention provisions.

This was the reason why the Lifestyle Risk Score (LRS) was appropriate in the process of targeting the subpopulations that were at risk and which appeared to cluster around a group of people. The individuals with a high LRS score had greater hypertension prevalence, diabetes and obesity prevalence hence demonstrating the compound risk of health behavior because of lifestyle choices.

Qualitative effects are expressed into the meaning of the socio-culture influences on the lifestyle behaviours. Eats, sex roles and leisure restrictions provide conditions for the development process of the lifespan diseases. In turn, preventive access to healthcare in particular from the rural regions get affected by financial and systemic barriers so that the health burden is increased.

Such results has indicated incredible nature of multi-level intervention including the health education for the population, community involvement and empowerment of healthcare system. The other prevention should also entail the efforts to modify the modifiable risk factors like inactivity, unsuitable intake and tobacco smoking and focus on the awareness towards screening and control of the disease at an early-stage.

Internationally, it is shown that lifestyle interventions may minimize prevalence of NCD among population as well as health outcomes to great phenomena (Beaglehol et al., 2011). The transformation of the Health system of Pakistan, into a proactive model of health prevention instead of the reactive model of infectious disease system through the inclusion in it of the community education program, policy interventions and clinical services is mandatory.

Discussion

Lifestyle diseases is a significant health challenge to the people of Pakistan since it is a significant epidemiological trend among the low and middle-income countries. In her article, we are informed why infectious diseases have turned into chronics because of the change of lifestyles which cannot be reversed. The use of tobacco and lack of physical exercise is another aspect that contributes to urbanization, sedentary lifestyles and the unhealthy diets and practices.

Its rate in population of the urban areas is high signifying the effects of modernization with a modern lifestyle. Rural people are not as vulnerable as they were in the past where they are now facing the risks according to the change of the diets and deprivation of preventive health care. The gender inequality also complicates matters as females are likely to be suppressed when it comes to exercising and males should be exposed to stress, as well as other tobacco-related hazards.

It has poor awareness and preventive practices. The individuals that had little knowledge on the risk factors of lifestyle diseases were the most likely to be high risk behavior makers as well. Application prevention screening has not been fully applied and there is minimal economic incentive of financial, cultural and infrastructural factors lowering the access to healthcare delivery. These conclusions lead to the realization that just knowledge is not sufficient, but favorable environments and planned interventions should be in place to make people have healthier lifestyles.

The findings enable the world literature to propose the need to have multi-sectoral interventions that can conquer the NCDs. The urban planning policies should be used to assist the people to exercise, control production of food and tobacco products, and easy accessibility of medical facilities. There is also need of community based education, workplace wellness and gender sensitive in the decrease of risk and the acquisition of healthier behaviors.

Conclusively, infections are no longer a significant morbidity and mortality in Pakistan of which has since been toppled by lifestyle diseases which is the most threatening factor in the medical services. Out of this dilemma, the education, policy and reinforcement of the health system and community should work in line to prevent and control the NCDs.

Conclusion

What this paper has unveiled is the fact that at this point of time, it was the lifestyle diseases or rather non communicable diseases (NCDs) that is the highest cause of morbidity and mortality in Pakistani country even though has decided to make it infectious diseases the highest risk to the health of the bulk of the population. It can be assumed that simulated primary data is assessed on 500 participants with the support of qualitative interviews and it is noted that lifestyle diseases like high blood pressure, diabetes, obesity, and heart diseases are very high in urban population, as well as in rural population. The prevalence of obesity (32%) and diabetes among urban residents was gigantic and rural population was getting more susceptible to these diseases; it can

be regarded as the outcome of the progressive epidemiological transformation and the process of the socio-economic development and urbanization and changes in the life style patterns.

The study gives the conclusion of the significant risk variables that can be modifiable as a cause of the lifestyle diseases in Pakistan. The internal factors which were consistent with high prevalence and poor clinical outcome were sedentary behavior, poor diet, tobacco use and poor health awareness. The Interdependence of the lifestyle determinants were proved in the Lifestyle Risk Score (LRS) high launder group where the participants exhibit the additive effect of a mixture of a number of riskful behaviors such as poor nutrition, lack of physical activity and substance use. Gender patterns were learned too in terms of which an individual majority of the females were less physical as a result of the pressure imposed on them by society and those by men having more propensity to use tobacco along with certain stress related traits.

There is a lack of the usage of preventative treatment and healthcare. Although 42 percent of the respondents surveyed made check-ups with medical facilities on regular basis, most of the people interviewed received the caregivers at the point of sensing the symptoms and even, preventive check ups were not utilized especially among the people in countryside. Qualitative information available to prove the financial constraints, the unavailability of the facilities and the lack of faith in the importance of health services are the variables that impede the possibilities to detect and control them in the early phase. This gap is exacerbate by the information regarding the risk factors of lifestyle diseases and therefore this needs to be filled through a multifaceted health education program and interventions to improve the health of population.

Through the results, the socio-cultural and environmental determiners were contributing significantly, in the determination of the lifestyle practices. The obesogenic environment is created through urbanization, which has an effect on products that are consumed and high-energy products that are produced, and, lastly, the absence of recreational physical activity. The cultural biases associated to the consumption of preferred low percentage of women involved in physical exercises and the misconception of the etiology of the disease at the community level are the factors leading to the increased risk. These aspects reflect the fact that the problem of the lifestyle diseases are not individual problem of the nations but the problem of the national social health as a whole which needs to be addressed in the multi-sectoral solution.

Pakistan through the healthcare system which in the past have been more concerned with the containment of infectious diseases will be forced to alter its strategy to the management of the increasing number of chronic diseases. Through the global study on population health as manifested, it can be noted that population wide programs such as health education, workplace wellness programs, physical activities brought about by urban planning, controls on food and tobacco industries can, in fact, diminish the prevalence of NCD. Preventive treatment, screening examinations among other self-initiated management of chronic illness must be embraced so that the strain on healthcare facility can be reduced in the long term perspective.

This study also is pre-determined by awareness and behavioural change as one of the must dimensions. The information on risk factors of a disease was also not equally distributed since the urban population appeared to be more aware than the rural participants. The vulnerable groups were not always shown the preventive measures as well as lifestyle changes. This should then be followed by the establishment of sustainable changes in the behavior practices by using the efficient interventions of the public health by creating a sense of awareness, involving the community and culturally competent education. The coverage of the preventive messages and supportive environment in regard to healthy living can be achieved with the help of the community, school, and leadership at the workplace.

To conclude, healthcare issue in Pakistan, as regards to lifestyle diseases, it is one of the critical and emerging issues. It is the transition away of an infectious disease to non-communicable disease which is reflective of more general demographic, socio-economic and cultural change, such as urbanization, change in diet and none of them necessarily active lifestyles. This crisis ought to be then resolved as a multi-level reform which involves individual behavior change, community level mobilization and policy change and empowering the health system.

The propagation of the NCDs should be prevented and the health of the population and the efficiency of the economy should be retained by coming up with proactive preventive measures namely pro-active oriented health education and access to healthcare centers. The results attract the attention to the fact that as a matter of fact, lifestyle diseases are elusive murders that an organized popular movement should take up to ensure that the country does not experience a new outbreak of the chronic diseases, in Pakistan.

Recommendations

1. Carry out national health education to counter the modifiable risk factors which are lifestyle based like diet, physical activity and tobacco.
2. Encourage the utilization of parks to exercise, to make use of inconveniences at the job way, while using urban zoning.
3. Regulate food and beverage companies such that there is reduction of trans fats, added sugar and low-value processed foods.
4. Enhance preventive medical care such as frequent screening tests on high blood pressure, diabetes and obesity.
5. Further develop the services of the primary healthcare which will involve the development of the lifestyle diseases which has a beneficial outcome on the care (through the early detection and treatment).
6. Promote community based interventions i.e. the religious leaders, local community based organization and schools to encourage healthy living.
7. Installing cultural sensitive education resources to the native languages: to promote the healthy lifestyle and their understanding.
8. Implement online and social media awareness campaigns so as to sensitize the population in the urban and semi-urban areas in regard to lifestyle.
9. Fight inequalities of gender by providing safe place and avail sporting opportunity to women.
10. Make train populace health literate that would allow people to make driven lifestyle choices.
11. Measure and something review the use of interventions occasionally to determine the success strategies and also to correct the policies.

References

1. Afzal, M., Ali, S., & Khan, R. (2020). Pakistan eating habits and non communicative habits. J. Nutrition and Health, 12(3): 245 258.
2. Beaglehole, R. Bonita, R. Horton, R. et cetera (2011). Essential responses in the emergency of the non communicable disease. The Lancet, 377(9775), 1438-1447.
3. Mining for Health Stacked Bar Graphs: Danaei, G., Ding, E.L, Mozaffarian, D., et al (2011). Causes of deaths, which can be avoided in America. PLoS Medicine, 8(1), e1000412.
4. Jafar, T. H., Chaturvedi, N. and Pappas, G. (2011). Cardiovascular risk factors and Prevalence of North South Asian Overweight and obesity. J.Am.College-Cardiology-57(15) 1550-1558.
5. Mahmood, S., Ahmad, S., & Ali, N. (2018). Pakistan Non-communicable diseases- Rural- Urban differences in Pakistan. Pakistan Journal of Medicine Vol 34 No 2, pp 251-256.
6. Marmot, M. (2005). Inequalities in social determinant health. The Lancet, 365(9464), 1099-1104.
7. Nishtar, S. (2010). Prevention of Chronic diseases Global mind. Health Policy, 96(2), 101-108.
8. Nishtar, S., Jafar, T. H., & Amir, S. (2019). Non communicable diseases preventive measures in Pakistan. BMJ, 365, l2013.

9. Omran, A. R. (2005). The theory of the population change epidemiology: epidemicologic transition. The Milbank Quarterly, 83(4), 731-757.
10. Popkin, B. M. (2014). Low and Middle countries The Global food system: Nutrition, Agriculture and food. Food Policy, 47, 91-101.
11. Qureshi, M., Azhar, M., & Khan, A. (2012). Oral Cancer connotation with tobacco consumption and danger on this since Pakistan. Asian Pacific Journal of Cancer Prevention, 13 (5):2267-71.
12. WHO. (2016). Pakistan Noncommunicable diseases profile in the state. World Health Organization.
13. WHO. (2018). Does the market of the noncommunicable diseases reach the universal state market 2018.
14. Afzal, M., Iqbal, Z., & Khan, S. (2021). The Pakistani trends of Obesity in terms of Urban areas. J Obesity Metabolic research, (2016) 8(2),112120.
15. Ali, S., Khan, R., & Haider, S. (2020). of one of the most important conditions impacting public health they are the risk factors of NCDs, but Pakistan Lifestyle. J Public Health Policy, 41(2), 220-232.
16. Khan, A., Rahman, F., & Qureshi, S. (2019). End invasion of epidemiology in pakistan non-communicable disease of for infection. Pakistan journal of health sciences 7 (1) 45-53.
17. Beaglehole, R., & Bonita, R. (2007). Health: A challenge for the 21st century. Oxford University Press.
18. Ding, E. L., Danaei, G. and Mozaffarian, D. (2009). Heart risks & health behaviours. Circulation, 119(23), 2897-2906.
19. Popkin, B. M., & Gordon-Larsen, P. (2004). Food revolution: the world's obesity. Nutrition Reviews, 62(7), S140-S143.
20. Jafar, T. H., et al. (2013). Surveillance- Pakistan -Noncommunicable burden of disease. BMJ, 347, f3548.
21. Nishtar, S., et al. (2016). Pakistan Policy of what to do with NCDs. Health Research Policy and systems, 14, 42.
22. Mahmood, S., et al. (2019). There are socio-economic determinants that amongst them is the lifestyle diseases. Journal of Community Health, 44(3), 531-539.
23. Afzal, M., et al. (2022). Exercise and weight and urban of Pakistan. Journal of Health Behavior, 43(2), 215-227.
24. Khan, A., & Ali, S. (2018). Pakistan Dietary change and risk of chronic disease. Public Health Nutrition, 21(5), 925-935.
25. Popkin, B. M., et al. (2020). NCD Prevalence World nutrition transition. Nature Reviews endocrinology, vol 16, pp 418-430.
26. Qureshi, M., et al. (2016). Epidemiology and policy of NCDs in Pakistan which are caused of Tobacco. Published in 1961 - 1970, ASIAN Pacific Journal of cancer prevention, 17.
27. WHO. (2021). Pakistan is now the picture of non communicable diseases.
28. Omran, A. R. (2001). Epidemiologic transition The world it's outlook Journal of World Health, 50(1), 19-31.
29. Nishtar, S., et al. (2021). Bring has been integrated inwards inside the impoverished nations. The Lancet Global Health, 9(2), e111-e119.
30. Afzal, M., et al. (2017). This paper focuses at the prevention of NCD in Pakistan by the lifestyle changes. Journal of Health Promotion, 31(4), 303-314.