

Micro-Policy Intervention

CONTEMPORARY POLICY DISCUSSION IN CAMBODIA



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Chapter 5 | Physical activity friendly offices contributing to a decreased risk of noncommunicable diseases

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Executive Summary

In recent years, the percentage of non-communicable diseases (NCDs) has risen dramatically, seriously affecting human health. According to the World Health Organization, NCDs kill 41 million people each year, equivalent to 71% of all deaths globally (World Health Organization, 2018a). The root causes of NCDs are tobacco use, alcohol consumption, poor diet and physical inactivity (World Health Organization, 2018b). Most people are unaware of the importance of physical activity and its important role in human well-being. Your body structure is made for movement.

Imagine being an office worker, sitting in an uncomfortable room for around 6 to 8 hours straight per day—what could happen to your body? This paper suggests a solution to address this issue.

Introduction

Cambodia is a developing country which faces many challenges and issues, especially the lack of healthcare services and an established education system. However, it is also a rapidly growing economy, with an associated rise in work opportunities. From 2016 to 2017, alone, the number of employed persons in Cambodia increased from 8,608,000 to 10,416,000 (Trading Economics, 2021). At the same time, non-communicable diseases (NCDs) account for 64% of Cambodia's deaths, with risk factors including tobacco and alcohol consumption, air pollution, poor diet, and physical inactivity (World Health Organization, 2018b). The focus of this paper is the NCD risk factor physical inactivity, particularly that amongst office workers.

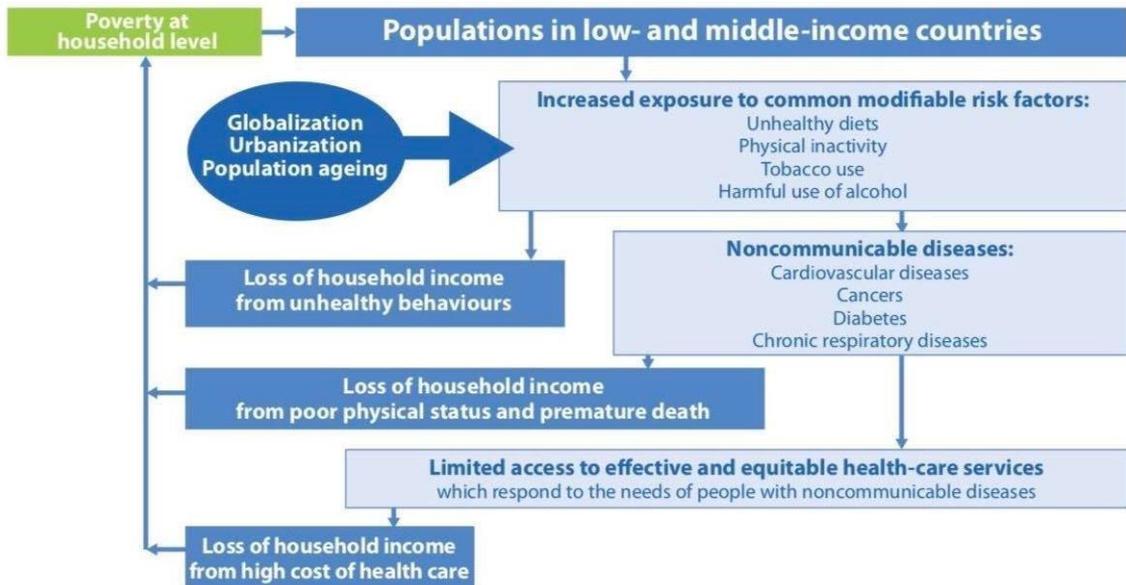
Background

Low- and lower-middle-income nations are expected to see dramatic increases in the burden of premature death and disability from noncommunicable diseases by 2040 (Bollyky et al., 2017). In most geographic regions, these increases will result from large demographic changes such as population growth and ageing that will not be sufficiently offset by the comparatively slower improvement in treating the rates of morbidity and mortality of noncommunicable diseases (World Health Organization, 2016). In lower-middle-income nations, most of the increase in noncommunicable diseases will be experienced by populations aged thirty-five and older (World Health Organization, 2016). In low-income nations, the surge in disability-adjusted life-years lost to noncommunicable diseases will be experienced across all age groups, but particularly among working-age adults and teenagers (Bollyky et al., 2017). For Cambodia, a focus on prevention is required to manage future risks.

The highest burden of non-communicable diseases relates to four risk factors: (1) harmful use of tobacco, (2) alcohol consumption, (3) unhealthy diet, and (4) physical inactivity (World Health Organization, 2018b). Action to prevent these four risk factors partially lies in non-health sectors, which makes the control of these diseases one of the most powerful examples of the need for multisectoral collaboration, requiring a whole of government and society approach (World Health Organization, 2021b).

Preventing NCDs is important for eliminating poverty because these diseases have a negative impact on productivity, family income, and result in a substantial proportion of household income being spent on health care in low-income countries (Engelgau, 2012). NCDs have a negative impact on national economies and, by association, also on poverty levels (Sturm, 2005). The costs for NCD health care, medicines, the health costs from diseases associated with tobacco and alcohol consumption displace household resources that otherwise might be available for education (World Health Organization, 2011). This problem is particularly acute in very poor families, which have the most to gain from education of their children.

Figure 1. Link between poverty and NDC's (World Health Organization, 2011).



The problem of sedentary behavior

Sedentary behavior causes 3 million deaths each year worldwide (Patterson et al., 2018). Adults who engage in sedentary activity for over 8hrs a day have a significantly increased risk for developing noncommunicable diseases (Patterson et al., 2018). Moreover, people with uninterrupted sedentary bouts of 30 minutes or more have the highest risk for death if total sedentary time exceeds 12.5 hours per day (Diaz et al., 2017).

Office workers are vulnerable to NCDs as a result of their long periods of sitting and reduced rates of physical activity. After adjusting for age and body mass index, the risk of NCDs and cardiometabolic risk factors for office workers was 40% greater compared with those engaged in more active field work (Jalayondeja et al., 2017). In a survey of 2,000 office workers in Britain, 45% of women and 37% of men reported spending less than 30 minutes on their feet at work daily, and more than 50% regularly ate their lunch at their desk (Gallagher, 2015). 78% of the office workers surveyed felt they spent too much time sitting down, and nearly two-thirds worried that sitting at work was negatively impacting their physical health (Gallagher, 2015). Gavin Bradley, from Get

Britain Standing, told BBC News “we're all victims of our environment, we've taken a lot of activity out of the workplace and we're sitting longer and longer...we need new and innovative ways of addressing the issue” (Gallagher, 2015).

Conventional office designs are often unsuitable for encouraging regular physical activity and good posture. However, office design which promotes physical activity, accessible sport facilities, and available time to exercise are three possible ways to encourage physical activity. Within these solutions, strategies include office redesigns to provide enough sunlight to the building, attractive stairs so people are encouraged to use them more than the elevator, and techniques to promote standing (Cooper and Clarke-Cornwell, 2021). To deliver these innovative and effective interventions to addressing the issue, a healthy work-life balance should be practiced. This requires the participation of both the individual and employer.

The rise of physical inactivity

There are a number of factors behind the crisis of physical inactivity amongst office workers. Many employees focus on work and therefore don't devote time to care for their health. Additionally, conventional approaches to physical activity, such as going to a gym or sport club, are often seen as expensive. However, keeping physically active does not require an expensive gym membership or costly clothing – there are simple, effective ways to stay fit at a low-cost and little time expense with a correctly designed environment. Purposeful outdoor spaces can offer a good space for physical activity; however, Phnom Penh has few areas where this exists. In addition, the polluted environment dissuades people from going for a walk or run, or to use the outdoor gyms dotted around the city. It is imperative that offices in Phnom Penh take steps to increase their employees' physical activity.

Micro-Intervention: Physical Activity Friendly Offices

Overview

To overcome the issue of physical inactivity in a society that is shifting away from manual labor to other types of work, including office-based employment, the proposed micro-intervention aims to promote physical activity friendly offices via four key alterations:

1: Office redesign

Companies will strive to provide environments that encourage physical activity as much as possible. This is important for worker productivity, and may be achieved in the following ways:

- **Adequate lighting:** allowing for natural light to enter office spaces. Natural light is important for health including for healthy sleep, which can aid in motivation to undertake physical activity (Boubekri et al., 2014).
- **Provide a variety of workspaces:** it is important that seats are ergonomic for the overall health of an employee's posture but staying in one space for a full working day promotes inactivity. Thus, it is recommended that multiple working areas are available, to encourage people to move about more throughout the day. Standing desks are another way in which people can benefit physically from their office environment (Cooper and Clarke-Cornwell, 2021).
- **Stairwell maintenance and design:** Ensuring stairwells are accessible, safe, and well-lit can increase use. Making them attractive through design and decorative aspects including color can also encourage more people to take the stairs than the elevator (Cooper and Clarke-Cornwell, 2021).

2: Access to sport facilities

Ensuring access to sport facilities can be achieved in various ways. In Phnom Penh, working spaces are changing to focus on communities rather than isolated offices. Factory Phnom Penh is one example of this, where there is a focus on shared working spaces and facilities to meet all resident requirements, including a gym. Collaboration between local businesses facilitated by government schemes that focus on access to sport facilities is another way to achieve adequate access.

3: Flexible working hours

Allowing employees to have a more flexible working day can encourage them to become more physically active. Employees may struggle with energy levels pre- or post-workday that discourage them from exercising. In providing increased flexibility, employees may be better able to schedule times for exercise. This not only benefits employees, but employers as well. Exercise can increase productivity in work due to endorphin release and overall better health (Friedman, 2014).

4: Promoting healthy eating

Providing a nice space that is clean and adequately stocked with utensils and fridges can encourage employees to eat more home cooked foods, which tend to be healthier than eating takeaway foods.

Justification

Employees of office-based jobs can spend a lot of their day sitting in one place, often in uncomfortable seats, moving very little until it is time to go home (Gallagher, 2015). As people spend a lot of their waking day at the office, encouraging physical activity in and around office spaces can greatly increase employee health and wellbeing, and reduce their likelihood of developing NDCs.

Authorities such as the World Health Organization recommend that in order to combat NCDs countries should develop preventative programs to manage this emergent health crisis (World Health Organization, 2021a). Programs of action must contain specific objectives, targets, timetables, budgets and monitoring frameworks in relation to specific risk factors (World Health Organization, 2021b).

By promoting collaboration between all actors, policymakers can work with businesses and employers to encourage office design and employment frameworks conducive to active lifestyles. Initially, not every company or organization may support this idea, but the first step would be to find a workplace to pilot this idea and monitor the impacts in order to illustrate benefits to other organizations.

Implementation

There are three steps to developing this project.

Step 1: Office Design

Work with an architect to develop a prototype of a physical activity friendly office space, to be modelled both in 3-D and as a technical drawing.

Step 2: Spread the word

Work with relevant stakeholders to display prototype models at conferences and trade fairs. Also, promote the model to representatives from relevant Government ministries.

Step 3: Pilot the design

After gaining further support, partner with a workplace to conduct a pilot case study. Assist them in their office redesign and monitor changes in employee behavior and health via regular surveys. Share the results with the public to demonstrate the positive effects of office redesign.

Conclusion

The human body is made for movement. Physical activity is one of the most effective ways to maintain people's wellbeing and reduce their likelihood of developing NCDs. The proposed micro-intervention meets this need held especially by office workers, through redesigning office space, providing access to sport facilities, and promoting flexible working hours. As NCDs account for 64% of deaths in Cambodia, it is critical that proactive steps are taken to reduce the prevalence of NCDs in the Kingdom (World Health Organization, 2018b).

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