

# The Financial Impact of disease on Employees, Organization and the Nation

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## ABSTRACT

### Background

Human Resources are an important pillar of any organization and their continued consistent performance play's an important part in making an organization profitable, which inturn has an effect on their salaries and the economy of a country. This research paper studies the financial impact of diseases on the employees, employer and the economy of a country.

### Methods

This research is based on desk research. Published literature was searched and data was collected through secondary sources like research papers, books on the related topics, web portals, public websites of concerned departments and other statistics, various journals, newspapers and magazines, websites of selected governmental and non-governmental agencies, as well as different printed materials (brochures, etc) collected from them.

### Results

The paper reveals that employee health is important for an organizations and plays an important part in improving profitability both at the organizational level and country level. The paper further, shows that as humans are becoming resistant's to drugs, diseases would continue to have a significant impact on the financial assets at the employee level, organization level and country level.

### Conclusion

The financial impact of diseases should be compared with relation to overall changes that could happen to the lifestyle of the employee. The study suggests that organizations should run disease related awareness campaigns for their employees and governments from around the world, should come together and proactively, collaborate with the World Health Organization, for formulating policies, regarding mitigation of disease outbreaks.

**Keywords: Disease, Economy, Financial Impact, Human resource, Organization, Training.**

## I.INTRODUCTION

Employees are valuable assets of an organization and the key to success[1]. The success of any business is directly affected by the performance of the employees within the organization, whether or not those employees are dealing directly with customers [2]. But research shows that financial impact of disease can have a severe impact on business. Research shows it costs an organization an average of \$392 each day an employee is out with flu-related illness, and typically at least 15 percent of employees are out of the office each year due to the flu alone. Also, the typical flu keeps an employee out of the office for an average of six days [3]. Diseases can impact heavily on tourism and related sectors of a country. The 2002 to 2004 outbreak of Severe Acute Respiratory Syndrome (SARS) saw a large economic impact on affected countries, due to postponements of travel plans, despite only a relatively small number of deaths [4]. Thus, this research paper, studies the impact of financial impact of diseases on employee, organization and the nation.

### 1.2 Objective of the study

The objective of the study is to access the financial impact of diseases on employees, organization and the nation. Follows sub objectives are set to achieve the main objective of the study: (1) Financial impact of disease on employees; (2) Financial impact of disease on employer; (3) Financial impact of disease on the nation .

### 1.3 Research Methodology

The research is based on secondary data taken from different books on the related topics, web portals, public websites of concerned departments for data and other statistics, various journals, newspapers and magazines, websites of selected health care providers, as well as different printed materials (brochures, etc.) collected from them. Substantial

information has been gathered from these sources thus allowing for appropriate analysis, compilation, interpretation, and structuring of the entire study.

## **II. MATERIALS AND METHODS**

### **2.1 Literature Review**

#### **2.1.1 Financial Impact of disease on employees**

Employees and their households seek to maximize their opportunities to consume products that they most value, both in the form of market goods and 'non-market' goods. The main limitation on their consumption of market goods and services is the sum of income that they have at their disposal. They also need to take into account future consumption needs, so they may make a decision to hold back some of their current income or consumption opportunities for savings and investments. In this way, they endeavor to maximize the utility derived from future consumption. Disease or injury may interfere with this in a number of ways. In the simplest case, the incidence of a disease or injury event has two immediate potential effects. At the first place, the diseased or injured employee may have to cut their normal level of productive activity and, secondly, the household may need to increase its consumption of health services or goods (at the expense of other goods and services). In terms of market impacts, reduced earnings from salary plus additional expenditure on health services must reduce non-health consumption opportunities. Households may have to lessen their consumption of these non-health goods and services or they may try to continue current levels of non-health consumption by liquidating household assets (such as cash savings held in a bank account) or resorting to loans [5]. At the family level, overheads incurred in the purchase of health services should represent the resources that could have been used for other types of consumption had the disease or illness not occurred, taking into account the fact that the impact on the present value of future consumption depends partly on whether the costs are funded from current income, savings, sale of assets or borrowing. Absolute monetary levels of household out-of-pocket expenditure on health generally or on a specific disease or injury can be linked to household spending for all goods and services in order to derive a relative measure of financial burden [6]. In United States of America, nationally, 9.6% of an employee's household income was spent on premiums and deductibles, compared with 5.3% in 2003. Employees are in a financial hard place for two reasons. First, their salaries are barely increasing. Salaries and wages are rising at an even slower pace. That means workers have to spend a larger portion of their incomes on healthcare. One study from rural China, for instance, utilized the baseline survey of a community-based rural health insurance study to estimate via logistic regression the impact of ill health and associated medical expenditures on household investments in human and physical capital. The authors found that households with a member hospitalized in the last year spent three times as much on medical expenses as those that did not, and this expenditure had the effect of 'crowding out' other categories of consumption, including education (26% reduction), farming expenses (15%) and savings (47%) [8].

#### **2.1.2 Financial impact of disease on organization**

Severe acute respiratory syndrome (SARS) disease outbreak was in year 2003. SARS caused a fright similar to the Ebola outbreak. SARS was a viral respiratory illness. It was reported in Asia in 2003. It spread to many countries in the Americas and Europe. The airline industry was impacted by the decrease in traffic or revenue passenger kilometers (or RPK). Asia Pacific Airlines lost 39 billion RPKs—8% of the annual traffic. This caused ~\$6 billion in revenue loss. North American Airlines lost ~\$1 billion. They lost 12.8 billion RPKs—3.7% of total international traffic [9]. Utilizing data from integrated Benefits Institutes' Health and Productivity Benchmarking Databases and IMS Lifelink researchers were able to analyze more than 37,000 employee/dependent medical records from 2007-2010, 77% were male and 95% were under the age of 65. Annual health care costs per human resource inclusive of out of pocket expenses were \$8,170. 92% of this amount was for hospitalization and the remaining balance were drug related costs. Employees with acute coronary syndrome (ACS) lost on average 60.2 days of work during episodic events and 397 days of work over an extended period. Employers estimated per claim productivity loss for short term disability averaged \$7,943 and \$52,473 for long term disability claims [10]. The amount companies have to pay for health care coverage of their employees has been rising at nearly 10% per annum. And, over 75% of those costs are attributable to preventable chronic diseases, including: heart disease, diabetes and some forms of cancer. Productivity's also negatively impacted by the rise in chronic conditions. Obese employees cost U.S. private employers \$45+ billion annually in medical expenditures and work loss. In fact, according to a 2007 economic study the Milken Institute estimates that the 7 most prevalent chronic diseases today (including heart disease, diabetes, and hypertension) cause a lost economic output totaling more than \$1 trillion dollars every year [11].

#### **2.1.3. Financial impact of disease on the economy of a country**

The pandemics that sit most recently in global memory are Zika and Ebola, and tuberculosis and HIV/Aids. While Tuberculosis is slowly declining globally, the burden of the disease is still high, with approximately 1.5 million deaths per year. And despite huge progress in the fight against HIV and Aids, the battle is far from won. Besides the human cost, HIV/AIDS is having profound effects on Africa's economic development and hence its ability to cope with the pandemic [12]. One review reported that the annual costs associated with sickness and reduced productivity as a result

of HIV/AIDS ranged from \$17 (£12; €19) per employee in a Kenyan car manufacturing firm to \$300 in the Ugandan Railway Corporation[13]. These costs reduce competitiveness and profits. Government incomes also decline, as tax revenues fall, and governments are pressured to increase their spending, to deal with the rising prevalence of AIDS, thereby creating the potential for fiscal crises[12]. Although robots are being employed to mitigate the dangers caused to humans by life threatening diseases like SARS, MERS,EBOLA [14,15,16]. According to the International Air Transport Association (or IATA), even though SARS caused fewer deaths, it caused severe economic damage to China and Hong Kong's economies. The global cost SARS was estimated at \$33 billion. This was 0.1% of gross domestic product (or GDP) in 2003. It cost the U.S. economy over \$7 billion [9]. Similarly, the accommodation and food sectors of Canada and Australia lost \$4.3bn and \$120m respectively[4].

Ebola on the other hand, has cost \$10bn. With around \$7bn supplied in aid from other countries, the outbreak has cost the three main affected countries a further \$2.8bn. Due to the Ebola outbreak in 2015, Liberia's economy grew 0.3%, Guinea's grew 0.1% and Sierra Leone's fell to -2.5%, down from pre-Ebola estimates of 6.8%, 4.3% and 8.9% respectively. Sierra Leone enjoyed GDP growth of 20.2% in 2013, which represented a devastating contraction to its growing economy. The Spanish flu outbreak in 1918, which lasted until 1920, killed approximately 100 million people worldwide and wiped 5% – around \$4trn – from global GDP[4]. Coronary heart disease cost £1.73 billion to the United Kingdom (UK) health care system in 1999: £2.42 billion in informal care and £2.91 billion in friction period adjusted productivity loss; 24.1% of production losses were attributable to mortality and 75.9% to morbidity. The total annual cost of all coronary heart disease related burdens was £7.06 billion, the highest of all diseases in the UK. [17]. According to the International Social Security Association, 270 million suffer non-fatal workplace accidents each year with 160 million new cases of occupational illnesses; the financial burden of compensation, health care, rehabilitation and invalidity is huge: A sum equivalent to percent of world GDP for work injuries alone. For some developing countries, the cost can be as high as 10 percent of GDP [18].

### **III. RESULT**

So far there has been not much research done to find the financial impact of disease on the employees, organization and the economy of a nation. As humans are becoming resistant's to drugs, diseases would continue to have a significant impact on the financial assets at the employee level, organization level and country level. Almost one tenth of employees household income is spent on premiums and deductibles, which as compared to fourteen years back, is a substantial increase. The major financial brunt of an outbreak of disease is on the travel and tourism industrial especially the airlines industry. The losses to the industry are in billions of dollars. Not only this, the research found that other than communicable diseases, non-communicable diseases like, coronary heart disease, diabetes etc also have a considerable impact on the gross domestic product of a country. Furthermore, these diseases eat up a sizeable part of the gross domestic product of developing countries. The researchers confidently conclude that this study has practical and policy implications for employees, organizations and the government.

### **IV. CONCLUSION**

#### **4.1. For employees**

The financial impact of diseases should be compared with relation to overall changes that could happen to the lifestyle of the employee, if proper precaution against the spread of to communicable and/or non-communicable diseases is not taken.

#### **4.2. For organizations**

Losses occur when disease outbreaks raise the direct and indirect costs of the organization and reduce earnings. In order to contain losses, organizations should run disease related awareness campaigns for their employees, so that at least their employees do not fall prey to communicable and/or non-communicable diseases.

#### **4.3. For the government**

Government healthcare institutions should start collaborating with the private sector so that healthcare specific campaigns could be run, which would in turn help in generating awareness regarding communicable and/or non-communicable diseases. Governments around the world, should come together and proactively, collaborate with the World Health Organization, for formulating policies, regarding mitigation of disease outbreaks.

#### **4.3. Limitations of the study**

The study is based on data collected from secondary sources only and there is scope for research based on primary data. Future researchers can take up further studies based on the above-mentioned limitation.

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