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Czech Republic: Diabetes

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Diabetes in the Czech Republic

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Source: "The World Factbook," 2018.

Location:
In central Europe, bordered by Germany, Austria, Slovakia, and Poland.

Population:
A total population of 10,543,000 as of 2016 (World Health Organization or WHO); the total ethnic population is composed of 64.3% Czech, 5% Moravian, 1.4% Slovak, 1.8% other, 27.5% unspecified (2011 est.); the nation is 10.4% Roman Catholic, 1.1% Protestant, 54% other/unspecified, 34.5% none (2011 est.).

Political Structure:
The nation is currently a parliamentary democracy with a Chief of State President Miloš Zeman and Head of Government Bohuslav Sobotka. The three main powers are the executive, judicial, and legislative. The president is not only commander in chief of the army, but also appoints the prime minister, signs enacted laws, and ratifies international treaties. The prime minister has supreme executive power, the right to plan for most of the global and domestic policy, and has the ability to select ministers. The judicial court judges are appointed by the president for a lifetime. Lastly, the legislative branch may pass bills, have parliament holds, modify the constitution, and declare war ("Czech Republic: Government," 2018).

Major Challenges:
The nation's current healthcare system could be improved to assure that citizens and non-citizens have access to quality healthcare. According to "Primary Healthcare in the Czech Republic," healthcare is mainly provided through statutory health insurance, consisting of private health insurance funds. Healthcare is, therefore, offered through a compulsory insurance model where private insurances pay portions of fees. There exists a fee-for-service care that is based on mandatory employment-related insurance plans. Thus, poor populations would be at greater risk. Specifically, within the health field, access to diabetes treatment and doctors must be improved in order to provide treatment for all patients. Other internal challenges include the inability to hold a rapidly aging population, the lack of skilled workers, and a non-functional educational system. In addition, 9.7% of the population lives below the poverty line (2015 est.). External issues the nation faces includes controlling illicit drugs and improving transportation ("The World Factbook," 2018). In fact, a project for modernising a railway is underway for quicker connection between the capital Prague and the German border.

Public Health Issue and Epidimiology:
Diabetes mellitus is a life-threatening disease in which high sugar levels are found in the bloodstream (Kocová, Novák, & Šídlo, 2016). The reason for the high levels of glucose in the blood are due to a relative or complete lack of insulin. Without insulin to signal the body to absorb sugars, the sugars build up in the blood causing various problems. Such issues, however, may take a long period of time to be noticeable, which makes diabetes a risky disease. There are two most common types of diabetes. Type 1 diabetes is characterized by beta cells destruction, which then causes an absolute insulin deficiency. Thus, the individual becomes insulin dependent. Genetic and environmental factors may lead to this type of diabetes and, as of 2013, almost 59,000 individuals suffered from type 1 diabetes with a prevalence of 560 diabetics per 100,000 people living in the Czech Republic. In addition, the prevalence of type 2 diabetes is alarmingly greater than that of type 1 diabetes. For type 2 diabetes, as of 2013, there were more than 789,000 diabetics with a prevalence of 7,515 per 100,000 inhabitants in the country. This type of diabetes occurs due to insulin resistance and insulin deficiency in the body. As demonstrated in Koková, et al. (2016), the groups of people mostly affected are the elderly and males (as shown below). The risk factors for type 2 diabetes are advanced age and obesity: nine out of ten victims of this type of diabetes are overweight (Koková et al., 2016). Further on, the prevalence of diabetes continues to grow annually. As the population grows old, more cases are expected to emerge, which means that not only

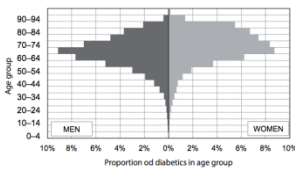

Fig. 2 Sex/age distribution of diabetics in 2013.
Source: VZP ČR 2014a.

is the quality of life lowered for many Czechs, but the healthcare expenditure is also expected to rise.

Interventions Attempted:
The nation's response to the growing issue has involved operational policy, strategy, and action plan for diabetes (WHO). The Government Directive on Local and Travel Time Accessibility of Healthcare Services legislation has taken steps since 2012 to assess local accessibility to diabetic clinics. The limit time of travel to a clinic is 45 minutes. Although such regulations are aimed to control diabetes, many factors were not considered. The main issue is that it does not account for whether the doctor works forty or only four hours per week; instead, the legislation only considers whether there is an existing clinic. Therefore, the capacity the clinic offers may be limited, creating a barrier to accessibility to care. Additionally, since a significant number of diabetologists are reaching old age, with 12% of providers being 65 years and older, the number of providers may change. Another factor that is not considered in the legislation is that different types of populations account for the type of care available. In areas of the country with high numbers of elderly, for example, may reflect a greater number of diabetic clinics since the elderly are a target population. (Koková et al., 2016).

Suggested Interventions:
Since there exists no legislation that requires a certain number of providers per inhabitant in the country's districts and regions, I would propose collecting data of capacity and focusing in increasing the ability for doctors to actually see and treat all patients. The initial step to improving access to care is for the government to get informed about the issue and inform the public. As Koková et al. (2016) explained, the government lacks information and statistics on diabetic accessibility and treatment. And the information used in the study is mostly derived from insurance companies. Although there are 510 diabetic-focused clinics and 639 providers according to the Czech General Health Insurance, the question of capacity is still an underlying issue. Another suggestion I present is to improve the roads. Since people who live in rural outskirts of the country are less likely to find a near clinic, improving and building roads for faster and safer travel would help. In addition, since the borders of the nation seem to have less numbers of clinics available within a short travel time, I would suggest providing public transportation so that gas money is not a limitation to accessibility of care. Since non-citizens lack insurance coverage or have very limited benefits, requiring insurance companies to provide a high-quality care for the poor and migrant populations would help assure that everyone in the nation is being cared for (Hnilicová & Dobiášová, 2011). In 2016, a total of 650 persons (ages 30-69) died due to diabetes (WHO). Lastly, providing information to the public may generate awareness to improve quality of life since diabetes can be prevented by having regular checkups before symptoms appear and healthcare expenses increase for the patient and overall healthcare system.

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