Summary

The purpose of our thesis is to investigate the prevalence of diabetes that has not been properly diagnosed, as well as its causes, effects, and relationships with other conditions in developing nations such as Bangladesh, India, Pakistan, Nepal, Bhutan, Sri Lanka, and Maldives. The goals of this thesis were accomplished through the conduct of two separate studies. The first study in this thesis performed a systematic review of 52 closely controlled clinical trials in order to investigate the prevalence of type 2 diabetes in South Asia that was not diagnosed. The findings of the systematic review demonstrated the prevalence of diagnosed and undiagnosed diabetes (Type I and Type II Diabetes) in developing countries (Bangladesh, India, Pakistan, Nepal, Bhutan, Sri Lanka, and Maldives), as well as gender prevalence (male and female) in each study with factors related to the undiagnosed diabetes, such as obesity, hypertension, and smoking percentages.

The second study or you can say that this is second part of the systematic review is mate analysis (quantitative analysis) of the literature studies which based on the prevalence of undiagnosed diabetes in South Asia. The highest pooled prevalence of undiagnosed diabetes in South Asia is 36.1536 (95 % C.I 13.2963; 62.9928, I^2 = 100%) in Nepal, followed by 20.7854 (95 % C.I 6.2293; 40.9540, I^2 = 99.9) in Bangladesh, 13.6146 (95 % C.I 6.8901; 22.1620, I^2 =100%) in India and both Pakistan and Sir Lanka approximately are same in prevalence 11.6146 (95 % C.I 9.9779; 13.3628, I^2 =95.3%) and 11.4960 (95 % C.I 10.5834; 12.4413) respectively but Bhutan has the lowest prevalence of Type II diabetes which is 4.2509 (95 % C.I 3.8846; 4.6330). Furthermore, practically all of the geopolitical zones of the South Asian nations are represented by the papers chosen for this meta-analysis, allowing for the identification of regional variations in the prevalence of diabetes. South Asia as a whole is affected by diabetes, with Nepal having the highest prevalence and Bhutan having the lowest. Significant risk factors for diabetes in South Asians include increasing age, family history, hypertension, and obesity. It is strongly advised to develop a national diabetes care survey and preventive strategy.