An Update on Epidemiology of Depression: A Major Concern

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Abstract

Depression is mood related disorder that affects the person mentally and physically also. In this disorder learning ability of person is also get decreased. This review is conducted in order to assess the epidemiology of depression.Literature review is conducted using different types of data present on different databases that included PubMed, Frontier in pharmacology, Elsevier, Journal of depression and anxiety, etc. Different studies shows that different types of factors are responsible for depression these factors includes socioeconomic factors, cultural factors and different types of customs.According to study it is found that rate occurrence of depression is more common in females as compare to males. This is associated with physiological, biological and economical factors. It also associated with different types of diseases. And in the worst form depression leads to the suicide.

**Keywords:** Depression, risk factors, mental health, prevalence.

Introduction

Epidemiology is a Greek word originated from word "epidemia"(*Epidemiology | Definition of Epidemiology by Oxford Dictionary*.)Means prevalence of disease and logy means study. It is branch of medicine that deals with the distribution(pattern, frequency) and risk factors of disease, status of health in a particular population(city, state, educational institute, country). It also deals with factors can be helpful in controlling of disease. In this study exposure to the environment, infectious disease, injury non-infectious disease, world terrorism affect on health status of particular population is studied.
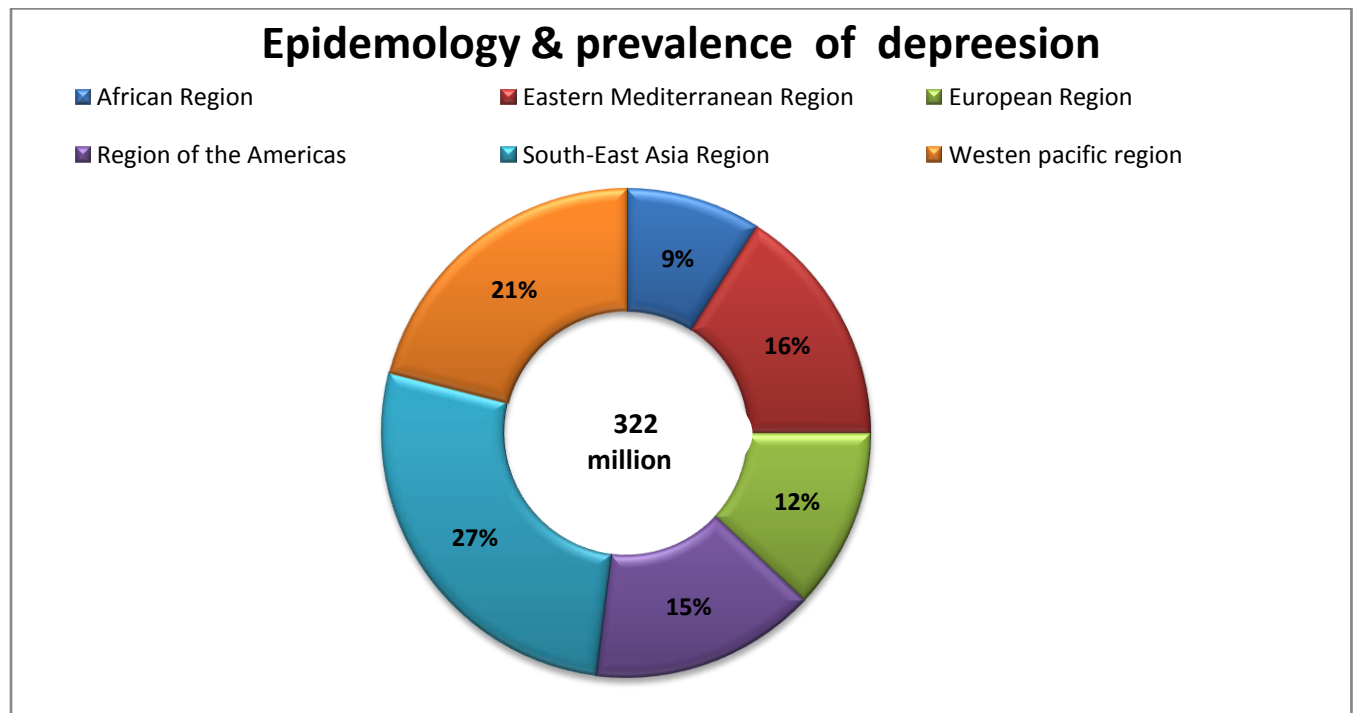
Depression epidemiology: Depression is disorder related to mood of a person. In this disorder health of person both physical and mental health affected. But it more affects mental health. In past study of depression it is considered that disorder occurs due low level of some neurotransmitters nor adrenaline, dopamine, 5-HT. Now study found that only these are not affected but also some other key factors are involved in depression. Neuroinflammation, neuronal volume and density, neuronal plasticity or neurotropic factors also play a role in this. Epidemiology of this disorder is increasing and from 1990 to 2017 it is under top five disease of world(James et al., 2018).

Some major points regarding epidemiology of depression("WHO | Depression and Other Common Mental Disorders," 2017)

- ➢ 322 million people are suffering from depression in all over world.
- ➢ More population suffers from this disorder is present in South East Asia region and western pacific region include China and India.
- ➢ Depression is more in females as compare to male. 5.1 % of females only 3.6 % of males are suffering from this disorder.
- ➢ Its prevalence is vary according to age more in older people 5.5 % of male and 7.5 % of female are suffers of between age 54 – 75.
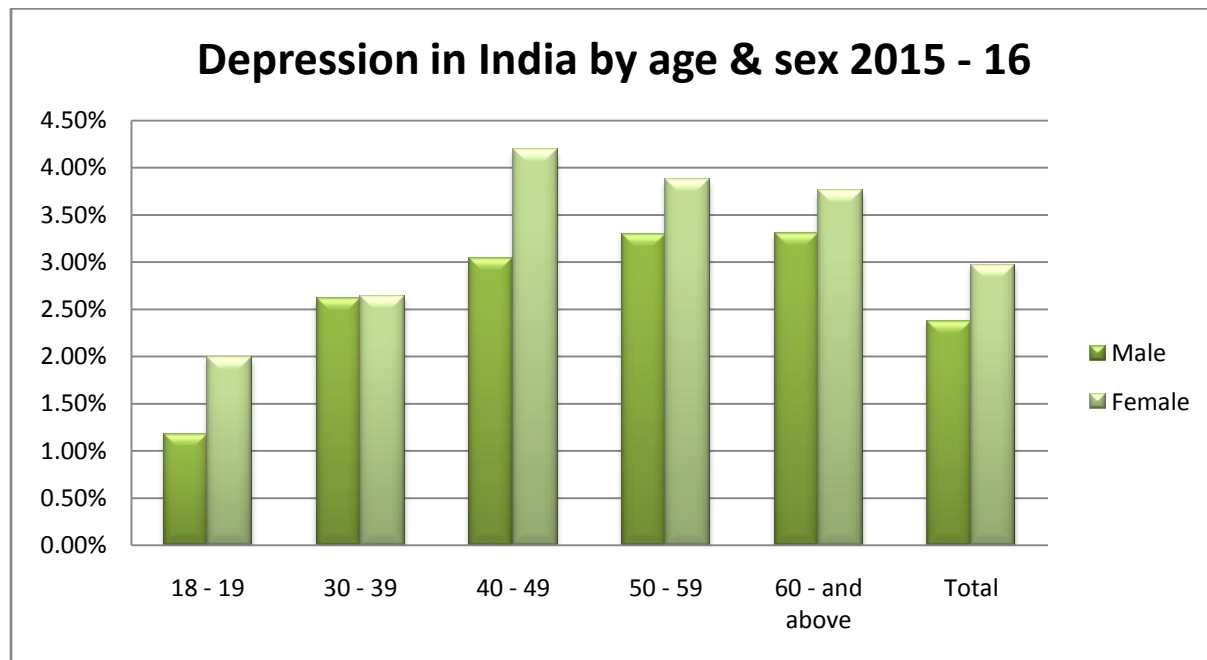- ➢ 18.4 % depression growth is seen from 2005 to 2015.
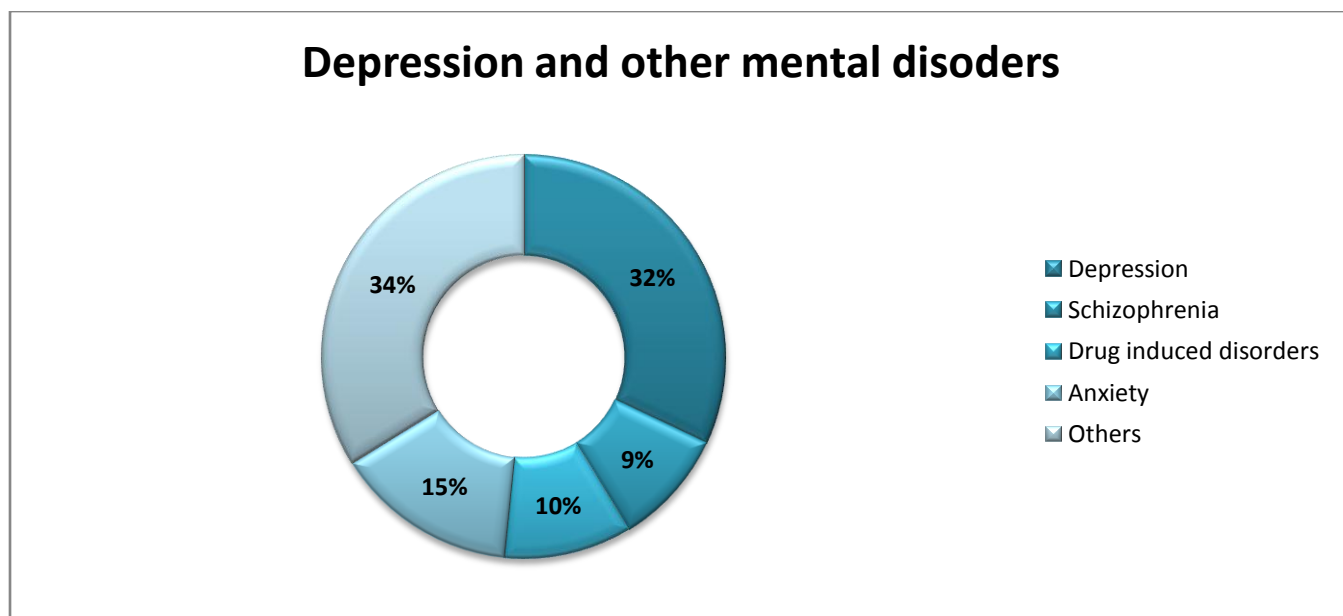
Figure 1 : Depression and other mental disorders(Gururaj et al., 2017)

Figure 2: Epidemiology and prevalence of depression(Gururaj et al., 2017)
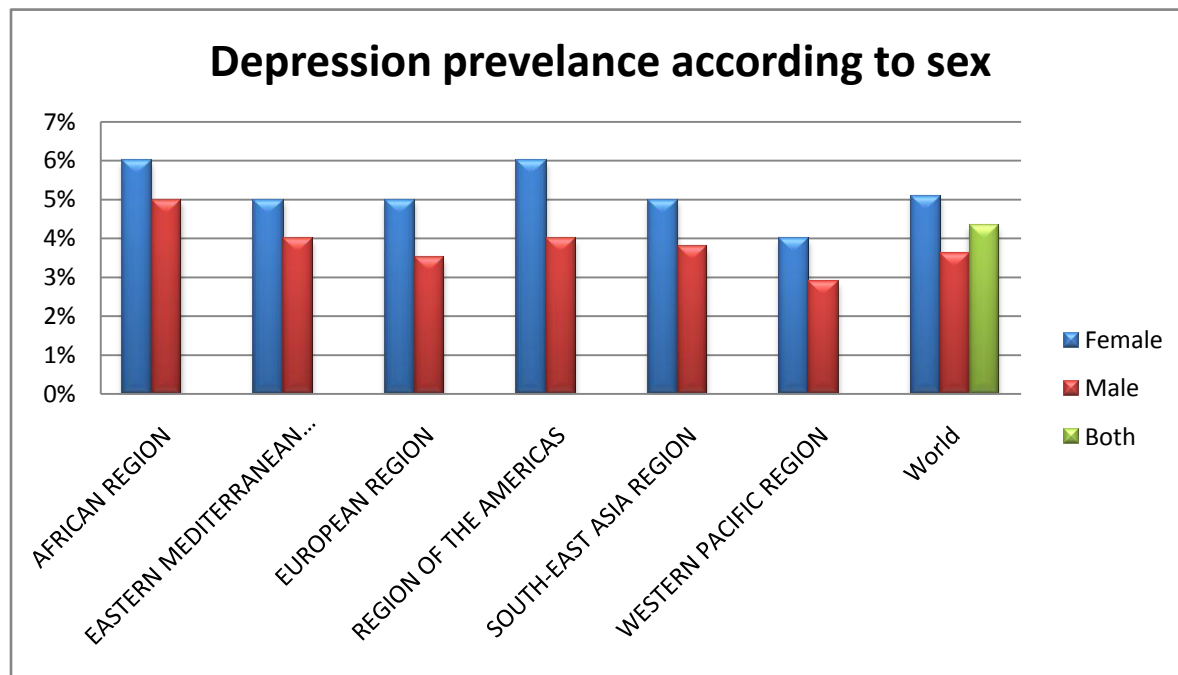
Figure 3: Depression and other mental disorders according to sex ("WHO | Depression and Other Common Mental Disorders," 2017)

Figure 4: Depression in India by age and sex

Risk factors associated with depression: Depression cause due to multiple factors no a single factor is associated with depression. It may be social, biological, economical, cultural and environmental factors that act in can be cause of depression.

Biological factors: About one third patient of depression has this factor in other cases of depression it may be environmental or non – genetic factors. A person who suffers from injury or any type of trauma in its childhood may develop depression; it may be associated with genetic factors. There is sustainable relationship between depression and genetic factors.

Psychological factors: In childhood if person experience a bad influence from parents or an malafide behavior towards itself. Child get separates from mother. In these conditions development of depression may be there.

Social factors: It is one of the key players in depression. Relationships which are distressing can be contributing factor to depression. In low and middle income countries include India it is one of reason of depression.

Economic Factors: It is key player of depression, a person who faces economic crises suddenly have poor status.People living in area where chances of disaster are more susceptibility of depression.

Cultural Factors: Religion, belief, culture of person is also affects mental state of person. These factors affect way of living of a person. For better understanding of depression it is better to understand it.(Gururaj et al., 2017)
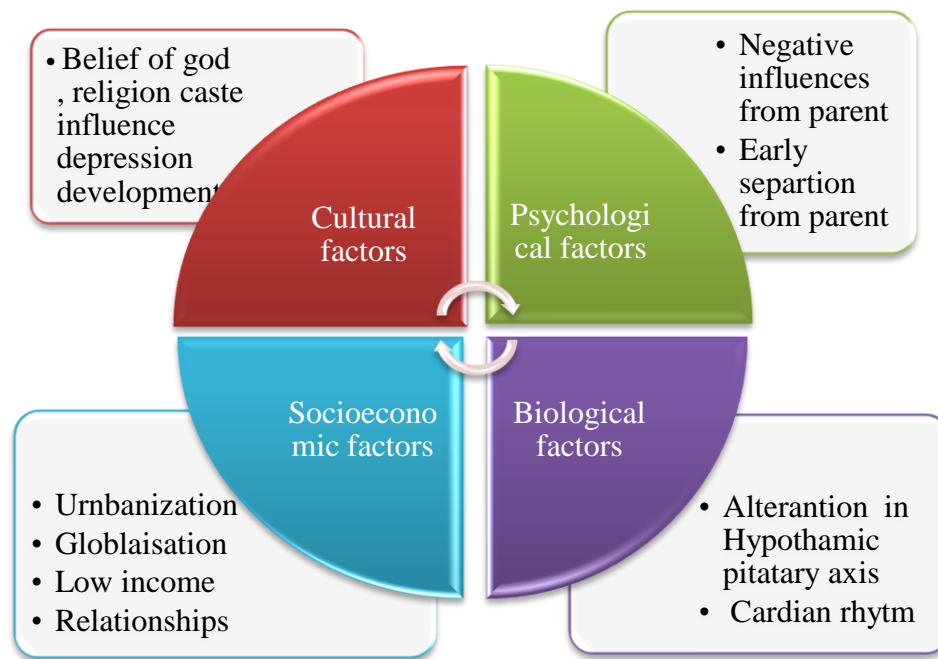

Figure 5: Different factors affecting depression

Suicide: WHO provides a data of suicide worldwide. In year 2016,8000000 people died due to suicide and so many attempt suicides but do not die. Suicide is globally second cause of death worldwide in younger people age between15-29. Men die more than women due to suicide rate is nearly double in men. Deaths due to suicide are nearly 1.5% worldwide. More than half of deaths due to suicide occur in low and middle income countries.(10 Facts onMental Health, ; "WHO | Depression and Other Common Mental Disorders," 2017)
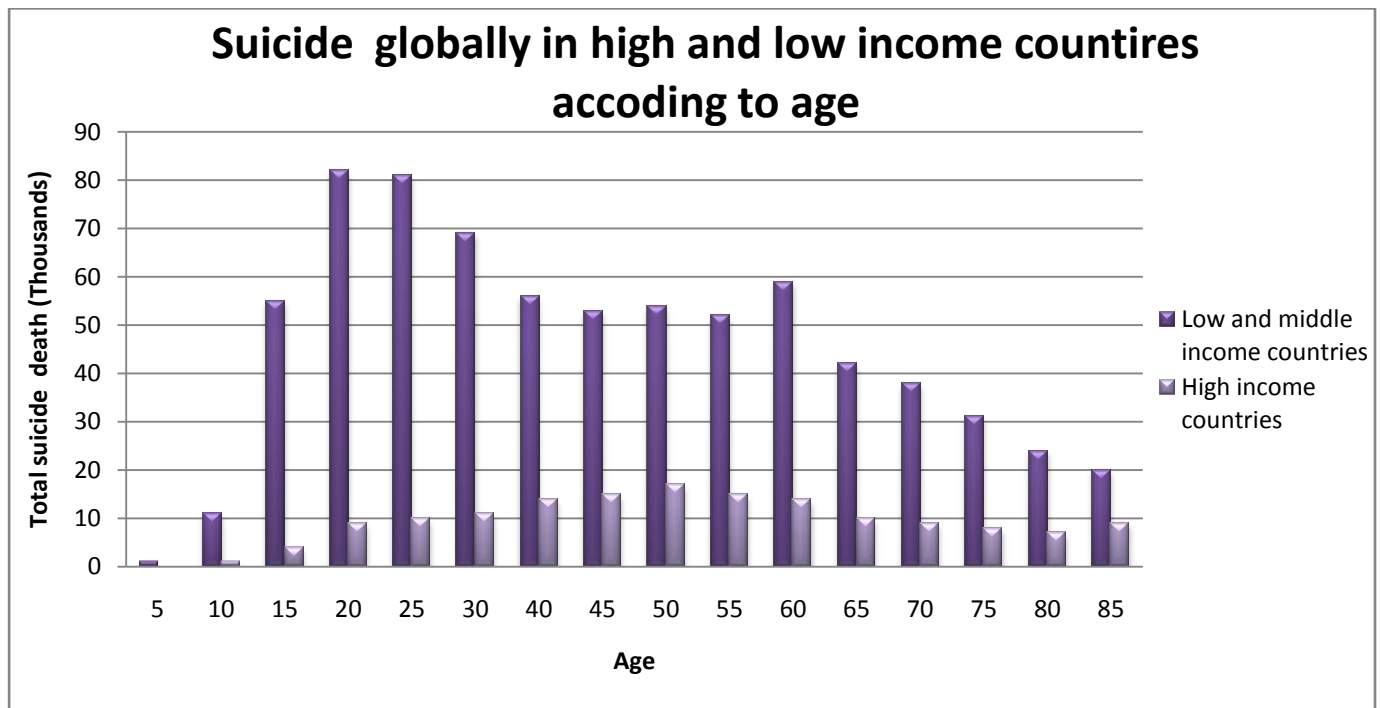
Figure 6: Rate of suicide globally in high and low income countries according to age
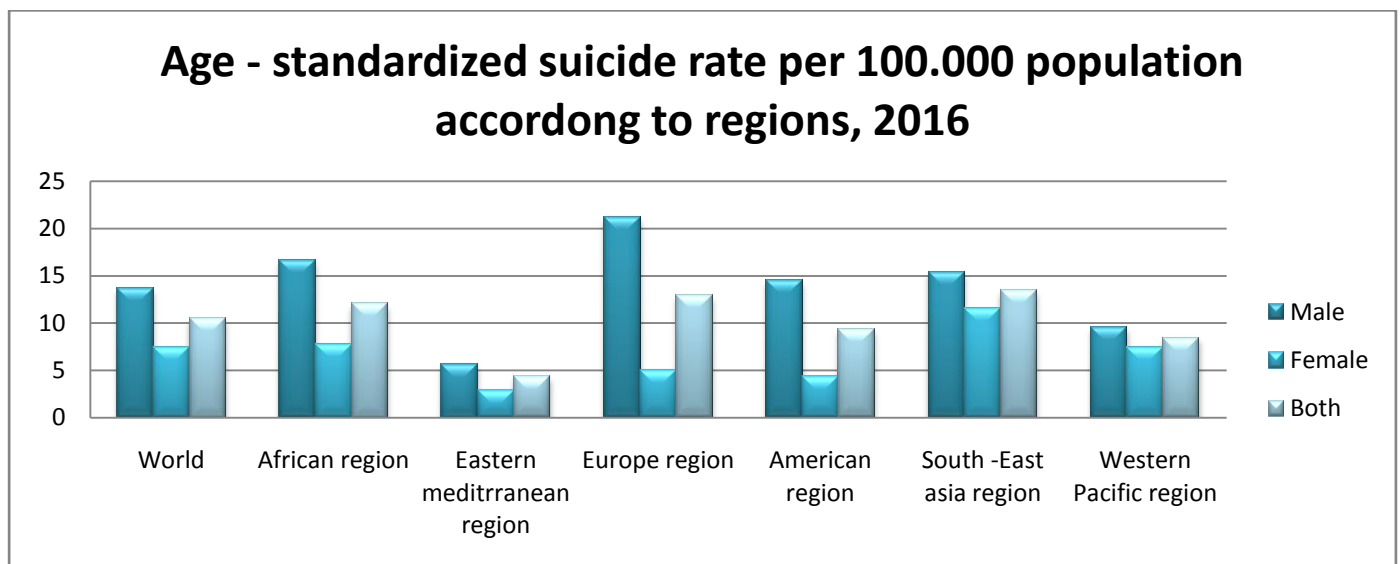
Figure 7 : Suicide rate according to region ("WHO | Mental Health ATLAS 2017," 2019)

Suicide rate in India: Suicide rate in India is increase in 2016 by number 230314. It is most reason of death among young people age between 15- 39 years. In globally 800000 people die due to suicide. In India 17.4% people die due to suicide and India population is 17% of world's population. Suicide rate is increased by 7.9 to 10.3 % from 1987 to 2007 per 100000. Suicide

rate is higher among Maharashtra, Tamil Nadu. According to WHO 36.6 in women which ranks 6th in world in men it is 24.

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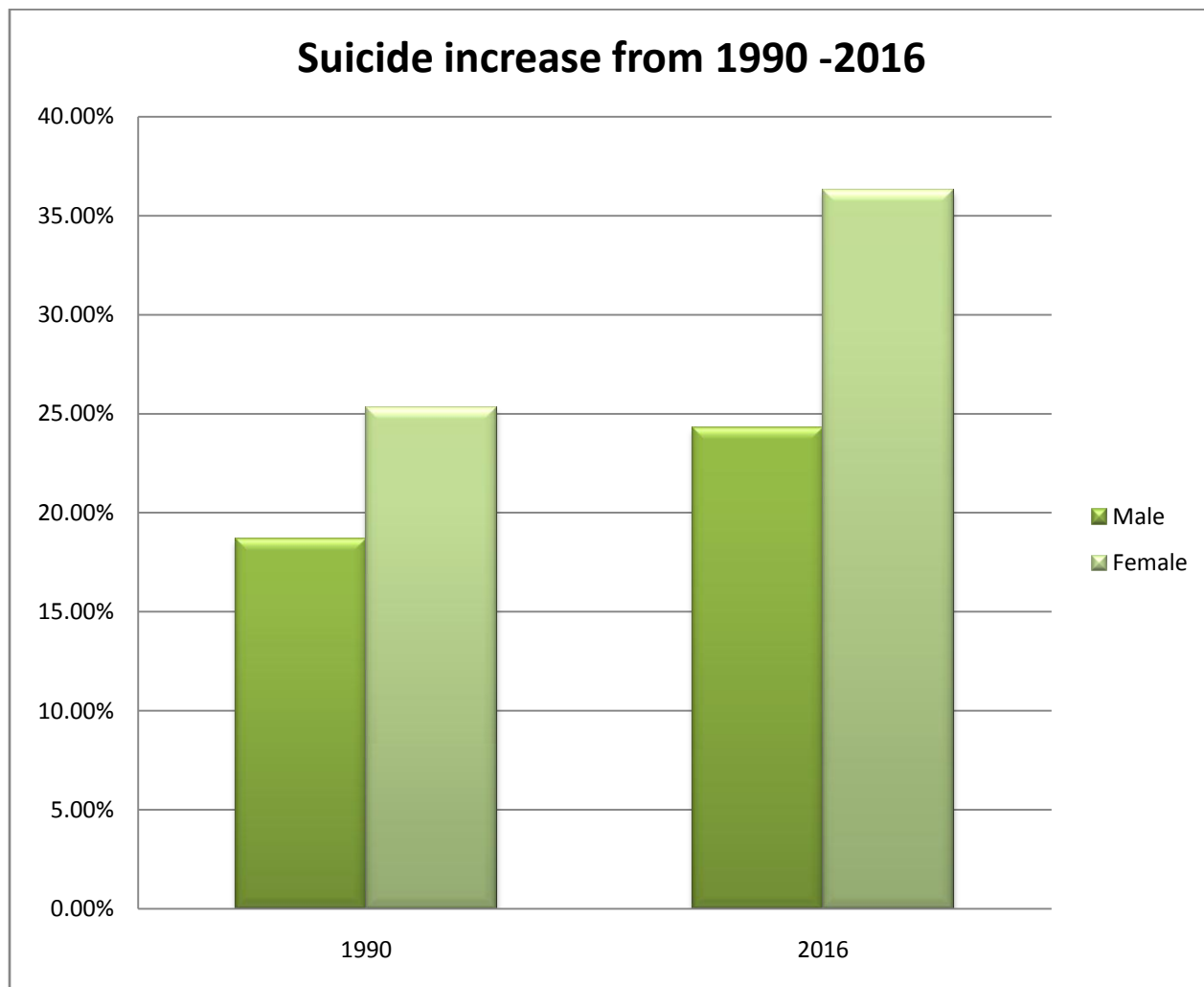
Figure 8 : Suicide rate from 1990-2016(Patel et al., 2012)

Depression is the cause and consequence of many health conditions

Non-communicable disease: Injuries and chronic disorders (diabetes, cardiovascular disease, cancer, and neurological disorder) are a major health issue in India. Depression can co-occur with these disorders. Depression in persons suffering from a non-communicable disease is from 22% to 33%. A significant relation is present among diabetes and depression. Depression increases the risk of type two diabetes by nearly 60% and diabetes hardens the situation of depression. Depression also increases the chances of cardiovascular disease. If a person suffers from any type of physical illness than more chances to have depression(Gururaj et al., 2017).
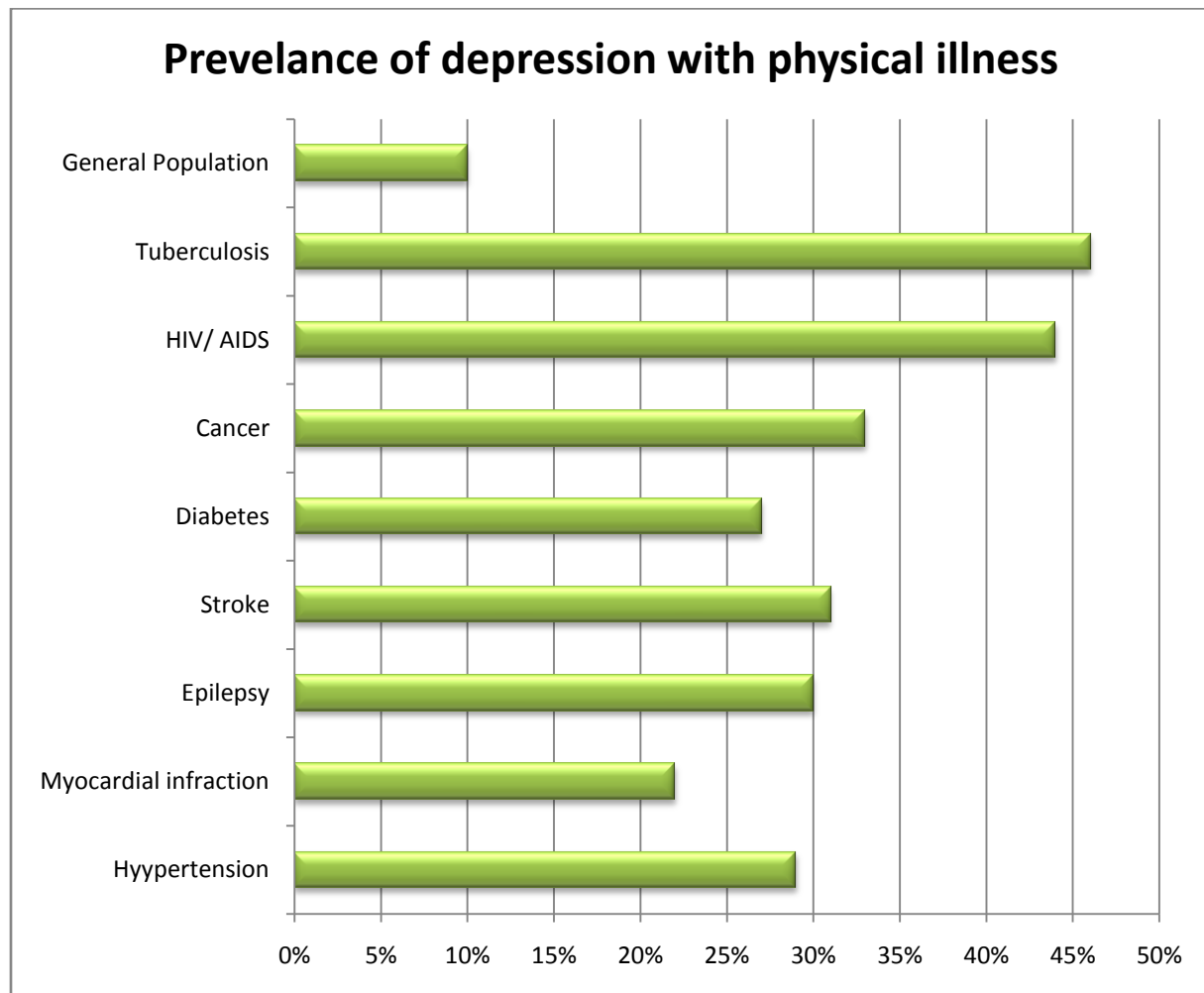
Figure 9: Prevalence of depression associated with disease Source: Investing in mental health, WHO 2003

Conclusion: From data it is concluded that epidemiology of depression is increasing in all over the world. Its prevalence is varying in different regions and countries. Females are more depressed than males (WHO). Depression is more in southeastern areas of world. In this area India and China are more depressed. These countries are overcrowded countries and so many factors effect contributes to development of depression. In poor countries and low middle income countries depression is more as compare to higher income countries.

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