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Economic Disparity and Mental Health

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ABSTRACT

Economic disparity is an important issue worldwide, with adverse consequences on physical and mental health of the impoverished. All over the world, the gulf between the rich and poor is widening not only between countries, but also within countries. Poverty not only increases the risk of mental illnesses, but is also a consequence of the same. This review presents a conceptual framework for understanding the relationship between mental health and economic disparity. Various studies have shown a significant relationship between low educational status, unemployment and mental illnesses. Low socio-economic status in women and children has been found to increase their vulnerability to developing mental illnesses. Possible ways of tackling the issues at different levels like at the state, inter-sectoral and research are discussed.

Keywords: Economic disparity, poverty, mental illness, psychiatric disorders, socio-economic status, low education, unemployment.

Introduction

Economic disparity refers to the differences in the economic status between different socio-economic strata in a society. It could be the differences between different strata within a society or between different countries. It is now well recognized that the gulf between the rich and the poor of the world is widening (1). Economic disparity is closely related to poverty. Over the years, research has consistently shown

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that poverty and economic disparity have direct as well as indirect effects on social, mental and physical health of individuals (2). Extreme poverty is the world's most ruthless killer and the greatest cause of suffering on earth. Poverty is associated with reduced life expectancy, handicap, disability and starvation, and has been identified as a major contributor to mental illness, stress, suicide, family disintegration and substance abuse (3). High level of income disparity reduces social capital, and may lead to rich withdrawing social support and also promotes comparison which in turn increases stress levels substantially (4, 5).

Factors like insecurity, hopelessness, inability to respond to rapid social changes, risks of violence and physical ill-health explain the greater vulnerability of the poor to common mental disorders. On the other hand, the economic costs of ill-health tend to worsen the economic condition of the individual; hence creating a vicious cycle. Several hypothesis explain the variation in rate of psychiatric problems in poorer individuals as compared to their richer counterparts. According to social selection hypothesis (6), persons with mental illnesses tend to drift down in socio-economic positions and hence are concentrated in the inner cities or the lower strata of the society. On the contrast, social causation hypothesis (7) attributes socio-economic deprivation as an important contributing factor leading to mental illnesses.

As per the World Health Report 2001, there are 450 million people across the world suffering from mental and neurological disorders. Every year one million people commit suicide, and 10-20 million attempt to take their lives. Despite the anticipated rise in such problems, about 40% of countries have no mental-health policy. Two-thirds of the countries spend 1% or less of their health budget on mental health, and half have only one psychiatrist per 100,000 people (8). In the low income countries, high rates of common mental disorders have often been associated with factors such as discrimination, unemployment and living in a period characterized by rapid and unpredictable social changes (9).

Economic Disparities across the World

The gulf between the poor and the rich of the world is widening (10). The

gap in per capita income between the industrialized and developing world is rapidly increasing. Developing countries, with 80% of the world's population, control only 21% of the global gross national product (GNP). Differences in economic and health status within countries are also as great as or greater than those between countries. A 1990 study from the US reported life expectancy of black men aged 15-44 living in the central health district of Harlem in New York as lower than that of a male Bangladeshi of the same age (11).

A number of stressful social conditions are related to poverty and economic disparity, which can affect the mental health. Some of these include unemployment, illiteracy, homelessness, gender discrimination, increased stresses of daily living, poor housing, over crowding, scarcity of food, clothing and shelter, and lack of resources for medical help (12).

Poverty and Mental Health

Two-levels of researches have been conducted to understand the association between poverty and mental illnesses- individual level and area level. Individual-level researches have consistently demonstrated that poverty is significantly associated with high levels of common mental health disorders such as anxiety and depression (13, 14). Area-level analysis have found that in poorer areas, there are high rates of hospital admissions, higher out-patient mental health services and suicide (15). New Haven Study, one of the earliest landmark studies and its follow-up indicated a direct relationship between poverty and high rates of emotional and mental problems. The study also showed that the different social classes accessed different types of treatment facilities (16).

In 1995, the Office of Population Censuses and Surveys in USA in a study on prevalence of psychiatric disorders, reported that unemployment significantly increased the odds of having a psychiatric disorder, with the highest being for alcohol and drug-use disorders, followed by phobia, psychosis, depression and anxiety disorders (17). In another US study of inner city mothers, self-reported poor financial status predicted depressive symptoms independent of socio-economic status, ethnic group and marital status (18).

Two large scale population based studies from Netherlands (19) and Ethiopia (20) found association between unemployment, education and under-achievement, and mood disorders. Unemployment has also been found to be one of the strongest predictors of suicide after adjusting for other socio-economic variables (21).

Studies from the developing countries have also shown a strong association between indicators of poverty especially low education levels and common mental disorders (9). Disparity in educational attainment could be one of the most important factors perpetuating social inequalities in psychiatric disorder in the world. Poor education and low income have been found to be independently associated with increased prevalence of common mental disorders in Northeast Brazil (22). Similar results were reported in a meta-analysis that tried to understand the relationship between socio-economic position and depression (23).

The relationship between deprivation and mental health needs appears to be linear. A prospective study involving 7726 adults, aged 16-75, found a relationship between financial strain at baseline and the onset as well as maintenance of common mental disorders. The relationship stood strong even after adjusting for objective indices of standards of living (24). Relationship to sudden financial loss and suicide, and extreme poverty and suicide is frequently reported in the media where many cases of suicide and extended suicide were cited.

Poverty, Female Gender and Common Mental Disorders

Poverty and female gender have been found to be associated with depression and anxiety in developed as well as in developing countries. In low and middle income countries, women bear the brunt of adversities associated with poverty including less access to education, emotional and physical abuse, sexual trafficking, unwanted pregnancies and fewer job opportunities, hence increasing their vulnerabilities for mental disorders (9). Research has consistently reported presence of depressive symptoms in mothers with low income (25). The development agencies who focus on women as a priority group have failed to recognize their unique vulnerability to common mental disorders and need to reorient their priorities accordingly.

A multinational study conducted in four developing countries, viz. India,

Zimbabwe, Chile and Brazil studied association of common mental disorders with economic deprivation and education. Female gender, low education and poverty were found to be strongly associated with common mental disorders. The study suggested population based prevention strategies based on increasing the proportion of those who complete schooling and acting on high-risk groups such as providing loan facilities to the impoverished (26).

Economic Disparity and Children

Low income accompanied by disruptive environment and poor external support has been found to put children at risk to develop a variety of psychiatric disorders (10). Problems in socially disadvantaged children can be grouped under medical illnesses, emotional and social problems, environmental deprivation, learning disabilities and mental retardation. Psychiatric disorders are a result of interplay between genetic and environmental factors including adverse life experiences. Reviews by World Health Organization have reported that approximately one in five children or adolescents suffer from mental health problems (27).

Poor children not only suffer worse health status and injuries, but also have less access to routine medical care (28, 29). Moreover, they are found to have higher rates of psychiatric disorders and associated impairments like poor school performance, ill-health, tobacco use, and social impairments (30, 31). The harmful effects of poverty on children are more pronounced in the preschool period than at later stages. Almost half of all lifetime cases of mental illnesses begin by age 14. Therefore, early childhood is an important period to predict later economic and health positions.

Poverty and social disadvantage are also strongly correlated with deficits in children's cognitive skills and educational achievements. The number of years that a family lives in poverty has been reported to be associated with negative outcomes in children, even for variables like IQ scores (32). Threatening and erratic discipline, lack of supervision and poor parent-child attachment are known to mediate the effects of poverty especially in development of behavioral disorders such as delinquency and substance use disorders (33).

Social Class and Mental Illness

Relationship between social class and mental illness is one of the earliest and the most firmly established association in psychiatric epidemiology (7). Socially disadvantaged people have higher rates of psychiatric disorders than their advantaged counterparts as measured by treatment statistics, non-specific distress in the community and epidemiological surveys of psychiatric disorders (34). Persons belonging to lower economic positions also have a significantly higher probability of hospitalization and remaining hospitalized longer than their middle class counterparts.

Until the early 1970s, it was thought that the people belonging to lower classes were exposed to more stressful life experiences than those of more advantaged social status, and this differential exposure accounted for the negative relationship between social class and mental illness. However, subsequent work has proven the hypothesis that class-linked vulnerability to stress accounts for the major part of the association between social class and depression, and between social class and non-specific stress (2, 13).

Differential vulnerability may arise in different ways. One is that some type of selection or "drift" of incompetent copers to the lower class might lead to the relationship between class and vulnerability, for example, in cases of psychosis and substance use disorders. The other is that one's experience as a member of a particular class leads to the development of individual differences in coping capacity as well as differences in coping resources, which may be true in cases of anxiety and depression.

Some of the risk factors that make the lower socio-economic group more vulnerable to psychiatric disorders include poor coping styles, ongoing life events, exposure to stress and weak social support system (35). Among various psychiatric disorders, depression is found to have a controversial association with social class. A review found that although lower social class had higher prevalence of psychopathology, the results for depression were more ambiguous with only five studies out of eleven showed higher prevalence of depression in lower social class (36). A recent meta-analysis indicated a strong to moderate correlation between social class and depression with lower socio-

economic status increasing the risk of onset of episode as well as persistence of symptoms (37). Persons belonging to lower social strata are disadvantaged in their access to supportive relationships. There is also evidence that the personality characteristics associated with vulnerability to stress, such as low self-esteem, fatalism, and intellectual inflexibility are more common in lower class people.

The course of illness is also determined by socio-economic status. This may be a result of service related variables like barriers to access to provided services. Poor countries have fewer resources. Even in rich countries, poverty and associated factors like low education, unemployment, racial, ethnic and language minority can create insurmountable barriers to care (8). It has also been found that outcome of mental illnesses is unequally distributed according to social class, with the lower class facing more disabilities and poorer prognosis (38, 39).

Early onset psychiatric disorders are powerful predictors of a wide range of adverse social consequences like school failure, teen childbearing, early marriage, mental instability, job instability and financial adversity. Psychiatric disorders are associated with functional impairments both within the family and work roles. Persons with a history of psychiatric disorders miss more days of work and have lower productivity while at work than the workers in the same job who never had a psychiatric disorder (40). Thus the psychiatric disorders, if not attended well, have a great potential at drifting the socio-economic status of persons with mental illness and further increasing the economic disparities.

Solutions

Interventions need to be undertaken at the policy level and the State needs to take strong initiatives at improving the education and health status of the society and minimize unemployment. Policies of higher taxation of the rich and minimal of the lower income groups, which is often the norm, is also a step towards this direction (41).

The World Bank Group (42) has given certain guidelines to fight poverty, which include improving the distribution of income and wealth, accelerating social development by creating and enhancing education opportunities of girls and women, provision of safe water and sanitation, and immunization of children.

The society has to work towards reducing the inequalities in income by increasing education, employment, housing and healthcare opportunities of its underprivileged population.

Conclusion

Growing economic disparity has close inverse association with mental health. The diversities exist both across the developed and developing countries and within different countries. There is a need to reduce this ever expending gap and to provide adequate cost-effective services to the underprivileged sections of the society.

References

1. Wilkinson RG (1997). Health inequalities: relative or absolute material standards. *Br Med J* **314** : 591–595.
2. Wilkinson R and Pickett KE (2007). The problems of relative deprivation: why some societies do better than others. *Soc Sci Med* **65:**1965–1978.
3. World Health Organization (1995). The World Health Report 1995 - Bridging the Gaps. Geneva: WHO.
4. Kawachi I and Kennedy BP (1999). Income inequality and health: pathways and mechanisms. *Health Serv Res* **34:**215–227.
5. Kaplan GA, Pamuk ER, Lynch JW, Cohen RD and Balfour JL (1996). Inequality in income and mortality in the United States: analysis of mortality and potential pathways. *Br Med J* **312(7037):** 999–1003.
6. Eaton W (1980). A formal theory of selection for schizophrenia. *Am J Sociol* **86:**149–158.
7. Hollingshead AB and Redlich FC (1958). Social Class and Mental Illness: A Community Study. New York: John Wiley.
8. World Health Organization (2001). The World Health Report 2001 - Mental Health: New Understanding, New Hope. Geneva: WHO.
9. Patel V and Kleinman A (2003). Poverty and common mental disorders in developing countries. *Bull WHO* **81:**609–615.
10. Murali V and Oyebode F (2004). Poverty, social inequality and mental health. *Adv Psychiatr Treat* **10:**216–224.

11. McCord C and Freeman H (1990). Excess mortality in Harlem. *New Engl J Med* **322:**173–177.

12. Araya R, Lewis G, Rojas G and Fritsch R (2003). Education and income: which is more important for mental health? *J Epidemiol Community Health* **57:** 501–505.

13. Butterworth P, Rodgers B and Windsor TD (2009). Financial hardship, socio-economic position and depression: results from the PATH Through Life Survey. *Soc Sci Med* **69:**229–237.

14. Jenkins R, Bhugra D, Bebbington P, *et al.* (2008). Debt income and mental disorder in the general population. *Psychol Med* **38:**1485–1493.

15. Rehkopf DH and Buka SL (2006). The association between suicide and the socio-economic characteristics of geographical areas: a systematic review. *Psychol Med* **36:**145–157.

16. Hollingshead AB and Redlich FC (2007). Social class and mental illness: a community study. 1958. *Am J Public Health* **97 :**1756–1757.

17. Meltzer H, Gill B, Petticrew M and Hinds K (1995). OPCS Surveys of Psychiatric Morbidity in Great Britain: 1995. London: HMSO.

18. Heneghan AM, Silver EJ, Bauman LJ, Westbrook LE and Stein RE (1998). Depressive symptoms in inner-city mothers of young children: who is at risk? *Pediatrics* **102 :**1394–1400.

19. Bijl RV, Ravelli A, and van Zessen G (1998). Prevalence of psychiatric disorder in the general population: results of the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Soc Psychiatry Psychiatr Epidemiol* **33:**587–595.

20. Kebede D and Alem A (1999). Major mental disorders in Addis Ababa, Ethiopia. I. Schizophrenia, schizoaffective and cognitive disorders. *Acta Psychiatr Scand Suppl* **397:** 11–17.

21. Lewis G and Sloggett A (1998). Suicide, deprivation, and unemployment: record linkage study. *Br Med J* **317:** 1283–1286.

22. Ludermir AB and Lewis G (2001). Links between social class and common mental disorders in Northeast Brazil. *Soc Psychiatry Psychiatr Epidemiol* **36:**101–107.

23. Lorant V, Deliège D, Eaton W, Robert A, Philippot P and Ansseau M (2003). Socioeconomic inequalities in depression: a meta-analysis. *Am J Epidemiol* **157:**98–112.

24. Weich S and Lewis G (1998). Poverty, unemployment, and common mental disorders: population based cohort study. *Br Med J* **317:** 115–119.

25. Siefert K, Heflin C, Corcoran M and Williams D (2001). Food insufficiency and physical and mental health in a longitudinal survey of welfare recipients. *J Health Soc Behav* **45:**171–186.

26. Patel V (2001). Cultural factors and international epidemiology: depression and public health. *Br Med Bull* **57:**33–45.

27. World Health Organization (2012). Adolescent Mental Health: Mapping Actions of Nongovernmental Organizations and Other International Development Organization. Geneva: WHO.

28. UNICEF. Child Poverty in Rich Countries 2005 [Internet] (2005). Available from: https://www.unicef-irc.org/publications/371/ [cited 2017 Apr 12].

29. Newacheck PW, Hughes DC and Stoddard JJ (1996). Children's access to primary care: differences by race, income, and insurance status. *Pediatrics* **97:** 26–32.

30. Dashiff C, DiMicco W, Myers B and Sheppard K (2009). Poverty and adolescent mental health. *J Child Adolesc Psychiatr Nurs* **22:** 23-32.

31. Qi C and Kaiser P (2003). Behavior problems of preschool children from low income families: review of the literature. *Top Early Child Spec Educ* **23:**188–216.

32. Brooks-Gunn J and Duncan GJ (1997). The Effects of poverty on children. *Future Child* **7:** 55–71.

33. Farrington D (1995). The Challenge of teenage antisocial behavior. In: Psychosocial Disturbances in Young People: Challenges for Prevention. Rutter M (ed), London: Cambridge University Press.

34. Andrade L, Walters EE, Gentil V and Laurenti R (2002). Prevalence of ICD-10 mental disorders in a catchment area in the city of São Paulo, Brazil. *Soc Psychiatry Psychiatr Epidemiol* **37:**316–325.

35. Brown GW and Moran PM (1997). Single mothers, poverty and depression. *Psychol Med* **27:**21–33.

36. Lynch J and Kaplan G (2000). Socioeconomic position. In: Social Epidemiology. Berkman L and Kawach I (eds), London (UK): Oxford University Press.

37. Muntaner C, Eaton WW, Miech R and O'Campo P (2004). Socioeconomic position and major mental disorders. *Epidemiol Rev* **26:**53–62.

38. Dohrenwend B, Levav I, Shrout P, *et al.* (1992). Socioeconomic status and psychiatric disorders: the causation-selection issue. *Science* **255:**946-952.

39. Harris T (2001). Recent developments in understanding the psychosocial aspects of depression. *Br Med Bull* **57:**17–32.

40. Kessler RC (2012). The costs of depression. *Psychiatr Clin North Am* **35:**1–14.

41. Pickett KE and Wilkinson RG (2010). Inequality: an unacknowledged source of mental illness and distress (Editorial). *Br J Psychiatry* **197:** 426-428.

42. World Bank Group (2004). Responding to Poverty: How to Move Forward in Achieving the Millennium Development Goals? Washington, DC: World Bank Group.