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# *Global Trade and Mental Health*

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**ABSTRACT** The consequences of the unprecedented growth of global trade on development and population health are significantly influenced by global trade policies that have delivered millions from poverty, but have constrained the ability of governments to regulate their economies and protect health. While the effects of global trade policy on health have been documented, mental health considerations have been very limited. This analysis explores the impact of global trade policy on a number of socio-structural determinants of mental health including poverty, social inequality, food security, mental health systems, alcohol consumption, access to pharmaceuticals and occupational health. The evidence reviewed makes a strong argument that global trade is likely to have a significant impact on mental health. However, the mental health outcomes of global trade will be influenced by a host of contextual factors and will therefore be heterogeneous. Preliminary recommendations for discussion are considered.

**KEYWORDS** *development, globalization, global trade, inequality, mental health*

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## *Introduction*

The rapid growth of global trade in the past three decades is one of the most significant components of globalization. While countries have been trading with each other for centuries, the magnitude and nature of global trade in current times is unprecedented (Labonte, 2004). Trade has largely been facilitated by development strategies that regard free trade, financial liberalization, market deregulation, privatization and flexible labour markets as the *sine qua non* of economic growth. In the development policy context this approach is commonly referred to as the 'Washington Consensus' and has been pursued by the most powerful global financial and trade institutions, namely the World Trade Organization (WTO), World Bank and International Monetary Fund (IMF). It is an approach that, according to Gore (2000: 789–90) recommends: 'that governments should reform their economic policies and, in particular: a) pursue macroeconomic stability by controlling inflation and reducing fiscal deficits, b) open their economies to the rest of the world through trade and capital account liberalization; and c) liberalise domestic product and factor markets through privatization and deregulation'. Suffice it to say, the Washington Consensus has had a major influence on trade policy development, particularly in relation to developing countries.

Global trade policies became formalized shortly after the Second World War and culminated in the establishment of the General Agreement on Tariffs and Trade (GATT) in 1947. The GATT was the primary global trade agreement (GTA) until the establishment of the WTO in 1995, which subsumed GATT and expanded trade rules to cover trade in services and intellectual property through the General Agreement on Trade in Services (GATS) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) respectively (WTO, 2007c).

Consistent with the Washington Consensus, a key principle of WTO agreements is to ensure that trade is not unnecessarily restricted by tariff or non-tariff barriers. Tariff barriers refer to financial methods of restricting trade such as import taxes, whereas non-tariff barriers refer to laws and regulations that affect trade such as those based on a threat to public health (Shaffer et al., 2005). Key related principles covered by GATT, GATS and TRIPS are that goods imported from different countries must be subject to the same tariff and non-tariff restrictions ('most-favoured-nation' [MFN]) and that these same restrictions be equally applied to locally produced goods ('national treatment') (WTO, 2007c).

Proponents of the 'Washington Consensus' argue that increasing cross-national trade will stimulate economic growth, which will benefit nations by raising per capita income, employment and government budgets for public service expenditure (Bond, 2001; Commission on Growth and Development, 2008). From this perspective, one could argue that economic growth is viewed as both a necessary and *sufficient* contribution to development (and therefore

health). By contrast, while the majority of public health advocates would endorse policies that reduce poverty and increase employment, both well acknowledged drivers of health differentials, the measure of success would be the translation of these gains into improving health and reducing health *inequality*. While this exposition is overly simplified it highlights an inescapable ontological divergence between Public Health and 'Washington Consensus' approaches to development within which debates about health and global trade can be contextualized.

The impacts of global trade on health have gained focus and analysis internationally (e.g. Hall, 2001; Jernigan et al., 2000; Labonte, 2004; Shaffer et al., 2005; Smith, 2004, 2006; WHO and WTO, 2002). However, there is dearth of literature on the association between global trade and *mental* health, defined by the World Health Organization (WHO) as '... a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community' (Herman et al., 2005: 2). The impact of global trade on mental health is important to consider in the light of the substantial and increasing Burden of Disease attributable to mental illness (Lopez et al., 2006; Prince et al., 2007).

Due to the lack of empirical data directly linking global trade and mental health this study by necessity adopts an exploratory approach; the analysis investigates the impact of global trade on established socio-structural determinants of mental health thereby illustrating how global trade policy can be expected to impact on mental health. It is hoped that such an analysis will contribute to identifying areas requiring further research and informing debates on how trade policies may be strengthened to enhance human health and development.

#### METHODOLOGY

Utilizing the literature on the socio-structural determinants of mental health and on global trade and health in general, key outcomes of global trade that may impact on mental health were identified. The socio-economic risk factors identified were poverty and social inequality, employment and occupational health, trade in neurotoxic substances, the privatization of mental health services, intellectual property of pharmaceuticals and food security. For each of these six risk factors, two bodies of evidence were sought for review of the factor in question: (1) epidemiological studies investigating the links with mental health, and (2) economic, legal and public health studies investigating the relationship with global trade. As a systematic review of 12 vast topics ([1] and [2] for six determinants) was not feasible, a narrative review of the literature in these areas was conducted whereby the best available evidence on each topic was sought. Databases consulted included: ISI web of knowledge, PubMed, MEDLINE, Econlit, PsychINFO, Academic Search Premier and Google Scholar. Additional searches were conducted on major global organization websites including those of the WTO, World Bank and WHO.

## Results

### POVERTY AND INCOME EQUALITY

There is strong evidence linking various indicators of poverty and multiple deprivation with mental ill health. In epidemiological studies, mental ill health has been associated with food insecurity (Patel et al., 1997), inadequate housing (Araya et al., 2003; Reichenheim and Harpham, 1991), unemployment (Abas and Broadhead, 1997; Araya et al., 2001; Inandi et al., 2002), low levels of education (Araya et al., 2003), social fragmentation (Harpham et al., 2004) and violence (Fleitlich and Goodman, 2001; Harpham et al., 2004; Seedat et al., 2004; Stein et al., 2002; Ward et al., 2006). The evidence appears to be less convincing for an association between mental ill health and low income per se than between mental ill health and the range of multiple deprivations that are frequently associated with income poverty (Patel and Kleinman, 2003). The types of disorders associated with deprivation are diverse and the mechanisms of the associations are likely to vary between disorders (Saraceno et al., 2005).

In terms of the causal relationship between mental ill health and multiple deprivation, there appears to be evidence for reciprocal causality. Researchers have described the interaction of poverty and mental ill health as a vicious cycle in which the conditions of poverty lead to high levels of stress, social exclusion, reduced access to health services, malnutrition and increased risk of violence, and thereby increased prevalence of and worse outcomes for mental disorders (Patel, 2001). In turn, mental ill health leads to increased health expenditure, reduced productivity, job loss and social drift into poverty (Saraceno and Barbui, 1997; Saraceno et al., 2005). Thus the capacity of individuals to engage productively in their economies is intimately linked with their mental health.

In addition, income *inequality* has also been shown to be associated with common mental disorders in low and middle income countries (Patel and Kleinman, 2003). Indeed, preliminary analysis of WHO World Mental Health Survey data indicates that greater income inequality at a national level is associated with higher prevalence of mental illness (Pickett and Pearl, 2006).

How global trade policies affect the various facets of poverty or deprivation (and hence mental health) remains disputed. In the words of Joseph Stiglitz: 'globalization *may* bring enhanced growth, but need not, and it *may* lead to increased poverty, but need not' (Stiglitz, 2004: 467). The effects of global macro-economic trade policies on national economies, employment and poverty are prone to confounding and modification by a multitude of complex factors including domestic economic and social policies, geography and degree of leverage in global trade organizations (Labonte, 2004).

Notwithstanding these difficulties, it is crucial to critically examine trends in poverty reduction and human development and their relation to increased global trade through macro-economic policies. Two examples frequently cited as evidence of the benefits of global trade are China and India, which take on added significance as the two most populous economies in the world.

After liberalizing their markets, both these countries experienced sustained economic growth with China's current annual GDP growth rate at 8.9% and India not far behind at 7% (Humphrey, 2006). These growth rates have delivered millions of people from income poverty. For example, between 1990 and 2003 the number of people living below the poverty line (US\$1 per day) in China shrunk from 33% to 13% of the population (Humphrey, 2006). In terms of how these gains have been harnessed for broader development goals, the latest United Nations Development Programme (UNDP) reports show improvements in all human development indicators in both countries (United Nations Statistics Division, 2007). However, it has been argued that the gains in human development are somewhat disproportionate to what one would expect from the growth in GDP (UNDP, 2007). Furthermore, the reduction in poverty in India (estimated as ranging between 2.4–10%) falls short of that expected from econometric models (Bhaskar and Gupta, 2007), highlighting the variable effect of economic growth on poverty reduction.

The major critique of these findings as evidence of the benefits of globalization is that aggregate data on poverty and development indicator masks gross inequalities. Indeed, there is marked disparity evident in all of the development indicators with major inequalities evident between urban and rural populations and between states of these two countries. This pattern of differential benefit derived from global trade is evident both within and across countries. For example, the GDP ratio between the richest and poorest countries has more than doubled over the past 40 years and income inequality has increased for 59% of the world's population (Jenkins et al., 2007), most evidently in Latin America, sub-Saharan Africa, South East Asia and Eastern Europe (Birdsall, 2006). Indeed, income-inequality has increased in developing countries with the share of consumption by the poorest quintile declining from 4.6% in 1990 to 3.9% in 2004 (United Nations Statistics Division, 2007).

In this context 'least developed countries' are of particular concern as they appear to have benefited least from global trade. For example, more than half of African country members of the WTO are classified as Least Developed Countries (LDCs), yet according to WTO statistics, Africa's share of regional trade flows in world merchandise exports is a mere 2.9% (WTO, 2007b). Although the WTO Doha Development Round aims to reform the multilateral trading system on developmental problems, analysts have noted that the Doha Round holds few opportunities for generating higher growth in African countries. For example, a decrease in tariff rates to non-LDC countries is proposed that will in effect erode trade preferences of LDCs that are largely responsible for their current competitive advantage over middle income countries (Jensen and Gibbon, 2007). African countries in general appear caught in a circle of increasing economic and political marginalization resulting in a lack of bargaining power and negotiating capacity (Alavi, 2007; Jensen and Gibbon, 2007).

In conclusion, while globalization may have increased income levels for millions of people, whether these translate into mental health benefits will be

at least partially determined by the extent to which they are accompanied by decreases in income inequality, and increased access to education, housing, health, security and employment.

#### NUTRITION AND FOOD SECURITY

Three areas of nutrition and food security that have been associated with mental health and are influenced by trade are highlighted in this section: farmers' livelihoods, access to food and food quality.

The growth in agricultural trade, currently estimated at approximately 7% of global merchandise trade (Food and Agriculture Organization [FAO], 2007), has accompanied the consolidation of agricultural and food companies into large transnational corporations, with global brand names and marketing strategies (Moretti, 2006; Tansey and Rajotte, 2008). As a result, many countries are moving away from the goal of national food security through investment in local agriculture and rural livelihoods towards a focus on a few agricultural exports and reliance on food imports to feed increasingly urban populations (Chopra, 2004). This shift has had a major impact on farmer's livelihoods, food security and dietary patterns, which in turn carry repercussions for mental health.

#### *Farmers' Livelihoods*

Farming is an occupation that has been recognized as being at high risk of mental illness (Fraser et al., 2005) with high rates of suicide reported among farmers in many parts of the world (Gregoire, 2002). The growth of global agricultural trade appears to have added to the strains on farmers, with epidemic rates of farmer suicides in India over the past 10 years focusing attention on the pressures faced by many small-scale farmers (Chowdury et al., 2007). For example, in the Maharastra State of India, farmer suicides rose from 15 per 100,000 farmers in 1995 to 57 per 100,000 in 2004 (World Bank, 2006).

The impact of global trade policies on the viability of small-scale farming and its impact on mental health is particularly concerning given that agriculture is still the dominant source of income for many rural populations in developing countries (Dixon et al., 2001). A number of studies and reports (Chopra, 2004; Hawkes, 2006; Orton, 2003; Oxfam International, 2007; Tansey and Rajotte, 2008) have suggested that GTAs contribute to the pressures on small-scale farmers through a range of mechanisms including: (1) increased expenditure resulting from the adoption of high-yielding varieties of seeds and agrochemicals (protected by intellectual property provisions of trade agreements) in order to remain competitive with large multi-national companies, (2) reduced access to credit by small farmers due to commitments made in the context of financial services liberalization, (3) the imposing of comprehensive tariff liberalization beyond WTO requirements in the context of regional and bilateral trade agreements, but failing to address the adverse impacts of rich-country subsidies on poor countries, the dumping of products

not sold in rich countries at non-competitive prices or the plethora of non-tariff barriers that impede access to rich-country markets.

### *Access to Food*

Food insecurity can impair mental health either through psychological pathways leading to anxiety or through the direct effect of nutritional shortfalls on brain functioning (Heflin et al., 2005). Evidence from cross-sectional surveys in the USA and Canada show that food insecurity is strongly associated with major depression, suicidal behaviour among teenagers and psychological distress (Patel et al., 1997; Stuff et al., 2004; Vozoris and Tarasuk, 2003). Similar findings have been found in studies of children. Weinreb et al. (2002) found that, compared to children without hunger, children with severe hunger were significantly more likely to have higher rates of depression and anxiety. Interestingly, their parents were also found to have higher reported depression and anxiety, which has been confirmed by other studies (Whitaker et al., 2006). The effects of food insecurity on mental health persist even after adjustment for a wide range of potential confounders.

It is often argued that despite losses for producers, consumers are the real beneficiaries of cheaper imports resulting from greater tariff liberalization. Yet, food insecurity remains a widespread problem with 17% of developing country populations remaining undernourished (FAO, 2007). In 2003, the FAO estimated that there were 854m undernourished people worldwide, and that virtually no progress has been made towards the World Food Summit target of halving undernourished people by 2015 (FAO, 2006).

Complex realities underlie the prevalence of food insecurity. Amartya Sen's seminal work demonstrated that widespread famines occurred at the same time as food was being exported from those same areas (Sen, 1981). When a few large importers control the market, consumers may not see the benefits of lower cost imports. For example, in Honduras the top five importers currently control 60% of the rice trade. When rice tariffs were lowered the import price fell by 40% between 1994 and 2000. The real consumer price, however, actually rose by 12% between 1994 and 2004 (Oxfam International, 2007). Additionally, heavy dependence on food imports entails major risks. Highly volatile commodity prices on world markets exacerbated by sudden changes in subsidy policies and changes in exchange rates, can dramatically affect consumer prices.

### *Food Quality*

There are clear associations between diet quality and mental health. A recent review indicates that nutritional deficiencies arising from changes in diet and decreased consumption of fruit and vegetables are likely to be a risk factor for depression (Bodnar and Wisner, 2005). Cross-sectional evidence demonstrates that obesity is associated with significant increases in common mental disorders, bipolar disorder and panic disorder (Dong et al., 2004; Prince et al., 2007;

Wardle et al., 2006). While this association may occur in both directions, prospective studies have demonstrated a *causal* association between obesity and common mental disorders (Kasen et al., 2007).

Global economic policies regarding agriculture, trade, investment and marketing have a significant impact on the type of food eaten (Hawkes, 2006). Poor diet quality and aggressive marketing strategies have contributed to the global epidemic in obesity and diet-related chronic diseases (Hawkes, 2006). In the USA, for example, approximately one third of adults are obese (Baskin et al., 2005). The problems of obesity are increasing even in countries where hunger is endemic (Chopra et al., 2002). On the other hand, the potential for the private sector to actively promote healthy diets should also be noted, as suggested by trends in marketing low fat, low sugar, low salt and high fibre foods (Coveney, 2003). However, to have an impact on the growth of obesity in developing countries, the price of such products would clearly need to be affordable to low and middle income country consumers.

National governments have a role to play in creating regulatory environments that balance the interests of the food industry and promote public health and healthy diets (Coveney, 2003). Successes of public health policies in Finland and Norway illustrate that, if national governments are not unduly restricted by trade agreements or policies, adverse dietary trends can also be addressed through price manipulation, public education and clear food labelling (Chopra et al., 2002). Public policies regarding pricing and labelling are, however, vulnerable to being challenged in the context of trade policies as these interfere with commercial interests and markets more than, for example, public education.

#### TRADE IN NEUROTOXIC SUBSTANCES

The trading of substances that may be toxic to human health are covered by either the Agreement on Technical Barriers to Trade (TBT Agreement) or the Agreement on Sanitary and Phytosanitary Measures (SPS Agreement). Contrary to what one might expect, these agreements aim to 'ensure that product requirements, and procedures that are used to assess compliance with those requirements, do not create unnecessary obstacles to trade' (WHO and WTO, 2002: 32). Consistent with the goals of removing barriers to trade, the rationale for these agreements is that governments may seek to protect their markets through fallacious claims about health risks related to foreign products or services. The trade in alcohol will be used to illustrate the manner in which trade agreements can erode nation states' control of substances hazardous to mental health. There are of course many other examples such as the trades in tobacco or lead-containing fuels.

The consumption of alcohol can affect mental health via four mechanisms. First, the use of alcohol may lead to abuse or dependence, mental health problems associated with significant disability in their own right (Obot, 2006). Second, alcohol use and particularly misuse may also cause or exacerbate other mental disorders such as depression (Strakowski et al., 2000; Swofford

et al., 1996). Third, the contribution of alcohol to interpersonal violence, road traffic incidents and increased levels of risky sexual behaviour indirectly impacts on mental health through exposure to trauma, disruptions of family systems, unwanted pregnancy and HIV/AIDS (Obot, 2006). Finally, substance use during pregnancy affects foetal development and can lead to a range of mental disorders including Foetal Alcohol Syndrome (Fischer et al., 1999; National Institute on Alcoholism and Alcohol Abuse, 2000).

Adult per capita alcohol consumption is related to the prevalence of heavy use and alcohol-related harm but this relationship is modified by the number of drinkers in a population and the patterns of alcohol use (WHO, 2003). Although the highest alcohol consumption occurs in economically developed regions of the world, data on consumption in developing countries is usually an underestimate due to informal trading of alcohol not being recorded and a high concentration of consumption in small groups of the population (with per capita consumption understating consumption by drinkers) (Jernigan et al., 2000; Rutherford et al., 2003). Furthermore, global sales figures indicate a convergence of consumption trends with increases in traditionally low-consuming countries and declining consumption in previously high-consumption countries (WHO, 2003). Of particular concern is the rise of alcohol consumption in emerging economies such as China and Thailand (WHO, 2003). Analysis of trends in the developing world 'suggests that alcohol consumption and related harm increase as economic development raises buying power' (Jernigan et al., 2000; Rutherford et al., 2003: 493). This is particularly concerning given that the highest rates of harmful drinking patterns have been found in developing countries (Rehm et al., 2003). For example, although South Africa's recorded per capita consumption is lower than European countries, South African drinkers have a high frequency of heavy drinking occasions, the usual quantity of alcohol consumed is high and they commonly drink in public places (Obot, 2006).

Multinational companies have recognized developing countries as attractive investment opportunities due to the demographic composition (large numbers of youth), weaker restrictions on alcohol promotion and control and lack of market saturation (Rutherford et al., 2003). As a result, and facilitated by the absence of trade restrictions on alcohol, trade in Latin America and Africa are largely responsible for the growth in sales of the largest multinational alcohol industries (Caetano and Laranjeira, 2006).

Liberalization of the alcohol market accompanying GTAs has resulted in the privatization of alcohol production and distribution in many countries (Jernigan et al., 2000). Deregulation and privatization have commonly been accompanied by increases in the availability of alcohol through greater numbers of liquor outlets, changes in price, longer hours or more days of sale (Her et al., 1999). This has been well documented in North America and Europe and is likely to be similar in developing countries (Jernigan et al., 2000). Furthermore, in developing countries, the privatization of alcohol production

and distribution has often been encouraged by development agencies under the aegis of economic reform (Jernigan et al., 2000).

A related issue is the impact of trade agreements and trade dispute mechanisms on the erosion of national alcohol control regulatory frameworks. Under current WTO agreements, proven interventions such as price controls can become very difficult to maintain if challenged. For example, Chile fought to maintain its policy of tax on alcohol related to alcohol content such that higher alcohol beverages were taxed more heavily, but because imported alcoholic beverages from the European Union (EU) had higher alcohol levels than those produced locally this was challenged as a violation of the national treatment principle. The WTO tribunal ruled in favour of the EU (WTO, 2007a).

Regional trade policies have also been shown to have adverse effects on alcohol control. For example, the European Court of Justice ruled that the Swedish government had to remove the longstanding ban on the advertising of alcohol as its effectiveness on reducing alcohol-related harm was not considered 'proportionate' to the damages to trade that would result. Alcohol consumption subsequently rose by 8.3% (McLoughlin and Fairweather, 2002; Rutherford et al., 2003). Indeed, the requirement to prove that harm is proportionate to trade losses is identical to that found in the SPS and TBT agreements of the WTO (WHO and WTO, 2002). GATS and commitments related to distributional services also prevent the regulation of liquor outlet density, a proven intervention for reducing alcohol consumption (Shaffer et al., 2005).

The benefits of globalizing the alcohol industry include increases in employment, increased exports, import substitution and improved product quality. While this has not universally been the case, it is important to acknowledge that alcohol production and sale generates significant revenue for farmers, manufacturers, the hospitality industry, advertisers and investors. 'Alcoholic beverages are, by any reckoning, an important, economically embedded commodity' (WHO, 2003: 1343). It is equally important to recognize, however, that alcohol is 'no ordinary commodity' (Babor et al., 2003; WHO, 2003).

#### EMPLOYMENT AND OCCUPATIONAL HEALTH

The nature of the working environment is a well-acknowledged determinant of mental health and has been significantly shaped by the growth in global trade and the policies governing this trade.

The literature on work and mental health makes use of the term 'work stress' which can be defined as 'a pattern of emotional, cognitive, behavioural and physiological reactions to adverse and noxious aspects of work content, work organization and work environment' (Kortum and Ertel, 2003: 35). Cross-sectional and longitudinal studies have demonstrated that 'work stress' is associated with a significantly higher incidence of depression, chronic fatigue, aggression, unhealthy lifestyle habits, early retirement, burnout, alcohol abuse, summarization and musculoskeletal disorders (Froneberg, 2003; Tennant, 2001). The importance of work for mental health is reflected in the

finding that work and family are the two most important domains in people's assessment of their Quality of Life (Tennant, 2001).

Aspects of work resulting in 'work stress' include organizational culture, career-related anxieties such as potential for advancement and job insecurity, unpleasant or dangerous working environments, and imbalances in the home and social-work interface (Froneberg, 2003; Kortum and Ertel, 2003; Tennant, 2001). Low status employees are most at risk for developing psychological distress when exposed to these stressors (Tennant, 2001). The model commonly used to conceptualize how these factors operate is the Demand-Control-Support Model, which postulates that low control, high demand and low social support result in mental illness (De Lange et al., 2004).

Concern is expressed at the 'growing epidemic' of work-related stress reportedly to have doubled in the EU since 1990 with current prevalence rates here at 28% (Froneberg, 2003). Given the evidence on the predisposing employment conditions for work stress, it is clear that where global trade threatens job security, safety and quality, and increases the demands on workers, the 'epidemic' of work stress is likely to grow.

The International Labour Organisation (ILO)-WTO review on trade and employment suggested that while globalization may be good for some workers it may not be good for all workers, and its distributional implications should not be ignored (Jenkins et al., 2007). The opening of national borders to investment has increased the supply of unskilled labour in the global economy; this together with the low costs of labour in low and middle income countries has driven down the costs (and hence wages) of unskilled labour in general as countries compete with each other to secure multinational contracts for production (Jenkins et al., 2007). The shift of production to low and middle income countries has also been associated with job losses in industrialized countries where wages are higher and conditions of employment are more stringently regulated (ILO, 2002; Shaffer et al., 2005; WHO, 2006).

In general, the effects of labour market adjustments to globalization have been characterized by a rise in less secure jobs and casualization (contract-work), even at high levels in the work hierarchy, and in developing countries particularly, a massive shift to informal sector employment (ILO, 2002; Jenkins et al., 2007; Loewenson, 2001; WHO, 2006). Indeed, research indicates that, even when unfounded, the perception of job security is sufficient to negatively affect mental health (McDonough, 2000). Evidence also suggests that redundancies may be harmful to mental health (Egan et al., 2007).

While some countries have experienced a rise in employment, the quality of work, particularly low-wage unskilled work, has decreased in many instances with the ILO having initiated several calls for the creation of 'decent work' rather than just employment per se (ILO, 2002). The quality of work generated as a result of global trade policies or GTAs is difficult to quantify, as well as their direct relationship to working conditions. However, evidence indicates job demands have increased while job control has decreased and

workers are exposed to a greater number of occupational hazards as a result of the introduction of new technologies and chemicals into the workplace (De Vries and Wilkerson, 2003; Froneberg, 2003; ILO, 2002; Kortum and Ertel, 2003; Loewenson, 2001).

Low and middle income countries are particularly affected by these changes in the working environment due to their comparatively weak regulatory and enforcement capacity (Shaffer et al., 2005). This is exacerbated by the concurrent problems of inadequate surveillance and monitoring of occupational injuries and diseases, weakly organized labour movements and the overriding need for economic growth in these countries (Jenkins et al., 2007; Loewenson, 2001). Moreover, WTO agreements place significant constraints on the scope of national governments to regulate trade in hazardous substances (Brown, 2005). In general, it can be argued that the growth in global trade has outpaced both the development of policies and regulations to ensure occupational safety and the capacity of institutions, such as the ILO, to enforce existing standards (Jenkins et al., 2007; Loewenson, 2001; MacPherson et al., 2007).

The shift towards employment in the informal sector documented in developing countries is associated with greater occupational risks and job insecurity due to lack of regulation of this sector, the absence of union protection and forced occupational mobility (ILO, 2002; Jenkins et al., 2007; Kortum and Ertel, 2003). In addition, informal sector work is often carried out by the most vulnerable groups in society such as women and children. Women as a group are differentially affected by the pitfalls of global trade; they are more likely to be unemployed as the job losses associated with global trade differentially affect traditionally female jobs, such as clothing manufacture and farming (WHO, 2006).

Another trend in the global labour market linked to global trade is the increase of migrant labour (MacPherson et al., 2007). While gains in employment may improve mental health, migrants are vulnerable to exploitation and disruptions of the family unit, culture shock, lack of access to culturally appropriate services and experiences of xenophobia, which may compromise mental health (Bhugra, 2004).

#### MENTAL HEALTH SERVICES

Trade and choices in trade policy can impact mental health through the financing, provision and distribution of mental health infrastructure, services, people (patients and professionals) and medicines (Saxena et al., 2007). Access to mental health care is clearly an important factor influencing the burden of mental illness (Saxena et al., 2007).

The General Agreement on Trade in Services (GATS) aims to promote economic development through progressive liberalization of all services, including health services, discouraging discrimination against foreign suppliers of services (Shaffer and Brenner, 2004; Shaffer et al., 2005; Smith, 2004). While governments do have scope in deciding how and which sector they

want to liberalize, it can be argued that GATS enhances prospects of commercialization and privatization of health services in the long run. Furthermore, governments of developing countries may find themselves under international or economic pressure to refrain from excluding services provided on a commercial basis (Hall, 2001).

We focus here in particular on concerns with respect to privatization and commercialization of mental health services provision as well as implications of increasing mobility. However, access to water, sanitation, electricity and education have been associated with mental health and are also influenced by privatization under GATS. Indeed, the long-term protective nature of education against common mental disorders is well documented (Chevalier and Feinstein, 2004; Lorant et al., 2003; Patel et al., 1999) and preliminary research findings suggest that access to basic services may also be important for mental health (Lepore et al., 1991; Parkar et al., 2003; Swartz et al., 2005).

GATS covers four modes of supply for the delivery of services in cross-border trade, two of which are relevant to this discussion: (1) commercial presence (*mode 3*), where foreign companies invest or enter into a joint venture with local partners in a country's health care sector (e.g. a foreign company investing in a domestic hospital) and (2); presence of a person abroad (*mode 4*), where skilled workers move to other countries to work (i.e. migration of mental health personnel) (Waeger, 2007).

*Mode 3* has the potential to substantially alter the profile of mental health service provision. Health service provision has traditionally remained embedded in state structures, yet health care has increasingly become subject to processes of privatization and contracting out (Holden, 2005). While it can be argued that trade liberalization may improve the quality of care by promoting the adoption of international standards (Bettcher et al., 2000), this potential benefit may be offset by a number of factors related to the privatization and commercialization of mental health services.

First, in the negotiation of trade agreements, power imbalances and lack of technical capacity may constrain the ability of developing countries to develop sound regulatory frameworks that ensure equitable access to mental health care. Yet domestic policies are vital in developing safeguards regarding standards of health care, professional accreditation, subsidization policies for disadvantaged groups, conditions placed on profits, reinvestment and resource transfer to the government. Such safeguards play a key role in determining the nature of the impact of commercial presence in the health sector (Smith, 2004).

Second, privatization tends to favour vertical models of care delivered by specialists. Due to high levels of comorbidity between mental and physical disorders, effective delivery of mental health services requires integration into primary health care and close collaboration with other health specialities (Hall, 2001; Prince et al., 2007). Therefore, where privatization is not regulated to ensure integrated models of care, the burden of both physical and mental morbidity is likely to increase.

Third, international evidence has demonstrated the impact of different sources of funding (private health insurance, taxes and user charges) on the quantity, efficiency and equity of mental health service provision (Dixon et al., 2006). For example, private health insurance poses three problems for mental health service users: exclusion of mental health benefits from many packages, restricted access to the unemployed and refusal to insure pre-existing conditions (Dixon et al., 2006; Saxena et al., 2007). Given the strong correlation between mental disorders and unemployment, people with mental health problems are likely to be disadvantaged by the possibility of an increased role for financing through private health insurance in employment-related insurance schemes. Similarly, international evidence suggests that charging patients for mental health services results in inequitable access to care and can result in 'catastrophic health expenditure' for households living near the poverty line (Xu et al., 2003).

A critical factor to consider is the impact of the GATS on human resources for mental health, given that shortages of mental health workers are a major factor hindering care in low and middle income countries (Saxena et al., 2007). Through *Mode 4*, the GATS can affect the availability, distribution and migration of health care workers (Sanders and Lloyd, 2005). For example, agreements made through GATS can reduce barriers to migration of health personnel, such as immigration, entry visas, work permits and the harmonization of qualifications (Sanders and Lloyd, 2005; Shaffer and Brenner, 2004). Large-scale migration of skilled health professionals to high income countries has caused a major challenge to developing countries, and is predicted to increase, given the continuing shortages of health professionals in developed countries (Sanders and Lloyd, 2005).

While patterns of migration of skilled workers can improve the average health status and the distribution of health in the host country, sending developing countries typically incur a double cost, caused by the investment in specialist training in addition to the subsequent loss of human resources (Sanders and Lloyd, 2005). Such losses are partially offset by remittances flows. However, these remain in the private sector and do not lead to investment in the public sector (Bhugra, 2004). Within countries, the internal brain drain to the growing private sector, facilitated by GATS, can also aggravate the shortage of personnel and worsen the existing inequitable distribution of health care resources (Chanda, 2002).

#### MEDICINES

Access to psychotropic medication is a key component of mental health care delivery (Jacob et al., 2007). Unavailability of essential medicines already constrains mental health treatment. About a quarter of low income countries do not provide even basic antidepressant medicines in primary care settings (Saxena et al., 2007). The availability and distribution of medicines for other diseases also has a major effect on mental health, through the significantly

increased risk for mental illness associated with diseases such as HIV/AIDS, cardiovascular disease, diabetes, TB and malaria. Mental disorders also act as risk factors and lower adherence to treatment for many of these conditions (Prince et al., 2007).

The pharmaceutical sector, including psychotropic medicines, is significantly affected by the Trade-Related Aspects of Intellectual Property Rights (TRIPS). TRIPS establishes minimum standards for intellectual property rights, protecting patented drugs from generic competition for 20 years (WHO, 2005a). Typically the pharmaceutical industry highlights the importance of patent protection for continued investment in research and development of new medicines (Bettcher et al., 2000). However, concerns regarding the effects of TRIPS on access to medicines in developing countries are frequently raised (Shaffer and Brenner, 2004; WHO, 2005a).

Cost of medicines is an important determinant of access, particularly in developing countries where 'out-of-pocket' payments are common (WHO, 2005a). TRIPS and further measures protecting patented drugs from generic competition in bilateral agreements influences the choice and cost effectiveness of various drugs, with a greater influence on newer medicines (see for example Fink and Reichenmiller, 2005; Roffe and Spenneman, 2006).

With regard to psychotropic medicines, recent cost-effectiveness studies indicate that while newer psychotropic medicines are usually more expensive they are not significantly more effective than older medicines. However, they have fewer side effects, which may help improve adherence and decrease the costs of overall treatment needed for other care and treatment (Saxena et al., 2007; WHO, 2005a). Moreover, new antidepressants do offer more effective treatment for severe depressive episodes (WHO, 2005a).

While the Doha Declaration in 2001 confirmed the right of countries to use safeguards, such as compulsory licences, to overcome patents in order to protect public health (Shaffer et al., 2005), many barriers hinder the application of the safeguards ('flexibilities'), such as lack of awareness and legal expertise, inappropriate national laws and pressure from large multinational pharmaceutical industries (Khor, 2007). In the context of the complexities affecting decisions about selecting psychotropic medicines, national institutions should have the freedom to make decisions guided by public health considerations rather than economic agreements (WHO, 2005a). It has been argued that particularly for severe psychiatric disorders, drugs should be excluded from patent protection (De las Cuevas et al., 2002).

Regional and bilateral free trade agreements are also being used by powerful countries, led by the USA and the European Union (EU), to win concessions extending the requirements of TRIPS (referred to as TRIPS+ requirements), which discourage competition from generic medicines, through patent extensions and data exclusivity requirements (Fink and Reichenmiller, 2005; Oxfam International, 2007; Roffe and Spenneman, 2006).

## *Conclusion*

Empirical evidence of the *direct* effects of macro-economic global trade policies on mental health outcomes is lacking. However, such difficulties are not unique to this study. As Herman and Jané-Lopis (2005: 43) explain: 'Evidence for direct causal pathways is generally strongest for the most immediate influences.' Researchers analysing the links between poverty reduction policies and mental health have faced similar problems and emphasize that 'absence of evidence should not of course be mistaken for evidence of absence' and stress that 'plausible preventive interventions' can nevertheless be applied (Petticrew et al., 2005: 204).

In the context of global trade and mental health, there is robust evidence that mental health is causally linked with poverty and deprivation, income inequality, alcohol misuse, occupational stress, food insecurity and access to mental health services and treatment, all of which have been or are likely to be affected by global trade. Equally, global trade has the potential to decrease the risk factors for mental illness. Therefore, there is a strong case to be made for global health and development institutions and nation states to regulate global trade with a view to *preventing* adverse consequences for mental health. In a context where mental illness is already a leading contributor to the global burden of disease (WHO, 2004), costs countries approximately 4% of their GDP (WHO, 2005b) and is causally linked with poverty and poor educational, employment and health outcomes, preventing mental illness should be regarded as a critical investment in development.

### RECOMMENDATIONS

Notwithstanding the significant challenges in empirically demonstrating direct links between global trade and mental health, ecological and prospective studies of the links between particular aspects of global trade, the potential mediators identified in this analysis and mental health outcomes would clearly strengthen advocacy efforts aimed at protecting and promoting mental health.

In the interim it is important to advocate for highly 'plausible preventive interventions' that promote mental health, prevent mental illness and contribute both directly and indirectly to human development. In this regard, we suggest on the basis of the review that several key areas merit serious consideration and debate:

- The expansion of trade preferences for developing countries, in particular LDCs
- Increasing the representation and capacity of LDCs and developing countries in global trade decision-making bodies
- Revising of GTAs to ensure food security in developing countries
- Recognition of alcohol as a formidable risk to health; regulation and monitoring to prevent the erosion of evidence-based alcohol control policies, particularly in countries undergoing rapid economic growth

- Expansion of the Core Standards of Labour to cover basic conditions of employment and equitable wage
- Limitation of privatization of health, education and other basic services
- Investment in global initiatives aimed at reducing the constraints preventing countries from implementing legal safeguards provided under TRIPS, such as compulsory licensing
- Monitoring and regulation of TRIPS+ agreements
- The exclusion of psychotropic drugs for severe mental disorders from patent protection
- Monitoring and evaluation of the impact of GTAs on mental health outcomes

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#### RÉSUMÉ

### *La Politique Commerciale Globale et la Santé Mentale*

La croissance sans précédent du commerce global a eu un impact important mais variable sur les économies des nations. Les conséquences de cela sur le développement et sur la santé démographique sont, de façon significative, sous l'influence des politiques commerciales globales qui, dans quelques cas, ont libéré des millions des gens de la pauvreté, mais y ont érodé la capacité de gouvernements de réguler leurs économies et de protéger la santé. Pendant que les effets de politique commerciale globale de la santé physique ont été bien documentés, les considérations de la santé mentale ont été très limitées. Cet article explore l'impact de la politique commerciale globale sur un certain nombre des facteurs sociostructurels de santé mentale incluant la pauvreté, l'inégalité sociale, la sécurité alimentaire, les changements climatiques, les systèmes de santé mentale, la consommation d'alcool, l'accès aux produits pharmaceutiques, et règlement sur la santé et la sécurité au travail. Les éléments de preuve font l'argument convaincant que le commerce global peut significativement influencer sur la santé mentale. D'une manière importante, les issues de santé mentale de commerce global vont en toute probabilité être hétérogènes. Les recommandations préliminaires pour la réforme de politique sont considérées.

#### RESUMEN

### *La Política Comercial Global y la Salud Mental*

El aumento inaudito del comercio global ha tenido un gran, pero variable, impacto sobre las economías de ciertas naciones. Las consecuencias de este impacto sobre el desarrollo y la salud de las poblaciones están apreciablemente influidas por políticas de comercio global. Estas políticas han librado, en algunos casos, a millones de personas de la pobreza, pero han reducido la capacidad de ciertos gobiernos de regular sus economías y proteger la salud. Aunque los efectos de la política comercial global sobre la salud están documentados, las consideraciones para la salud mental están muy

limitadas. Este análisis investiga el impacto de la política comercial global sobre algunos factores socio-estructurales de la salud mental, incluso la pobreza, la desigualdad social, la seguridad de alimentos, el cambio climático, los sistemas de salud mental, el consumo de bebidas alcohólicas, el acceso a los fármacos y la salud ocupacional. Las pruebas examinadas muestran que el comercio global podría tener un impacto considerable sobre la salud mental. Además, existe la posibilidad de que las consecuencias de salud mental del comercio global sean heterogéneas. Las recomendaciones preliminares para la reforma de la política están consideradas.

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