



Making strides in women's mental health care delivery in rural Ethiopia: demographics of a female outpatient psychiatric cohort at Jimma University Specialized Hospital (2006–2008)

Citation

Chemali, Zeina N, Christina PC Borba, Tanya E Henderson, and Markos Tesfaye. 2013. "Making strides in women's mental health care delivery in rural Ethiopia: demographics of a female outpatient psychiatric cohort at Jimma University Specialized Hospital (2006–2008)." *International Journal of Women's Health* 5 (1): 413-419. doi:10.2147/IJWH.S43617. <http://dx.doi.org/10.2147/IJWH.S43617>.

Published Version

doi:10.2147/IJWH.S43617

Permanent link

<http://nrs.harvard.edu/urn-3:HUL.InstRepos:11717616>

Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA>

Share Your Story

The Harvard community has made this article openly available. Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)

Making strides in women's mental health care delivery in rural Ethiopia: demographics of a female outpatient psychiatric cohort at Jimma University Specialized Hospital (2006–2008)

Zeina N Chemali^{1,2}
Christina PC Borba^{1,2}
Tanya E Henderson³
Markos Tesfaye⁴

¹Department of Psychiatry, Massachusetts General Hospital, Boston, MA, USA; ²Harvard Medical School, Boston, MA, USA; ³International and Human Rights Law Consultants, Cambridge, MA, USA; ⁴Department of Psychiatry, College of Public Health and Medical Sciences, Jimma University, Jimma, Ethiopia

Abstract: This paper presents the delivery of mental health care to a sample of women living in Jimma, rural Ethiopia, and their access to mental health services. A total of 226 psychiatric charts were reviewed for women seen at Jimma University Specialized Hospital. The mental health charts included documentation ranging from one paragraph to a full note. No psychiatric chart recorded medication status, detailed substance abuse history, or a history of violence. Rendering appropriate mental health care for women requires concerted efforts by multiple stake holders. Using our results, we advance concrete and practical suggestions for improving women's mental health in rural Ethiopia. We point out that the health care system needs to be responsive, allowing for change starting with gender rights, so that rural women have access to basic mental health services.

Keywords: global mental health, low income country, Africa, gender differences

Introduction

Women's right to health has been the subject of many conferences and symposiums worldwide, and is a pivotal point in the achievement of Millennium Development Goals (MDG).¹ While some strides, albeit minimal, have been achieved, mental health lags behind, both as a general subject and more so as it becomes pertinent to women's mental health. Mental health providers and reform activists advocate that gender equity and women's empowerment is a prerequisite for women's better health and optimal mental health and well-being.² In 1995, the United Nations Beijing Platform formally acknowledged, "women have the right to the highest attainable standard of physical and mental health. The enjoyment of this right is vital to their life and well-being ..."³ Women's mental health and empowerment are also critical to achieving sustainable progress in areas of socioeconomics, government policies and in the cultural environment which enables women to engage in and sustain the development process. As one can easily conclude, mental health is integral to maternal health, child health, and education. Empowering women over their health may further decrease risk of violence and sexually transmitted diseases. While the United Nations Beijing Platform policy was established more than a decade ago, the principles enlisted remain hard to apply to real life. Globally, women are viewed in the role of wives and mothers, raising children and caring for household members within the "private" domain of home and family structures, while participating in the "public" realm of industry and politics (financial transactions, political decision-making and leadership) is largely limited

Correspondence: Zeina N Chemali
Departments of Neurology and Psychiatry, Division of Global Psychiatry, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
Tel +1 617 724 5600
Fax +1 617 726 7541
Email zelchemali@partners.org

to men. As a result, women's sovereignty over their health, including mental health, well-being, and empowerment, is often restricted and inadequate.

Ethiopian women are no exception to this phenomenon. This paper presents a review on the mental health delivery of care to women in Jimma, rural Ethiopia, and their access to mental health services. Demographic and descriptive data were collected on services and care rendered at an outpatient psychiatric clinic at Jimma University Specialized Hospital (JUSH) in rural Ethiopia. These data are presented as they describe the introduction to, and follow-up care of, Ethiopian women suffering from mental health problems. The manuscript concludes by offering possible solutions in promoting women's mental health and well-being, enhancing wider community development.

Ethiopian setting

Ethiopia is a country situated in the "Horn of Africa" region. It covers 1,221,900 square kilometers and shares borders with Sudan, Eritrea, Kenya, Somalia, and Djibouti. According to 2009 estimates, its population has grown to 85,237,338. Ethiopia is a young population, with the 0–14 years range accounting for 46.1% of the population and the 65 years plus range accounting for only 2.7% of the population.⁴ The life expectancy at birth is 55.41 years, with women's life expectancy (58 years) slightly higher than that of men (53 years). Out of 100,000 live births or deliveries, about 350 mothers die as a result of childbirth complications.⁵ Ethiopia is among the least developed countries in the world, with Gross National Income (GNI) per capita of US\$110 in 2004.⁵

Despite the fact that Ethiopia is considered one of the more proactive African countries working to reach MDGs, gender inequities are rampant, especially in rural settings.

The public health care system in Ethiopia is still underdeveloped. There are 2.8 physicians per 100,000 population, and 2,123 primary health care clinics in the country, of which a large proportion are privately run.⁶ Additionally, the government subsidizes non-physician-based clinics and clinical programs managed by health care workers. In the year 2008–2009, there were 195 hospitals and 1,362 governmental primary health centers run by 1,606 health officers in service.⁶

The status of women in Ethiopia

Despite newly introduced policy instruments and legislative commitments designed to serve women's interests, Ethiopia remains one of Africa's most tradition-bound societies. A vast majority of Ethiopian women, particularly in rural areas,

live in a state of poverty and dependence, and rarely benefit directly from development initiatives. There have been few studies concerning women in Ethiopia. However, recent literature affirms that low status characterizes nearly every aspect of an Ethiopian woman's life.⁷ Traditional sociocultural installations and practices impose powerful constraints on women's rights and autonomy. Heavy workloads imposed on females at a young age, early marriage without choice, harmful traditional practices, and a subservient role to her husband and in-laws, leave women with few opportunities to make and act on their own decisions.⁷

Ethiopian women and girls experience gender-based violence daily.⁸ And gender-based divisions of labor make women responsible for all household and familial chores in addition to their support for agriculture and livestock.⁸ Over 85% of Ethiopian women live in rural areas where scarcity of water and fuel further burden women's workloads. Under traditional Ethiopian laws and customs, household resources and property are administered and controlled by the male head of household; inherited by sons only; and in the case of divorce, is most often retained by the husband.⁹ Since the enactment of its 1993 National Policy on Women, the Ethiopian government has initiated a series of social, economic, and political policies aimed to address the profound inequities experienced by Ethiopian women. Ethiopia's 1995 Constitution explicitly guarantees women equal rights with men.¹⁰ Changes in the law, however, remain unknown by much of the population and are rarely enforced by local authorities. As a result, deeply imbedded discriminatory practices against women, and male dominance, continue to prevail in both private and public spheres.^{10,11}

Mental health in Ethiopia and Jimma

Similar to other low-income countries, mental health in Ethiopia is largely neglected. Of the total national expenditure for health, mental health expenditures have never increased beyond 2% of the budget. Additionally, while a national mental health strategy is under development, there is currently no mental health policy in Ethiopia.¹² There is no provision for special women's mental health care or policy in Ethiopia.

Reports suggest that mental health problems account for nearly 12% of disease burden in Ethiopia^{13,14} and carry a lifetime prevalence for any International Classification of Diseases (ICD)-10 diagnosis of 18.7%.¹⁵ Despite these numbers, earlier reports show that less than 10% of adults with severe mental illness were treated with up-to-date psychiatric services.¹³ The vast majority of people with mental health conditions continue to be treated by traditional methods.¹⁶ For

many years, professional mental health services were offered in only two locations: Amanuel Hospital in Addis Ababa, the sole mental hospital in Ethiopia, and an outpatient department in a general hospital run by Addis Ababa University. With growing demand and need for additional services in the country, decentralization of all health services, including mental health, was put into place by the national/government based campaign in Ethiopia, with more than 50 psychiatric outpatient clinics outside of the capital city, Addis Ababa. They remain poorly staffed and suffer from lack of drug supply. For example, psychotropic drugs are included in the national list for essential medicine but have poor supply sustainability.¹⁷ There were 34 psychiatrists in Ethiopia in 2009.¹⁴

Community based studies have found that mental disorders are a common health problem in Ethiopia. The 1-month prevalence of mental distress has been reported to be 11.7% and 17.4% in urban and rural settings respectively.^{18,19} The lifetime prevalence of schizophrenia and schizoaffective disorder was 0.9%.¹⁹ The prevalence for affective disorders was reported to be 5%, whereas that for neurotic and somatoform disorders combined was 10.8%.^{13,17} The prevalence of khat use in a rural community was found to be 55.7%.¹⁴ One percent of the adult population has a lifetime history of alcohol dependence.¹⁵

Jimma, a region southwest of Addis Ababa, shared the same fate of scarce resources for mental health care, despite a 1960s study finding a prevalence of psychiatric morbidity of 9.1% among the rural community in Southwestern Ethiopia,^{18,19} two decades passed before mental health services were brought to this region. In 1988, psychiatric nurses were hired to staff JUSH (formerly Jimma Hospital) and run a community clinic serving Jimma town and rural dwellers in the Jimma zone (sub-region). Eight years later, in 1996, an acute psychiatric inpatient unit was launched, which included seven beds in the auspices of the general hospital. Services in the psychiatric unit eventually grew to its current status, with 26 inpatient beds, and outpatient services are provided for hundreds of patients monthly. In addition, as no mental health services are present in any district hospitals or primary care centers within Jimma zone, this psychiatric facility continues to be a referral center for a population of over five million inhabitants of Southwestern Ethiopia.

Methods

Chart review on women attending the psychiatric facility at JUSH

Psychiatric charts were reviewed for all women seen at JUSH from 2006 to 2008, with Institutional Review Board

approval from JUSH and with Partners Healthcare acknowledging JUSH's extramural Institutional Review Board. In total, 246 psychiatric charts were retrieved for review. Of these, 20 charts lacked notations. As a result, a total of 226 psychiatric records were reviewed in depth. We extracted relevant data from charts onto a data sheet before analysis. For the same time period, we documented a total number of 42,000 medical visits to the hospital under general medicine. Medical visits were defined as medical consults such as headaches, HIV, pneumonia, fever, and malaria. The ratio of visits to psychiatric versus general medicine was 246/42,000 (0.57%).

Results

Descriptive data

The 226 remaining charts had documentation ranging from one paragraph and quick SOAP note (subjective, objective, assessment, and plan) to a full note with chief complaint, history of present illness, past medical history, medications, family history, social history, exam, assessment, and plan. The most common presentation for chief complaint was "abnormal behavior dating for [] days".

Additionally, no psychiatric chart recorded allergy status, comprehensive list of patient's medication, the benefits and/or side effects related to the treatment, symptoms in relationship to menstrual cycles, detailed substance abuse

Table 1 Demographic characteristics of women attending the psychiatric facility at Jimma University Specialized Hospital (n = 226)

	Mean (SD)	n (%)
Age	28.74 (12.86)	
Psychiatric diagnosis*		
Attention deficit disorder		5 (2.2)
Bipolar affective disorder		42 (18.8)
Complex partial seizures		2 (0.9)
Generalized anxiety disorder		18 (8.1)
Generalized tonic-clonic seizure		6 (2.7)
Major depressive disorder		68 (30.5)
Postpartum depression		3 (1.3)
Postpartum psychosis		11 (4.9)
Psychosis		25 (11.2)
Schizophrenia		27 (12.1)
Seizure/psychosis		2 (0.9)
Other**		14 (6.3)
Marital status*		
Single		66 (36.1)
Married		102 (55.7)
Separated		6 (3.3)
Divorced		7 (3.8)
Widowed		2 (1.1)

Notes: *Does not total to n = 226 because of missing data; **includes headache, dementia, and impulse control disorders (eg, kleptomania).

Abbreviation: SD, standard deviation.

history, or a history of abuse or violence. Table 1 describes the demographic characteristics of the women attending the psychiatric facility at JUSH.

Admissions and follow-up visits

Based on the psychiatric charts, 51 cases were admitted at presentation for the first visit/encounter with a mental health provider. The patients admitted returned for outpatient follow-up in 33 of 51 (64.7%) cases and were lost to follow-up after discharge 18/51 (36.3%) cases. Figure 1 graphically depicts the follow-up visits of the women attending the psychiatric facility at JUSH. In the first year of study, 204 regular follow-up visits were recorded. In the successive year, only 94 follow-ups were recorded, and 110 patients were lost to follow-up. It is noted that most follow-up visits were for major depressive disorder and bipolar I disorder. Patients with schizophrenia ($n = 27$) were admitted to the hospital at first encounter with a mental health provider. Only 37% continued yearly follow-up and 63% were lost to outpatient follow-up right after discharge. It is worth noting the high rate of severe mental health disease presentation (20% of women presented with psychotic illness or schizophrenia). This is not surprising, as many patients will only come to clinics or the hospital in case of absolute emergency. The concept of preventive medical and/or mental health visits is foreign in the developing world, and Ethiopia is no exception. Additionally, we illustrate in Tables 2 and 3 the most commonly used drugs for women attending the psychiatric facility at JUSH ($n = 226$).

Discussion

The general outpatient and inpatient psychiatric services at JUSH are predominantly utilized by men.²⁰ Community prevalence rates of mental illness neither support nor explain this observation. In fact, a survey done in Jimma town found that mental distress was nearly twice as common in women than in men.²¹ There is no evidence supporting differential experience of stigma by women with mental illnesses. Financial issues might have some influence on women's access to mental health care. It is customary for patients to be accompanied by one or more family members when they come to the psychiatric clinic, depending on the family's ability to pay for transportation. When the family is poor, male patients come alone for follow-up to receive their medications. Under the same circumstance, it is more common to see a relative or a family member come to receive medications for a female patient, instead of the patient returning for follow-up herself. The latter, while depicting family members' care for the female patients' health, deprives women of seeing health professionals, and perhaps leads to less quality of care for women. Occasionally, male patients are brought to the hospital after a few weeks of falling ill, while a female patient who has been mentally ill for several months is kept at home. However, our recent study did not show a statistically significant difference in the delay to modern psychiatric treatment between men and women.²⁰

Rendering women-friendly treatment

Given the strong cultural implications of traditional Ethiopian society, particularly pertaining to women, culturally

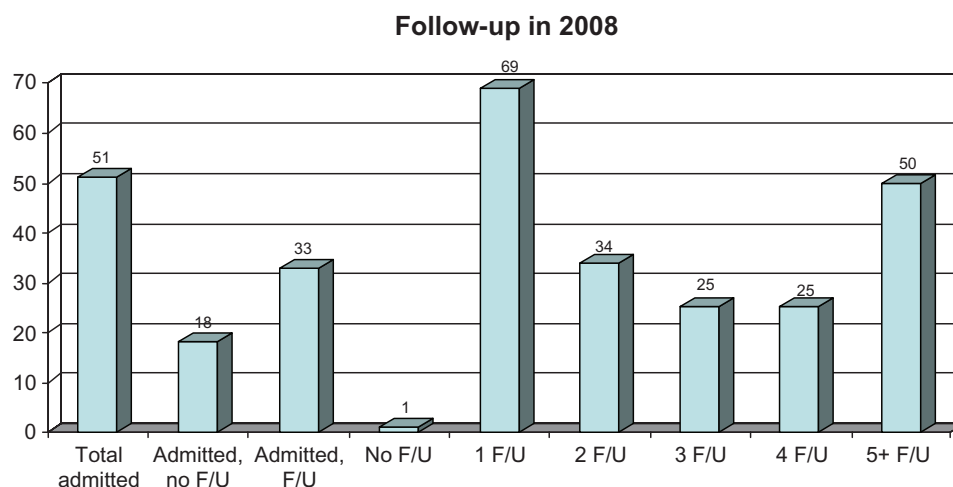


Figure 1 Follow-up visits of the women attending the Psychiatric Facility at Jimma University Specialized Hospital.

Notes: 51 women were directly admitted from clinic visit to inpatient psychiatric unit. Of those, only 33 came for follow-up after discharge. The right side of the figure depicts number of follow-up visits in 2008 recorded for 224 women in clinic (69 women had 1 follow-up over 12 months; 34 came twice, etc).

Abbreviation: F/U, follow-up.

Table 2 Most commonly used drugs by class and decreasing order of use (n = 226)

Neuroleptics	Antidepressants-mood stabilizers	Anxiolytics	Anti-epileptic drugs (AED)
Haldol IM (not available since 2008)	Amitriptyline	Diazepam IM/IV/po	Carbamazepine
Chlorpromazine IM	Carbamazepine ^a	Lorazepam ^c	Phenobarbital
Thioridazine po Chlorpromazine po Haldol po	Fluoxetine Imipramine	Bromazepam ^d	Dilantin (DPH)
	Sertraline Sodium valproate Lithium ^b		

Notes: ^aPreferred treatment for outpatient Bipolar disorder (BPD); ^bnot available in Jimma – 1st line of Rx of BPD in Addis Ababa; ^cnot available; ^drare use.

Abbreviations: IM, intramuscular; IV, intravenous; po, orally.

sensitive and women-friendly care is necessary to provide better care for women, increase compliance in female patient populations, and raise the health status of women, including mental health. Women's limited time and access to money, and their restricted mobility, or lack of autonomy over health care decisions, often delays their seeking health care. Further, women's self-perceived low status may hinder female patients from effectively communicating their health needs, or their ability to make decisions regarding appropriate care. Women-friendly treatment requires gender-responsive action, where providers strive to empower female patients in determining their health care outcomes. Gender issues that impact health-seeking behavior should inform the location or timing of services. Creation of exclusive spaces for women's treatment may make services more culturally "acceptable" for women, their husbands and/or other family members, particularly in highly traditional or religious families.

Table 3 Treatment regimen based on diagnosis for women attending the psychiatric facility at Jimma University Specialized Hospital (n = 226)

Psychiatric disorder	Commonly used treatment
Major depressive disorder (MDD)	Amitriptyline, imipramine, fluoxetine
Bipolar disorder (BPD) – recent episode manic	Carbamazepine + chlorpromazine Carbamazepine + haloperidol
Schizophrenia	Chlorpromazine, haloperidol, thioridazine
Agitation ^a	Haloperidol, chlorpromazine
Generalized anxiety disorder (GAD)	Amitriptyline
Dementia ^b	Amitriptyline

Notes: ^aPropranolol is added sometimes; ^bno acetylcholine esterase inhibitors are available. If patient is agitated, thioridazine is used.

None of the primary care centers in Jimma provide psychiatric services to the community. Services available closer to home or the workplace, and at times that are suitable to women, are more likely to be utilized and could make a significant difference to the identification of the morbidity, and to its effective treatment and cure. The range and content of health services provided must also address biological differences between women and men, in terms of health conditions that occur exclusively or more commonly in women, manifest differently, or have different risk factors. Similarly, the list of essential medicines should reflect and meet women's different health needs, including issues related to childbearing.

In Ethiopia, the most consistently available antidepressants are tricyclic antidepressants such as amitriptyline and imipramine, notorious in causing weight gain, an important side effect influencing women's confidence in their body image. Although tricyclics are generally found to be safe to use during pregnancy, as they have very low teratogenicity, they can cause orthostatic hypotension, fatigue, and dizziness, aggravating the pregnancy state. Pregnant women, who still have to manage domestic and family chores, often complain of these debilitating side effects, forcing them to stop the use of the antidepressant, becoming non-compliant with treatment, and putting them at a higher risk for relapse. Likewise, the available options to treat bipolar disorder and psychosis remain the older antipsychotics, such as chlorpromazine, haloperidol, and thioridazine, with common side effects such as dizziness, fatigue, dry mouth, and weight gain. Extrapyramidal side effects are not uncommon and are often difficult to manage, as the supply of anticholinergic medications is inconsistent. Women often complain of those side effects but have no other alternative as no "woman-friendly" psychoactive medication has been added to any government medication procurement list. In addition, when nursing and breastfeeding are taken into consideration, it has been quite challenging for mental health professionals to prescribe medications to women who cannot afford to buy powdered milk to feed their infants using the bottle.

Domestic violence, women's low status, and lack of empowerment in financial decision-making are also significant factors impacting women's health and well-being in Ethiopia. Given the extraordinarily high rate of domestic violence in Ethiopia, the possibility of gender-based violence needs to be screened in every woman, and a policy of upholding women's safety adopted. Health providers need to be trained to recognize gender-based violence and sensitively respond to the patient.^{22,23}

In rural Ethiopia, where women have limited control over finances, they are less likely to get treatment for mental health problems. For many people living in rural Jimma, the cost of transportation is probably a significant barrier preventing psychiatric follow-up care. Therefore, interventions aiming at improving mental health care for rural women should target decentralization of services to the nearest primary care centers as well as sustainable supply of gender-friendly psychotropic medications.

Information is a vital tool enabling the pursuit of gender equity in all areas, including health. As such, the current level of record keeping at JUSH is sub-optimal in addressing gender specific demographics. Without knowledge of the social determinants of health in Jimma, including the dimensions of mental health burden, there is no way to begin addressing inequities in gender and health. Promoting the use of gender-disaggregated data and gender analysis, establishing safe and complete record keeping, as well as enhancing clinicians' accountability, will enable JUSH to provide better health care for women, shed light on gender issues impacting female patients, and accelerate Ethiopia's achievement of human development outcomes necessary to meet MDGs.

Limitations

Our study relies on chart reviews, and data analysis and discussion was based on what was written or omitted in the charts for 2008. The data is all quantitative. We did not have access to the women presenting themselves to the clinic to interview them or their family representatives to qualify the barriers to care. The authors strongly feel that to capture with strength the reality on the ground, interviews and surveys based on qualitative methods should be undertaken in conjunction with any future data collection.

Conclusion

There is a dire need to improve mental health worldwide. Africa is no exception, and Ethiopia's need is even greater. In that context, our work presents mental health data related to a female cohort in the rural part of the Ethiopian country. Improving the health status of women and rendering appropriate mental health care requires concerted efforts by multiple stakeholders: the state, external donors, Non-Governmental Organization (NGO) health care providers, hospitals, community, and women's health groups. The gender-based rules that directly impact women's access to health and well-being need to be changed using a top-down approach, and enlisting all groups involved in shaping gender equality in the social and cultural Ethiopian context. The

United Nations Millennium Declaration² makes women's health and mental health an utmost priority, and gender equality in health care access a pillar of social justice in any society. In response to this call, and to achieve MDG, the health care system needs to be responsive, allowing for change starting with gender rights and women's mental health to happen in the well-being and health of women, family, and the entire community. Prospective research with mixed qualitative and quantitative methods is urgently needed to fully understand the barriers to adequate follow-up of women with mental health problems.

Acknowledgments

Funding for this study was provided by the Neuropsychiatry Educational Fund from Brigham and Women's Hospital, Boston, MA, USA.

Disclosure

The authors report no conflicts of interest in this work.

References

1. The United Nations. Millennium Development Goals. Available at <http://www.un.org/millenniumgoals/>. Accessed June 24, 2013.
2. Qureshi N, Shaikh B. Women's empowerment and health: the role of institutions of power in Pakistan. *East Mediterr Health J.* 2007;13(6):1459-1465.
3. United Nations. *Report of the Fourth World Conference on Women. Beijing September 4-5, 1995.* New York, United Nations publications 1996.
4. The Central Intelligence Agency. *CIA World Book.* Available at <http://www.theodora.com/wfbcurent/ethiopia/index.html>. Accessed December 20, 2010.
5. The World Bank. [webpage on the Internet]. *Ethiopia.* Available from <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/ETHIOPIAEXTN/0,,menuPK:295935~pagePK:141159~piPK:141110~theSitePK:295930,00.html>. Accessed December 20, 2010.
6. Ministry of Health. (2010). Retrieved December 2010, from <http://www.moh.gov.et>.
7. Alemu B, Asnake M. *Women's empowerment in Ethiopia: New Solutions to Ancient Problems.* Watertown, MA: Pathfinder International; 2007.
8. US Department of State. *2009 Human Rights Report: Ethiopia; 2009 Country Reports on Human Rights Practices.* Washington DC: Bureau of Democracy, Human Rights and Labor; 2010.
9. The World Bank. *Implementing the Ethiopian National Policy for Women: The Women's Affairs Office, Federal Democratic Republic of Ethiopia.* Washington. The World Bank; 1998.
10. Federal Democratic Republic of Ethiopia. (1995). *Constitution of the Federal Democratic Republic of Ethiopia:* Articles 34-35. Available from <http://www.wipo.int/wipolex/en/details.jsp?id=7438>. Accessed March 20, 2013.
11. Gopal G, Salim M. *Gender and Law: Eastern Africa Speaks.* Washington DC: World Bank Publications; 1998;137.
12. Georgis T. *National Mental Health Strategy 2012/13-2015/16.* Ministry of Health. Federal Democratic Republic of Ethiopia; 2010. Available at <http://www.globalmentalhealth.org/sites/default/files/Ethiopia%20MH%20Strategy.pdf>. Accessed June 12, 2012.
13. Abdulahi H, Mariam D, Kebede D. Burden of disease analysis in rural Ethiopia. *Ethiop Med J.* 2001;39(4):271-281.

14. Atalay A. (2010). In Chemali Z, Henderson T, Tesfaye M, (editors). Ethiopia. Available from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2911080/>. Accessed on March 20, 2013.
15. Kebede D, Alem A. Major mental disorders in Addis Ababa, Ethiopia. I. Schizophrenia, schizoaffective and cognitive disorders. *Acta Psychiatr Scand.* 1999;100:11–17.
16. Atalay A, Menilik D, Mesfin A. Mental health in Ethiopia: EPHA expert group report. *Ethiop J Health Dev.* 1995;9(1):47–62.
17. World Health Organization. *WHO-AIMS report on Mental Health System in Ethiopia*. Addis Ababa; 2006. Available from http://www.who.int/mental_health/evidence/ethiopia_who_aims_report.pdf. Accessed March 20, 2013.
18. Alem A, Kebede D, Wolde-semiat G, Jacobsson L, Kullgren G. The prevalence and socio-demographic correlates of mental distress in Butajira, Ethiopia. *Acta Psychiatr Scand Suppl.* 1999;397:48–55.
19. Kebede D, Alem A, Rashid E. The prevalence and socio-demographic correlates of mental distress in Addis Ababa, Ethiopia. *Acta Psychiatr Scand.* 1999;100:5–10.
20. Girma E, Tesfaye M. Patterns of treatment seeking behavior for mental illnesses in Southwest Ethiopia: a hospital based study. *BMC Psychiatry.* 2011;11:138.
21. Mekonnen E, Esayas S. Correlates of mental distress in Jimma town, Ethiopia. *Ethiop J Health Sci.* 2003;13(1):39–49.
22. Deyessa N, Berhane Y, Alem A, et al. Intimate partner violence and depression among women in rural Ethiopia. Available from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2689215/>. Accessed March 20, 2013.
23. Tadegge AD. The mental health consequences of intimate partner violence against women in Agaro Town, southwest Ethiopia. *Trop Doct.* 2008;38(4):228–229.

International Journal of Women's Health

Publish your work in this journal

The International Journal of Women's Health is an international, peer-reviewed open-access journal publishing original research, reports, editorials, reviews and commentaries on all aspects of women's healthcare including gynecology, obstetrics, and breast cancer. The manuscript management system is completely online and includes

Submit your manuscript here: <http://www.dovepress.com/international-journal-of-womens-health-journal>

Dovepress

a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.