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Original Article

Prevalence of Mental Disorders in the General Population of the Yoto Health District in Togo in 2022

Prévalence des Troubles Mentaux en Population Générale dans le District Sanitaire de Yoto au Togo

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ABSTRACT

Objectives. To estimate the prevalence of mental disorders in the general population of Yoto Health District and identify the factors associated with these disorders. **Methods.** A descriptive analytical transversal study was carried out. Data were collected using a survey form containing socio-demographic data and the Mini International Neuro-psychiatric Interview, during a door-to-door survey of individuals aged 18 years and over. **Findings.** A total of 445 people were enrolled in the study, 245 of whom were women. The median age was 43. The global prevalence of mental disorder was 35.7%. It was significantly higher in men (43.5%) than in women (29.4%) with p = 0.002. The main disorders encountered were psychoactive substance use disorders (16.9%), suicidal risk (15.5%), mood disorders (9.0%), and anxiety disorders (8.8%). Male gender, presence of a neurological history, occupational inactivity and obesity were factors associated with these different disorders. **Conclusion.** This study shows a high prevalence of mental disorders in Yoto. Replicating the study at regular interval, as well as further research on factors associated with the occurrence of the disorders, is necessary in order to extend the findings to the national scale and to work out effective preventive actions.

RÉSUMÉ

Objectifs. Estimer la prévalence des troubles mentaux en population générale dans le District Sanitaire de Yoto au Togo et identifier les facteurs associés à la survenue de ces troubles. **Matériels et méthodes**. Une étude transversale descriptive analytique a été réalisée. Les données ont été recueillies à l'aide d'une fiche d'enquête contenant les données socio-démographiques et le « Mini International Neuro-psychiatric Interview », lors d'une enquête porte à porte auprès des personnes âgées de 18 ans et plus. **Résultats**. Au total 445 personnes ont été enrôlées dans l'étude dont 245 femmes. L'âge médian était de 43 ans. La prévalence globale des troubles mentaux était de 35,7%. Elle était significativement plus élevée chez les hommes (43,5%) que chez les femmes (29,4%) avec p = 0,002. Les principaux troubles rencontrés étaient les troubles liés à l'usage des substances psychoactives (16,9%), le risque suicidaire (15,5%), les troubles de l'humeur (9,0%), et les troubles anxieux (8,8%). Le sexe masculin, la présence d'antécédents neurologiques, l'inactivité professionnelle et l'obésité étaient des facteurs associés à ces différents troubles. **Conclusion**. Cette étude montre une forte prévalence des troubles mentaux dans le Yoto. Sa réplication à intervalle de temps régulier ainsi que la recherche complémentaire des facteurs associés à la survenue des troubles est nécessaire en vue d'étendre les résultats à l'échelle nationale.

INTRODUCTION

According to the World Health Organization (WHO), one in eight people in the world lives with a mental disorder. The most prevalent mental disorders in 2019 were anxiety disorders and depressive disorders [1]. These disorders place a significant financial burden on individuals and households [2]. In South Africa, a national survey of the general population in 2004 reported a prevalence of 30.3% of mental disorders [3]. The prevalence was 48.9 % in Morocco in 2007 [4]. In Benin and Burkina Faso, studies conducted in the general population in 2013 and 2018 respectively reported an overall prevalence of mental disorders of 54.2% and 41.4% respectively [5, 6].

In Togo, to date, there are no data available on the prevalence of mental disorders in the general population. Given the impact of these disorders on the individual and in society, and in order to have mental health data for future preventive actions, we therefore conducted this study. This was a study carried out as part of the Transcultural Alcohol Project (ALCOTRANS) which is a study project between France, Togo and Benin. The main objective of our study was to study mental disorders in the general population in the Yoto Health District in Togo in 2022. And secondarily, it was to estimate the prevalence of different mental disorders within the Yoto population and to describe the factors associated with these different disorders.

MATERIALS AND METHODS

Our study was a study carried out as part of the ALCOTRANS project which is a multicenter project between the University of Limoges (France) and the Universities of Lomé (Togo) and Abomey-Calavi (Benin). We proceeded by a descriptive and analytical cross-sectional survey concerning the population of the commune of Yoto 1 aged 18 and over, a commune located in the Yoto Health District in the maritime region of southern Togo. The inquest took place from 25 Apr to 05 May, 2022. The only criterion for non-inclusion was cases of people being absent from their homes during the survey period for any reason. Several steps were necessary to build our sample. We selected the Yoto 1 commune by non-probabilistic method. An exhaustive selection of the cantons of the commune was made, and then one village out of two was selected per canton. The number of subjects per village was identified by probability technique proportional to the size of the population.

Finally, the selection of individuals was made by drawing after numbering the concessions.

The data collection tools were a written questionnaire, developed by ourselves, and the MINI (Mini International Neuropsychiatric Interview) for the identification of present or past mental disorders. The significance threshold considered was 5%. From an ethical point of view, the protocol of this research has received the prior approval of the Committee on Bioethics and Health Research (CBRS) as well as the agreement of the competent administrative and local authorities at various levels. Participants were informed about the objectives of the study prior to their participation. Free, informed, written consent was obtained from school-going subjects prior to data collection. For those not in school, oral consent was obtained with written evidence given by an eyewitness. We have taken care to respect the anonymity of our respondents and the confidentiality of the data collected.

RESULTS

A total of 445 people were enrolled, 55.1% of whom were women. The median age of participants was 43 years with an interquartile range = [33 – 56]. Details of socio-demographic characteristics and background are provided in Table I.

Table I : Sociodemographic characteristics and medical history

	Actual	%
Marital status		
Couples	299	67.2
Alone	87	19.5
With the family	59	13.3
Level of education		
Primary/Secondary	325	73.0
Out-of-school	106	23.8
Upper	14	3.1
Profession		
Active	388	87.2
Inactive	57	12.8
Habitat		
Collective	318	71.5
Individual	127	28.5
Living environment		
Rural	260	58.4
Urban	185	41.6
Religion		
Christianism	212	47.6
Animism	204	45.8
Islam	29	6.5
Background		
Obesity	66	14.8
HTA*	63	14.1
Diabetes	42	9.4
NeurologicalLiving environment	27	6.1
***HBP= High blood pressure**		

Of the 445 people enrolled, 159 or 35.7% met the criteria for at least one of the mental disorders studied according to the MINI.

If the risk of suicide is excluded, the number of people with a psychiatric syndrome would be 90, i.e. a prevalence of 20.2%.

Of the men surveyed, 43.5% suffered from mental disorders compared to 29.4% of women. The difference between the two proportions was statistically significant (p = 0.002).
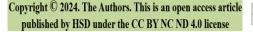
Alcohol use disorder was the most common mental disorder in the surveyed population (12.4%), followed by major depressive episode (MDE) (7.2%). Details of the different disorders by sex are described in Table II.

Table II : Prevalence of different mental disorders by sex

	Total			Female		Male		
	Case	(%)	IC* à 95%	Case	Prevalence (%)	Case	Prevalence (%)	p**
Suicidal risk	69	15.5	[12.3-19.3]	37	15.1	32	16.0	0.795
Substance use disorder								
Alcohol Use disorder	55	12.4	[9.5-15.9]	8	3.3	47	23.5	**<0.001**
Tabacco Use disorder	25	5.6	[3.7-8.3]	6	2.4	19	9.5	0.001
Stimulant Use disorder	5	1.1	[0.4-2.8]	1	0.4	4	2.0	0.179
Sedative Use disorder	2	0.4	[0.1-1.8]	1	0.4	1	0.5	0.899
Cannabis Use disorder	1	0.2	[0.0-1.4]	0	0.0	1	0.5	0.449
Mood disorder								
Major depressive episode	32	7.2	[5.0-10.1]	14	5.7	18	9.0	0.182
Current dysthymia	7	1.6	[0.7-3.4]	4	1.6	3	1.5	0.899
Manic episode	1	0.2	[0.0-1.4]	0	0.0	1	0.5	0.449
Anxiety disorders								
Post-traumatic stress disorder	20	4.5	[2.8-7.0]	10	4.1	10	5.0	0.642
Agoraphobia	12	2.7	[1.5-4.8]	5	2.0	7	3.5	0.345
Social anxiety	10	2.2	[1.1-4.2]	5	2.0	5	2.5	0.759
Panic disorder	5	1.1	[0.4-2.8]	3	1.2	2	1.0	0.899
Obsessive-compulsive disorder	2	0.4	[0.1-1.8]	1	0.4	1	0.5	0.899
Generalized anxiety disorder	2	0.4	[0.1-1.8]	0	0.0	2	1.0	0.201
Behavioral addiction								
Gambling disorder	19	4.3	[2.7-6.7]	5	2.0	14	7.0	**0.01**
Video game disorder	9	2.0	[1.0-3.9]	4	1.6	5	2.5	0.737
Others								
Attention deficit disorder	7	1.6	[0.7-3.4]	4	1.6	3	1.5	0.899
Psychotic syndrome	5	1.1	[0.4-2.8]	1	0.4	4	2.0	0.179
Antisocial personality disorder	5	1.1	[0.4-2.8]	0	0.0	5	2.5	0.018
Food related disorder	2	0.4	[0.1-1.8]	2	0.8	0	0.0	0.504
Psychotic disorders	1	0.2	[0.0-1.4]	0	0.0	1	0.5	0.449
Bulimia	1	0.2	[0.0-1.4]	1	0.4	0	0.0	0.899

* IC = Trusted interval ; ** p = value of p

Four factors were significantly associated with the occurrence of mental disorders. These include male gender, occupational inactivity, obesity and the presence of a neurological history. Table III summarizes the results of the analyses.

Table III: Factors Associated with Mental Disorders

	Univariate model			Multivariate model		
	OR*	95% IC**	p	ORa***	95% IC	p
Sex						
Female	1.00			1.00		
Male	1.85	1.25-2.74	**0.002**	1.73	1.15-2.61	**0.009**
Habitat type						
Collective	1.00					
Individual	0.77	0.49-1.19	0.239			
Profession						
Active	1.00			1.00		
Inactive	0.61	0.31-1.11	0.115	0.42	0.20-0.83	**0.018**
Existence of a neurological history						
No	1.00			1.00		
Yes	5.73	2.47-14.9	**<0.001**	8.45	3.40-23.8	**<0.001**
Obesity						
No	1.00			1.00		
Yes	0.43	0.22-0.79	**0.009**	0.45	0.23-0.86	**0.020**

* OR = Odd ratio ; ** IC = Confidence interval ; *** ORa = Adjusted odds ratio

DISCUSSION

We observed a predominance of the female sex (55.1%) and a high proportion of people with primary or secondary education among the respondents. These data reflect data from the general census of the Togolese population.

The present survey found a high prevalence of mental disorders in the general population, suggesting the true weight of mental disorders in the Yoto Health District. Despite the WHO's warning of their strong repercussions on health and important social, economic, and human rights consequences of the burden of mental disorders [8, 9], these mental health problems do not receive the attention required by the public authorities in Togo. In fact, 35.7% of those surveyed had at least one of the mental disorders according to the MINI. This prevalence is similar to the results of previous surveys conducted elsewhere using a similar methodology. In Burkina Faso, for example, Ouédraogo et al. reported a prevalence of 41.43% in a national survey conducted in the general population on a sample of 2587 people in 2018 [6]. Kadri et al. in Morocco had also found a prevalence of 40.1% in a national survey conducted in 2005 [9]. This prevalence was 42.8% in French Polynesia and 41,8% in a study conducted in the general population in the Creuse department of France in 2003 by Burbaud and Nubukpo [10, 11]. Lépine et al. in their international general population survey, found that more than a third (38.4%) of the population living in France in 2002 had a mental disorder during their lifetime [12]. In Saudi Arabia, Altwaijri et al. in their survey international surveys in the general population, found that more than a third (38.4%) of the population living in France in 2002 had a mental disorder during their lifetime [12]. In Saudi Arabia, Altwaijri et al. in their survey of 4004 Saudis had found a lifetime prevalence of mental disorders of 34.2% in 2020 [13].

This high prevalence reported in our study is initially in line with the high prevalence of mental disorders worldwide. This could be explained by the absence of a national programme for the management of mental disorders in the country.

The prevalence found in our study was however much lower than the 54.22% reported by Tognon-Tchégnonsi et al. in a study conducted in 2013 in a rural community in northern Benin.

This study involved a sample of 603 people and the tool used was the CIDI (Composite International Diagnosis Interview) [5]. In Sudan in 2008, this prevalence was 52.9% in a study conducted on a sample of 1876 people and used the MINI as a survey tool [14]. Moussaoui also reported a prevalence of 48.9% in a Moroccan national epidemiological survey carried out in 2007 using the MINI and which included 6000 people [4].

These differences in prevalence could be explained on the one hand by the CIDI used in the Benin study. On the other hand, by the fact that in Morocco it was a national study while in Sudan the study was carried out among a population of internally displaced persons following tribal conflicts and attacks by Ugandan rebels.

The prevalence of mental disorders was significantly higher among males (43,5%) than females (29.4%). In contrast to the male predominance found in our study, several studies mention a female predominance. Thus, Ouédraogo et al. in 2018 reported a significantly higher prevalence among women (46.24%) compared to men (35.01%) [6]. In Morocco, this prevalence was 48.5% among women compared to 34.3% among men [9]. Jenkins et al. found the same trend in their study conducted in a province of Kenya in 2013 [15].

This difference could be explained by the difference in sample sizes and by the high prevalence of substance use disorders in our study. Men are more likely to use substances than women in our societies.

However, according to Douki D, this female vulnerability, highlighted by several authors, is less related to sex, i.e. biological differences. It is much more related to gender and the multiple discriminations that women face throughout their lives [16].

Regarding the clinical presentations encountered, the three main disorders identified were suicidal risk (15.5%), UTD (12.4%), and EDM (7.2%). Moussaoui found a similar result for suicidal risk with a prevalence of 16.5% [4].

Apart from the risk of suicide, UTD appears to be the second most common mental disorder in the population. Its prevalence was significantly higher in males (23.5%) than in females (3.3%). Cohidon also found this male predominance of TUA but with lower prevalences among men (7.2%) and women (1.5%) [17].

With regard to the factors associated with the occurrence of the disorders, namely male sex, occupational inactivity, obesity and the presence of a neurological history, further studies are needed to better explain the findings.

CONCLUSION

This first survey of the general population revealed a high prevalence of mental disorders. Its replication at regular time intervals as well as the complementary search for the factors associated with the occurrence of the disorders is necessary. However, there is an urgent need to train and involve paramedical staff and general practitioners more in the identification and management of these disorders, as there is a very insufficient number of specialist staff in the field of medical services.

REFERENCES

[1]   GBD 2019 Mental Disorders Collaborators. Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet Psychiatry 2022; 9: 137–150.

[2]   A65_10-fr.pdf, https://apps.who.int/iris/bitstream/handle/10665/80862/A65_10-fr.pdf (accessed 3 July 2022).

[3]   Stein DJ, Seedat S, Herman A, Moomal H, Heeringa SG, Kessler RC,et al. Lifetime prevalence of psychiatric disorders in South Africa. Br J Psychiatry. 2008 Feb;192(2):112-7.

[4]   Moussaoui D. La santé mentale au Maroc : enquête nationale sur la prévalence des troubles mentaux et des toxicomanies. L'Encéphale 2007; 33: 125–126.

[5]   Tognon-Tchégnonsi F, Adoukonou T, Djidonou A, Iréti EA, Gandaho P. Prévalence des troubles mentaux dans une communauté rurale à Parakou au nord Bénin. Annales Médico-psychologiques. 2020;178(9):908-912.

[6]   Ouédraogo A, Ouango JG, Karfo K, Goumbri P, Naném D, Sawadogo B. Prévalence des troubles mentaux en population générale au Burkina Faso. Encephale. 2019 Sep;45(4):367-370.

[7]   AFR-RC71-15 Rapport de la soixante et onzième session du Comité régional.pdf, https://www.afro.who.int/sites/default/files/sessions/final-reports/AFR-RC71-15%20Rapport%20de%20la%20soixante%20et%20onzi%C3%A8me%20session%20du%20Comit%C3%A9%20r%C3%A9gional.pdf (accessed 27 July 2022).

[8]   World Health Organization. World mental health report: transforming mental health for all. Geneva: World Health Organization, https://apps.who.int/iris/handle/10665/356119 (2022, accessed 13 October 2022).

[9]   Kadri N, Agoub M, Assouab F, Tazi MA, Didouh A, Stewart R, et al. Moroccan national study on prevalence of mental disorders: a community-based epidemiological study. Acta Psychiatr Scand. 2010 Jan; 121(1):71-4.

[10]   Amadéo S, Benradia I, Sy A, et al. Santé mentale en population générale : images et réalités à Tahiti. L'information psychiatrique 2022; 98: 521–529.

[11]   Burbaud F, Nubukpo PH.Santé mentale en population générale en Creuse: images et réalités. Rapport final.2004.

[12]   Lépine JP, Gasquet I, Kovess V, Arbabzadeh-Bouchez S, Nègre-Pagès L, Nachbaur G, et al. Prévalence et comorbidité des troubles psychiatriques dans la population générale française: résultats de l'étude épidémiologique ESEMeD/MHEDEA 2000/ (ESEMeD) [Prevalence and comorbidity of psychiatric disorders in the French general population]. Encephale. 2005 Mar-Apr;31(2):182-94.

[13]   Altwaijri YA, Al-Subaie AS, Al-Habeeb A, Bilal L, Al-Desouki M, Aradati M, et al. Lifetime prevalence and age-of-onset distributions of mental disorders in the Saudi National Mental Health Survey. Int J Methods Psychiatr Res. 2020 Sep; 29(3):e1836.

[14]   Salah TT, Abdelrahman A, Lien L, Eide AH, Martinez P, Hauff E. The mental health of internally displaced persons: an epidemiological study of adults in two settlements in Central Sudan. Int J Soc Psychiatry. 2013 Dec;59(8):782-8.

[15]   Jenkins R, Othieno C, Ongeri L, Sifuna P, Ongecha M, Kingora J, et al. Common mental disorder in Nyanza province, Kenya in 2013 and its associated risk factors--an assessment of change since 2004, using a repeat household survey in a demographic surveillance site. BMC Psychiatry. 2015 Dec 9;15:309.

[16]   Dedieu SD.La santé mentale des femmes. Swiss Arch Neurol Psychiatr 164.5 (2013): 158-64.

[17]   Cohidon C. Prévalence des troubles de santé mentale et conséquences sur l'activité professionnelle en France dans l'enquête «Santé mentale en population générale: images et réalités». Bulletin épidémiologique hebdomadaire 2007; 1–6.