



## Geographical study of knowledge, attitudes and practices of mental illness in Côte D'ivoire: Survey of the population accompanying the patients

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### Abstract

The study of health and probably morbidity related to mental illness inevitably involves considering a diverse set of individual traits, frequently referred to as sociodemographic characteristics. These characteristics are likely to produce either a direct or indirect impact on the chronicity or not of mental illness, or to indicate behavioral, biological, genetic risk elements that have led to mental illness in individuals. The objective of this study is to assess the level of knowledge of mental illness and to describe the attitudes and practices observed by the population accompanying patients with mental illness in Côte d'Ivoire. This study was based on documentary research, field surveys and the administration of a questionnaire to 120 companions of mentally ill people spread across cities with mental health treatment centers, including Abidjan (HPB, CGI, CMTG and CEDNA), Bouaké (HPB and HSCL), Yamoussoukro (HSVPY), Korhogo (CJK) and Bondoukou (HSCL). The results of the study reveal an erroneous level of knowledge of the causes of mental illness among those accompanying patients. The majority are unaware of how to behave when dealing with a mentally ill person and resort to a multitude of practices that are most often inadequate and often harmful.

**Keywords:** Ivory coast, mental illness, knowledge, attitudes, practices

### Introduction

Mental health is an integral part of overall health and the quality of life of individuals. Health is a fundamental right and promotes learning, work, and participation in society. Conversely, mental health disorders and psychological distress have significant implications at various levels. Beyond the suffering they cause to individuals and those around them, they also often lead to complications in the spheres of physical and social health (Lydia Gilse, 2008, p. 495). Furthermore, mental illness is characterized by alterations in thinking, mood, or behavior (or a combination of the three) associated with distress and marked dysfunction. Symptoms of mental illness vary from mild to severe depending on the type of mental illness, the individual, the family, and the socioeconomic background. It can take various forms. These include mood disorders, schizophrenia, anxiety disorders, personality disorders, eating disorders, and addictions such as drug abuse and pathological gambling (Tony Clement, 2006, p. 2) [12]. They cause great suffering to the individual and/or those around them or often constitute a disability in one or more areas of daily life ("European Pact for Mental Health and Well-being, 2008" cited by Lydia Gilse, 2008, p. 495). The observation is that mental illness is not always known by those accompanying patients and their practices always remain a challenge. The behavior of those accompanying patients constitutes a risk due to their low level of knowledge. The majority of those accompanying patients are unaware of the conduct they should adopt when faced with a mentally ill person. Faced with this observation, the research question that arises is the following: How do the population accompanying patients behave when faced with mental illness in Côte d'Ivoire? The main objective of the study is to analyze the level of knowledge of those accompanying patients, their attitudes and practices towards mental illness in Côte d'Ivoire.

### Methodology

This section is structured around three points: type of study, description of the study population, Sampling, and data collection.

### Type of study

This is a mixed-method (qualitative and quantitative) study conducted with an analytical aim. It is a cross-sectional, descriptive and analytical survey conducted in an urban environment.

### Description of the study population

The study population concerns the companions of mentally ill people from nine health centers spread across five health districts, namely the Abidjan health district, the Bouaké health district, the Yamoussoukro health district, the Korhogo health district and the Bondoukou health district (Table 1).

**Table 1:** Health structures surveyed in Ivory Coast

Health districts	Psychiatric care centers
Abidjan	Bingerville psychiatric hospital (hpb)
	Child guidance center (cgi)
	Marguerite te gonle center (cmtg)
	Addiction and mental hygiene service (sahm)
	Blue cross of ivory coast
	Neuropsychological assessment and diagnostic and support office (cedna)
Bouake	Bouaké psychiatric hospital (hpb)
	Saint camille hospital of bouaké (hscb)
Yamoussoukro	Saint vincent de paul hospital (hsvdp)
Korhogo	Korhogo jubilee center (cjk)
Bondoukou	Saint camille hospital of bondoukou (hscb)

**Source:** field surveys; 2024

Participant recruitment was conducted through healthcare staff from various health districts who contacted the patients' companions. All agreed to answer the various questions.

**Sampling**

The survey was conducted after the patient's companion's agreement. Thus, to ensure the external validity of the results, all patient companions gave their consent and were surveyed. Thus, 120 patient companions, including 37 in the Abidjan health district, 24 in the Bouaké health district, 14 in the Yamoussoukro health district, 14 in the Bondoukou health district, 17 in the Korhogo health district and 14 in the Grand-Bassam health district, participated in the survey.

**Data collection**

The data collection was carried out during individual interviews using a questionnaire. The interviewer who conducted the interviews was a researcher. Test interviews were conducted beforehand so that the interviewer could familiarize himself with conducting an interview. These interviews were not included in the analysis. The interviews took place on the website of the various health districts. The questionnaire included the sociodemographic profile of the carers, data on knowledge of mental illness and finally the

attitudes and practices of the carers of the patients towards mental illness. The questionnaire was administered using computer tools in a kobocollect software environment.

**Results**

The results section is structured around three main points. The first relates to the sociodemographic characteristics of the patients' companions, the second deals with the understanding of mental illness, and finally the third refers to the attitude and practices of the patients' companions towards this pathology.

**Characteristics and profile of patients' companions**

The 120 companions of patients to whom the questionnaire was administered during the survey phase are distributed across nine health centers in five different health districts. The sociodemographic data collected clearly describe the profile of the companions in terms of gender, age, level of education, income level, marital status, profession and family ties (Table 2).

**Table 2:** Characteristics of the companions of mentally ill people interviewed

<b>Sex</b>	
Men	28%
Women	72%
<b>Family relationship</b>	
Spouses	18%
Fathers/mothers	31%
Sons /daughters	19%
Brothers/sisters	22%
Cousins/nephews	10%
<b>Occupation</b>	
Liberal activity	59%
Public sector employee	17%
Private sector employees	24%
<b>Educational level</b>	
Illiterate	14%
The koranic school	20%
Primary	29%
Secondary	23%
Superior	14%
<b>Age group</b>	
Under 18	2%
18-30 years old	20%
30-50 years old	61%
Over 50 years old	17%
<b>Religion</b>	
Animists	31%
No religion	15%
Christians	11%
Muslims	43%
<b>Marital status</b>	
Bachelor	19%
Divorce	3%
Customary marriage	37%
Legal marriage	20%
Free union	17%
Widower	4%

Source: field surveys; 2024

According to Table 2, the information collected from the 120 companions of mentally ill patients showed that these people are adults, with 81% between the ages of 18 and 50, and are all close relatives of the patients. It is noted that 18% of these relatives are spouses of patients, 31% are fathers or mothers of patients, 19% are sons or daughters of

patients, 22% of parents are brothers or sisters of patients, and 10% are cousins, nephews, or nieces of patients. The patients are all dependent on these different categories of people mentioned. These companions of patients work closely with the healthcare staff of the various care structures that take care of their patients. It is also noted that

women are those who assist the mentally ill the most, with 72% of respondents being women compared to 28% of companions of patients who are men.

The professional situation varies from one caregiver to another. 24% of caregivers of mentally ill people work in the public sector, compared to 59% in the private sector and 16% in the self-employed. Regarding their level of education, 14% of caregivers of mentally ill people are illiterate, 20% have specifically attended Koranic school; 29% have limited themselves to primary school. The majority of caregivers of mentally ill people has a primary education. 23% have continued to secondary school, and 14% of respondents have reached higher education (Table 2).

The distribution by marital status reveals that out of a total of 120 people surveyed, 19% are single, 57% are married. Respondents who find themselves separated from their partners due to divorce or death represent only 07% of the

total population of companions (3% divorced and 4% widowed), which is the lowest proportion of the total. Respondents working in the public sector represent a proportion of 17%. This category appears to be the least represented in the sample. The opposite was also noted for professional profiles in the liberal profession (59%) and public administration (17%).

Analysis of the data contained in Table 2 above shows that the majority of companions are Muslims. They represent 43% of the respondents. Christians are also noted. They account for 11% of the respondents. The non-religious and animists represent 15% and 31% of the patient companions, respectively.

Concerning mentally ill patients, there are a total of 241 patients who are either in hospital (boarding school), or in the treatment phase by appointment or aftercare that we were able to observe and count in all the different mental health care centers that we visited (table 3).

**Table 3:** Distribution of mentally ill people by treatment center according to sex and age group of age

Loca Lites	The centers of Care Psychiatrics	Number of patients observed	Staff by gender		Age group				
			M	F	Under 15 years old	From 16 to 25 years old	From 26 to 45 years old	From 46 to 55 years old	Over 55 years old
Abidjan	Psychiatric hospital from bingerville	53	31	22	0	17	23	9	4
	Guidance center Infantile	19	8	11	19	0	0	0	0
	Marguerite te gonlé center	15	9	6	15	0	0	0	0
	Addiction service and mental hygiene	13	9	4	0	4	7	2	0
	Blue cross of Ivory coast	12	8	4	0	3	5	3	1
	Evaluation and audit office Diagnostic Neuropsychological And support (cedna)	8	3	5	8	0	0	0	0
Bouake	Psychiatric hospital from bouaké	24	15	9	0	8	13	3	0
	Saint camille hospital from bouaké	34	13	21	0	7	16	8	3
Yamoussoukro	Saint vincent de paul hospital	18	11	7	0	4	9	3	2
Korhogo	Korhogo jubilee center	13	9	4	0	4	7	2	0
Bondoukou	Saint camille hospital of bondoukou	15	11	4	0	4	8	3	0
Grand-bassam	Crfcd	17	12	5	1	5	6	3	2
Totals		241	139	102	43	56	94	36	12

Source: field surveys, 2024

Table 3 presents in detail the number of patients by center and by locality. These data reveal that the male gender is the most affected by mental illness with more than 57.67% of men against 42.32% of women. It is also noted that young people and adults are mostly the most affected by this illness with 39% of mentally ill people being between 26 and 45 years old. 23% are between 16 and 25 years old, and 18% are adolescents under 15 years old. Elderly people between 46 and 55 years old and old people over 55 years old are the least affected by mental illness with respectively 15% and 4% each.

Furthermore, it is noted that the distribution of these interned patients is uneven between the different mental health treatment centers. Those that receive the most patients are Abidjan and Bouaké. At the local level, the Abidjan health district is the one that receives and treats the most patients with psychiatric disorders. It manages approximately 52% of the total mental health patients. Next

comes the Bouaké health district, which treats approximately 24% of the country's interned mental health patients thanks to its two (02) specialized psychiatric care centers.

**Understanding**

Regarding knowledge of the causes of mental illness, 51% of respondents have poor knowledge of the causes of this pathology. Only 49% have good knowledge of these causes. Among the causes cited are a virus (3%), divine punishment (18%), witchcraft (33%), depression (16%), disorders (7%), hereditary (3%), life stress (10%), the environment in which the person lives (7%), and health problems affecting the brain (4%).

Observation of Table 4 shows that the companions of patients in the health districts of Abidjan (59%), Bouaké (62%) and Grand-Bassam (57%) have a good knowledge of the causes of mental illness.

**Table 4:** Knowledge of the causes of mental illness among respondents in Côte d'Ivoire

Causes of mental illness	Percentage of respondents by location in Côte d'Ivoire					
	Abidjan	Bouake	Yamoussoukro	Bondoukou	Korhogo	Grand - Bassam
A virus	3%	0%	7%	0%	0%	7%
A divine punishment	22%	13%	0%	21%	35%	7%
Witchcraft	19%	25%	50%	50%	47%	36%
Depression	16%	29%	14%	7%	6%	14%
Disorder	14%	8%	0%	0%	0%	7%
Hereditary	0%	4%	0%	14%	6%	0%
Life stress	14%	13%	7%	0%	6%	14%
Environment in which the person lives	11%	4%	7%	7%	0%	7%
Health problem affecting the brain	3%	4%	14%	0%	0%	7%

Source: field surveys; 2024

While the caregivers of patients in the Bondoukou and Korhogo health districts have poor knowledge of the causes of mental illness. For the majority of caregivers of patients in the Bondoukou and Korhogo health districts, the causes of mental illness are divine punishment (21% in Bondoukou and 35% in Korhogo) and witchcraft (50% in Bondoukou and 47% in Korhogo).

Misconceptions about the symptoms of mental illness are common in 36% of cases. Symptoms cited include major

changes in behavior (6%), gluttony (18%), strange and disorganized thoughts (28%), inappropriate behavior (such as undressing in public) (10%), insomnia (3%), delusions (17%), hallucinations (3%), theft (12%), and alcohol (3%). The health districts of Korhogo and Bondoukou have the highest proportions of incorrect knowledge of the symptoms of mental illness with respectively 41% and 40% for gluttony, 12% and 7% for insomnia, 18% and 20% for theft and 6% and 7% for alcohol (Table 5).

**Table 5:** Knowledge of symptoms of mental illness according to respondents

	Abidjan	Bouake	Yamoussoukro	Bondoukou	Korhogo	Grand - Bassam
Major changes in behavior	5%	4%	7%	7%	6%	7%
Gluttony	5%	17%	7%	40%	41%	14%
Strange and disorganized thoughts	43%	21%	36%	13%	12%	29%
Inappropriate behavior (such as undressing in public)	14%	13%	14%	0%	0%	14%
Insomnia	0%	0%	7%	7%	12%	0%
Delusions	24%	21%	21%	7%	6%	7%
Hallucinations	5%	4%	0%	0%	0%	7%
Flight	3%	17%	7%	20%	18%	14%
Alcohol	0%	4%	0%	7%	6%	7%

Source: field surveys, 2024

Patient companions in the health districts of Abidjan, Bouaké, Grand-Bassam and Yamoussoukro are good students in terms of knowledge of the symptoms of mental illness.

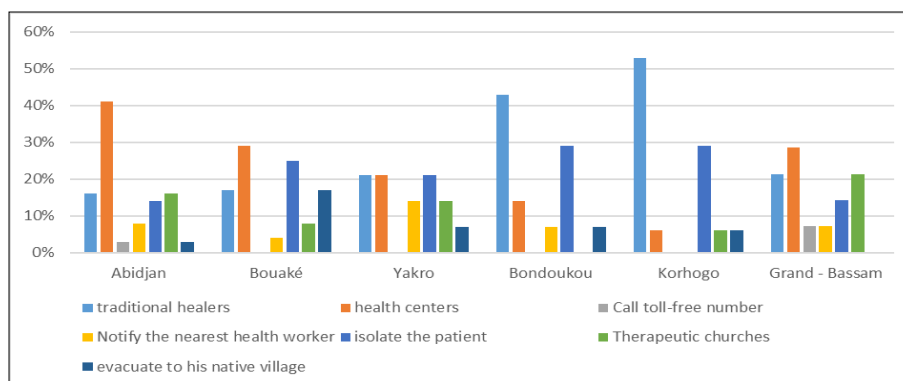
**Attitude and practice towards mental illness**

The companions of patients surveyed in the different health districts declare that the first action they would take if they found themselves in the presence of a person showing signs of mental illness is to take them to a health center themselves (27%).

26% of respondents said they would take the patient to a

traditional healer. 21% of respondents said they would isolate the patient, while 12% said they would take them to a therapeutic church. Only 7% said they would take the patient to their home village or notify a nearby health worker. A minority of respondents (2%) said they would call the toll-free number.

The majority of the companions of patients interviewed in the health districts of Bondoukou (43%) and Korhogo (53%) stated that the first action they took when faced with a patient showing signs of mental illness was to consult a traditional healer because, for them, this illness is due to divine punishment (Figure 1).

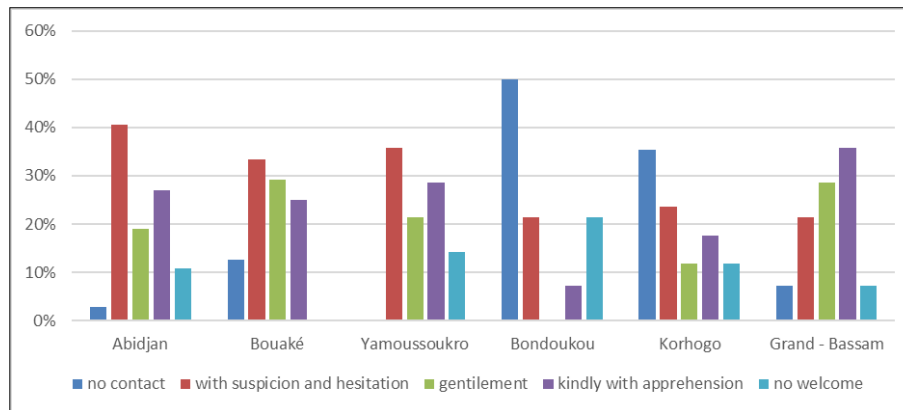


Source: field surveys, 2024

**Fig 1:** Initial attitude of respondents towards mental illness

The analysis of Figure 1 reveals that the first action taken by the caregivers interviewed in the health districts of Abidjan, Bouaké and Grand-Bassam was to take them to a health center when their patient's first sign appeared. The caregivers of mentally ill people interviewed in Yamoussoukro were equally divided between having resorted to a traditional healer, a health center and isolating the patient with 21% each.

Figure 2 shows a differentiation in the reception of a patient cured of mental illness. Indeed, 32% of respondents will welcome a person cured of mental illness into the household with suspicion and hesitation, compared to 24% who will welcome the cured patient kindly but with apprehension. Also, 19% say they will do so kindly and 15% think they will have no contact with the cured person, while 10% will not welcome them at all.



Source: field surveys, 2024

Fig 2: Reception of a patient cured of mental illness by the accompanying persons

The analysis of Figure 2 shows that in the different health districts, the people surveyed are in favor of welcoming a person cured of mental illness into the household with mistrust and hesitation. These are Abidjan (41%), Bouaké (33%) and Yamoussoukro (36%). However, in the health districts of Bondoukou (50%) and Korhogo (35%), the majority of respondents do not want to have any contact with a person cured of mental illness in the household. In the Grand-Bassam health district, the majority of respondents (36%) will welcome their patient cured of mental illness kindly but with apprehension.

**Discussion**

The research conducted here has shown that caregivers of mentally ill people in Côte d'Ivoire constitute a risk group with regard to mental illness due to their behavior and their low level of knowledge about this pathology. The knowledge of caregivers of mentally ill people is erroneous, particularly with regard to the causes of contamination and the symptoms of the illness. The majority of respondents (51%) did not know that mental illness is caused by depression, various disorders, life stress, the environment in which the person lives. Mental illness can also be due to health problems affecting the brain. The symptoms of this illness are ignored by 36% of respondents. This low level of knowledge would be the consequence of the low level of education, schooling and overwhelming illiteracy (14% illiterate, 20% have attended Koranic school and 29% have not gone beyond primary level) of caregivers of the sick. When we combine the companions of illiterate patients and those from the Koranic school, we obtain a rate of 34.16% compared to 23.33% for those with a secondary education and 13.33% for those with a higher education. Overall, the educational level of the companions of the patients is low, i.e. 63.32% when we consider the lowest levels of education (illiterate, those from the Koranic school and those from primary school).

This low level of knowledge would also be linked to the difficulties linked to access to the healthcare system and consequently to basic health education. The knowledge about mental illness observed in the study population is similar to that observed in the population of Marrakech in Morocco. This is a study by Safa ARIB (2008) [6] on knowledge, attitudes and practices towards epilepsy which is another form of mental illness. The relatives of patients consulting at the IBN Tofail hospital in Morocco have a low rate of knowledge of the causes and symptoms of epilepsy. This would be the consequence of the low level of education and schooling and illiteracy (55.6% of Moroccans over 25 years old). Abundant in the same sense, several studies including that of A. BENER *et al* (1998) [2], A. DAOUD *et al* (2007) [3] and A. AB RAHMAN *et al* (2005) [1] prove that our percentage far exceeds studies carried out in other countries including Arab-Muslim and even some countries of sub-Saharan Africa. Only 13.8% of Emiratis according to A. BENER *et al* (1998) [2]; 14.6% of Jordanians according to A. DAOUD *et al* (2007) [3] and 5.3% of Malaysians according to A. AB RAHMAN *et al* (2005) [1] think that mental illness is due to possession by an evil spirit or bewitchment. The study by I. HANIF *et al* (2005) [7] among the Hindu and Sikh communities shows that mental illness is perceived as the result of sins committed in a previous life. This belief is more widespread among Omanis, 65% of whom link mental illness to supernatural forces (S. AL-ADAWI *et al*, 2003). Concerning attitudes and practices towards mental illness, the realities observed in this research are similar to those of O. MECARELLI *et al* (2007) [10]. For him, the parents and relatives of the mentally ill are mostly unaware of the conduct they should adopt and resort to a multitude of practices that are most frequently inadequate and often harmful. Several inappropriate and potentially harmful practices have been provided by the literature. Introducing an object into the mouth such as a piece of wood or a gag to

prevent biting of the tongue. These are sometimes sharp objects such as a knife, a fork or a spoon. This is a very widespread measure and is repeated in several studies such as that of D. NDOUR *et al* (2004)<sup>[4]</sup> and CY GARDIAN *et al* (2002). According to Lyne Langlois (1997) in her article entitled "Attitudes in general towards the sick and ex-sick "mental" states that groups in society tend to construct boundaries or frameworks that serve to define personal and collective identity.

### Conclusion

The study clearly shows an incorrect level of knowledge about the causes of mental illness, 51% of respondents have limited knowledge about the causes of mental illness and poor behavior in the event of symptoms of this illness among those accompanying patients. However, there is a disparity between the different health districts. Those accompanying patients in the health districts of Abidjan (59%), Bouaké (62%) and Grand-Bassam (57%) have a good knowledge of the causes of mental illness while those accompanying patients in the health districts of Bondoukou and Korhogo have poor knowledge of the causes of mental illness. The latter constitute a risk group with regard to mental illness because of their low level of knowledge about mental illness due to a low level of education which prevents them from accessing information. Incorrect knowledge about the symptoms of mental illness is common in 36% of cases. The health districts of Korhogo and Bondoukou have the highest proportions of misunderstandings about the symptoms of mental illness.

Regarding attitudes and practices toward mental illness, the majority of those who care for patients are unaware of the proper conduct and resort to a multitude of practices that are often inadequate and often harmful. These populations must be sensitized to change their mentality in favor of the option of health centers for a loved one suffering from mental illness.

This work has a number of limitations that we are aware of and that deserve to be highlighted. First, it concerns the questionnaire, which omits some questions that could be included in the section on general knowledge of mental illness, namely contagiousness and heredity. We have indeed avoided making the questionnaire too long. Another limitation is related to the face-to-face interview method, where participants risk being more suspicious and less frank, especially since the work is done with the patients' companions.

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