Psychological Impact of Stigmatization of Guolished Ebola Patients at Ebola Treatment Centers in Conakry and Coyah

Keita MM1, Traoré FA2, Diallo KK3 and Doukouré M4
1Department of Psychiatry, Donka National Hospital, Republic of Guinea
2Infectious Disease Specialist, Infectious and Tropical Diseases Service, Donka National Hospital, Republic of Guinea
3Department of Infectious and Tropical Diseases, Donka National Hospital, Republic of Guinea
4Child Psychiatrist, Psychiatric Service, Donka National Hospital, Republic of Guinea

Abstract
Introduction: The epidemic of Ebola virus disease has had a huge impact on the well-being of affected people, their families, community members and health care professionals who treat people with Ebola. The objectives of this study were to contribute to improving the management of the stigma of people cured of Ebola in Guinea in general and, specifically to describe the socio-demographic characteristics of people cured of Ebola, to assess their psychosocial reintegration, formulate recommendations with a view to contributing to the improvement of psychosocial PEC, to identify the types of stigmatization of which they are victims and to identify the specific needs of these people cured of Ebola.

Methodology: This was a descriptive prospective study of three months duration (February 1 to April 30, 2016) on the psychological impact of the stigmatization of Ebola cured patients at Ebola Treatment Centers (CTE) from Conakry and Coyah during the study period.

Results: The average age of the patients was 12.98 ± 11.33 years with a male predominance of 56% and singles or 42.20%. The professional layer most affected were pupils and students (37%). Those not in schools are the most affected (44.15%). The main psychological effects reported were: stigma in interprofessional relationships (71%), stigma in health services (91%), intra-family stigma (37%).

Conclusion: This study showed that people infected and cured of Ebola suffer from multiple psychological and social problems. Taking these different types of stigma into account would allow systematic psychosocial monitoring in order to reduce the suffering of these patients and promote their socio-professional reintegration.

Keywords: Impact; Psychological; Stigma; CTE; Conakry; Coyah

Introduction
People cured of Ebola Virus Disease (EVD) face various somatic and psychological consequences; all these psychological and somatic alterations have not yet been fully identified and described. Our exploratory study of 256 people recovered from EVD in maritime Guinea, for a median of 8 months, revealed that around 15% of them have depressive symptoms; clinical consultation shows that these sometimes major symptoms have a strong impact on the social reintegration capacity of these people. Long-term follow-up of people cured of EVD will be necessary to know the evolution of these pathologies. In the current post-epidemic context, these observations highlight the need to develop and strengthen diagnostic and care systems in mental health on a national scale [1].

The Ebola virus disease epidemic in West Africa has been on an unprecedented scale in scale and duration [2]. Since the recognition of the outbreak in March 2014 until December 29, 2015, the World Health Organization (WHO) has reported 17,145 cases and 6,070 deaths, mainly in Guinea, Liberia and Sierra Leone [2].

Survivors of previous Ebola outbreaks have reported significant negative psychosocial effects. In one study, 35% of survivors reported "feeling rejected by society, including their family, friends and neighbors" [3]. Survivors often stigmatized, face loss of income and bereavement, especially when friends or relatives have died; moreover, a large part of their property was destroyed to prevent the transmission of the disease [4]. Some family members worried about the infection have shown reluctance to accept orphaned children [5].

Survivors can also play an important role in educating their community about Ebola, especially in areas with high infection rates, where some sick people may be afraid to seek medical help. They can bring hope for possible survival if medical care is received from the earliest stages of infection [6].

However, survivors have long-lasting antibodies against the circulating Ebola strain that could immunize them during subsequent infections with the same strain [7]. Survivors can treat infected people while following the infection control protocol, including the use of appropriate personal protective equipment recommended for all caregivers of Ebola patients. Some survivors have donated plasma to other Ebola patients, but the benefits of passive immunotherapy have yet to be proven [8].
Reintegration plans in the community begin before the survivor leaves the Ebola Treatment Unit (ETU), which aims to help the family and the local community accept the return of the survivor. Institutions engaged in the response to the Ebola epidemic emphasize that survivors are in precarious situations with need material and psychosocial assistance, as well as medical care. They report that they are also victims of ostracism (a form of social exclusion) and find it difficult to regain the social condition they knew before being infected with EVD. In addition, the deaths generated mourning experiences, deterioration in the psychological state and the guilt of the survivors. The disappearance of “productive” collateral or ascendants, such as heads of families, leaves their dependent parents, such as orphaned children, destitute [9].

In Guinea: Keita MM et al. [1] reported that of the 256 adult patients followed in Conakry who participated in this study, 55% were women of median age 31 years. The median duration since discharge from the Ebola Treatment Center (CTE) was 8.1 months; 15% presented a score higher than the threshold values suggestive of mental suffering (15% in men and 14% in women). In Guinea: Doumbouya, A et al. reported that 18.69% of survivors had a stable psychological state. In contrast, despair and insomnia occupied common frequencies of 37.38%. Anxiety and stress were cited in proportions of 26.16% and 22.42% respectively [10]. The scarcity of previous studies, the difficulties of social reintegration as well as the stigmatization suffered by these victims motivated the choice of this research topic. Our general objective in this study was to contribute to improving the psychological care and social reintegration of people recovered from Ebola in Guinea. This was specifically to describe the socio-demographic characteristics of people cured of Ebola and to identify the types of stigma experienced by cured Ebola patients.

**Methodology**

Our study took place at the provisional headquarters of the association of cured and affected people of Ebola in Guinea (APEGUAEG), housed by the Psychiatric service of the Donka national hospital whose structure includes: a President, a Vice-president, a Secretary General, a treasurer, a secretary for the study of projects and Programs and a secretary in charge of the organization. At the date of our survey, this association had 215 members and is open to anyone infected with cured or affected Ebola. Ebola infected and cured people who had been treated in Ebola Treatment Centers (ETC) made up the materials. A survey form and an informed consent form were used to collect data. It was a prospective, cross-sectional, descriptive study of a period of three months from February 1 to April 30, 2016 inclusive. The target population of our study was all of the Ebola infected and recovered people from the various ETCs in the prefectures of Conakry and Coyah.

We included in this study those infected and cured of Ebola aged 15 years or more who benefited from treatment in the CTE of Conakry and Coyah as well as the members of the association present in Conakry and Coyah during the study period and having given informed consent to participate in our study. Depending on the technique and the data collection procedure, we first issued an information sheet on the study to people infected and cured with Ebola, then an informed consent sheet was given to each participant after signature. Thus acknowledging having received clear information on this study. Finally, a survey on the psychosocial aspect through the questionnaires of the survey sheet to collect the psychological and social problems of these people. We used both quantitative and qualitative variables. We have defined stigma as all of the negative words or deeds used against people who have been cured of Ebola because of their status. (People, who have been abandoned, insulted, attacked, robbed, excluded from housing, etc.). We have distributed it according to the following methods:

- Stigma in interprofessional relationships
- Stigma of the health service
- Intra-family stigma

For the data analysis method, the survey sheets were randomly distributed to people recovered from Ebola who agreed to participate in the study beforehand. This distribution was preceded by an individual awareness of the participants. The cards were removed twenty (20) minutes after their distribution and those which were correctly filled were used for the study.

The data collected was analyzed and analyzed using EPI info software version 7.1 and entered by Word and Excel 2013 software.

Our limits were: the refusal of some people recovered from Ebola to answer the questionnaire and the unavailability of certain members of the association.

From an ethical point of view, the data were collected in strict confidentiality and on the informed oral consent of people cured of Ebola within the Association of Cured and Affected People with Ebola (APEGUAEG).

**Results**

154 people recovered from Ebola agreed to participate in our study, a frequency of 72%. The average age of the patients was 12.98 ± 11.33 years with a male predominance of 56% and singles of 42.20%. The 25-34 age group was the most affected (38.31%) followed by that of 35-44 years. Men were more represented than women, respectively 56% and 44% with a sex ratio M/F: 1.29 (Table 1).

The professional layer most affected was pupils and students (37%). Out of school were predominant (44.15%). The main psychological effects reported were stigma in interprofessional relationships (71%), stigma in health services (91%), and intra-family stigma (37%).

**Discussion**

It was a prospective, cross-sectional, descriptive study of a period of three months, going from February 1 to April 30, 2016 inclusive (Figure 1). This study, carried out within an association of Ebola recovered people, focused on the psychological impact of the stigmatization of Ebola recovered patients in Guinea (Figure 2). Our study has limitations due to its short duration and its low number of inclusions, but it remains very interesting, because it allows us to be located on certain problems of people cured of Ebola. And our results have enabled us to reach our objectives. Out of a total of 215 members of the association, 154 people recovered from Ebola agreed to participate in our study.

**Table 1:** Distribution of people recovered from Ebola in Conakry and Coyah by age group from February 1 to April 30, 2016.

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Effective</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24 years</td>
<td>20</td>
<td>12.98</td>
</tr>
<tr>
<td>25-34 years</td>
<td>59</td>
<td>38.31</td>
</tr>
<tr>
<td>35-44 years old</td>
<td>46</td>
<td>29.87</td>
</tr>
<tr>
<td>45-54 years old</td>
<td>21</td>
<td>13.63</td>
</tr>
<tr>
<td>55 and over</td>
<td>8</td>
<td>5.19</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>100</td>
</tr>
</tbody>
</table>

Average age: 12.98 ± 11.33; Years Extremes: 15 and 60
to participate in our study, a frequency of 72%. This high frequency could be explained by the active participation of the members of the association. Our study population was cured Ebola people, the majority of whom were young people. Our results are comparable to those found by RADJI [11] in the Ivory Coast who noted an average age of 32.37 years. These high rates could be explained by the fact that these age groups are the most active socially and professionally. Also it is the most important in the general population of Guinea.

We noted a predominance of the male sex is 56% with a sex ratio of M/F=1.29. Our result is higher than that of Sidibe et al. [12] in Guinea who found in his doctoral thesis in 2015 a predominance of the male sex, i.e., 52.5% with a sex ratio of 1.10; as well as Grovogui Coll [13] in 2017 in his Doctoral Thesis, which noted a male predominance with a frequency of 61.70%, i.e., a Gender M/F ratio of 1.61 (Table 2).

During our study, the most represented marital status was single, 42.20%. Our result is different from that of Coulibaly who found that 65% of the population was married [14].

### Table 2: Distribution of people cured of Ebola in Conakry and Coyah by level of education from February 1 to April 30, 2016.

<table>
<thead>
<tr>
<th>Educational</th>
<th>Attainment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out of school</td>
<td>68</td>
<td>44.15%</td>
</tr>
<tr>
<td>Primary</td>
<td>20</td>
<td>12.98%</td>
</tr>
<tr>
<td>Secondary</td>
<td>31</td>
<td>20.12%</td>
</tr>
<tr>
<td>University</td>
<td>35</td>
<td>22.72%</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>100%</td>
</tr>
</tbody>
</table>

The most represented socio-professional categories were pupils and students followed by housewives. These high frequencies could be explained by the fact that they belong to the most represented age groups but also the most active professionally.

In our study, the uneducated followed by primary education were the most represented in our study population. Our results are comparable to those of Doumboya A et al. [10] in Guinea in 2017 in his doctoral thesis in medicine who found that divorced women occupied respective percentages of 17.76% and 1.87%.

When asked about stigma, the majority of people cured of Ebola (71%) said they were victims of interprofessional stigma. The lack of information and the ignorance of the disease can be a source of rumor and psychosis among the population which is at the origin of the stigma. In our modern world, the press is paying close attention to the management of epidemics, particularly when it comes to outbreaks of Ebola virus disease. Establishing effective communication with the media is a very important element in managing the Ebola outbreaks [5]. In our study, Stigma of the health service was the most frequent at 91% and Intra-family stigma was less frequent at 37% the attitude of the neighborhood was mistrust. The stigma affects both healthcare professionals and Ebola patients because they are rumored to be vectors of the virus, and therefore people to be avoided. This situation could exacerbate the spread of the disease, as people flee health facilities for fear of coming into direct contact with medical personnel [15]. In Guinea, the social consequences of the epidemic are not only those linked to morbidity and the number of deaths, but also to those of stigma resulting from changes in behavior which has sometimes given rise to violent reactions [16] (Figures 3-6).

### Conclusion
At the end of our study we recorded 154 people infected and cured of Ebola, the observation of which allowed us to highlight the different types of stigma which are among others: stigma in interprofessional relationships, Stigma of health services and intra-family stigma which is the main social problem encountered in the neighborhood. This

![Administrative map of Guinea.](image1)

![Distribution of people cured of Ebola in Conakry and Coyah by frequency from February 1 to April 30, 2016.](image2)
work also made it possible to note a population mainly made up of young adults with a male predominance for the most part pupils, students and out of school. These results show all the suffering and social hardship suffered by people healed from Ebola in our country. Systematic psychosocial support would reduce these problems and ensure their socio-professional reintegration. A national study would be better suited to identify the different psychological and social aspects of people recovered from Ebola in Guinea.

References


12. Sidibe A. Therapeutic route for patients received in the infectious and tropical diseases department (SMIT) of the national Donka hospital and transferred to the Ebola treatment center (CTE). State doctorate thesis in medicine, University of Conakry. 2015.


15. Doumbouya AK. Guinea/Post-Ebola life our neighbors no longer reject us thanks to UNICEF. 2015;19:15.