

**“Blood, Sweat and Tears” –The psychiatry of PPE**  
**Reflections of an out of programme experience in Sierra Leone**

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**Introduction**

On the coast of West Africa there lies a country called Sierra Leone, “the Lion Mountain” derived from the the shape of the land formation visible from the sea. Sierra Leone has a population of approximately six million people. It is a country rich in natural minerals mainly diamonds, gold and iron, despite this it is also one of the poorest countries in the world, ranking 180 out of 182 in the human poverty index. (1)

Life expectancy in Sierra Leone is low averaging at 49.6 years for women, and 46.9 years for men, with a healthy life years expectancy of 30. (1) It has one of the highest maternal mortality rates in the world, with only 1 -2 doctors for every 100,000 people there are exceptional constraints on a struggling health system. During the long civil war which ended in 2000 many of the countries health professionals left and did not return. Since then Sierra Leone has remained at peace, and worked slowly towards improving its fragile health system and repairing the damage which occurred as a result. This was until now, when a new enemy hit in April 2014, but this time it was different. This enemy had no boundaries and was entirely unselective towards its victims, and rumbled slowly through the country as it quickly crossed back and forth across porous borders from Liberia and Guinea. This enemy was Ebola, a viral haemorrhagic disease which arose in West Africa in the worst, most devastating outbreak of its kind. During this outbreak approximately 700 health care workers got infected and over half of them died. A recent study carried out by the world health organisation found that health care workers where between 21 and 32 times more likely to be infected with Ebola than the general population (2).

A recent report of Ebola survivors compared the current Ebola crisis to a conflict impact as it has the same number of devastating consequences as a violent war due to the number of human loses, break up of family and social bonds and the economic impact on the country. 13,500 people were infected and almost 4000 people died. Of those who did survive 50% of people presented with signs and symptoms of distress, with women being the worst effected and a third of survivors have experienced stigma and rejection following recovery from Ebola. (3)

It was the knowledge of all this, along with my prior knowledge of Sierra Leone from a period of voluntary work in 2012 after completing the Diploma of Tropical medicine, which was my motivating force which lead me to volunteer for the Ebola Emergency response.

I was given the opportunity to volunteer at the end of my CT1 year of psychiatry training. I applied for a four week out of programme experience and volunteered as a doctor in an Ebola Treatment centre (ETC) in a southern district in Sierra Leone.

I present here a collection of my reflections from this experience with details of how the Ebola outbreak has had an impact on the national staff working in the ETC and what impact Ebola has had on the mental health provision offererd by a district hospital.

**Ebola**

The world has not yet reached a consensus about how this devastating virus took hold and why it took so long to defeat it, but what is understood is that this is one of the largest, most devastating outbreaks of Ebola the world has ever seen. It has resulted in significant lessons and given the world a much greater understanding of the disease and its impact. It has demonstrated the impact of

inequalities in global health systems and brought to light the fragility of Sierra Leone's health system. It was inadequate to defeat this disease alone as it was under resourced and under staffed, with many primary health centres without access to running water, isolation facilities or personal protective equipment. The population of Sierra Leone has had to make significant adaptations to their cultural and behavioural practices particularly around the management of the dead. Sierra Leoneans respect their dead by cleansing the body before burial this resulted in easy passage of the disease to care givers resulting in a change to the law of the management of the dead. The bodies of the dead must now be reported to the government burial teams to be swabbed and cleansed with chlorine before burial in a safe and dignified manner, this change in practice currently challenges the beliefs of the Sierra Leonean people and their age old traditions and initially caused significant levels of distress. "Every time I leave my house I pray that I do not see that mother, when she sees me she screams and runs away, when her son was sick, I sent him away for treatment and he never returned, that mother never saw him again" (Community health officer who volunteered with the Ebola Surveillance team prior to working in the ETC. )

### **Working in the Ebola Treatment Centre**

My main role was to cover shifts at the Ebola Treatment Centre (ETC) with a team made up of 1 other English doctor, 2 international nurses, and 16 national nurses, community health officers and health care aids. We screened and managed patients who met the World Health Organisation's case definition of a suspect or probable case of Ebola. The majority of patients were referred from hospital and primary health units according to the following criteria any person with sudden onset of high fever and at least three of the following symptoms: headaches, anorexia / loss of appetite, lethargy, aching muscles or joints, breathing difficulties, vomiting, diarrhoea, stomach pain, difficulty swallowing, hiccups or any person with inexplicable bleeding.

The ETC was frightening, it resembled a concentration camp rather than an environment for health care and convalescence and it is run with military precision to avoid cross infection. It is divided into three zones. The white zone is the non-clinical zone. The green zone is home to the medical team and the infection, prevention control team and the red zone is for the patients. As you progress through each zone the height of the fence also increases.

To prevent cross contamination from patients a one way system exists in the red zone, once a patient has been admitted there is only one of two ways to leave either via the happy shower (wash in 0.5% chlorine) or the mortuary, fear of the ETC has been instilled in all patients, many trying to escape from the ambulance on arrival. Patients did not have the right to refuse treatment and once admitted could not leave until they had received a negative ebola PCR result 72 hours after the onset of their symptoms. There was no use of the mental capacity act, no deprivation of liberty act, no patient autonomy, if a patient refused treatment they would be managed by the military. However unlike in the UK this was never challenged by the patients and they accepted all treatment as advised. Patient confidentiality was also a significant challenge due to the high levels of stigma around Ebola and many patients required proof of being disease free in the form of certificates before being accepted back into their communities.

Two metal fences ran around the red zone, each placed two metres apart, this keeps the patient in, but also more importantly allows communication with the patient without the need for personal, protective equipment, this also gives the family and friends the opportunity to visit and speak to their sick relative.

Access to the red zone for staff was through the dressing area, it could take up to 20 minutes to dress in personal, protective equipment, it was humid and hot often the outside temperatures were 35 degrees Celsius with 90% humidity. At handover each morning teams would be assigned as well as the number of entries for the day as protocols allowed us to only enter for a maximum of 45 minutes, a minimum of two hours apart due to both the physical and psychological demands in the red zone. It was essential to continually communicate with your buddy and to follow the

guidelines to ensure safe entry and exit into the red zone.

### **The communication challenge**

Aside from the heat I had two significant challenges when entering the red zone. Communication was difficult, almost impossible. As a psychiatry trainee I rely on facial expressions and body language almost as much as words to establish a rapport with my patient and to put them at ease. In personal, protective equipment this was impossible, all of my natural instincts were diminished and as I spoke to my patients, I felt like I was reviewing them under water. Even as I knelt down beside them and held their hand I knew that they could not see me smile because of the mask, or understand my words of reassurance because of the language barrier, I would strain my eyes, through the goggles, just to try and communicate something, anything, to try and reassure them, although we were in the same space we were entirely separate.

Communication with my patients felt entirely out of my control. Often my words of reassurance would get lost in the translation, often the nurses would answer my questions on the patient's behalf at times just commenting on their own observations, adding nothing to my initial impression. Facts could be completely omitted due to deep cultural divides "she won't tell you that" said a nurse when I asked about a layer of clay and herbs which had been spread thickly across a patient's abdomen and genitals, "please could you try and ask her about it" I replied gently and patiently, "it's nothing" was the response. There was a depth of cultural understanding I knew I could never achieve only being in Sierra Leone for one month.

It took patience to try and slowly piece the information together, often asking the same question three or four times each time slightly differently to try and elicit facts from assumption. Despite time limitations in the red zone nothing could be rushed. Due to the blunting of our senses each step in the patient review had to be performed, calmly, methodically and slowly to make sure mistakes did not happen.

The second challenge was more difficult to manage, and that was the fear of contamination from the patient, but like working with my patients in the UK it was necessary to approach each patient without judgment and treat them fairly and consistently. It was essential to be fully aware of all infection control protocols and to follow guidelines and by supporting and listening to colleagues concerns safety was assured and no health care worker was infected in the ETC I was placed in and this was something all the staff were very proud of.

### **The communication highlights**

The privilege of working with the national nurses was the highlight of my experience. It was an invaluable opportunity to get to know and understand the team, they were the real Ebola heroes and despite the difficulties they had encountered over the past year they welcomed me with kindness, openness and honesty, despite the trepidation of yet, another foreign doctor who will only stay for a month. Their flexibility, adaptability and enthusiasm to work with an ever changing flow of international doctors were admirable and demonstrated such resilience. I hopefully repaid this by being understanding, supportive and open to hear about the experiences they encountered. Each story similar and tainted by fear, stigma and hardship, they shared honest accounts "even we believed Ebola was magic, until the professor died, then, only then did we start to believe it was real" unsure of what the outcome of this would be for them.

An assessment of psychological impact on Sierra Leonean ETC staff carried out by the Maudsley found (4): 1) Staff described mental health problems across a range of severity from normal reactions to extremely distressing experience to profound and long lasting mental health difficulties requiring more intensive intervention. 2) Cultural or work related pressure not to show emotional impact of their work, fearing being fired or not being able to keep up with international staff. 3) Substantial proportion were likely to have ongoing mental health needs. Estimated 25-50% PTSD, 33% depression, 20-30% anxieties about health/contamination.

Having this awareness allowed me to sensitively support and listen to staff, manage my expectations of them. I advocated for all staff to be able to attend the psychosocial wellbeing workshops funded as a result of the Maudsley assessment, during their shifts in the ETC when no patients were present in. This was an essential resource for all staff, it ensured they all had the opportunity to attend and resulted in them feeling heard and valued, empowering them to speak up about their experiences and their needs.

The anxieties of the staff became evident with the stories they shared, “even now I go home from work and before entering the house, I remove all my clothes and put them in a bucket of chlorine, then I wash in chlorine....I will not enter or hold my children until I have done this”. “My brother called him and he told me not to use the soap the government gave out, in Freetown they say it was infected, so I buried it and then set a fire over it.”

One particularly memorable event for me was entering the confirmed tent for the first time with a nurse to do a stock check, and clear out, something which was expected to be done once a week. To my surprise on entering the ward it was clear that no one had entered for sometime, possibly even since the last patient had left and that was almost 4 months prior. On entering the ward, the nurse I was accompanying could not take her eyes off a bed, “that is where the first one died”, she then went on to slowly, and thoughtfully relay the story of many of the patients who had occupied beds in the confirmed tent. This like our patient reviews could not be rushed, and when she finished speaking we got on with the job of checking the stock. The following day, the same nurse offered to return to the confirmed tent to replace the stock, she asked if I would accompany her, and I could see that this request took trepidation and bravery, I did not hesitate to agree. Once our task had been completed, she commented that “Dr Grace has saved my life, she came with me inside the confirmed tent, I could not have done it without her”. We did not speak of it again, but I hope that the support and understanding I offered her, in some way helped validate her feelings and gave her a chance to speak out freely about her experience and come to terms with some of the horrific scenes she had witnessed. Even if it were only that I met her comments without the prejudice she may have expected from a foreign member of staff. I look forward to reading the outcome of the DfID funded psychosocial wellbeing workshops established to identify the needs of the national Ebola treatment centre staff.

I encountered many surprises through working with the national nursing team I learnt that the majority of the health care staff in Sierra Leone work as volunteers and it may take up to 5 years to receive a government pin to be paid even after completing their diploma. It saddens me to think that the nurses I worked with believed that their hard work in the Ebola treatment centre would be recompensed at the end of the outbreak and that they would be awarded a government pin. This was a myth and since the closure of the ETC 1 month ago the majority are now unemployed. How such joy for the end of the Ebola outbreak can be tainted with anxiety and fear towards the future, when all they should be doing is celebrating and resting. I cannot help reflecting on this as I am placed on the nominations list to be awarded a medal for my voluntary work in Sierra Leone, a medal I do not feel that I really deserve.

As we look towards the future and the end of the emergency it was important to highlight the impact of Ebola on the health system and what resources are available to support patients who have been affected by the disease. I was fortunate to gain access to the local hospital to assess what mental health provision was available and what impact Ebola has had on this.

### **Mental Health: Current provision and potential provisions for Ebola survivors at the local district hospital**

#### **The situation:**

In 2004 the WHO world mental health survey (1) found:

- 420,000 people in Sierra Leone had a mental disorder over the last 12 months only 2000 receiving treatment

- 1 psychiatric hospital, 1 retired psychiatrist
- 2% psychosis, 4% severe depression, 4% severe substance abuse. ( substance misuse accounts for 90% of psychiatric admissions)
- Prevalence rates of severe mental illness were 13% of the adult population (4 times higher than then estimated global prevalence of 3%).
- Believed to be a consequence of the civil war
- Rates of mental illness are expected to increase due to Ebola Crisis (4).

### **Methods:**

I interviewed the district mental health nurse, two doctors and a midwife to ascertain the changes since the start of Ebola. Review of patient registers to assess the mental health morbidity presenting to the hospital, the size of the caseload and management options for patients.

### **Major Findings:**

#### ***Pre-Ebola Jan 2014 –April 2014***

- 2 mental health nurses trained to diploma level graduated Jan 2014. (21 in the country)
- Despite this the mental health service was not functioning.
- No appropriate referral pathway
- 1 referral made from Maternity -Puerperal psychosis.
- Majority of patients identified independently from market place.
- Inadequate knowledge/training of all other healthcare staff
- Limited psychotropic medication (Carbamazepine and Chlorpromazine)

#### ***During Ebola –April 2014 –July 2015***

- 1 mental health nurse died of Ebola.
- Psychotropic medication expired and not replaced.
- National programme for distribution of psychotropic medication suspended due to inability to train hospital and PHU staff.
- All mental health training and supervision suspended.
- Ebola related morbidity made up greatest number on caseload
  - Depression, Ebola related grief, bereavement, Ebola related anxiety.
- Patients referred from psychosocial teams in community and ETC.
- Poor awareness or knowledge of symptoms of ill mental health amongst other health professionals.
- Unable to promote mental health service on radio
- No formal review or screening of EVD affected communities.

### **Major Recommendations**

- 1) Screening of EVD survivors to be carried out by mental health nurse and psychosocial team.
- 2) Urgent training for hospital and PHU staff to identify patients with mental health difficulties in order to identify difficulties in the wider population. Suggestions made to optimise and formalise the patient referral system. Recommendation's for training to occur locally rather than in the capital

Freetown as had been happening prior to the Ebola outbreak.

- 3) Urgent distribution of psychotropic medications once appropriate training has taken place.
- 4) Promotion of mental health services in the district via radio to ensure all potential patients can access the service available.
- 5) Ongoing training and supervision for the mental health nurse is urgently required.

### **Conclusions**

The opportunity to volunteer in Sierra Leone was a life changing experience, which tested my clinical skills, communication and confidence to the limits. To develop as a doctor it is essential to step outside of your comfort zone, but also to ensure you work within your limits, this requires adaptability and understanding of fluid, ever changing situations and different cultures which will be encountered in medicine anywhere in the world. This opportunity has evoked my curiosity to learn more about the global presentations of mental health needs and to understand more about different cultures. Volunteering in this capacity has exposed me to different ways my skills as a doctor can be used and has opened my eyes to many different opportunities. It has made me a better doctor with a greater understanding of my own strengths and limitations, as well as exposing me to some of the difficulties and needs of the world outside of the NHS.

### **References**

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