2012 Mass Psychogenic Illness of Breast Cancer in Ethiopia: A Case Study

Introduction

In 2012, a woman in Derashe Woreda, a zone in southern Ethiopia, passed away due to breast cancer complications, triggering an outbreak of similar symptoms in 120 women. The Regional Health Bureau sent a team of health professionals and reported no environmental or infectious disease causes, concluding this was a mass psychogenic illness. This led to further investigation into effective interventions to understand future occurrence events.[2]

Facts of the Case

Following a conflict, Ethiopia established the Segen Area Peoples zones, including Derashe Woreda, a district administrative structure with ten kebeles (local administrative units). Two Kebeles, Bussa Bassa and Bussa Killa, were affected during the outbreak.[2] In 2012, a protestant woman from Derashe Woreda died in her early 40s of metastatic breast cancer complications. The woman was socially recognized when she was alive, especially among the protestant community. She discussed her diagnosis and showed her wound and mastectomy site to women in her community. Shortly after her death, many women complained, claiming they had breast cancer. Similar symptoms were reported, such as breast swelling, breast pain, and back pain, along with other symptoms, such as dizziness, chest tightness, fatigue or weakness, tingling sensation, drowsiness, numbness or paralysis, and anxiety or nervousness.[2] Within three years, from the beginning of 2012 to June 2015, a total of 120 cases were reported. Women started to complain to their health institutions for medical treatment. However, due to their dissatisfaction with the health provider's findings, many of the women went to traditional and religious healing centers for alternative treatment. The women did not know why they had this illness, but some believed they were being punished by God or evil spirits. These beliefs led to women drinking herbal juices, applying herbs, and consenting to healers using “hot metallic rode to cauterize the affected areas as a treatment.”[2] After June 2015, no new cases were reported, and the cause of the illness was unresolved. Additionally, the cost of these types of outbreaks is rarely reported.[4]

Epidemiological Aspects of the Event

Mass psychogenic illness (MPI), also known as mass hysteria, is inadequately reported, particularly in developing countries. Given the absence of biological or environmental causes of the symptoms, diagnosing and explaining their illness is challenging, especially when it affects a group of people without explanation. Due to this, the nature of MPI is diverse, with various triggers depending on the type of incident.[3,4] Most incidents only last a short time, but some, like this case, have longer-lasting episodes. The Regional Health Bureau started hearing these reports and sent a team of health professionals to investigate and conduct a community-based cross-sectional study. They examined 92 women aged 17 to 56, with a mean of 32.5 years old. Sixty-nine women were from the Bussa Bassa Kebele, and the rest were from Bussa Killa Kebele. From 2014-2015, eighty (82.4%) women in the sample reported developing symptoms, fifty (62.5%) of those developed them in 2015, and the rest of the cases developed the illness between 2012 – 2014. Additionally, complaints of the women's illness ranged between 1 to 48 months, with a mean of 18.6 months.[1] About 52.6% of the participants didn’t know what caused their illness, while 39.2% said God was punishing them. About 75.3% of the women went to health services to seek treatment, 63.9% visited traditional healing services, 43.3% sought treatment at both health care and traditional healing services, 8.2% sought treatment from

religious services, and 5.1% sought treatment at all three facilities. Additionally, two focus groups were conducted to determine the onset of illness. In the discussions, most women talked about hearing stories about a protestant woman dying of breast cancer and showing people her wound. Soon after that, women started complaining about similar symptoms, and it was discovered that many women resided close to the women who died or knew her by blood. Misunderstandings from health professionals, misinformation, and religious beliefs increased distress and fear in these communities.[2,3]

Management of the Event

The public health response to this event was slow. The first few cases started in 2012, with the Regional Health Bureau intervening three years after the initial cases emerged, sending a team of "public health officers, general practitioners, gynecologists and different other stakeholders to the area."[2] By then, there were 120 cases with various problems, including misinformation circulating, isolation from families and neighbors, stigma and discrimination, fear of catching the illness, and being around infected people. Patients expressed dissatisfaction with the medications provided by doctors, leading women to seek traditional healers and suffering from infected wounds after getting injured by hot metallic rod on their breasts. Due to the slow response, medical facilities were overwhelmed, inadequate knowledge of mass hysteria, and health education and interventions were delayed.[2]

Communications of the Event

There was a significant lack of communication during this event. As mentioned above, it took three years before government health officials intervened to help control the spread of MPI. Crucial steps could have been taken to manage these incidents. Although little evidence is available on how to treat MPI, there are ways to manage these incidents before a large outbreak occurs. Early interventions through educating and training health professionals about mass psychogenic, how to communicate with patients who claim to have these psychological conditions, and validating community concerns to reduce anxiety can help decrease the possibility of an outbreak.[2,3,4,5] Additionally, physicians and community health professionals should collaborate with public health officials as they investigate these outbreaks of MPI.[5]

Summarize

Between 2012 - 2015, Derashe Woreda in Southern Ethiopia had a psychogenic illness outbreak leading to 120 cases of women suffering from this hysteria. Due to the delayed response of public health officials, knowledge, and misinformation, this outbreak endured for three years. Early intervention, education, training, and addressing community concerns to reduce anxiety can help prevent long-term outbreaks of mass psychogenic illness.

Reference

1. Ethiopia Peace Observatory. Konso and Segen Area Peoples Zone Conflict. (2023). https://epo.acleddata.com/segen-area-peoples-zone-conflict/
2. Ayehu, M., Endriyas, M., Mekonnen, E. *et al.* Chronic mass psychogenic illness among women in Derashe Woreda, Segen Area People Zone, southern Ethiopia: a community based cross-sectional study. *Int J Ment Health Syst* 12, 31 (2018). https://doi.org/10.1186/s13033-018-0207-1
3. Keshishian, K. Mass Psychogenic Illness and How to Respond to Incidents. *Health Protection Agency (2009).* https://www.apothecaries.org/wp-content/uploads/2019/06/Mass-psychogenic-illness-and-how-to-respond.pdf
4. Boss, L. Epidemic Hysteria: Review of the Published Literature. (1997). https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d24aeb03f4a5da4ef03b24f1afb87e01d104dcb3
5. Weir, E. Mass Sociogenic Illness. (2005). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC543940/