Mothers in Distress: Cases from the Maternal-Child Mental Health Consultation Service, Liberia, West Africa

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Abstract

Maternal health and well-being have a direct impact on the welfare of the child, as caregiver distress contributes to morbidity in the child. Liberia’s under-five mortality rate is improving dramatically but remains high: as of 2010, 1 in 10 children still die before the age of five. Psychosocial factors contribute to a child’s increased risk for malnutrition, neglect, and infectious diseases. Among these risk factors is maternal mental health.
We present three cases from our work on the recently established maternal-child mental health consultation service at JFK Hospital in Monrovia Liberia. The consultation service, which began operations in April 2011, is operated by trained mental health clinicians (MHC’s) supervised onsite and remotely via teleconferences with members of our team. The mental health clinicians routinely round on the Pediatrics and Maternity wards at JFK Hospital, the main medical center in Monrovia. By virtue of their integrated presence in the hospital, the stigma of mental health care is reduced and those at risk have access to needed services that they might not otherwise receive or engage in.

These cases illustrate how addressing psychosocial stressors and the mental health of mothers can improve the welfare of both the mother and the child. Common psychosocial factors include food insecurity, financial pressures, gender inequality, lack of access to contraception and unwanted fertility, intimate partner violence, childhood sexual abuse, psychological trauma, including stillbirths and infant deaths. The population still struggles with effects of the years of devastating civil war, which ended in 2003. The mental health clinicians staffing the maternal child consultation service provide counseling, emotional support and empowerment for women, often adolescents themselves, who are coping with the serious illness of their child or complications of a pregnancy. We illustrate how a mental health screening evaluation and referral for co-localized ongoing care made during an acute hospital stay has the potential to simultaneously address MDGs 4 and 5: reducing under-5 mortality and improving maternal health.

Introduction

The burden of childhood mortality in Liberia remains significant, despite recent progress made in this area. The highest period of risk for a child is in the first year of life: one third of under-five deaths occur during the first month of life, and another third occurs from the post-natal period to 11 months of age (1). During early life, a child’s health depends on the health of his or her caretakers, and the mother plays a critical role. Maternal health issues that can impact on child welfare span the range from acute obstetric complications including post-partum hemorrhage or infection, or other chronic health problems, to psychiatric complications including post-partum depression, psychosis, or adjustment disorder in the setting of social stressors. In Liberia, mental health services are very limited and only recently have mental health specialists started to become integrated into the workforce in settings where mothers and children present for care.

A survey of the top conditions affecting children in Liberia indicates that malnutrition, rates of stunting (42%), diarrheal disease, malaria and other infectious diseases are pervasive (2). Liberia’s under five mortality was 103 per 1000 live births in 2010 (3). The top causes of death in children under 5 are malaria (18%), pneumonia (14%), other diseases (13%), prematurity (12%), and measles (10%) (3). Malnutrition is an underlying risk factor contributing to the vulnerability to and mortality from infectious diseases. Many of these conditions are potentially preventable by behavioral actions such as improved utilization of insecticide-treated bednets, vaccination, and early access to medical
care. These tasks may be neglected in homes overwhelmed by various conflicts and psychological stressors.

The maternal child mental health consultation program’s inception was in April 2012 and was formed through a collaboration of JFK Hospital with the nonprofit organization Health Education and Relief through Teaching (HEARTT) which partners with Mount Sinai and other academic medical centers. The overarching goal is to assist in the development of sustainable advances in the local healthcare system. Our team from Mount Sinai, alongside mental health clinicians trained by the MoHSW and the Carter Center, participates in advocacy for the importance of identifying and treating common mental health conditions, aims to dispel stigma and address the human rights of affected individuals. Psychiatry residents from the global health track at the Icahn School of Medicine rotate in Liberia for an elective month during which they provide education to local staff and trainees on the nature of and causes of psychiatric symptoms and offer training sessions in appropriate management strategies.

The following three cases describe patients encountered by our team on rounds with the Maternal-Child Mental Health Consultation service which sees patients referred from the pediatrics, obstetric and emergency departments at JFK Hospital, the major medical center in the capital city of Monrovia and the national referral hospital.

**Case 1:**

Baby J is a 1 year old boy who was born with hydrocephalus. At the time of his delivery, however, there were no viable neurosurgical interventions due to lack of materials required to create a shunt as well as a trained physician that could perform the surgery. Baby J was sent home with his 33 year old Mother to return to their rural town 4 hours outside of Monrovia with no plans for any future interventions. Within her community, Mother was ostracized and rumored to be doing witchcraft such that Baby J was deemed not to be a baby but rather a devil. Mother showed great courage, and her close attachment with this child prevented her from being like many other women in her community who would have abandoned the child at birth or left him “in a bush.” At 11 months, Baby J was brought to JFK hospital as his now massive hydrocephalus was creating numerous cranial pressure ulcers, and there were now the materials and doctor that could introduce a shunt. Mother stayed by his bedside 24 hours a day throughout his 6 weeks of stay and was his advocate in ensuring proper treatment. Although she left behind her husband and 4 other children, Mother felt strongly about staying by J’s bedside throughout. The mental health clinicians at JFK Hospital worked closely with her in educating her about baby J’s illness, providing supportive psychotherapy by reinforcing adaptive behaviors such as obtaining appropriate medical care, helping her to negotiate being stigmatized by other visitors and patients at the hospital, and being a liaison between the mother and pediatrics team. By working as liaisons, the mental health clinicians helped to encourage the treatment team and the mother to work together in order to achieve the treatment goals by helping each of them understand each other's concerns, answer questions and work together as a team.

**Case 2:**

Patient H is an 18 year old woman admitted to the obstetrics service with eclampsia, having already seized with loss of consciousness and subsequent facial injuries. She gave
birth to a health baby boy via cesarean section but was found to be delirious with waxing/waning consciousness and paranoid thinking for several days postpartum. Although it quickly resolved the exact etiology of the delirium was uncertain due to various confounding factors as well as limited resources for further testing. The mental health clinicians helped the primary team maintain patient’s safety while her delirium resolved.

After obtaining a complete psychiatric history, it was evident that Patient H had suffered significant trauma- she was raped by a man whom she initially stated was her aunt’s husband but later found to be the husband of member of her community who had taken her in to help with chores around the house in order to help the patient’s family with its finances. It was this rape that led to her current pregnancy. Throughout their work, patient H repeatedly stated how her religious beliefs were a major source of support and helped her understand her situation. She had feelings of guilt of how the rape would effect her aunt and although she recognized that this man had taken away her childhood, she forgave him. She had a bright affect, discussed her future goals of going to school, living in the United States and raising her son. The mental health team attempted to balance realistic planning, especially given H’s limited options and resources, for her post-discharge plans with support for her resilient outlook.

Case 3:

13 year old boy S was brought as an outpatient to be seen by the mental health clinicians by his father. S’s father, who was himself a teacher, noticed that as a child S had difficulties with language and learning which persisted and created increased difficulties with abilities to manage schoolwork and activities of daily living without significant prompting. S had never had a thorough diagnostic workup, and, due to the scarce resources in Liberia, the family was unable to obtain IQ testing, neuropsychiatric testing nor educational resources such as special education that could assist this boy. The mental health clinicians worked with this family using cognitive behavioral techniques to implement techniques they could use at home to reinforce positive behaviors as well as engage him at school in order to succeed. It was apparent that a thorough medical workup was also necessary to rule out medical causes such as diabetes, hearing and sight testing, as possible factors that could be contributing to his difficulties.

Discussion

Factors which may contribute to child health include maternal health and in particular, maternal mental health. Maternal mental health is multifactorially determined in the biopsychosocial model as illustrated in Figure 1.
Maternal mental health has significant implications for a child’s health, mediated through perinatal as well as postpartum factors. Literature clearly supports (4,5) the impact of maternal depression on child survival. Studies have linked untreated maternal depression to poor child outcomes in terms of rates of stunting, diarrheal diseases (6) and child development including motor skills, language, and social/emotional development (7-8). A study conducted in India examined infants of 37 depressed mothers as well as 134 non-depressed mothers. This study found that after adjusting for birth weight and parental education, maternal depression was strongly associated with infants being underweight at 6 months (7). Breastfeeding, an important factor in childhood nutrition and factor that impacts on survival has been shown to be affected by maternal depression – reduced initiation and duration of breastfeeding has been found in mothers with untreated depression (9,10,11).
It is thought that maternal depression during pregnancy and early postpartum are likely underdiagnosed and untreated, even in settings with greater access to psychiatric care (12). This has been attributed, in part, to a reluctance of women to endorse problems during motherhood, a time of presumed happiness.

Alcohol and illicit drug use during pregnancy, although rarely encountered among patients seen by our team, can have serious consequences for the child. In utero exposure to alcohol may cause birth defects, including facial and brain abnormalities and is one of the common preventable causes of intellectual disability (13). In some cases, there may not be any detectable effects of perinatal substance use at birth on the infant; however this may be evident later in the child’s life. Children and teenagers exposed to cocaine were show to be more irritable, have difficulty focusing their attention and have more behavioral problems (14).

Despite maternal and neonatal healthcare services commanding 20% of the health care budget, maternal and neonatal healthcare-related services, poor child health outcomes persist. The Liberian Ministry of Health & Social Welfare (MOHSW) has a commitment to the Millennium Development Goal of a two-thirds reduction in childhood mortality and morbidity and has developed a range of policies including the National Health Policy and Plan, National Reproductive Health Policy, The Essential Package of Health Services, The Road Map for the Reduction of Maternal and Neonatal Mortality, Accelerated Action Plan for Reducing Maternal and Neonatal Mortality and The Liberian National Policy and Strategy for Child Survival.

The mental health nurses at JFK Hospital staff the consultation service year-round, provide psycho-education, supportive individual and group therapy, and can prescribe psychotropic medications. They advise on breastfeeding and nutrition and promote access to services including reproductive health and access to contraception, for which there is a high unmet need in Liberia. A high prevalence of rape and unwanted pregnancies result in overburdened caretakers. There is only 11% contraceptive prevalence (2005) in the country, and a total fertility rate of 5.2 (15). Pregnancy and childbirth remains a high-risk period for women in Liberia - a woman’s chance of dying in childbirth was 1/24 in 2010, although an improvement from the rate of 1/13 in 1990, there is much room for progress on this MDG. The rights of women are increasingly being promoted – with new legislation and programs to address sexual and gender based violence recently initiated in Liberia (16).

Despite this clear evidence-based link between child survival and maternal mental health, mental health services remain under-funded. Our project initiated working with the JFK hospital is an innovative and low-cost way to screen and provide treatment for patients and we hope that further study will demonstrate whether the interventions provided have an impact on childhood health outcomes.
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