

## Contribution of the Depression in ObaapaVitA and Newhints (DON) Population-based Cohort Study towards Perinatal Depression Epidemiology- the Ghana Model

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### Background

The DON study sought to add to the sparse evidence base on perinatal mental health in sub-Saharan Africa (SSA) by employing what is perhaps the largest cohort ever attempted in this region of pregnant and recently delivered women to provide data on the burden, determinants, consequences of perinatal depression, including an evaluation of the impact of a home-visits intervention on reduced depression.

The research was undertaken within seven contiguous districts of the Brong Ahafo region of Ghana between January 2008 and July 2009, nested within two consecutive trials addressing maternal [1] and neonatal health and survival [2]. Women were screened once at pregnancy (over 20,000 women), and again between 4 and 12 weeks after birth (close to 14,000) with the locally validated Patient Health Questionnaire (PHQ-9) [3]. Other data collected included: socio-demographics, obstetric histories, pregnancies, births, deaths and infant and maternal health.

The key findings defining the character of perinatal depression in rural Ghana suggest that: 1) antenatal depression is more prevalent (9%) than postnatal depression (3.5%) though a third of women with postnatal depression are also depressed antenatally, 2) Most risk factors of postnatal depression relate to adverse birth outcomes of the mother and/or baby, whereas those of antenatal depression are sociodemographic and pregnancy-specific, 3) Both antenatal and postnatal depression may have deleterious effects on the health of the mother and/or on child health and survival.

### Next Steps

This initial characterization of the epidemiology of perinatal depression in Ghana coupled with the potential adverse effects on child survival and the health of the mother, is a call for immediate action. These children and mothers have to be helped using innovative strategies if necessary but without having to re-invent the wheel! Various interventions to tackle perinatal depression have evolved over the years, and evidence appears to be converging on preventive and curative measures using lay community resources particularly in settings with inadequate mental health infrastructure [4-6]. Indeed, arguments in favour of scaling up these interventions have been put forward by the new movement for global mental health and the World Health Organisation. Most of the evidence that informed these calls to action, though overwhelming, have come from studies largely from south Asia and south America region.

### What we Propose

We agree with Patel and colleagues that more research into the effectiveness of mental health interventions should not hinder scale up initiatives [7]. However, given the dearth of evidence in the use of lay community health workers in improving mental well-being in SSA, plus the fact that only research that is conducted locally is likely to

affect awareness and lead to policy change/development [8], we aim to first test the external validity of these interventions in our region. This may require some amount of adaptations to proven and recommended interventions such as the Thinking Healthy Programme [4], or developing workable interventions from scratch. It will also be apt to add value to these interventions by incorporating other interventions that promote child growth and development, which is beginning to gain considerable currency as a public health issue requiring immediate attention. The benefits from such integrated interventions are huge, guaranteeing optimal child development and growth, school readiness, optimal adolescent growth and health, and ultimately a productive and healthy adult population.

### Conclusion

The stage has been set for testing psychological treatments and behavioral interventions in this setting. The critical evidence on the burden, determinants, and consequences of perinatal depression, supporting the need for interventions was made entirely possible through healthy collaborations with maternal and child health initiatives. The Ghana model has provided a clear demonstration of how to merge mental health with other health interventions and the huge benefits that accrue to both.

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