

Births after a Catastrophe: Understanding the Nature of Tsunami Baby Boom in Post-Tsunami (*Smong*) 2004 in Aceh, Indonesia

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Introduction

Disaster Impacts on Population

Disasters impact population directly at the onsets, during emergency and rehabilitation periods, and in the longer terms of recovery and post-recovery.

Yet, there are not many studies done on the long term population change after a major disaster.

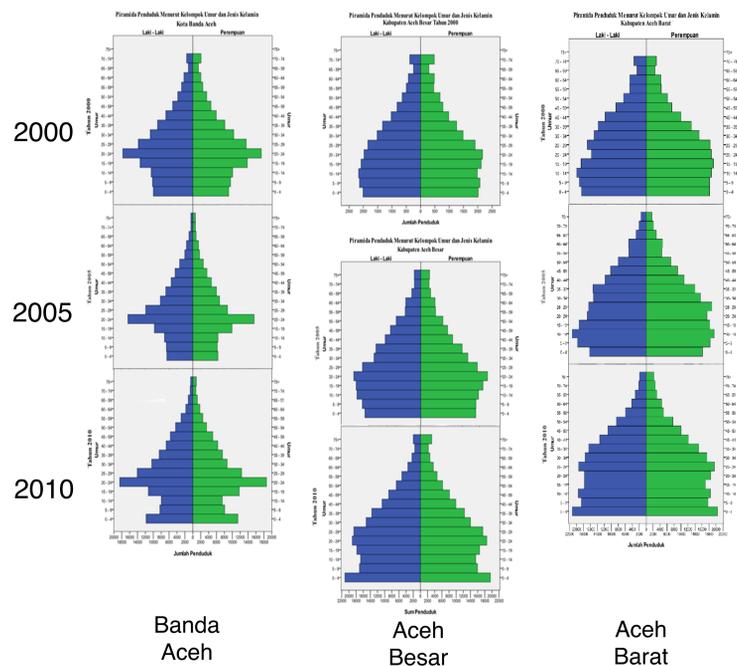
Based on 2010 Indonesia Census, new cohort of “Tsunami Babies” was emerging in tsunami-affected coastal-urban areas of Aceh.

This study confirms and investigates the background of this “Tsunami Baby Boom” phenomenon. What factors did contribute to the new born increase? What are implications, if any, to family planning and reproduction health intervention during emergency period following a major disaster?

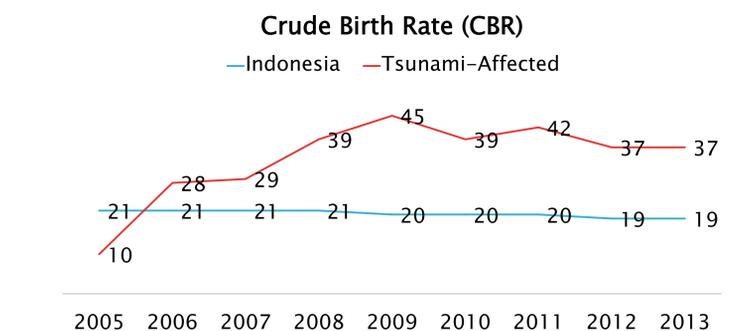
No or limited family planning intervention can cause unfavorable long-term impact to population increase and change.

Results

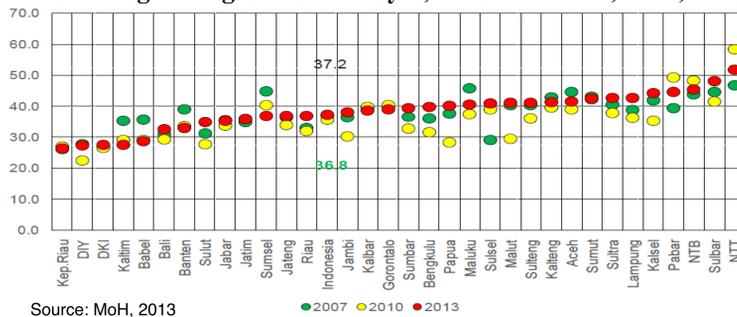
Tsunami Baby-Boom: Comparing 2000, 2005, and 2010 Census



Doubled Post-Tsunami Crude Birth Rate (CBR) in Banda Aceh, Aceh Besar & Aceh Jaya Affected Communities



Stunting among Children < 5yrs, Indonesia 2007, 2010, 2013



Source: MoH, 2013

Children < 5 yrs	2007		2013	
	Aceh	National	Aceh	National
Underweight	25.5%	18.4%	26,3%	19,6%
Stunted	44.6%	36.8%	41,5%	37,2%

Conclusions

Tsunami Baby Boom could have been modest

- Tsunami Baby Boom phenomenon was taking place in the *Smong*- affected regions in Aceh.
- CBR is estimated to have been as high as 45 in 2009, more than double of the current CBR of Aceh or Indonesia at 20 per 1000 people.
- There are four main factors contributing to the increase of new born in post-Tsunami Aceh:
 - Survivors are mostly in their productive ages;
 - Influx of new residents;
 - Widows and widowers re-married have new children;
 - Cultural: Soothing from the post-disaster misery.

The importance of Nutrition, FP and RH intervention in post-disaster

- Limited resources, limited access, and lack of trust on the importance of family planning and reproductive health in emergency situation and in the recovery of the post-disaster regions.
- Occasional family planning and reproductive health promotions in emergency period, but much more was actually needed.
- Aceh’s BKKBN staff: “Worse already due to local policy after decentralization, family planning and reproductive health promotion in post devastating 2004 Tsunami had been sidelined and ad-hoc at best.”
- The results underline the importance of family planning and reproductive health intervention during emergency period and during displacement after a major disaster.

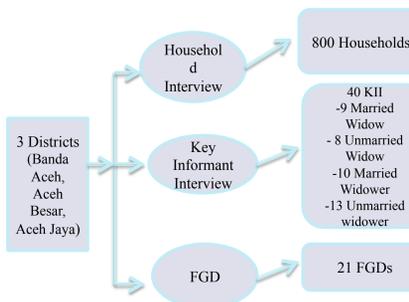
Design and Methods

Study Population

- Target population: 2004 Tsunami-affected population in Aceh
- Study population: Households living in tsunami-inundated areas in Banda Aceh, Aceh Besar, and Aceh Jaya Districts

Sample Selection

- Tsunami-inundated areas listed based on various databases and GIS
- Random: Two-stage cluster sampling with *gampong* (village) as cluster
- 40 clusters out of 196 villages were selected
- 20 HHs living in donated houses were systematically selected from each cluster
- Supplemented with FGDs and KIIs



Recommendation

Next Step: A wake up call

A wake up call for all stakeholders on the urgent and strategic place of population issues, especially family planning and reproductive health issues, in disaster mitigation and intervention.

Tsunami Baby Boom shows that a sporadic campaign on reproductive issues during emergency period after 2004 *Smong* (Tsunami) was not effective. Distributing contraceptives in the IDP camps, for example, is not an adequate measure. A more comprehensive family planning and reproductive health measure is needed in a post-disaster communities.

Current basic health indicators in Aceh are worrisome as six out of seven main public health indicators in Aceh are the worst in Sumatra by the 2013 National Department of Health’s account, including 41.5% stunting prevalence among children under five years old.

Further study is needed to investigate whether the two, tsunami-baby boom and poor children health indicators e.g. stunting and underweight are related.

Literature

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