# Socio-cultural and economic factors impact to children malnutrition in ksatria airlangga floating hospital service (RSTKA) in remote area: Bawean island

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# INTRODUCTION

- Child undernutrition is a major public health problem in many low and middle income countries (LMICs).
- Malnutrition in children severely affects their physical growth and academic achievements. It results from a complex interaction of contextual factors related to community, household, environmental, socioeconomic and cultural influences which have significant health consequences.
- There is lack of data about malnutrition in Indonesia especially rural area (Bawean island).

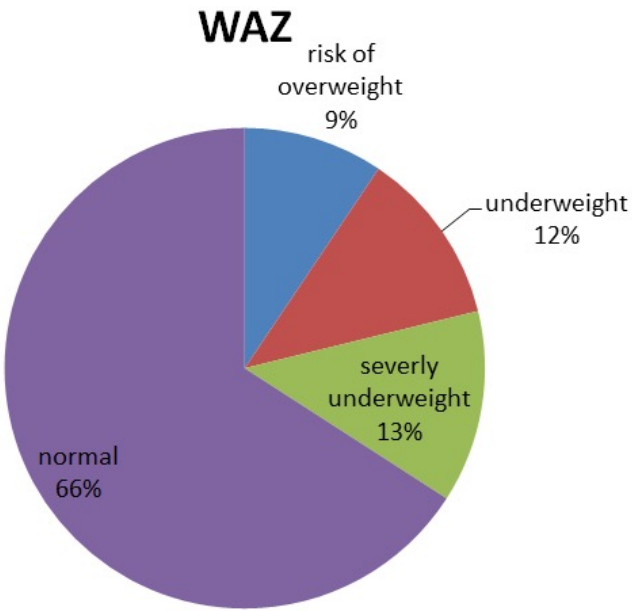
# OBJECTIVE

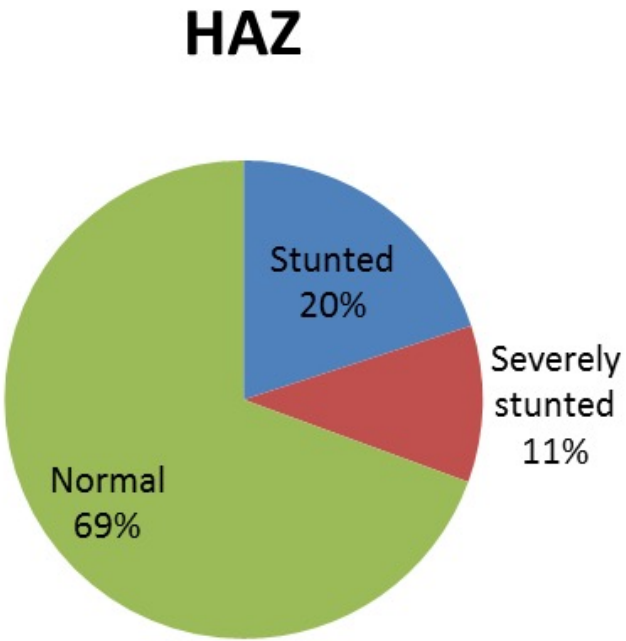
To assess the impact of various socio-cultural and economic factors on nutritional status of children in a rural area Bawean Island

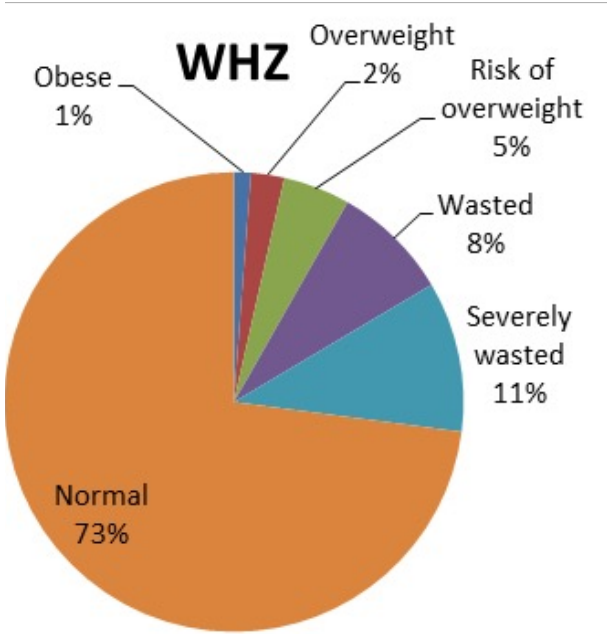
# METHODS

- This study used descriptive analytical design with the cross-sectional approach.
- The total 75 mothers with their children aged 2 months–8 years old from Bawean Island, Gresik, East Jawa, Indonesia were total sampling in RSTKA service.
- This research identifies cultural, lifestyle values, and economic status using questionnaires. The questionnaire has been validated and is feasible to be carried out by the sample.
- Demographic and household characteristics were documented and anthropometric measurements were collected to calculate weight-for-age (WAZ), height-for-age (HAZ) and weight-for-height (WHZ).
- WHO Anthro and SPSS v 20 (IBM Corp, Chicago, IL, US) were used for the analysis of data.

# RESULTS


WAZ
risk of overweight 9%
underweight 12%
severly underweight 13%
normal 66%


HAZ
Stunted 20%
Severely stunted 11%
Normal 69%


WHZ
Obese 1%
Overweight 2%
Risk of overweight 5%
Wasted 8%
Severely wasted 11%
Normal 73%

| | WHZ | | | HAZ | | | WAZ | | |
|---|---|---|---|---|---|---|---|---|---|
| | Normal n (%) | Malnutrition n (%) | P value | No stunting n (%) | Stunting n (%) | P value | Normal n (%) | Malnutrition n (%) | P value |
| **Gender** | | | | | | | | | |
| Male | 27 (67.5%) | 13 (32.5%) | 0.072 | 25 (62.5%) | 15 (37.5%) | 0.277 | 26 (65%) | 14 (35%) | 0.552 |
| Female | 30 (85.7%) | 5 (14.3%) | | 26 (74.3%) | 9 (25.7%) | | 25 (71.4%) | 10 (28.6%) | |
| **Age** | | | | | | | | | |
| < 12 m.o | 17 (63%) | 10 (37%) | 0.237 | 21 (77.8%) | 6 (22.2%) | 0.174 | 20 (74.1%) | 7 (25.9%) | 0.806 |
| >12-36 mo | 29 (82.9%) | 6 (17.1%) | | 20 (57.1%) | 15 (42.9%) | | 22 (62.9%) | 13 (37.1%) | |
| >36-60 mo | 8 (88.9%) | 1 (11.1%) | | 6 (66.7%) | 3 (33.3%) | | 6 (66.7%) | 3 (33.3%) | |
| >60 mo | 3 (75%) | 1 (25%) | | 4 (100%) | 0 | | 3 (75%) | 1 (25%) | |
| **Mother Education** | | | | | | | | | |
| ES | 5 (55.6%) | 4 (44.4%) | 0.579 | 6 (66.7%) | 3 (33.3%) | 0.513 | 4 (44.4%) | 5 (55.6%) | 0.587 |
| JHS | 12 (75%) | 4 (25%) | | 8 (50%) | 8 (50%) | | 12 (75%) | 4 (25%) | |
| SHS | 25 (78.1%) | 7 (21.9%) | | 24 (75%) | 8 (25%) | | 22 (68.8%) | 10 (31.3%) | |
| Diploma | 3 (75%) | 1 (25%) | | 3 (75%) | 1 (25%) | | 3 (75%) | 1 (25%) | |
| Degree | 12 (85.7%) | 2 (14.3%) | | 10 (71.4%) | 4 (28.6%) | | 10 (71.4%) | 4 (28.6%) | |
| **Socio-cultural** | | | | | | | | | |
| Yes | 42 (72.4%) | 16 (27.6%) | 0.194 | 40 (69%) | 18 (31%) | 0.741 | 36 (62.1%) | 22 (37.9%) | **0.042** |
| No | 15 (88.2%) | 2 (11.8%) | | 11 (64.7%) | 6 (35.3%) | | 15 (88.2%) | 2 (11.8%) | |
| **Economic status** | | | | | | | | | |
| High | 28 (73.7%) | 10 (26.3%) | 0.178 | 31 (81.6%) | 7 (18.4%) | **0.012** | 23 (60.5%) | 15 (39.5%) | 0.156 |
| middle | 11 (64.7%) | 6 (35.3%) | | 7 (41.2%) | 10 (58.8%) | | 11 (64.7%) | 6 (35.3%) | |
| Low | 18 (90%) | 2 (10%) | | 13 (65%) | 7 (35%) | | 17 (85%) | 3 (15%) | |