

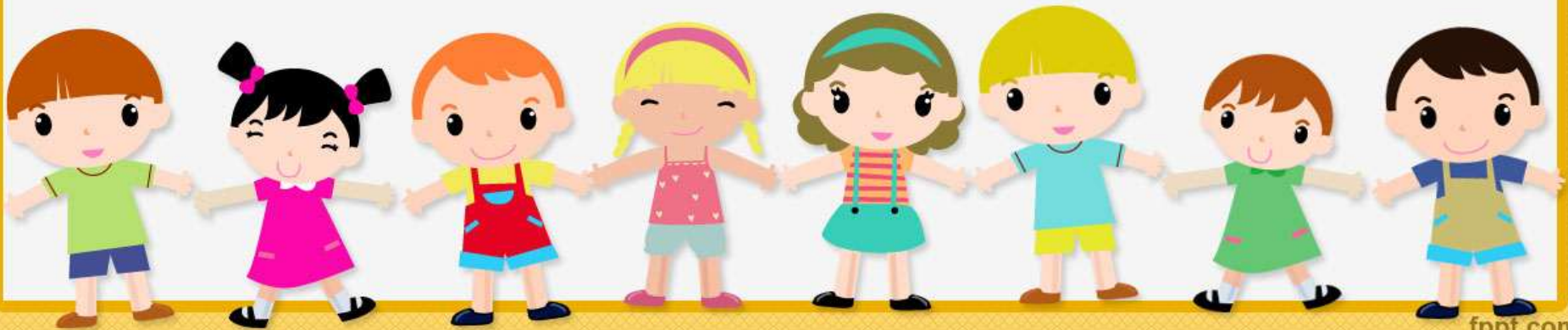
DETERMINANT FACTORS OF INFANT MORTALITY BIMA REGENCY IN 2012



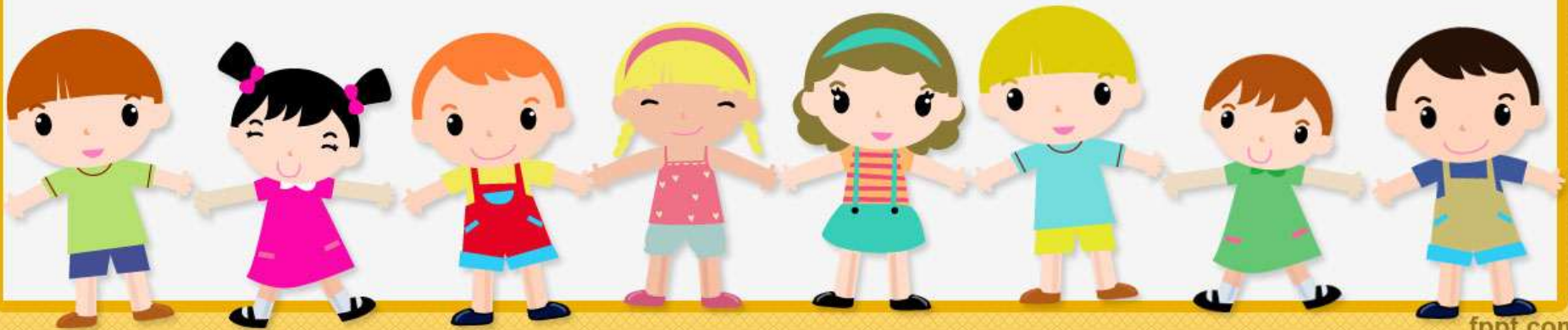
RINI HENDARI

INTRODUCTION

- **Infant mortality In Indonesia 2 fold compared with neighboring countries, the army, Thailand, Sri Lanka and China.**
- **Infant mortality according to Indonesian demographic health survey in 2012 is a 32/1000 live births**



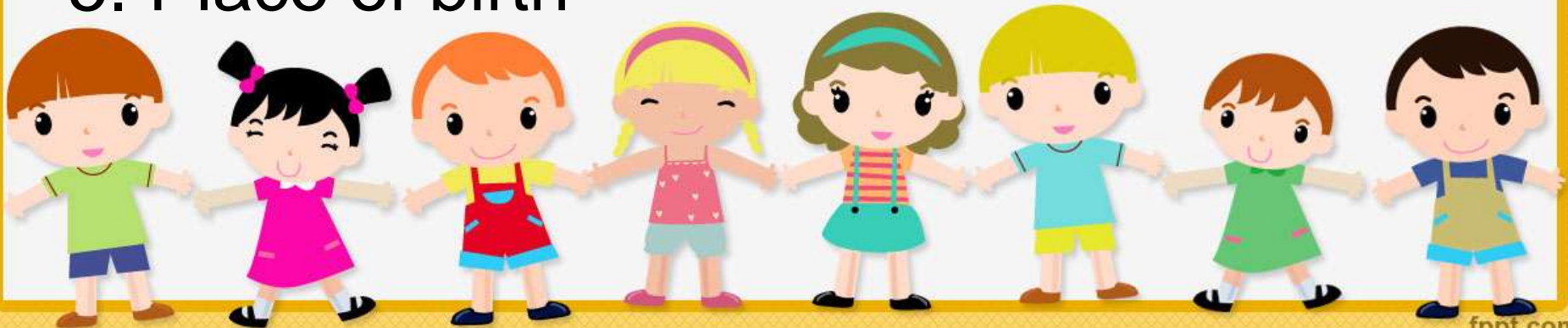
- **Infant mortality in West Nusa Tenggara still high of 61,2/1000 live births**
- **The 2015th MDGs in Indonesia is 17/1000 live births**
- **The number of deaths of infants in the Regency of Bima last 5 years is stay & on 2012, 10,17/1000 live births**



FORMULATION OF THE PROBLEM

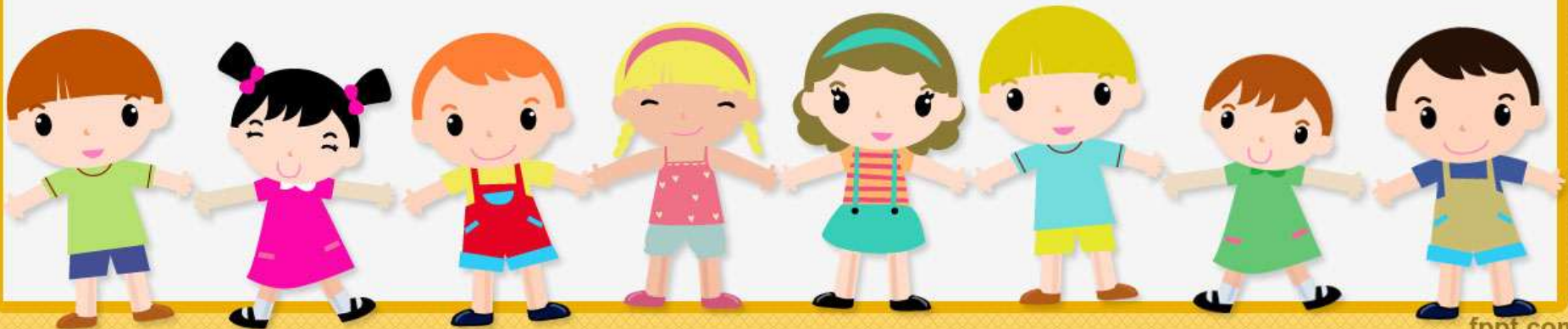
Whether the risk factors:

1. The family income
2. Maternal age
3. Spacing birth
4. The frequency of the Ante Natal Care
5. Place of birth



6. Weight infants born
7. Exclusive breastfeeding
8. Mother's knowledge about baby care
9. Completeness of immunization basics
10. Clean source of water
11. The frequency of health counseling

Associated with infant mortality ?



RESEARCH PURPOSES

General Purpose

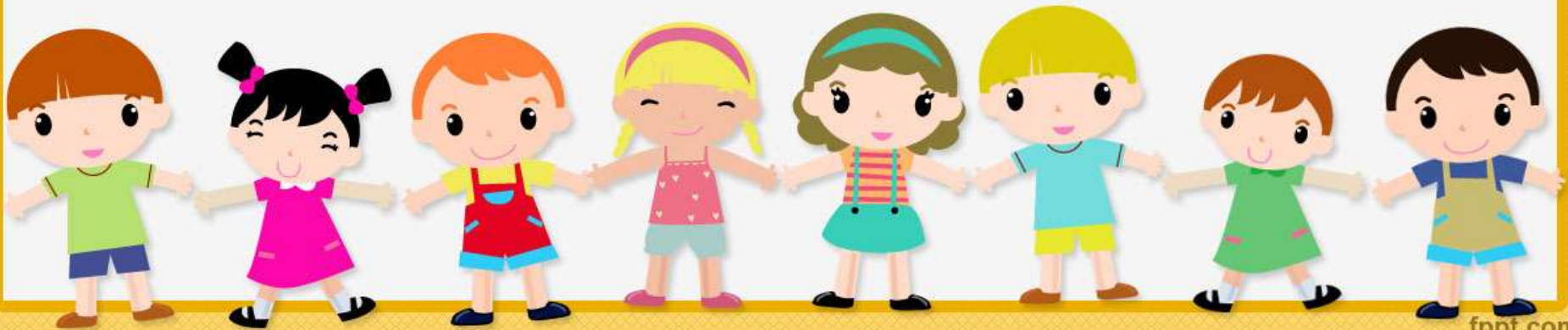
Knowing the factors determinant of infant mortality in Bima Regency



SPECIAL PURPOSES

Relationship factors

1. The family income
2. Maternal age
3. Spacing birth
4. The frequency of the Ante Natal Care
5. Place of birth



6. Weight infants born
7. Exclusive breastfeeding
8. Mother's knowledge about baby care
9. Completeness of immunization basics
10. Clean source of water
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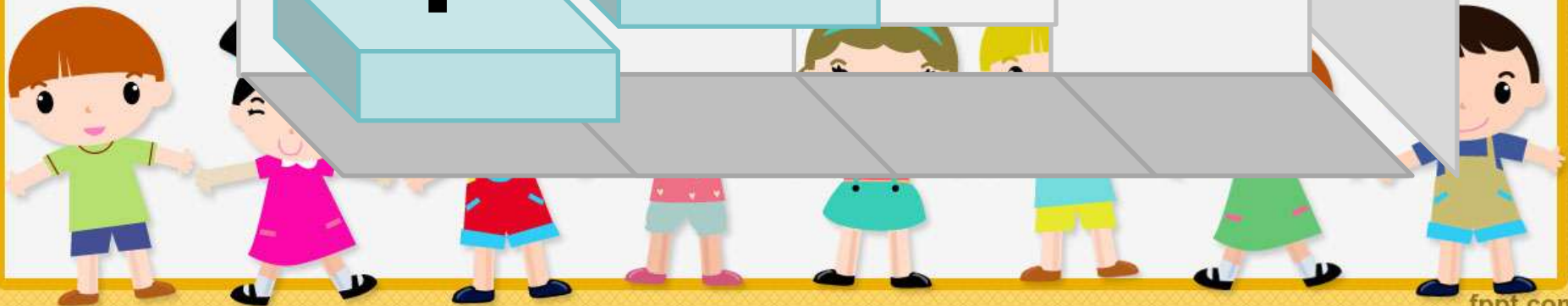
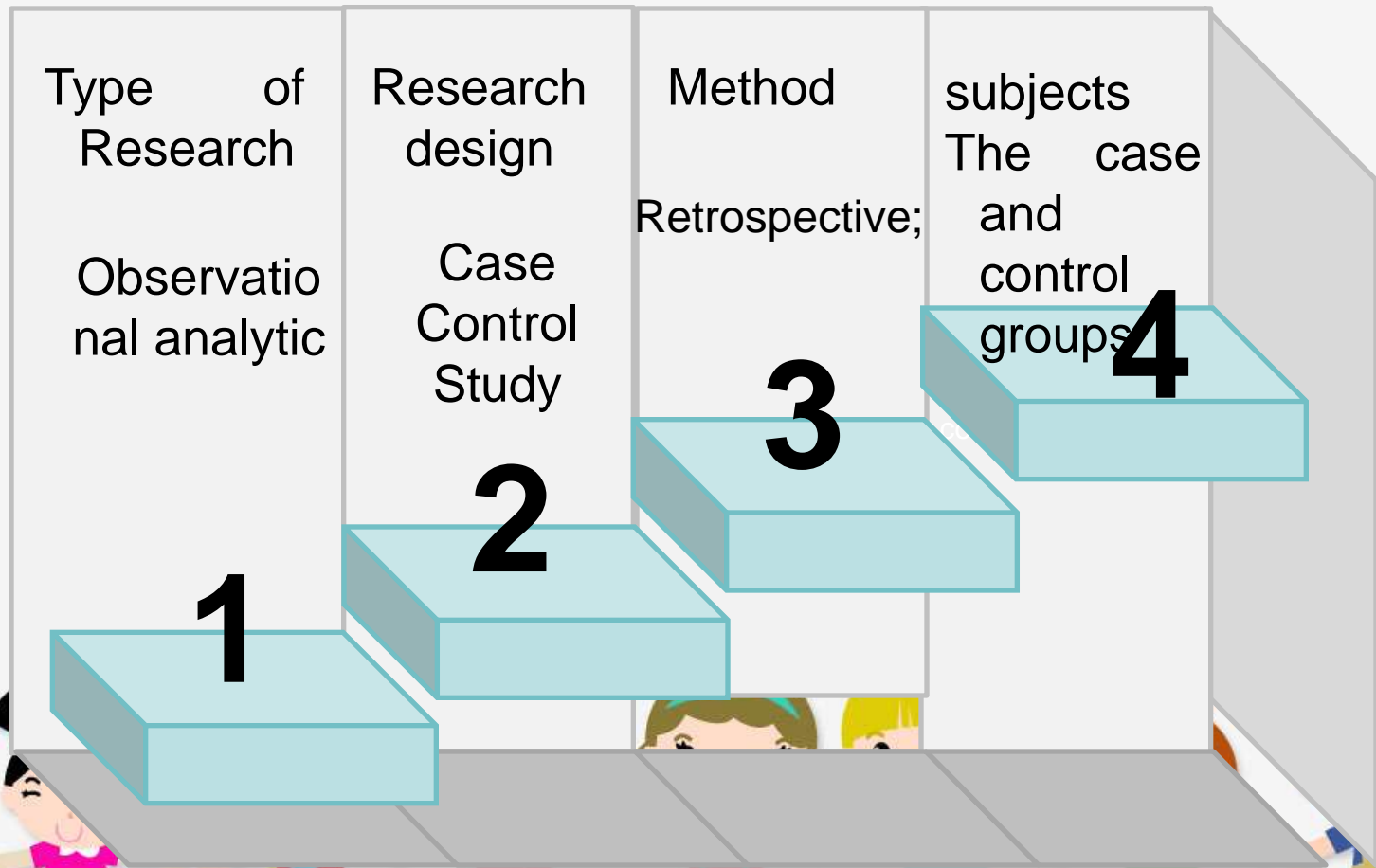
Whether The factors mention above associated with infant mortality in Bima.



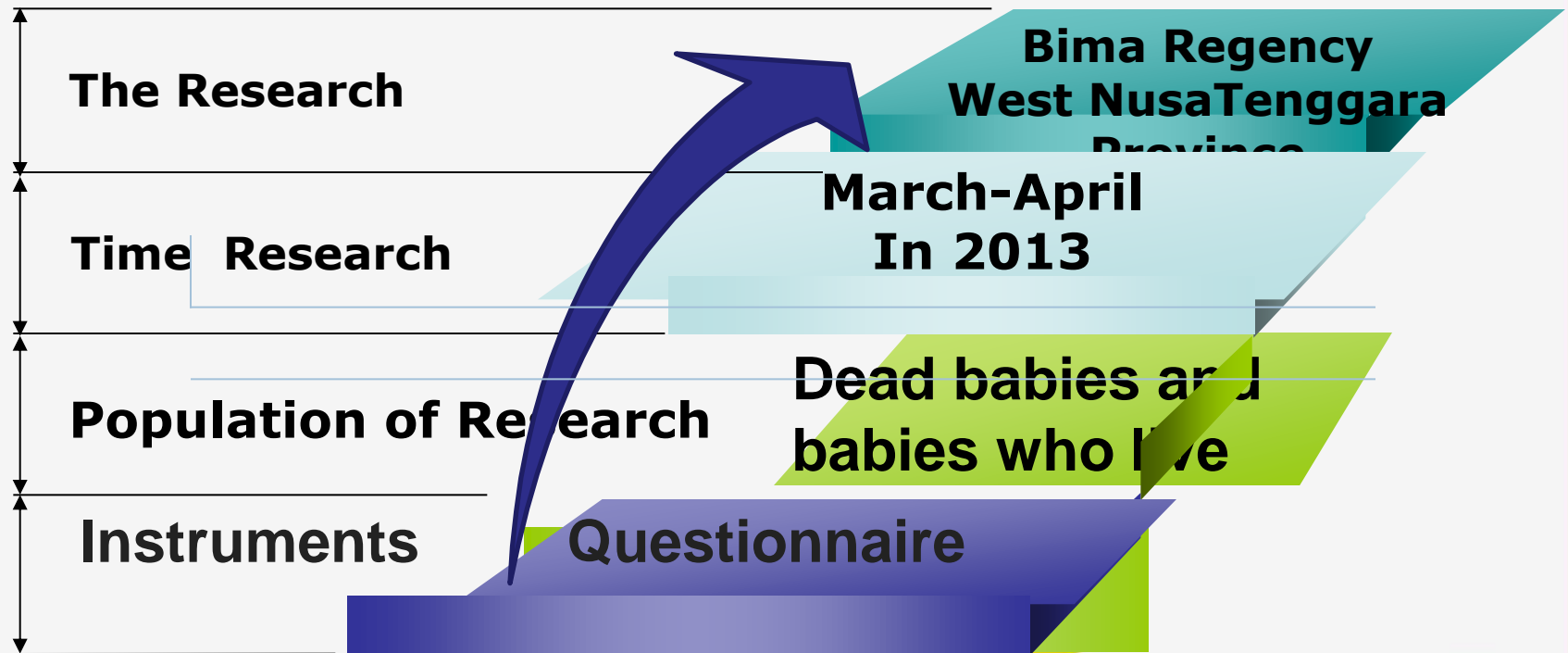
RESEARCH METHODS



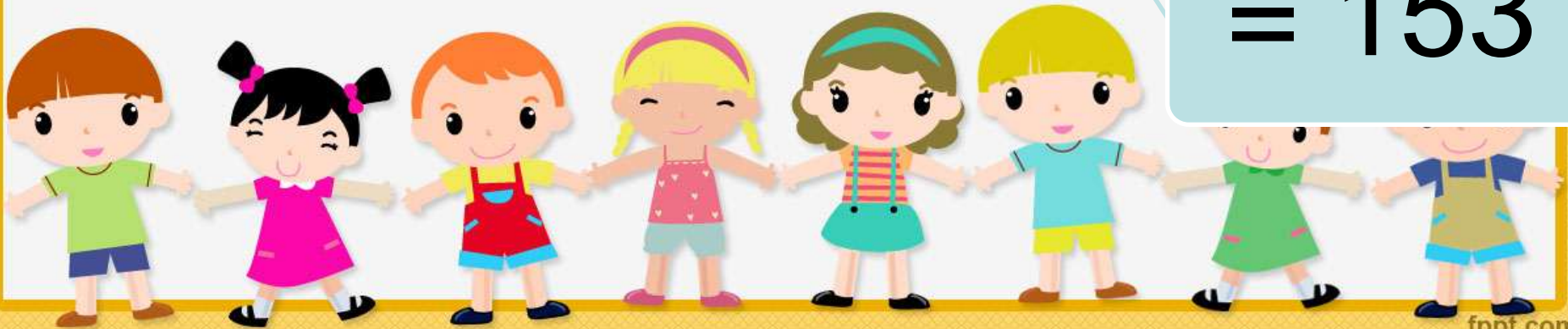
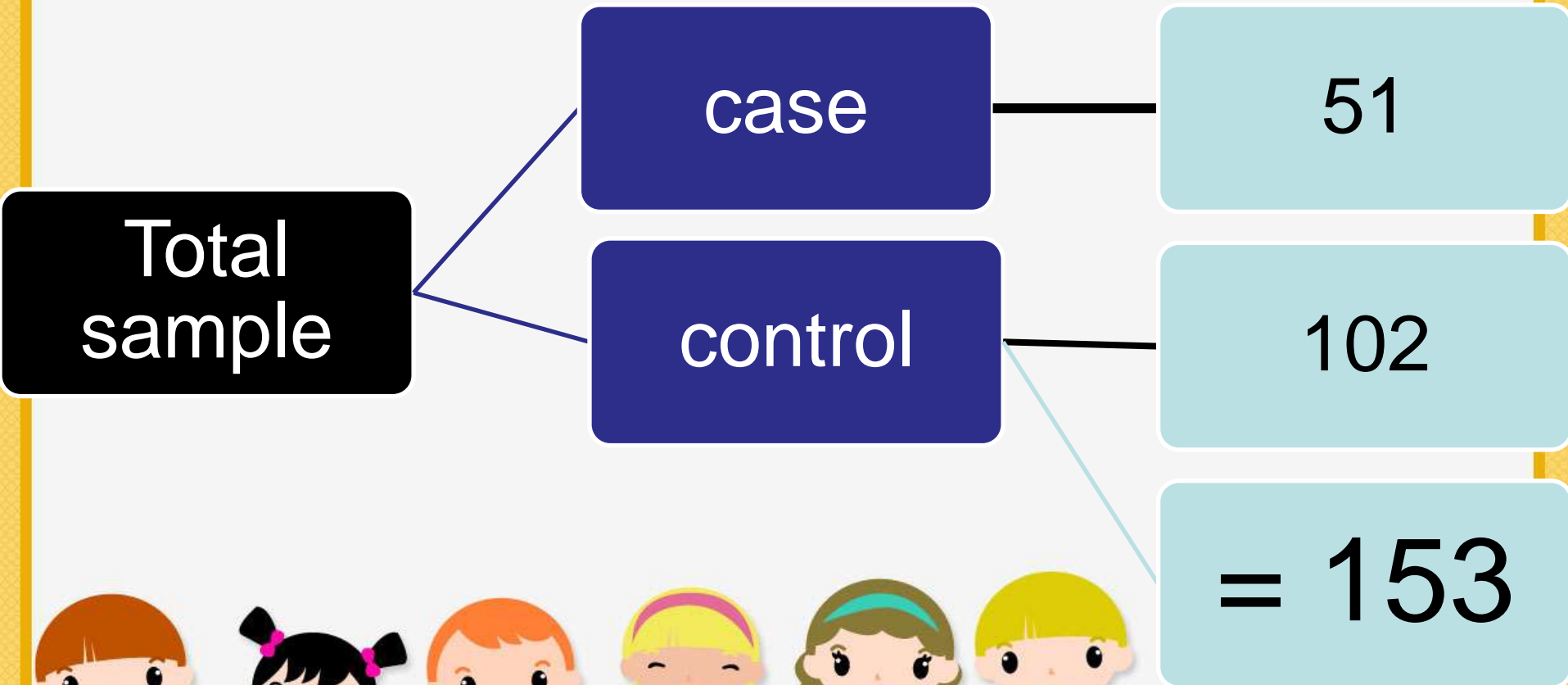
RESEARCH METHODS



The Location, time, population, and research instruments



The determination of the sample

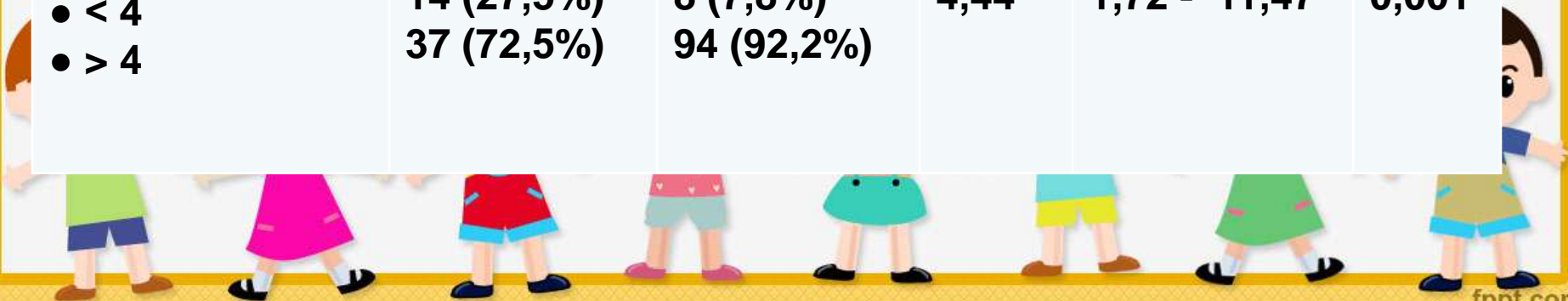


RESEARCH RESULT



Bivariat analysis of risk factors

Risk factors	Case	Control	OR	95% CI	P
Family income					
● Under RMS	46 (90,2%)	68 (66,7%)	4,60	1,67 - 12,63	0,002
● Above RMS	5 (9,8%)	34 (33,3%)			
Age mother					
● < 20, > 35	17 (33,3%)	11 (10,8%)	4,13	1,76 - 9,72	0,001
● 20-35 years	34 (66,7%)	91 (89,2%)			
Birth Spacing					
● ≤24 months	20 (39,2%)	11 (10,8%)	5,33	2,30 - 12,37	0,000
● ≥24 months	31 (60,8%)	91 (89,2%)			
Frequency of the ANC					
● < 4	14 (27,5%)	8 (7,8%)	4,44	1,72 - 11,47	0,001
● > 4	37 (72,5%)	94 (92,2%)			



Risk factors	Case	Control	OR	95% CI	P
Knowledge mother about the care of babies					
• good	31 (60,8%)	19 (18,6%)	6,77	3,19 – 14,35	0,000
• less	20 (39,2%)	83 (81,4%)			
Weight infants born					
• ≤ 2500 grams	17 (33,3%)	8 (7,8%)	5,87	2,32 – 14,85	0,000
• ≥ 2500 grams	34 (66,7%)	95 (4,9%)			
completeness of immunization					
Incompletely	10 (19,6%)	5 (4,9%)	4,73	1,52 – 14,70	0,004
Completely	41 (80,4%)	97 (95,1%)			
ASI					
not exclusive	14 (27,5%)	7 (6,9%)			
Exclusive	37 (72,5%)	95 (93,1%)	5,13	1.92 – 13,73	0,001

Risk factors	Case	Control	OR	95% CI	P
Place of birth					
• Non-health care facilities	5 (9,8%)	2 (2,0%)	5,43	1,01 – 29,06	0,029
• Health care facilities	46 (90,2%)	100 (98,0%)			
Frequency of health counseling					
• Rare	16 (31,4%)	80 (78,4%)	7,95	3,73 – 16,95	0,000
• Often	35 (68,6%)	22 (21,6%)			
Clean water sources					
sanitationary	36 (70,6%)	28 (27,5%)	6,34	3,01 – 13,33	0,000
Non- pipe	15 (29,4%)	74 (72,5%)			
Pipe					

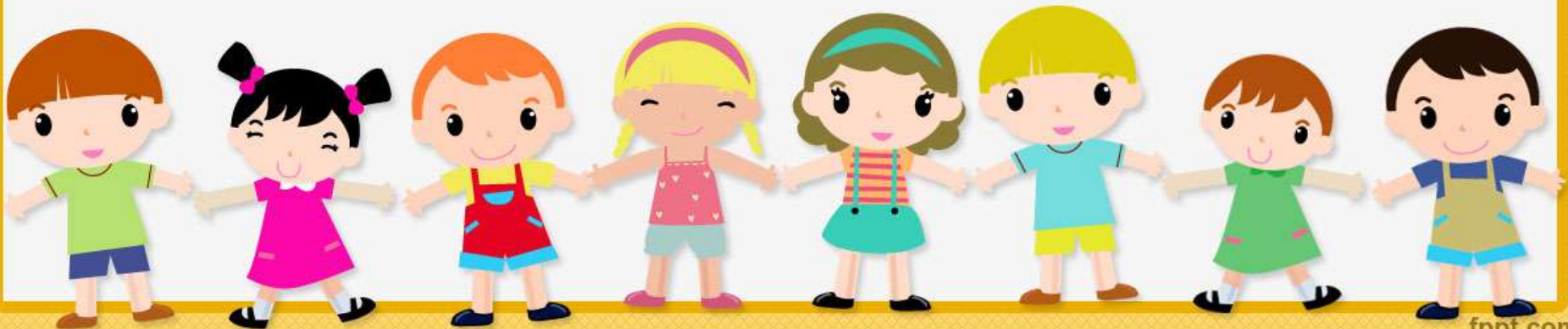
ANALYSIS OF RISK FACTORS INFANT MORTALITY IN A MULTIVARIATE

Risk Factors	OR adjusted	95% CI	P	R2
Birth Weight <2500 gr.	7,38	2,04 – 26,70	0,002	6,1%
Birth spacing <24 months	6,69	2,11 – 21,16	0,001	12,6%
Maternal Age <20 or >35 years	6,63	1,84 – 23,90	0,004	3,3%
Not exclusively breastfeeding	6,23	2,10 – 18,46	0,001	6,7%
The frequency of rare health counseling	6,02	2,17 – 16,65	0,001	26,4%
Clean water sources sanitary non pipe	3,72	1,35 – 10,25	0,011	2,4%

DISCUSSION

Maternal factors

Infant mortality factors that occurred in the regency of Bima is owned by mothers aged <20 or >35 years with odd 6.6 times compared with mother's age 20-35 years. According to the study, Suradi et al (2000) the age of mothers less than 20 years old have the opportunity to give birth to 1.27 times the baby with LOW BIRTH WEIGHT compared with maternal age 20-35 years of age and over 35 years mother have the opportunity to give birth to baby 2.10 times with LOW BIRTH WEIGHT compared with aged 20-35 years old.



The age of the first marriage of a mother dealing with the death of a baby. The younger a mother decided to do weddings, the longer the period of reproduction making it possible to give birth to more than one child. According to Wiknjosastro, (2002), most deaths occurred in the proportion of mothers with parity >3 children and when seen according to the spacing was less than 2 years. Nazrul research et al., (2009), in Bangladesh showed that the spacing effect on infant mortality, if the previous birth intervals are longer, the lower the risk of death.

INFANT FACTORS

The survival of babies who are born in the early neonatal period very closely associated with birth weight. The results showed that the weight of the baby born <2500 grams increase of 7.3 times odd infant mortality compared with the weight of a baby born >2500 gr.

Research on Efriza (2007) of RSUD Dr. Achmad Muchtar Bukit Tinggi in the period 2001-2005 infancy with weight <2500 grams. increases the risk of neonatal mortality compared with 58.7 times baby weight > 2500 gr.


Babies with low birth weight increases the risk of death because the babies are very vulnerable to disruption, disorders of body temperature regulation, lung maturity is not yet perfect and circulatory system disorders.

Infant mortality is influenced by factors other than the weight of infants born may also be affected by the grant of exclusive breastfeeding and immunisasi. The results showed that the factors are not exclusive BREASTFEEDING increases the risk of infant death 6,23 times, compared with exclusive breastfeeding with 6.7% leverage.

with the condition of breast-feeding in Bima Regency, there are still many breastfeeding Moms Directly before exit (pralaktal) on day one or day 3 give honey or white water even to the baby milk formula, giving advice is generally done on the advice of my grandmother subjects who assume that babies cry because hungry therefore should be drinking or eating

Factor health services

The results showed that the frequency of health counseling which rarely raise the odd 6 times against infant mortality compared with the frequency of counseling that often with the greatest leverage is 16.5%.



The problem of death and pain in infants and children are indeed inseparable from socio-cultural factors and the environment in the communities where they are located.

Bima Regency in general society/mother will attend in droves following the public health when there is something given by health workers for example supplementary feeding in infants or pregnant women, they are rarely present due to her awareness of her own based on the need for health.

Environmental Factors

- The results showed a non clean source of water piping system enhances the odd. 3.7 times the infant mortality compared to a source of clean water piping.

According to WHO (2005) lack of public access to clean water and sanitation contribute to the deaths of 1.8 million people per year due to diarrhea, especially in children under five years of age.

Conclusions and suggestions


Factors that are proven to increase the risk of infant mortality in Bima Regency are: baby born weight < 2500 grams. spacing birth < 24 months, maternal age < 20 or > 35 years old, breast-feeding is not exclusive,

the frequency of rare health
counseling and clean source of
water non piping.

All of factors above contribute of
influence of infant mortality 61,1%.

Suggestions,

- improve supervision and monitoring to PHC activities in extension and promotion of the importance of nutrition on pregnant women,



breast-feeding Exclusively until infants aged 6 months, delay the age of marriage and pregnancy spacing with a wide range of innovation and the appropriate methods of the target.

LOCATION OF RESEARCH

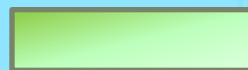
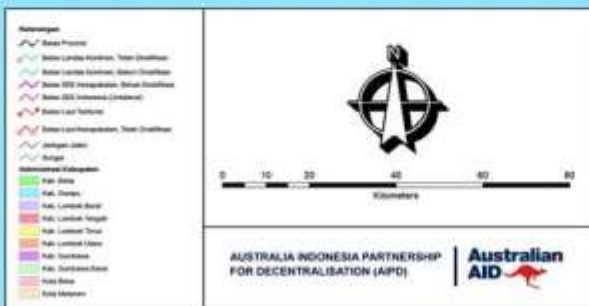
Map of West Nusa Tenggara

North Lombok
Regency

Dompu
Regency

West Lombok
Regency

Bima Regency



Bima Regency



Thanks for your
attention

