





International Conference On Mathematics **And Sciences**

Attitudes towards COVID-19 vaccines to support the achievement of government targets: A case study of **Bontang city**



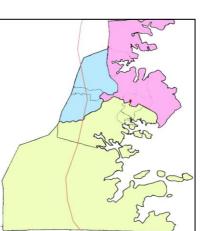
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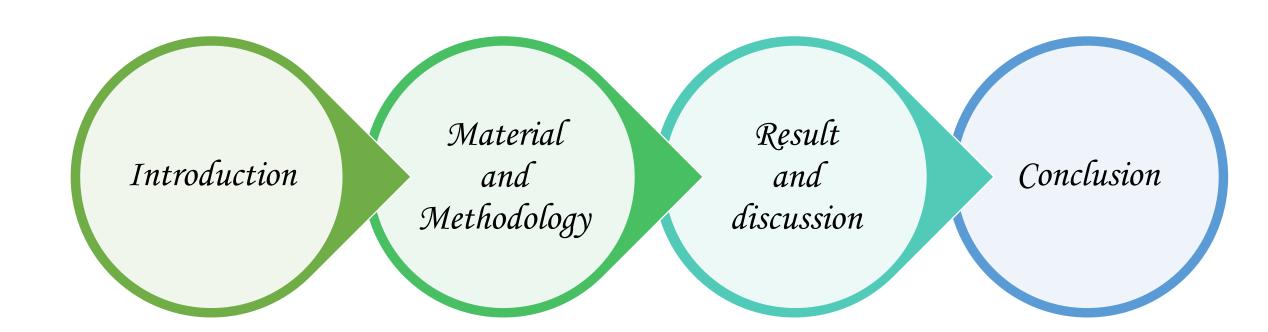


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OUTLINE







INTRODUCTION



The world's shared plan to end extreme poverty, reduce inequality, and protect the planet by 2030.















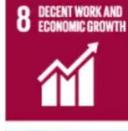








13 CLIMATE ACTION













INTRODUCTION



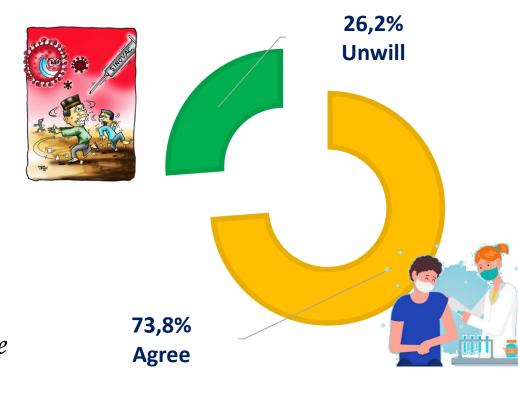
The vaccination program launched by the Indonesian government is the fastest and best solution to overcome the COVID-19 pandemic.





The government targets to vaccinate 70% of the total population in Indonesia.

The public unwillingness to receive COVID-19 vaccinations in the Bontang city.



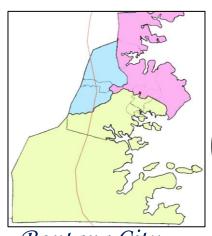
We estimate predictors of six of domains of unwillingness to receive COVID-19 vaccinations or negative attitudes towards COVID-19 vaccines in the Bontang city using binary logistic regression.



MATERIAL AND METHODOLOGY



The data from Darnah, Hayati, & Roy, were collaborated with Research and Development Agency Bontang City, 2021.



Bontang City

A cross sectional study.

Sample: 500 participants The sample size has been determined based on the Slovin's formula.

Binary logistic regression Age Gender Profession Attitudes Level of Income Education

We were analyzed factors significantly affect on the Attitudes towards COVID-19 vaccines in the Bontang city

October 12th & 13th 2021



MATERIAL AND METHODOLOGY



Research Variables

Gender.

- 1: *Male*;
- 2: Female

Age.

- 1: <17 years
- 2. 17-25 years
- 3. 26-35 years
- 4. 36-45 years
- 5. 46-55 years
- 6. >55 years.

Profession

- 1. Lecturer & Teacher
- 2. Government Employee
- 3. Trader
- 4. Farmer
- 5. Fisherman.
- 6. Employee
- 7. BUMN/BUMD Employee
- 8. Honorary Employee
- 7. Laborer
- 8. Doctor etc.
- 9. Enterpreneur.
- 10. Others.

Attitudes towards

COVID-19 vaccines

in the Bontang

city.

- 1: Unwill.
- 0: Agree.

Income

- $1. \leq 0.5 \text{ million } IDR$
- 2. 0.6-2 million IDR
- 3. 3.5 million IDR
- 4.6-5 million IDR
- 5. >5 million IDR

Marital Status

- 1. Married
- 2. Single
- 3. Divorce
- 4. Death Divorce

Level of Education

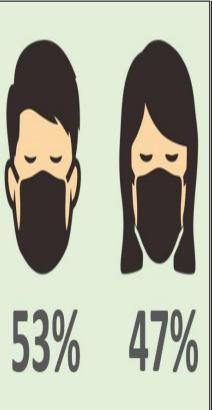
- 1. Elementary School
- 2. Junior High School
- 3. Senior High Scool
- 4. University

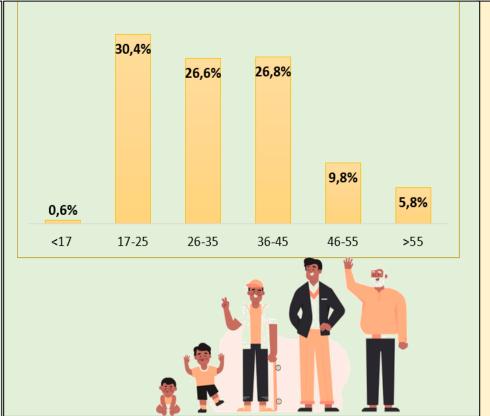


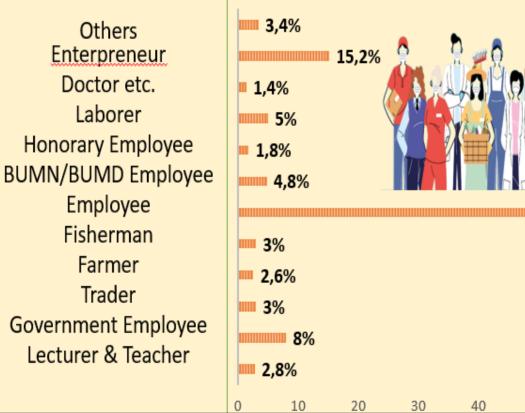
RESULT AND DISCUSSION











The number of male and female is almost the same.

The most participants are aged 17-25 years and the least participants are aged less than 17 years.

The least participants are doctor and other health workers.

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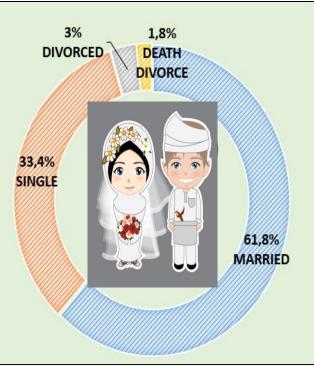
RESULT AND DISCUSSION



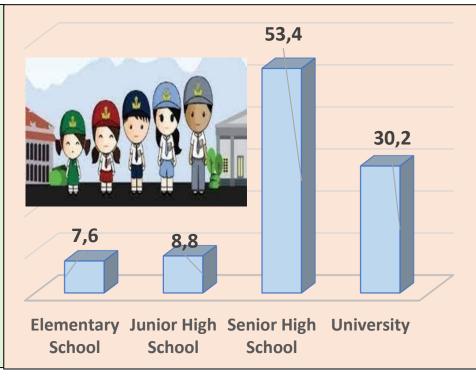
Income

35% 25,8% 15,4% 14,2% 9,6% ≤ 0,5 0.5 <math>2>5 3,5< p ≤ 5

Marital Status



Level of Education



The most participants are participants who have a salary 2-3,5 million.

The least participants are death divorce.

The least participants are elementary school.



RESULT AND DISCUSSION



Age

17 - 25 years: OR=1.651.

36 - 45 years: OR=1.015.

55 years : OR=1.016.

The older age groups (17-25 years old) were more likely to unwillingness for COVID-19 vaccines than younger and older age groups.



 $\leq 0.5 \text{ million } IDR$: OR=9.999.

 $0.6 \text{ until} \le 2 \text{ million } IDR : OR=8.816.$

2.1 until \leq 3.5 million IDR: OR=6.216.

The income groups (≤ 0.5 million) were more likely to unwillingness for COVID-19 vaccines than bigger income groups.





Farmer : *OR*=5.876.

Fisherman: OR=6.168.

Employee: OR=3.161.

Laborer : OR=5.361.



Married : OR = 3.936.

Single : OR = 3.973.

Death divorce: OR=5.148



Elementary school: OR=2.787.

Junior high school: OR=2.420.

The predictors significantly affect of COVID-19 vaccine's attitudes in the Bontang city.



CONCLUSION



The predictors affect of COVID-19 vaccine's attitudes in the Bontang city are income, profession, marital status, and level of education.





Recommendation to support the achievement of government targets:

Persuasive approach and public health massaging should be continued and tailored to address these concerns, specially to certain age, certain profession, certain marital status, and people with lower levels of education and incomes.





