

موضوع:

# Esperance pica study

تهیه و تنظیم : دکتر مریم بهمنی

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# Esperance pica study

What is pica?

Associations with health

Aetiology

Prevalence

Methods



# Esperance pica study

**Results**

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# What is pica?

Latin for magpie

persistent craving for, or eating of, non-food items

fifth edition (DSM-5): as a mental illness

persist beyond 12 months to 2 years of age

**forms of pica:** geophagy - amylophagy - pagophagy



# Associations with health

anemia

renal disease

intellectual impairment

lead poisoning of earth-eating children

intestinal obstruction



# Aetiology

cultural theory

organoleptic model

physiological theories: Iron-zinc

emerging theory: innate immune system

hygiene hypothesis



# Prevalence

Geophagy in African populations

28–100% in pregnant women

77% in African children

reported from numerous other human populations

many animal species



# THE PREVALENCE IN AUSTRALIA

unknown

19 habitual clay eaters in a town of 4,000-6,000 people

New Zealand, found pica in 24 of the 170 children

primary aim :estimate the rate of pica among children

Secondary aims: range of substances





## **METHODS**

**in Esperance, Western Australia, during a period of seven months were encouraged by receptionist staff to fill out a simple questionnaire while waiting to be attended**

**children aged 2–9 years**



# Table 1. Frequency of pica

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	Soil	Paper	Paint	Hair	Ice	Other
Never	184	167	205	194	70	154
Less than once a month	22	32	10	14	60	7
Once a month or more	6	10	4	6	57	6
Once a week or more	8	10	1	5	26	4
Daily or more	0	1	0	1	8	8
Did not respond	3	3	3	3	2	44
<b>Total</b>	<b>223</b>	<b>223</b>	<b>223</b>	<b>223</b>	<b>223</b>	<b>223</b>



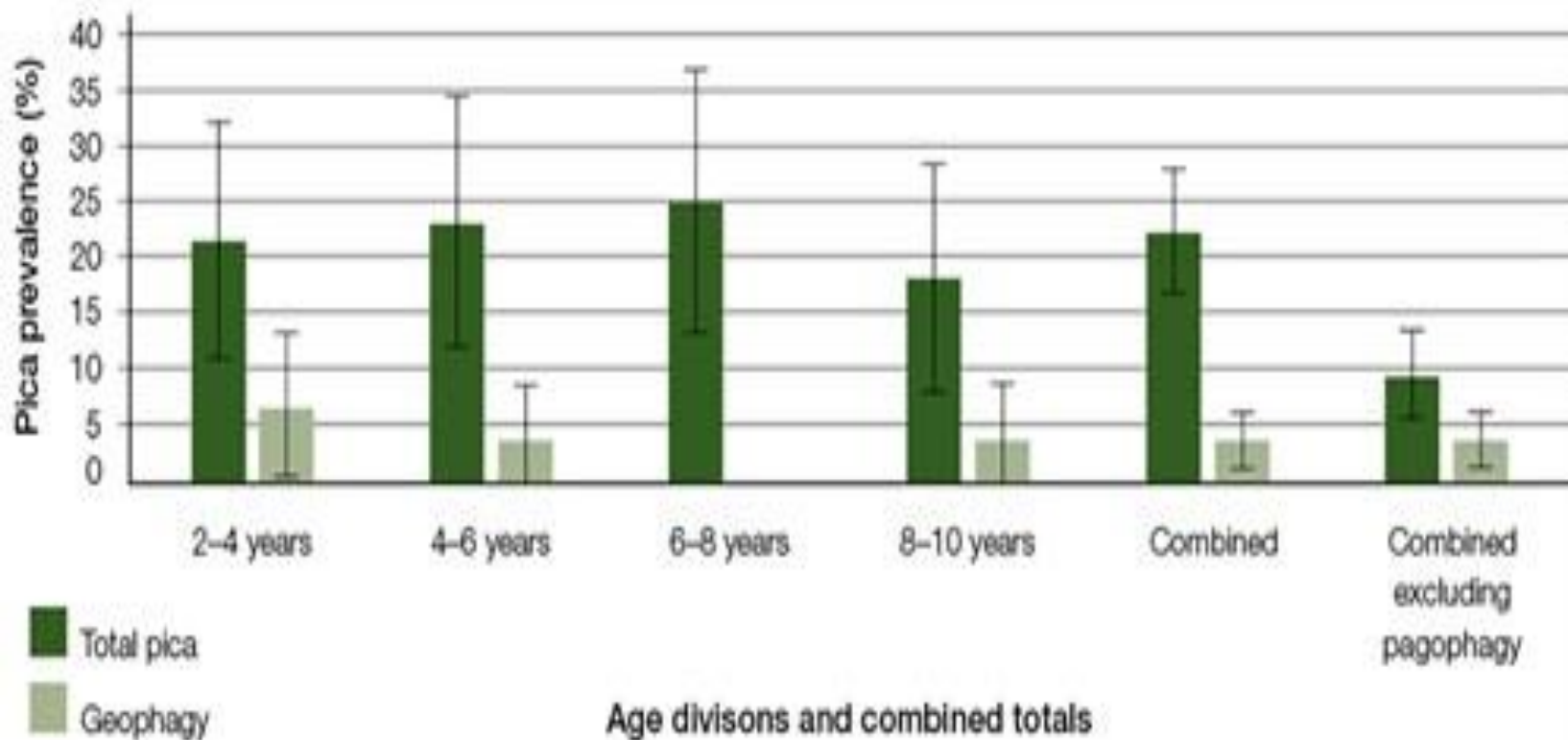
# Table ۲. Pica substances

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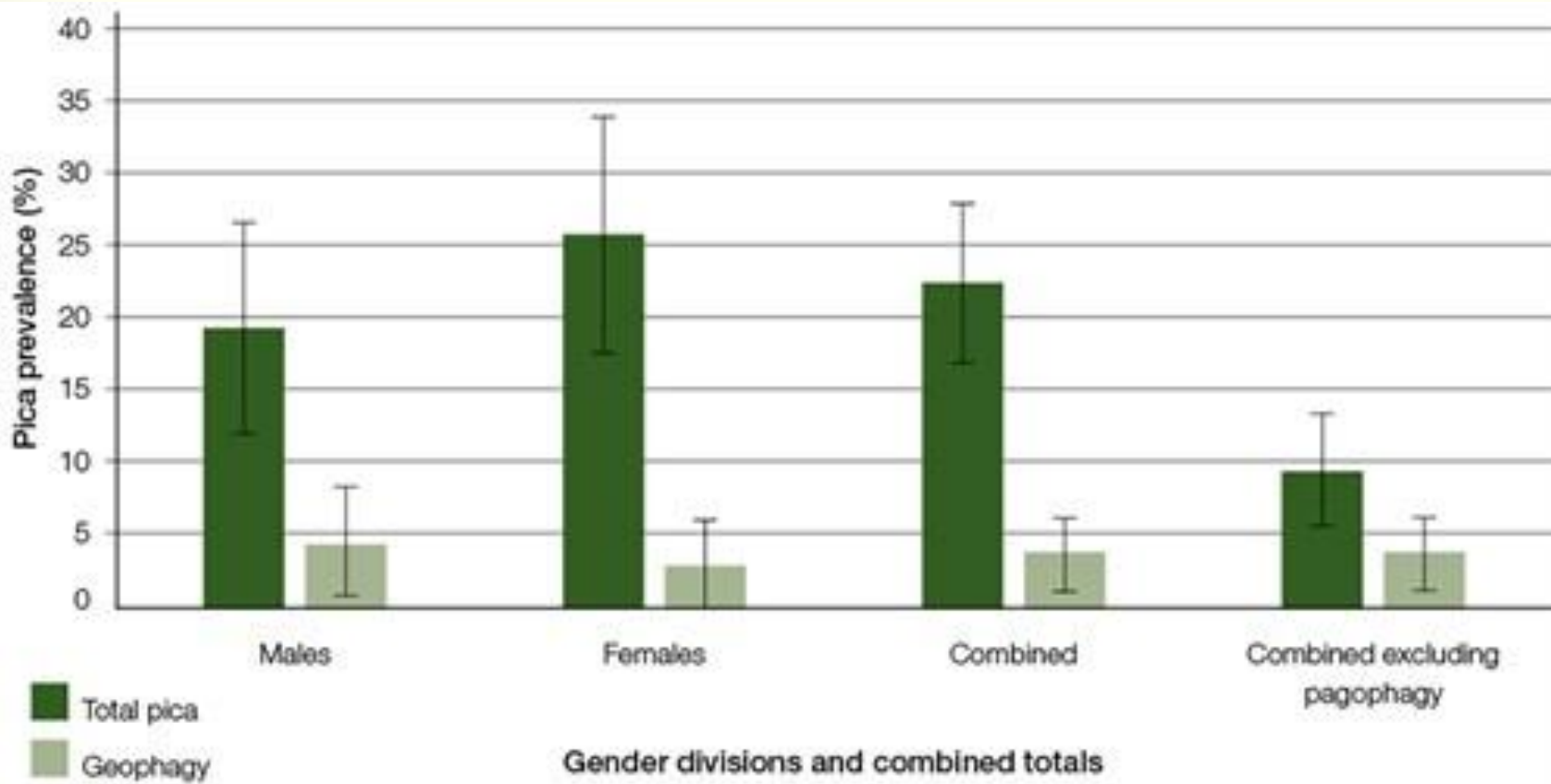
Amount	Soil	Paper	Paint	Hair	Ice	Other
None	۱۸۸	۱۶۷	۱۹۶	۱۹۱	۸۴	۱۴۲
About a tablespoon	۱۷	۳۵	۱۶	۲۱	۷۸	۱۵
About half a cup	۸	۸	۰	۰	۴۲	۲
About a cup	۰	۱	۰	۱	۸	۱
More than one cup	۰	۱	۰	۰	۶	۳
Did not respond	۱۰	۱۱	۱۱	۱۰	۵	۶۰
<b>Total</b>	<b>۲۲۳</b>	<b>۲۲۳</b>	<b>۲۲۳</b>	<b>۲۲۳</b>	<b>۲۲۳</b>	<b>۲۲۳</b>



**Figure 1. Pica by age groups**



## Figure ۲. Pica by gender



# Results

pica occurred in 50 of the 223 participants

Pagophagia: in 34 children

non-pagophagic pica : 21 children, 9.4%



# Discussion

pagophagy, occurred in 22.4% of children

Geophagia occurred in only 3.6% of the children

NO: different age groups or between males and females

occur in people with iron deficiency



## Weaknesses of the study

they live near the shire boundaries, closer to other towns

boundary an arbitrary was chosen





## Implications for general practice

was found in 9.4% of children, and geophagy in 3.6%

eat more than one non-food substance

associated with iron deficiency

geophagia may lead to lead poisoning



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