

The prevalence of infertility in Bavi district-Hatay-Vietnam

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KI-Sweden

WHO Scholarship

Training Course in Reproductive Health Research

WHO 2007

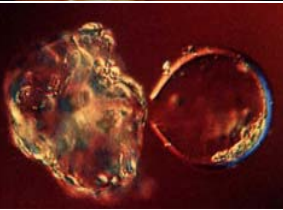
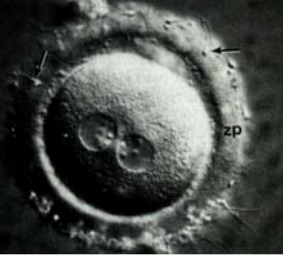


Orientation and Background

Infertility : absence of conception after 12 months of regular, unprotected intercourse (commonly used medical definition of infertility). Inability to conceive within two years of exposure to pregnancy is the epidemiological definition recommended by the World Health Organization.

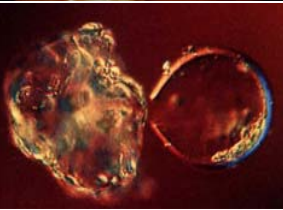
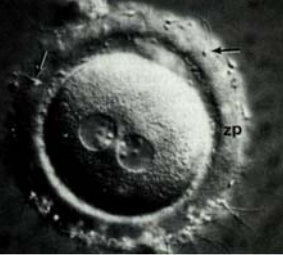
Prevalence of infertility

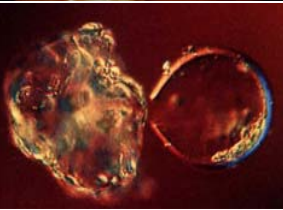
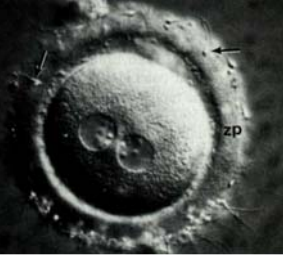
- 8-10% of couples (50-70 millions) [WHO-2000].



Vietnam [9,12]

- Agricultural country.
- After 1990: economic growth rate $> 7\%$.
- The population: >83 millions with 25.2% in urban areas.
- Female of reproductive age in rural $>$ urban areas (51%-27%).
- GDP/person: 7.484.2 ID (430 USD 2002).

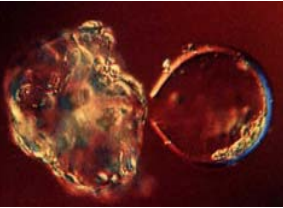
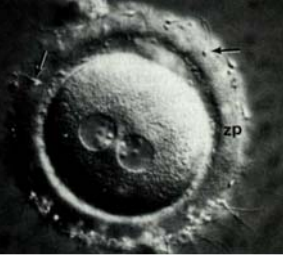




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- According to the VP&FPC Report in 1998, the prevalence of infertility in Hanoi is 13-13.4%.
 - Treatment cost for one IVF treatment is around 5000-7000 USD, the success rate is 20-30% [11].
 - The first IVF baby was born April 30, 1998; ART is common now.

Research questions

What is the current prevalence of infertility in Bavi district, Hatay province of Vietnam?





General aims:

To examine and evaluate infertility conditions and related issues at BaVi district, Ha Tay, Vietnam. Based on the findings, we may propose several suggestions contributing to infertility policies for the community to increase the quality and efficiency of the treatments, improve reproductive health care, increase people's wellbeing, especially in rural areas of Vietnam.



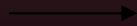
Specific objectives

1. To determine the prevalence of infertility in BaVi-Ha Tay-Vietnam.
2. To investigate the relationship between infertility and socio-economic status in BaVi-Ha Tay-Vietnam.

Methodology

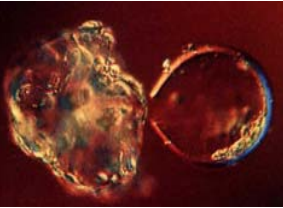
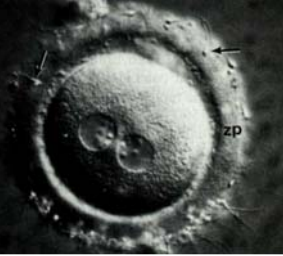
1. A population based cross-sectional survey [3]

2. The conceptual framework

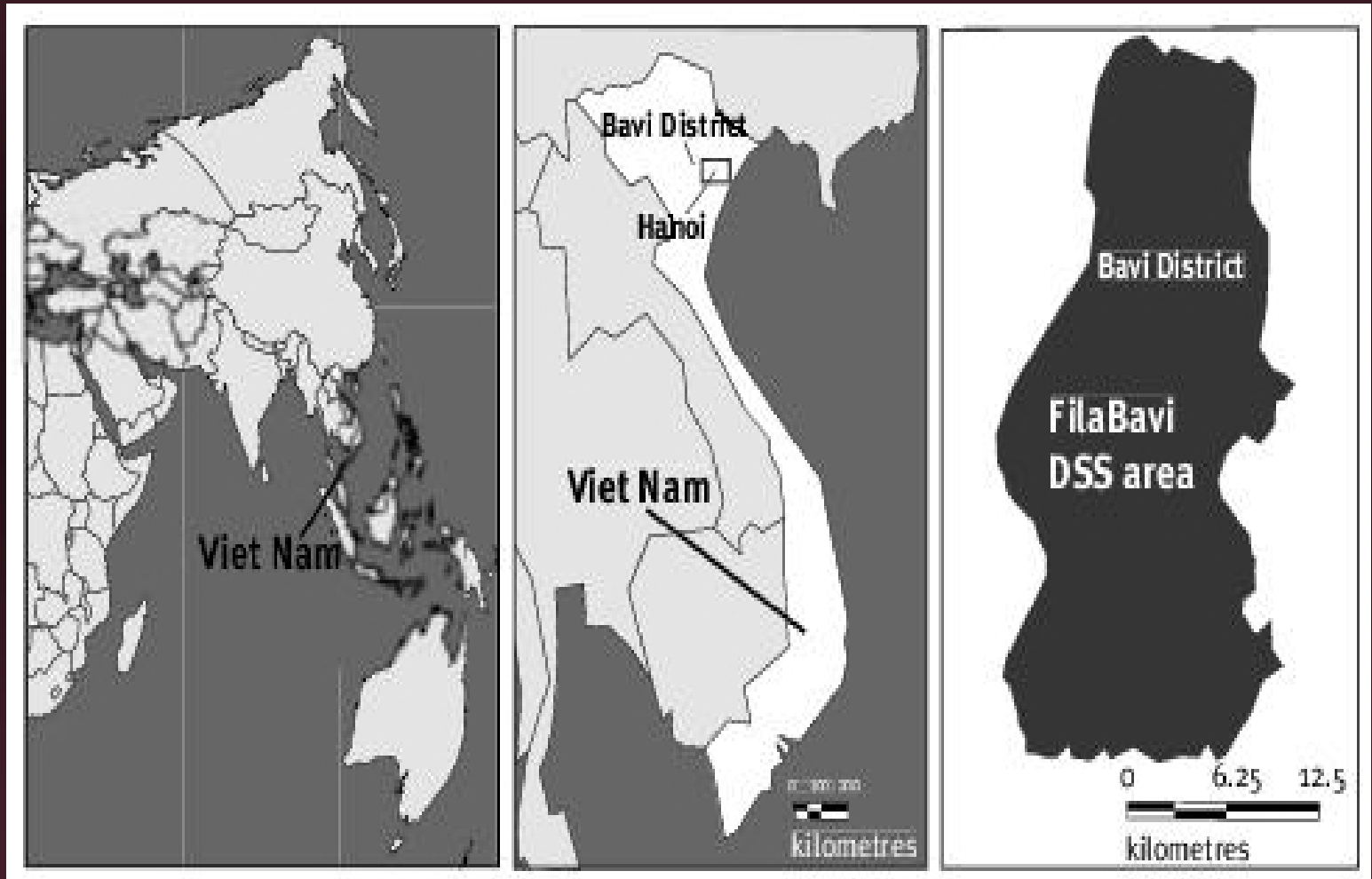
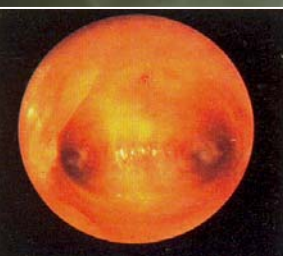
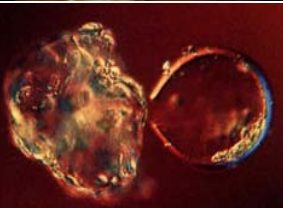
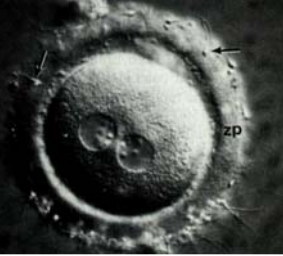


General population => Target population =>

Suspected cases => Confirmed cases



Study location:
Epidemiology Field Lab FILA Bavi
(www.filabavi.org.vn)

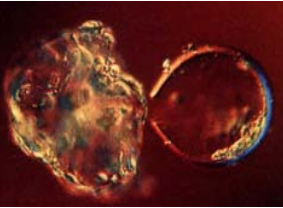
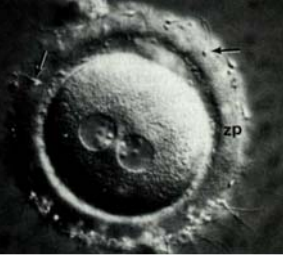


Sample size

1.249 couples in reproductive age to find out 163 with infertility.

$$n = z_{1-\alpha/2}^2 \cdot (1-p) / (p \cdot \epsilon)^2$$

$\alpha = 0,05$, $\Delta = p \cdot \epsilon = 0.13 \times 0.02$, drop out 15%





Expected outcome and variables

Main outcomes:

- The prevalence of infertility in Bavi district.
- The associations of infertility with social economic conditions in Bavi.

Variables:

- Demographic characteristics of the population.
- The infertility prevalence.
- The rate of primary and secondary infertile couples.
- The relations between the infertile conditions and social economic events.

Analyzing by SPSS



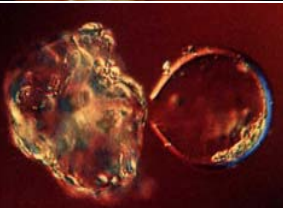
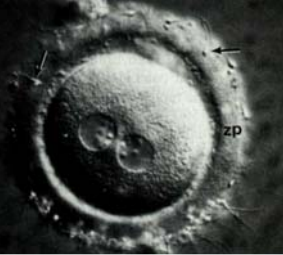
Ethical clearance

All studies will be conducted within Fila Bavi and NHOG, which has a strong approval of the Vietnamese MOH and International authorities (Sweden and INDEPT) for support and collaboration.



Budget and timetable

- Supporting by HRSP of SIDA-SAREC (Sweden) and others.
- Time plan: March-December, 2007

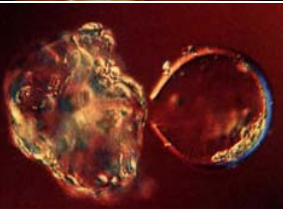
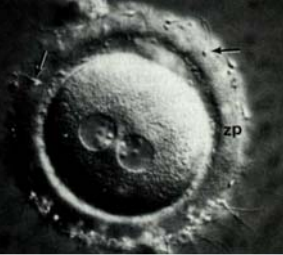


Thank you very much!



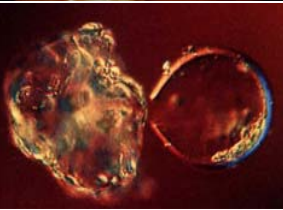
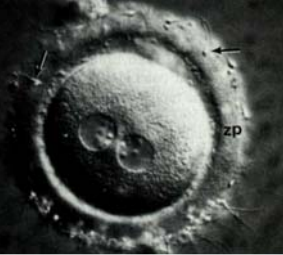
Epidemiology Field Lab FILA Bavi

1. Set up in 1998, about 60km from Hanoi, 410 square km: town, plains, hill and mountain regions, 238.000 people with the typical geographical, economic, cultural, social conditions of a Northern rural district of Vietnam
2. The model is randomly selected by clusters; the probabilities are proportional with the populations and cover all regions
3. 67 groups selected with population of 50,000 people belonging to 11000 families.



The general information of socio-economic conditions of each families and individuals has been collected since 1/1999 (each 2) in a base-line survey:

1. Individual: Age, gender, marital status, education, occupation...
2. Household: living conditions, water resource, property, debts, average income and spending...
3. In the follow up surveillance is conducted each three months, information of evens or changes such as: marriages, births, pregnancy, illness, death, out and in moving...is collected.



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4. 42 local investigators employed dividing into 6 groups, conduct the work following the questionnaire. Each group is led by a supervisor (with professional level of the experienced nurse supervising and organising the group).
 5. The data is managed by Microsoft access at the local studied field's office.