

Jävsdeklaration:

∘ Inget jäv



Obstetric ultrasound in Vietnam

- Ministry of Health in Vietnam (2009) recommends one ultrasound scan in each trimester in an uncomplicated pregnancy
- WHO (2016) recommends one ultrasound before 24 vweeks of gestation
- Studies show pregnant women i Vietnam undergo an average of six scans in urban areas and 3.5 scans in rural areas

Sex ratio at birth in Vietnam

- Declining fertility and increasing availability of sex selection technology has led to an increasing male to female sex ratio at birth
- Year 2000: 105 males: 100 females (normal rate)
- Year 2014: 112 males: 100 females
- National policy from 2003 prohibiting sex determination and sex selection of the fetus



Part 1

To investigate the awareness and adherence among
 Vietnamese health professionals of/to clinic, regional and
 national guidelines for the use of obstetric ultrasound, in relation
 to specified background factors.

Part 2

 To investigate the views among Vietnamese health professionals on the use of obstetric ultrasound for sex determination of the fetus, in relation to specified background factors.

 To explore the views on sex selection of the fetus among health professionals in contemporary Vietnam, in relation to specified background factors.



Material and Methods (1)

- Part of the CROss-Country UltraSound Study (CROCUS)
 - Sweden, Norway, Australia, Rwanda, Tanzania, Vietnam
- Questionnaire containing sociodemographic characteristics,
 questions and statements concerning the use of obstetric
 ultrasound, non-medical ultrasound examinations, and opinions
 on sex selection of the fetus
- Fixed response options or Likert-scale response options

Material and Methods (2)

- The data were collected in April 2017 in the region of Hanoi,
 Vietnam
- 1 national hospital, 1 provincial hospital, 24 district hospitals och
 3 maternity homes
- 882 included respondents. 289 obstetricians/gynechologists, 535 midwives, and 58 sonographers

Statistics

- Categorical variables
 - Pearson's Chi-Square-test for test of difference
 - Level of significance set at p<0.05
- Continuous variables
 - Mean values and standard deviations
- Univariable and multivariable logistic regression analyses to present Odd's ratios and their 95% confidence intervals



Background characteristics

Variable	All health professions	Obstetricians/ gynecologists	Midwives	Sonographers
Variable	Total=882	Total=289	Total=535	Total=58
	n (%)	n (%)	n (%)	n (%)
Age (years)				
Mean; SD	34.8; 8.7	36.6; 9.2	33.7; 8.2	35.9; 8.8
Min-Max	21-60	23-60	21-55	25-57
Gender				
Male	164 (18.6)	123 (42.6)	0 (0)	41 (70.7)
Female	718 (81.4)	166 (57.4)	535 (100)	17 (29.3)
Type of health care				
Public	843 (95.7)	268 (92.7)	521 (97.6)	54 (93.1)
Both public and private	38 (4.3)	21 (7.3)	13 (2.4)	4 (6.9)

Are there any guidelines at your clinic/work place for use of ultrasound in pregnancy from the second trimester?

Variable	Total	National hospital		District hospital	Maternity home	p-value ^a
	n=882	n=152	n=194	n=504	n=32	
	n(%)	n(%)	n(%)	n(%)	n(%)	
Clinic guidelines	739 (83.8)					<0.001
Yes		87 (68.5)	131 (82.4)	290 (67.1)	7 (33.3)	
No		40 (31.5)	28 (17.6)	142 (32.9)	14 (66.7)	
National guidelines	601 (68.1)					<0.001
Yes		68 (57.1)	83 (69.7)	146 (42.2)	5 (26.3)	
No		51 (42.9)	36 (30.3)	198 (57.6)	14 (73.7)	

^aPearson's Chi-Square test for test of differences between the four groups national hospitals, provincial hospitals, district hospitals and maternity homes.

From your own experience, to what extent are these guidelines followed?

- 80-100% of the participating health professionals responded that the guidelines (clinic, regional, national) are followed to a moderate or great extent
- No statistically significant difference between participants from different hospital levels (national, provincial, district hospital, maternity home) or between professions

"It is the pregnant woman's right to obtain information about the sex of the fetus during an ultrasound examination"

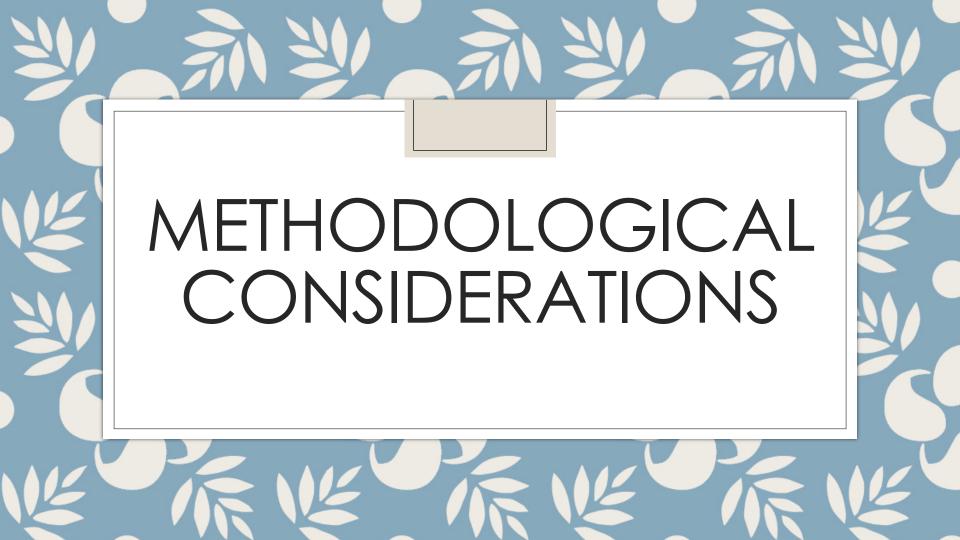
- 26% agreed or strongly agreed
- 43% disagreed or strongly disagreed
- 30% were neutral
- No statistically significant difference between professions or between male or female participants

"There is a preference for male offspring in my country"

• 60% agreed or strongly agreed, 21% disagreed/strongly disagreed. 19% were neutral.

"There is a preference for male offspring in my country"

Variables	Crude OR (CI 95%)	Model 1	Model 2	Model 3
	n=713	n=713	n=713	n=700
Gender				
Female	1	1	1	1
Male	2.19 (1.30-3.68)	1.48 (0.78-2.79)	1.49 (0.78-2.82)	1.44 (0.75-2.76)
Profession	n=713			
Ob/gyn	1	1	1	1
Midwife	0.61 (0.42-0.89)	0.706 (0.45-1.10)		
Sonographer	2.11 (0.79-5.65)	1.88 (0.69-5.13)	1.82 (0.66-4.97)	1.87 (0.67-5.17)
Area of health	n=713			
facility				
Semi-urban	1		1	1
Urban	1.68 (1.06-2.64)		1.56 (0.98-2.48)	
Rural	1.91 (1.16-3.13)		1.92 (1.16-3.17)	1.85 (1.11-3.08)
Age	n=700			
>35	1			1
<34	1.55 (1.10-2.19)			1.70 (1.19-2.43)



Strengths

• Large study population with 882 participants from different hospital levels, both urban and rural areas.

 The data were collected by Vietnamese researchers and efforts were made to minimize misinterpretations of the questionnaire due to the translation from English to Vietnamese.

Limitations

- Only 4.3% of the participants worked in both public and private care.
- Only 18.6% of the participants were male.



Conclusions (1)

 The awareness of guidelines for use of ultrasound from the second trimester was relatively low, but most respondents believed that the guidelines were followed to a moderate or great extent.

 Most did not agree that obstetric ultrasound examinations often are performed for non-medical reasons in Vietnam.

Conclusions (2)

 Most agreed that there is preference for sons in their country. This was more common among younger participants and male participants.

• Sex selection of the fetus was perceived as a problem by most health care professionals.

Implications for the future

- Educational efforts for both health care personnel and pregnant couples concerning use and limitations of obstetric ultrasound.
- Actions to improve adequate allocation of limited health care resources.
- Further efforts to improve the position of women in Vietnam to reduce the skewed sex ratio at birth (i.e. gender empowerment).

