



Reducing pain by the auricular acupressure with Internet for dysmenorrheal adolescents in Taiwan

Yu-Ling Hung¹, Hong-Nerng Ho²,
Mei-Ling Yeh³, Hsing-Hsia Chen⁴

Outline

- **Background**
- **Objective**
- **Methodology and Designs**
- **Results**
- **Conclusions**



Background~ 1

The prevalence rates of dysmenorrheal	51.3~ 90 % (USA) 65% -72% (Taiwan)
The school absenteeism rate or limited activities	37% -42% (USA) 10-15 % (Taiwan)
Limited class concentration	59% (USA)
Taiwan carried out the Act of Equal Employment for Men and Women in 2002	Female asks for one-day leave because of menstruation
Dysmenorrheal is the most common gynecologic complaint (Ho , Chien, 1993)	

Background ~ 2

Affects social and academic situation :

- **USA :** It is estimated that the annual losses in 600 million working hours and 2 billion US dollars from work absence due to dysmenorrhea. (**Coco,1999**)

- **In Taiwan :**

Increase the risk of taking medicine by oneself and more expenditure of medical expenses.

Background~ 3

Pharmacological therapy :

- ❖ Nonsteroidal anti-inflammatory Medications(NSAIDs),
- ❖ to block of PGF2 medicine,
- ❖ Oral Contraceptives pills
Coco, 1999 ; Gould, 1998 ; Schroede & Sanfilippo, 1999

Traditional Chinese medical :
Acupuncture 、
Auricular acupressure

Non-pharmacological therapy :

- ❖ Heating pad ,
- ❖ Bed rest ,
- ❖ Teaching Relaxation skill etc.
Campbell&McGrath,1999

Management of dysmenorrheal

Side effects : Nausea, vomiting, G-I system uncomforted , headaches, fatigue, and dizziness etc.

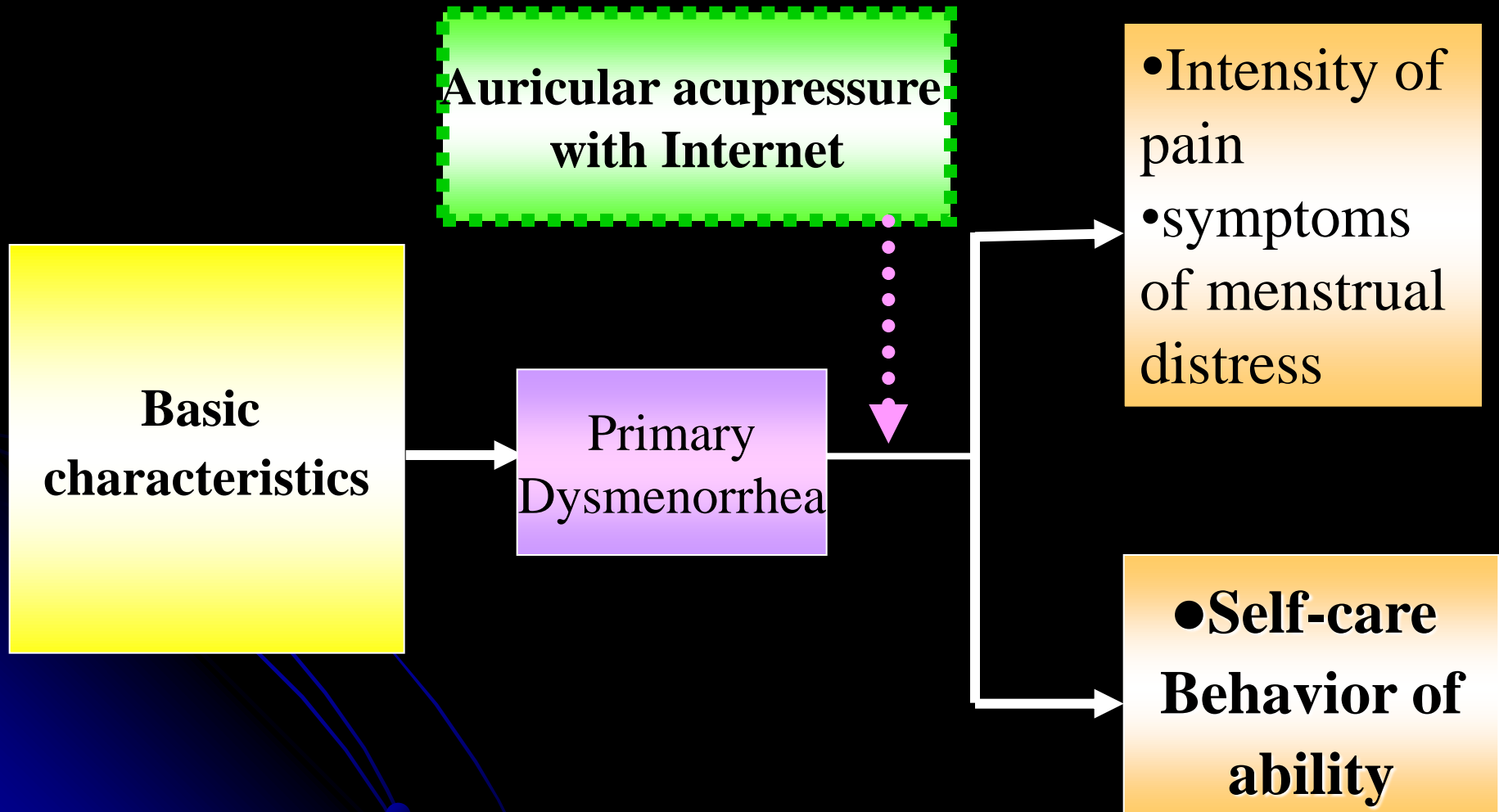


Lower to 40% :
Aware of self effective

The study of objectives

**Reduce intensity of pain ,
symptom distress, and improve
self-care behavior in terms of
auricular acupressure on Internet
learning program for
dysmenorrheal adolescents.**

Conceptual of Framework



Literature review ~ 1/3
dysmenorrheal and auricular acupressure

Mechanism of auricular acupressure

Stimulates the production and releasing of
Endorphin, Serotonin

(Kober et al,2003 ; Wang et al.2001)

Stimulates the neurotransmitters and
block the transmission of pain signals

(Kober et al,2003)

Literature review ~2/3

dysmenorrheal and auricular acupressure

Advantages of auricular acupressure :

- **Not invasive and not affect the integrity of epidermis.**
- **Easily application and no adverse side effects.**
- **Minimal medical costs.**

〈 Hwang , 2000 ; Douglas et al ; 2001 ; Kober et al,2003 〉

Literature review ~ 3 /3

Interactive Internet Web

Interactive Technology --computer	E-revolution In2002, > 100million obtained health information from the Web (Fokner,2003)
Utilization ratio of computer	15~24years > 88.3% (Taiwan , 2003)
Life long learning	Create Health of life , will be decrease expenditure of medical expenses

The study of Methodology

Designs : Quasi-experimental single-blind

team \ time	During of dysmenorrheal	After 2~3hrs of Nursing intervention
Exp Group A	O1 + X1	O2
Exp Group B	O1 + X2	O2
Control Group	O1 + X3	O2

Notice :

- ❖ O1 = pre-test ; O2 = post-test ;
X1 = true auricular acupressure with Internet ;
- ❖ X2 = true auricular acupressure ;
- ❖ X3 = sham auricular acupressure

The study of participants~1/2

- Participants were female senior high school with dysmenorrheal in Taipei, Taiwan.
- Conducted between October 2003 and October 2004.

The study of participants~2/2

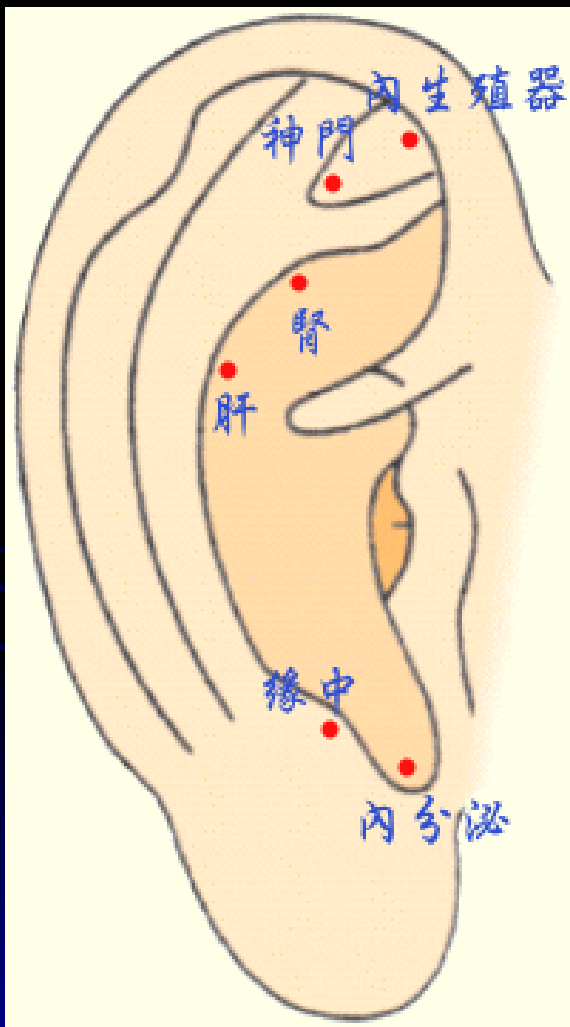
- Experimental group A (n = 50) : **auricular acupressure on the 6 true acupoints with Internet self-learning program .**
- Experimental group B (n = 50) : **auricular acupressure on the 6 true acupoints.**
- Control group (n = 50) : **on the 6 sham outpoints.**
- **170 female adolescents were recruited.**

twenty (11.8%) participants failed to complete the study due to fear to auricular acupressure.



Study of instruments~1/2

The true auricular acupuncture with seeds



Press 4 times per day, seeds were kept in ear for 48h.



Auricular acupoints	Effect
Sherman	A master acupoint of Relaxation, Increase pain threshold produce a calming effect
Uterus	Enriches Qi ,blood and uterus
Liver	Improves blood circulation, nourishes Yin and restrains Yang
Kidney	Enriches essence ,relieves stress and pain
Central rim	Increase effect of Endorphin
Endocrine	Changing metabolism of sexual endocrine balance 〈 Yiin, 2001 ; Oleson,2003 〉

Study of instruments~ 2/2

The sham auricular acupressure with seeds **is placebo points.**

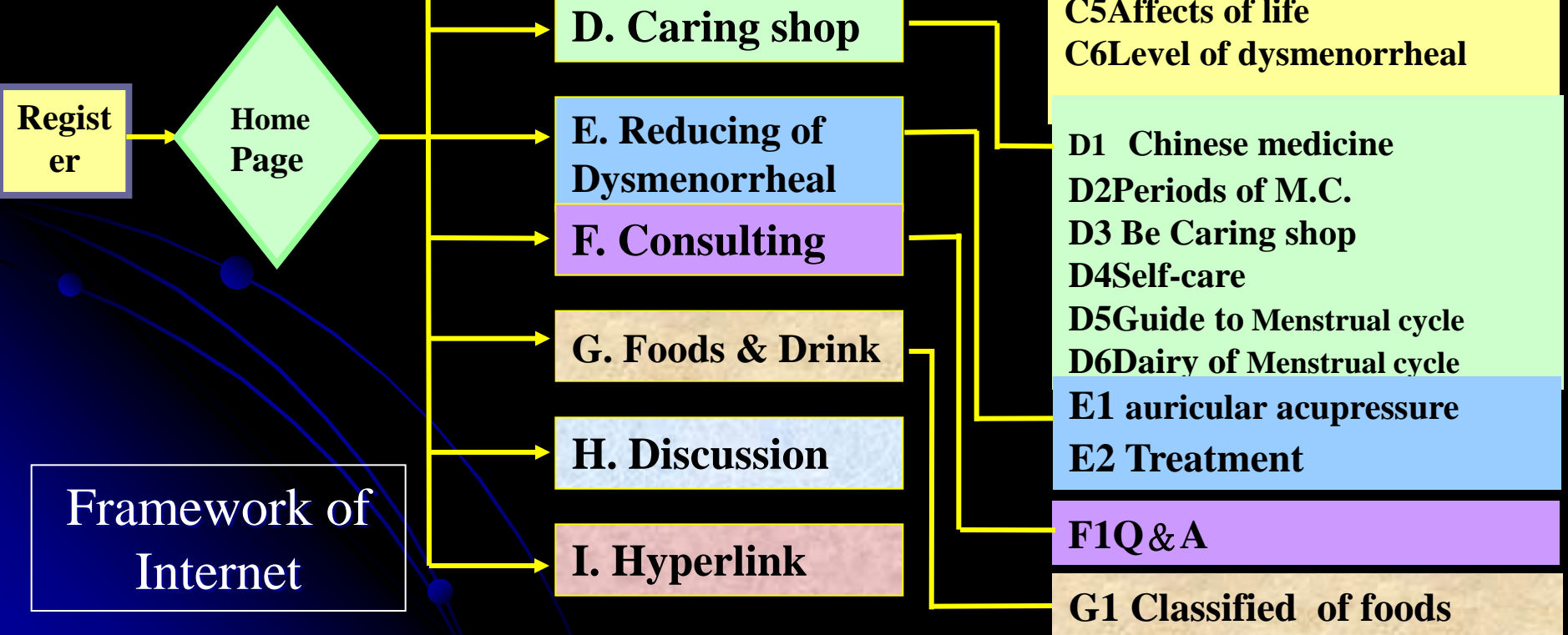
Press 4 times per day, seeds were kept in ear for 48h.







Instruments ~ Internet for dysmenorrheal





貼一貼 壓一壓 痛痛不見了

好朋友 共享

Self management :
Health promotion of Dysmenorrhea

痛經健康促進資訊網

使用者登入

帳號:

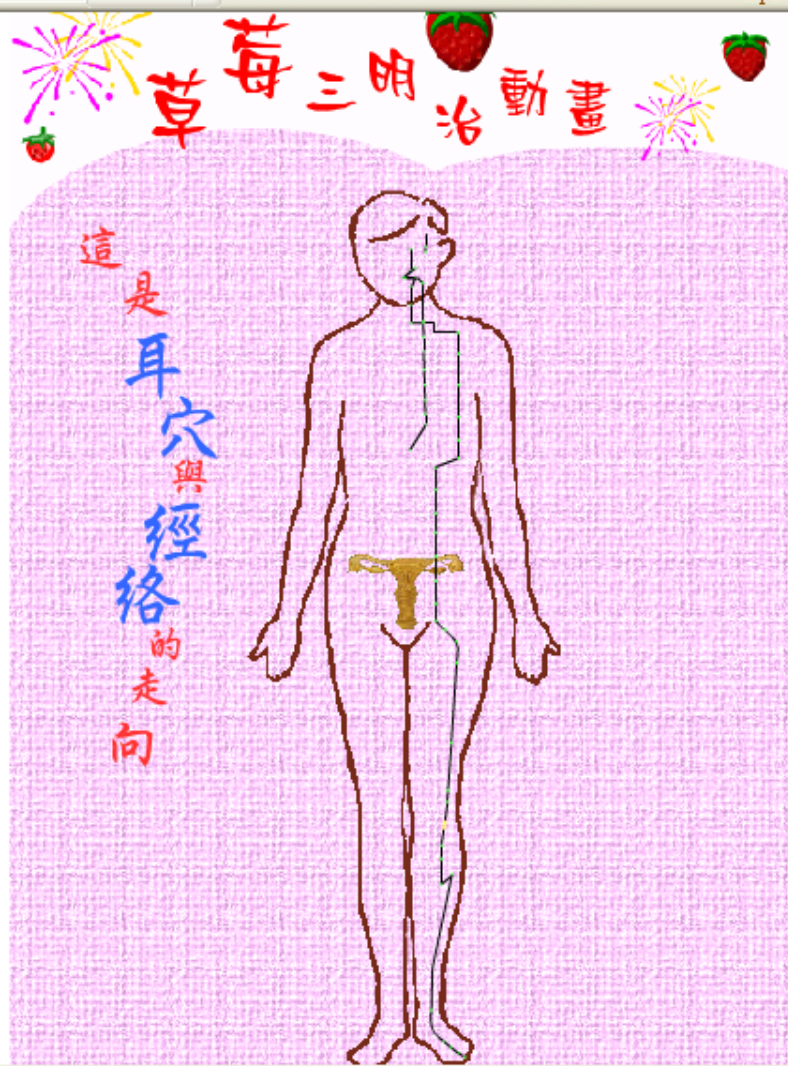
密碼:

登入 密碼查詢

93年國科會補助計畫

護理專業網際網路中心

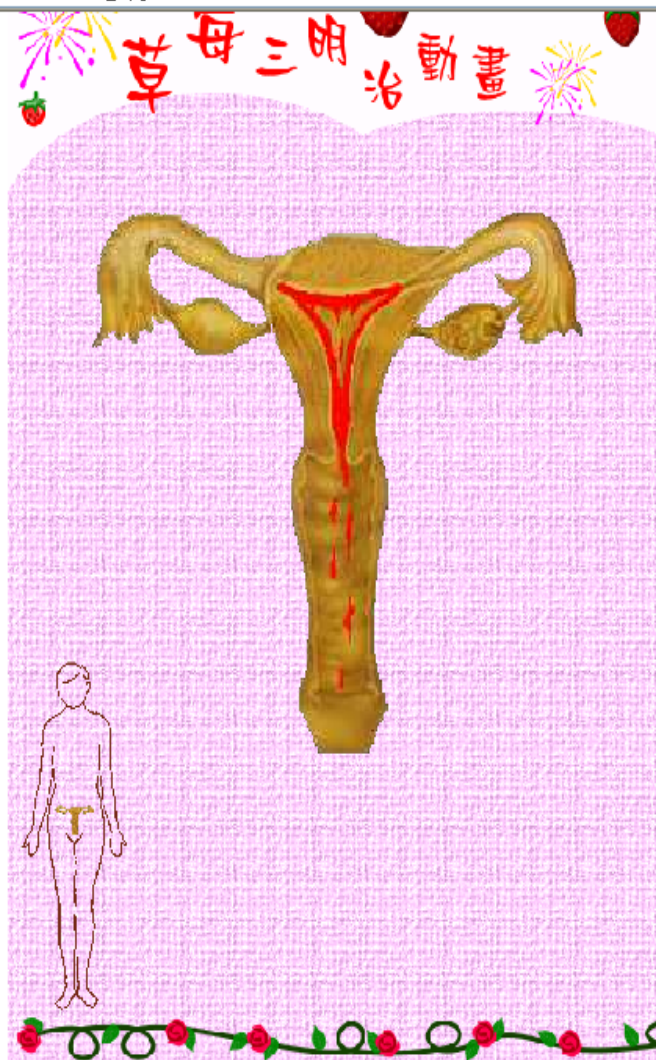
中原大學網路資訊實驗中心 版權所有 Copyright© 2003 Internet Information Center. @ C.Y.C.U. All Rights Reserved.



- 麻辣好消息
- 小紅魔法書
- 痛經知多少
- 關懷小舖
- 耳貼除痛經
- 專業諮詢
- 吃吃喝喝
- 吱喳討論區
- 相關網站
- 網站導覽

你知道以下器官的功能嗎?

子宮	容納胎兒生長及產生月經發生的器官
輸卵管	讓卵巢排出的卵，由此吸入輸卵管內另一端與子宮相連
卵巢	是性腺。主要是排卵和分泌女性激素。左右個一，青春 期含有約廿~卅萬個初級濾胞，每一濾胞內含一個卵。女人一生中僅有400個左右的卵可成熟而被排出，餘則自行退化。
陰道	是性行為器官，主要是作為月經流出和胎兒生產的通道。



- 麻辣好消息
- 小紅魔法書
- 痛經知多少
- 關懷小舖
- 耳貼除痛經
- 專業諮詢
- 吃吃喝喝
- 咬喳討論區
- 相關網站
- 網站導覽

你知道以下器官的功能嗎?

子宮	容納胎兒生長及產生月經發生的器官
輸卵管	讓卵巢排出的卵，由此吸入輸卵管內另一端與子宮相連
卵巢	是性腺。主要是排卵和分泌女性激素。左右個一，青春 期含有約廿~卅萬個初級濾胞，每一濾胞內含一個卵。女人一生中僅有400個左右的卵可成熟而被排出，餘則自行退化。
陰道	是性行為器官，主要是作為月經流出和胎兒生產的通道。

水果類

寒涼性



西瓜、楊桃、香蕉、蕃茄、
 草莓、香瓜、柿子、
 柚子、李子、枇杷、梨子、
 蓮子、檸檬、山竹、橘子、火龍
 果、葡萄柚、奇異果



Study of measurements ~1/2

Instruments of measures	Variable of measures
<ul style="list-style-type: none">● The Short-Form McGill Pain Questionnaire System (MPQ-SF)● The Visual Analogue Scale for Pain (VASP)● The Menstrual Distress Questionnaire (MDQ) <p>Cronbach's $\alpha = 0.83 \sim 0.86$</p>	<ul style="list-style-type: none">● Intensity of pain● symptoms of menstrual distress

Study of measurements ~2/2

Instruments of measures	Variable of measures
<ul style="list-style-type: none">● The Adolescent Dysmenorrheal Self-Care Scale (ADSCS) Cronbach's $\alpha=0.90$	<ul style="list-style-type: none">● Self-care behavior of ability
<ul style="list-style-type: none">● Internet for dysmenorrheal CVI=0.95 Management of count times	<ul style="list-style-type: none">Times, numbers of person

● RESULTS



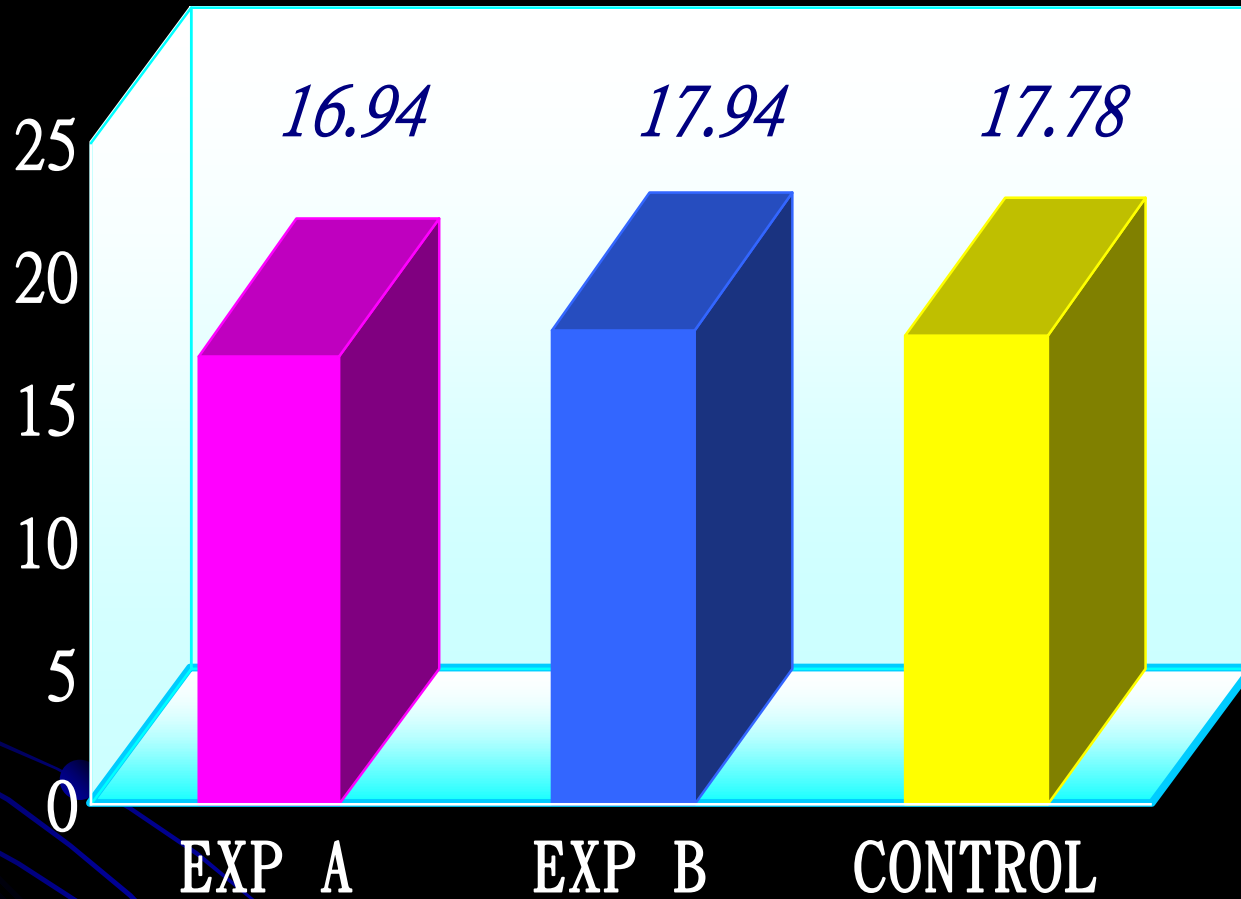
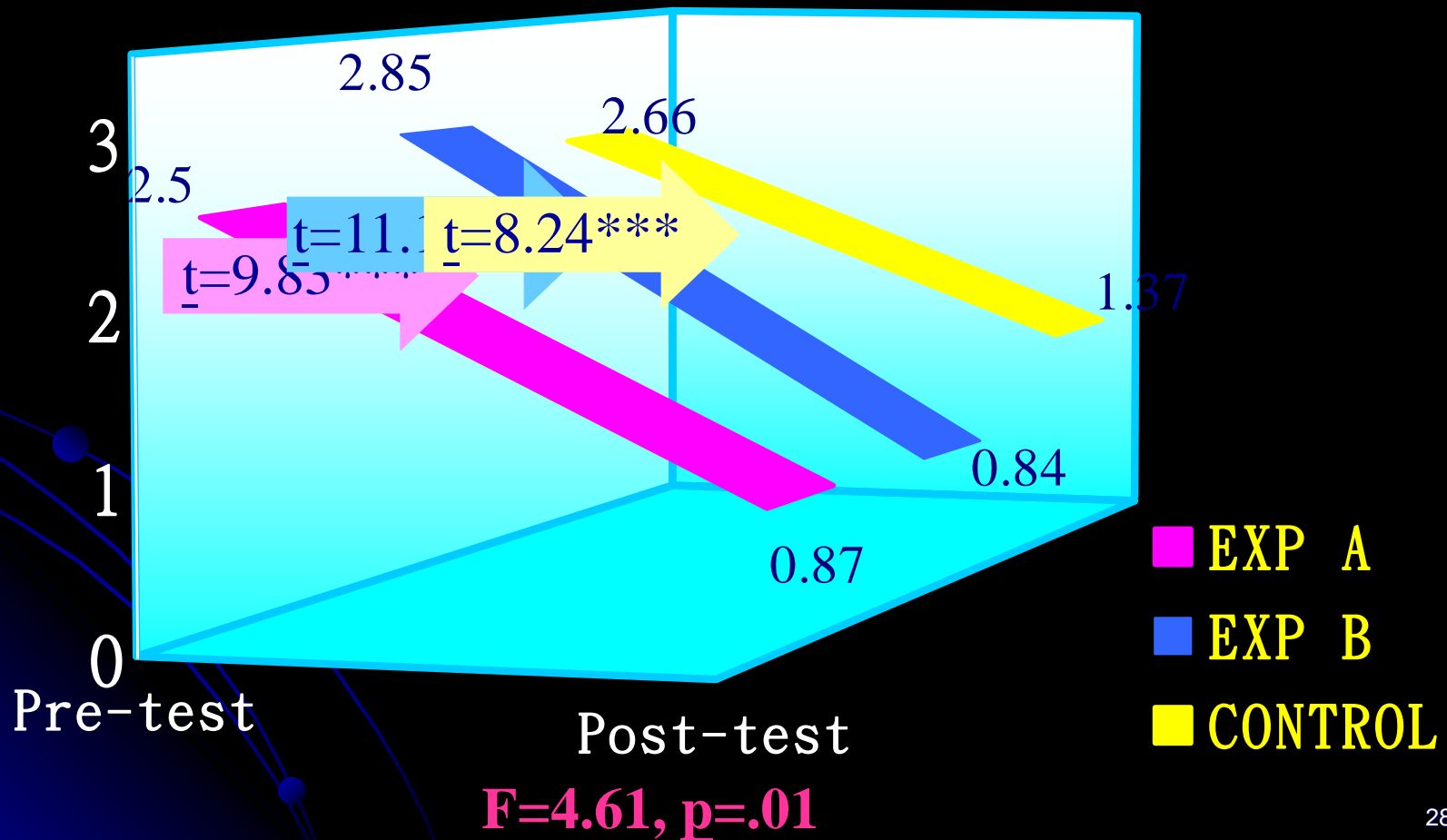


Figure 1 Demographic Data for
sample average age

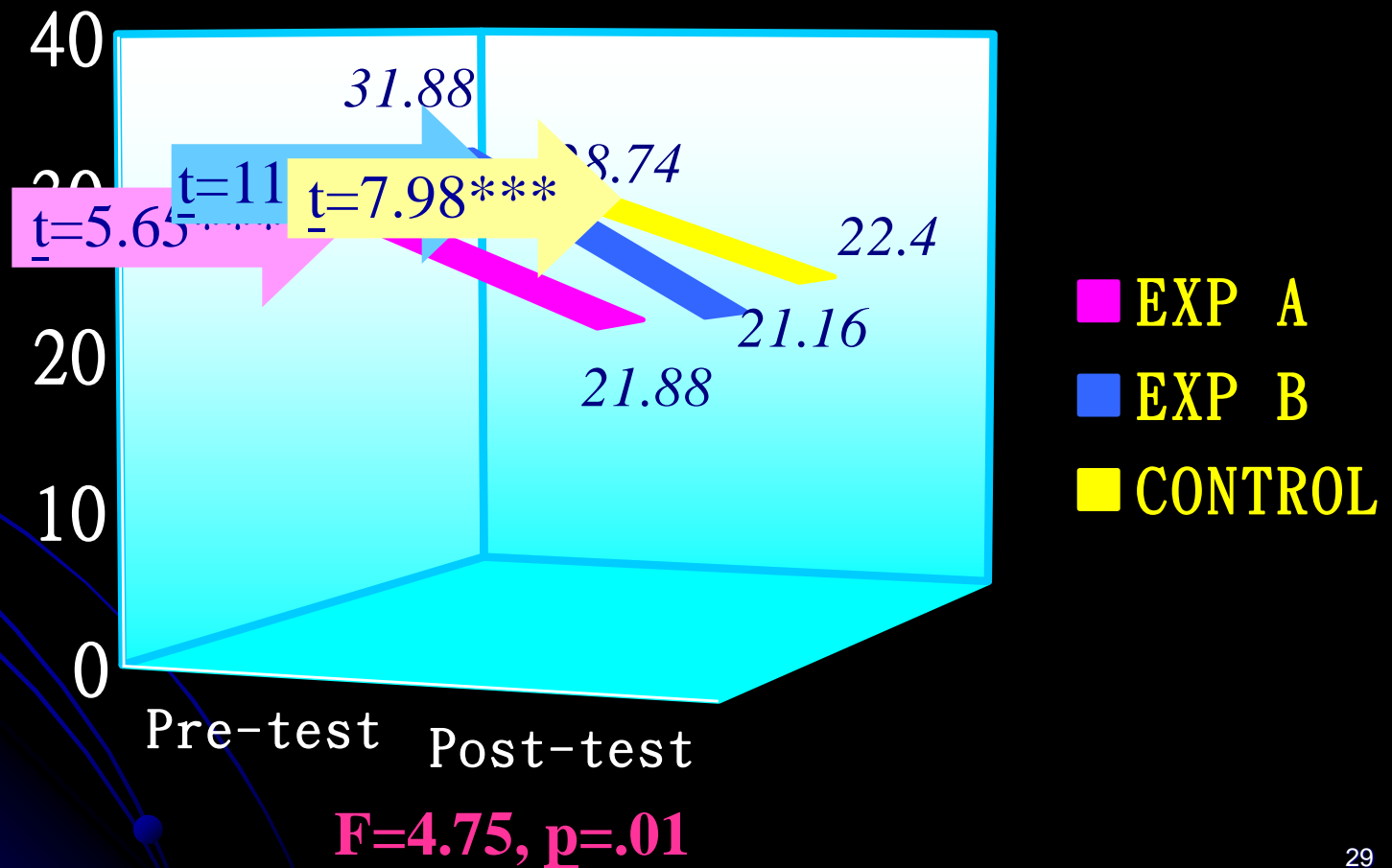
After Nursing intervention ~ Intensity of pain :

- ANOVA : Significant between Three group difference.



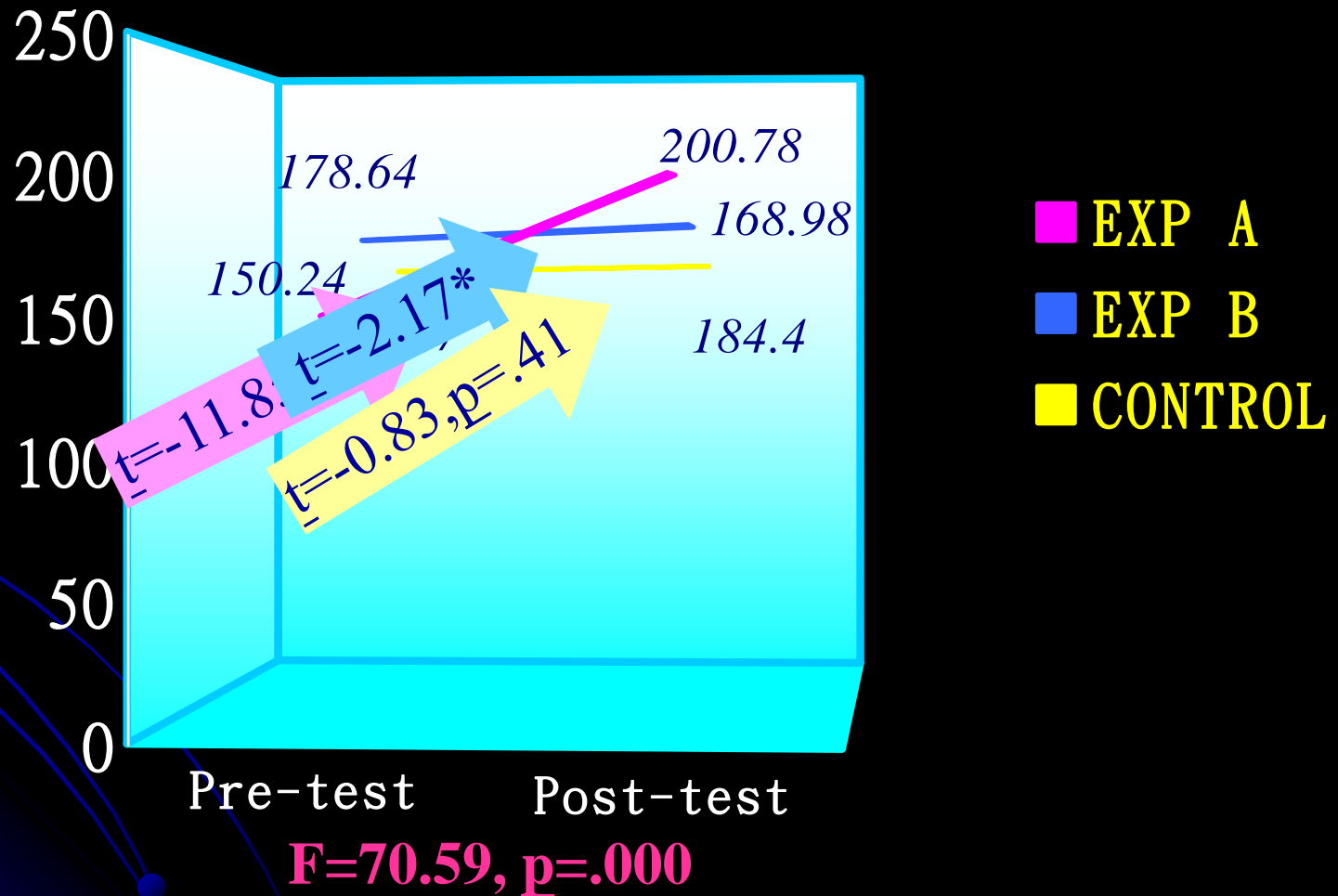
After Nursing intervention ~ MDQ (symptoms of distress) :

- ANOVA : Significant between three group difference.



After Nursing intervention ~ ADSCS (Self-care behavior) :

- ANOVA : Significant between three group difference.



Conclusions

Conclusions -1

The effectiveness for reducing intensity of pain , symptom distress, and improve self-care behavior of auricular acupressure on Internet learning program for primary dysmenorrheal adolescents.

Conclusions~2

- Providing no invasive and easily application and no adverse side effects on primary dysmenorrheal adolescents .
- E-learning : 「 Interactive Internet 」 for nursing education.
- Design repeat- measure for future study.

Thank You For Your Attention

