

Applicability of the Healthy Beat Acupunch Exercise Program for Community Older Adults

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Disclosure

➤ *Authors*

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➤ *Conflict of Interest*

- *None.*

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➤ *Learner Objectives*

- *To identify the protocol of a newly-developed complementary health practice method, the Healthy Beat Acupunch (HBA) exercise program.*
- *To know the applicability of the HBA exercise program for community older adults.*

Background 1/2

- **Regular physical exercises can improve some health problems associated with aging** (Chan et al., 2018).
- **Numerous exercise programs have been designed and promoted for older adults.**
- **In Taiwan, 40-50% of older adults have expressed that they felt too weak and too old to exercise** (Huang et al., 2016).
- **There was a gap between the value of health perceived by older adults and their actual engagement in physical exercises.**
- **Recognizing older adults' needs, motivations, and barriers to exercise when designing an exercise program would help achieve the purpose of the program** (Miller & Brown, 2017).

Background 2/2

- *The **Healthy Beat Acupunch (HBA)** exercise program developed by our research team combines the concepts of **traditional Chinese medicine (TCM)** **meridians** and **body movements** (Tsai, Chen, & Huang, 2018).*
- *Therapies based on **TCM** have **positive effects** on **disease-related health outcomes** and **health maintenance** via internal and external interactions in the body (Yeh, Chiu, Wang, & Lo, 2017).*
- *The **HBA** exercise program was designed in light of the purpose of **health promotion** and **sustenance**.*
- *However, its **applicability as perceived by older adults**, warrants further investigation.*







Purpose

- To evaluate the **applicability** of the **HBA** exercise program for **older adults** at community care centers.
- To explore their **perceived impacts** and **suggestions** for program protocol after **six months of HBA** exercises.

Acupunch Exercise

- A non-invasive method of **meridian & acupoint stimulations** that emphasize **vibration** rather than beating.
- Vibrations through **hands** to **cuff or tap** every part of the **body along 14 meridians** to transport **qi and blood** (Shaun, 2009).
- Using sudden force on the body to **vibrate meridians & generate heat**, which helps to **circulate qi & blood** and **dredge meridian passages** (Lu & Zhong, 2006).
- The **speed, force, & duration** of acupunch can be **self-determined & adjusted** according to a person's **physical condition**.

Principles of Acupunch

- Making a **hollow fist** with a **solid grasp**, leaving a space with a **width of approximately one finger**.
- **Six punching styles:**
 - **dragon fist** 
 - **tiger fist** 
 - **trunk fist** 
 - **phoenix fist** 
 - **palm beat** 
 - **back beat** 
- When practicing acupunch, the **wrist, elbow, and shoulder joints are relaxed**, using **natural swinging** to **direct the fist onto the targeted acupoint** (Shaun, 2008; Shaun, 2009).

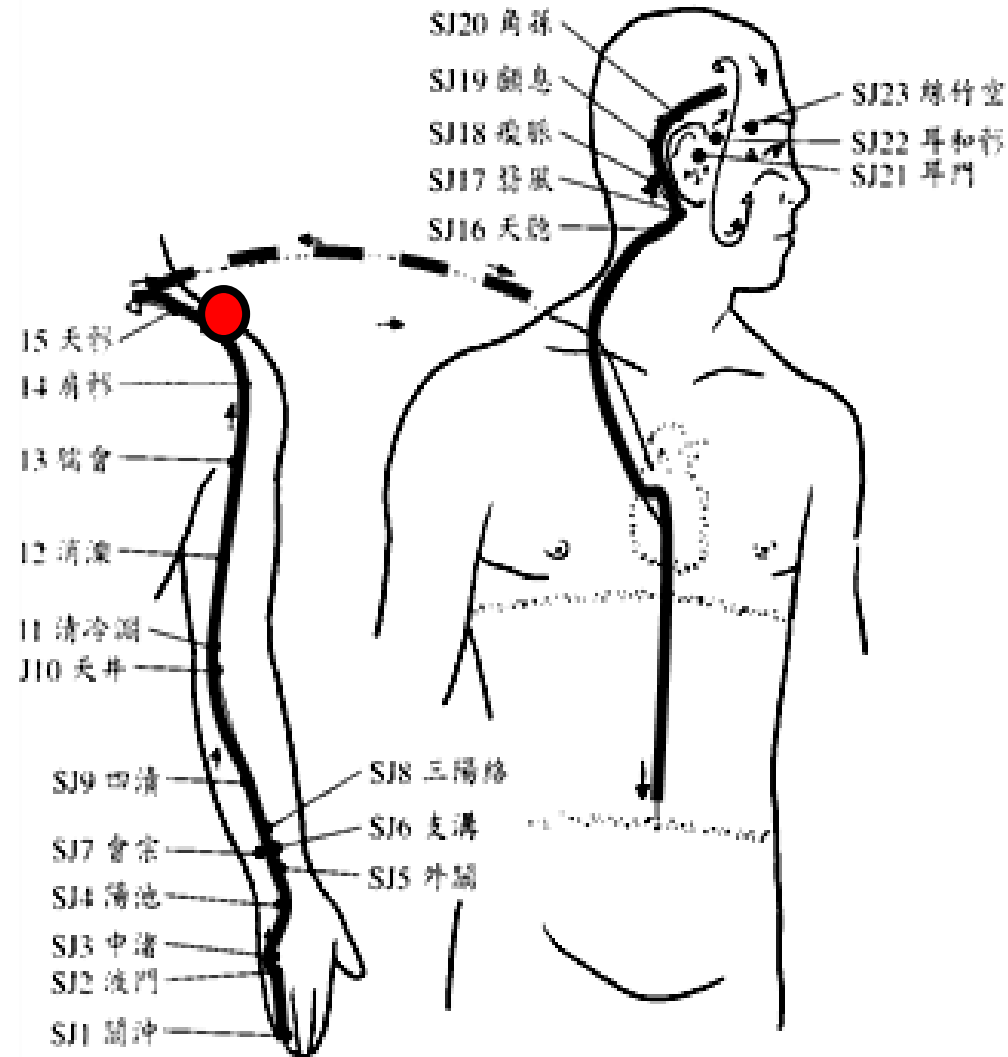
Methods

- **Design:** Prospective & Descriptive study
 - Participants were interviewed after 6 months HBA exercise (3 times/week, 40 min./session) to evaluate the HBA program.
- **Setting:** 4 community care centers, southern Taiwan.
- **Sampling:** Convenience
- **Sample:** 113 community older adults

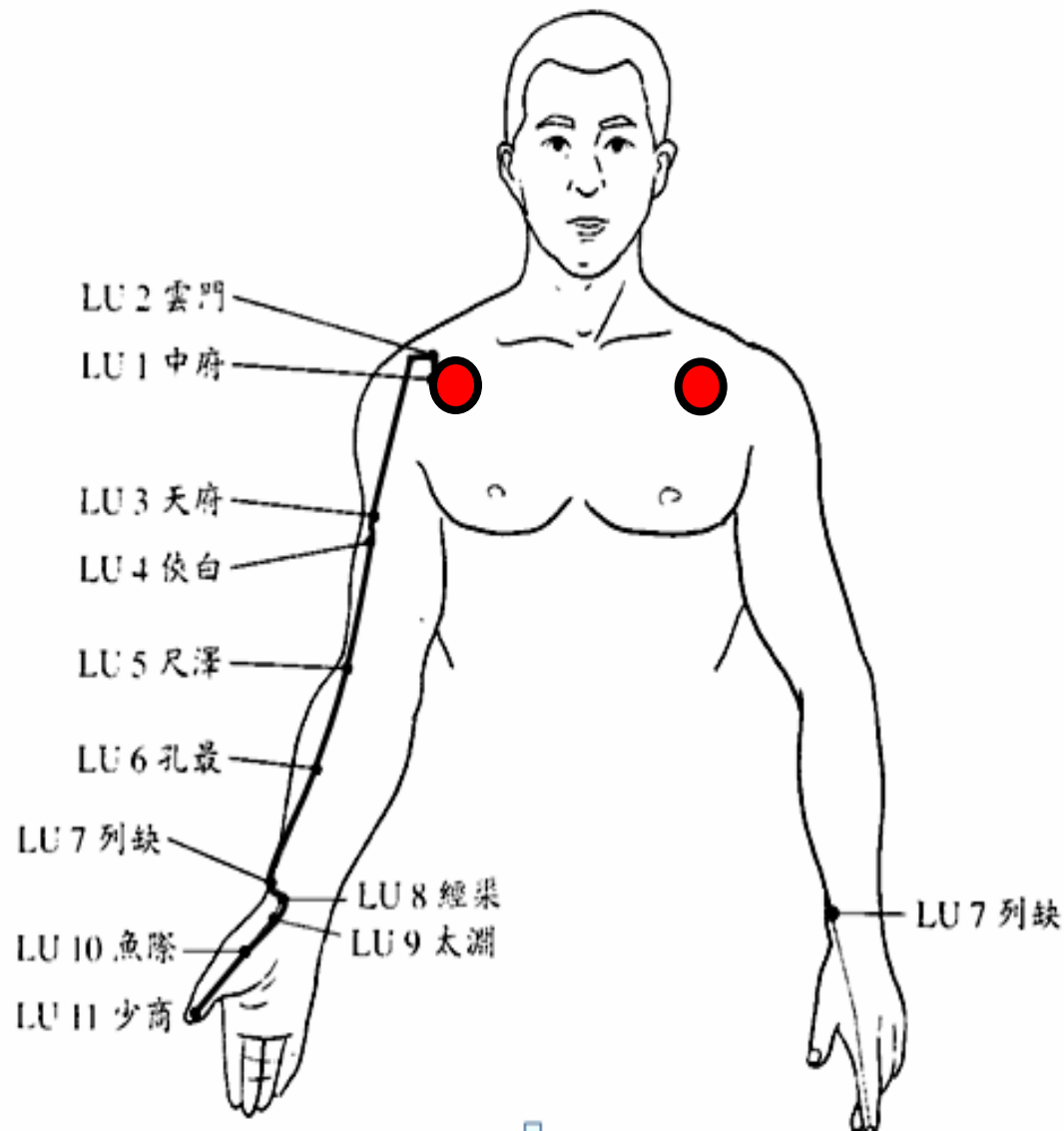
HBA Program

- **Phase 1: Activating qi & blood (warm-up)**
 - 8 min.
 - 5 slow, gentle motions to loosen up joints, warm up the body, and adjust breathing.
- **Phase 2: Punching meridians (exercise)**
 - 19 min.
 - 14 low-to-medium speed motions to punch 14 meridians to enhancing cardiorespiratory workout, activating qi & blood circulation, and boosting energy.
- **Phase 3: Relaxing body & mind (cool-down)**
 - 8 min.
 - 5 low-speed motions to relax muscles and stretch the body.

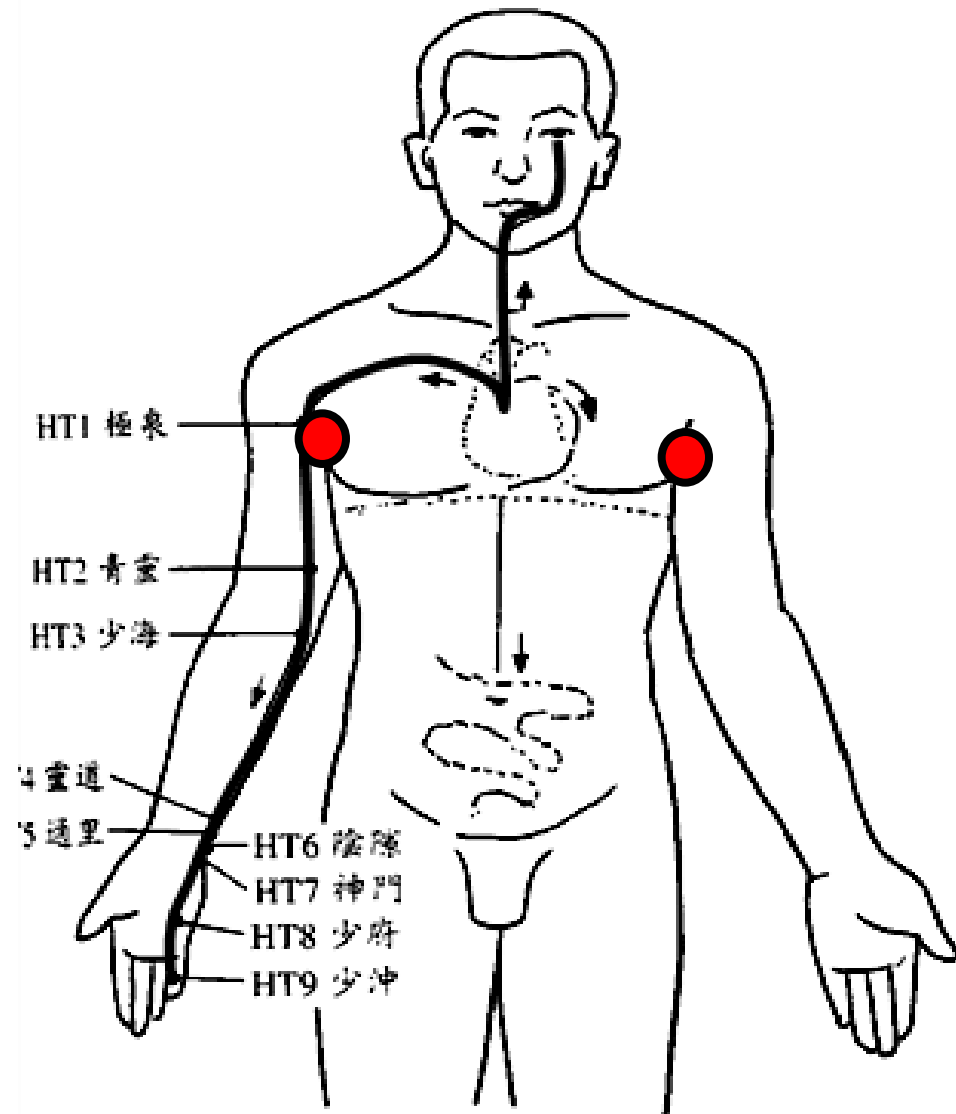
Punching the Shoulders with Phoenix Fist



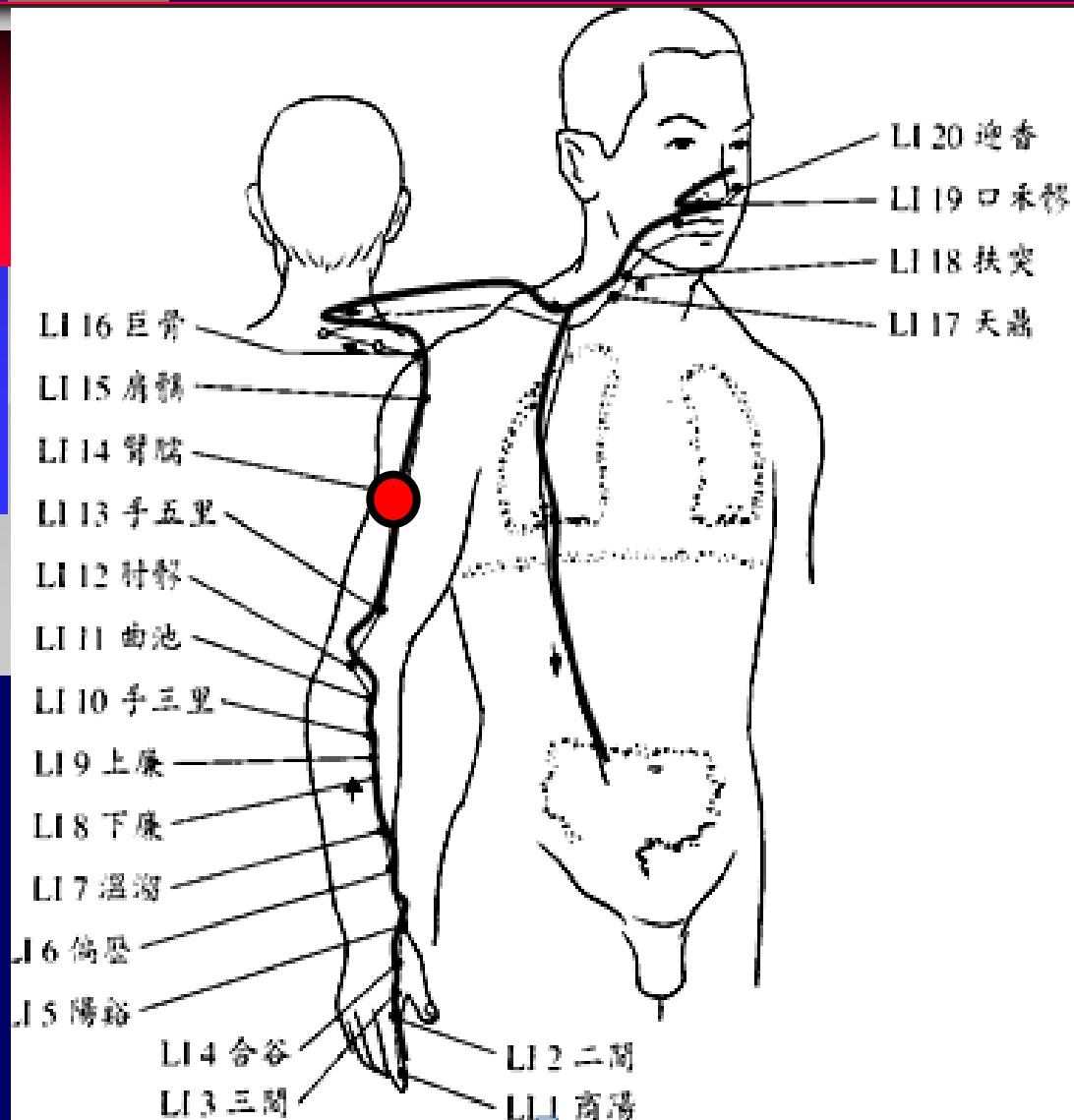
Punching the Upper Chest with Phoenix Fist



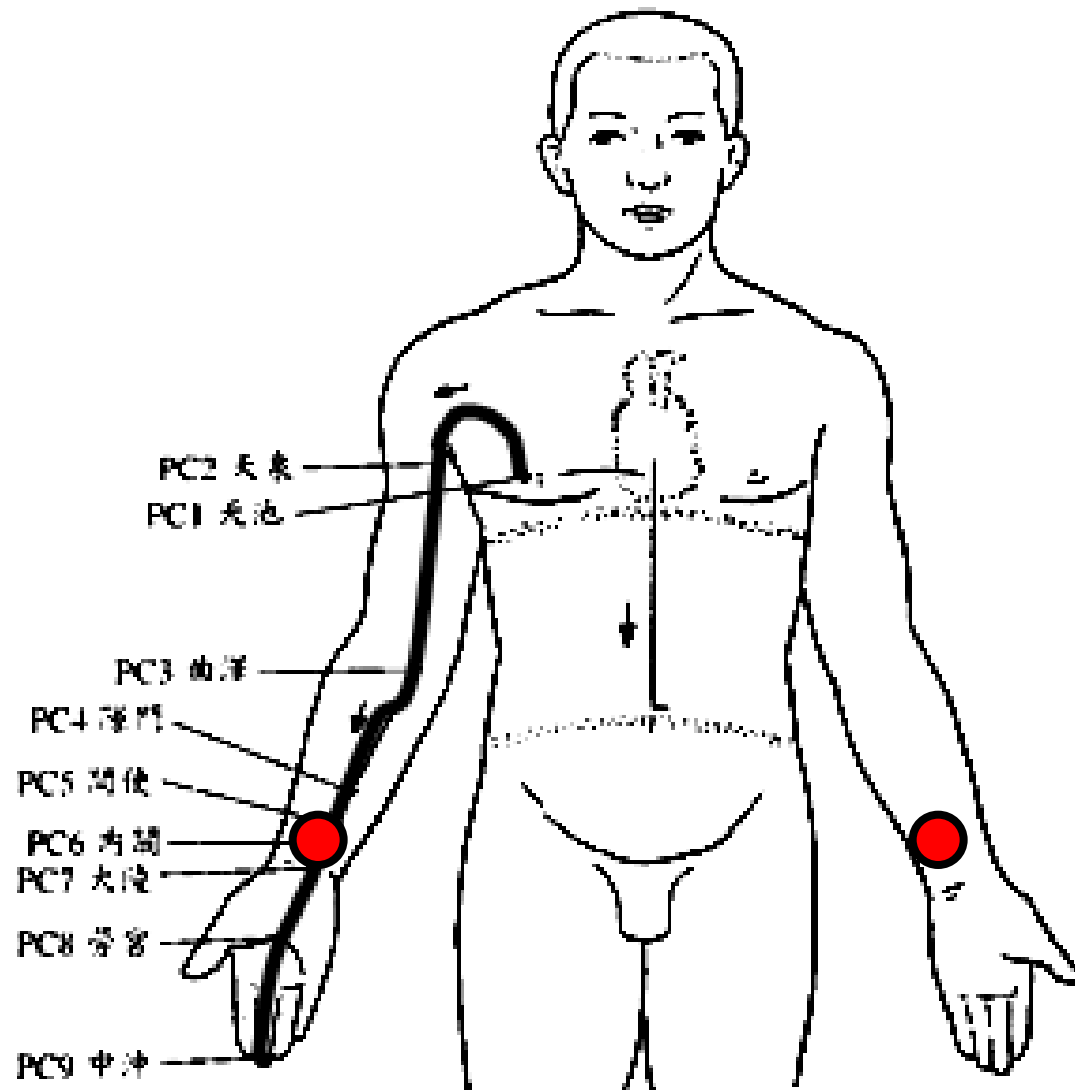
Punching the Armpits with Tiger Fist



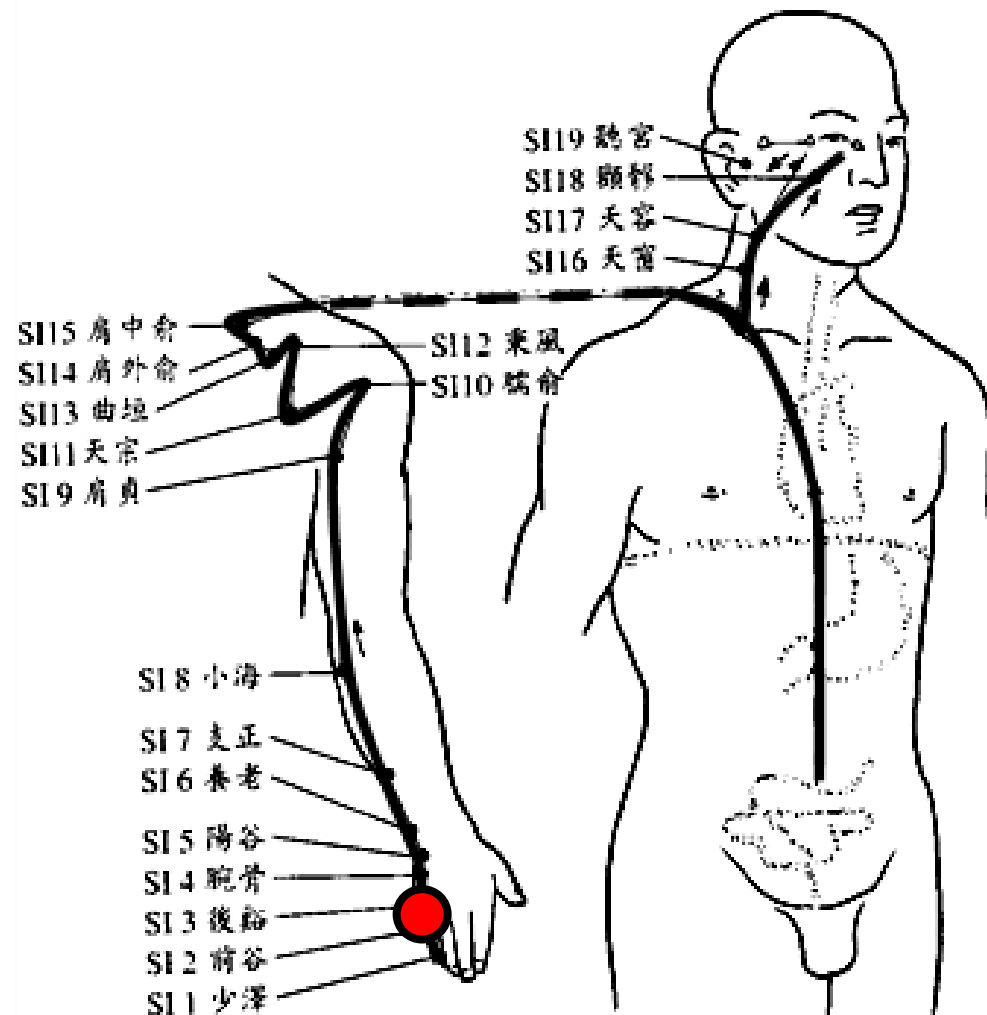
Punching the Outer Arms with Phoenix Fist



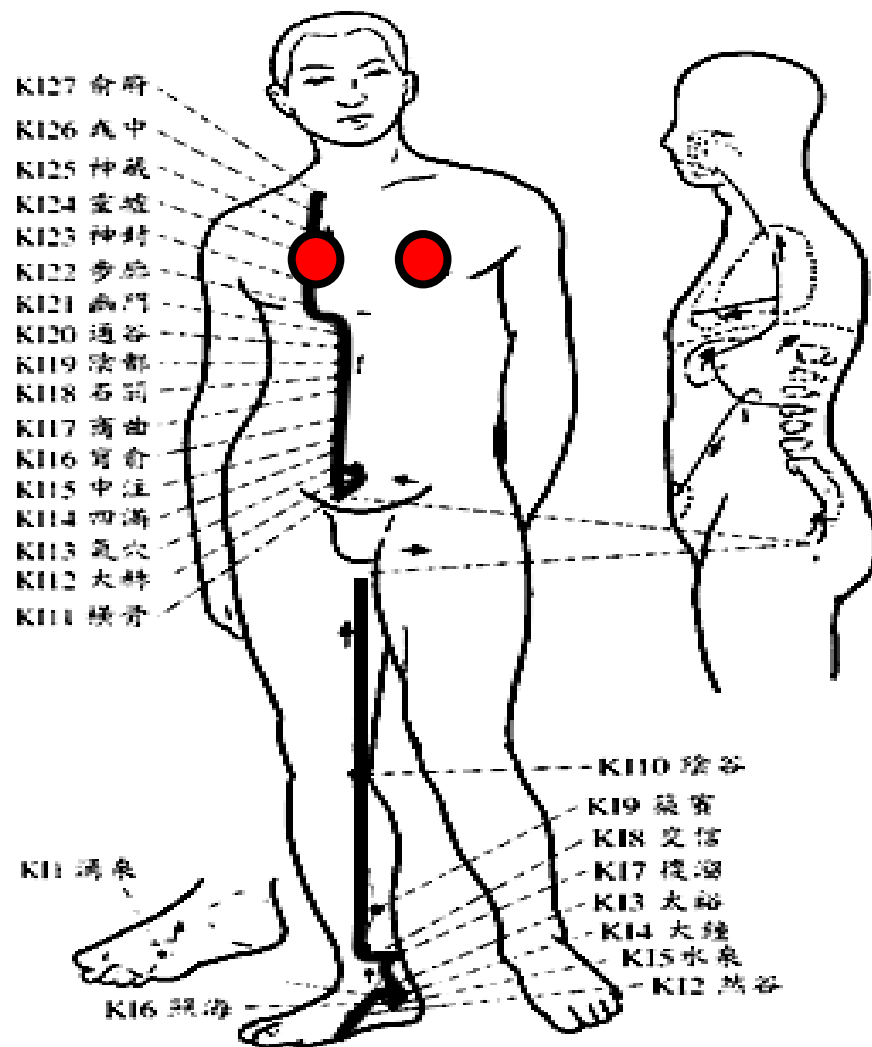
Punching the Forearms with Dragon Fist



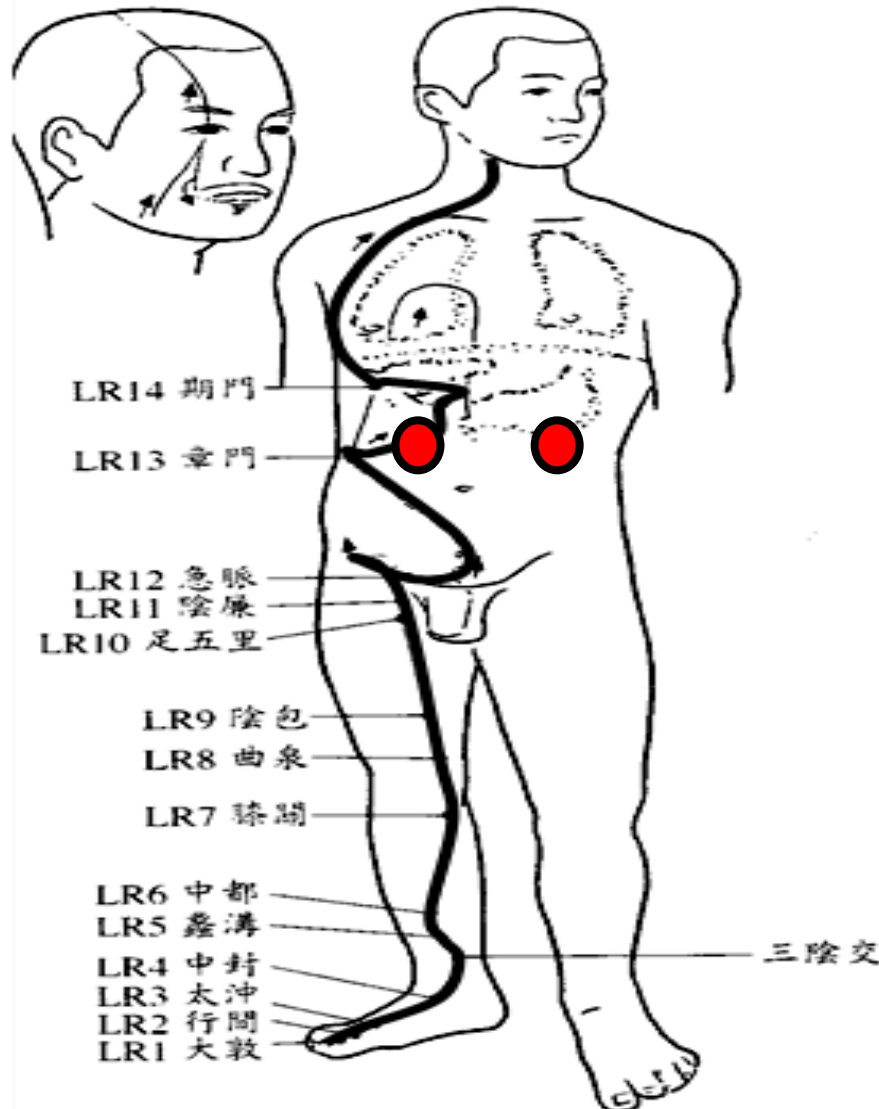
Punching the Little Finger Side with Palm Beat



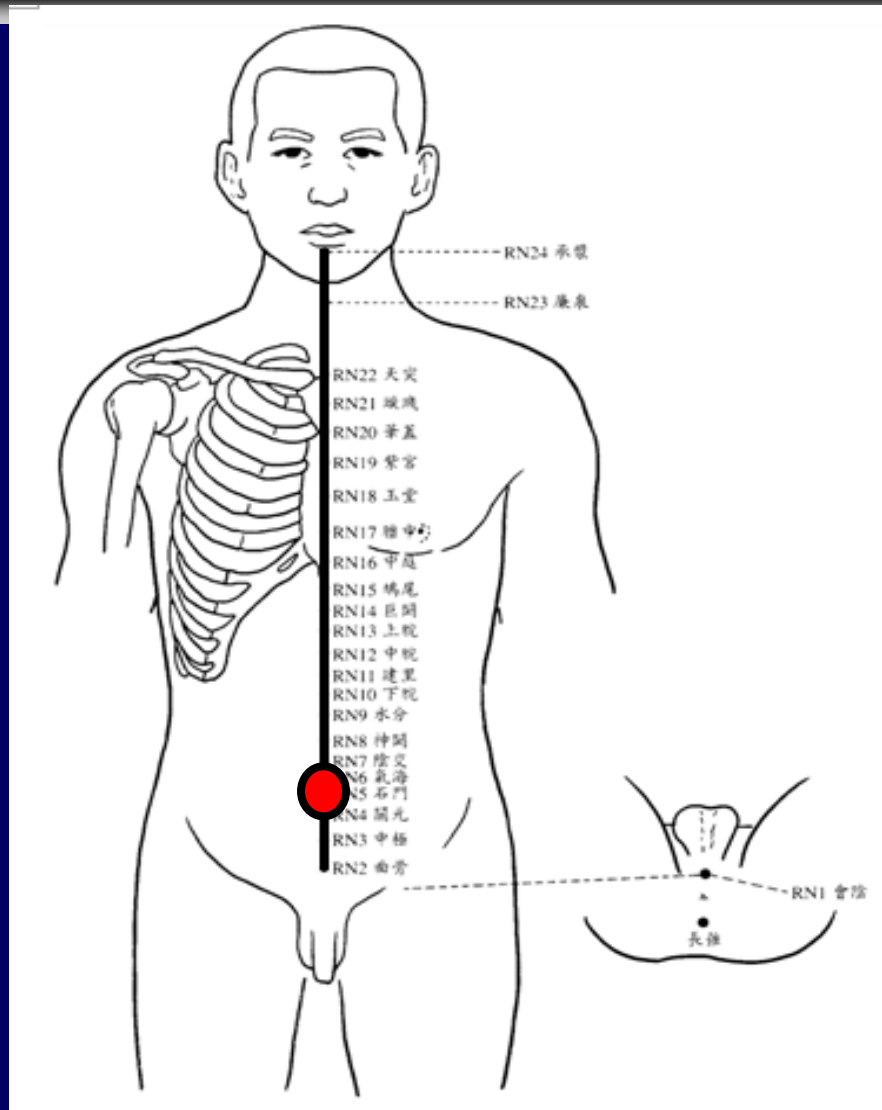
Punching the Center Chest with Palm Beat



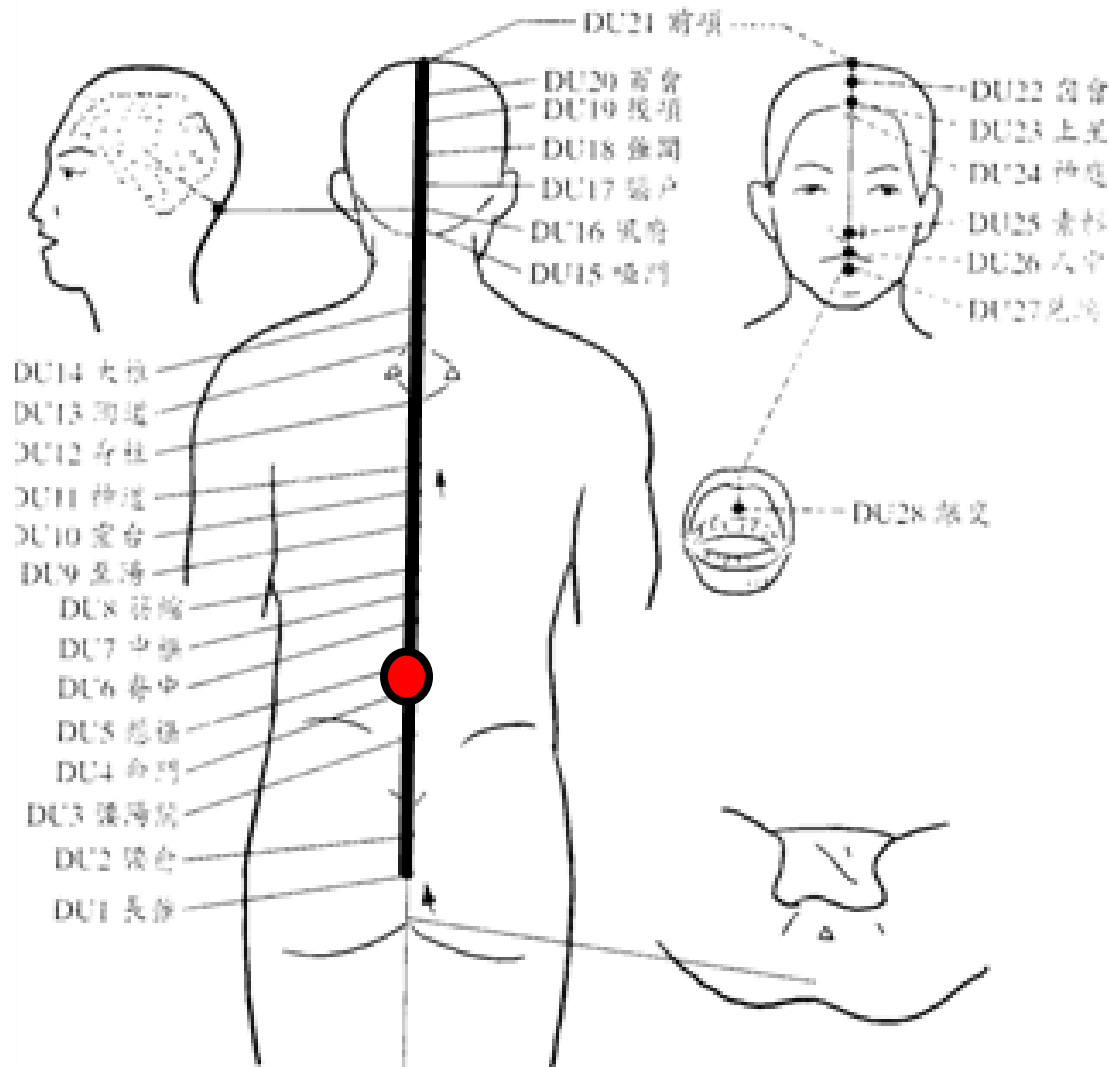
Punching the Lower Ribs with Palm Beat



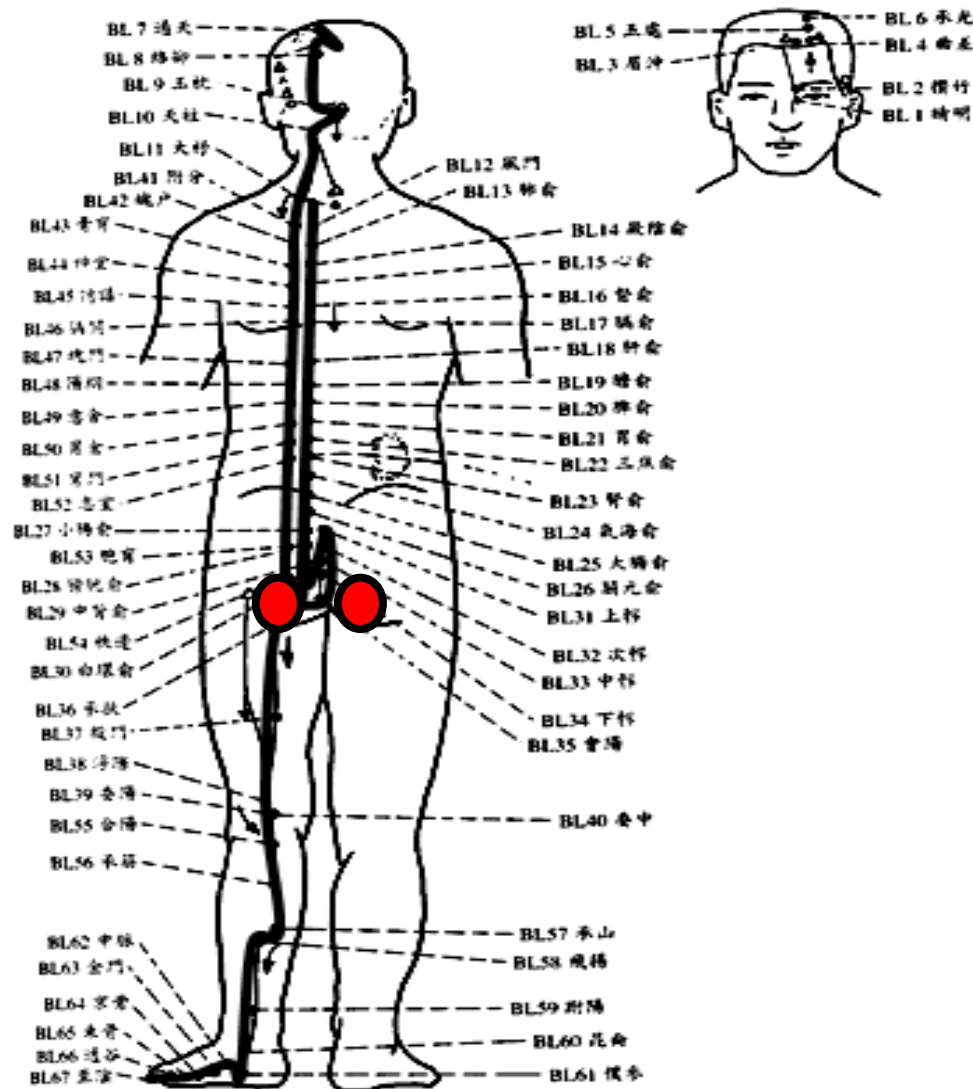
Punching the Lower Abdomen with Palm Beat



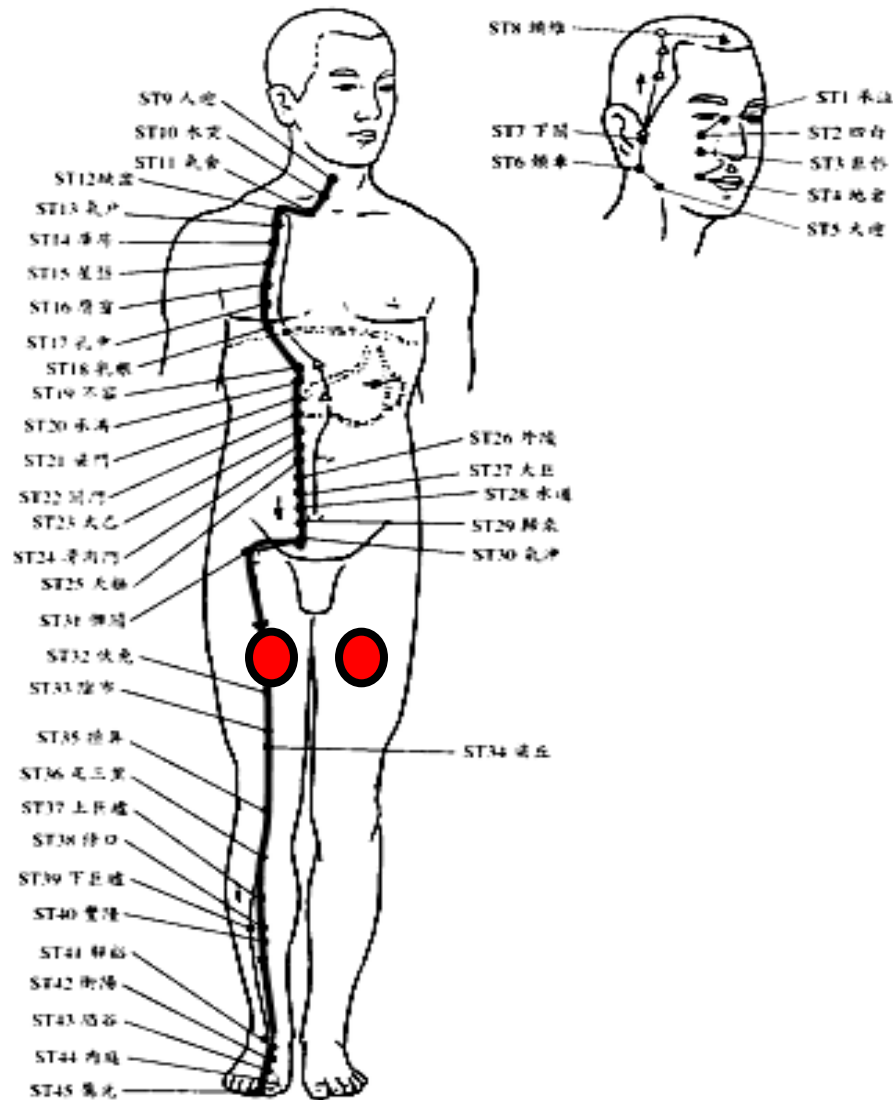
Punching the Lower Back with Back Beat



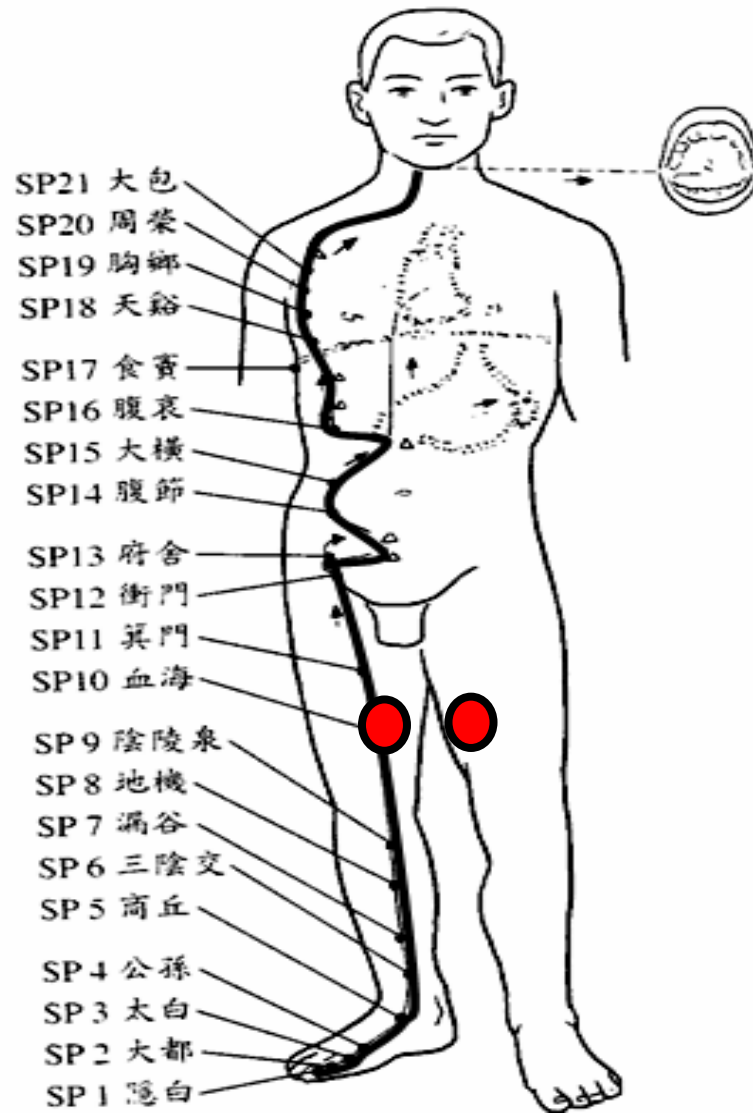
Punching the Buttocks with Tiger Fist



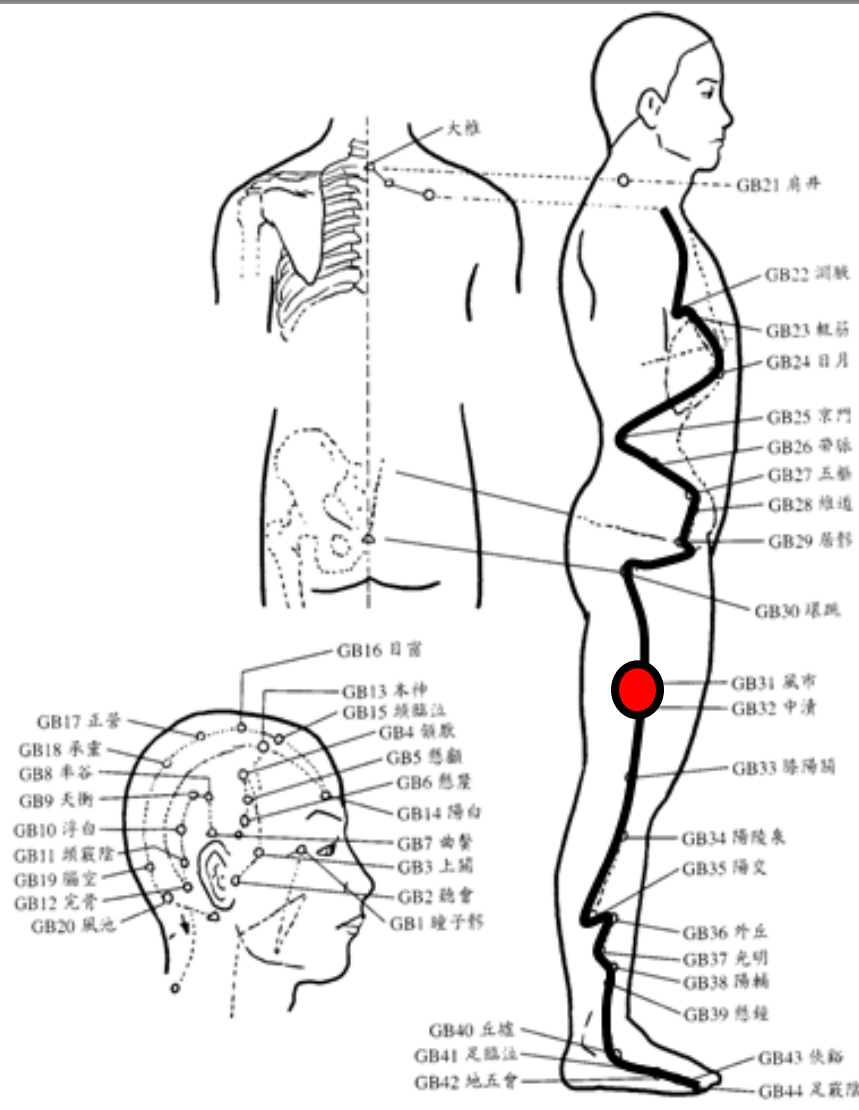
Punching the Forelegs with Trunk Fist



Punching the Inner Legs with Dragon Fist



Punching the Outer Legs with Phoenix Fist



Data Collection 1/2

- **Evaluation criteria:** *simplicity, safety, suitability, and helpfulness.*
- **Scale: 10-point ladder scale**
 - **0:** *very difficult, very dangerous, very inappropriate, and useless in contributing to the older adults' health.*
 - **10:** *very easy, very safe, very appropriate, and very helpful to the older adults' health.*

Data Collection 2/2

■ *Six open-ended questions:*

1. *What kinds of changes have you experienced after completing the HBA?*
2. *How many participants in a HBA group is appropriate?*
3. *How many times/week of HBA is suitable?*
4. *What length of a HBA session is preferred?*
5. *What characteristics do you think the instructor needs to have?*
6. *Would you recommend the HBA to your friends?*

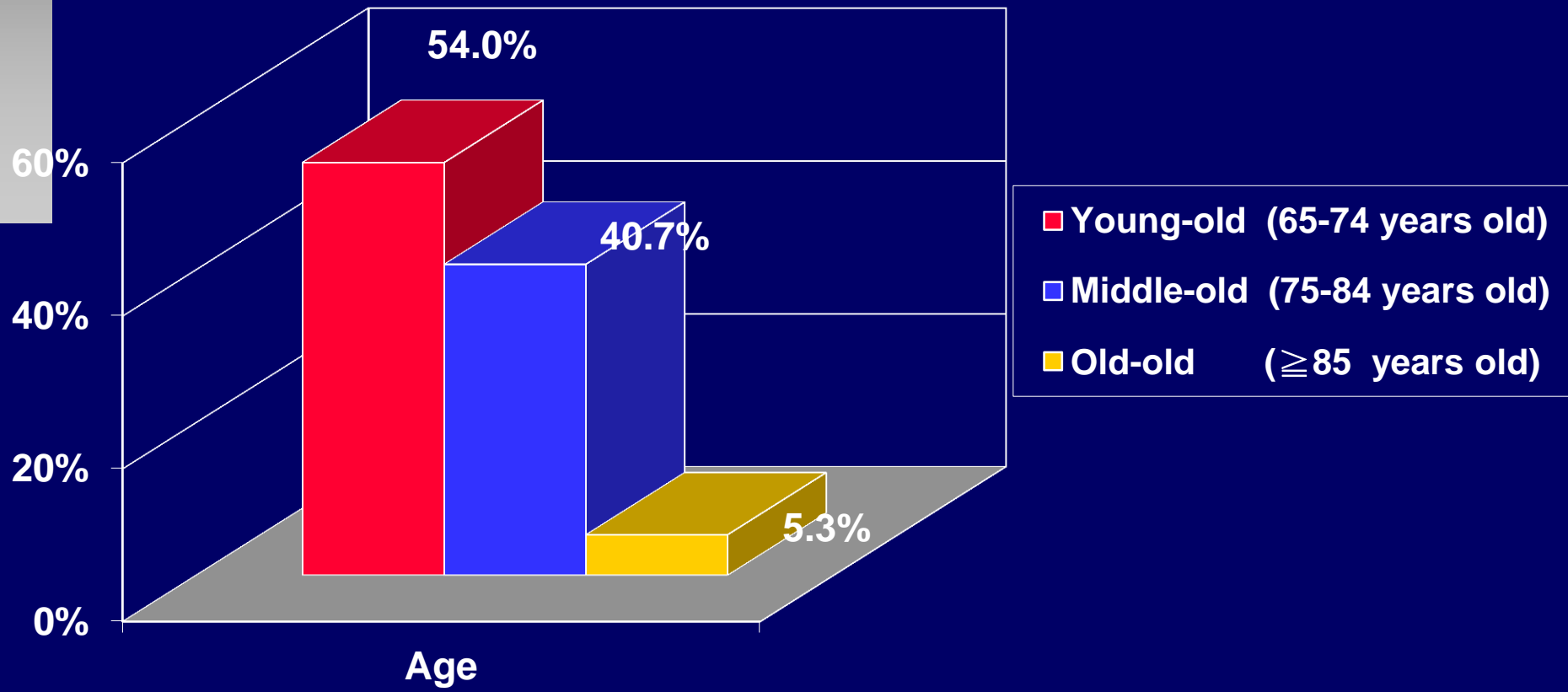


Results



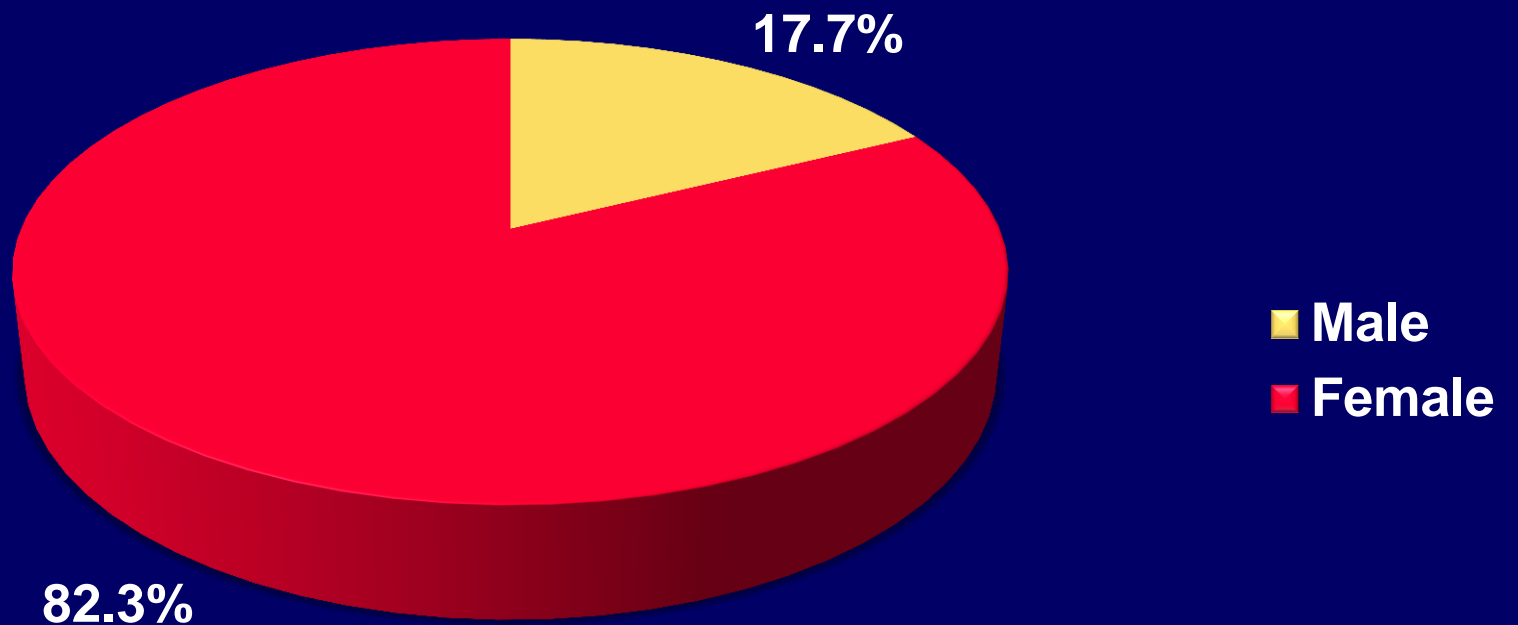
Demographic Profiles of the Participants

Age

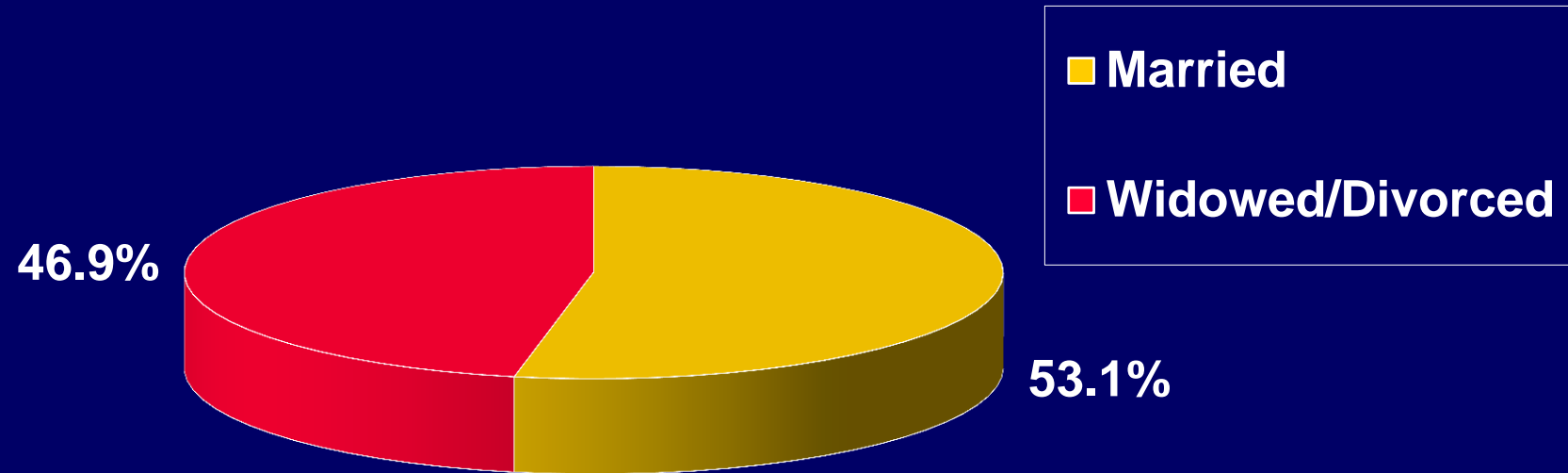


$M = 74.65; SD = 6.03$

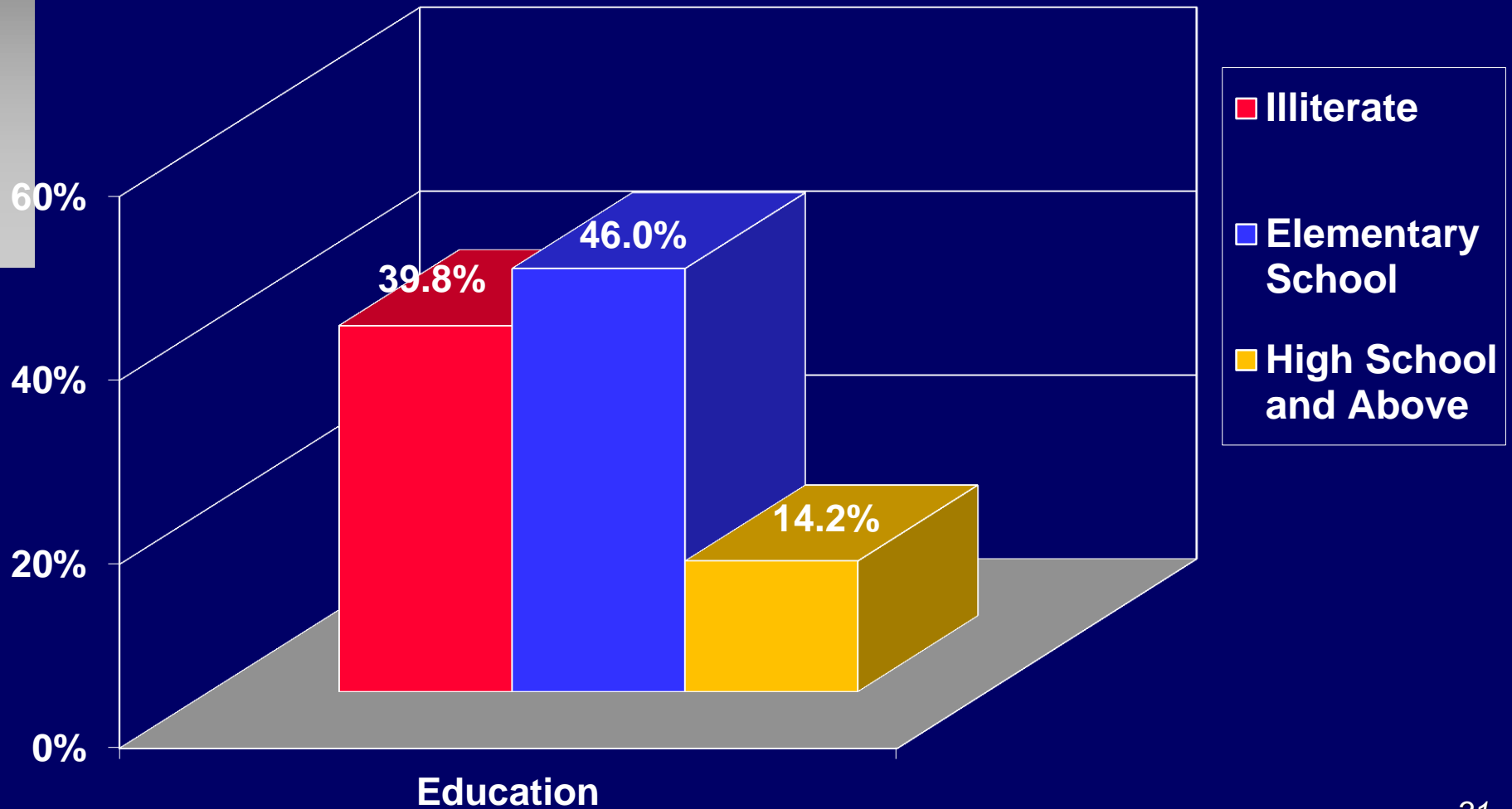
Gender



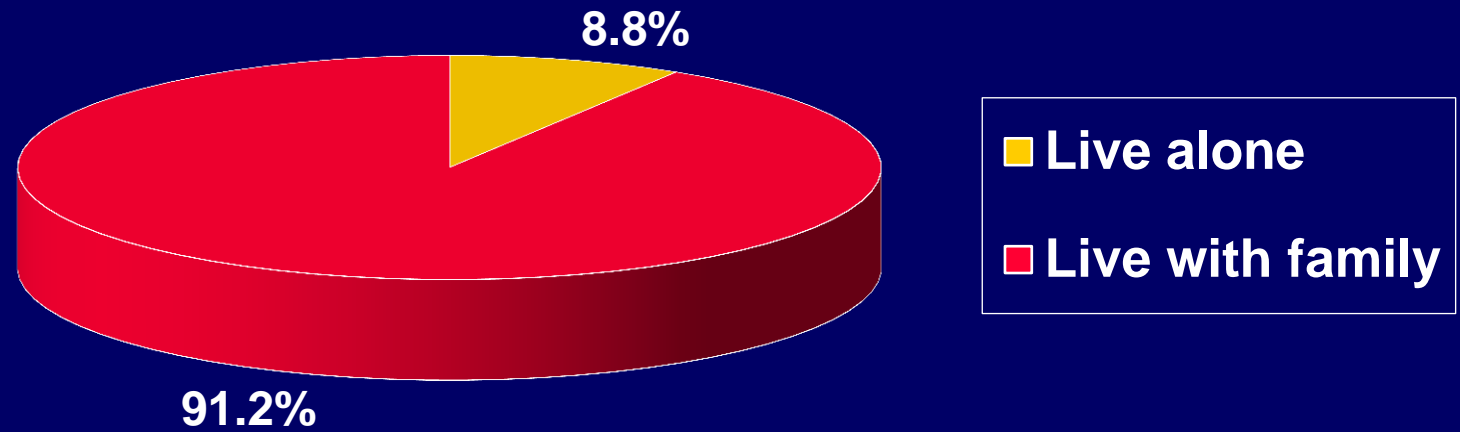
Marital Status



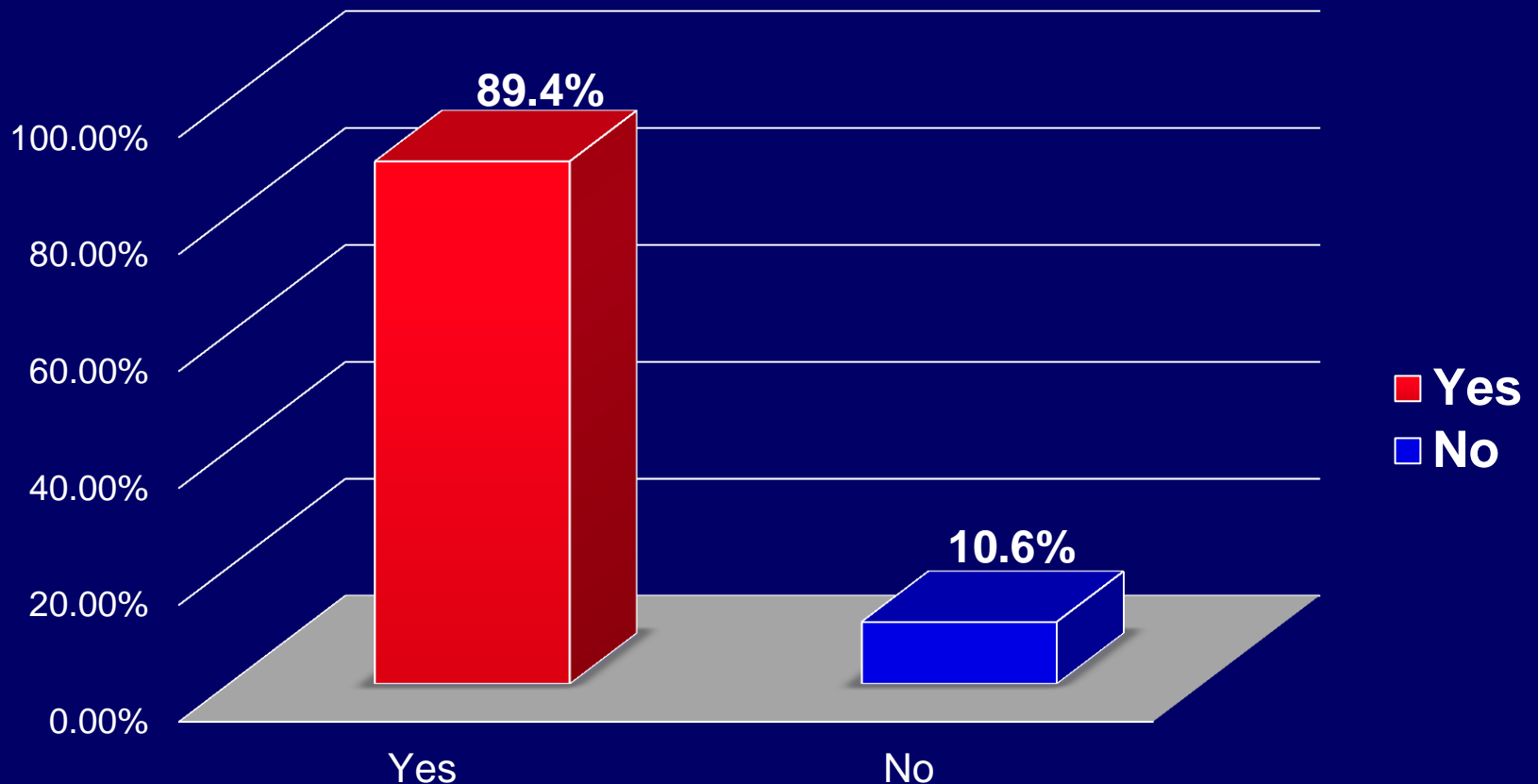
Education



Living Condition



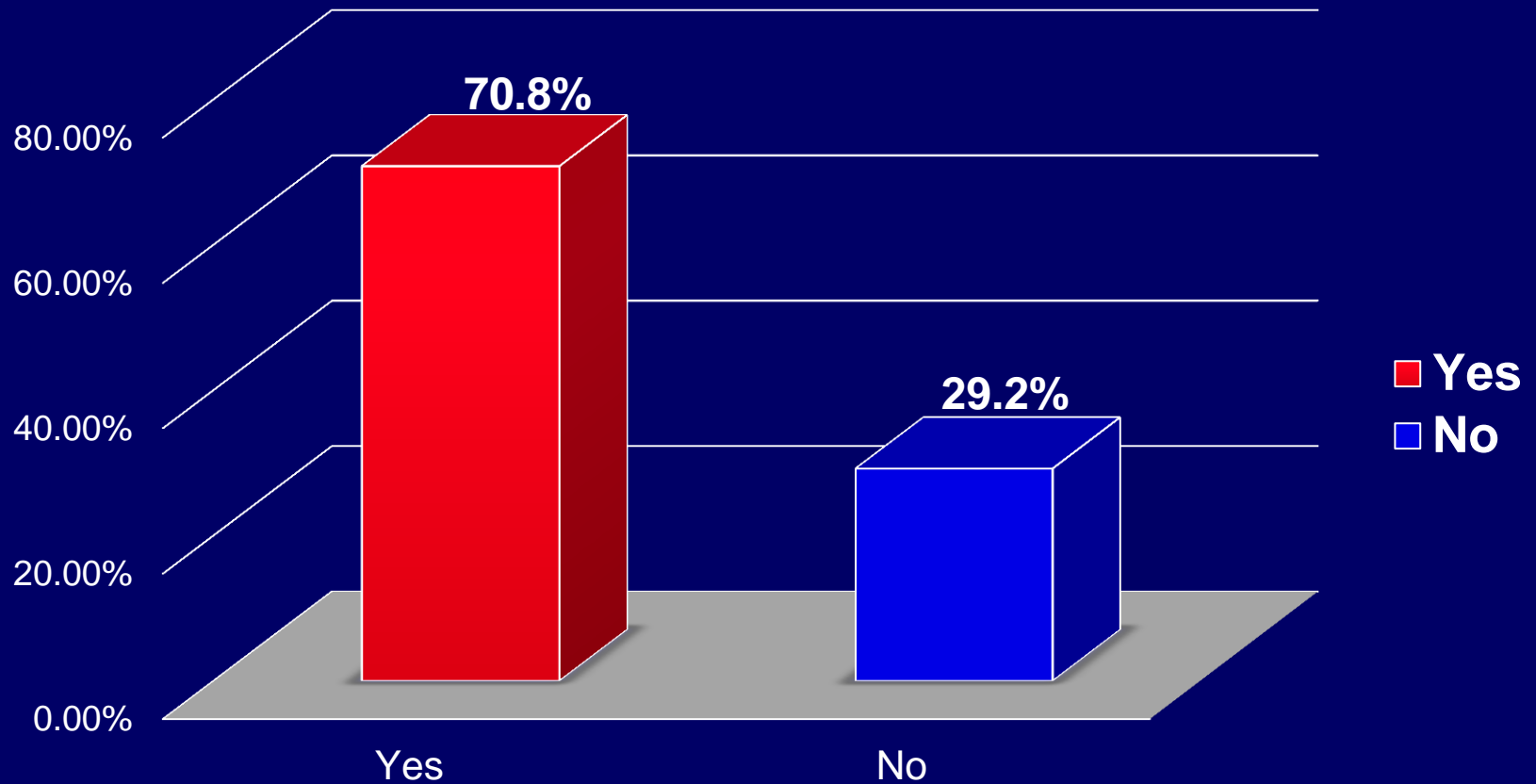
Exercise Habit



Exercise Frequency (times/week): $M = 3.92$; $SD = 2.11$

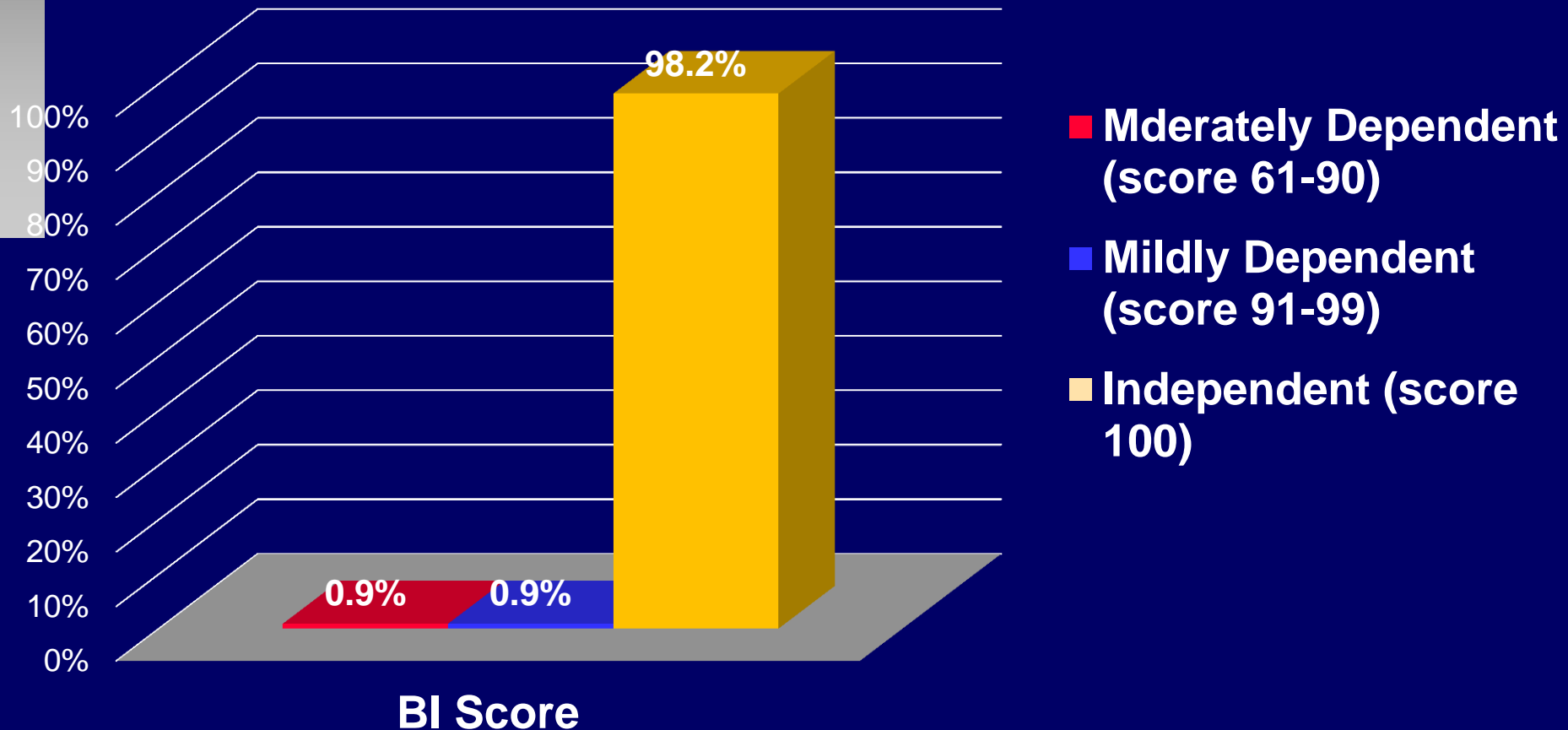
Exercise Duration (min./session) : $M = 45.22$; $SD = 27.58$

Chronic Disease



Chronic disease number: $M = 1.04$; $SD = 0.88$

Activities of Daily Living



Activities of daily living (ADL) : $M = 99.82$; $SD = 1.48$

Applicability Evaluation of HBA

(*N* = 113)

	Simplicity (M ± SD)	Safety (M ± SD)	Suitability (M ±SD)	Helpfulness (M ± SD)
Phases				
Activating Qi and Blood	9.65±0.68	9.70±0.67	9.96±0.21	9.96±0.21
Punching Meridians	9.59±0.75	9.84±0.43	9.95±0.23	9.96±0.21
Relaxing Body and Mind	9.86±0.97	9.98±0.13	9.96±0.19	9.96±0.23

Perceived Changes after HBA

(N = 113)

Physical and Mental Changes	<i>n</i>	%
Limbs more flexible	31	27.4
Body more relaxed	26	23.0
Felt more energetic	26	23.0
Became more agile	22	19.5
Became stronger	19	16.8
Felt less pain	6	5.3
Maintained body functions	5	4.4
Became happier	5	4.4
Reduced body weight	3	2.7
Improved endurance	2	1.8
Experienced more life fulfillment	2	1.8
Had more regular bowel movements	1	0.9
Experienced cleansing of upper respiratory tract	1	0.9

Program Protocol (N = 113)

Variable	<i>n</i>
Group size (number of people)	
30	66
35	1
40	20
> 40	26
Exercise frequency (times / week)	
3	94
5	4
Everyday	15
Exercise duration (minutes / session)	
30	2
40	107
60	4

Instructor Preference (N = 113)

Variable	<i>n</i>
Characteristics of the instructor	
Professional	39
Hardworking	29
Easygoing	19
Enthusiastic	18
Gender	
Female	28
Male	16
No Preference	69

Instructor Preference (N = 113)

Variable	<i>n</i>
Age	
20-29 years old	2
30-39 years old	22
40-49 years old	26
50-59 years old	29
No Preference	34
Recommend to friends	
Yes	112
No	1

Conclusions

- *The participants rated the HBA highly and commented that the program was feasible, safe, suitable, and helpful.*
- *HBA program is appropriate and applicable for the older population.*
- *Proper assessment and evaluation prior to physical exercise implementation ensures participant engagement and continuity.*

Clinical Implications & Further Research

- *Global nurse practitioners or researchers who are interested in health promotion and/or health maintenance of older adults could further **test the effects of the HBA program on older adults** in order to disseminate the program as a health promotion activity for older adults in community.*

Comments & Questions

