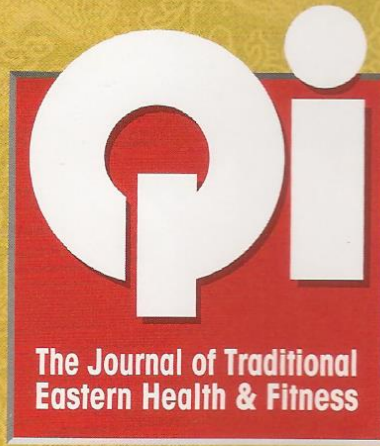


Metarobics: The Future of T'ai Chi for Health & Chronic Conditions

*The Wisdom of Breath
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of the Light*



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The Effects of Zhìnéng qìgōng's Practice on Glucose Levels, Blood Pressure, and Body Weight in People with Acquired Visual Disability.

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***Abstract* - The practice of zhìnéng qìgōng 智能气功 3 times a week for 1 hour for 12 weeks resulted in statistically significant reductions in glucose levels and body weight in diabetic patients with acquired visual disability. The students in the interviews reported having better moods, greater vitality, better concentration, better posture, and less pain. Under medical supervision, three of the students began to reduce their doses of injected insulin. The students' blood pressure did not change.**

Although the sample of the present study was small (fourteen students), for the first time with these results, Mexico contributed to the hundreds of studies around the world that prove that zhìnéng qìgōng 智能气功 is an effective therapy for diabetic and overweight people.

***Keywords* - Diabetes, blood pressure, people with acquired visual disability, weight reduction, zhìnéng qìgōng 智能气功.**

I. INTRODUCCION

Qìgōng's 气功 systems are very ancient methods, that have been used by Chinese doctors and masters to heal illnesses, maintain good health, and extend life expectancy. Zhìnéng qìgōng 智能气功 includes a series of body and mind movements. It is a system so simple that anyone, of any age, and in any state of health, can practice it. It can be practiced from 15 minutes to several hours a day. However, the more it is practiced, the greater the benefits [1]-[3].

A. Scientific research with diabetes

For many decades, scientific research has been carried out in China and around the world. They have demonstrated that Qìgōng's practice has the property of reducing the levels of glucose in diabetic patients and improving the quality of life for the people who practice it [4]-[6]. The objective of the present study was to investigate the effects of Zhìnéng qìgōng's daily practice on glucose levels, body weight and blood pressure in students with acquired visual disability. In addition, it helped the instructors to be pioneers in this field with Zhìnéng qìgōng in Mexico.

II. METHODOLOGY

In a school for people with acquired visual disability in Mexico City, students were invited to participate in the research protocol. Fifteen students decided to participate in the study after listening to the informative discussion. They signed their letters of informed consent forming the experimental group. Ten students agreed to participate as part of the control group.

The experimental group consisted of fifteen students (twelve women and three men), ranging in age from 24 to 73 (Fig. 1). Nine of the students diagnosed with diabetes, ten were overweight and thirteen were hypertensive.

The control group consisted of ten persons (five females and five males), ranging from 47 to 74 years old. Four of the students diagnosed with diabetes, five were overweight and eight were hypertensive.

Participants in both groups were asked to maintain their normal activities including their doctor's appointments, medication doses, diet, etc.

Before starting the protocol, the glucose levels, blood pressure, and body weight of the participants of both groups were measured. Subsequently, the experimental group was interviewed orally, and the certified instructor, Tiān Chéng 天成, gave them a special Zhìnéng qìgōng workshop, teaching theory, and 6 different exercises.



Fig 1. Zhìnéng qìgōng's students that participated in the project.

The instructor practiced Zǔ chǎng fǎ 组场法 (Organizing qì field method), Chēn qì fǎ 伸气法 (extending qì method), Lǎ qì fǎ 拉气法 (gathering qì method), Zhí tuǐ zuò sōng yāo fǎ 直腿坐松腰法 (sitting method for relaxing hip joints with straight legs), kidneys's sounds, liver and spleen's sounds, and Hùn yuán wō gōng 混元卧功 (sleeping method) with the students. They practiced 3 times a week for 1 hour for 12 weeks. The students also received external qì 气 by the instructor (Fā qì fǎ 发气法 technique to send qì 气 to others) for 7 times. In addition, the students received audios to practice at home if they wanted.

Three months later, the glucose levels, blood pressure, and body weight of both groups were measured again. Oral interviews of the experimental group were also performed. One of the students in the experimental group did not show up to the final data collection, so the number of final data obtained was fourteen.

Data from the control and experimental groups were analyzed separately with the t student test for related samples.

III. RESULTS

Experimental Group

Statistically significant difference was found in glucose levels between the first (M=112.71, SD=32.059) and the second measurement (M=92.64, SD=19.093); $t(13)=2.222$, $p=.045$ (Table 1).

Table 1. Experimental group's glucose levels analysis.

| Glucose levels | Median | Standard deviation | t | p |
|--------------------|--------|--------------------|-------|-------|
| First measurement | 112.71 | 32.059 | 2.222 | 0.045 |
| Second measurement | 92.64 | 19.093 | | |

Statistically significant difference was also found in body weight between the first (M=60.129, SD=18.7706) and the second measurement (M=59.479, SD=18.7451); $t(13)=2.511$, $p=.026$ (Table 2).

Table 2. Experimental group's body weight data.

| Body weight | Median | Standard deviation | t | P |
|--------------------|--------|--------------------|-------|-------|
| First measurement | 60.129 | 18.7706 | 2.511 | 0.026 |
| Second measurement | 59.479 | 18.7451 | | |

However, no statistically significant difference was found in high blood pressure between the first (M=133.07, SD=17.912) and the second reading (M=129.50, SD=24.450); $t(13)=.393$, $p=.701$ (Table 3). Similarly, no statistically significant difference was found in low blood pressure between the first (M=75.71, SD=9.571) and the second reading (M=76.35, SD=11.426); $t(13)= -0.181$, $p=.859$ (Table 4).

Table 3. Experimental group's systolic blood pressure.

| Systolic blood pressure | Median | Standard deviation | t | P |
|-------------------------|--------|--------------------|-------|-------|
| First reading | 133.07 | 17.912 | 0.393 | 0.701 |
| Second reading | 129.5 | 24.45 | | |

Table 4. Experimental group's diastolic blood pressure.

| Diastolic blood pressure | Median | Standard deviation | t | P |
|--------------------------|--------|--------------------|--------|-------|
| First reading | 75.71 | 9.571 | -0.181 | 0.859 |
| Second reading | 76.35 | 11.426 | | |

In the oral interviews, the students reported having better moods, greater vitality, better concentration, better posture, and less pain. Under medical supervision, three of the students began to reduce their doses of injected insulin.

Control group

There was no statistically significant difference in glucose levels between the first (M=189.50, SD=101.794) and the second measurement (M=180.80, SD=101.266); $t(9) = -0.916$, $p = 0.384$ (Table 5).

Table 5. Control group's glucose levels analysis.

| Glucose levels | Median | Standard deviation | t | p |
|--------------------|--------|--------------------|--------|------|
| First measurement | 189.50 | 101.794 | -0.916 | .384 |
| Second measurement | 180.80 | 101.266 | | |

There was no also statistically significant difference in body weight between the first (M=71.36, SD=15.567) and the second measurement (M=71.38, SD=15.567); $t(9) = 1$, $p = 0.343$ (Table 6).

Table 6. Control group's body weight.

| Body weight | Median | Standard deviation | t | p |
|--------------------|--------|--------------------|---|------|
| First measurement | 71.36 | 15.567 | 1 | .343 |
| Second measurement | 71.38 | 15.567 | | |

There was no statistically significant difference in high blood pressure between the first (M=128.50, SD=25.993) and the second reading (M=136.30, SD=27.496); $t(9) = 1.173$, $p = 0.271$ (Table 7). Similarly, there was no statistically significant difference in low blood pressure between the first (M=72.40, SD=15.987) and the second reading (M=72.20, SD=13.620); $t(9) = -0.060$, $p = 0.953$ (Table 8).

Table 7. Control group's systolic blood pressure.

| Systolic blood pressure | Median | Standard deviation | t | p |
|-------------------------|--------|--------------------|-------|------|
| First reading | 128.50 | 25.993 | 1.173 | .271 |
| Second reading | 136.30 | 27.496 | | |

Table 8. Control group's diastolic blood pressure.

| Diastolic blood pressure | Median | Standard deviation | t | p |
|--------------------------|--------|--------------------|-------|------|
| First reading | 72.40 | 15.987 | -.060 | .953 |
| Second reading | 72.20 | 13.620 | | |

IV. DISCUSSION

The control group did not present any changes in the variables measured (glucose levels, body weight, and blood pressure). However, the experimental group did present significant changes in the variables of glucose levels and body weight, improving their health status. In analyzing the case of no change in blood pressure, we found that the students diagnosed with high blood pressure were taking medication during the research, so the medicine was correcting the condition during the study.

V. CONCLUSIONS

The daily practice of Zhìnéng qìgōng for 3 months reduced glucose levels and body weight of the practitioners in the experimental group. The control group did not present any changes in any of the measured variables. The results of this study suggest that the practice of Zhìnéng qìgōng is an effective therapy for diabetics and overweight people. It also suggested more studies should be performed with a larger sample.

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REFERENCES

- [1] M.Q. De, *The Treasure of Good Health and a Happy Long Life. ZhiNeng QiGong Science*. Mexico, City: Crane flight, 2016, pp. 3–68.
- [2] K.H. Ooi, *ZhiNeng QiGong: The science, theory and practice*. San Bernardino CA: Island ZhiNeng QiGong Center, 2010, pp. 16–72.
- [3] The Best of Me, ZhiNeng QiGong. (2017). *Benefits*. Available: <http://www.thebestofmeusa.com>
- [4] X. Liu, Y.D. Miller, N.W. Burton, J.H. Chang, and W.J. Brown. (2011, August). Qi-gong mind-body therapy and diabetes control. A randomized controlled trial. *Am J Prev Med*. 41(2):152-8. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/21767722>
- [5] S. Guan-Cheng, J.C. Lovejoy, S. Gillham, A. Putiri, M. Sasagawa, and R. Bradley. (2010, January). Effects of Qigong on Glucose Control in Type 2 Diabetes. *Diabetes Care*. 33(1): e8-e8. Retrieved from: <http://care.diabetesjournals.org/content/33/1/e8.full>
- [6] Y. Tsujiuchi, H. Kumano, K. Yoshiuchi, D. He, Y. Tsujiuchi, T. Kuboki, H. Suematsu and K. Hirao. (2002, January). The Effect of QiGong Relaxation Exercise on the Control of Type 2 Diabetes Mellitus. *Diabetes Care*. 25(1): 241-242. Retrieved from: <http://care.diabetesjournals.org/content/25/1/241>