## THE EFFECTS OF MEDITATION ON RELAXATION ON RECOVERING ALCOHOLICS

陳惠姿<sup>1</sup> 楊朝成<sup>2</sup> 張嘉苓<sup>3</sup>\*

<sup>1</sup>敏惠醫護管理專科學校美容保健科 <sup>2</sup>嘉南藥理科技大學化妝品應用與管理系 <sup>3</sup>敏惠醫護管理專科學校美容保健科

## Abstract

This research used a meditation specifically designed to lessen the obsession to drink. Ten Alcoholics Anonymous subjects sober at least six months, five were led in one session of the meditation and five Alcoholics Anonymous subjects listened in one session to relaxing music. All ten had an open-ended interview to discover their perception of the session. Pulse rates were measured before and after the meditation or music was introduced.

The mediators' pulse rates decreased more than the music listeners did. The open-ended interview process revealed all ten people thought the session had a positive effect on them and would use it again.

#### Key Words : Alcoholics, meditation, interview

\*通訊作者: 敏惠醫護管理專科學校美容保健科 Tel: +886-6-6226111Ext712 Fax: +886-6-6226779 E-mail: <u>chialing25@mail.mhchcm.edu.tw</u>

## I The Problem

Many alcoholics in recovery have a difficult time maintaining sobriety. Polich, Armor, & Braiker found that 80-90% of alcoholics who were treated in generic inpatient treatment centers relapsed in the first year (Breslin, Zack, & McMain, 2002). Those who develop spirituality seem to have a better chance of maintaining sobriety (Sanders, 2000).

Most alcoholics do not remain in the Alcoholics Anonymous program over time, which may be because they are unable to embrace or utilize any concepts other than just attending meetings (Caldwell & Cutter, 1998).

## **□** • Literature Review

Various forms of meditation produce a lower respiration rate, heart rate, and blood pressure (Ameling, 2000). Studies conducted on patients with heart problems, Fibromyalgia, dental difficulties, cancer and other painful medical conditions, stressed nursing students, and those in recovery for alcohol addiction all show the positive effects of meditation on their condition.

Unhealed emotions cause chronic sadness, fear, frustration, and anger. Some disturbing and unacceptable feeling usually precipitates drinking

alcoholically. That person does not know how to deal with it so he or she medicates him or herself to avoid feeling it (Pert, 2004).

Meditation and relaxation counteract the fight or flight reactions. They produce a reduction in physical levels of catecholamines and relax muscle tension. Blood vessels open and blood pressure decreases. The body is at rest, but mental clarity and alertness is heightened (Eliot, 2005).

Since alcoholics are more apt to relapse during the first few months of sobriety, finding a type of meditation that can be quickly taught, that does not take too long to learn or to do, or require long term practice to benefit from it, would be an asset for the novice meditator (Mooney, Eisenberg, A. & Eisenberg, H. 2002).

## **Ⅲ** • Methodology

The methodology employed in this study was qualitative. The qualitative method used an open-ended interview and a before and after (the meditation or listening to relaxing music), pulse rate measurement readings for data collection and analysis. The pulse rate measurements were administered to all ten participants. Five participants



received instruction in practicing the Medical Meditation. Five participants listened to relaxing music. The purpose of this research was to demonstrate the effectiveness of a single session of Medical Meditation taught to Alcoholics Anonymous participants with at least six months sobriety, and who had not had any formal meditation training.

After the final pulse rate measurements were completed, an open-ended interview was conducted using seven questions. This interview was tape-recorded and transcribed after the session.

## **IV** • Assumptions or Limitations

There were several assumptions made in this study. The first was that alcoholics in recovery had anxiety, and a method to help them relax would effectively lower their pulse rate. The second assumption was that Medical Meditation would be simple to teach and simple to learn. The third assumption was that participants who stated they were in recovery for at least six months were honest.

## **V** • Research Questions

#### Question One

What effect does a single session of meditation have on the pulse of a recovering alcoholic in AA? The Medical Meditation appears to lower the pulse rate of participants, but not until the meditation has ended for at least five minutes. See Table 1.

 Table 1. Pulse Rate Readings of Medical Meditation

 Participants

Participant number:	1	3	5	7	9
First pulse	122	73	70	75	78
Second pulse	119	71	68	72	74
Third pulse	118	73	67	72	76
Fourth pulse	114	75	74	75	77
Fifth pulse	112	71	66	74	67

Comparing the fourth to the first, (just after the music finished playing), showed the pulse rate lower for three people and higher for two participants. It was the same two people that had an elevated pulse rate on their fourth and fifth readings. The relaxing music had a lowering effect on three of the five participants' pulse rates. See Table 2.

# Table 2. Pulse Rate Readings of Relaxing Music Participants

#### Relaxing Music Participants' Responses

"It relaxed me. I started talking to God about some problems I 'm having. I felt warm and

Participant number:	2	4	6	8	10
First pulse	98	90	81	76	69
Second pulse	93	86	90	74	71
Third pulse	92	87	92	73	71
Fourth pulse	93	84	84	72	75
Fifth pulse	91	85	82	74	70

comfortable." It was busier than I'm used to when I meditate...I found my self trying to fight the tempo of the violin."

Relaxing and/or calming is how most people described the session whether doing the meditation or listening to relaxing music. For those doing the meditation, holding the arms in a certain position for seven minutes did affect how relaxed they felt. "It hurt my arm, holding my arms up for such a long time." For one person listening to relaxing music he had varying responses. "The guitar was very relaxing.

#### **Ouestion** Two

Describe how this meditation affected you physically.

Medical Meditation Participant's Response

"I don't think much physical effects. It wasn't like I was more relaxed, more trying to stay with it." "...Got a little hard to hold my arms up there." "Physically...only thing I can say is...I can't say I didn't care about anything...Things just didn't bother me in the way they had before." "I think my heart rate dropped.The position for doing the meditation affected most of the participants. They still felt the meditation had a good effect on them. *Palaxing Music Participants' Parameter* 

Relaxing Music Participants' Response

"I don't think it did. I don't recognize anything. In a few minutes I could have been sleeping." "It was relaxing." They found the music relaxing, but some stated words that indicated they were looking for a deeper relaxation.

## **Question** Three

Describe how this meditation affected you emotionally?

Medical Meditation Participants' Responses

"Didn't feel any emotion. I didn't feel a lot of effect calming or anything else either way." "...I don't know if there was any effect on that...I guess and even keel." "Emotionally it did not affect me in any way." "...It helped me concentrate and stay out of my own head." "I thought about nothing emotionally other than concentration...I'll say because it was helpful there.

#### Relaxing Music Participants' Responses

"...Calmed some of my anxieties. I think that is why I have the radio on all the time." "...I don't know. I found the spot where I am quiet finally...It seemed more of a struggle." "I don't know that it had an emotional effect on me."

### Question Four

Please describe how this meditation affected you spiritually.

#### Medical Meditation Participants' Responses

"I think I like somehow the words mean again something to me. Spiritually, ...I'd say I had been praying a little bit more here lately. And you know, I've always known that there is a God...I feel like my spirituality is pretty good even though I failed to do my prayers like I should...I think I'm spiritually fit. There's one, one verse in the Big Book that's real contingent. Ah, real contingent to our spiritual condition." "...I thought about...a Higher Power as I was doing it." "...Not being familiar with the words although you explained them. I didn't feel comfortable with them. Most talked about their spirituality, but not how this meditation affected that. The unfamiliarity of the mantra words were foreign to one person's practice of spirituality.

#### Relaxing Music Participants' Responses

"I just got in touch with God and talked with him like he was right here. That's how I do most of my praying, just conversation. I don't do all the formal just whatever pops in my head. Of course, he already knows anyway. He's very tolerant of me." "...Toward the end of it I did find that spot, ...that serene spot where I can listen. I did get there." "I felt closer to God during the meditation." "It gave me a higher belief.All of the relaxing music participants said they experienced some connection with God while listening to the music. Each person had a spiritual connection to God prior to the session.

#### *Question Five*

Please complete this sentence: Having me in the room while you were meditating...

#### Medical Meditation Participants' Responses

"It was okay...It wasn't so bad except I forgot what the word meant, not having you in the room." "It didn't have no effect. It didn't bother while having in the room meditating." "It, ah, didn't bother me.Only one of the participants felt having the researcher in the room affected her ability to do the meditation. She knew the researcher prior to the study and knew of the work, but not the details and stated she wanted it to be successful. She felt this affected her ability to perform the meditation.

#### Relaxing Music Participants' Responses

"It didn't bother me. In fact, um, I forgot you were here. That was good." "I thought about it about three times, and that was it. I didn't." "Did not seem to bother me." "Didn't bother me." "...Didn't really affect me at all. I mean I had my eyes closed so you could have been here or not been here. It really didn't matter." The researcher being present did not affect any of the relaxing music participants.

#### Question Six

Please complete this sentence: This meditation is... Medical Meditation Participants' Responses

"Interesting." "I'd say it a calming." "It's very

relaxing. Ah, it's not like Valium in any aspect. It just keeps me just as calm, and cool, collected; however." Because it does allow me to not think about what is in my mind. Everything was very helpful. All stated some positive effect from doing the meditation. Given the opportunity, all would do the meditation again.

Relaxing Music Participants' Responses

"I found out some things about myself. Um, I wasn't aware of. I don't think of myself much better than and that there are places that I could have helped." "It was interesting." "Good, but could be better without the violin." It was a revealing experience for two women. It invited one to do want to do more service for others. For the other woman she recognized from her responses to questions how little she is actually involved in anything other than the meetings.

#### Question Seven

Is there anything else you would like to ask or share?

Medical Meditation Participants' Responses

Participant: "What was my expectation, what did you do?" Researcher: "Because I have not finished talking to every...doing research on everybody, I can't share that until I get done, but I will when I get done. I don't want to influence it either way... I want to wait until all ten people have had the experience. And I will write about it and then you can read about it, because I have to process it....

The meditation invited one man to do some introspection on his relationship to God and how he puts that into practice. For another, he wanted the meditation to be longer.

#### **Relaxing Music Participants' Responses**

Participant: "I don't know what to ask. Share is just that Sunday is Easter and God is risen. That's the beginning that is the beginning of the year, as far as I am concerned. It is renewal time. It is ah, most like the flowers know Jesus arose and it's beautiful." Some expressed an interest in knowing more about the particulars of the research, "...Why you chose that particular piece of music." For one person it invited her to do some introspection, "I'm hearing things about myself."

## **VI** • **Conclusions**

People often drink to avoid pain whether emotional or physical. Drinking can produce peaceful, pleasurable feelings. The negative voices in the head get quiet. When the alcoholic enters sobriety they find surrendering to their Higher Power and reaching out to others it is a life changing event. The result is a euphoric feeling and an entrance to a different dimension without the hangover, guilt, or shame. Through this experience comes the discovery that a connection to God and others is what was sought in the bottle.

Meditative Meditation and relaxing music appears to produce relaxation in the mind of the participant, even if the measurements do not initially reflect that. If the person believes it reduces their blood pressure, pulse rate, perhaps over time those measurements will actually demonstrate that. This relaxation maybe what the alcoholic has been seeking to overcome the desire to drink. The endorphins that are released during meditation may assist the person in achieving this spiritual state they seek. Dr. Khalsa (personal communication, June 9, 2004) recommends a person doing the Medical Meditation for forty days to achieve maximum results. Maybe over that time span if pleasurable feelings increase then the desire to self-medicate to avoid pain will lessen.

As those blood vessels opened blood pressure lowered (Eliot, 1994), signifying a lower response to stress. When as a result of meditation an increase in serotonin production and a decrease in cortisol production were present, a reduction in substance abuse was also present (Kissman & Maurer, 2002). Maybe the measurements might not reflect the calming effect immediately, but if studied over the recommended forty-day period they may become more evident.

## **VII** • **Recommendations**

Since spirituality, prayer, and meditation are frequently mentioned Alcoholics Anonymous, but not clearly defined, to repeat this research with people matched to the present participants, but who are not in Alcoholics Anonymous might be revealing. To use some of the prayers mentioned in Alcoholics Anonymous instead of this meditation may produce the same or different results. To use some of the prayers and compare it to this meditation would be another possible study.

Combining efforts with the medical community to measure the amount of lactate or cortisol present in the participant's body would provide physical evidence of the effects of meditation. Measuring brainwave activity would also be another avenue for documenting the effect of meditation on the person's brain.

## VIII 、 Thank

Thank ten Alcoholics Anonymous subjects sober at least six months of the participants, with the conduct of research. And Chia Nan University of Pharmacy and Science Professor Chau-Chen Yang help to the study successfully completed.

## IX References

Ameling, A. (2000, April). Prayer: An ancient healing practice becomes new again.*Holistic Nursing Practice*, 14(3), 40-48.

- Breslin, F. C., Zack, M., & McMain, S. (2002). An information-processing analysis of mindfulness: Implications for relapse prevention in the treatment of substance abuse. *Clinical Psychology: Science and Practice*, 9(3), 275-293.
- Caldwell, P. E., & Cutter, H. S. G. (1998). Alcoholics anonymous affiliation during early Recovery. *Journal of Substance Abuse Treatment*, 15(3), 221-228.
- Eliot, R.S. (2005). From Stress to Strength: How to Lighten Your Load and Save Your Life. New York: Bantam Books.
- Eliot, R.S. (1994). From Stress to Strength: How to Lighten Your Load and Save Your Life. New York: Bantam Books.
- Kissman, K., & Maurer, L. (2002, January). East meets West: Therapeutic aspects of Spirituality in health, mental health and addiction recovery. *International Social Work*, 45(1), 35.
- Mooney, A. J., Eisenberg, A., Eisenberg, H. (2002). *The Recovery Book.* New York:Workman Publishing.
- Pert, Candace. (2004). *Molecules of Emotion*. New York: Scribner.
- Sanders, J. (2000). Alcoholism recovery: Myth, philosophy, and the 12 steps. *The Counselor*, 36-38.

# 冥想放鬆對恢復期酒癮患者之影響

陳惠姿<sup>1</sup> 楊朝成<sup>2</sup> 張嘉苓<sup>3</sup>\*

<sup>1</sup>敏惠醫護管理專科學校美容保健科 <sup>2</sup>嘉南藥理科技大學化妝品應用與管理系 <sup>3</sup>敏惠醫護管理專科學校美容保健科

## 摘要

本研究採用專門設計的冥想,以減輕酒癮。十位匿名的酒癮者戒酒至少六個月,五位執行冥想和五 位聽取輕鬆的音樂。所有的十位參與者有一個開放式的訪談,以發現他們心目中的感受。在冥想或音樂 進行的前後測量脈搏跳動,以比較其改變。

使用冥想參與者的脈搏率下降大於聽音樂的參與者。開放式採訪過程中發現所有的十位參與者認爲 冥想或聽音樂可增加他們的積極性,並有正向的影響,往後他們將會再次使用它。

關鍵詞:酒癮者、冥想、訪談

\*通訊作者: 敏惠醫護管理專科學校美容保健科 Tel: +886-6-6226111Ext712 Fax: +886-6-6226779 E-mail: chialing25@mail.mhchcm.edu.tw

