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Review article

## SUPPORTIVE THERAPY IN CANCER PATIENTS: POGRESSIVE MUSCLE RELEXATION THERAPY

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#### **ABSTRACT:**

Progressive Muscle Relaxation Therapy is one of the powerful tool for relaxation of mind and body which convert into relaxed and calm state. It is a simple, safe and self-awareness technique used for the individuals or group of persons. Progressive Muscle Relaxation Therapy have many health related benefits like relieve pain, nausea, stress, anxiety, lower blood pressure so on. And also strengthen the physical, mental, emotional well-being. **Method and materials**: A different session with exercises is used by the therapist. The session starts with the relaxation, breathing exercise which helps to increase the attention of mind. In the technique the practitioner guide the clients and tell them to relax progressively of different parts of the body (Example- feat ankle, then knees and so on). Result: According to research studies the Progressive Muscle Relaxation Therapy is an effective or supportive therapy in Cancer patients as proved. By practicing Progressive Muscle Relaxation Therapy 20 to 30 minutes daily in their live it relax the mind as well as reduces the symptomatic problems like pain, nausea, stress, anxiety related to cancer. Conclusion: Progressive Muscle Relaxation Therapy significantly reduces all the stressful stimuli and makes client with well relaxed and calm mind. Especially cancer patient who are fighting with cancer cells in their body showing maximum symptoms related to adverse effects of treatment. For cancer patients Progressive Muscle Relaxation Therapy is a best remedy supportive treatment or technique to relief from various problems which in turn make their life betterment with copying harmful crises. Progressive Muscle Relaxation Therapy

**Keywords:** Progressive Muscle Relaxation Therapy (PMR), Relaxation, Mind, Body, Cancer Patients, Pain, Stress

### **INTRODUCTION: -**

World Cancer Day every **4 February** is a global uniting initiative organised by the Union for International Cancer Control (UICC). By raising worldwide **awareness**,

improving **education** and catalysing personal, collective and government action, we're working together to reimaging a world where millions of preventable cancer deaths are saved and access to life-saving cancer treatment and care is equal for all - no matter who you are or where you live. Each year, hundreds of activities and events take place around the world, gathering communities, organisations and in individuals schools, businesses, hospitals, marketplaces, parks, community halls, places of worship - in the streets and online - acting as a powerful reminder that we all have a role to play in reducing the global impact of cancer. This year's World Cancer Day's theme, 'I Am and I Will', is all about you and your commitment to act.1 We believe that through positive actions, together we can reach the reducing the number premature deaths from cancer and noncommunicable diseases by one third by 2030. Thus for achieving the theme some of the supportive therapy is needed for coping up and fighting towards the cancer disease. One among supportive therapy is Progressive muscle relaxation therapy.<sup>2</sup>

### PROGRESSIVE MUSCLE RELAXATION

Progressive muscle relaxation (PMR) is an exercise that anyone can use to alleviate disturbing and disruptive emotional symptoms such as anxiety or insomnia. Like breathing exercises, visualization, and yoga, PMR is considered a relaxation technique. It's especially helpful in moments of high stress or nervousness, and even can help someone get through a panic attack.<sup>3</sup>

#### **HISTORY OF PMR:**

PMR was first described by an American physician, Edmund Jacobson, in the 1920s.Jacobson noted that regardless of their illness, the majority of his patients suffered from muscle pain and tension. When he suggested that they relax, he noticed that most people didn't seem connected to and aware enough of their physical tension to release it. This inspired Jacobson to develop a sequence of steps for tightening and then relaxing groups of muscles. He found this allowed his patients to become more aware of their tension, to learn how to let go of it, and to recognize what it feels like to be in a relaxed state. Since then, the technique has been modified many times but all modern variations of PMR are based on Jacobson's

original idea of systematically squeezing and then releasing isolated muscle groups.<sup>4</sup>

#### **HOW PMR WORKS:**

PMR works in part by helping to counteract a normal reaction to stress known as the flight-or-fight response. In evolutionary terms, this reaction developed as a way to help animals survive a threat either by running away or by meeting the opposition head-on. Unfortunately, when it's not needed for actual survival, repeated activation of the flight-or-fight reaction tends to take its toll on the body in a variety of ways. Also, muscle pain, Relaxation techniques, including PMR, have the reverse effect on the body, eliciting the relaxation response, lowering heart rate, calming the mind, and reducing bodily tension. 4tension, and stiffness are common symptoms brought on by stress and anxiety.PMR also can help a person become more aware of how their physical stress may be contributing to their emotional state. By relaxing the body, a person may be able to let go of anxious thoughts and feelings.<sup>5</sup>

#### PMR STEP-BY-STEP:

For a quick taste of how PMR works, squeeze one of your fists as hard as you can. Notice how tight your fingers and forearm feel. Count to ten and then release the clinch. Allow your hand to relax completely and let go of any tension. Let your hand go limp and notice how relaxed

it feels now compared to before your clinched your fist.<sup>5</sup>

### **Step 1:-Get comfortable.**

You don't have to lie down to do PMR; it will work if you're sitting up in a chair. Do make sure you're in a place that's free of distraction. Close your eyes if that feels best for you.

### Step 2:-Breathe.

Inhale deeply through your nose, feeling your abdomen rise as you fill your diaphragm with air. Then slowly exhale from your mouth, drawing your navel toward your spine. Repeat three to five times.

### Step 3:-Tighten and release your muscles.

Starting with your feet. Clench your toes and pressing your heels toward the ground. Squeeze tightly for a few breaths and then release. Now flex your feet in, pointing your toes up towards your head. Hold for a few seconds and then release.

## Step 4:-Continue to work your way up to your body.

Tightening and releasing each muscle group. Work your way up in this order: legs, gluts, abdomen, back, hands, arms, shoulders, neck, and face. Try to tighten each muscle group for a few breaths and then slowly release. Repeat any areas that feel especially stiff.

### Step 5:-Take a few more deep breaths.

Nothing how much more calm and relaxed you feel. A Word from Very well.PMR is a skill, one that takes practice to master. In order to be able to draw on PMR when you need it in other words when you're truly in a stressful or anxiety-provoking situation you'll want to learn how to do it while you aren't under pressure.

Practice PMR several times a week to become aware of what it's like to feel relaxed. Understanding this feeling can help you to more readily let go of tension when anxiety rises.

Reduce Tension with Progressive Muscle Relaxation By tensing your muscles before relaxing them, you enable yourself to relax them more thoroughly after you release, letting go of physical tension more effectively. Fortunately, it can be easily learned and practiced virtually anywhere.

Research shows that relaxing your body physically can also release psychological tension and stress, minimizing your stress reactivity and decreasing your experience of chronic stress. There are other effective ways to minimize psychological and emotional stress, but PMR can offer you one more tool to manage stress, which can help you to build your resilience overall.

### **HOW TO DO PMR:**

Here's how to get started: 6

- 1. **Find Some Time**. Block off at least 15 minutes to begin. I recommend setting an alarm for yourself, in case you fall asleep.
- 2. Sit and Make Yourself Comfortable. After finding a quiet place and several free minutes to practice progressive muscle relaxation, sit lie down and make yourself comfortable. It's more effective to stretch out and lie down, but if you don't have room to lie down, sitting in a comfortable chair is fine as well. Unfold your arms, however, and uncross your legs so that you have easy circulation and your body is able to really relax.
- 3. **Start With Your Face**. Begin by tensing all the muscles in your face and scalp. Make a tight grimace, close your eyes as tightly as possible, clench your teeth, even move your ears up if you can. Hold this for the count of eight as you inhale.
- 4. Let Go of Your Tension. Now exhale and relax completely. Let your face go completely lax, as though you were sleeping. Feel the tension seep from your facial muscles, and enjoy the feeling. Take your time and relax completely before you move onto the next step. You can repeat this step until your face feels thoroughly relaxed if desired.
- Move to Your Neck. Next, completely tense your neck and shoulders, again inhaling and counting to eight. Then exhale and relax. Again, this step can be

repeated until you feel absolutely relaxed in this area, particularly because many people carry tension in their neck and shoulder muscles. Take your time, and let yourself go.

- 6. **Work Your Way Down**. Continue down your body, repeating the procedure with the following muscle groups:
- 1. chest
- 2. abdomen
- 3. entire right arm
- 4. right forearm and hand (making a fist)
- 5. right hand
- 6. entire left arm
- 7. left forearm and hand (again, making a fist)
- 8. left hand
- 9. buttocks
- 10. entire right leg
- 11. lower right leg and foot
- 12. right foot
- 13. entire left leg
- 14. lower left leg and foot
- 15. left foot
- 16. face
- 17. neck, shoulders, and arms
- 18. abdomen and chest
- 19. buttocks, legs, and feet
- 7. **Practice**. Then Abbreviate. For the shortened version, which includes just four main muscle groups, quickly focus on each group one after the other. With practice, you can relax your body like 'liquid relaxation' poured on your head and it

flowed down and completely covered you. This takes practice, of course, but it may take less time to develop this skill than you may imagine. Once you're able to relax your body from head to toe, your mind will feel more relaxed as well, and your overall stress levels will decrease as well. This exercise can help you to minimize chronic stress and resilience to the stress you face in the future. You can use progressive muscle relaxation to quickly de-stress any time, making it a wonderfully effective tool.

# WHAT TO EXPECT WITH PROGRESSIVE MUSCLE RELAXATION:

Researchers report that relaxation training methods, including PMR, work best if a person is trained before cancer treatment starts. The researchers also said that after 2 hours of training from an expert, patients are usually experienced enough to successfully practice the techniques on their own.<sup>7</sup>

### HEALTH CARE PROFESSIONALS WHO TEACH PMR CAN INCLUDE:

- Psychologists
- Nurses
- Health care professionals trained in hypnosis
- Clinical social workers

Many cancer hospitals and clinics offer programs in relaxation training that

includes PMR, so ask your doctor for recommendations.<sup>8</sup>

## RESEARCH ON PROGRESSIVE MUSCLE RELAXATION IN PEOPLE WITH BREAST CANCER:

In studies of people with breast cancer, progressive relaxation training has been shown to help reduce nausea, vomiting, anxiety, and depression. In a South Korean study published in 2015, 30 patients with breast cancer received training in PMR and guided imagery. An additional 30 patients in the study received no training. Both groups then began a 6-cycle chemotherapy regimen. Researchers found that the patients trained in PMR and imagery experienced guided less chemotherapy-related nausea and vomiting than the patients who had no training. In addition, the trained patients had much lower levels of anxiety and depression than the untrained patients. Six months after treatment ended, the trained group still experienced a higher quality of life than the untrained group.

In a study published in 2018, 38 breast cancer patients used PMR 1 hour before they received chemotherapy, followed by daily PMR for an additional 5 days. Each PMR session lasted 25 minutes. The 38 patients were compared with a group of 33 patients undergoing chemotherapy without PMR. In the PMR group, the duration of

nausea and vomiting was significantly reduced.<sup>9</sup>

# IMPORTANT THINGS TO CONSIDER BEFORE TRYING PROGRESSIVE MUSCLE RELAXATION:

Progressive muscle relaxation is generally thought to be a safe practice, but as with all relaxation techniques, there are some risks:

- Rare increases in anxiety. In rare cases, the increased body awareness that comes with relaxation training has led to more anxiety instead of a reduction in anxiety.
- Very rare physical symptoms. In some people who use relaxation techniques, there have been extremely rare instances of pain, heart palpitations, and muscle twitching.

People with schizophrenia and other mental disorders should avoid PMR and other forms of relaxation training.<sup>10</sup>

### **CONCLUSION:**

Progressive Muscle Relaxation therapy is generally potential and safe beneficial technique in providing relief from symptomatic problems in Cancer patients. Progressive Muscle Relaxation therapy enhances cancer patients to relief from anxiety, pain, and nausea by using their own sensory imagination of relaxation. Usually in Cancer patients sedating medications will improve quality of life, so Progressive Muscle Relaxation therapy is one of the best remedy which supports the

life for betterment. Progressive Muscle Relaxation therapy will not reduce the disease condition but according to some studies shows that the cancer patients control over their lives in facing of crisis. If Progressive Muscle Relaxation therapy techniques practiced by cancer patients in daily life means there will be positive physical and psychological conditions will improve ultimately intern that will be a good contribution to produce humanistic help in their fatal life in promoting positive directions with better being.

Ethical clearance is obtained from the Institution's Ethical Committee of Shri B.V.V.S., Sajjalashree Institute of Nursing Sciences, Navanagar, Bagalkot.

### Conflict of interest: None

**REFERENCES:** 

- https://unesdoc.unesco.org/ark:/48223/pf0 000119111
- "World Cancer Day: Why the Fourth of February?". ASCO Connection. March 19, 2012.
- Jump up to:<sup>a b</sup> "Campaign theme (I am and I will) | World Cancer Day". www.worldcancerday.org.

- 4. "World Cancer Day 2016-2018
  WCD". Www.worldcancerday.org.
  Retrieved 2018-09-09.
- "World Cancer Day 2015: 'Not Beyond Us' Campaign launched! | UICC". Www.uicc.org. Retrieved 2018-09-09.
- "World Cancer Day 2014: Debunk the myths! | UICC". Www.uicc.org.
   Retrieved 2018-09-09.
- 7. "Cancer Myths Get the Facts on World
  Cancer Day 4 Feb 2013 | CANSA The
  Cancer Association of South
  Africa". www.cansa.org.za.
  Retrieved 2018-09-09.
- N "World Cancer Day: "Stand Up To Cancer!" and End Mesothelioma and other Asbestos-Caused Cancers ADAO Asbestos Disease Awareness Organization". www.asbestosdiseaseaware ness.org. Retrieved 2018-09-09.
- 9. By Katharina Star, PhD Medically reviewed bySteven Gans, MD Updated on September 16, 2020
- 10. Elizabeth Scott, MS, September 28, 2020