



# Positive Activity Interventions in Asian and Asian American Cancer Patients and Survivors: A Scoping Review

Amy R. Senger, Lilian J. Shin, and Qian Lu

Department of Health Disparities Research, University of Texas MD Anderson Cancer Center

## Introduction

### Problem

Cancer patients experience poor quality of life (QOL)<sup>1</sup>, and a potential solution may lie in positive activity interventions (PAIs).<sup>2</sup> Studies have been conducted which test PAIs in underserved groups such as Asians and Asian Americans (see Table 1). However, the literature is available but fragmented.

### PAIs' potential benefits:

Positive activity interventions (PAIs) may present many potential benefits to Asian cancer patients and survivors, such as reducing healthcare disparities<sup>2,3</sup>, improving mental health<sup>2</sup>, and increasing overall quality of life (QOL)<sup>2</sup>.

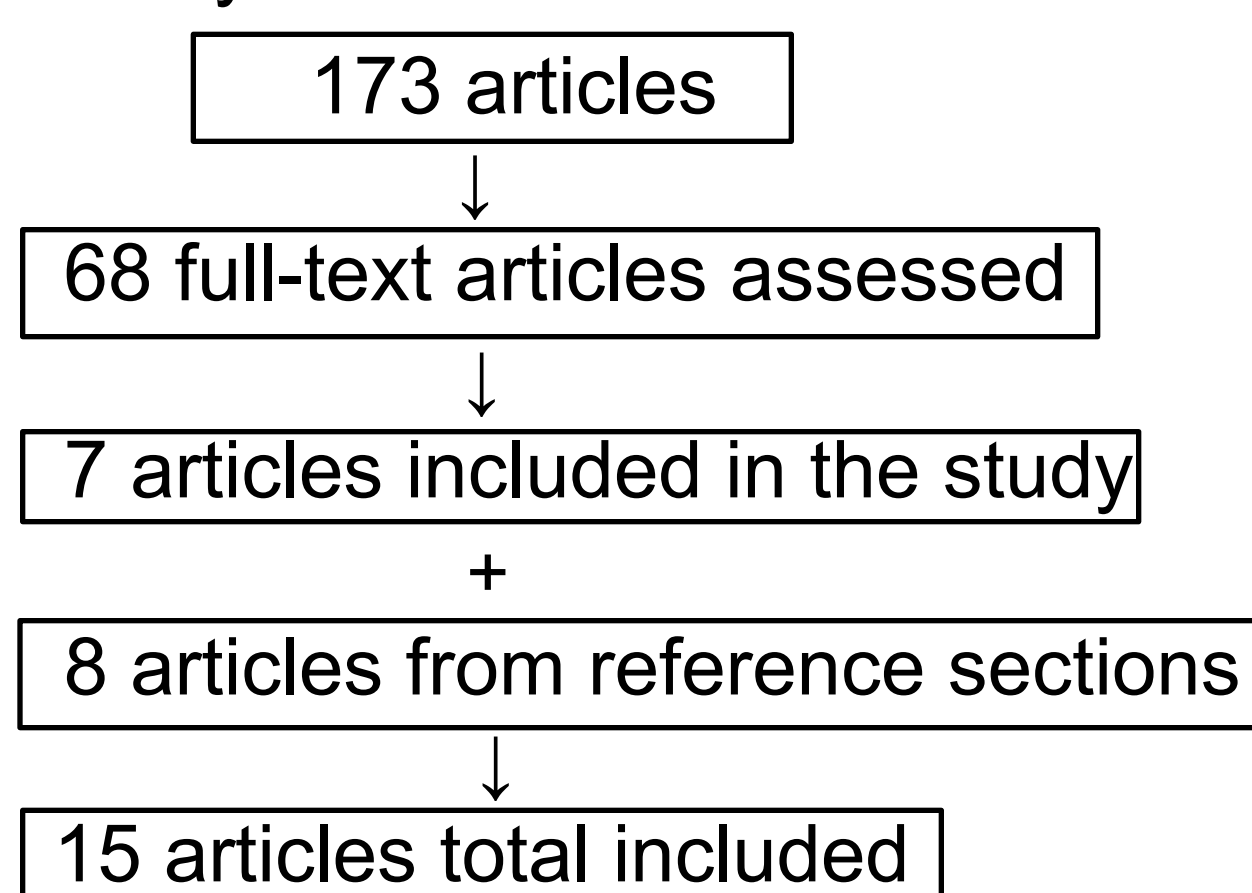
### Scope of Review:

The purpose of the current review was to review studies that were randomized controlled trials (RCT), addressed types of PAIs investigated, what Asian populations they have been tested in, outcomes reported, PAIs' efficacy for these populations, and to provide an overview of the available literature.

## Methods

- Scoping review with PRISMA guidelines; no IRB protocol was needed
- Inclusion criteria:
  1. Randomized controlled trial (RCT)
  2. Sample = at least 50% Asian heritage including Asians in non-Asian countries
  3. Cancer patients or survivors
  4. Investigated the use of a PAI
  5. Written in English
- MEDLINE database search term categories:
  - “positive interventions”, “positive constructs”, “cancer”, and “Asian continental ancestry group.”

- Search yielded:



## Results

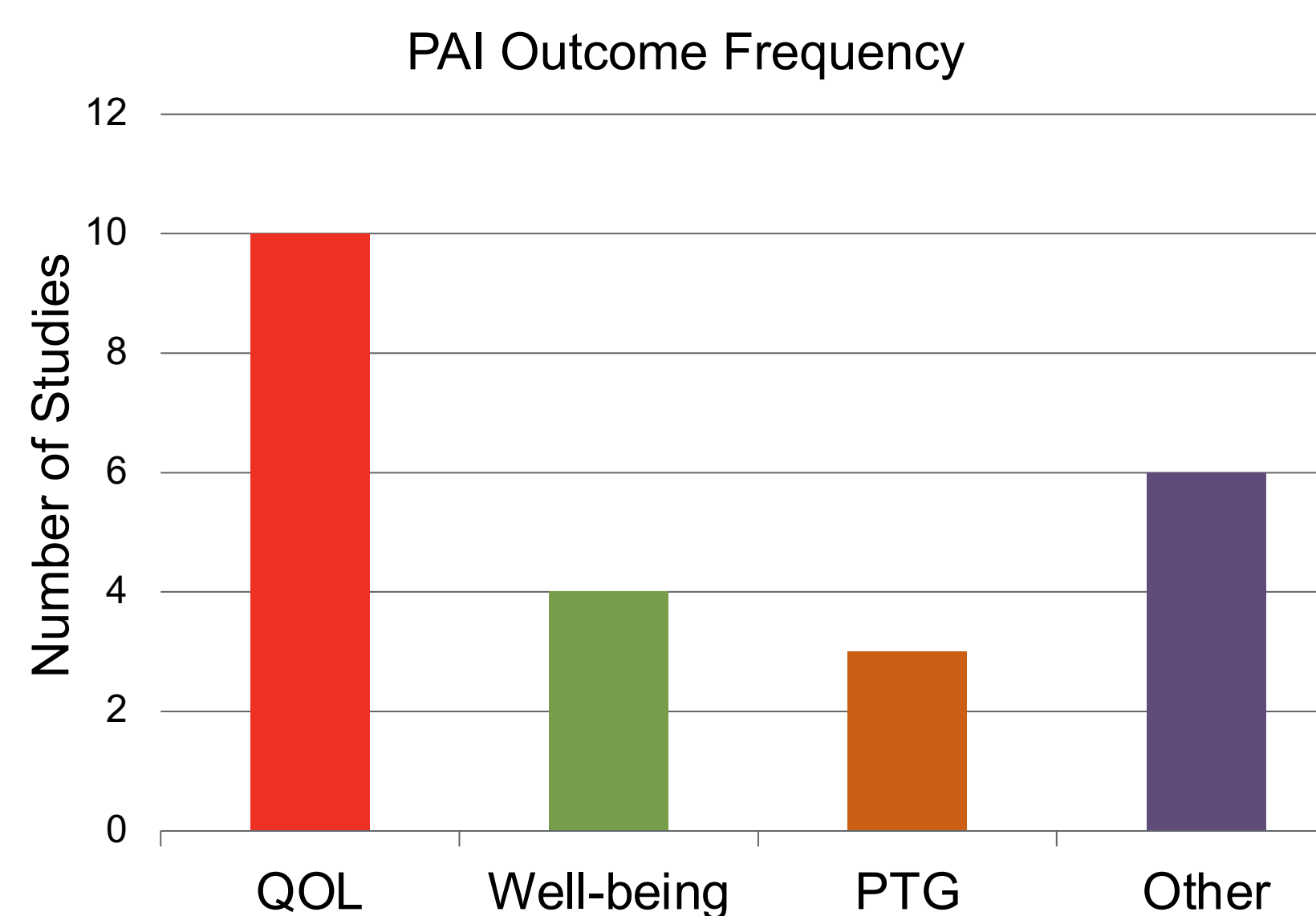
- The PAIs investigated can be condensed into three categories:
  1. Mindfulness/relaxation activities (e.g., mindfulness meditation or progressive muscle relaxation)
  2. Expressive writing (EW)
  3. Movement-based activities (e.g., qigong; see Figure 1)
- PAIs were tested in the following countries: China, Korea, Japan, Malaysia, and United States
- The primary outcomes reported that increased were QOL, well-being and posttraumatic growth (PTG; see Figure 2).
- The PAIs increased positive outcomes such as QOL and PTG in Asian and Asian Americans.

**Figure 1**  
 Qigong exercise illustration



Photo from <https://cbdclinic.co/blog/qi-gong-exercises-you-can-prescribe-for-pain/>

**Figure 2**  
 PAI outcome frequency of the studies reviewed



**Table 1**  
 PAI characteristics and the outcomes of the studies reviewed

| Article                | PAI                                 | Country/Culture                          | Cultural Adaption (if any)                                | Outcome Results  |
|------------------------|-------------------------------------|--|---|--|
| Chen et al., 2013      | Qigong                              | Shanghai, China                          | No  | ↑ QOL  |
| Cheung et al., 2003    | Progressive Muscle Relaxation (PMR) | Hong Kong                                | No  | ↑ Disease-specific QOL & general QOL                   |
| Gallagher et al., 2018 | Expressive Writing (EW)             | Houston, Los Angeles, New York City, USA | Yes, tailored EW (cancer facts)                           | ↑ Post traumatic growth (PTG)                          |
| Kim et al., 2013       | Mindfulness Meditation              | Seoul, Korea                             | Yes, based on Korean traditional "Danhak" exercise        | ↑ Global QOL   |
| Kwan et al., 2019      | Life Review Therapy                 | Hong Kong                                | Yes, intervention questions                               | ↑ Spiritual well-being                                 |
| Liu et al., 2008       | Mind-Body-Spirit Group Therapy      | Not reported, but likely Taiwan          | Yes, integrates Western & Chinese medicine & philosophies | No difference in body-mind-spirit well-being           |
| Loh et al., 2014       | Qigong                              | Kuala Lumpur, Malaysia                   | No  | ↑ QOL  |
| Lu et al., 2017        | EW                                  | Houston, Los Angeles, New York City, USA | Yes, tailored EW (cancer facts)                           | No difference in QOL                                   |
| Lu et al., 2018        | EW                                  | Chinese-speaking, USA                    | Yes, design of EW (enhanced SR, order modified)           | ↑ QOL  |
| Lu et al., 2019        | EW                                  | Shanghai, China                          | Yes, tailored EW (cancer facts)                           | No difference in QOL                                   |
| Park et al., 2020      | Mindfulness-Based Cognitive Therapy | Tokyo, Japan                             | No  | ↑ Spiritual well-being, QOL, and mindfulness           |
| Ye et al., 2016        | Peer Mentoring and Education        | Southeast mainland China (Guangzhou)     | Yes, mentor and mentee matched based on province          | ↑ Hope, QOL, social support, transcendence, resilience |
| Yoo et al., 2005       | PMR and Guided Imagery              | Seoul, Korea                             | No  | ↑ Emotional well-being                                 |
| Yun et al., 2017       | Mind Subtraction Meditation (MSM)   | Seoul, Korea                             | No  | ↑ QOL, PTG, satisfaction with life                     |
| Zhang et al., 2017     | Mindfulness Stress- Based Reduction | Harbin, China                            | Maybe, tested MBSR in China                               | ↑ PTG  |

Note. Gallagher et al., 2018 is a secondary analysis of Lu et al., 2017.

## Discussion

- **Aim:** identify articles that used PAIs in Asian and Asian American cancer patients/survivors
- 15 articles met the inclusion criteria
- PAIs were efficacious but investigated in a narrow subset of participants and outcomes
- Many PAIs are low-resource interventions, but the main type of low-resource intervention investigated was EW.
- Limitations included examining only articles written in English, limited variety in cultures examined, limited variety in types of PAIs investigated, and limited variety of outcomes.
- Suggestions for future PAI studies may include reviewing articles that are not in English, investigating a wider variety of populations, investigating different types of PAIs, and different outcomes.

## Conclusions

- PAIs are effective for Asian cancer patients and survivors in increasing QOL and may aid in decreasing health disparities/increasing healthcare accessibility.
- PAIs may lead to more comprehensive cancer care and prevention. This may be accomplished through improving patients' QOL and increasing well-being to reduce stress to prevent cancer recurrence/onset.

## References

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