



ENHANCING SOLDIER RESILIENCE: ACUPUNCTURE TECHNIQUES FOR PAIN AND STRESS MANAGEMENT ON THE FRONTLINES

✉ Grabous Oleksii, <https://orcid.org/0009-0005-3430-3143>
Makar Oksana, <https://orcid.org/0000-0002-1863-1412>
Andriyuk Lukyan, <http://orcid.org/0000-0002-8064-8805>
Hrabous Oleksandr, <http://orcid.org/0009-0000-5901-6857>

¹Danylo Halytsky Lviv National Medical University, Lviv, Ukraine

Received: July 24, 2024

Accepted: September 28, 2024

Corresponding author: Grabous Oleksii E-mail: kaf_rehabilitationmed_fpge@meduniv.lviv.ua

Abstract

This article examines the growing interest in acupuncture as a potential treatment on the battlefield, particularly for pain relief and aiding the recovery of soldiers. This trend is part of a broader movement toward the integration of complementary and alternative medicine (CAM) into military healthcare systems. The article highlights how acupuncture's holistic approach, which differs significantly from traditional Western medicine, makes it particularly effective in managing pain by considering the physical, psychological, and other patient characteristics that contribute to imbalances. Modern research and evidence further support the integration of acupuncture into pain management strategies, especially in military contexts. The article also explores the development and application of Battlefield Acupuncture, a protocol designed for rapid pain relief in combat settings. Additionally, the introduction of innovative approaches, such as finger acupuncture for self-help on the battlefield, offers a practical and low-risk alternative for soldiers in field conditions where access to comprehensive medical care may be limited. The effectiveness, simplicity, and potential for self-treatment make acupuncture a valuable tool in military medicine, particularly in resource-constrained environments.

Keywords: battlefield acupuncture, su jok acupuncture, military medicine

How to cite: Grabous O., Makar O., Andriyuk L., Hrabous O. Enhancing Soldier Resilience: Acupuncture Techniques for Pain and Stress Management on the Frontlines. *Anti Aging East Eur* 2024;3(3):141-145 <https://doi.org/10.56543/aaeeu.2024.3.3.05>



Key Messages for Research and Practice

- **Stress Reduction and Mental Resilience:** The Su Jok method can significantly alleviate stress and anxiety among military personnel, promoting mental resilience. By using simple acupressure techniques, soldiers can manage stress effectively, leading to improved focus and decision-making under pressure.
- **Enhanced Physical Recovery:** Su Jok therapy supports faster physical recovery from injuries and fatigue. By stimulating specific points on the hands and feet, soldiers can experience reduced pain and improved healing, which is crucial for maintaining peak performance during training and battles.
- **Holistic Well-being:** Integrating the Su Jok method into military health programs fosters holistic well-being. It encourages a proactive approach to health, helping soldiers maintain emotional balance and physical health, ultimately enhancing overall unit cohesion and effectiveness.
- **Accessible Self-care Tool:** The Su Jok method is an easily accessible self-care tool that soldiers can use anywhere, anytime. This empowers individuals to take charge of their own health and well-being, fostering a culture of self-reliance and proactive health management within the military.

Introduction

Acupuncture has garnered increasing attention due to its potential application on the battlefield, particularly for pain relief and aiding in the recovery of soldiers. This trend reflects a broader movement toward integrating complementary and alternative medicine (CAM) within military healthcare systems [1]. Although CAM, including acupuncture, has been practiced for centuries, it was traditionally more common among the general public than within the medical community. However, the unique theory and application of acupuncture make it particularly suitable for pain management, which is a critical concern in military medicine [2].

In addition, this ancient method has many general effects on the human body, like circulation improvement, activation of mental activity and stress reduction. By addressing emotional and psychological stressors, Su Jok may contribute to a more balanced state of mind, which is linked to better physical health and a more youthful appearance [3]. Su Jok therapy emphasizes a holistic approach to health, addressing both physical and emotional aspects, has shown promising anti-aging effects, which may hold particular relevance in the context of military medicine. In military settings, where personnel are subjected to high levels of stress, physical exertion, and environmental challenges, Su Jok therapy could potentially enhance recovery, reduce the impact of aging on the body, and improve overall resilience [4].

By integrating this non-invasive, cost-effective technique into military healthcare systems, soldiers may experience improved physical and mental health, reduced fatigue, and enhanced longevity, potentially contributing to soldiers' well-being and fighting capacity.

Acupuncture and Pain Management

Acupuncture's approach to pain management differs fundamentally from that of conventional Western medicine. Traditional medicine often links symptoms like pain directly to diseases or dysfunctions within physiological systems. In contrast, acupuncture takes into account the patient's physical, psychological state and other features as factors contributing to an imbalance. This Chinese practice is based on the belief that no part of the body can be fully understood without considering the whole person. Symptoms are not linked to a singular cause but are viewed as interconnected aspects of the individual. From this perspective, each complaint or symptom is examined within the broader context of the patient's life [5].

Theories underlying acupuncture align well with the biopsychosocial model of pain management, which recognizes the interaction of internal and external factors in experiencing pain. The approach of acupuncture involves recognizing these interactions and utilizing them to develop a comprehensive therapeutic strategy that transcends simple symptom relief [6,7].

Acupuncture in Military Medicine

The use of acupuncture in military contexts dates back centuries in some Asian cultures. Recently, U.S. military forces have adopted acupuncture as part of their pain management strategies, particularly because of the limitations and side effects associated with conventional painkillers, such as opioids [8,9]. Acupuncture is employed in military medicine for treating both acute and chronic pain [10,11], as well as for reducing stress and fatigue [10]. A notable protocol, known as Battlefield Acupuncture (BFA), was developed by Dr. Richard Niemtzow in 2001. BFA involves inserting small needles into specific points on the ear (auricular acupuncture) to quickly reduce pain and stress, designed for ease of use in field conditions [13].

Studies on Battlefield Acupuncture have shown promising results in treating acute pain. For instance, research published in *Medical Acupuncture* (2013) evaluated BFA's effectiveness in military personnel, finding significant reductions in pain levels across various acute pain conditions. Soldiers reported immediate relief, with pain reduction sometimes lasting for days. The U.S. Department of Defense has incorporated BFA training into some military medical programs, enabling medics and healthcare providers to apply BFA in combat zones where access to comprehensive medical facilities may be limited [14].

Self-Help Battlefield Finger Acupuncture

We propose an innovative approach to battlefield self-care using finger acupuncture, based on Su Jok acupuncture's principles. Developed in Korea by Professor Park Jae Woo in the 1980s, Su Jok acupuncture focuses on the hands and feet as microsystems representing the entire body [3,4]. It is believed that specific points on the hands and feet correspond to various organs and systems, and stimulating these points can treat a wide range of conditions [3]. For this, we use the scheme of projections of parts of the human body on both sides of the fingers of the hand (Figure 1, 2).

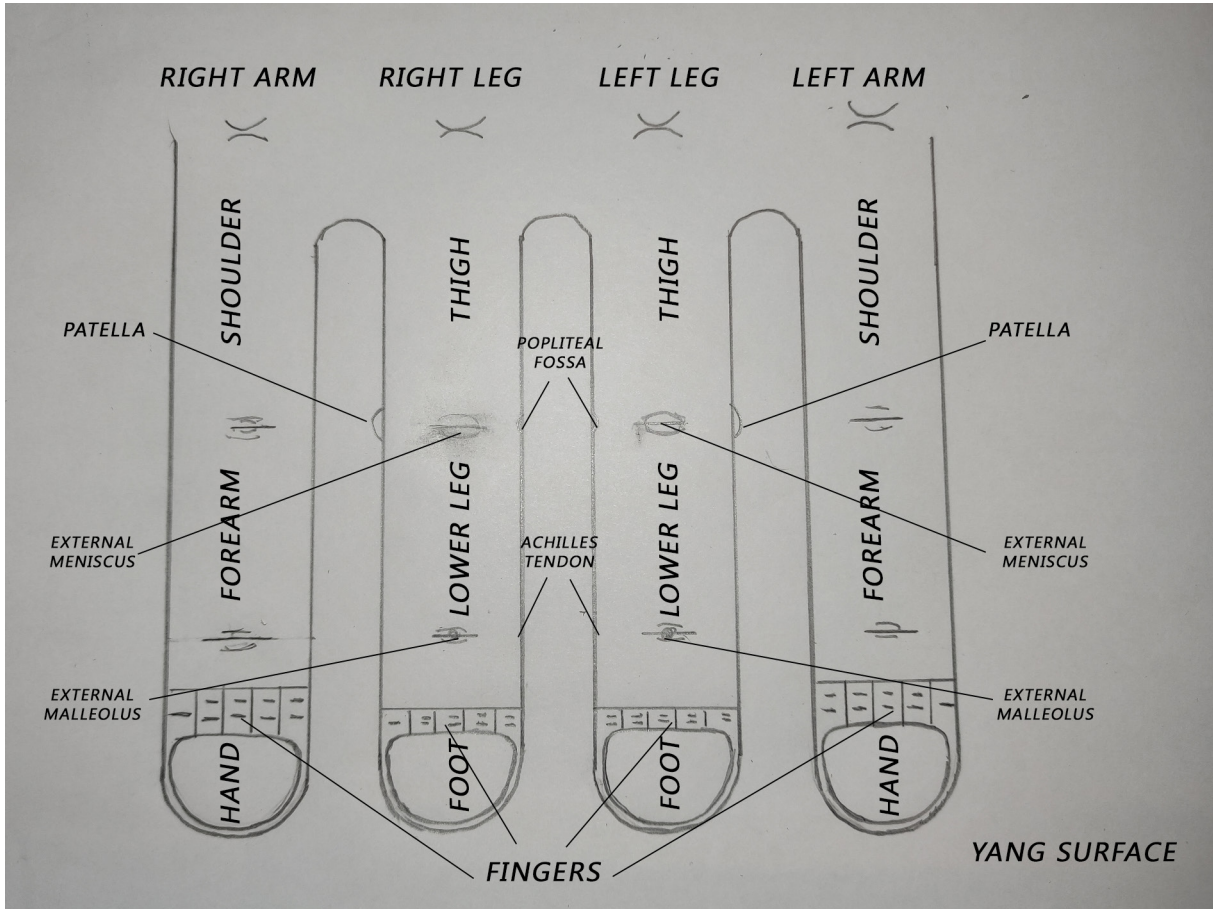


Figure 1. Standard system of correspondence to the body on the hands (yang surface).

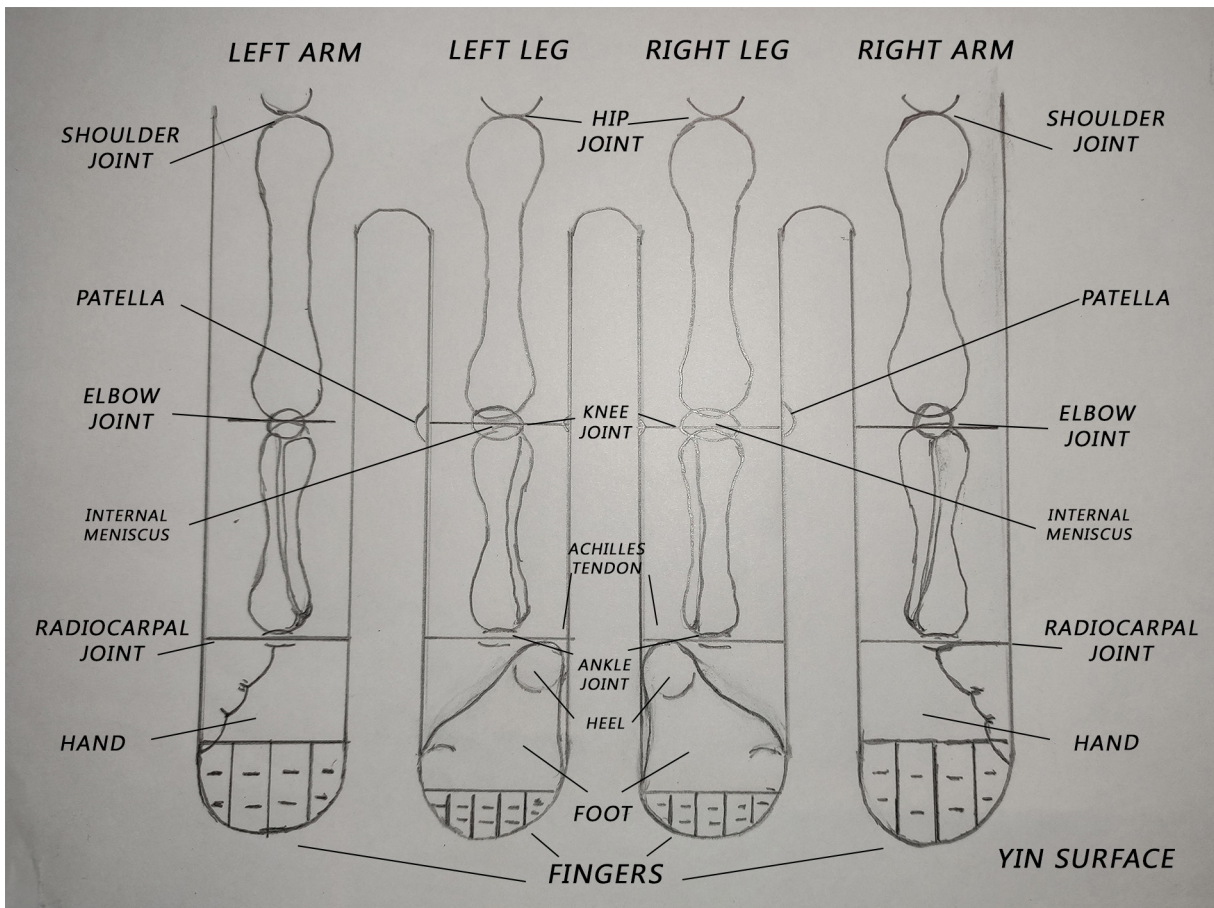


Figure 2. Standard system of correspondence to the body on the hands (yin surface).

Su Jok acupuncture is often used to manage pain [15,16], including headaches [17], migraines [18], arthritis, and joint pain [19]. Its microsystemic approach allows for quick and effective treatment, particularly in acute pain scenarios.

This therapy is also applied to chronic conditions, with the belief that it stimulates the body's self-regulation mechanisms to restore balance and treat various ailments [20-22]. A detailed scheme of the correspondence of human organs on each finger is presented in Figure 3.

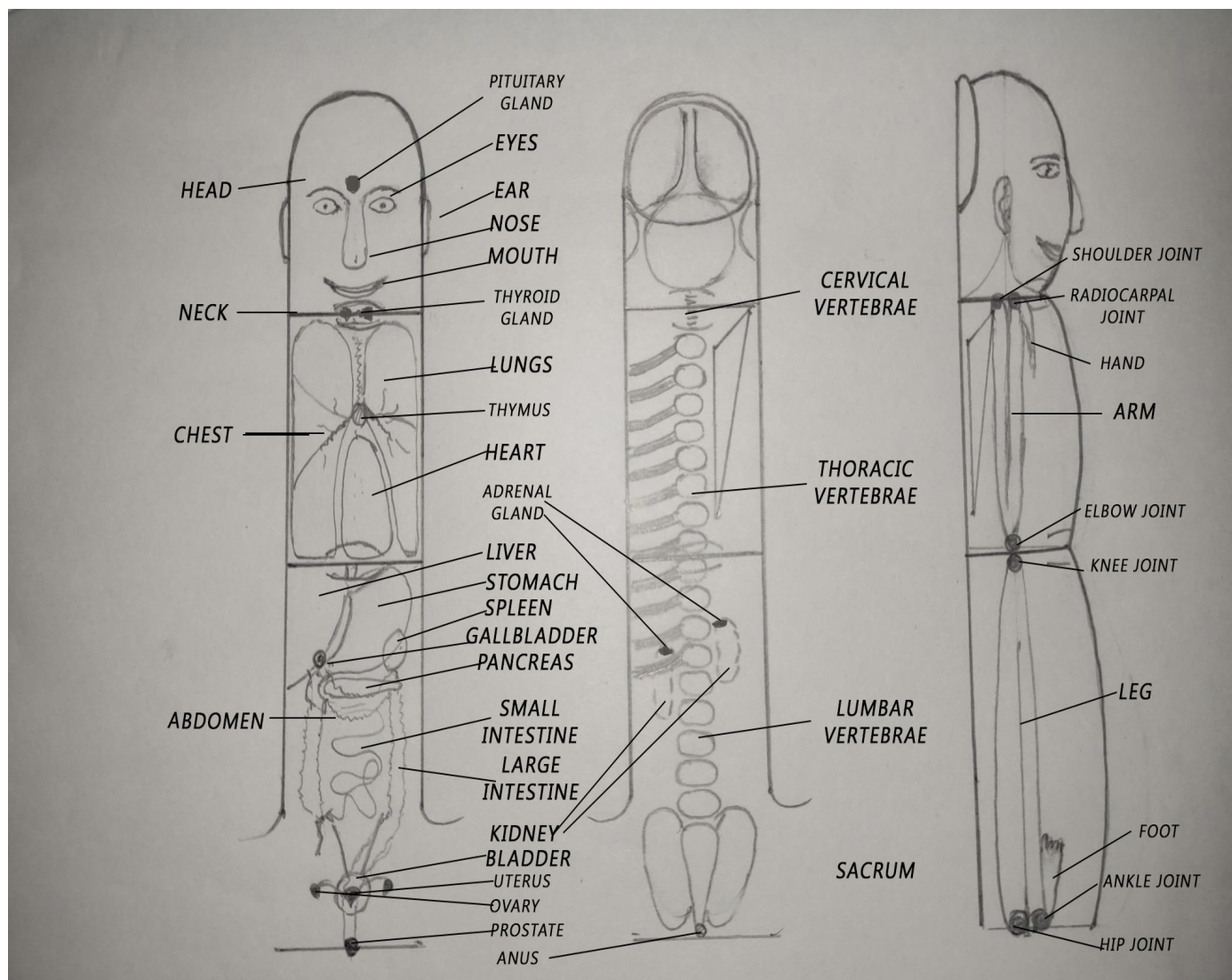


Figure 3. Finger/toe standart correspondence system ("insect" system).

Moreover, Su Jok therapy is used to alleviate stress, anxiety, and depression, with some practitioners claiming it can balance emotional and psychological states by stimulating certain points on the hands and feet linked to the nervous system. The battlefield self-help method involves using small needles (0.18 x 8 mm) targeting points on the fingers corresponding to affected body structures. These points are identified using acupressure diagnostic probes, which can also be used for treatment purposes. Treatment can also be administered through acupressure using magnets, seeds, and other tools. This method is effective for pain relief and stress management and empowers patients to self-administer treatment [23].

Conclusion

Self-help finger acupuncture on the battlefield represents an innovative and cost-effective approach to pain relief, stress management, and overall health improvement. It is particularly beneficial for soldiers in combat, who may not have access to comprehensive medical care and need self-care alternatives in challenging conditions. This microsystemic therapy offers benefits similar to traditional acupuncture, including pain relief and stress management, while allowing patients to engage in self-treatment.

AUTHORS' CONTRIBUTIONS

All authors participated in manuscript revision, approved the final version, and met the authorship criteria outlined by the International Committee of Medical Journal Editors (ICMJE).

FUNDING

None

ACKNOWLEDGEMENT

None

CONFLICTS OF INTEREST

The author declare that there are no potential conflicts of interest.

REFERENCES

1. Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. *JAMA*. 1998 Nov 11;280(18):1569-75.
2. Eucker SA, Glass O, Staton CA, et al. Acupuncture for acute musculoskeletal pain management in the emergency department and continuity clinic: a protocol for an adaptive pragmatic randomised controlled trial *BMJ Open* 2022;12:e061661.
3. Park JW. *Su Jok (hand & foot) acupuncture - Volume 1*. - Seoul, Korea: O Haeng Publishing co; 1991.
4. Park JW. *Be Your Own Doctor*. Jaipur, India: Smile Academy Pvt. Ltd; 1987.
5. Kaptchuk TJ. *The Web That Has No Weaver*: McGraw-Hill; 2000.
6. Park J, Linde K, Manheimer E, et al. The status and future of acupuncture clinical research. *J Altern Complement Med*. 2008 Sep;14(7):871-81.
7. Schnyer R, Lao L, Hammerschlag R, et al. Society for Acupuncture Research: 2007 conference report: «The status and future of acupuncture research: 10 years post-NIH Consensus Conference». *J Altern Complement Med*. 2008. Sep;14(7):859-60.
8. Crawford P., Jackson JT, Ledford CJ. The Association Between Acupuncture Training and Opioid Prescribing Practices. *Pain Medicine*, 2018. 20(5), 1056-1058.
9. Collinsworth KM, Goss DL. Battlefield Acupuncture and Physical Therapy Versus Physical Therapy Alone After Shoulder Surgery. *Med Acupunct*. 2019 Aug 1;31(4):228-238.
10. Haake M. German Acupuncture Trials (Gerac) For Chronic Low Back Pain Randomized, Multicenter, Blinded, Parallel-Group Trial With 3 Groups. *Archives of Internal Medicine*. 2007;167(17):1892.
11. Linde K, Allais G, Brinkhaus B, et al. Acupuncture for migraine prophylaxis. *Cochrane Database of Systematic Reviews*. 2009;1:CD001218.
12. Seung HB, Leem J, Kwak HY, et al. Acupuncture for military veterans with posttraumatic stress disorder and related symptoms after combat exposure: Protocol for a scoping review of clinical studies. *PLoS One*. 2023 Apr 21;18(4):e0273131.
13. Niemtzwow RC, Litscher G, Burns SM, Helms JM. Battlefield Acupuncture: Update. *Med Acupunct*. 2009; March; 21(1): 43-46.
14. Jain S, McMahon GF, Hashem H, Calabrese C, Niemtzwow RA. Randomized Controlled Trial of Battlefield Acupuncture in Primary Care Patients with Acute Pain. *Med. Acupunct.*, 2013;25(2):79-83.
15. Nurjannah I, Hariyadi K. Complementary Therapies in Clinical Practice Su Jok as a complementary therapy for reducing level of pain: A retrospective study. *Complement Ther Clin Pract [Internet]*. 2021;43(September 2020):101337.
16. Nurjannah I. "Su Jok" therapy and sclerology profile monitoring for managing chest pain at home while avoiding hospital admission during the COVID-19 pandemic: a case study. *Belitung Nurs J*. 2020;6(6):229-32.
17. Hakim AN, Pratiwi RD, Hasanah U, et al. Su Jok Therapy Education On Head Pain Reduction As A Hypertension Prevention Effort. *J Abdi Masy*. 2023;4(1):85-91.
18. Kahraman A, Cevik Akyil R. Efficacy of Su Jok Seed Therapy in Migraine: A Randomized Placebo-Controlled Study. *Complement Med Res*. 2022;29(5):402-412.
19. González ML, González YB, Aguilera NG, et al. Presentation of a patient with elbow hygroma treated with Su jok acupuncture. *Correo Científico Médico de Holguín*. 2017;21(2):570-6.
20. Nurjannah I. "Su Jok" therapy and sclerology profile monitoring for managing chest pain at home while avoiding hospital admission during the COVID-19 pandemic: a case study. *Belitung Nurs J*. 2020;6(6):229-32.
21. Yagil Z. Su jok therapy for the treatment of fatigue and weakness among oncologic patients. *Quaderno*. 2019;14(23):51-69.
22. Trujillo Huber JC, Pereira Despaigne OL, Jacas García C, García Díaz RdIC. Efectividad de la terapia Su-Jok en pacientes con dolor por espolón calcáneo. *Medisan*. 2016;20(10):2258-66.
23. Park JW. *Su Jok Seed Therapy*. India: Su Jok Therapy Centre (India) Pvt. Ltd; 2000.