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An Overview of Clinical Trials in Chinese Medicine

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Abstract: To safeguard human participants and to scientifically assess the efficacy and safety of a new medicine, a research protocol must be approved by an ethical committee before it can begin. The first point to mention is that when it comes to clinical research, there are fundamental differences between TCM and WM in three major areas: theoretical idea, practice, and technique. Combos made up of different elements it is necessary to conduct a technical and ethical evaluation of the research process. These factors all influence safety concerns, non-clinical research needs, drug quality requirements, enrolment, and efficacy of clinical trials. In addition to ensuring that the medicine is lawful, a comprehensive assessment must take into consideration the attributes of the already available TCM drug.

Keywords: Traditional Chinese Medicine, Characteristics of TCM, Ethics Review, Drug Efficiency, Western Medicine.

1. INTRODUCTION

A Chinese translation of the Guidelines for Conducting Study on Human Subjects was released in 1999, and it stipulates that human subject in drug clinical trials must be examined and authorized by an Institutional Examination Board prior to the research being conducted on the subjects. In the recent decade, there has been a significant increase in the number of ethical evaluations of clinical trials using new medical technology, biological research involving humans, and human clinical trials involving Traditional Chinese Medicine. [1] The findings of our research in China compelled us to investigate how western methods to ethical evaluation may be adapted to the country's cultural and customary peculiarities. When traditional Chinese medicine and mainstream medical research are compared and contrasted, a distinction is drawn between the two. This research compares and contrasts different styles of medicine [2]. The implications of these discrepancies for clinical studies including Traditional Chinese medicine are investigated. Following the guidelines established by the State Administration for The Legal Evaluation of Medical Research in Traditional Chinese Medicine (SALEMA), the Institutional

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Review Board IEEE should evaluate the accuracy of the study in terms of both science and ethics, as well as the planning and execution of the study. According to established scientific standards, traditional Chinese pharmaceuticals as along-term therapy option in medical science, as well as laboratory research and animal studies, where appropriate, must be adhered to by the study in line with established scientific criteria Researchers compared traditional Chinese medicine (TCM) research to studies in Western medicine using these criteria [3].

People in Tcm use Exempt Anti-Research for New Medicine

Research on human subjects is logical since some of the herbal medicines now provided involve several of them, and many Traditional Chinese Medicine individuals [4] have depended on medication formulations for millennia. In addition, when evaluating an ethics protocol, researchers look at the study's theoretical and non-clinical foundations, as well as the literature and clinical experience that went into establishing the hypothesis, before determining whetheror not it is ethical to perform the study on human subjects. For a novel drug to be approved for human use, it must first be examined by an Ethics Committee to determine if it can be used safely on human subjects and whether it will have the projected efficacy in people that has been shown in animal studies. It is only nonclinical data that may be utilized by the IRB to guarantee the safety and possible benefit of human participants in medical research or first-in-human clinical trials. Following the acquisition of the formula's patent from an experienced TCM practitioner, the pharmaceutical business develops new TCM formulations [5] that are approved for use in the United States. Medicine in Traditional Chinese Medicine (TCM) is created in a different method than medicine in Western medicine. As a result, the research and development cycle for CM is the polar opposite of what occurs throughout the clinical trial process for WM 349, which begins with a clinical study and then returns to the lab, progresses to clinical trials, and concludes with use in the clinic. In spite of the fact that some TCM new drugs may be exempt from animal studies and even early human studies as a result of the consideration of these factors, clinical experience with initial medical research dala for certain TCM new medicines provides valuable human data that can be used to determine safety and effectiveness before a full clinical study can be carried out.

Despite the fact that extensive and expanding use provides a plethora of data for determining its quality, the effectiveness or safety of a new TCM medicine, as well as its efficacy and toxicity profiles, may be significantly altered. Medicinally active components' efficacy and toxicity are both significantly influenced by the processes used in their preparation. As reportedby colleagues [6] and Liu Shenlin, pharmacological production procedures affect the dangerous profile of clinical formulae, and the transition from oral decoction to capsule distribution results in a significant number of unforeseen side effects in clinical trials. [7]: In particular, if we use the conventional diagnostic of sickness and TCM symptoms and also examine WM diagnosis by eliminating hazardous or acute conditions, we may find that TCM "abdominal pain" is caused by gastroenteritis, pericarditis, or even stomach perforations. China's Food and Drug Administration [8] adopted a more explicit requirement in response to the previous one. Preparation of Traditional Chinese Medicine In order to make a product available to the public, it must fulfill a number of conditions, including the absence of potentially harmful herbal constituents, adherence to a consistent method of administration, and a product that performs and shows TCM symptoms in the same way as the traditional product. In order to conduct two-

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phase and stage-multiple medical testing on TCM component formulations using WM sickness and TCM symptom kinds as criteria, it is necessary to collect investigational hazardous research data in advance of the tests. It is necessary to gather non-clinical evidence for TCM chemical compositions with symptoms of both WM illness and different types of TCM illness when the pharmaceutical production method, dosage, or dosages are not equivalent to the conventional one. Non-clinical evidence for TCM chemical compositions with symptoms of both WM illness and different types of TCM illness is also necessary.

Combinations of TCM Drugs

Reproducibility of the active pharmaceutical ingredient (API) and the finished product can onlybe assured in conventional, chemically defined pharmaceuticals if these processes are taken into account 161. The repeatability of the drug as well as the dependability of the clinical trial outcomes are both reliant on the medication's quality control procedures and procedures. TCM,in contrast to WM, is a complex blend of various components, some of which are unknown at the time of writing. The use of a multi-component combination has an impact on two areas of the ethical evaluation. For the effectiveness of TCM's new drug components to be ensured, the herbal medicine must be grown according to GAP; this new Chinese medication must be manufactured in a good manufacturing facility; and a license for pharmaceutical materials is required in order to ensure customer satisfaction with the drug components. The effectivenessof a medicine, on the other hand, is determined by the active component that it contains. The effectiveness component is continually at work to deliver the effect, regardless of whether or not we comprehend the chemistry involved in many TCM treatments. The multicomponent constitution of TCM drugs results in low effectiveness potency but a wide range of efficacy points over a wide range of time. It is thus necessary to conduct an exploratory inquiry in orderto find the optimal dosage and delivery route for the anticipated therapeutic effect; otherwise, an effective TCM medicine may be no more effective than a placebo in terms of efficacy.

TCM uses a Two-Step Procedure for Enrolment

Every TCM diagnostic and treatment formula at the clinic is based on the fundamental idea of syndrome-oriented therapy, which is the cornerstone of TCM (Bianzheng Lunzhi). Occupational therapists and working memory analysts in the modern world combine working memory practice and math with their training in Traditional Chinese Medicine to make TCM medical studies workable for working memory, which serves as a foundation for working memory collaboration with other people. The WM sickness criteria and the TCM syndrome type diagnostic are two of the most often utilized ways in current TCM clinical research to enroll participants and determine whether or not they meet the diagnostic 350 criteria for the disease. In addition, while evaluating study findings, a dual-system method is used. How can clinical research in Traditional Chinese Medication (TCM) address the needs of patients with WM illness assessing markers while also representing the characteristics of TCM medicine in terms of treating symptoms described by patients? WM illness efficacy indicators and TCM syndrome indicators are evaluated independently for patient-reported symptoms and signs, and in some cases, a major independent evaluation of a person's illness will be conducted to determine whether or not the medication is working as intended to treat the illness. Oncology is being utilized to treat chronic epigastric discomfort caused by superficial gastritis. TCM therapy for urinary and gastrointestinal conditions is characterized by a lack in the treatment of cold. The

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fields of gastroenterology and histology are being utilized in certain circumstances to encompass individuals who have recurrent subsurface ulcers. Then, indications of disease such as coldness are utilized to corroborate the diagnosis of the condition. When the research is completed, more endoscopic and pathological testing will be performed to determine whether or not the illness has improved. There was no difference in the improvement of sickness between the study and the control groups in this research. When it comes to treating some side effects, exploratory medication outperforms the placebo. Here are some of the adverse effects that investigational medicine excels the placebo in treating. Another aspect that was examined was the general syndrome and symptoms, such as having a chilly stomach or having a lot of loose stools, among other things. They were then compared and it was discovered that they were statistically different.

2. CONCLUSIONS

Even though international and national standards govern ethics reviews, just adhering to these regulations does not ensure a successful review. A good review should safeguard humansubjects while giving protocol suggestions to improve the objective evaluation of the new medicine's effects and safety. This will allow potentially useful and safe medications to be evaluated in clinical trials. Despite the fact that both TCM and WM are based on theoretical notions, clinical research has shown that TCM has three major advantages over WM. a variety of substances are combined to form a mixture Safety problem, non-clinical research criteria, drug quality requirements, enrolment and effectiveness evaluations are just a few of the aspects that must be taken into account while conducting a full examination of Traditional Chinese Medicine (TCM). This is due to the fact that they all have an influence on the ethical and scientific appraisal of scientific research techniques.

3. REFERENCES

- 1. Rojnić, Michele, et al. "A Comprehensive Assessment of Fundamental Overcurrent Relay Operation Optimization Function and Its Constraints." Energies 15.4 (2022): 1271.
- 2. Xing, Diang, et al. "1200-V SiC MOSFET Short-Circuit Ruggedness Evaluation and Methods to Improve Withstand Time." IEEE Journal of Emerging and Selected Topics in Power Electronics (2022).
- 3. Ji, Z., et al. "Development of a core outcome set on traditional Chinese medicine (COS-TCM) for rheumatic heart disease (RHD): study protocol." (2022).
- 4. Huang, Zeling, et al. "The Efficacy and Safety of Zhengqing Fengtongning for Knee Osteoarthritis: A Systematic Review and Meta-Analysis of Randomized Clinical Trials." Evidence-Based Complementary and Alternative Medicine 2022 (2022).
- 5. Xu, Weichao, et al. "Traditional Chinese medicine for precancerous lesions of gastric cancer: A review." Biomedicine & Pharmacotherapy 146 (2022): 112542.
- 6. Xiao, Xianjun, et al. "The Efficacy and Safety of High-Dose Nonsedating Antihistamines in Chronic Spontaneous Urticaria: A Systematic Review of Randomized Clinical Trials." (2022).
- 7. Cui, He-Rong, et al. "Immunometabolism at the service of traditional Chinese medicine." Pharmacological Research (2022): 106081.
- 8. Hu, Zhanqing, et al. "Knowledge and Attitudes of Research Participants in China Toward Electronic Informed Consent in Clinical Trials: A Cross Sectional Study." Journal of

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http://journal.hmjournals.com/index.php/JHTD **DOI:** https://doi.org/10.55529/jhtd23.14.18



- Empirical Research on Human Research Ethics (2022): 15562646221075884.
- 9. Wang, Carol Chunfeng, et al. "The safety and efficacy of using moxibustion and or acupuncture for cancer-related insomnia: a systematic review and meta-analysis of randomised controlled trials." Palliative Care and Social Practice 16 (2022): 26323524211070569.
- 10. Song, Yuebo, et al. "China amyotrophic lateral sclerosis registry of patients with Traditional Chinese Medicine (CARE-TCM): Rationale and design." Journal of Ethnopharmacology 284 (2022): 114774.
- 11. Usichenko, Taras I., et al. "Auricular stimulation for preoperative anxiety-a systematic review and meta-analysis of randomized controlled clinical trials." Journal of Clinical Anesthesia 76 (2022): 110581.
- 12. Li, Qiuju, et al. "Risk compounds, potential mechanisms and biomarkers of Traditional Chinese medicine- induced reproductive toxicity." Journal of Applied Toxicology.
- 13. Md. Tabil Ahammed, Chinmoy Das, Shahriar Rahman Oion, Sudipto Ghosh, and Maharin Afroj, "Design and Implementation of Programmable Logic Controller Based Automatic Transfer Switch", Journal of Artificial Intelligence, Machine Learning and Neural Network, vol. 2, no. 02, pp. 41–51, Mar. 2022.
- 14. Md. Jannatul Ferdous, Nayan Sarker, Chinmoy Das, Md. Tabil Ahammed, and Zayed Mohammad, "Design and Analysis of A High Frequency Bow-tie Printed Ridge Gap Waveguide Antenna", JIPIRS, vol. 2, no. 02, pp. 26–38, Mar. 2022.
- 15. Ahammed, Md Tabil, et al. "Design of Porous Core Fiber for Terahertz Regime using Zeonex." 2021 4th International Conference on Computing and Communications Technologies (ICCCT). IEEE, 2021.
- 16. Zhang, Qiao-li, et al. "Treatment Progress in Diminished Ovarian Reserve: Western and Chinese Medicine." Chinese Journal of Integrative Medicine (2022): 1-7.
- 17. Zhang, Xiaoyu, et al. "Efficacy of Wen-Dan Decoction in the treatment of patients with coronary heart disease: A protocol for systematic review and meta-analysis." Medicine 101.1 (2022).
- 18. Coronado, Juan Felipe, Laura Juliana Castillo Merchán, and José Ignacio Palencia Palencia. "Has acupuncture benefit in the management of migraine? A scoping review." Revista Internacional de Acupuntura 16.1 (2022): 100167.
- 19. Mu, W., D. F. Kong, and Q. Xu. "Chinese patent medicine for stable angina pectoris: protocol for a systematic review and network meta-analysis." TMR Integr Med 6 (2022):e22001.
- 20. Lu, Chung-Yen, et al. "Adjuvant therapy with traditional Chinese medicine and long- term mortality in patients with stroke: A nationwide population-based cohort study in Taiwan." Maturitas 158 (2022): 47-54.
- 21. Wiesner, Denise. "Traditional Chinese Medicine, infertility, and sexuality dysfunction." Psychological and Medical Perspectives on Fertility Care and Sexual Health (2022): 213-235.
- 22. Lai, Bao-Yong, et al. "Clinical Effectiveness and Safety of Chinese Herbal Medicine Compound Kushen Injection as an Add-On Treatment for Breast Cancer: A Systematic Review and Meta-Analysis." Evidence-Based Complementary and Alternative Medicine 2022 (2022).
- 23. Yuan, Jia-ying, et al. "Research progress on icariin, a traditional Chinese medicine extract, in the treatment of asthma." Allergologia et immunopathologia 50.1 (2022): 9-16.
- 24. Xiong, Yibai, et al. "The effect of Huashibaidu formula on the blood oxygen saturation status of severe COVID-19: A retrospective cohort study." Phytomedicine 95 (2022): 153868.

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