7th Annual Growth and Resilience Dialogue

An appropriate and sustainable model for healthcare in the OECS/ECCU

Section Theme-Panel Discussion II

Exploring the potential of Traditional Medicine (TM) as a game changer in Caribbean promotion, disease prevention and treatment.

" How can we advance research in traditional Medicine to inform guidelines, policy and procedures in order to integrate Traditional Medicine into our healthcare system".

Guido B. Marcelle Ph.D

April 25th , 2023

Definition:

• The World Health Organization (WHO) defines traditional Medicine as:-

" Diverse health practices, approaches, knowledge and beliefs incorporating plants, animals and/ or mineral based medicines, spiritual therapies, manual technologies and exercises applied singularly or in combination to maintain well-being, as well as treat, diagnose or prevent illness(WHO 2007)."

Other definition:

 Traditional Medicine is the sum total of knowledge, skills, and practices based on the theories, beliefs, experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement, or treatment of physical and mental illness.

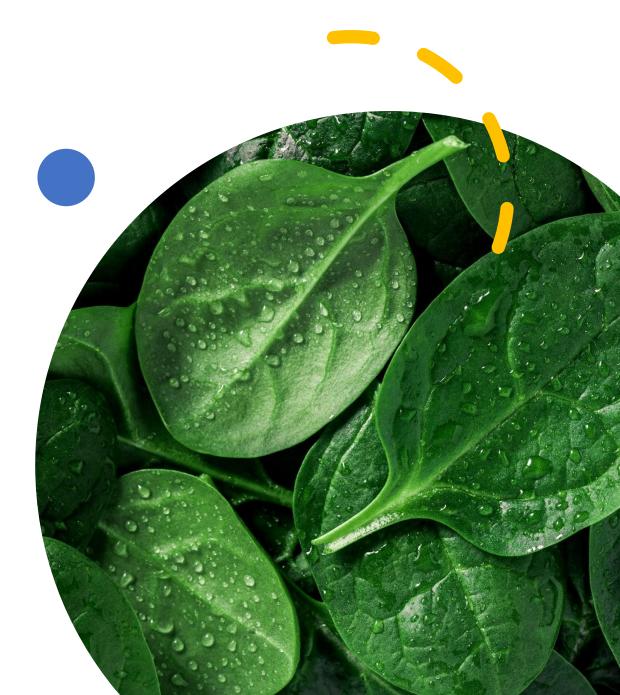
" Herbal Medicine"-

For this presentation emphasis is on "Herbal Medicine"

Herbal Medicine includes:

• Herbs:

Herbal drugs are considered as mainly crude whole, fragmented or broken plants or parts of plants in an unprocessed state, usually in dried form or sometimes freshplant could be interpreted in the broader sense to also include fungi, algae, lichens, mosses, ferns etc.



Herbal Materials

- Wood ,bark, leaves, aerial parts, roots, rhizomes, bulbs, tubers
- Flowers, fruits, seeds
- Gels, gums, resins, fatty or fixed oils, essential oils
- Dry powders

Herbal medicine

Herbal preparations:

- Teas, tea mixtures, decoctions, infusions
- Maceration, gels, juices, syrups, tinctures
- medicinal spirits, medicinal essence, medicinal oils
- Instant teas, tea bags, granules
- Capsules, tablets, pills
- Lozenges or pastilles
- Suppositories
- Ointments, pastes, gels, creams
- Finished herbal products that contain therapeutically active ingredients that are plant based

Herbal Medicine

Guidelines, policies and procedures must seek to encompass the many aspects of Herbal Medicine.

The entire chain must be considered from plant growth to final use of products and any subsequent reactions. Policy and Legal Framework All countries or regional entities should have in place some framework to review and monitor Herbal Medicine (Traditional Medicine)

This may include:

➤A coordinating Agency

➤A Regulatory Agency

► A National Advisory Committee

➤A system to monitor adverse reactions from Herbal Medicine (pharmacovigilance)

Policy and Legal Framework

Pharmacovigilance may be conceived as the process of monitoring, evaluating, and communicating drug safety which has profound implication that depend on the integrity and collective responsibility of all parties such as consumers, health professionals, researchers, academics, media, pharmaceutical industries, drug regulations, government and international organizations.

A road map for Herbal Medicine (Traditional Medicine) ntegration

Introducing and expanding the credibility and integration of Herbal Medicine (Traditional Medicine) into national healthcare system must require:

- 1. As a guiding principle, developing an evidence base for safety and efficacy.
- 2. Consolidating of data from existing national, regional and International Studies.
- 3. Supporting new research to fill evidence gaps

Consolidating the road map:

• First steps:

Before developing a national or regional Herbal Medicine (HM), or Traditional Medicine (TM) policy, the following should be undertaken:

- 1. Assess Herbal Medicine (Traditional Medicine) use and practices.
- 2. Evaluate how herbal medicine (traditional medicine) can be used to improve existing healthcare systems.

National/ Regional Policies:

- A national or regional policy must:
- Ensure the safety, efficacy and the quality of Herbal Medicine and (TM) products and practices.
- Not unduly hinder patient's treatment options.
- Not lead to higher healthcare costs.

Policy

A national or regional policy should encompass:

- Legislation and regulations of products and practices
- ✓ Education
- ✓ Training
- ✓ licensing of products or practitioners
- ✓ research and development
- ✓ protecting medicinal plants
- protecting Indigenous knowledge and intellectual property



Policy

- National or regional policy should encompass(continued):
- ✓ Factoring plants in the context of climate change
- " It must also be noted as being very crucialthat information on the Internet is not easily controlled or regulated and that special attention is needed when evaluating online information."

Road map for our Region:

• What may be the best approach for integrating TM into the national or regional healthcare system?

Choices:

1. A tolerant system

- Based on conventional Western medicine, but allows some TM practitioners to practice in some capacity, obtains in UK, Canada, USA.

2. Inclusive system

- recognizes TM practices, but does not fully integrate them into the healthcare delivery, education and regulation. Exemplified by Nigeria, Mali and South Africa

Road map for our Region (continued):

3. A Parallel healthcare system

- has both conventional and traditional as separate components of the national healthcare system i.e India

4. An integrated system

- integrates conventional and TM systems at the level of medical education and practice. Integrative measures include government regulations and registration to control safety, efficacy, and quality of herbal medicine products, registration of traditional healers and herbalists, and establishment of specialized hospitals, colleges and universities ie, China, Koreas, Vietnam

Total quality

- Research in the areas of quality, safety and efficacy must be advanced to fully inform guidelines policies and procedures for the integration of herbal medicine into the national and regional healthcare system.
- Total quality must be emphasized in the following domains
- 1.Traditional knowledge documentation
- 2. Pharmacopoeias
- 3. Botanical definition
- 4. Macroscopic description
- 5. Microscopic description

6. Phytochemical markers

Total Quality (continued)

- 7.Phytochemical fingerprints
- 8. Purity and strength
- 9.Common substitutes
- 10.Assays
- 11.Healing paradigm comparisons
- 12.Preclinical and clinical research
- 13. Innovative clinical designs
- 14. Reporting of clinical studies
- 15. Evaluation and synthesis of evidence

Conclusion:

Herbal Medicine cannot be considered in isolation. The whole ambit of complementary medicine, food supplements, nutraceuticals, a regional drug list, in addition to concerns with global harmonization must be looked at if there has to be a substantive intervention in the healthcare system of the region.

Finally ,a very broad circle of varied personnel must be involved in the process of integration. This may include health professionals, consumers, regulators, academics [botanists, ethno-botanists, chemists, pharmacognosists,] legal personnel, laboratory personnel, researchers, practitioners, media , government and international organizations among others.

Further Reading:

1.Shraddha Thakkar et al., *Regulatory landscape of dietary supplements and herbal medicines from a global perspective, regulatory toxicology and pharmacology.* 114 (2020) 104, 64-7

2. World Health Organization global report on traditional and complementary medicine 2019

3.Karin G.M Lenssen et al., —International Perspectives on substantiating the efficacy of herbal dietary supplements and herbal medicine through evidence on traditional use. Comprehensive reviews in food science and food safety Vol 18, 2019, 910 to 922

Further Reading:

4.Azhar H. Alostad et al., herbal medicine classification policy recommendations. Frontiers in medicine www.frontiersin.org, February 2020 (Vol 7) Article 31

5.Sanjay Sharma, current status of herbal product regulatory overuse, J Pharm Bioallied Sci. 2015

6.Carmen Tanayo and Freddie-Ann Hoffman- botanical regulation: Comparison of the United States and Canada .Pharm Regul aff 2017 ,6:1.

- 7. World Health Organization (WHO) review of world pharmacopoeias
- 8. British Pharmacopoeia 2022

Further Reading:

9. European pharmacopoeia (ph. Eur) 11 Edition

10. Chapter 5-Traditional and Complementary Medicine Policy. Mds 3 –ch 05traditional medicine mar 2012.pdf

11. Pharmacognosy, fundamentals, applications and strategies, Simone Badal, Rupika Delgoda, 2017 chapter 34,35 and references therein

12. Pharmacopia vegetal Caribbean –Segunda Edition (2005), Tramil

13. World Health Organization (WHO) guidelines in safety monitoring of herbal medicines in pharmacovigilance systems, Geneva, (WHO) 2004

14.Linquist M., Vigibase, The WHO Global ICSR Database System Basic Facts Drug Info 2008:42:409-19