

PERSPECTIVE ON RESEARCH INTO AFRICAN TRADITIONAL MEDICINES: CHALLENGES & BENEFITS

**CONFERENCE ON SYNERGIZING INDIGENOUS
KNOWLEDE SYSTEMS INTO BUSINESS INNOVATION
THROUGH KNOWLEDGE MANAGEMENT**

PRETORIA BOTANICAL GARDENS

19 FEBRUARY 2010

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HISTORICAL PERSPECTIVE

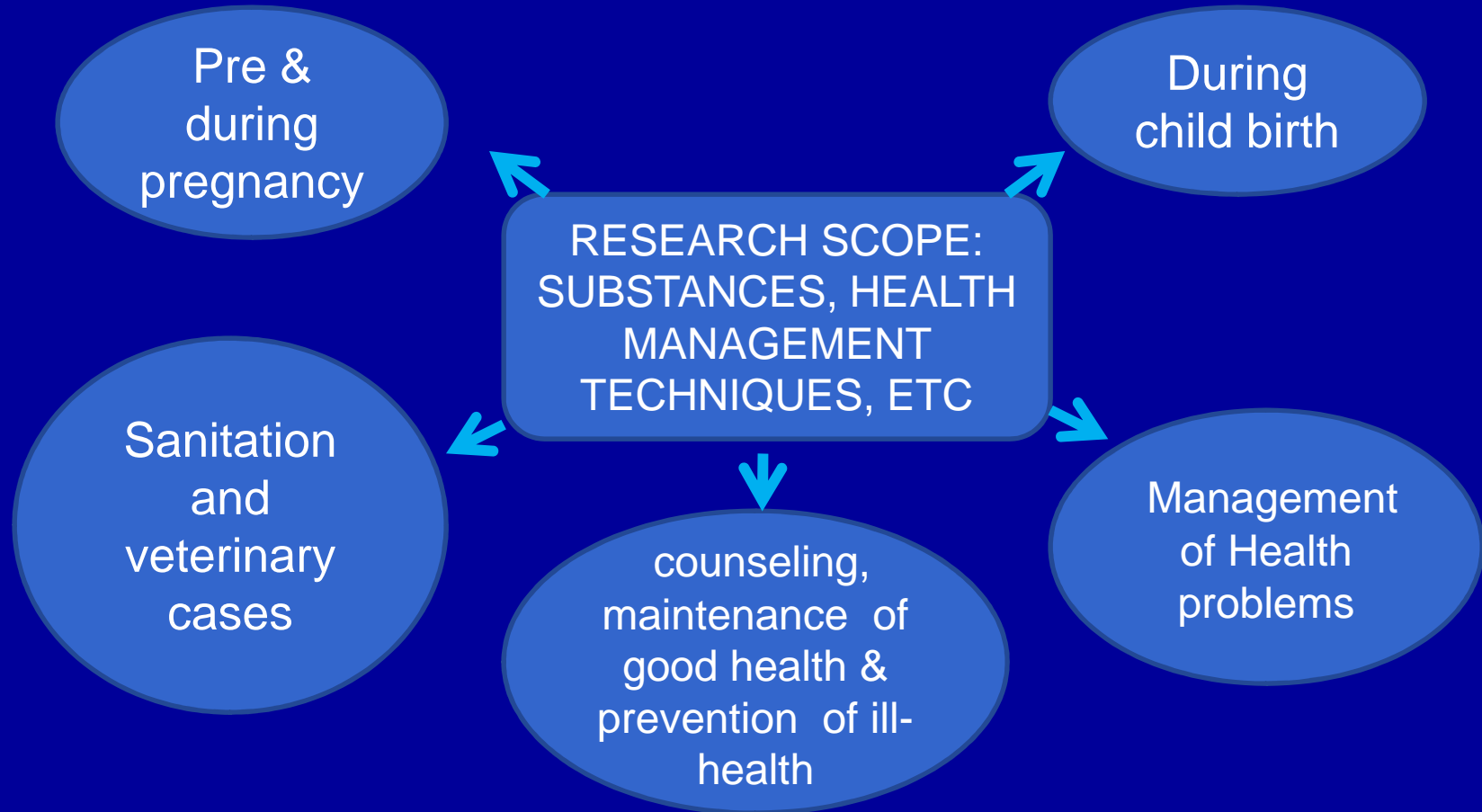
- “Plant metabolites have been the successful source of drugs and provided considerable value not only to the pharmaceutical industry but also to human health problems”

Ying Wang: Phytochem Rev (2008) 7:395-406

WHAT DRAFT POLICY ON AFRICAN TRADITIONAL MEDICINE (ATM) MENTIONS AND ENVISAGE ON RESEARCH OF ATM

- It has a principle on Research and Development
- It mentions protection of African Traditional Medicine Knowledge and Intellectual Property rights.
- A herbal Pharmacopoeia for the regulation and registration of Traditional Medicines.
- Management of information and knowledge on Traditional Medicine Knowledge so as to produce outcomes of Knowledge Economy that facilitates addressing of human health problems

SYNOPSIS OF TRADITIONAL MEDICINE KNOWLEDGE (TMK) & ITS SCOPE OF USAGE IN TRADITIONAL HEALING



TMK SYNOPSIS ON SOURCES OF MEDICINES : SCOPE OF RESEARCH OPTIONS FOR CONSIDERATION

Source	Example pharmacological effects of agents
1. Plants	Local anesthetics, anti cancer, anti-malarial, etc
2. Animals	Antibiotic peptides, analgesics
3. Micro-organisms	Anti-bacterial agents and anti-viral
4. Rocks and Soil	Essential elements, anti-inflammatory
5. Insects	Provide important tools in studying receptors, ion channels, and enzymes
6. Marine	Inflammatory, anti-viral, anti-cancer, etc
7. Venoms and Toxins	From animals, plants, snakes, spiders, scorpions, insects and micro-organisms. Provide important tools in studying receptors, ion channels, and enzymes



CHALLENGES

- Uncoordinated research activities into Traditional Medicine
- Wide spread adoption and utilization of researched and validated products of African Traditional Market
- Registration of researched Traditional Medicines
- Inclusion of researched and registered Traditional Medicines in Medical Schemes
- Interventions linked to outcomes of research into Traditional Medicines that address Job creation and poverty alleviation

OPPORTUNITIES

- Establishment of an Institute on ATM as envisaged by the Draft Policy on ATM. It will coordinate all Research activities into ATM
- Research outcomes on the following will be captured:
 1. Validated and negated claims for cure of ATMs
 2. Best norms and standards in the management of diseases (somatic, mental, organic, etc.) and counseling methodologies of ATM
 3. Involvement of Traditional Health Practitioners as researchers in research teams
- Benefits: protection of public health & preservation of medical traditions

PROPOSED HERBAL RESEARCH MODEL WITH TARGETED OUTCOMES

NO MODIFICATION SHORT TERM	EXTRACTED CRUDE MEDIUM TERM	ISOLATED ACTIVE METABOLITE LONG TERM
<ul style="list-style-type: none"> Plant itself is an active & has history of use as safe and effective material 	<ul style="list-style-type: none"> Isolation of active crude material 	<ul style="list-style-type: none"> Active metabolite isolation, purification & Characterization
<ul style="list-style-type: none"> Cultivation viability - GAP & GHP for quality assurance 	<ul style="list-style-type: none"> Determination of norms & standards for safety & effectiveness 	<ul style="list-style-type: none"> Synthesis
<ul style="list-style-type: none"> Validation of safety, claims for cure, norms & standards – Monographs 	<ul style="list-style-type: none"> Documentation of specifications – finger printing, molecular marking, etc. 	<ul style="list-style-type: none"> Determine clinical usefulness – safety, stability, efficacy, quality: clinical studies
 <p>INPUT</p>		 <p>INPUT</p>
<ul style="list-style-type: none"> Utilization in ATM discipline for the management of health problems 		<ul style="list-style-type: none"> Utilization in all Disciplines of Health

BENEFICIATION FROM INVOLVEMENT OF THE DEPARTMENT

- Through a Policy on ATM, objectives on research into ATM would be set and priority areas on research into ATM would be determined.
- Research outcomes and investment returns would be ploughed back into the Discipline of ATM for its development
- Facilitation of regulation and registration of research and validates ATMs and their inclusion in the Medical Aid Schemes

CONCLUSION

Institutionalization of African Traditional
Medicine and Traditional Medicine
Knowledge through research is an
attainable goal and it can be done

THANK YOU