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PROCEEDINGS

International Seminar & Symposium: Use of Herbs for Prevention of Vascular and Neurodegenerative Diseases

(Golden Anniversary of Brawijaya University)

March 6 - 9 , 2013
Faculty of Medicine, Brawijaya University
MALANG - East Java, Indonesia

Organized by

PHK-PKPD FKUB (HPEQ)

Kumamoto University

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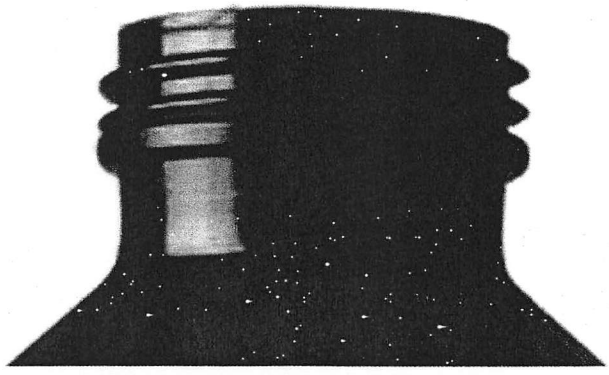

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of

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in occasion of

The Golden Anniversary of Brawijaya University

March 6-9, 2013

Faculty of Medicine, Brawijaya University

Malang, Indonesia

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PREFACE

Praise be to Allah, The cherisher and sustainer of the worlds; God who has been giving His blessing and mercy to us to complete the proceeding of International Seminar and Symposium on "Use of Herbs for Prevention of Vascular and Neurodegenerative Diseases" for Golden Anniversary of Brawijaya University.

This publication complements the main conference proceedings. It contains papers from speakers together with the full text contributions from the presenter (oral presentation).

A conference such as this requires a huge amount of work from many people. In particular, we take this opportunity to thank those on the steering committee and organizing committee as well as the researchers in Indonesia, Australia, Taiwan, Japan, and USA who supported the conference in a multitude of ways.

Great thank to the collaborator and our beloved speakers:

Prof. H.K. Lin, PhD (Oklahoma University, USA)
Prof. Mitsuyo Kishida, PhD (Kumamoto University, Japan)
Prof. T.C. Huang, PhD (NPUST, Taiwan)
DR. J.L. Hsu, PhD (NPUST, Taiwan)
Robyn Meech, PhD (Flinders University, Australia)

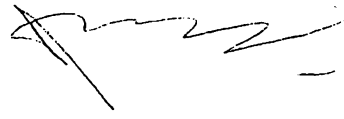
We are also very grateful to the sponsors for their financial support:

PHK-PKPD (HPEQ Project) of Medical faculty of Brawijaya University and PT. Kalbe Farma Indonesia.

We hope that this Supplementary Proceedings, will provide a valuable resource for Indonesian researchers especially whom concern in herbal medicine and participate to this conference as well as to the others, who are less fortunate and will miss the inspiring presentations and discussions but will, at least, have this record of the conference activities.

Malang, April 21, 2013

Chairman,



dr. Hidayat Sujuti, Sp.M., Ph.D.

CONTENT

Problem in the Use of Herb on Medical Practices

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ABSTRACT

Trend herbal medicine that has been like "mushroom" has caused doctors facing dilemma between the rigid disciplines of science or adjust to the demands of society. The doctor as a profession is bound to medical disciplines that are subject to the ethical and the legal practice of medicine. Doctors under oath will only provide treatment that proved beneficial for the patient and in accordance with up to date the development of medical science. The widespread of herb use in medicine have forced the doctor to accept or reject. Doctors should accept as a complement or alternative treatment and what criteria to take as complement or alternative to become remain selective on acceptance. As a result, some doctors provide herbal although less accompanied by appropriate scientific evidence based on evident based medicine (EBM). In the era of liberalism business aspects may encourage all people, including doctors to play in the free market. Consequently patients become a new commodity in the market place of herbal medicine that is sometimes equal with the placebo effect. Doctor who tended to take exact approach in the discipline of science must compete with the humanist approach of herbal medicine provider with a strong feel of subjectivism. Aspects of the business, social and cultural as well as scientific and even religion (spiritual) are mixed together and sometimes contradictory. Problem in medical indications, patient quality of life, patient preference factors and cultural influences are daily "menu" of physicians in treating patients, including the use of herbs. Problems of bioethics including four principles that is beneficence, non-maleficence, autonomy, justice and EBM supports including level of evidence have become a home work for the doctor to choose the best herbs for treatment in term of safety, efficacy and quality.

Keywords: problem, use of herb, medical practices

INTRODUCTION

During the last decade, use of traditional medicine has expanded globally and has gained popularity. It has not only continued to be used for primary health care of the poor in developing countries, but has also been used in countries where conventional medicine is predominant in the national health care system.[1]

As a doctor, we find that the use of herbal medicine like "mushroom". The WHO estimates that 80% of people worldwide rely on herbal medicines for some part of their primary health care.[2]However we realize that the evidence-based medicine for herbal medicine are still minimal and sometimes full of bias.[3]

The use of herb in medical practices as known herbal medicine refers to using a plant's seeds, berries, roots, leaves, bark, or flowers for medicinal purposes. Herbalism has a long tradition of use outside of conventional medicine. It is becoming more mainstreams

improvements in analysis and quality control along with advances in clinical research show the value of herbal medicine in the treating and preventing disease.[4]

The history of herbal medicine applied when plants have been used for medicinal purposes since before recorded history. Ancient Egyptian writing indicates the Egyptians used garlic (*Allium sativum*) and juniper (*Juniperus communis*) for their healing properties. Early 19th century, scientist began to use chemical analysis for extracting and modifying the active ingredients from plants.[2,4]

There are many kinds of herbal medicine that we can find in our practice. The World Health organization (WHO) defines 4 types of herbal medicine, 1) raw herbs, 2) herbal material (plant juices, gums, oils, resins, and dry powders, 3) herbal preparations (include extract and tinctures of herbal materials produced by biological/chemical methods such as extraction, fractionation, and concentration), 4) finished herbal products (may contain a single or multiple herbal ingredients).[5]

All kinds of herbal are easier to being found in our daily practices as part of complementary and alternative medicine (CAM) or traditional medicine (TM). CAM consists of natural products, mind-body medicine, manipulative and body-based practices and others such as Reiki, homeopathy and movement therapy. The use of herbs is a core part of all systems of traditional medicine or CAM.[6]

In clinic some patients have asked the benefit of herb and had a hope to get the prescription. However it is difficult to address patients' interest in herbal medicine without experience and evidence. It became a dilemma when we faced this condition because we have no data or information about the evidence. Doctors have dilemma to make harmonize between the rigid disciplines of science or adjust to the demands of society. As well as we know, herbal medicines have been used on expert opinion basis in several fields.

According to Akhmad and Fitriyati survey, approximately 56.5% doctors have rendered recommendation to their patients to use herbal and 47.8% doctors have delivered herbal to their patients and 43.5 % doctors' recommended herbal medicine based on their own experience. Then other doctors recommended herbs based on testimony from their patients after taking herbs for treatment. Also 47.8% doctors declared that patients have been getting better after using herbs.[7] Practices regarding herbs by doctors like those are not standard according to professional conduct. As individual in term of member of professional society, doctor is bound to medical disciplines that are subject to the ethical and the legal practice of medicine. Doctors under oath will only provide treatment that proved beneficial for the patient and in accordance with up to date the development of medical science or the latest advancement in medicine for providing high quality and ethical care.[8]

Governments are being challenged to develop sound policies, regulations, and trade standards as the global public's use of traditional and complementary medicine increases. Public access to their health care system of choice and public safety are both important dimensions of the policy challenge.[9]

Various practices of traditional medicine have been developed in different cultures in different regions without a parallel development of international standards and appropriate methods for evaluating traditional medicine. The challenge now is to ensure that traditional medicine is used properly and to determine how research and evaluation of traditional medicine should be carried out.[5]This paper will discuss all the problem of herbs use on medical

practices from regulation aspect, social, cultural and economic/market aspect, decision making process, the evidence-based medicine and bioethical aspect.

METHODOLOGY

This article was written as literature study. We examined some related books, articles, website, and using search engines such as Google or using, Cochrane Library, PubMed. Also we have conducted mini survey to twenty three medical doctors in faculty of medicine Islamic University of Indonesia. We discuss and make interpretation of them. Then we write in this paper to realize more the problem in the use of herb on medical practices.

RESULT AND DISCUSSION

After searching by using search engine Google scholar and PubMed we have found WHO document about the crucial issues of traditional medicine or CAM in National policy on traditional medicine and regulation of herbal medicines: Report of a WHO global survey in 2005. The global survey by WHO demonstrate that only 32 % country have issued national policy on TM/CAM.[5] Regulation related herbal medicine will become alternative medicine, complementary medicine and integration medicine. The two systems of traditional and Western medicine need not clash. Our survey has revealed that most of medical doctors (82.6%) in FM IUI agreed herbs use become complement treatment along with modern treatment rather than alternative medicine to substitute modern treatment (34.8%).[7]The lack of pharmacological and clinical data on the majority of herbal medicinal products is a major impediment to the integration of herbal medicines into conventional medical practices. For valid integration, pharmacological and especially, clinical studies, must be conducted on those plants lacking such data. Adverse events, including drug-herb interaction must also be monitored to promote a safe integration of efficacious herbal medicine into conventional medical practices.

In the international level of regulation of herbal medicine there are three main problem of herbal medicine i.e. safety, efficacy, and quality of product. Safety problem concerned with the adverse event or side effect of herbs use in patients. Many cases of adverse event have not been reported. The idea that herbal drugs are safe and free from side effects is false. Commonly perceived as safe because they are natural; however, many side effects, some potentially lethal, have been reported. Side effects are due to active ingredients, contaminants like mercury or lead as well as pesticides, and/or interactions with other drugs.[2]It is probable that adverse reactions to herbal products are under-reported because it is well known that patients are reluctant to inform their doctors that they are taking herbal products. Furthermore, majority of these products are self-prescribed and are used to treat, manage or control both minor and chronic ailments. Some 'traditional, complementary and alternative medicines (TCAM) contain toxic and potentially lethal constituents. These constituents include aristolochic acids, pyrrolizidine alkaloids, benzophenanthrine alkaloids, lectins, viscotoxins, saponins, diterpenes, cyanogenetic glycosides and furanocoumarins.[10,11] Hong Kong Department of Health issues warnings about Traditional Chinese Medicines (TCM) found to contain heavy metals lead in 4 products and mercury in 11 products.[12]

Quality is the paramount issue because it can affect the efficacy and/or safety of the herbal products being used. Current product quality ranges from very high to very low due to

intrinsic, extrinsic, and regulatory factors. Intrinsically, species differences, organ specificity, diurnal and seasonal variations can affect the qualitative and quantitative accumulation of active chemical constituents in the source medicinal plants. Extrinsically, environmental factors; field collection methods such as cultivation, harvest, post-harvest transport and storage; manufacturing practices; inadvertent contamination and substitution; and intentional adulteration are contributing factors to the quality of **herbal** medicinal products. Source plant materials that are contaminated with microbes, microbial toxins, environmental pollutants, or heavy metals; or finished products that are adulterated with foreign toxic plants or synthetic pharmaceutical agents can lead to adverse events. Substandard source materials or finished products will yield therapeutically less effective agents. **Herbal medicine** quality can also be attributed to regulatory practices. In a number of countries, **herbal** medicines are unregulated, which has led to product quality differences. Product quality improvement may be achieved by implementing control measures from the point of medicinal plant procurement under good agricultural practices (gaps) and the manufacture of the finished botanical products under good manufacturing practices (GMPs), plus post-marketing quality assurance surveillance.[13]

Herbal medicines vary widely in the amounts of active markers in a given product due to both variability in the content and concentrations of constituents of plant material (due to difference in species, soil conditions, etc.) and the range of extraction techniques/processing steps used by different manufacturers. A recent study of 25 available ginseng products found a 15-200 fold variation in the concentration of 2 ingredients believed to have biological activity. There is contamination in a study of 260 Asian patent medications that 25% contained high levels of heavy metals incl. lead and mercury (due to defective manufacturing processes or because the herbs were grown in polluted soil), 7% contained undeclared pharmaceuticals, added to produce a desired effect.[2]

Problem of herbs use mentioned above basically due to the main characteristics of herbal medicines. By having main characteristics of herbal medicine, traditional medicine or CAM is different from modern medicine both as presented in Table 1.

Table 1. Traditional vs. Modern Medicine (scientific use)

Traditional Use of Herbs	Scientific Use
• Every people use typical plants or parts of these, often with different indications, as juices, decoction or pills.	• Use of proper extractive and pharmaceuticals preparation of plants.
• Generally are used mixtures of many plants (often more than 10 together!), thought synergic. Products often do not contain any reference to the chemical constituents nor extraction technique.	• Generally used purified and standardized in the chemical constituents that have a pharmacological activity, and are used as symptomatic, for prevention or treatment.
• Generally believed safe and without any adverse reaction.	• Possible side effects, contraindications, drugs interactions, etc.
• Pathogenesis of illnesses and therapy are often based on philosophic, religious and socio-cultural conception, and are referred to the character and emotions of a patient (holistic approach).	• Diagnostic and therapeutic methodology follows the rules of mainstream medicine, because the reference for clinical administration is only the pharmacological activity based on conventional laboratory techniques and clinical trials.

Based on our survey to 23 medical doctors in faculty of medicine Islamic University of Indonesia (FM IUI) the common problem in herbal medicine include efficacy not sure, the availability not always ready stock or rare, rule of time usage not clear, patient trust lower, have no confident and experience, clinical trial very minimal, dosage uncertain and others as follow presented in table 2.[7]

A search of the literature shows that over the last 15 years a great growth and world-wide interest in herbal medicines has taken place, both in developed and developing countries.[10] The growth of the botanical market has attracted much interest on the part of the pharmaceutical companies by using Multi-Level Marketing (MLM) strategies that recruiting doctors as agent of products. The growth of business network or more commonly known as MLM are found a plenty in Indonesia today. According to data of DSAI (Direct Selling Association of Indonesia) until the year 2011 there are more than 66 companies that joined MLM a member of DSA (Direct Selling Association of Indonesia). The hundreds of companies are still not yet becoming member of DSA member. Not only that, almost every month there is a new MLM company just opened its business in Indonesia, whether it is a local company in the country of origin as well as from abroad. Noted there are over 176 companies that will come to enliven MLM industry in Indonesia. In Indonesia, the first MLM Company established in 1986, precisely located in the city of Bandung. The first MLM Company is PT. Archipelago Sun Chlorella Tama. The company later changed its name to PT. Centra Nusa Insan Cemerlang. Initials development, MLM business in Indonesia did not go smoothly. This is because the MLM business or abused by certain people to make a profit as much as possible. That is like the case off raudor more commonly known as money game.[15]

Table 2. Problem of Herbs Use in Medical Practices

What kind of problem do you find when giving recommendation for herbal medicine?	Total Answer	No Answer
• The availability of herbal medicine	1	46.87%
• Sometimes more expensive	1	
• Time usage	1	
• Efficacy	2	
• Patient trust	1	
• Less confident because lack of experience	1	
• Clinical trial still limited and not accurate	1	
• Dosage uncertain	1	
• Long term in useto get effect	1	
• Patient asking scientific evidence&mechanism of action	1	
• Not available scientific data or no EBM	1	

A study published in JAMA found that 87% of authors of clinical guidelines involving drugs had received money from the impacted pharmaceutical companies, including 58% as contracted researchers and 38% as employees or consultants. The effects of these conflicts of interests are widespread.[16] In herbal medicine some practices that similar with that phenomenon are testimony several persons to justify the beneficial effect and then promised a bonus if achieved sales targets in MLM network. It is common in rural area some people walking around offering herbs to patients who are seriously ill because modern medicine failed to alleviate their suffering. Patient with the vulnerable condition will be affected to buy herbs

products without careful consideration. Patient will ease to receive the argument of sales because the verbal communication of the sales is very good to influence the decision making process to use herbal medicine supported by testimony from several people. Communication is becoming powerful way to recruit member of MLM network in herbal medicine to form social relationship in business interest. Sometimes herbal medicines sales will approach young medical doctor to join in business MLM of herbal. In the long term doctors will give combination of medicine including herbal medicine and modern medicine to their patient. Eventually doctors only will give herbal medicine to the terminal stage of disease because of pity to the patient left without therapy (table 3).[7]As a result, some doctors provide herbal although less accompanied by appropriate scientific evidence based on evident based medicine (EBM) and become money game by MLM network. The many sales of herbal products have lack of quality control, commercial profiteering and exploitation leading to adulterations, lack of proper knowledge about the herbs and their contents that may exhibit drug-drug interactions and other adverse side-effects, and inappropriate usage of the herbal products have become a cause for concern in the health care professions.[17]

Table 3. Reason of Herbs Use

What is the reason of doctor using herbal medicine?	Total Answer	No Answer
MLM business	0	3
Medical medicine is more expensive	2	
The patients want to get herbal medicine	1	
Modern medicine failed as treatment	2	
Pity to the patient without therapy	12	
Based on medical indication	4	
Suggesting effect to make the life longer	0	

Aspects of the business, social and cultural as well as scientific and even religion (spiritual) are mixed together and sometimes contradictory and become dilemma in decision making. In daily clinical practice doctors always make decision making to solve dilemma on examination, diagnosis and treatment. Clinical situations in using herbal that raise ethical questions are a challenge to navigate as "menu" in daily practices to be solved. Often, there are multiple clinical facts to consider. In addition, patient values and preferences and the concerns and values of family must be taken into account. In some cases a decision is needed quickly. Ideally, when faced with these difficult clinical situations, we would use a systematic approach that ensures success in reaching an ethical decision or recommendation to use herbal medicine.[18]

According to Jonsen, Siegler and Winslade there are four topics method was developed to provide clinicians with a framework for sorting through and focusing on specific aspects of clinical ethics cases on herbs use and for connecting the circumstances of a case to their underlying ethical principles. Each topic—medical indications, patient preferences, quality of life, and contextual features—represents a set of specific questions to be considered in working through the case (Figure 1). In this article, we apply the four topics method to the analysis of a case that raises the question: should herbal medicine be withdrawn or given in this patient? The case is presented first, followed by an analysis of the facts of the case using the four topics method. First box is absolute to find the medical indication for using herbal medicine. Second box is to respect for person especially to patients by asking permission to

use herbal medicine or not as expression human rights of self-determination. Third box is to evaluate the quality of life of patients after, before and during use of herbal medicine. Fourth box is a supportive consideration to prolong or continue the herbal medicine in relativity situation. In working through the case, we hope to illustrate the potential value of this approach to data gathering and decision making in ethically difficult situations.[18]

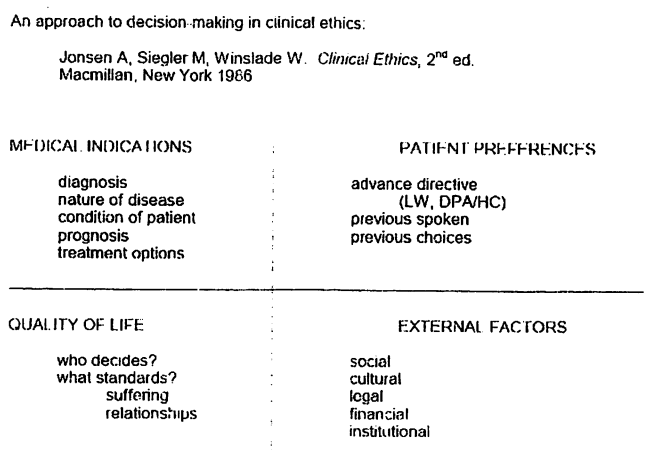

Figure 1. Decision-Making in Clinical Ethics

Another method to analyze ethical dilemma of herbs use can be done by using principle bioethics according to Beauchamp and Childress in their Book of *Principles of Biomedical Ethics*. These principles consist of beneficence, non-maleficence, justice and autonomy as known Bioethical principles or *Principlism*.[19]

Autonomy principle requires the ability to decide for the self-free from the control of others and with sufficient level of understanding as to provide for meaningful choice. To be autonomous requires a person to have the capacity to deliberate a course of action, and to put that plan into action to use or not herbal medicine. This creates problems in the delivery of health care, especially when patients are comatose, incompetent (whether due to age- i.e., children, or to mental ability) or, for example, imprisoned. And this is an issue in the clinical research setting of herbs use, especially as it relates to the provision of informed consent, with its need for competence, disclosure, comprehension and voluntariness.[19]

Beneficence is the common morality requires that we contribute to others' welfare, perhaps as an embodiment of the Golden Rule. Beauchamp and Childress suggest that there are two principles of beneficence, positive beneficence and utility. The principle of positive beneficence asks that moral agents provide benefit, while the principle of utility requires that moral agents weight benefits and deficits to produce the best result in the context of using herbal medicine. This seems to beg the issue of a risk benefit analysis, with non-maleficence representing the deficit/risk side of the equation and beneficence representing the benefit/asset side of the equation. What cannot be so easily answered is how much benefit a moral agent should provide, how to weigh that benefit against risk, and then how to act accordingly. In the sense of the four principles as a method of ethics, the moral agent is charged with determining the "good" in a specific scenario or situation, and then weighing that good against the risk of specific actions. The practice of beneficence is challenged by the

respect for autonomy. It is not possible to act without the permission of a free moral agent without that agent's consent. It is for this reason that Engelhardt privileges the principle of permission. And determining good is a personal decision, and the good that a patient may determine can often differ from that of his or her physician or caregiver. Beneficence therefore must overlap in part with autonomy; patients wish to be provided various levels of information, and may wish to select a particular direction for their care because in their view that is the greatest good. Because this may differ from the physician's perspective, a tension is created. In the context of herbs use, doctors should give the most benefit to patient according to the value of altruism.[19]

Non maleficence in healthcare, it is not uncommon to see the words primum non nocere, first do no harm. Also in herbal medicine based on the ethical principle of non maleficence; we should not harm others in the top priority in using herbal. It is the negative side of beneficence, though some, such as David Thomas see the two as more like two sides of the same coin. This also represents the risk side of a risk-benefit analysis. In clinical research and treatment using herbal, this is addressed in the disclosure of risks associated with being a participant in a research project and therapy program. But again, the question as to what to disclose- every possible risk that could potentially occur, or just the more likely- is not clearly delineated.[19]Valid, consistent or reliable and relevance reports should be considered by doctor to use herbal medicine regarding the safety addressing non maleficence principle.

The fourth principle is justice. Justice addresses the questions of distribution of scarce healthcare resources for using herbal medicine as example, respect for people's rights and respect for morally acceptable laws. Justice represents one of the thorniest issues that a country can face, and become a source of ongoing concern and political rancor. At its base, the fundamental question is, is there a universal right to healthcare including in the context of herbal medicine? If there is not, how are we to provide care for those who for whatever reason cannot afford it; if there is, to what level is such care to be offered, and how will it be funded? How can we ensure fairness is the process? These are not question with obvious answers, and they lead to various ways of answering the question, from the distributive (those who need more get more, for example) to the non-distributive (each public health center will get 100 kinds of a herbal medicine and will provide them to whomever shows up first).[19]

To sort the most important principle in any kind situation that caused conflicting situation or dilemma we need to make the best choice using prima facie approach. Prima facie approach can solve the problem in making priority of all principle in dilemmatic situation. Basic rules of bioethics can be a separate thing (tough) or exchanging places so that it can also be a continuation (not rigid). Prima facie means the first view or first look. The purpose of primafacie is to know the first right to appear and function till another existing rights more powerful capable to replace it.[20]

According to Purwadianto in the context of beneficence, in the table above principle of prima facie is something that turns into or under most circumstances. This means that patient is in reasonable condition and applies to many other patient, doctors will do their best for the benefit of patients (elective action). Doctor has done calculations where the goodness that will be experienced patients more than the loss.[20]

In the context of non-maleficence, prima facie principle is when the patient turns into or with in the state of emergency which required a medical intervention in order to save his

life. Doctor will prioritize non maleficence when facing vulnerable patients, easily marginalized and the children or the elderly or women's groups as well (gender issues).[20]

In the context of autonomy, it seems that doctor prioritizes prima facie of autonomy in situation appear to change into or within the state of the figure-educated patients, providers, adult and mature person.[20]

Justice appears prima facie to turn into or within concerned to other patients except himself. People those having equal or equivalent rights and similarity rights in healthcare or concerned with social rights of communities around himself as patients.[20]

The principle of prima facie is a card game in which cards framed trump though smallest been established as trump always won from ace trump in the game at that time.[20]

The last problem of herbs use is to get the best evidence in line with EBM rule in the best level and recommendation. To get best result, clinicians should give treatment using herbal medicine based on hierarchy of evidence as follows;[21]

Ia. Meta-analysis of randomized controlled trials.
Ib. At least one randomized controlled trials.
IIa. Minimal research non-randomized controlled trials.
IIb. Cohort and Case control studies
IIIa. Cross-sectional studies
IIIb. Case series and case reports
IV. Degree of consensus and expert opinion and advice

Degree of recommendations:

A. Evidence included in the level Ia and Ib.
B. Evidence included in level IIa and IIb.
C. Evidence included in leve IIIIa, IIIb and IV.

Research conducted in herbs are mostly still using animal or in vitro as preclinical study so that not appropriate as reference to give herbs to patients. Studies in animal regarding the effect of herbs is out of evident based medicine rule and not as recommendation in medical practices.

To achieve these goals, we need *Natural Medicines Comprehensive Database* relies on a solid evidence-based foundation. Each product monograph in the *Database* and its associated Safety Ratings, Effectiveness Ratings, and Interaction Ratings are supported by the best available scientific evidence. This evidence is systematically identified, critically evaluated, and applied using the same high standards used to evaluate evidence related to other therapies. We do not believe that there should be different standards of evidence for conventional therapies compared to alternative therapies. Therefore, we do not consider anecdote, tradition or folklore to be scientific "evidence."[3] To make realization of that, EBM supports including level of evidence have become a home work for the doctor to choose the best herbs for treatment. In Indonesia there is not available such as data base containing EBM of herbal medicine. In the practice it is very hard to get evidence using any kind of data base freely in Bahasa Indonesia and in English version available for EBM in degree A of level I of evidence but not free access. For this purpose finally recommendations were developed to improve reporting RCTs of herbal medicine interventions by Elaboration of CONSORT (Consolidated Standards of Reporting Trials) Checklist Item 4 for Reporting Randomized

Controlled Trials of Herbal Medicine Interventions. Practically what doctor needed is a simple access by typing only the names of herbs automatically appears the research conducted in database and free to get information about the herbal medicine based on evidence based medicine.

CONCLUSION

The common problem of herbs use consists of safety, efficacy, control of quality, decision making in the best ethical consideration and navigating by evidence based medicine EBM. In clinical practices there are several problem encountered in using herbal including the lack of availability of herbal medicine, sometimes more expensive, time usage, efficacy, patient trust, less confident because lack of experience, clinical trial still limited and not accurate, dosage uncertain, long term in use to get effect, patient asking scientific evidence & mechanism of action, not available scientific data or no EBM. There is no *Natural Medicines Comprehensive Database* in Indonesia. The last but not the least, doctors should encourage to make decision making in harmony status with bioethical principle and clinical ethics along with EBM rule. The problem in decision making will navigate practices of herbal medicine much more humanist.

It is necessary to make database for herbal medicine, do research about herbal medicine in term of EBM rule, and then make portal open access to reporting the side effect of herbal. Then doctor is given a simple access to get information about the herbal medicine that based on evidence based medicine.

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