



Researching Traditional Medicine: A Review and Evaluation of Objectives and Methodologies

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Abstract

The objectives and methods of published studies on traditional medicine are reviewed. Status and future of research on traditional medicine are also be evaluated. The majority of studies are descriptive, and results are often used as a basis for applied research which aim to test hypothesis and search for bioactive plant medicines. Common methodologies used in descriptive research are described in detail, including participatory observation, interviews, ethnographic techniques, inventories, patient logs/health calendars, and decision tables. Case studies are used to illustrate objectives and methods used in descriptive, hypothesis testing, and bioprospecting research. In the future, studies on traditional medicine will move towards standardizing descriptive results, hypothesis testing, effective use of interdisciplinary techniques, and applying results towards the benefit of both traditional and modern societies.

Key words : traditional medicine, descriptive method, case study

Introduction

Traditional medicine is knowledge of healthcare that has developed over many generations within a community or a group of people. It involves both expert and non-expert health¹ care practitioners who have specific definitions of health conditions and symptoms and use a system of diagnosis and treatment. While traditional medical systems vary across cultures, all aim towards

achieving overall mental, physical, and spiritual balance and harmony.¹⁻³ In contrast, biomedical treatment systems are based on the concept of Cartesian dualism which treats the body and mind as separate entities.^{1,2} Although modern or orthodox medicine is today's most dominant form of health care, traditional health care systems continue to play an important role in society.^{1,4-6}

Contrary to popular belief, traditional medicine is not limited to undeveloped areas of the world. Current studies have shown that immigrant communities in urban settings use traditional medicine to treat concepts of disease that are not recognized by biomedically trained physicians.³ At the same time, the new age, holistic, and alternative medicine movement continues to gain momentum around

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the world as people search and experiment with complimentary medicine.^{7,8} In the light of these events, declarations have been made by internationally acknowledged organizations, such as the National Center for Complimentary and Alternative Medicine (NCCAM) and the World Health Organization (WHO), to develop and strengthen scientific rational for studying traditional, indigenous systems of medicine.^{9,10} In urban areas, research of traditional medicine can be applied towards developing alternative healthcare that is ethnically and culturally sensitive and complimentary to Western medicine. In rural areas, traditional medicine can be upgraded and developed as an available and sustainable resource; unique knowledge and natural resources can be conserved for future generations.

Traditional medicine is a complex medical system that is based on a community's culture, religion, beliefs, and natural environment. To overcome the challenges of documenting and analyzing these principles and practices, multi-disciplinary skills are required from a range of fields, for example, botany, pharmacy, linguistics and anthropology. This paper utilizes both classic and recent case studies to illustrate some common objectives and methods used to research traditional medicine. Analytical aspects are not detailed, as this

has been described in a previous article.¹¹

Types of research

Most studies on traditional medicine aim to describe health practices and remedies; they also provide tests for hypothesis or search for bioactive plant medicines (bioprospecting). These objectives are reached via such avenues as field work, laboratory research, and literature surveys. *Descriptive studies* are conducted mostly on the field within selected communities and may be pioneer studies which describe the traditional medicine for the first time. Literature surveys of these results, and often in concert with field research, can be used to *test hypothesis* and direct, advance, and apply studies of traditional medicine. Descriptive and hypothesis-testing studies often provide data on medicinal plants, which can be chemically analyzed in *bioprospecting* research. The following sections will use case studies to illustrate each area of research. Common methods used in descriptive studies are described in detail.

Descriptive studies

A descriptive field study offers a comprehensive survey of a community's traditional medicine. Most descriptive research focuses on two aspects--medicinal plants and health care practices---primarily through the use of ethnobotany and anthropology

methods. While all studies include both elements to varying degrees, many earlier studies on traditional medicine lean heavily towards one component.

Ethnobotany methods, such as interview techniques and herbarium collection, are well suited for collecting data on traditional knowledge of medicinal plants. An example of a basic ethnobotany study was conducted by Anderson^{12,13} who documented medicinal plant use among hill tribe groups in northern Thailand. Anthropology methods are appropriate for studying health practices. The long study periods and subtle techniques for collecting data are necessary to develop rapport with community members and comprehend and analyze complicated theories, ideas, and principles of traditional medicine. Conklin¹⁴ completed a classic ethnographic account of plant use by an indigenous group in the Philippines using anthropology methods. Some commonly documented variables of medicinal plant use and health practices are included in Table 1.

Many current descriptive studies experiment with combining techniques to test and search for effective and complimentary methods. The following sections will describe techniques for selecting such variables as study site, informants and methods of research.



Table 1. Common data collected on medicinal plants and health practices.

Medicinal plants	Health practices among patients and healers
<ul style="list-style-type: none"> • Local and scientific plant names • Nature of plants • Wild/cultivated • Medicinal use of the plants • Other uses of plants • Frequency of quotation by informants • Part(s) used as a medicine • Preparation and administration techniques • Effect of plants on patients • Conditions when plants can not be used medicinally • Rituals performed for plant collection • Cost of medicine 	<ul style="list-style-type: none"> • Methods of treatment (examples: ceremony, herbal) • System for diagnosis • System for treatment (beginning to end of treatment) • Beliefs associated with cause of illness • Ceremonies associated with treatment • Method for prevention and protection from illness • Demographics of patients seeking healers • Effect of treatment on the patient • Disease events/decision patterns for patient to seek sources of treatment • Concept of illness and death/dying

Selecting study site and informants

Study site and informants are two fundamental components of descriptive research. The overall location and population must be selected according to criteria established by the researcher. Statistical and sociological methods are used to sample appropriate study sites and informants, and the specific criteria and characteristics of the study site and informants must be detailed (Table 2).

The location for the study site may be selected based on its political or natural boundaries and cultural background. The traditional medicine of the Golan Heights and West Bank region of Israel was documented to add to the regional base of medicinal plant knowledge.¹⁵ Nolan¹⁶ chose the Ozark-Ouachita highlands of

U.S.A. to compare the medicinal plant use knowledge between peoples living in different parts of the mountain area. As unique medical knowledge often results from communities who share similar linguistic and cultural origins, studies may focus on ethnic groups such as the Zay people in Ethiopia.¹⁷

Informants are local experts who offer esoteric (specialized) knowledge or non-experts with exoteric (common) knowledge of the community.¹⁶ A study in New York City, U.S.A. compared the treatment knowledge between Latino traditional healers and biomedical physicians.¹⁸ On the other hand, plant medicines used among non-expert elderly community members in Sardinia, Italy were studied in an attempt to draw conclusions

between their use of medicinal plants and unexplained longevity among male inhabitants.¹⁹

Pioneer descriptive studies that conduct qualitative surveys of broad subject matter are often unselective with study sites and informants. Baird²⁰ compiled an overview of traditional medicines used by expert (traditional healers, medicinal plant traders and non-expert plant users (local people) throughout Laos P.D.R. Another study by Goodman and Ghafoor²¹ documented the medicinal plant knowledge of expert (street vendors, shop physicians, and traditional doctors) and non-expert plants users (desert nomads, tribal leaders) in different regions of Pakistan.

**Table 2.** Some defining variables of a study site and informants.²²

Study site	Informants
<ul style="list-style-type: none"> • Political and geographical location • Flora and fauna • Seasons and climate • Ethnicity of communities • Current economic and development status • Historical data relevant to traditional medicine 	<ul style="list-style-type: none"> • Age • Ethnicity • Religion • Place of birth • Gender • Occupation • Migration to other regions • Kinship • Number of children • Number of people in household • Literacy • Education • Language ability

Methods used for descriptive studies

This section presents some common ethnobotany and anthropology methods which are used to research traditional medicine. The advantages and disadvantages of each method are described and case studies are used to illustrate techniques for combining or altering the methods to meet objectives and reduce the negative aspects of the methods. The methods include, participatory observation, unstructured/open-ended, semi-structured, structured and specialized interviews, ethnographic techniques, inventory, patient logs/health calendars, decision tables, and literature survey.

1. Participatory observation

This technique requires the researcher to participate in tasks with the community of study and observe the community members' interactions and daily life. Data may be

collected by recording observations and asking questions.²³ Participatory observation is considered a highly reliable technique. It reduces the possibility of behavior change among the people of study and offers the researcher an intuitive understanding of the culture which improves his/her ability to formulate more sensible questions.²⁴ However, it often requires a lengthy study period to form rapport with the community, which is necessary to gather valid data.

Voeks²⁵ examined the plant pharmacopoeia used in spiritual healing ceremonies by six traditional specialists in Brazil. This study was especially challenging because the traditional knowledge was highly guarded by healers, and a lengthy correspondence using subtle and unobtrusive methods, such as interviews and participant observation methods, was necessary to document

knowledge. The results included descriptions of traditional mythology, religion, and health principles related to medicinal plant use, a list of plants with accompanying herbarium specimens, documentation of the plants' ritual use and classification according to mythological characteristics, and theories on changes in traditional medicine and medicinal plants as a result of previous migration.

2. Interviews

All descriptive studies of traditional medicine utilize interviewing techniques. Interviews can generate both qualitative and quantitative, data depending on the type of interview used. The interview techniques described here are unstructured, semi-structured, structured and applied interviews.

Unstructured interview

This interview has the appea-



rance of a casual conversation, but both parties are aware that it is an interview. The researcher exercises minimum control over the responses--the informant is led to the topic of the interview but independently develops the content of discussion.²³ Unstructured interviews are most useful when there is ample time on the field and interviewees may be interviewed on many separate occasions. Unstructured interviews can be used to build initial rapport with informants, approach sensitive issues, and develop formal guidelines for more structured interviews and methods.²⁴

An ethnobotanical study of medicinal plants in Portugal chose to use unstructured interviews in order to encourage informants to speak spontaneously and without pressure.²⁶ Each informant was interviewed several times, sometimes with more than one informant at a time. The results of the interview included a list of medicinal plant aromatic plants used and/or known by each informant and voucher specimens. This data was quantitatively analyzed to determine such factors as novelty of plant names, ethnobotanicity index, ethnobotanical richness, ethnobotanical diversity, equitability, and informant consensus factor.

Semi-structured interview

The semi-structured interview is guided by a list of questions and topics that are covered in a particular order, but the interviewer may follow

leads during the interview. This method is most useful when there is little time available on the field and people may not be interviewed more than once. It may also be used to pursue details after specific research questions have been established.²³

The pharmacopoeia of a minority ethnic group in Croatia was surveyed for the first time.²⁷ The study chose to use semi-structured interviews because the study period was short and flexible methods were needed to collect data. Semi-structured interviews were complimented with participatory observations methods to collect ethnobotanical, ethnopharmaceutical, and ethnomedical data from elderly community members. Many of the interviews were recorded with audio and video records and photos. The results included a detailed list of medicinal plants and animals and medicinal use details, and voucher specimens.

Structured interview or questionnaire

Structured interviews use one set of questions to collect data in a consistent and accurate manner and provide fast analytical data from a large study population from which inferences can be made with reasonable accuracy.²² Negatively, the inflexible and impersonal characteristics of structured interviews increase the possibility of bias in the questioning, especially if the questions have not been well developed.

Questionnaires were administered to a sample of 400 women in postnatal period to document their use of herbal remedies for six different groups of health conditions.²⁸ Plants samples were not necessary to identify the plants, since the women used common local plant names. The study compiled information detailing medicinal plant species used to remedy each health condition, the plant part used, medicinal plant preparation and method of use, and the women's basis and result for using each remedy. This study chose to use questionnaires in order to reach a large sample of women and identify the broad scope of herbal remedies used for postnatal health conditions.

Applied interviews

A field interview takes place in vegetation zones, where the informant and/or interviewer may select plants to discuss. This method allows informants to see plants in a natural state, which validates plant identification and encourages new leads and discussion during interviews. The interviewer may choose to mark or number plants prior to the interview in order to quantify the results. However, this method is time-consuming, and the researcher may be limited to the number of informants and plant species used in the sample.²³

Plant samples can be collected from the field and used as props during interviews with informants in the village. This is a fast and useful method for reconfirming or gathering



complimentary data, and allows the researcher to use a higher sample number of informants and plants.²³ Photographs of the plant in-situ may be used to assist the interview, as plants may be difficult to identify once removed from their natural environment.²⁹

A study in Catalonia used both a field and plant interview to qualitatively collect ethnobotanical data on medicinal plants. Interviewers asked community members to assist with collecting plants, and unstructured interviews were conducted on the field. Some interviewees were unable to collect plants in the field, and this difficulty was overcome by using a plant interview to verify plant identities.³⁰

Interviews may focus on a plant group or health conditions to collect specific treatment information. One study documented the medicinal use of *Terminalia* and *Combretum* (Combretaceae) in Tanzania because these plant groups are used often as medicines in Africa.³¹ Another study in Nigeria documented the herbal remedies used to treat trypanosomiasis in domestic animals—a common and deadly disease in Africa.³² Both studies identified medicinal plants to be screened for bioactive compounds, and the results can be applied towards identifying plants with useful medicinal qualities for the use of the community.

3. Ethnographic techniques

Ethnographic techniques collect data by studying and interviewing members of a society over

a long period of time in order to produce a cultural description of a group of people, or ethnography. Ethnographic data is collected with participant observation and unstructured interview techniques, which employ specific types of questions, such as descriptive, structural, and contrast questions. The interviews are recorded verbatim to reduce the influence of the ethnographer's translation. These interviews are linguistically analyzed to identify the semantic definitions, domains, and categories and relationships between terms and phrases and associations with cultural symbols. The end result is an ethnography, which is based on a defined cultural theme.³³ In studies of traditional medicine, the ethnographic approach is useful for revealing insights and analyzing changes and effects within the system of medicine.

A study in Indonesia used ethnographic methods in combination with ethnobotany methods to record data on Alune ethno-medicine.³⁴ Ethnographic methods were especially appropriate because of the sensitivity of the subject matter—incantations are highly guarded by the healers. Traditional healers led field trips to identify and collect medicinal plants and ethnographic interviews were used to discuss and demonstrate the use of plants for medicine. The results included (1) an overall list of illnesses and medicinal plants, including voucher specimens; (2) healing practices involving incantations; and (3) an analysis of

the effect of factors, such as religion change, shift in language, modern priorities on Alune use of incantations, health care practices, and transmission and distribution of knowledge.

4. Inventory

Inventories can be used to create an accurate picture of a community's present medicinal plant use by surveying the materials used for medicine within the community or a given area. Amorozo³⁵ used questionnaires to survey the plants, plant material, manufactured medicine and other therapeutic products present or growing near the household at the moment of the interview. The results of the inventory was complimented with extensive studies on ethnobotany and disease concepts and treatment over fifteen year period and questionnaires recording the socioeconomic position, disease events and use of health facilities by family members over the past six months prior to the study. As a result, a fair picture of the community's health practices and use of medicinal plants was recorded.

5. Free-listing

Free-listing is often used to determine discrete linguistic domains, by asking informants to list items within a category, such as kin, animals, plants, and diseases.²⁴ The length of the list³⁶ and the frequency that an item is mentioned by informants^{24,37} can be statistically analyzed. Informants can be asked to elaborate on or organize the items listed, for example, by ranking a list



of health conditions according to its degree of life threatening.³⁷ The salience, or psychological prominence, of the listed items can be quantitatively determined by analyzing the order of the listed items, since informants tend to list the most significant items first.²² One disadvantage is that the list may not be complete, as it relies on memory recall of the informants.

The ethnopharmacology of intestinal worms in the West Indies was primarily documented with free-listing techniques.³⁹ The researchers considered free-listing to be a useful method for applying analytical techniques and determining important medicinal plants according to salience. The free-listing method was complimented with informal key informant interviews and a health survey of the village. The results produced an ethnography of the ethnophysiology of worms, detailed descriptions of each herbal treatment, and quantitative data on plant use and value.

6. Patient logs/health calendars

Patient logs and health calendars are useful for collecting data on current health treatment activities among both traditional healers and families. This method is advantageous because it offers a description of health problems from the perspective of the family.

A study aimed to describe the orthodox and traditional healing systems among the five largest ethnic groups in inner-city Miami,

Florida.⁴⁰ For four consecutive weeks, thirty to forty families of each ethnic group were asked to keep a health calendar describing their symptoms of illness and the action taken in response. Participatory observation and in-depth interviews were conducted, based on records from the health calendar, to collect data on the etiology of health problems and the family's reasons for engaging in certain health behaviors. The results of the study describe patterns of health care among each group to use multiple treatment resources and recommends how orthodox medical practitioners can meet the needs of ethnic groups. Literature resources pertaining to the ethnic groups' country of origin were used for further insight into health beliefs and practices.

Another study recorded the herbal remedies and methods for treating women's health conditions based on specific patient sessions with six Dominican healers in New York City.¹⁸ Female patients exhibiting symptoms for menorrhagia, endometriosis, hot flashes, or uterine fibroids were examined by healers who used their own diagnostic techniques and prescribed treatments. Afterwards, a follow-up interview was conducted with the patients and traditional healer to document details of the treatment and health condition. The results included, healer profiles, a list of medicinal plants, and various details relating to their use as a medicine

and methods of collected from the wild by healers and Botanicas (local herbal shops).

7. Decision tables

Decision tables are a type of causal flow chart that can be used to predict the kinds of choices people will make under specified circumstances. Young⁴¹ used decision tables to determine how Tarascan people in Mexico decide and choose to treat illnesses. First, possible ways of health treatment were identified as employing a home remedy, native healer, non-physician practitioner of modern medicine or modern physician. Previous ethnographic studies had determined that the decision to use a treatment depended on four factors: (1) degree of seriousness of illness as perceived by the patient; (2) knowledge of an existent home remedy; (3) informant's faith in the efficacy of treatment for an illness; and (4) accessibility to treatment. Then, combinations between the choices and conditions were identified by creating two sets of questions. One set asked informants to describe why they would choose one choice over another and the second set used 'what if...' questions to describe a potential situation, including three of the four factors, and the respondent was asked to choose a treatment. The results were used to create a decision table of the choices and conditions that affect the choices and the possible rules that informants use to make their choices. A negative aspect of this technique is that the



decision models may only predict what informants will say they did to make decisions, instead of what they really do and did.²⁴

8. Literature surveys

A large number of descriptive studies have been published, and literature surveys are needed to summarize and compare data for verification, standardization and application of the results.⁴² Steenkamp⁴³ completed a literature survey of the traditional herbal remedies used to treat gynecological complaints among South African women in order to compile and analyze the types of health conditions that are treated and medicinal plants used for treatment. These results may be used in further descriptive, hypothesis testing, or bioprospecting studies.

Testing hypothesis

Hypothesis testing is vital for evaluating, assessing and validating research of traditional medicine and the resulting data can be used to advance and direct future studies. Descriptive data of the study site and community must be of sufficient depth in order to generate hypothesis.^{44,45} Current hypotheses in studies of traditional medicine have a basis in such paradigms as cognitive, evolution, ecology, anthropology, and plant systematics⁴⁵ and are tested by applying quantitative analysis to results obtained from descriptive studies. The importance of quantitative methods and statistical analysis of interdisciplinary studies

has been recently acknowledged, and a variety of methods has been and is in the process of being developed.¹¹ Three case studies are presented to demonstrate some objectives of hypotheses testing in studies of traditional medicine.

1. Effects of migration on plant use knowledge⁴⁶

This study compares a literature survey of medicinal plants used by healers in Dominican Republic with descriptive data of migrant healers in New York City to test the effects of plant availability on medicinal plant knowledge. The results validate the data collected with the migrant healers and identify important differences and similarities between treatments and treatment methods used by Dominican herbalists in the Dominican Republic and New York City. The conclusions of the study evaluate the effect of migration on medicinal plant use and knowledge.

2. Ecological, cultural and socioeconomic effects on medicinal plant use¹⁶

Nolan¹⁶ used a variety of literature sources in combination with descriptive field research to examine the ecological, cultural and socioeconomic factors that affect the medicinal plant use by herbalists in two mountain zones of the Ozark-Ouachita Highlands. Interviews and free-listing methods were used to collect data on medicinal plants used by herbalists and socio-demographic data of each healer. Literature sources were used to identify and

determine local plants, quantitative differences of species abundance, natural habitat of each species, and variety and dominance of the characteristic flora for each mountain area. The distribution of plant species was compared to ecological records of understory species in each mountain zone to assess the association between vernacular knowledge and availability. Sociodemographic variables relating to the informants and their home communities were examined to identify how regional geography and economy may affect medicinal plant use and knowledge in study areas. The medicinal plants used in remedies were compared to literature resources describing medicinal plants used historically by early settlers, native Americans and folk medicine experts in Britain and Scotland.

The results included (1) a list of medicinal plants and plant applications; (2) informant agreement on medicinal plant use; (3) relationship between socio-demographic data and extent of medicinal plant knowledge; (4) cultural and geographic continuity of medicinal plant use; (5) socioeconomic and demographic variables associated with medicinal plant preservation; and (6) effect of forest composition and regional plant availability on medicinal plant knowledge among the healers.

3. Testing antiquity of medicinal plant use knowledge⁴⁷

Two detailed and independent descriptive ethnobotanical



studies of two communities in Mexico were compared to provide evidence of the antiquity of their medical plant use knowledge. These two linguistically related communities were located in the same area but had had no historical contact or interchange over the past 2000 years. Statistical analysis was used to compare the use of medicinal plant species and cognate names. The results showed a high incident of similarity which proved the antiquity of their plant use knowledge. This is the first study to use a botanico-linguistic approach for understanding plant use in cultures without a written history. It also tests and validates a method for contextualising indigenous plant use knowledge.

Bioprospecting

Bioprospecting objectives have played a large role in developing research of traditional medicine. Once hailed as a potentially vast source for new and improved drugs, pharmaceutical companies have been losing interest in the search for natural remedies since the early 1990's. This change may be related to declarations made at the Convention on Biological Diversity which grants indigenous peoples ownership of their medicinal plant knowledge and applications.⁴⁸ In any case, the present face of bioprospecting research within traditional medicine is changing.

Bioprospecting research now focuses on applying results within the traditional populations who use the

plants. Future studies are encouraged to address ways to integrate, translate and apply the results of medical ethnography and pharmaceutical bioassays towards developing the traditional medicine of these communities. Promising herbal remedies must be studied in more depth and the continued use and sustainable cultivation of medicinal plants should be encouraged.⁴⁴

A study in Mexico used ethnobotanical methods (plant collection and informal interviews) and ethnographic methods (free-listing and semi-structured interviews) to collect data on treatments used for gastro-intestinal diseases.⁴⁹ Eight of the total forty-four plants were mentioned most frequently by interviewees and these plants were selected for bio-assays and antibacterial screening. The results showed that the plants with the highest antibacterial activities also had the highest frequency of mentions by the informants.

Sexually transmitted diseases are a common health problem in communities of Zimbabwe.⁵⁰ Interviews and questionnaires were used to collect ethnobotanical data on medicinal plants used to treat these diseases by both expert and non-expert informants. Out of the fifteen plant species mentioned, six were mentioned repeatedly. All six plants tested positive in antibacterial tests, and further studies aim to isolate and identify the structure of the plants' bioactive compounds.

Both studies use descriptive

research as a basis to select plants for bioactivity screening. Positive results from bioassay screenings of these medicinal plants validate the purpose of bioprospecting—to identify, verify, and upgrade the use of herbal remedies by local people, as well as contributing useful information to modern pharmaceutical science.

The future for traditional medicine research

The structure of this manuscript may honestly reflect the present state of traditional medical research. The section on descriptive research methods is lengthy and detailed, while applied and advanced research, such as hypothesis testing and bioprospecting, is relatively short and undefined.

It is clear that the future for traditional medicine research requires more studies based on hypothesis testing, in order to rigorously examine and effectively use interdisciplinary research methods, develop theoretical domains, and apply results. Truly interdisciplinary research should reflect an equal integration of both the western and traditional concepts of medicine. An ethnopharmacology study, for example, should include sufficient descriptive data to generate and test hypotheses, substantive statements concerning medicinal plant use in the actual human populations, and suggestions for applying phytochemical knowledge towards the formulation of new pharmaceuticals for the benefit of both local and Western needs.⁴⁴



The plethora of descriptive data must be gathered in literature surveys and standardized to facilitate access and efficient use of its contents for further studies. The application of modern information technology and databasing may serve well to reach these goals. Future research should be directed towards advancing mechanisms for improving and implementing equal reciprocity, benefit sharing, and dispersal of research results within indigenous groups who participate in research projects.⁵¹

As enthusiasm for interdisciplinary studies continues to grow, the future for traditional medical research is bright and encouraging. Time-tested traditional wisdom of local people combined with scientific testing and evaluation can only produce a more optimal health care system that both recognizes and respects the benefits of cultural, spiritual, and physical human diversity.

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บทคัดย่อ การวิจัยด้านการแพทย์แผนเดิม: การทบทวนและประเมินเป้าประสงค์และระเบียบวิธีวิจัย อารีกา วีระพงษ์^๑ ชัยนต์ พิเชียรสุนทร^{๑,๒}

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บทความนี้ได้ประมวลเป้าประสงค์และระเบียบวิธีวิจัยของรายงานการวิจัยด้านการแพทย์แผนเดิมที่ตีพิมพ์ในวารสารวิชาการต่าง ๆ และได้ประเมินสถานภาพและทิศทางในอนาคตของการศึกษาวิจัยด้านการแพทย์แผนเดิม ผลการศึกษาด้านการแพทย์แผนเดิมส่วนใหญ่มักเป็นการวิจัยเชิงพรรณนา ผลการศึกษาวิจัยเหล่านี้มักใช้เป็นข้อมูลพื้นฐานในการวิจัยต่อยอด ไม่ว่าจะเป็นด้านการทดสอบสมมุติฐาน หรือการศึกษาพืชสมุนไพรอันมีฤทธิ์ทางชีวภาพที่ต้องการ ระเบียบวิธีวิจัยที่ใช้กันทั่วไปในการวิจัยเชิงพรรณนาเหล่านี้มักได้แก่ การสังเกตการณ์แบบมีส่วนร่วม การสัมภาษณ์ เทคนิคชาติพันธุ์วรรณนา การจัดทำบัญชีรายการ และการศึกษาเวชระเบียนผู้ป่วย บทความนี้จะแสดงตัวอย่างผลงานวิจัย วิเคราะห์เป้าประสงค์และระเบียบวิธีวิจัยของการวิจัยเชิงพรรณนา การวิจัยเพื่อทดสอบสมมุติฐาน และการวิจัยเพื่อใช้ประโยชน์จากสิ่งมีชีวิตแบบยั่งยืน สำหรับการศึกษาวิจัยการแพทย์แผนเดิมในอนาคตนั้น มีแนวโน้มที่จะมุ่งไปสู่การวิเคราะห์ผลการวิจัยเชิงพรรณนาให้เป็นมาตรฐานที่ได้รับการยอมรับทั่วไป การทดสอบสมมุติฐาน การใช้ประโยชน์จากเทคนิคสหวิทยาสาขามีประสิทธิภาพ และการประยุกต์ใช้ผลการวิจัยให้เกิดประโยชน์ต่อทั้งชุมชนดั้งเดิมและชุมชนสมัยใหม่

คำสำคัญ : การแพทย์แผนเดิม, การวิจัยเชิงพรรณนา, กรณีศึกษา