12-1997

Cultural Patterning in the Use of Herbal Medicines *(Jamu)* and Health Seeking Behavior in a Javanese City

Brook Williams Weisman-Ross
University of Tennessee, Knoxville

To the Graduate Council:

I am submitting herewith a thesis written by Brook Williams Weisman-Ross entitled "Cultural Patterning in the Use of Herbal Medicines *(Jamu)* and Health Seeking Behavior in a Javanese City." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Anthropology.

Michael H. Logan, Major Professor

We have read this thesis and recommend its acceptance:

Micheal Betz, Benita J. Howell

Accepted for the Council:
Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Associate Vice Chancellor and
Dean of The Graduate School

CULTURAL PATTERNING IN THE USE OF HERBAL MEDICINES *(JAMU)* AND HEALTH SEEKING BEHAVIOR IN A JAVANESE CITY

A Thesis
Presented for the
Master of Arts
Degree
The University of Tennessee, Knoxville

Brook Williams Weisman-Ross
December, 1997

This thesis is dedicated to my parents.

Without their worldly exposure,
I would not be the individual I am.

ACKNOWLEDGMENTS

There are many people to whom I am grateful for their help and support during the research and writing of this thesis. First, I would like to thank my friends and family for their continued support and encouragement. Among them, I am especially grateful to Andrew Kramer for taking me with him to Java in 1995, so I could begin developing this project. I am also grateful to the W. K. McClure Fund for the Study of World Affairs for granting me much of the funds to return in 1996 to conduct my ethnographic interviewing. In Indonesia, I am deeply indebted to Muslim Muin for his hospitality, Tony Djubiantono for his enthusiasm, Naniek Kasniyah for her encouragement, the West Java Department of Population and Culture, the West Java Department of Health, and the Yogyakarta Department of Health for their interest and support, my research assistants, Nita and Sarah, for their hard work and friendship, and every one of my informants, without whom this thesis would not be possible.

I also give thanks to The Graduate School's Thesis Consultant, Ann Lacava, and especially to my Thesis Committee, Michael Betz, Benita Howell, and Michael Logan. They gave me the encouragement and intellectual stimulation needed to make this project successful. As my Major Professor, Michael Logan has devoted a considerable amount of time and effort into advising my research and reviewing the many drafts of this thesis. For all of this, I am truly thankful.

Finally, my deepest gratitude goes to my wife, Merith. Her unwavering emotional, intellectual, and financial support, both by my side in Java and in the United States, have been invaluable to me for the completion of this thesis.

ABSTRACT

This thesis examines the social patterning in the use of traditional Javanese plant medicines, collectively called *jamu,* within the primarily ethnic Javanese city of Yogyakarta, in central Java, Indonesia. Using both qualitative and quantitative ethnographic research methods, forty-eight common and uncommon types of *jamu* are discussed, and five predictions are evaluated: 1. *Jamu* sold daily by door to door vendors *(jamu gendong)* will most often be preventatives, rather than curatives; 2. *Jamu* sold by sedentary vendors will more often be used for specific illnesses (curatives) than those sold by door to door vendors *(jamu gendong);* 3. Seasonal differences (rainy versus dry seasons) will be observed in *jamu* use patterns; 4. Individuals of low economic standing will use both preventative and curative *jamu* remedies regularly for both minor health concerns and serious illnesses; and, 5. Individuals of high economic standing will generally use curative *jamu* only for disorders that are not effectively treated by Western biomedicine (eg., arthritis, infertility, cancer, etc.). Except for the fourth prediction, all of the above are largely supported by the ethnographic data. Some expectations are found to be oversimplified, and additional factors are suggested to explain evident social variability. With implications for health care delivery and ethnomedical theory, this thesis demonstrates that *jamu* use is not only influenced by provider type and user socioeconomic status, but also by the culturally patterned and seasonally-based occurrence of disease.

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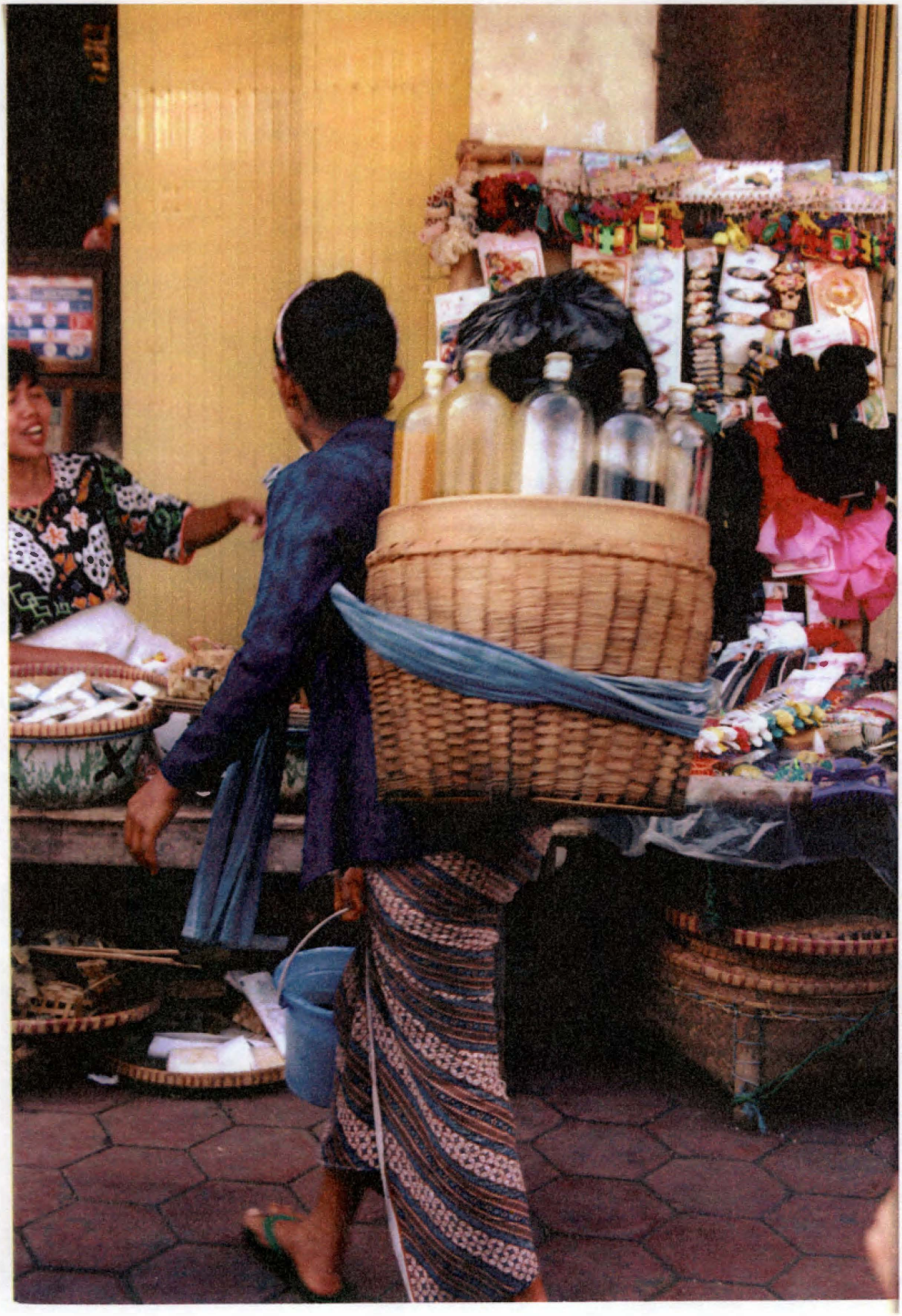
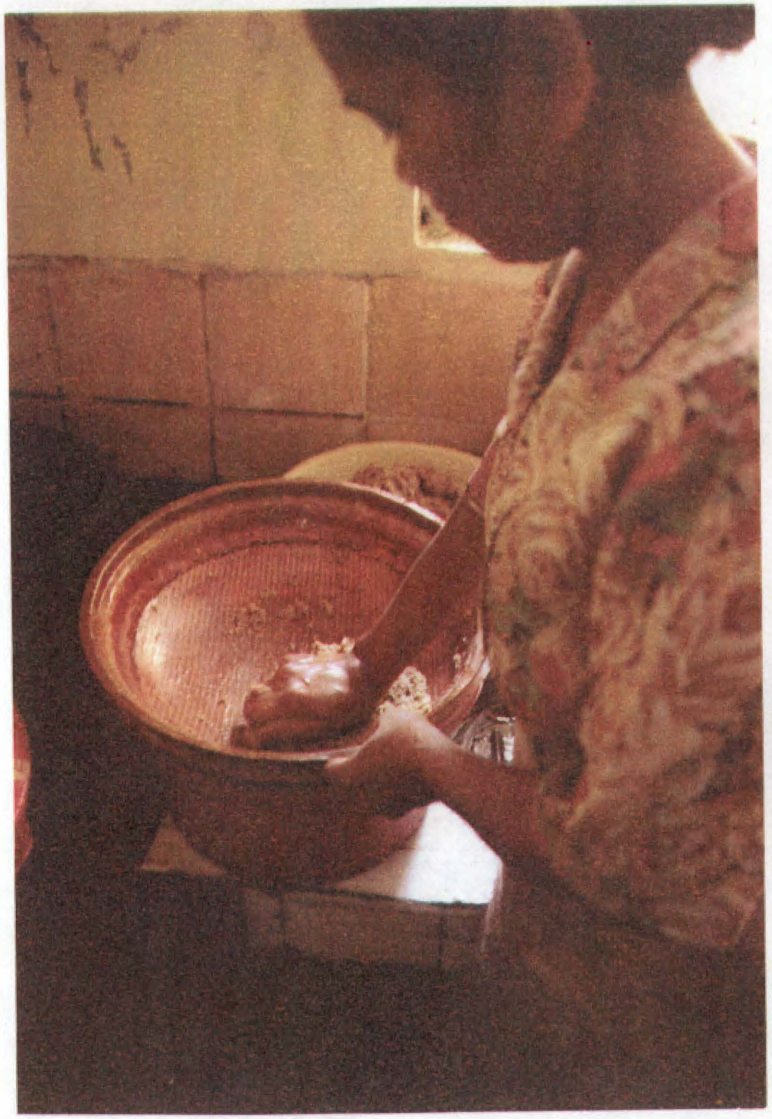
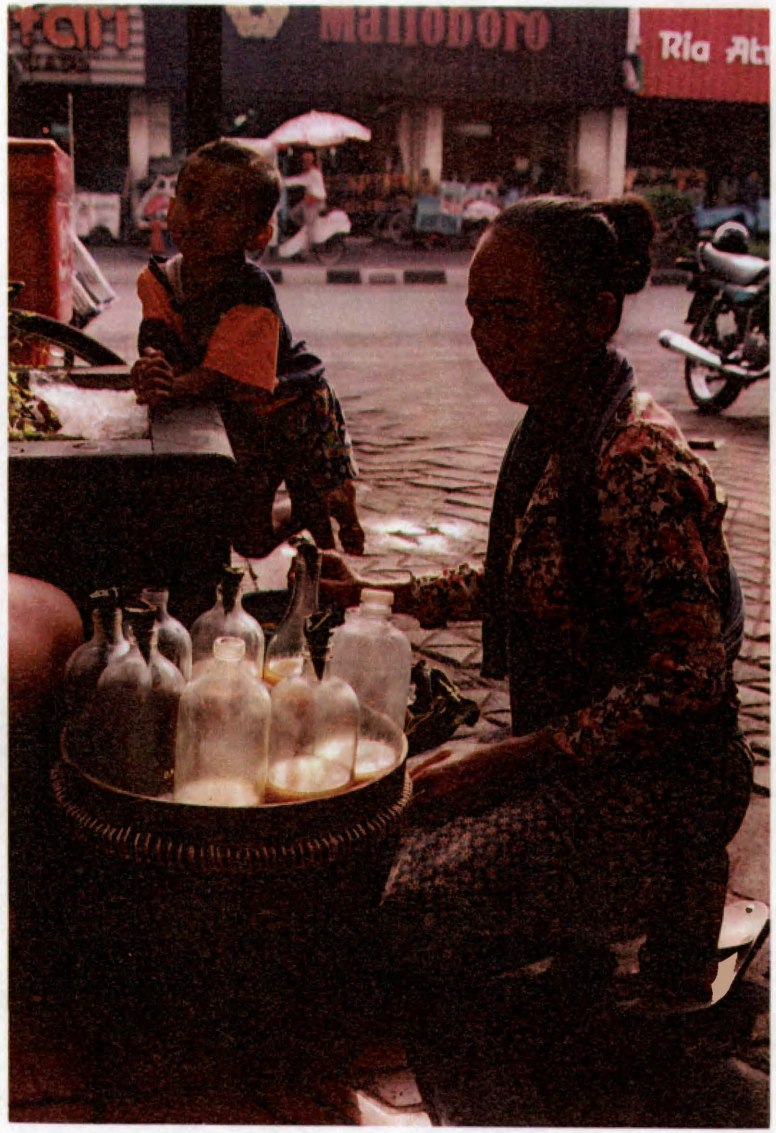
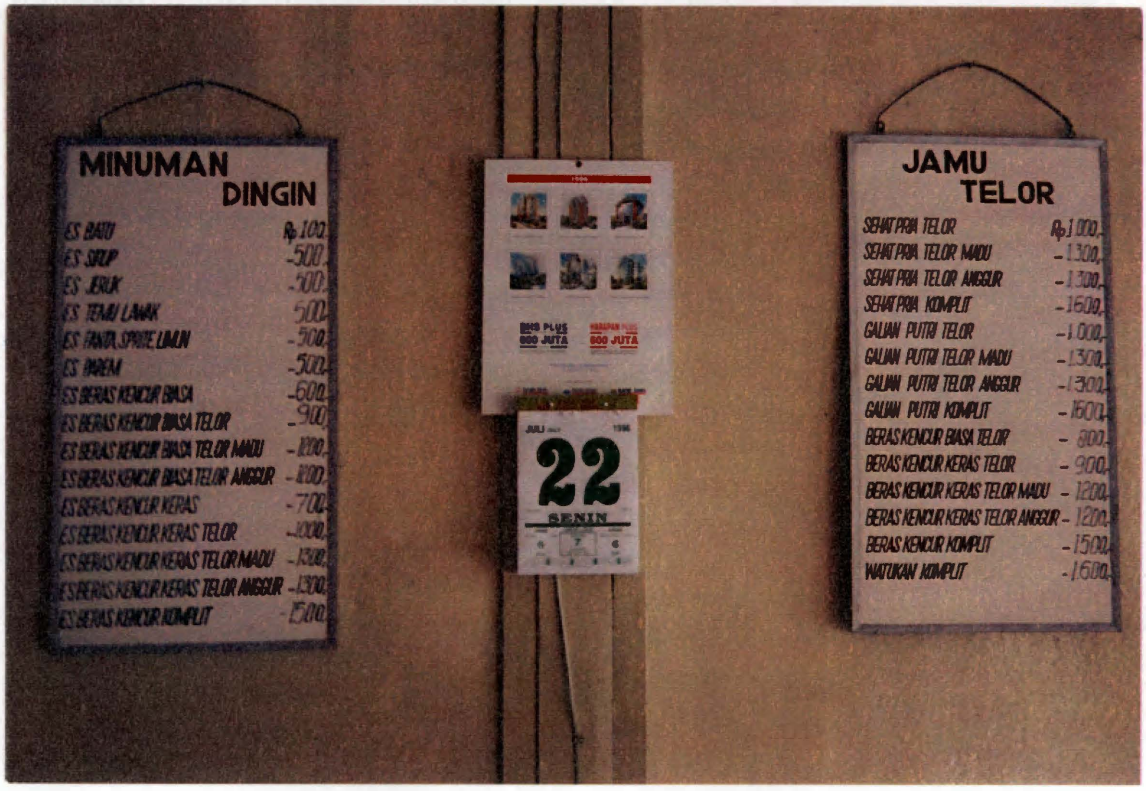
The following photographs were taken by the author between June and August 1996, and are presented to further illustrate aspects of *jamu* preparation and vending practices.






Marlboro


MINUMAN
DINGIN
ES BATU Rp 100,-
ES SIRUP -500,-
ES JERUK -700,-
ES TEMU LAWAK 500,-
ES FANTA, SPRITE, LAIN -500,-
ES PAREM -500,-
ES BERAS KENCUR BIASA -500,-
ES BERAS KENCUR BIASA TELOR -900,-
ES BERAS KENCUR BIASA TELOR MADU -1200,-
ES BERAS KENCUR BIASA TELOR ANGSUR -1200,-
ES BERAS KENCUR KERAS -700,-
ES BERAS KENCUR KERAS TELOR -1000,-
ES BERAS KENCUR KERAS TELOR MADU -1300,-
ES BERAS KENCUR KERAS TELOR ANGSUR -1300,-
ES BERAS KENCUR KOMPLIT -1500,-
JAMU
TELOR
SEHAT PRIA TELOR Rp 1.000,-
SEHAT PRIA TELOR MADU -1.300,-
SEHAT PRIA TELOR ANGSUR -1.300,-
SEHAT PRIA KOMPLIT -1600,-
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GALIAN PUTRI KOMPLIT -1600,-
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BERAS KENCUR KERAS TELOR ANGSUR -1200,-
BERAS KENCUR KOMPLIT -1500,-
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22
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CHAPTER I
INTRODUCTION

Jamu is the general Indonesian term for traditional Javanese plant-based remedies. Most often, these are mixtures of many different plants which are usually either ground into a pulp or boiled to make many different types of teas. *Jamu* remedies are used for a wide variety of purposes, such as treating respiratory illnesses, gastrointestinal infections, or skin irritations. Some are used for beautification or sexual enhancement. While knowledge concerning many *jamu* mixtures is widely shared, some remedies are family secrets passed down through generations. Both these common and specialized plant remedies are prepared and sold by an assortment of vendors. These herbalists, most of whom are women, sell their various *jamu* compounds either as mobile door-to-door vendors or from sedentary locations, such as a market or *jamu* store. Additionally, other types of Javanese traditional healers utilize *jamu* to suppliment their treatments. *Jamu* has maintained a wide, if not growing, popularity in Java despite the increasing availability of Western biomedicine. In this thesis I focus on the use of *jamu* solely for health related purposes.

Anthropologists have demonstrated that the occurrence of disease is not only patterned environmentally and biologically, but disease is also patterned culturally. Both behavior patterns and beliefs influence the onset and interpretation of disease. For

example, research by Rubel et al. (1984) into the Latin American folk illness *susto* has revealed that people with this illness commonly hold deep feelings of failure in the performance of their social roles. Sexually transmitted diseases, such as AIDS, are additionally patterned by societal attitudes towards sexual promiscuity. Not only are diseases culturally patterned, but several anthropologists (eg., Finkler 1985) have suggested that folk-based therapies are also culturally patterned. In this thesis I attempt to demonstrate that the health related uses of *jamu* are culturally patterned. This research is relevant to the ethnomedical literature because it supports other studies which suggest that not only is disease culturally patterned, but health seeking behavior is patterned as well.

To explore patterning with respect to the use of plant-based remedies in Java, I generated seven predictions about the sale and use of *jamu.* These predictions include: 1. *Jamu* sold daily by door to door vendors *(jamu gendong)* will most often be preventatives, rather than curatives; 2. *Jamu* sold by sedentary vendors will more often be used for specific illnesses (curatives) than those sold by door to door vendors *(jamu gendong);* 3. Seasonal differences (rainy versus dry seasons) will be observed in *jamu* use patterns; 4. Individuals of low economic standing will use both preventative and curative *jamu* remedies regularly for both minor health concerns and serious illnesses; 5. Individuals of high economic standing will generally use curative *jamu* only for disorders that are not effectively treated by Western biomedicine (eg., arthritis, infertility, cancer, etc.); 6. *Jamu* use patterns will reflect local epidemiological patterns, with a majority of curative remedies used to treat gastrointestinal disorders, respiratory ailments, fevers, infections, etc.; and, 7. Folk-urban differences in *jamu* use patterns will be seen, with a higher use of *jamu* in rural communities. Due to research limitations concerning time and the availability of epidemiological data from the research location, this thesis will discuss only the first five predictions.

Largely funded by the W. K. McClure Fund for the Study of World Affairs, the research for this thesis was conducted in the city of Yogyakarta, which is situated in southern central Java. Yogyakarta is predominately ethnic Javanese and economically

diverse, yet it retains a strong tradition in the use of *jamu*. From June until August 1996, I conducted participant observations, semi-structured interviews, and structured surveys with fifteen *jamu* providers and over sixty *jamu* consumers. This abundance of interviews was facilitated by my Indonesian language skills, due to two years of prior experience within Indonesia, and by the use of two Javanese research assistants. Data derived from these interviews will be used to evaluate the first five predictions cited above.

Throughout Java, *jamu* is widely used for health related concerns. Demonstrating the patterned way in which Javanese employ *jamu* holds relevance for illustrating the significance of this ethnomedical tradition within the overall health care system in Java. Such patterned use gives an additional voice to the stark inequities the Javanese experience in gaining access to biomedical health care.

In 1978, the World Health Organization (WHO) initiated the goal of "Health for All" (Executive Board of the World Health Organization 1979). To help achieve this goal, WHO recognized the importance of traditional medicine worldwide and identified a number of ways to incorporate traditional healers into its developmental policies and international health programs. However, many governments in developing nations have historically discouraged the practices of traditional medicine.

It must be realized, though, that traditional healers represent a significant resource in any attempt to provide primary health care for all (Hoff 1992: 182). To make health care both accessible and acceptable in Third World communities, maximum self-reliance and community participation in health deployment are critical (Bannermann et al. 1983: 318). However, developing countries often have inadequate resources for providing health services, a lack of trained health personnel, and no readily available means for improving the health of their people. To alleviate these constraints, many governments need to make use of local traditional health practices. Biomedical resources tend to be located in urban areas, often servicing a minority of the population within many nations. For example, in 1983 Ghana had over 80% of the Government salaried physicians working in the larger towns and cities, where only 15% of the total population was located. As a result, there

was a physician to population ratio in the rural areas of 1: 100,000 (Bannermann et al. 1983: 320). Unfortunately, the biomedical institutions that do exist in rural areas are often too expensive for most people to use.

Because of these limitations, it is often the traditional practitioners who are the primary health workers in both rural communities and urban centers. Traditional healers offer many advantages as health care providers. They are accessible, affordable, and trusted by those in greatest need of medical care. In Swaziland, for example, there are over 5,000 traditional healers, creating a healer to population ratio of 1: 110 (Green and Makhuba 1983). Not only are traditional practitioners more accessible and affordable, but use of indigenous plant remedies can help to reduce expenditures for imported drugs (Elisabetsky 1991). Some developing nations are now attempting to integrate traditional practitioners into their biomedical health care systems.

In Java, the situation is similar. The higher costs and limited availability of biomedical practitioners and pharmaceuticals often make these services difficult for many to obtain. By contrast, there are multiple traditional practitioners within almost every village in Java (see discussion in Chapter II: Research Setting). Not only are their services readily available, they are also generally affordable to everyone within the lower classes.

I hope the present research can be used to help develop more enlightened social policies concerning traditional medicine, and fuel support for the further integration of traditional practices into the Indonesian national health care system. Only then can Indonesia hope to provide all its people culturally appropriate services that are accessible, affordable, and, one hopes, effective. Beyond the setting of Indonesia, this thesis can help demonstrate how economic constraints on health care can be mitigated. Through the official recognition and increased utilization of traditional medicine that is efficacious, underdeveloped countries can provide better health care for all.

In this thesis, I attempt to demonstrate that the use of this Javanese ethnomedical system, *jamu,* is culturally patterned. In Chapter II, the Research Setting, I briefly discuss

the Javanese culture, the research setting of Yogyakarta, the demographic and epidemiological patterns of that setting, the limitations of the national health care system, and the availability of traditional practitioners. In Chapter III, the Literature Review, I first explore the cosmological beliefs of the Javanese to ascertain whether the use of *jamu* conforms to the tenets of this larger system. I next outline the Javanese ethnomedical system, particularly in relation to *jamu.* This establishes a base for the analysis of *jamu* use patterns within this thesis. In Chapter IV, the Methodology, I discuss the basis of my five predictions and outline the research methods I used to gather the data for evaluating these expectations. In Chapter V, the Analysis, I discuss my findings and conclusions for each of the five assessed predictions. Finally, in Chapter VI, the Conclusion, I summarize my findings and their implications for applied anthropology and ethnomedicine. Confirmation of these predictions should help to demonstrate that, like the occurrence of disease, health seeking behavior is culturally patterned.

CHAPTER II
THE RESEARCH SETTING

The Indonesian archipelago is the world's largest, comprising almost 14,000 islands. Collectively these islands cover five thousand kilometers east to west and almost two thousand kilometers north to south. The archipelago spans between mainland Southeast Asia, in the northwest, to New Guinea and Australia, in the southeast. Some of the major islands in this archipelago are Borneo, New Guinea, Sumatra, Sulawesi, Java, Timor, and Bali. Located on the southwest edge of the Pacific Ocean's "ring of fire," many Indonesian islands have active volcanos. Because the archipelago straddles the equator, it has a tropical climate. However, the climates and natural environments within Indonesia are quite diverse. Some islands, such as Borneo, contain rain forests. Borneo receives over 230 cm (90") of rain annually. It also lacks a dry season. Other islands have arid savannah environments with very limited rainy seasons.

As a nation, the Indonesian archipelago is the fourth most populated in the world, with about 200 million people. This is more than the combined total of all mainland Southeast Asian nations. Within Indonesia's population, there are over 300 different ethnic groups, and more than 600 different languages and dialects. On the single island of New Guinea, over 300 additional languages exist.

Despite being only 1,500 kilometers long and 500 wide, the island of Java reflects

the wide diversity of Indonesia. While most of Java is extremely fertile and wet, with some areas covered by dense rain forest, the northeast coast and the neighboring island of Madura are both quite arid and rocky. The hot coastal regions contrast with the much cooler mountain plateaus and high volcanic craters. Java has two primary seasons, the monsoon season, generally from December until March, and the dry season, from June to September. Transitional periods between the two seasons exist usually from April to May and October to November.

Java is home to some 115 million people, which is more than half of all of Indonesia's population. Yet the people in Java occupy only seven percent of Indonesia's total land mass. As a result, Java has the highest population density in Indonesia, with an average of about 900 people per square kilometer. The island of Java contains five indigenous cultural-linguistic groups: the Javanese, Sundanese, Madurese, Tenggerese, and the Budui. Many other ethnic populations currently live in Java, notably Chinese, Malays, and people from throughout the Indonesian archipelago.

THE JAVANESE

Of the 115 million inhabitants of Java, the Javanese are by far the most numerous group, both on the island and elsewhere in Indonesia. While the exact number of ethnic Javanese is unknown (Koentjaraningrat 1985: 3-5), they do inhabit almost two-thirds of the island; mostly in central and eastern Java. The Javanese perceive regional linguistic and cultural differences among themselves (Koentjaraningrat 1985: 21-24). These variations roughly coincide with Javanese dialectical divisions, and each typically has different styles of food, household rituals, folk art, and music. My research location was within the Negarigung Javanese culture region, which was defined by the court civilizations of the Yogyakarta and Surakarta sultanates. Koentjaraningrat (ibid.: 21) states that this culture

region "boasts of a four-century old literary history and a sophisticated art of court dances and music, and is characterized by a highly syncretistic religious life, combining elements of Hinduism, Buddhism, and Islam."

ECONOMY AND SUBSISTENCE

For many Javanese, the rural economy and daily subsistence depend mainly on their staple crop, rice. Wet rice agriculture is labor intensive and involves the creation and maintenance of complex terracing and irrigation systems. Other major subsistence crops include corn, cassava, dago, and various fruits. Fishing is a primary means of subsistence and trade in coastal regions. Fish farming is practiced in many northern coastal areas of Java to help supplement protein in the Javanese diet. Many people raise chickens, ducks, goats, and cows for subsistence needs or profit.

Concerning gender roles within a typical Javanese family, women are in charge of overseeing the household and children, while men generally work in the fields or in some type of salaried labor. Women usually clean, wash clothes, prepare meals, care for children, purchase goods, and manage most of the household finances. Rural women in wet rice agricultural communities frequently work in the planting, replanting, harvesting, and preparing of the rice. They are also responsible for family fruit and vegetable gardening. Both rural and urban women often provide additional means of income for their families through craft production, *jamu* vending, market sale of produce, teaching, entrepreneurship, and many other part or full time careers. Javanese men generally do heavier agricultural and production work, such as the clearing and plowing of fields, offshore fishing, large livestock maintenance, carpentry, pedicab *(becak)* bicycling, etc. Many men have careers in the government, businesses, and numerous other professions, especially within urban areas.

The Javanese have a market-based economy, with purchases by means of cash or barter. In addition to agricultural work, manual and skilled wage labor are also prevalent.

Many Javanese also run small cottage industries, such as batik making, weaving, pottery, woodwork, or *jamu* production. In towns and urban locations, people may find many types of jobs: laboring, cooking, driving buses, retail sales, banking, management, and government. In fact, the government is the single largest employer in Indonesia.

SOCIAL AND POLITICAL STRUCTURE

Most rural Javanese live in village clusters with populations from 300 to 3,000 residents. Some urban areas have population densities as high as 9,000 people per square kilometer. The Javanese have a kinship system of bilateral descent, and extended bilateral kin groups often reside in the same village. After marriage, a Javanese couple usually establishes a neolocal independent household, but the couple may initially reside with the wife's family, unless the husband expects to inherit his family's land.

The Javanese sociopolitical system is highly structured. Generally, recognition of relative social status is very important to the Javanese for assuming appropriate social roles and for both giving and receiving proper respect. The social status of a Javanese individual is often dependant on age, occupation, ancestry, spiritual achievement, wealth, education, behavior and etiquette. This system was influenced by the Hindu caste system, but has developed independently over time. It can be seen as having two primary categories: *"alus"* (refined) and *"kasar"* (rough). The social position of a Javanese person can be defined along a generalized continuum from *"kasar"* to *"alus."* For example, the Sultan of central Java's Special Territory of Yogyakarta, an ancient Javanese court center, might be considered the most *"alus,"* while a beggar might be an extreme of *"kasar."* As discussed by many researchers (for example, Geertz 1960: 6; Koentjaraningrat 1985: 231-233), the Javanese often recognize three major categories of social class: the peasants, commoners and blue collar workers; the merchants; and the white-collar bureaucrats and intelligentsia. The Javanese court systems in Yogyakarta and Surakarta have historically provided a fourth class distinction: the nobility.

LANGUAGE

The language of the Javanese people belongs to the Hesperonesian subfamily of the Malayo-Polynesian family (Murdock 1964: 222). The Javanese language is categorized into nine different styles of speech (Koentjaraningrat 1985: 15-19). These nine styles comprise three general forms: formal *(krami),* semi-formal *(madya),* and informal *(ngoko).* These styles of Javanese speech incorporate obligatory distinctions according to differences in status, rank, seniority, and degree of familiarity between the addresser and addressee. The differential use of the styles of speech identifies the relative social position between the speakers. Additionally, there is an extremely formal language used ceremonially and almost exclusively in the sultanate court systems of Yogyakarta and Surakarta. The majority of Javanese have not learned this language, called *Basa Kedaton* or *Bagongan,* which is not one of the nine levels discussed above (Oudemans 1984, cited in Koentjaraningrat 1985: 18). Finally, there is an extremely rude language, called *basa kasar,* mainly used to aggressively insult someone, and it is below the nine general styles mentioned above (Soepomo Poedjosoedarmo 1968: 64, cited in Koentjaraningrat 1985: 18).

JAVANESE RELIGION AND BELIEFS

Influenced by Indic traditions that arrived with Hinduism, in addition to their own unique cultural developments, the Javanese have long had a highly stratified culture, both socially and economically. The Javanese religion has been shaped throughout history by many of the same forces that have changed the Javanese character of life. One theme of Javanese religion, the balance of inner and outer forces, may have roots in Indic, and specifically Sanskritic, traditions (Henry 1987: 110). However, before the Hindu and Buddhist traditions arrived in Java around the fifth century A.D., there existed an

indigenous religion similar to many types of animism still found in several of the more remote areas of Southeast Asia and the Indonesian archipelago. Followers of this indigenous animism were able to syncretize elements of the Hindu-Buddhist and Islamic traditions that arrived over a thousand years apart through trade contacts with merchants, rulers, and coastal kingdoms (Geertz 1960: 5; Wessing 1978: 15-16). Geertz writes that "the village religious system commonly consists of a balanced integration of animistic, Hinduistic, and Islamic elements, a basic Javanese syncretism which is the island's true folk tradition, the basic substratum of its civilization" (1960: 5).

However, Geertz contends that a simplistic unified view of this syncretized religion inadequately represents the complexities that make up the Javanese system. To show how much variation exists in ritual and beliefs, he identifies three emic variants in Javanese religion:

> *Abangan*, representing a stress on the animistic aspects of the over-all Javanese syncretism and broadly related to the peasant element in the population; *santri*, representing a stress on the Islamic aspects of the syncretism and generally related to the trading element (and to certain elements in the peasantry as well); and *prijaji*, stressing the Hinduist aspects and related to the bureaucratic element (1960: 6).

Others, including Wessing (1978), state that these distinctions are not clear cut, but often depend on the specific context in which the individual is participating. He asserts that the distinction between *abangan* and *prijaji* is not a religious distinction but instead is social or political.

Additionally, it should be noted that some Javanese people, though clearly a minority, have converted to Christianity. Catholicism arrived in Java with the brief Portuguese occupation. Protestantism was introduced by the Dutch, who governed the archipelago for approximately four centuries until 1942. In the central Javanese Special Territory of Yogyakarta, over 90% of the population was listed as Muslim in 1994, while less than 9% was reported as either Catholic or Protestant (Yogyakarta Special Territory Province Statistical Office 1996: 145). Further discussion regarding the Javanese religion

will primarily pertain to the variants of the syncretized Hindu-Buddhist-Islamic influences.

Javanese religion often focuses on balance and harmony. This plays a large role in many aspects of daily life, especially health and disease. Just as health can be achieved through asserting balance of cosmic power and inner harmony, an imbalance or disharmony can often cause illness. In the following chapter (Chapter III: Literature Review) I explore this notion of cosmological balance in relation to the Javanese ethnomedical system and disease theories, with particular reference to the use of *jamu.*

RESEARCH SETTING: YOGYAKARTA

I conducted the field research for this thesis in the city of Yogyakarta, which is the capital of the Yogyakarta Special Territory Province in south-central Java, Indonesia. Yogyakarta is a bustling city with many universities and businesses. It is the center of a Javanese sultanate palace system, with many of its traditions. The city and surrounding areas are said by many Javanese to be strong in the classical beliefs, practices, and arts of the Javanese culture. Largely because of this, Yogyakarta is a major tourist destination. Also for this reason, I chose Yogyakarta as a location that contains many *jamu* vendors and where *jamu* remedies are popularly used. Due mostly to time constraints, I only interviewed informants within the urban environment of Yogyakarta.

DEMOGRAPHY

The Indonesian Government (Central Bureau of Statistics 1994: 20-25) reports that the Yogyakarta Special Territory Province had a total of 2,922,612 people in 1992, almost half of which (48.78%) lived in urban areas. Of this total population of the Yogyakarta Province, 48.74% were male, and 51.26% were female. This slight sex-based difference

is reflected in both the urban and rural populations (49.05% male to 50.95% female in urban; 48.44% male to 51.56% female in rural areas). Compared to the urban locations, the rural areas had almost 16% more people under the age of fifteen and 12.5% more people sixty-five years or older. The urban areas had about 10% more people from fifteen to sixty-four years than the rural areas. I suggest that this difference is caused by the draw of perceived employment opportunities in the urban locations.

The Yogyakarta Special Territory Province Statistical Office (1996: 61) reported that 3,124,286 people resided in Yogyakarta Province during 1994. Yearly population figures indicate an increasing degree of population growth in the region. Between 1987 and 1988, the population grew at an annual rate of 0.36%, but between 1993 and 1994, that growth rate had increased to 0.90% annually.

Five administrative regencies exist within the Yogyakarta Province: Kulon Progo, Bantul, Gunung Kidul, Sleman, and Yogyakarta city. Similar to rural/urban patterns in many devoloping countries worldwide, rural areas tend to be the least economically prosperous regions in Indonesia. From my observations, Kulon Progo and Gunung Kidul are the most rural and economically deprived regions in the province. Some parts of Bantul and Sleman are more urbanized and economically prosperous. Overall, Yogyakarta remains the most urbanized and economically affluent region in the province. However, stark economic contrasts are observable within each of these regions.

In the Javanese language, Kulon Progo means "west of the Progo" river, which denotes this region's location in the southwest corner of the province. It borders the Progo River in the east, the Indian Ocean to the south, and is mountainous in its western and northern areas. Lacking any major tourist destinations, Kulon Progo is largely agricultural. It had a population of 435,844 in 1994 (Yogyakarta Special Territory Province Statistical Office 1996: 61), about 92% of which were Muslim (ibid.: 145).

Located against the Indian Ocean in the southeast corner of Yogyakarta Province, Gunung Kidul is similar to Kulon Progo. While it does have some tourist destinations, such as popular beaches, it is still largely rural and agricultural. Gunung Kidul had a

population of 720,643 in 1994 (Yogyakarta Special Territory Province Statistical Office 1996: 61), 97% of whom were Muslim (ibid.: 145).

The region of Bantul lies between Kulon Progo in the west, Gunung Kidul in the east, Yogyakarta to the north, and the Indian Ocean to the south. It produces many crafts for the tourist industry, and has many popular destinations. However, much of Bantul is rural and many of its residents are agriculturalists. Its population was 732,437 in 1994 (Yogyakarta Special Territory Province Statistical Office 1996: 61), almost 97% of which were Muslim (ibid.: 145).

The administrative region of Sleman is in the northern part of the province, mostly on the southern slopes of an active volcano, Gunung Merapi. Southern areas in this region are urbanized and border with the city of Yogyakarta. While many agricultural sectors exist, the region's mountainous north contains popular resort towns and many weekend homes of Yogyakarta's wealthy. Its 1994 population was 783,562 (Yogyakarta Special Territory Province Statistical Office 1996: 61), about 90% of which were Muslim (ibid.: 145).

Finally, the urban administrative region of Yogyakarta, which is the provincial capital, had 461,800 people in 1994 (Yogyakarta Special Territory Province Statistical Office 1996: 61). This number represents almost one seventh of the total population in the Yogyakarta Special Territory Province. Officially, the population of this region in 1994 was about 78% Muslim, 12% Catholic, over 7% Protestant, 2% Hindu, and less than 1% Buddhist (ibid.: 145). From my observations, the city of Yogyakarta is economically stronger and has a larger middle and upper class than any other region in the province.

Because the administrative region of Yogyakarta is mostly urbanized, it has very little agricultural land. Instead, much of its economy relies on Yogyakarta's craft industries, trade, the many educational institutions, and the large governmental bureaucracies. The principal mainstay in Yogyakarta's economy is that of international and domestic tourism, as Yogyakarta is well known as the primary tourist destination in all of Java, and second in Indonesia. Many people have home industries for the tourist market,

such as batik or other folk craft production. Additionally, people have independent enterprises directed toward local consumption, such as tailoring, selling meals from pushcarts, or vending *jamu*. As mentioned above, it is in the city of Yogyakarta that I conducted my research on the patterns of *jamu* use.

YOGYAKARTA PROVINCE EPIDEMIOLOGY

The Central Bureau of Statistics (1994: 26-28) provides some insight into the epidemiological situation in the Yogyakarta Special Territory Province during 1992 (see Table 1 below). It reports that the frequency of people seeking treatment for fevers was slightly higher (11%) in the rural areas than in the urban. The frequency of reported coughs was also higher (20%) in the rural areas than the urban. Alternately, reports of "flu" or "cold" were 40% higher within the urban areas of Yogyakarta Province. The reported frequencies of diarrhea were few, but still 25% higher in the rural areas than the

Table 1: Percent of Total Reported Health Complaints for each Area Type during 1992 (from Central Bureau of Statistics 1994: 26-28).

	Yogyakarta Urban	Indonesia Urban	Yogyakarta Rural	Indonesia Rural
Cough	17.4	17.8	21.8	16.4
Diarrhea	3.1	3	4.1	4
Diarrhea & Vomiting	1.7	1.6	1.9	1.6
Fever	16.8	25.1	18.9	31
Flu/Cold	30.5	22.3	18.4	17.8
Other*	30.5	30.3	34.8	29.3
Total	100	100	100	100
% of Total Population Who Reported a Health Complaint During a One Month Period	22	20.8	25.5	21.1

*Note: Includes reported toothaches, paroxysms, injuries, and other health complaints not specified by the Central Bureau of Statistics (1994).

urban. The combined symptoms of diarrhea and vomiting were rarely reported, but were still more frequent (12%) in the rural region than the urban. Finally, the Central Bureau of Statistics (ibid.) reported that the rural areas of Yogyakarta Province had a higher frequency (12%) than the urban areas of other reported health complaints, including toothaches, paroxysms, injuries, and many other less frequent problems.

The Central Bureau of Statistics (1994: 26-28) also reported on the percentage of the total population of each province who reported a health complaint during a one month period in 1992 (see Table 1). While both areas had relatively high frequencies, the rural population had almost 14% more reports of health complaints than people in the urban areas. However, this regional difference can possibly be explained by the greater tendency of the province's urban people for practicing self treatment (see page 22).

The Yogyakarta Special Territory Province Statistical Office (1996: 164) presents selective epidemiological prevalence data from all five regions in the province for 1994 (see Table 2). Bronchitis was significantly more prevalent in the urban region of Yogyakarta than any of the other regions. The prevalence of measles had a similar pattern, and was highest in the city of Yogyakarta. This is likely due to the greater ease of its transmission within dense populations. Alternately, pneumonia had its highest prevalence outside the city. Hepatitis did not have a clear rural-urban pattern, and its prevalence ratios were low in all five regions.

Prevalent food and water borne illnesses include dysentery and typhoid. Dysentery was most prevalent in Kulon Progo and Sleman, both mountainous regions, but did not display a rural-urban dichotomy. Typhoid also did not show rural-urban differentiation. The prevalence of typhoid was highest in Kulon Progo, a rural region, but was low in the comparatively rural region of Gunung Kidul. Typhoid was also relatively high in the urban region of Yogyakarta. Only two cases of cholera existed in 1994, both in rural and economically disadvantaged regions. Diarrhea was the most commonly reported health problem in 1994. All regions, except Sleman, reported about 200 cases of diarrhea for every 10,000 people. Sleman had almost 242 reported cases per 10,000 people, possibly

Table 2: Total Disease Prevalence Data and Ratios per 10,000 During a One Month Period in 1994 by Region and Disease Type (from Yogyakarta Special Territory Province Statistical Office 1996: 164).

	Kulon Progo	Bantul	Gunung Kidul	Sleman	Yogyakarta
Population	425884	732437	720643	783562	461800
Bronchitis	4576 (107.5)	6738 (92)	5093 (70.7)	11026 (140.7)	11159 (241.6)
Cholera	1 (0.02)	0 (0)	1 (0.01)	0 (0)	0 (0)
Dengue Fever	3 (0.07)	32 (0.4)	6 (0.08)	33 (0.4)	285 (6.2)
Non-specific Diarrhea	8293 (194.7)	14231 (194.3)	13529 (187.7)	18941 (241.7)	9604 (208)
Dysentery	1064 (25)	343 (4.7)	275 (3.8)	1701 (21.7)	350 (7.6)
Filariasis	0 (0)	1 (0.01)	2 (0.03)	12 (0.2)	0 (0)
Hepatitis	42 (1)	22 (0.3)	15 (0.2)	63 (0.8)	42 (0.9)
Malaria*	4092 (96.1)	20 (0.3)	31 (0.4)	247 (3.2)	1 (0.02)
Measles	45 (1.06)	104 (1.4)	44 (0.6)	147 (1.9)	209 (4.5)
Pneumonia	1410 (33.1)	9172 (125.2)	802 (11.1)	1280 (16.3)	326 (7.06)
Typhoid	1277 (30)	271 (3.7)	527 (7.3)	891 (11.4)	769 (16.7)

* Note: Includes all malarial strains reported.

influenced by its cooler and wetter mountain environment.

Mosquito transmitted diseases are also reported for 1994: dengue fever, filariasis, and malaria. Of these, malaria was the most prevalent. Its greatest prevalence rate was in the rural region of Kulon Progo with over ninety-six reported cases per 10,000 people. Bantul, Gunung Kidul, and Sleman each had relatively low prevalence rates of malaria, which were between 0.273 and 3.152 per 10,000. Its lowest prevalence occurred in the city of Yogyakarta with only one reported case of malaria. This suggests that rural residents are at greater risk of contracting malaria than urban residents in the province. Conversely, the prevalence of dengue fever was highest in the city of Yogyakarta, with a ratio of over six cases per 10,000 people. None of the other regions reported a prevalence ratio that was over one case per 10,000. Finally, filariasis had a very low prevalence rate, the highest of which occurred in Sleman, with only 0.153 cases per 10,000 people. No cases of filariasis were reported in the urban region of Yogyakarta.

NATIONAL PRIMARY HEALTH CARE SYSTEM

The Indonesian national government has organized all of its communities into a hierarchical order. Under the national government, there are twenty-seven provinces. These provinces are composed of regencies *(Kabupaten),* each generally having a population of 200,000 to 1,200,000. These regencies are divided into districts *(Kecamatan),* each with populations usually from 15,000 to 75,000. Districts usually have ten to twenty villages *(Desa),* each with between 1,000 and 6,000 people. The Ministry of Health is organized at every administrative level of this governmental hierarchy. Formal governmental programs and services, including the national health programs, often extend down to the village level (Suwandono 1986: 12-13).

In 1978, after the World Health Organization suggested that all governments formulate national health policies, strategies, and plans of action to achieve "health care for all by the year 2000," Indonesia announced its new National Health System policies

(Suwandono 1986: 19). It emphasized rural health services and community participation. Among its important objectives was the reduction of infant and child mortalities. Other programs focused on nutrition, environmental health, communicable disease control, inpatient and outpatient care, village community health development, health education, improvement of management and legal aspects in health sectors, health information, research and development, and health work force development (Suwandono 1986: 20).

Since 1979, health care was made a priority in the national Five-Year Development Plans (*Recana Pembangunan Lima Tahun*, or REPLITA). Subsequently, many of these national health objectives included: improving rural water access and sanitation; improving nutrition, potable water supply, and environmental health; improving access to health services, particularly in the outer islands; improving the equal distribution of drugs, medicines and medical equipment; improving the efficiency and effectiveness of health facilities; developing the health system work force; strengthening health service delivery at the community/village level; improving family health behavior and practices through village level primary health care programs; and establishing programs to strengthen the overall management of the health system (Suwandono 1986: 20-22). The active involvement of the communities and non-governmental organizations has been important to the development of these community-based health programs and services (Suwandono 1986: 22-23).

PRIMARY HEALTH CARE IN YOGYAKARTA PROVINCE

In Yogyakarta Special Territory Province, the national health care system is extensive. However, the distribution of health services within the province is not equitable (see Table 3). Per capita, the more urbanized regions of Sleman and Yogyakarta have significantly more hospitals, hospital doctors, hospital midwives, hospital nurses, pharmacies, drug stores, pharmacists and pharmacist assistants than do the rural regions of Kulon Progo, Bantul, and Gunung Kidul. This difference would not be so dramatic if

Table 3: National Health Care Provider Data and Ratios per 10,000 in 1994 by Region and Provider Type (from Yogyakarta Special Territory Province Statistical Office 1996: 157-165).

	Kulon Progo	Bantul	Gunung Kidul	Sleman	Yogyakarta
Population	425884	732437	720643	783562	461800
Hospital	2 (0.05)	2 (0.03)	1 (0.01)	8 (0.1)	12 (0.3)
Hospital Doctor	22 (0.5)	67 (0.9)	17 (0.2)	615 (7.8)	235 (5.09)
Hospital Midwife	21 (0.5)	6 (0.08)	15 (0.2)	282 (3.6)	128 (2.8)
Hospital Nurse	65 (1.5)	148 (2.02)	94 (1.3)	945 (12.06)	1305 (28.3)
Pharmacy	3 (0.07)	8 (0.1)	2 (0.03)	31 (0.4)	58 (1.3)
Drug Store	0 (0)	1 (0.01)	0 (0)	3 (0.04)	37 (0.8)
Pharmacist	5 (0.1)	7 (0.1)	4 (0.06)	126 (1.6)	62 (1.3)
Pharmacy Assistant	10 (0.2)	28 (0.4)	4 (0.06)	127 (1.6)	328 (7.1)
Community Health Cntr.	20 (0.5)	26 (0.4)	29 (0.4)	29 (0.4)	18 (0.4)
Auxiliary Health Cntr.	57 (1.3)	60 (0.8)	109 (1.5)	64 (0.8)	12 (0.3)
Health Cntr. Doctor	71 (1.7)	108 (1.5)	53 (0.7)	90 (1.1)	41 (0.9)
Health Cntr. Assistant	404 (9.5)	695 (9.5)	835 (11.6)	819 (10.5)	495 (10.7)
Child & Maternal Clinic	79 (1.9)	86 (1.2)	118 (1.6)	92 (1.2)	29 (0.6)

there were significantly more community health centers in the rural regions to compensate. However, the number of community health centers per capita is relatively even throughout all five regions. Only the auxiliary health centers, a smaller version of the community health center, have a much greater per capita average in the rural regions than in the urban region of Yogyakarta, and slightly more than in the less urbanized regions of Bantul and Sleman. The per capita number of medical doctors specifically working in the health centers does not indicate a rural-urban dichotomy, as the two regions with the least amount of health center doctors are Gunung Kidul, an extremely rural region, and the city of Yogyakarta. The per capita amount of health center assistants is relatively equitable among the regions, while the per capita number of child and maternal health clinics is higher outside of the urban region of Yogyakarta. Possibly the most significant difference is that the combined amount of medical doctors from both the hospitals and the health centers has a relatively higher ratio of nine doctors per 10,000 people in Sleman and six in Yogyakarta. This contrasts with slightly more than two doctors per 10,000 people in both Kulon Progo and Bantul, and less than one in Gunung Kidul. This strongly suggests that inequalities between the rural and urban health care systems do exist.

The Central Bureau of Statistics (1994: 46-47) lists the percentage of children under five years of age in 1992 who have been immunized for at least one disease. The national average for all urban regions was 69%, while the urban areas of Yogyakarta Province had an average of 98% of its children under five being immunized. The national average for rural areas was also 69% in 1994, but the Yogyakarta Province rural average was over 91%. While both sectors of Yogyakarta Province surpassed the national averages, the difference within the province additionally suggests an inequity in primary health care delivery exists between the rural and urban areas.

The Central Bureau of Statistics (1994: 33-35) also reports on the use patterns of some major health services during 1992 (see Table 4). It first lists the percentage of the total population who reported having health consultations or outpatient treatments from public hospitals, private hospitals, medical doctors, community health centers, auxiliary

Table 4: Percent of Total Population who were Outpatients or had a Consultation for each Area Type by Place of Treatment in 1992 (from Central Bureau of Statistics 1994: 33-35).

	Yogyakarta Urban	Indonesia Urban	Yogyakarta Rural	Indonesia Rural
Public Hospital	2.2	4.9	2.1	2.1
Private Hospital	1.25	2.5	0.8	0.8
Medical Doctor	15.2	22.3	12.9	8.7
Community Health Cntr.	19.6	22.3	31	28.8
Auxiliary Health Center	0.8	3	5.4	3.5
Health Worker	7.4	9.2	15.3	17.6
Traditional Healer	1.7	2.3	5.6	5.3
Self Treatment	63.4	46.4	44.6	47.7

health centers, health workers, traditional healers, or through self treatment. These percentages are listed for both rural and urban areas of Yogyakarta Province. Public hospitals, private hospitals, and medical doctors were reported as being consulted slightly more often in the urban than in the rural areas of Yogyakarta Province. On the other hand, the community health centers, auxiliary health centers, and health workers were reported as being used more often in the rural areas of Yogyakarta Province than in its urban zones. These patterns reflect those reported above by the Yogyakarta Special Territory Province Statistical Office (see Table 3). Additionally, while a low percentage of traditional healer consultations was reported overall, they were used for treatment significantly more frequently in the rural areas of Yogyakarta Province than in its urban areas. Finally, the majority of the reported health seeking patterns were through self treatment. This was more frequent in the urban areas than in the rural areas of the province.

The low reported frequencies of health consultations with traditional healers, listed in Table 4, may not accurately reflect actual use patterns. A survey of children under five years old during 1992 (Central Bureau of Statistics 1994: 43-45) notes that traditional midwives, a category of traditional healer, were used extensively for facilitating childbirth in Yogyakarta Province (see Table 5). However, I suggest that a rural-urban dichotomy is

Table 5: Percent of Children under 5 years of age, by Region, by Birth Attendant in 1992 (from Central Bureau of Statistics 1994: 43-45).

	Yogyakarta Urban	Indonesia Urban	Yogyakarta Rural	Indonesia Rural
Medical Doctor	19.5	13.9	7.8	2.5
Biomedical Midwife	47.8	57.1	24.9	19.7
Other Medical Personnel	0.4	1.2	0.3	2
Traditional Midwife	32.3	27.1	67	71.9
Family	-	0.3	-	2.8
Other	-	0.3	-	1.2

still evident. While one-third of all reported childbirths in the urban areas involved traditional midwives, over two-thirds of all births in the rural areas of the province were overseen by traditional midwives.

TRADITIONAL MEDICINE WITHIN THE PRIMARY HEALTH CARE SYSTEM

Recently, the Ministry of Health has developed programs to incorporate the benefits of traditional healers and therapies into the national primary health care system. This endeavor is in cooperation with the World Health Organization to achieve its goal of Health for All. In 1992, and again in 1993, the government officially declared that traditional medicines and therapies, which can be medically substantiated, should be utilized to increase the coverage and distribution of primary health care (Republic of Indonesia Department of Health 1995a: 1). National Health Department surveys in 1990 and 1993 indicated that village level communities have an average of five to ten traditional healers each (ibid.). As an example from Yogyakarta Province, a 1990 study of Ngestirejo Village in Gunung Kidul found twenty-nine traditional healers in a population of 6,007 (Department of Population and Culture 1992: 9-13). This contrasts with the combined ratio of only fourteen doctors, midwives, nurses, and health assistants per 10,000 people in the

entire region of Gunung Kidul during 1994 (Yogyakarta Special Territory Province Statistical Office 1996: 157-165) (see Table 3). This comparison suggests that over three times as many traditional healers than health care workers exist in that region of Yogyakarta Province. The government has recognized that these traditional healers represent an extensive but officially under-utilized source of health care and community leadership at the village level. Programs to incorporate traditional medicines, therapies, and healers into orthodox care are actively part of REPLITA VI, the sixth national five-year development plan, launched in 1994 (Republic of Indonesia Department of Health 1995a: 1-2).

Since this initiative began, many programs have been developed. The Department of Health produced an instructional manual for community health workers detailing the treatment of many common diseases and health problems with traditionally used and locally grown plants (Republic of Indonesia Department of Health 1993). The manual has easy to read text, simple tree charts and diagrams classifying the symptoms into disease categories, recipe-style instructions for medicinal plant use, both color photographs and pen and ink illustrations of the plants, and an index of local plant names.

Another program attempts to gather information on all traditional healers concerning education, profession, healing methods and specialty, and knowledge of the community health centers and interest in participating in its training sessions (Republic of Indonesia Department of Health 1995b). Additionally, several major research universities (for example, the Bandung Institute of Technology, Brawijaya University, and Gajah Mada University) have been contracted to test the toxicity and efficacy of medicinal plants and *jamu* remedies. As a result of many of these new programs, I observed some health centers and hospitals (for example, the Bethesda Hospital in Yogyakarta) that have recently established pilot programs using traditional therapies, such as *jamu*, massage, or acupuncture, as alternatives to biomedical treatments.

Finally, the Health Department established guidelines for monitoring the mass production of traditional medicines, such as *jamu* (Republic of Indonesia Department of Health 1994). This program is intended to ensure the health and safety of both large *jamu*

factories and small home industries. However, it does not monitor the production of *jamu* by individual vendors.

CHAPTER III
LITERATURE REVIEW

In the following literature review, I open with a discussion of the cosmological beliefs of the Javanese to ascertain whether, and to what degree, the use of *jamu* conforms to the tenets of this larger system. At the same time, I will outline the Javanese ethnomedical system, particularly in relation to *jamu.* In doing so, a foundation can be set for the assessment of certain predictions advanced regarding the use of *jamu* as a culturally patterned ethnomedical system.

THE JAVANESE COSMOLOGY OF HEALTH

Theories of disease causation and healing throughout Southeast Asia are often centered around concepts of harmony and balance. Both cosmological powers and spirits need to be kept in balance to prevent physical and metaphysical disorder. The actions of humans often play a large role in maintaining this order. To this end, disease is usually thought of as the result of inharmonious or inappropriate behavior on the part of the afflicted individual, their family, their relatives or their neighbors (Laderman and Van

Esterik 1988: 747). These notions of balance and harmony are also prevalent in the religion and philosophy of the Javanese. There exists an elaborate, indigenous system of healing that is associated with the basic cosmology of the Javanese people (Rienks and Purwanta 1988: 75). Their illness categories, treatment strategies, and health maintenance behaviors directly reflect, and are informed by, these cosmological beliefs.

Wessing (1978: 22) defines cosmology as "the delineation of ideas and beliefs about the structure of the universe, as the basis for the values and truths it proclaims." To many Javanese, the universe is seen as a container with finite boundaries that is filled with elements animated by various types of power. These contents are always changing from one state of order to another, and between the two states of order exists disorder. At the center of the universe is a supreme being *(pangeran)* who was the Creator Spirit, but acts as the Regulator of all elements and their powers. These powers can be generally divided into good and evil power. Good power animates the elements that cause life, growth, fertility, and prosperity. Alternately, elements with evil power mainly cause disorder or chaos in the universe, destroying life and growth of living beings, causing sickness, misfortune, calamity, and other disharmonious, imbalanced, and disordered states. But under the control of the regulating Creator Spirit, all of the contents of the universe become neutral (i.e., neither good nor bad) (Suparlan 1978: 196-198; Wessing 1978: 23-25).

Humans are thought to be microcosms of this same system of balance and imbalance of power, with their soul as the regulator between these opposing conditions. In contrast to the macrocosmic universe, the amount of power within human bodies is variable. To a limited extent, individual power can be gained or lost and the capacity to hold power can similarly change (Suparlan 1978: 198; Wessing 1978: 25).

Every element is created with a specific amount of power that has a specific moral character that "fits" *(cocok)* with the cosmic container *(wadah)* of the entity. This applies to humans as well, and is used as a rationale for social differences: some people are born with smaller containers, which have less power of different kinds. Commoners and the lower class are thought of as having smaller containers and less power, while the upper

class or nobles are thought to have larger containers and thus stronger power, making them superior (Suparlan 1978: 199; Wessing 1978: 25). This concept of power fitting its container is important in explaining disorder, bad luck, and illness at all levels: individual, household, village, state, nation, and universe.

ILLNESS WITHIN THE JAVANESE COSMOLOGY

Sickness and misfortune are seen as resulting from a disorderly condition when power is shifted, creating an imbalance. A person may become sick due to an intrusion of foreign power into his body, something that may have destroyed the existing power or damaged the body as the container was forced to hold more power than it could, thus causing disharmony or disorder. Or, a person might have practiced too many evil actions and consequently filled his container with evil power that forced the good power to leave his body (Suparlan 1978: 200-201).

Two major types of illness are distinguished within the Javanese cosmology: "simple" or "natural illnesses" *(lara mriang)* and "serious" or "unnatural illnesses" *(lara nemen)* (Boedhihartono 1982: 21; Geertz 1960: 97; Rienks and Iskandar 1988: 76-79; Suparlan 1978: 207). A third illness category exists, one that pertains to illnesses that arise due to "fate" *(takdir, nasib).* These illnesses cannot, nor should not, be cured by any healer, biomedical or traditional (Boedhihartono 1982: 21). Within Javanese cosmology, individuals can strive to change their accumulation of cosmic power and modify their state of well being. However, the times of their birth and death are fixed and unalterable (Suparlan 1978: 200). The other two disease categories, *lara nemen* and *lara mriang,* are not fixed and are considered alterable.

The *lara nemen* (serious and unnatural illnesses) are attributed to improper social or religious behavior. Serious and unnatural illnesses originate either as an imbalanced relationship between the kind and amount of power animating from the body (Suparlan 1978: 207), or as a disruption between the different "worlds" of existence (simply put, the

real world of mortals and the eternal world of spirits[1]) (Rienks and Iskandar 1988: 76). Seven general types of serious and unnatural illness are discussed illustrating the relationship between cosmology and illness: "damnation" *(kebendu),* "childhood diseases" *(sawan)* caused by evil spirits, "curse" *(kewalat),* supernatural "punishment" *(kesiku),* "seizure" *(kesambet)* caused by an evil spirit wreaking vengeance on a human, spirit "possession" *(kebelisen),* and "caught by black magic" *(keguna-guna and kelebon)* (Rienks and Iskandar 1988: 76-78). Diagnosis is frequently based on the cosmological concepts of guilt and punishment. For this reason, it is believed that only indigenous healers can cure serious illnesses. When biomedical practitioners fail to effectively treat a disease or health problem, a serious illness is suspected and a traditional healer will often be consulted (Rienks and Iskandar 1988: 76).

Finally, the *lara mriang* (simple or natural illnesses) consist of those problems which have apparent and discoverable physical symptoms. They are thought to be caused either by the improper fit of any natural element in the body, or by the deterioration of an organ due to aging, accidents, or carelessness. Symptoms such as stomach aches, diarrhea, toothaches, and *masuk angin* (air inside the body; see discussion below) are easily detected as natural illnesses. These are commonly treated using *jamu* by self-therapy or by indigenous healers. Woodward (1985: 1012) states that these common ailments can be cured by treatments such as *jamu* only if there are no supernatural causes. However, as noted by Wessing (1978: 151), "when these cures fail, however, suspicion arises that there might be supernatural causes at work." Biomedical practitioners can also effectively treat these natural problems with modern pharmaceuticals (Suparlan 1988: 207). Since the simple or natural illnesses can often be cured by both *jamu* remedies and biomedicine, *jamu* is therefore an adequate comparison to biomedicine regarding use patterns. For most simple illnesses, it can be argued that people could seek treatment from either system. Therefore, the choice for one system over the other may be a factor which does not directly

[1] Rienks and Iskandar (1988) also include the womb world of souls before birth as humans.

relate to the ability of each system to treat the illness, but rather is more influenced by other factors, such as economics, accessibility, appropriateness, trust, etc.

"HOT" AND "COLD" CLASSIFICATION

The disease theory of balance between hot and cold works to explain many *lara mriang*. According to this system, "elements" may contain a "hot" or a "cold" composition. The terms "hot" and "cold" do not relate directly to actual temperature, but rather to the properties associated with an item. Plants, foods, and liquids, such as water, are most commonly referred to as having these properties. The human body is again viewed as a container in which a struggle for balance takes place. An imbalance with more "hot" elements within the body would invite the onset of "hot" based illnesses. The opposite is true for an imbalance of "cold" within the body. Therefore, this Javanese classification of diseases into "hot" and "cold" provides "the basis for the Javanese healer to use traditional medicines that have the effect of neutralizing warm or cold temperatures" (Koentjaraningrat 1985: 448).

Variations on this system of classification and ethnomedicine are found throughout Indonesian regions historically influenced by Malay culture. Hart (1969) states that the foundation of Malay medicine is the principle of preserving balance between the opposing bodily forces of hot and cold. Hart, based on field research in a Malay village, observes that:

> They accept the disturbance of the . . . elements in the body as a major cause of illness. Most sicknesses are classified as hot or cold. Food and medicine is classified as hot *(hangat* or *panas),* cold *(sejok),* and regular *(sedang* or *suam).* For hot illnesses, cold foods and remedies are prescribed, and vice versa (1969: 47).

Jaspan (1976: 235) gives an interesting example of the use of this "hot" and "cold" classification by a Rejang healer, named Man Aher, in southwest Sumatra, Indonesia:

> Man Aher's first step in any diagnosis was to determine whether the ailment or disease belonged to the hot or cold variety. The theory underlying such dichotomization contains both metaphysical and somatic elements. Once decided, however, the therapeutic regime accords with one of the two major types. "Hot" illness requires febrifuges such as quinine . . . and cooling drugs. "Cold" ailments, on the other hand, require heat and sudatory treatment.

Folk Illness of Wind Entering

To the Javanese, water is generally considered a "cold" based element. Therefore, a person exposed to too much rain can lose his or her internal balance, and thus develop an illness of excessive "cold." Wind (air) is also "cold," and it can enter the body, especially if the body already contains an excess of "cold," possibly resulting from "sitting in a draft or in wet clothes" (Geertz 1960: 99). This is the cause of the folk illness called ***masuk angin***, or "wind entering." Symptoms of this illness, characterized by headaches, muscle aches, congestion, coughing, sneezing, swelling of the stomach, burping and excess gas, are attributed to having too much air (wind) in the body. Because an excess of "cold" facilitated wind to enter the patient's body, it is reasoned that this illness is best countered by using "hot" based remedies, which can restore the body's equilibrium. Methods to achieve this may include rubbing tiger balm (which is "hot") on the body or by drinking *jamu* that is "hot." Many of these remedies employ chili peppers or ginger, both of which are considered to be "hot."

An example of wind entering among the Javanese is given by Woodward (1985: 1012):

> Among the most common diseases is ***masuk angin.*** The symptoms resemble those of the common cold. Javanese believe that it is caused by a chill or the entry of too much wind into the mouth or nasal passage. It is for this reason that it is common to encounter a group of Javanese wearing jackets huddled together in a crowded bus or train with all of the windows closed, even when the temperature is over 100 degrees. The traditional cure for ***masuk angin*** is a *jamu* made from salt, lime juice, and ground peppers, though imported cold tablets such as Dristan are increasingly popular in urban areas.

Jaspan (1976: 235-236) gives a similar example of this folk illness from southwest Sumatra:

> If a patient has a severe chill, with thin nasal mucus and a painful head and joints, he is diagnosed as "entered by wind" (*masuk angien*), a concept that includes catching a chill or draught, or getting a cramp or a stiff neck. All such ailments require heat treatment, and the patient is instructed to stay indoors near a fire and to take hot drinks and sudatory drugs. The absence of sweat in a patient "entered by wind" is regarded as a negative, and sometimes dangerous, symptom. The sudatory dosage may be increased, and the patient brought nearer to the fire. When *météng* or free perspiration begins, there is general relief, and a belief that the malady will take a natural course leading to recovery in a few days.

According to the Javanese, excess "heat" in the body often leads to localized pains (Geertz 1960: 99). Fever is a common example of a "hot" based disorder. The excess "heat" causing a fever is treatable by restoring the balance of valences within the body. A "cold" based *jamu* is typically used to treat a fever.

Excess "cold" causes bodily fluids to stop or slow, while an overabundance of "heat" causes them to liquify and flow. For example, "coldness" causes mucus to coagulate creating nasal congestion. It also slows blood flow in muscles, causing cramps and rheumatism. "Hotness" may cause fevers, high blood pressure, profuse sweating, and other disorders attributed to "flowing." "Coldness" can also influence fertility because a "cool" womb retains the "seed" of a man. Conversely, a "hot" womb is generally judged to be infertile because it causes the male "seed" to "flow" out. Similarly, excess "heat" can cause a fetus to "liquify" and "flow" from the uterus, thus producing an abortion or miscarriage.

Taking precautions and preventative measures to maintain the body's internal balance are often regular parts of one's daily life. A person may regularly drink a "hot" or "cold" *jamu* to maintain this balance, often depending on the relative valance of environmental factors, such as exposure to "cold" rain or to the "hot" sun. A "hot" *jamu* will be taken to counter a "cold" imbalance, and a "cold" *jamu* will be employed for correcting excess "heat." Wikan (1990: 179) gives a similar account of this daily practice

among her informants in Bali:

> "Balinese observe a number of such practices that manifest persistent concern with health: they drink daily the sweetened Javanese *jamu* or bitter Balinese *loloh* - traditional herb medicine to counter a variety of plagues; they try to avoid exposure to wind, sun, and cold, seek a properly balanced intake of hot and cold foods, bathe at least twice a day, and take daily medicines "to stay always young" (and strong) (*jamu awet muda).*"

Jordaan (1985: 228) points out that rather than "hotness" and "coolness" being in binary opposition, it should be conceived of as more of a three-dimensional model with the normal state of health as being an intermediate state associated with balance and harmony. "Hotness" and "coolness" are health disturbances on opposing sides of health. Koentjaraningrat (1985) also supports this model by saying that this Javanese dual system of symbolic classification can be viewed as a threefold system. He suggests that "the third category is the centre category which neutralizes the two antithetical elements and which keeps them balanced" (ibid.: 449).

Arguing for a Great Tradition of disease theory that extends over the world, Hart (1969) argues that this disease theory originated with the Greeks as the classical concept of humoral pathology. He asserts that the Greek system was diffused by the Arabs into Spain and Southeast Asia with the spread of Islam. Hart also suggests that the Indic Ayurvedic and Arabic systems may have combined with Chinese disease theories, also spreading into Southeast Asia. The combination of these influences with indigenous beliefs created unique localized extensions of the classical humoral theories. However, Jordaan argues that these Malay and Indonesian "hot" and "cold" distinctions probably trace back to an older, Austronesian medical tradition rather than from Greek, Indian, or Spanish/Portuguese Galenic humoral medical theories (1985: 206).

Within the cosmology of the Javanese and many other cultural groups in Java, the universe is seen as a balanced whole and traditional customs are seen as a way to live without upsetting this balance. But when this balance is broken, the results are usually

negative for the individual and often also for the community (Suparlan 1978: 196-202; Wessing 1978: 151). The Javanese religious systems are integrated into almost every aspect of daily life, and are centered around the principle of maintaining cosmic balance. Disease theory is also based on this religious cosmology. Local disease theory includes not only the "serious" or "unnatural" illnesses, but also the "natural" illnesses, such as "hot" or "cold" illnesses. It is important to realize that these "natural" illnesses are still linked to the supernatural. Jordaan states that "in native thought about causes it is very well possible that the natural conditions which triggered off the disturbance of bodily equilibrium are themselves influenced by supernatural circumstances" (1985: 226). By understanding these beliefs, the indigenous system of healing can then be recognized as logically addressing the causes of illness and promoting the maintenance of health.

THE JAVANESE ETHNOMEDICAL SYSTEM OF HEALING

JAVANESE HEALING SPECIALISTS

When home treatment fails in situations of "natural" or "unnatural" illnesses, a specialist is often sought to help restore the balance of opposing qualities. These specialists act as mediators who attempt to create order out of a disorderly state. Such specialists have the ability to control good and evil powers, and to accumulate these powers in order to redistribute them to others in need. The generalized term for any type of individual who is engaged in traditional healing to control such powers is *dukun* (Suparlan 1978: 201-202). Woodward (1989) notes that *dukun* are often simultaneously feared and respected due to the types of power they control. "The reason for this is that the types of power that can

cure disease can also control it" (ibid.: 233).

The term *dukun* is used to refer to a diverse array of part and full time practitioners (Geertz 1960: 86; Jordaan 1985: 161; Koentjaraningrat 1985: 422). A *dukun* may practice one or more of many different skills in creating this internal cosmic order and restoring balance, and each may have their own specialty or combination of specialties. Geertz (1960: 86) listed the following types of Javanese *dukun:* midwives, masseurs, mediums, circumcisers, ceremonial specialists, wedding specialists, numerical diviners, sorcerers, metallurgical specialists, incantation experts, and herbal *(jamu)* curers.

Other researchers have suggested differing lists of the types of healers, but these may often be a result of either semantic differences or not having encountered every type of specialist in their respective research locations. For example, Jordaan (1985) omitted several specialists mentioned by other authors because either his Madurese informants did not accord the status of *dukun* to some of those specialties, or because he was not able to obtain enough reliable information on them in his area. Interestingly, though, Jordaan does discuss types of *dukun* that were not mentioned by Geertz (1960): thief-magician, fishing-magician, snake-bite healer, needle-magician, charm healer, healer of child diseases, and bone-setter. A governmental list of indigenous healers also includes inner energy healers, tooth filers, and acupuncture specialists (West Java Department of Health: 1995). Many of the differences in these lists probably do not reflect actual emic differences, but rather reflect different etic categories employed by various researchers and institutions for the same domain, that of *dukun.*

Many of the specialties might emphasize the use of magic and the involvement of the supernatural (e.g., sorcerers) over the physical and medical, or vice-versa (e.g., masseurs). But rather than imposing a clear dichotomy between magical and medical practices of the *dukun,* a graded continuum between the two should be used to understand the range of differences in traditional healing practices, as suggested by Jordaan (1985: 162-163).

In this continuum, Jordaan (1985: 162-163) places *jamu* specialists closest to the

medical pole, and magico-religious specialists closest to the magic pole. The other healing specialties are not distributed at a relatively even rate inbetween the two poles. Rather, they appear to cluster near the ends of the continuum, particularly at the pole involving magic. At this pole he places the magic-religious specialist, divinational expert, thief-magician, fishing-magician, snake-bite healer, needle-magician, soothsayer/spirit medium, exorcising magician, exorcising expert and spirit medium, sorcerer, and charm healer. It is important to note that he does attribute varying degrees of the medical component to these vocations, despite being concentrated closer to the magical side. For example, most healers do use a number of methods, and many of them do incorporate plant mixtures into their practices.

Jordaan (1985: 162-163) places the indigenous healer types of traditional midwife, healer of child diseases, masseur, bone-setter, and vendor of herbal medicines (*jamu*) closer to the medical pole, but each with a separate degree of "magical" content. But since the natural world is conceived of as permeated by the supernatural, Jordaan points out that the operation of natural forces is seen as being dependant on supernatural circumstances (1985: 227). In regards to *jamu*, while many of the herbal ingredients are considered "hot" or "cold," some also carry religious symbolic significance. Again, the many differing healing specialties (including *jamu* vendors) cannot be grouped strictly as magical or medical.

The contemporary roles of *dukun* are effectively summarized by Suparlan (1978: 206):

> In the eyes of the present Javanese, a dukun is seen as a specialist in exercising good and evil powers for certain good or evil ends. These are: to heal sick persons (either caused by natural or by supernatural sickness); to neutralize haunted places; to give added powers to someone who is in need of being loved by the opposite sex; or for fortune and well-being, for strength and immunity from being struck by weapons; for protection from being sorcerized by others; and to practice sorcery on others.

Yet even within these common characteristics that span across specializations, there are noted perceptional differences in the abilities of the healers. Some are widely revered as possessing great power, while others may only have local reputations for their talents.

Rienks and Iskandar (1988: 79-81) present a four level hierarchy of healers within the general category of *dukun*. The placement of any given healer within this hierarchy is idiosyncratic and therefore considerable variability exists in the mind of the public.

First, the highest and most elite group of *dukun* is the *kamisepuh.* They usually are elderly villagers and are highly respected over a wide geographical region. Usually they have mastered a wide range of skills, can give advice on all sorts of matters, and have strong inner characters. Also, they are financially well off and do not require payment, although compensation is often given. Second in this hierarchy is that of *kasepuhan.* These are nonpaid advisors who are well skilled and highly respected within their localities. A more specific use of the term *dukun* is applied to the third level in the hierarchy. Here, *"dukun"* refers to paid advisers and healers who possess a medium level of competency in several of the major skill areas, such as massage, mixture of herbal remedies, numerology, and reciting magical spells.

Finally, *tukang*, the lowest level of specialization, refers to people who have some competency in only one or two of the above mentioned techniques of healing, but do not exert control over the cosmic powers. These people may often be proficient in massage or herbal remedies, but cannot recite ritual spells. The word *tukang* actually translates to "skilled laborer" or "craftsperson," illustrating the emphasis on a single specialization, but not necessarily one that only divinely inspired people can practice.

Jordaan (1985: 164) discusses the patterns that create the distinctions between *tukang* and the three higher levels of *dukun.* In reference to his continuum between the magical and medical poles of traditional therapy, he states that the closer a healing activity is to the magical pole, the greater a *dukun's* control of cosmological powers. These powers may include the ability to see, hear, or do "wonderous" things, such as preparing medicinal water from plain water solely by praying to it. The further away a given healing strategy is from this magical pole, the greater the reliance on natural sources for healing. Jordaan also notes that the closer to the medical pole a given therapy is, the greater the tendency for people to use the term *tukang* (craftsperson) instead of *dukun.*

Vendors of *jamu* are usually placed into this former category. They are called *tukang jamu.* They usually do not rely on mystical gifts. Instead they sell remedies they learned from other skilled vendors. Jordaan writes that:

> Neither the Javanese nor the Madurese vendors profess supernatural calling or make use of incantations. At most they make use of *kotèka*, relatively simple magical directives such as number and word symbolism. . . . This seems to be the main reason for their being called *tokang* (*tukang*), instead of *dukon* (*dukun*). Nevertheless, although not being accorded the status of *dukon*, they are included here in the list of indigenous healers, because in offering their services they clearly meet a medical need. Not only is their knowledge of herbal medicines and recipes more elaborate than that of the average village woman, they also have the contacts outside the village to procure the herbal ingredients that are not available locally (1985: 194).

While most *jamu* healers are referred to as *tukang*, some are classed as *dukun.* This is usually because the latter possess other skills outlined in Rienks and Iskandar's hierarchy. For example, one of the *jamu* healers I interviewed, Pak Wiro (a pseudonym), often uses *jamu* to treat people for cancer, and his patrons specifically stated that they came to him for his *jamu.* However, I observed that he usually recites a silent prayer over the *jamu* as he gives it to each person. The significance of this prayer should not be underestimated, as many people referred to him as a *dukun*, not *tukang*. People also came from all over Indonesia specifically to receive his treatment. Moreover, he stated that his knowledge of which plants to use in his *jamu* was divinely given to him by God in a dream. This healer receives a minimal payment for the cost of the *jamu.* He only treats health problems of a physical, not magical, nature. In consideration of this, he fits well into Rienks and Iskandar's third tier of *dukun*. This also fits the distinctions made by Jordaan, such as: "the title of *dukon* (*dukun*) indicates that the person's skills are seen as a special ability that is hereditary and/or supported by a potent mantra or prayer" (1985: 191). Pak Wiro apparently has a special ability, one further elevated through prayer.

Finally, Koentjaraningrat (1985) provides some historical depth to Javanese traditional healers and *jamu.* He suggests that the earliest Javanese books were written three or four centuries ago and appear to be notes on medicinal plants, medicines, and

healing magic. He states that:

> In the nineteenth century, the native medicines for diseases, for example, smallpox, cholera, leprosy, and malaria, gradually fell into discredit because of the advance of Western medicine, although many remedies for other serious diseases like the plague, typhoid, children's diseases, poisoning, and insanity, or less serious illnesses such as general aches, regular pains, skin diseases, etc., are still very much in use in the average rural as well as urban households (1985: 418).

Koentjaraningrat concludes that the Javanese cannot totally abandon traditional healing. "Even Javanese who are regular visitors of physicians still demand the services of the *dukun* healer when their sickness concerns certain types of diseases or when physicians fail to cure them" (1985: 426). While it may continually experience change, the Javanese system of traditional healing remains a strong and integral source of health care within Java today.

JAMU REMEDIES

In his discussion of Madurese herbal medicine, Jordaan (1985: 203) states that herbal cures are important to folk-medicine, and are used for a large variety of physical disorders and conditions. He identifies four major domains in which the use of herbal potions and ointments is prominent: "(a) for minor ailments, which are usually treated at home by the patient himself or his family, like common colds, headaches, stomach-aches, fevers; (b) for febrile skin diseases, like measles, chickenpox, mumps; (c) in the field of sex and eroticism; (d) during pregnancy and the postpartum period" (1985: 203).

For my purposes, I categorized the many types of *jamu* in a different way: preventative, curative, and situational. Preventative *jamu* remedies are often those that people take on a regular basis to maintain their health and energy. These are often drinks that people take to maintain the correct balance between "hot" and "cold." For example, in the hot, dry season many people and vendors report a preference for "cold" *jamu*, such as *Kunir Asam* (turmeric and tamarind based), to maintain the bodily balance and health. The

opposite is commonly reported for the rainy season, which is considered "cold" both because of the cooling temperatures of the monsoon and because of the "cold" valence of rain. During this season people use *Cabe Puyang* (a chili-based *jamu*) to add "hot" elements to the body. This is done to counter the "cold" associated with rain and to prevent such "cold" illnesses as *masuk angin* (wind entering). A great many of the preventative *jamu* remedies are associated with maintaining this balance between "hot" and "cold."

Curative *jamu* includes a wide range of plant mixtures used to treat coughs, asthma, skin diseases, kidney problems, venereal diseases, hemorrhoids, dizziness, jaundice, bronchitis, beri-beri, ulcers and even cancer. *Jamu* is used to treat a wide assortment of differing symptoms and diseases. Many *jamu* remedies are made for specific illnesses, while others have particular properties (such as "hot" or "cold") that allow them to be used for many different conditions. For example, *masuk angin*, as discussed above, may be prevented by taking "hot" *jamu* to maintain balance, but once a person has this condition, it may be treated by using the same *jamu* to restore the body back to balance and health. In this case, the property of the *jamu* allows it to either be preventative or curative, depending on its usage. An example of *jamu* used strictly for a specific disorder is *Keji Beling*. This is a common remedy for kidney stones. *Keji Beling* translates to "vile (or mean) shards (of glass)," a clear reference to the pain associated with kidney stones.

There are also *jamu* remedies that are "situational." These are herbal mixtures that are utilized as tonics. One example pertains to the many *jamu* remedies used as sexual enhancers. These range from *jamu* intended to tighten vaginal elasticity, to *jamu* remedies that are taken to give, for both males and females, extra sexual vitality. Strength and energy enhancing *jamu* are also used by laborers to aid in their work endurance. *Jamu,* such as *Galian Singset* (which contains extracts from *Guazuma ulmifolia*, *Curcumae aeruginosa*, *Curcumae domestica* and some other plants [Soedjito and Sorensenn 1996]), is often used to reduce weight and to maintain a slim, attractive figure. Many *jamu* mixtures are used for beautification purposes, such as softening and lightening the skin or for hair shampoos.

A diversity of other *jamu* compounds, ones used to regulate or facilitate female menstruation, pregnancy, child birthing, and lactation[2], are situational rather than preventative or curative. Different *jamu* remedies are used throughout the menstrual cycle to regulate its ease and punctuality. *Jamu Terlambat Bulan* ("late in the month *jamu*" often contains species of *Cinchona, Zingiberis, Alstonis, Piper,* and other plants) is used to start menstruation when it is even a few days late. Higher doses of this *jamu* are reported by many informants as often being consumed to induce abortions and restart the menstrual cycle. Interestingly, some plants (ie. *Montanoa tomentosa*) have a proven oxytocic effect (Ortiz de Montellano 1990: 185-186). There are various *jamu* remedies used during the different stages of pregnancy. Others are taken just prior to childbirth, to facilitate this process. Finally, some *jamu* mixtures, such as *Uyup-uyup* (no translation found), are employed to increase the quantity and quality of breast milk. A study in Semarang, Central Java (Van Esterik 1988: 752) found that 93% of all currently breastfeeding women actively tried to increase their milk supply. Of these, 81% regularly drank *jamu* to accomplish this. Because *jamu*-making is mostly a specialty of women, it is not surprising to see *jamu* employed for female health comprise a large share of all remedies.

In the analysis that follows, *jamu* remedies will be classified as either "preventative" or "curative," depending on their purpose of use. The category of "situational" *jamu* will not be used. For example, using *jamu* to facilitate a pregnancy can be considered "curative" because it is a remedy to a specific problem (low fertility). Similarly, *jamu* used to prevent severe menstrual cramps can be categorized as "preventative." In these and many other cases, categorization for methodological purposes is largely dependant on the qualitative rationale given for using a particular *jamu.* In some cases, however, a *jamu* remedy may hold both curative and preventative functions. Additionally, the rationale for taking some remedies was not always clearly stated by my informants. *Jamu* falling into these last two categories can be labeled as "either" or "neither," depending on the reported

[2] See Jordaan (1985) and Niehof (1988) for in-depth discussion of the vast system of *jamu* remedies used for females.

functions.

It is also important to mention that some *jamu* remedies are age related. There are *jamu* remedies specifically for young children, just as there are *jamu* remedies for older people. For example, *jamu Sawan Tahun* (epileptic years *jamu*) maintains health and treats rheumatic pains in older people. And *jamu Nafsu Makan* (eating appetite *jamu*) is given to many small children when they loose interest in breastfeeding or eating. Its purpose is to increase their appetite to its normal state. Again, many of these remedies are intended to counter a "hot"/"cold" imbalance, thus restoring one's health. Jordaan (1985) points out that there are differences in the "hot"/"cold" physiological make up of people. He states that "women, as a class, are considered slightly colder than men, while babies, children, and older people are colder than others" (ibid.: 213). This helps to account for age and sex specific *jamu* remedies. Excess "cold" is believed to cause blood coagulation and impair normal circulation. This is believed to affect the muscles and cause rheumatic pains and spasms, thus possibly explaining the otherwise curious title of *Sawan Tahun* (epileptic years).

The specific name for a *jamu* remedy may be based on its major botanical ingredients, its specific purpose, or its taste. *Jamu Temu Lawak* is named for the plant *Curcumae xanthorrhiza*, which is its main ingredient. *Terlambat Bulan* ("late in the month") or *jamu Nafsu Makan* (eating appetite *jamu*) are examples of remedies named in reference to their purpose or the condition being treated. *Jamu Pahitan* is a name derived from the remedy's taste. It means "bitter *jamu*."

Occasionally I encountered a *jamu* for which no formal name was given. These remedies were usually highly regarded trade secrets, and only their medicinal functions would normally be discussed. One of these unnamed *jamu* remedies was a special heart disease mixture prepared by a *dukun* that specialized in heart, liver, and kidney disorders. A nameless *jamu* was one used by another *dukun* (Pak Wiro, discussed above) to treat people with cancer. This was the only *jamu* that this man used in his practice, and, as stated above, was said to be a gift from God. When I discuss *jamu* remedies such as these,

ones that are beyond the normative cannon of *jamu* remedies and are usually unnamed, I refer to them as "special" *jamu.* By classifying a *jamu* as "special" or "specialized," I intend to convey that it is not a type of remedy that can be purchased from any *tukang jamu* vendor or *jamu* store. Rather, it is highly restricted in its medical function and it is usually a trade secret of the *dukun* who prescribes it.

I have excluded from this discussion reference to factory-manufactured *jamu.* Many *jamu* remedies are produced in mass numbers. They are sold in package or pill form. Packaged *jamu* is now a multi-million dollar industry within Indonesia. By the mid 1980's, there were over 350 factories which were producing five million doses of *jamu* daily (Afdhal and Welsch 1988: 149). These manufactured *jamu* remedies usually come in a packet as powder, which is then stirred into water to make a cold or hot tea. More recently, *jamu* pills have been created to appeal to a "modernized" market. Many of these products are for sex, eroticism, and beautification, but medicinal remedies are also produced in powdered or pill form. In the study mentioned above on breastfeeding women, Van Esterik (1988: 754) reports that, among the breastfeeding mothers she surveyed, 59% drank *jamu* remedies prepared by vendors, 30% used packaged *jamu* remedies, and 12% boiled the herbs themselves.[3] Van Esterik's figures clarify how important factory-made *jamu* has become. Interestingly, I observed that some people will add factory-produced *jamu* to traditional *jamu* for extra potency.

JAMU HEALERS

Many Javanese have practical knowledge concerning what plants to use for home remedies. People gather the plants for personal *jamu* preparation from their gardens and natural environment, or purchase them individually at the market place. Many of my informants stated that women have a greater degree of knowledge about medicinal herbs than men. However, it seems that, regardless of gender, most people have at least some

[3] Van Esterik's percentages total more than 100% due to rounding off.

knowledge about making home *jamu* remedies. It must be stressed, though, that the vast majority of *jamu* remedies are purchased from *tukang jamu* vendors.

A *jamu gendong* vendor is a person who carries prepared *jamu* remedies ready for sale. The term literally translates as "carried *jamu*," but the name is used to refer to the vendor. Such vendors are almost always women. These Javanese vendors generally carry bottles of prepared *jamu* in a basket slung over their shoulders. One woman, however, carried her bottles in two baskets hanging over her bicycle. She was therefore able to sell a greater range of *jamu* remedies over a wider area than pedestrian vendors. I have also observed some vendors using pushcarts to hold and transport their remedies. *Jamu gendong* vendors typically sell *jamu* remedies door to door. They sell it by the glass poured from the bottles they carry. Most also carry a small bucket of water to wash used glasses. A *jamu gendong* vendor typically has six to twelve bottles and these are usually filled with fresh concoctions daily. This limits the amount of *jamu* that can be sold in a day, as well as the types of *jamu* remedies they can provide. The types of *jamu* remedies a vendor selects to carry depends on public demand. Most of the *jamu gendong* vendors I interviewed stated that they began to make *jamu* about four o'clock in the morning so that they could begin selling by dawn. Some others vended their herbal remedies in the late afternoon. These are optimal times for finding people in their homes, and many prefer to drink *jamu* at these hours.

Vendors of jamu who work in markets are like *jamu gendong*, except that they are stationary and wait for customers to approach them. Their remedies are also usually prepared fresh daily. The types prepared and sold are determined by public demand. They also have more bottles and kinds of *jamu* remedies than the travelling *jamu gendong*. While the majority of market vendors I interviewed or observed used bottles to hold their pre-mixed remedies, I did interview one woman who prepared the requested *jamu* by hand from her assorted plant materials. This enabled her to enjoy greater flexibility than those vendors who pre-mixed their remedies. However, the time utilized favored the use of pre-mixed jamu.

Roadside *jamu* kiosks often are erected in the mid afternoon. Vendors here sell their *jamu* remedies late into the evening. They provide a wide array of remedies, generally more types than are sold by either the *jamu gendong* or the market vendors. Aside from a large variety of pre-mixed *jamu* remedies, these vendors also have an assortment of fresh ingredients to fulfill virtually any request.

There are also stores specializing in the sale of *jamu.* Some are tiny room shops filled with different types of leaves, roots, bark, and other plant parts. Here a customer may purchase almost any type of *jamu* that the vendor knows how to make. Other stores are large and open, similar to a café or small restaurant. Tables or counters with chairs, and even a extensive menu of *jamu* remedies, are provided for customers. Some even provide snack foods for people to eat while drinking their *jamu.* All of the *jamu* store vendors and owners I interviewed claimed that they would make a remedy to fit a customer's needs, regardless of the situation or illness involved. Not suprisingly, these stores carry the largest range of mixtures available. Additionally, they often sell bundles of mixed dry herbs for home consumption.

Among all vendor types, the *dukun jamu* possess an ability beyond that of the other *jamu* vendors, collectively known as *tukang jamu*. The special skill of the *dukun* is most frequently derived hereditarily from a supernatural agent. Many employ a special prayer or mantra to empower their *jamu*. Regardless of what it is that makes them different, *dukun jamu* are perceived as such and claim a wide notoriety for their *jamu* remedies.

CHAPTER IV
METHODOLOGY

OPERATIONS AND RESEARCH TECHNIQUES

STATEMENT OF PREDICTIONS

Prior to field research, I generated seven expectations regarding social patterning in the use of *jamu* for health related purposes. Five of these predictions are discussed and evaluated within this thesis. These predictions do not cover all types of *jamu.* Instead, these expectations focus only on those remedies that specifically relate to health. Many non-health related *jamu,* such as cosmetics (skin lighteners, hair conditioners, etc.) or sex and eroticism enhancers, are excluded. However, clear dichotomies between health and non-health related *jamu* are often difficult to establish. If a *jamu* remedy has a health related purpose in addition to other non-health related functions, I include it with the many *jamu* for which the expectations apply. The predictions are as follows:

1. *Jamu* sold daily by door to door vendors *(jamu gendong)* will most often be preventatives, rather than curatives.
2. *Jamu* sold by sedentary vendors will more often be used for specific

illnesses (curatives) than those sold by door to door vendors *(jamu gendong).*

3. Seasonal differences (rainy versus dry seasons) will be observed in *jamu* use patterns.

4. Individuals of low economic standing will use both preventative and curative *jamu* remedies regularly for both minor health concerns and serious illnesses.

5. Individuals of high economic standing will generally use curative *jamu* only for disorders that are not effectively treated by Western biomedicine (eg., arthritis, infertility, cancer, etc.).

To assess the above predictions, I conducted interviews with twelve *jamu* vendors, three *dukun jamu,* and over sixty *jamu* consumers. The twelve vendors (see Appendices B and C), commonly referred to as *tukang jamu,* consist of three *jamu gendong* vendors, six marketplace vendors, one roadside kiosk vendor, and two *jamu* store vendors. The sixty *jamu* consumers comprise two distinct sets: forty surveyed *jamu* users (see Appendix D), and twenty patients of the *dukun jamu.* All of these interviews were conducted between June and August 1996 within the city of Yogyakarta.

Due mainly to time limitations, some of the assessed predictions, as well as certain *jamu* remedies, have inadequate informant sample sizes for statistical analysis. While many remedies were discussed by most vendors and consumers, others were infrequently mentioned and have little basis for comprehensive evaluation. As a result, this analysis is largely inductive and represents my assessment of the informants' statements concerning each remedy, however brief. Rationalizations for the categorization of each *jamu* (as curative, preventative, either or neither) are discussed within the analysis but do not signify an emic perspective. Instead, these categories are generalized etic measurements used to assess the first and second predictions. Despite these limitations it is hoped that the five expectations concerning the cultural patterning of *jamu* use can be adequately tested.

WORKING DEFINITIONS

Before discussing the basis and operationalization of each prediction, I must first define all relevant terms (for further discussion of these terms, see Chapter III: Literature Review). My working definition of ***"jamu"*** focuses on what Javanese people commonly refer to as "*jamu asli*," meaning "traditional" or "indigenous *jamu*." This includes *jamu* remedies that are both commonly known and those that are from specialized vendors and healers.

While still allowing for a wide range of interpretation with this definition of *jamu,* specific limitations are placed on other types of medicinal plants. For example, herbal remedies referred to as *"jamu sinshe"* are not included because it means Chinese *jamu.* A significant Chinese population in Indonesia does explain the occasional use of herbal medicines from this other ethnomedical system, but I do not place them in the cannon of Javanese *jamu.* Factory-made and pre-packaged *jamu* may occasionally be referred to as "*jamu asli*," but most of those interviewed instead referred to it as "*jamu fabrik*" (factory *jamu).* Some informants made reference only to its factory brand name and generally did not consider it to be indigenous or traditional Javanese *jamu.* Additionally, after an initial sampling of *jamu* and *jamu* vendor types, I realized that the magnitude of factory *jamu* types is unwieldy and beyond the scope of my project. Therefore, factory-made packaged *jamu* remedies are not included in my working definition of *jamu.* I found this restricted definition of *jamu* to be appropriate, more manageable, and in line with my research objectives.

I recognized two primary types of *jamu* vendors: mobile and sedentary. ***"Jamu gendong"*** vendors are defined as those who sell their *jamu* remedies in a mobile manner, generally door-to-door by foot or on a bicycle. These vendors carry their *jamu* remedies with them as they cover their vending route. The *jamu* may be prepared prior to vending and carried in containers, or prepared fresh from plant mixtures when requested. Finally,

these vendors identify themselves as *jamu gendong*, and their customers also refer to them by this title.

"Sedentary vendors" include marketplace *jamu* vendors, roadside *jamu* kiosks, small or large *jamu* stores, and even the specialized *jamu* healers, or *dukun jamu.* The primary distinction between these vendors and the *jamu gendong* vendors is that these are sedentary and do not move their *jamu* mixtures while vending. Customers or patients come to these stationary vendors for *jamu,* which may be ready made, prepared when ordered, or sold as mixtures of plants to boil at home. This definition does not include plant wholesalers in markets who provide the raw ingredients for many *jamu* vendors or home users. Wholesale suppliers do not fit into the context of this study.

Defining *jamu* as either preventative or curative often depends on the stated purpose given by an informant for its use. **"Preventative"** *jamu* are defined as those that are used either to prevent a specific imbalance or disease, or to maintain general health. **"Curative"** *jamu* are used to treat an already existing health problem or disease. Curative *jamu* are used for a wide assortment of mild or acute ailments, both folk and biomedically recognized illnesses.

Other purposes can be mentioned for each *jamu* remedy, but the criteria for categorization depends on its primary usage as preventative or curative in each specific context. For example, if a woman is using *Kunir Asam* to prevent cramps and maintain health during the course of her menstrual cycle, then it would be considered preventative and health maintaining. But if the same woman was using the same *jamu* to reduce a fever, then it would be curative. Use of a *jamu* remedy can be simultaneously preventative and curative, in which case it will be stated as such. Otherwise, the primary function as preventative or curative will be stated. The purposes associated with each *jamu* were reported by my informants.

"Low economic standing" is defined as someone within a lower socioeconomic class. For research purposes, this term is intended to include people who would be economically burdened to afford most biomedical treatments and consultation

fees. **"Higher economic standing"** is defined as anyone within a relatively affluent socioeconomic class. Individuals here can afford most biomedical treatments without much financial burden. Estimation of an informant's socioeconomic standing or class was generally self reported. Moreover, visual, linguistic, and idiosyncratic markers were employed by the author to assess or validate someone's estimation of socioeconomic standing, as described in the following section.

"Western biomedicine" is defined as the ethnomedical system based in the Western biomedical scientific model. For this study, it typically includes use of biomedical treatment from hospitals, health clinics, doctors, nurses, pharmaceuticals, and other Western biomedical procedures or products. Self or home treatments are considered to be biomedical if they are reported as such. For example, using *"obat"* (medicine) from a *"apotik"* (pharmacy) or a *"toko obat"* (drug store) is considered as being within the Western biomedical system.

As noted below, the **"rainy season"** (native term, see below) in Java usually lasts from December to March and is characterized by daily thundershowers. The **"dry season"** generally ranges from June until September. Transitional periods, with less regular rainfall, occur between these two seasons. Because the field study was only conducted from June until August, collection of the rainy season data was from informant reports of *jamu* use during *"musim hujan"* (the rainy season). Collection of data during the dry season were both observed behaviors and information reported as being in *"musim panas"* (the hot season) or *"musim kemarau* or *kering"* (the dry season).

BASIS AND OPERATIONALIZATION OF EACH PREDICTION

First *Jamu* Prediction

The first expectation states that *"jamu* sold daily by door to door vendors *(jamu gendong)* will most often be preventatives, rather than curatives." For this prediction to have validity, there must be a greater quantity of preventative or health maintaining *jamu*

sold by the *jamu gendong* than curative remedies.

The methods employed to assess this prediction involved interviewing both *jamu gendong* vendors and *jamu* consumers. Relevant information for evaluating this prediction included: the number of *jamu* a vendor sells, major and minor purposes or functions associated with each *jamu*, and the average quantity of each *jamu* type sold. As the subjects of this prediction, the three *jamu gendong* vendors were the primary source of qualitative and quantitative data to assess its validity.

To suppliment the data derived from vendors, forty *jamu* consumers were also interviewed. They were asked which types of *jamu* have they used, the purposes for using each type, how often each type was consumed, and from whom they get each type of *jamu.* It was predicted that the quantity of *jamu* purchased for preventative or health maintenance reasons had to be greater than that obtained for curative purposes. If both of these data sources (vendors and consumers) conformed to this expectation, then the prediction would be supported.

Second *Jamu* Prediction

The second expectation states that "*jamu* sold by sedentary vendors will more often be used for specific illnesses (curatives) than those sold by door to door vendors *(jamu gendong).*" This predicts that sedentary vendors and *jamu* stores would be used to secure of curative *jamu* remedies much more frequently than what was true for *jamu gendong*. This assumption is based on the observation that sedentary vendors and *jamu* stores are able to house a wider range of plant ingredients and *jamu* mixtures than mobile vendors.

To assess this prediction, interviews with both *jamu* vendors and *jamu* consumers were conducted and analyzed. Nine sedentary vendors were interviewed about the types of *jamu* they sell, their respective purposes, frequencies of sales, and the average quantity of each *jamu* type sold. To add reliability to the vendor-based information, forty *jamu* consumers were interviewed about what types of *jamu* they have used, the purposes for using each *jamu* type, how often each was consumed, and from where they usually

obtained each type of *jamu.* For the prediction to be supported, there needs to be strong evidence that the sedentary *jamu* vendors and stores sell more curative *jamu* than do the *jamu gendong* vendors.

Third *Jamu* Prediction

The third expectation is that "seasonal differences (rainy versus dry seasons) will be observed in *jamu* use patterns." This asserts that the change of the local epidemiologies due to seasonal variations would have a corresponding change in the types of *jamu* used.

While the fieldwork for this thesis was conducted only during the dry/hot season, information was gathered from informants concerning seasonal variations in *jamu* use. Consumer informants were asked if they perceived a seasonally based difference in their purchasing and use of *jamu,* and if so, for which types of *jamu.* Vendor and healers were usually asked, "are there seasonal differences in your sales" for each *jamu* they sell. If the response was affirmative, then each informant was questioned as to why they thought there was a seasonal difference and what those differences were. Vendors were also asked about the differing quantities of each type of *jamu* they sell during each of the two primary seasons (rainy and dry). From these responses, I could assess this prediction. Any seasonal differences in local epidemiological patterns and correlations with *jamu* use will be analyzed. To support this prediction, the reported patterns of *jamu* use must show a notable difference between the dry season and the rainy season. These differences in *jamu* use patterns must have a clear association with the perceived epidemiological changes between the two seasons, as reported.

Fourth *Jamu* Prediction

I anticipated that patterning in health related behaviors would vary depending on many factors, including socioeconomic class. Since most Javanese of all walks of life have used *jamu* at some point, I examined possible class-based patterning in *jamu* use. The fourth and fifth expectations represent a dichotomy between the lower and the upper

classes. Simply put, some people can, and others cannot, afford biomedical treatment. Of course, other economically influenced factors, such as an individual's degree of formal Western education, may affect health seeking behaviors.

This fourth expectation states that "individuals of low economic standing will use both preventative and curative *jamu* remedies regularly for both minor health concerns and serious illnesses." This assumes that the lower classes generally must rely more on traditional medicine for preventive measures and curative treatment because this form of health care is often more affordable than biomedicine. Also, disease load is typically greater among the poor. For these reasons, I predicted that individuals of low economic standing will use *jamu* more frequently than their more affluent counterparts.

To assess this prediction, I needed to demonstrate that lower class people generally used traditional medicine more so than biomedicine. If the field data do not demonstrate this, then this prediction will be unsupported. The methods employed to assess this expectation are discussed below in the next section concerning the fifth prediction.

Fifth *Jamu* Prediction

The fifth expectation, the second part of my socioeconomic dichotomy, states that "individuals of high economic standing will generally use curative *jamu* only for disorders that are not effectively treated by Western biomedicine (eg., arthritis, infertility, cancer, etc.)." Many members of the upper classes often use *jamu* for multiple purposes, but I expect that for serious illnesses they will much more regularly resort to biomedicine for treatment. They have generally been more exposed to the biomedical system, and its costs are not as prohibitive as they are for those in the lower classes. However, when biomedicine is not able to effectively treat their condition, I predicted that they may turn to the use of traditional medicine and *jamu* as a parallel or an alternative source of treatment.

To support this prediction, members of the upper class should first show a general trend of resorting to biomedical health care instead of *jamu* for most health concerns, particularly serious illnesses. Second, I would need to demonstrate that members of the

upper class resort to curative *jamu* only after biomedicine has either not satisfactorily treated a given health problem, or if it is initially perceived as not being able to do so. For example, an upper class woman might be told by friends that biomedical doctors cannot effectively treat her infertility. This woman might then seek treatment with *jamu.*

Data used for assessing this prediction are derived from a separate set of unstructured and semi-structured interviews I conducted with twenty individuals seeking treatment from one of three specialized *jamu* healers, often called *dukun jamu.* These interviews provide qualitative accounts of each individual's illness and attempts to find treatment. These informants provide insight into the reasons for choosing *jamu* to treat their illnesses. I use these qualitative interviews for the primary analysis of the fourth and fifth *jamu* predictions concerning socioeconomic patterning.

Additionally, to assess the fourth and fifth expectations, I will use data from my interviews with many *jamu* providers and *jamu* users. I asked each vendor and healer about the approximate trends of consumer age, sex, occupation, and economic standing for each type of *jamu* sold. By asking this, I hope to establish a general estimate about the social and economic patterning in *jamu* use.

I also interviewed many consumers about their use of *jamu* and their patterns of health seeking behavior. Asking what types of *jamu* have they used, for what purposes, how often, and from where do they purchase *jamu,* I asked each informant about his or her profession and area of current residence to estimate socioeconomic status. I also gauged economic status from visual markers, such as types of clothing, jewelry, etc. The two Javanese research assistants I worked with (see below) were very useful in this respect because they could identify the class markers found in the Javanese language (see the discussion on Javanese language in Chapter II: Research Setting). I also asked many informants if they had a preference for either *jamu* or biomedicine, and why. Finally, I asked about their individual medical histories, and what health seeking venues they took (hospital, doctor, traditional healer, *jamu*, etc.) for each of these past health problems. I intend for this combined approach to increase the reliability of the resulting data.

RESEARCH ASSISTANTS

Two female native-Javanese speaking research assistants were used in conducting the majority of the interviews. These research assistants were utilized for the purposes of: (1) bridging language gaps with non-Indonesian speaking informants; (2) narrowing the gender gap with female informants; (3) narrowing cultural gaps with Javanese informants; (4) broadening the sample size of structured interviews with *jamu* consumers; and (5) aiding in the transcriptions of some key informant interviews. I trained the research assistants to help me during many of the key interviews, and to independently conduct some structured interviews with *jamu* consumers. One of my research assistants is a professional anthropologist, and the other is a recent college graduate. The use of the research assistants also eased many time constraints and gave greater reliability to my interpretation of interviews conducted in the Indonesian language. I feel that the use of these assistants gave greater reliability to this research overall.

RESEARCH TECHNIQUES

The research for this thesis was conducted between May 17th and August 13th 1996. The following research techniques were used: participant observation; unstructured and semi-structured interviews with key informants; semi-structured and structured interviews with *jamu* consumers; and unstructured and semi-structured interviews with patients of *jamu* healers. These methods are briefly discussed below.

For the participant observation component of this research, I spent time in and near *jamu* stores, stalls, and vending places. I drank *jamu*, and watched and interacted with both consumers and vendors in these locations. I also met with *jamu gendong* vendors on their daily routes and observed their preparation and sales of *jamu* remedies. I often conducted many informal interviews with these vendors and consumers during these

periods of observation.

Key informant interviews with *jamu* vendors and healers were a useful source of information. Unstructured interviews with these key informants generally involved lengthy conversations on a range of *jamu* and healing-related subjects. I also used semi-structured interviews to maintain an informal conversational atmosphere, while still addressing the specific research questions. Free listing techniques were often used to orally elicit information on the range of *jamu* types made by each vendor or healer.

Interviews with *jamu* consumers were either semi-structured or structured. These semi-structured interviews usually occurred at the site of a *jamu* vendor or healer, or in the informant's home. Again, I often used free-listing techniques so the informants would orally list all of the different *jamu* types they have used.

Structured interviews consisted of an orally administered questionnaire. I formulated this questionnaire after one month of extensive unstructured and semi-structured interviews with many *jamu* vendors, healers, and consumers (see Appendix A for questionnaire format). The purpose of this questionnaire was to gather comparable and quantifiable data while not compromising much of its qualitative potential. The majority of the questions were open ended, allowing for qualitative elaboration. The questions used are listed below in the Indonesian language with their English translations:

1. *Kerja apa?* (Profession?)
2. *Tinggal dimana?* (Where do you reside?)
3. *Lahir dimana?* (Where were you born?)

In association with the first three questions, the interviewer recorded each informant's economic class, gender, and age at the top of each questionnaire. This information facilitated intra-group comparisons.

4. *Jamu apakah yang pernah anda coba?* (Which *jamu* remedies have you

ever tried?)

5. *Berapa kali sehari/minggu/bulan/tahun minum jamu? Jamu apa sajakah?* (How many times per day/week/month/year do you drink *jamu?* Each *jamu?)*

6. *Apakah manfaat dari jamu-jamu tersebut?* (What is the purpose of each *jamu* mentioned?)

7. *Dimanakah anda membeli jamu? (toko, depot, warung, jamu gendong, pengobatan tradisional)* (Where do you purchase the *jamu?* [store, factory outlet, stall, *jamu* carrier, traditional healer])

For the above questions, a list of *jamu* types was provided on the back of the questionnaire. All of the health related *jamu* remedies discussed during the many key informant interviews were used on this list. The purpose of providing this list was two-fold. First, it served to aid the informant's speed of recollection of the many *jamu* types they may have used. Second, it provided an organized chart on which to record the data. Space was provided at the bottom of this list to record unlisted remedies that were used. The *jamu* remedies listed on the questionnaire include:

Benalu
Beras Kencur
Cabe Puyang
Cabe Puyang Hamil
Cekokan Nafsu Makan Anak
Daun Papaya
Endak-Endak Cacing
Galian Putri/Putra
Galian Singset
Ingin Punya Anak
Jerawat
Keji Beling
Keputihan
Kuat Pria/Wanita
Kunir Asam
Masuk Angin/Influenza
Nafsu Makan
Parem (Untuk Diluar)
Pegal Linu
Penyegar

Sakit Perut Dan Maag
Sakit Pinggang
Sariawan
Sawan Gatal
Sawan Tahun
Sesak Nafas
Tambah Darah
Temu Lawak
Terlambat Bulan
Urat Saraf
Uyup-Uyup

The following questions were meant to gain general qualitative insight into the ethnomedical disease theories of the interviewed *jamu* consumers:

8. *Apakah ada perbedaan pembelian jamu berdasarkan musim-musimnya? Jenis apa? Mengapa?* (Is there a difference in [your] *jamu* purchasing that is based on the seasons? Which types? Why?)
9. *Manakah yang lebih anda senangi, jamu atau obat? Mengapa?* (Which do you prefer, *jamu* or medicine? Why?)

The following set of questions pertain to the personal disease histories of the individual informants. I intended to gather reports on the range of health problems afflicting the people interviewed, and the course of action they pursued to correct those problems. Specifically, I was interested in generating data that could reflect the patterns of disease and health seeking behaviors.

10. *Pernah menderita penyakit apa? Kapan?* (Which illnesses have you ever suffered from? When?)
11. *Kalau pernah sakit, biasanya pergi ke mana untuk setiap jenis penyakitnya? (rumah sakit, klinik, puskesmas, doctor, ahli obat tradisional, penjual jamu, lain-lainnya?)* (If you have been sick, where do you usually go for each type of illness? [Hospital, clinic, local health center, doctor,

traditional medicine specialist, *jamu* vendor, others?])

12. *Kalau pernah sakit, bagaimana penanganan (untuk setiap jenis penyakit? (jamu, pijit, obat dari toko, obat dari apotik, operasi, lain-lainnya?)* (If you have been sick, how were you treated for each type of sickness? [*jamu*, massage, medicine from a store, medicine from a pharmacy, operation, others?])

Similar to the use of the *jamu* chart listed on the back of the questionnaire, I provided a chart of illnesses that reflect the range of health problems that may commonly be seen in Java. This list of illnesses was generated from interviews with numerous *jamu* vendors, healers, and consumers, as well as from existing literature on Javanese health and ethnomedicine (eg., Umiati et al. 1991; Geertz 1960; Republic of Indonesia Department of Health 1993; Yogyakarta Special Territory Province Statistical Office 1996). The disease list used is as follows:

masuk angin (wind entering)
influenza (influenza)
batuk (cough)
asma (asthma)
maag (stomach disorder)
diare (diarrhea)
gatal-gatal (skin infections/rash)
sakit kulit (skin disease)
keputihan (yeast infection)
darah tinggi (high blood pressure)
sakit gula (diabetes)
rematik (rheumatism)
masalah kesuburan (fertility disorder)
sakit gigi (tooth ache/disease)
sakit mata (eye disease)
sakit ginjal (kidney disease)
sakit lever (liver disease)
sakit jantung (heart disease)
sakit panas (fever)
malaria (malaria)
tetanus (tetanus)
campak (measles)
tumor (tumor)
kanker (cancer)
lain-lain? (Others?)

The above list of diseases and illnesses is not intended to be all-inclusive, but rather it provides a sampling of health problems to help the informants recall their personal health histories. Prior to my use of this list, I found that informants often did not initially recall many of their past health problems. For example, a person may not immediately remember having measles as a child until asked specifically. Remembering one illness might generate other recollections of previous health problems. By remembering an earlier case of measles, a person may also be reminded that, as a child, he also had chicken pox, which is not listed. As with the *jamu* chart, this disease list was intended not only to act as a mnemonic device, but also to organize the interview notes.

Finally, I conducted unstructured and semi-structured interviews with patients of *jamu* healers, the latter often referred to as *dukun jamu.* During unstructured interviews, I often asked an informant one or two general questions and let the person elaborate almost indefinitely. I frequently opened with the question "Why are you seeing a *jamu* healer?" In responding, many informants would go into great detail about their illness and how they had sought treatment for it. Semi-structured interviews were used to gain additional information that an informant may not have initially expressed. The additional questions I often asked included: "Have you used any other forms of treatment besides *jamu?,*" "What other *jamu* remedies do you frequently use?," and "How did you come to know about this *jamu* healer?" The purpose of these interviews was to provide additional qualitative data concerning the patterns of *jamu* use and health-seeking behavior.

PROTECTION OF INFORMANTS' RIGHTS

Prior to interviewing, all subjects were informed of the project's goals, methods, possible risks, benefits, confidentiality measures, and expectations (see Appendix A for the Informed Consent Statement). After being informed, they indicated their choice to participate in an interview. Many people declined, and were not further pursued. In this manner, all informants freely participated in the survey and gave their informed consent.

The botanical ingredients of each *jamu* remedy are noted only if this information was available. Such knowledge, however, is often considered to be a "trade secret." Because this information was not the focus of my study, I did not inquire about specific ingredients. Information collected concerning *jamu* consistencies was unsolicited and freely offered by some informants. Other botanical information presented in this thesis was either common Javanese knowledge or gathered from the existing literature.

Finally, all informant names in this thesis are pseudonyms. The actual names of my informants are deliberately altered to protect their identities. However, I have not altered any other information, all of which is presented as reported. By doing so, I hope to maintain the integrity of this research.

CHAPTER V
ANALYSIS

FIRST *JAMU* PREDICTION

INTRODUCTION

Prior to assessing the first expectation, it became necessary to first categorize each *jamu* made and sold by a *jamu gendong* vendor as preventative, curative, either, or neither. Not only do I evaluate each *jamu* sold by the three *jamu gendong* vendors interviewed, but I also evaluate every type of *jamu* reported by the forty consumers as being purchased from a *jamu gendong*. Analyzing data from both sources (vendors and consumers) regarding *jamu gendong* sales is intended to increase the reliability of my findings.

To evaluate each remedy vended by a *jamu gendong*, I used any relevant data from all twelve vendors (both *jamu gendong* and sedentary vendors) and the forty consumers. From these two sources, I categorized each *jamu.* Once the *jamu* types are qualitatively evaluated and categorized, then the prediction could be assessed quantitatively.

This analysis is divided into two sections: the *jamu gendong* vendors and the *jamu* consumers. In the first section, I evaluate each *jamu* sold by the three *jamu gendong* and use these findings to assess the first prediction. To adequately test it, quantitative support

must be given to two criteria concerning *jamu* sold by *jamu gendong* vendors. First, the majority of the types of *jamu* sold (eg. *Beras Kencur*, *Kunir Asam*, etc.) should be preventative instead of curative. Second, the mass majority of all liquid *jamu* sold should also be preventative instead of curative. If these criteria are met, then the first expectation is supported.

The second section contains the analysis of the consumers who reported purchasing remedies from *jamu gendong*. This discussion is intended to further assess the first expectation. If the consumers are quantitatively found to purchase more preventative than curative types of remedies from *jamu gendong* vendors, then the prediction is additionally supported.

JAMU GENDONG VENDORS

During the field research, three *jamu gendong* vendors were interviewed: Ibu Ardjo, Ibu Dita, and Ibu Indah. Each of these prearranged interviews was conducted in the particular vendor's home when they were not working. All three women live and vend within the city of Yogyakarta. They all stated that they consider themselves to be *jamu gendong* vendors.

Two of them, Ibu Ardjo and Ibu Dita, make their *jamu* mixtures with the assistance of their husbands, while Ibu Indah makes her *jamu* independently. Each of the three vend individually following their own street routines and time schedules. Ibu Ardjo and Ibu Dita do their vending on foot and carry their bottled *jamu* in a basket on their back. Ibu Indah carries her *jamu* in two large baskets on her bicycle, which she rides while vending. Using a bicycle in this manner allows her to carry more *jamu* over a wider area.

Ibu Ardjo makes and sells five types of *jamu: Beras Kencur, Galian Putra, Galian Putri, Kunir Asam,* and *Pahitan.* Ibu Dita, however, only makes and sells three types of *jamu* remedies: *Beras Kencur, Galian,* and *Kunir Asam.* Finally, in contrast to the first two informants, Ibu Indah makes and sells twelve types of *jamu: Beras Kencur, Cabe*

Puyang, Cabe Puyang with *Daun B'luntas, Daun Papaya, Galian Singset, Godogan, Keputihan, Keputihan Supaya Punya Anak-anak, Kunir Asam, Sakit Maag, Uyup-uyup,* and an unnamed *jamu* for inducing abortions. Each of the *jamu* types vended by the three *jamu gendong* are discussed below (see Appendix B for reported *jamu* functions, listed by vendor), and categorized as preventative, curative, either, or neither to facilitate a quantitative assessment of the first prediction (see Appendix C for *jamu* categorizations and quantities sold, listed by vendor).

Beras Kencur

Beras Kencur is an extremely popular *jamu* with a wide variety of stated uses. From the twelve *jamu* vendors interviewed, *Beras Kencur* was given a total of thirteen different purposes (see Table 6).

Preventative and health maintaining purposes were reported twelve times: "for tiredness," mentioned by five vendors, "for health," mentioned by two vendors, "to recover the womb," mentioned twice, "for refreshing the body," mentioned once, "for strength," mentioned once, and "for physical exercising," mentioned by one vendor. Essentially, I consider all of these functions to have the same purpose: to keep the body strong and in good health. The stated purpose "for tiredness" or "to get rid of tiredness" is very similar to "strengthening the body" or "making the body refreshed." Therefore, I do not consider tiredness to be a condition requiring a curative, but instead only needing a health maintainer. Additionally, recovering "the womb" can also be considered as a health maintainer since it implies a post-natal return of the womb to its normal condition.

Curative purposes were only stated six times, half as many as the preventative reports. As curative functions, the following are included: "for coughs," mentioned by five vendors, and "to release stomach gas," mentioned once. The Javanese folk illness of "wind entering" suggests that an imbalance of "cold" elements in the body allows an excess of air to enter the stomach resulting in coughing, sneezing, and flatulence as the air is slowly released (see Chapter III: Literature Review). From this ethnomedical perspective,

Table 6: *Beras Kencur* Vendor Responses

Category	Stated Purpose	#	Percent
Preventative	For tiredness	5	19.2%
	For health	2	7.7%
	For refreshing the body	1	3.8%
	For strength	1	3.8%
	For physical exercising	1	3.8%
	To recover the womb	2	7.7%
	Total	=	*46%*
Curative	For coughs	5	19.2%
	To release stomach gas	1	3.8%
	Total	=	*23%*
Either	Hot	2	7.7%
	Total	=	*7.7%*
Neither	Social drinking	3	11.5%
	For thirst	1	3.8%
	For sweetness	1	3.8%
	As chaser	1	3.8%
	Total	=	*22.9%*

coughing and stomach gas are symptoms of the same illness. To cure a "cold" based illness like wind entering, a "hot" *jamu* could be used to restore health. *Beras Kencur* was mentioned twice by the *jamu* vendor informants as being "hot." "Hotness" is a description of its associated natural properties, which can then be used for either preventative or curative functions. The "hotness" of *Beras Kencur* probably functions to give strength and energy just as it works to counter "cold" based disorders.

Finally, the *jamu* vendors gave six reports of purposes which are neither preventative nor curative. These include three reports of *Beras Kencur* for social drinking purposes, and once each for "thirst," "for its sweetness," and "as a chaser for bitter *jamu.*" These statements reflect its popularity for non-health related purposes. It is, in fact, the most frequently reported type of *jamu* in this study, as thirty-nine of the forty *jamu* consumers stated having used *Beras Kencur.*

As discussed above, the twelve vendor informants mentioned *Beras Kencur* twice as many times for preventative purposes than for curative. Most of the listed preventative and health maintaining functions relate to increasing physical energy. However, nearly as many vendors mentioned the expulsion of excess air from the body, a curative purpose, as did mention its use for adding physical energy. In consideration of this, *Beras Kencur* is not yet strongly determined as primarily either preventative or curative.

The *jamu* consumer interviews present a clearer distinction. Many of the thirty-nine consumer informants gave their individual reasons for having used *Beras Kencur.* From the *jamu* consumers interviewed, *Beras Kencur* was given a total of sixteen different uses (see Table 7).

Classified as preventative and health maintenance uses, I include: "for making the body refreshed and healthy," mentioned by eleven consumers, "for getting rid of tiredness," mentioned by six consumers, "for strength and stamina," mentioned twice, and "for general bodily health," mentioned twice. All of these stated functions are to either refresh the body, add strength and energy, or for general health: all preventative and health maintaining purposes. Additionally, "for breathing and respiration" was listed by a pedicab

Table 7: *Beras Kencur* Consumer Responses

Category	Stated Purpose	#	Percent
Preventative	For making the body refreshed and healthy	11	26.8%
	For getting rid of tiredness	6	14.6%
	For strength and stamina	2	4.9%
	For general bodily health	2	4.9%
	For breathing and respiration	1	2.4%
	Total	=	*53.6%*
Curative	For treating coughs	3	7.3%
	For rheumatic aches and pains	2	4.9%
	For wind entering	1	2.4%
	For upset stomachs	1	2.4%
	Total	=	*17%*
Either	For increasing appetites	4	9.8%
	To warm the body	3	7.3%
	For mother's breast milk	1	2.4%
	To clean and quicken the blood	1	2.4%
	Total	=	*21.9%*
Neither	For body odors	1	2.4%
	For a beautiful voice	1	2.4%
	Out of desire	1	2.4%
	Total	=	*7.2%*

driver to help him function well in his physically strenuous profession, and is included as a preventative and health maintainer.

As curative uses of *Beras Kencur*, I include "for treating coughs," mentioned by three informants, "for rheumatic aches and pains," mentioned twice, "for wind entering," mentioned once, and "for upset stomachs," also mentioned by one informant. Because coughs are a result of wind entering, the most frequently mentioned curative use is associated with this folk illness. The same "hot" element of *Beras Kencur* used to treat wind entering is also used to treat rheumatism and muscle aches and pains. Similar to other "hot" based treatments for rheumatic pains, such as rubbing "tiger balm" or other menthol ointments onto the afflicted muscles, the "heat" of *Beras Kencur* is used to treat rheumatism internally. Likewise, it is possible that the reported use of *Beras Kencur* to treat an "upset stomach" is also related to its "heat," a quality that counter-acts "wind entering."

Uses classified as either preventative or curative are "for increasing appetites," mentioned four times, "to warm the body," mentioned three times, "to clean and quicken the blood," mentioned once, and "for mother's breast milk," mentioned once. Many informants stated that they wanted to increase their appetites so they would eat more food to increase their energy and vitality; however, it could also be used to restore health after an illness episode. Both warming the body or cleaning and quicking the blood could be used for either preventative or curative means. And the functional use of *Beras Kencur* for mother's breast milk was not clear as stated by the informant. Stated uses that are neither preventative or curative include "for body odors," "for a beautiful voice," and "out of desire," each mentioned once.

The *jamu* consumer interviews revealed twenty-two references to *Beras Kencur* for preventative and health maintaining purposes. Twenty-one of these indicate a primary function of refreshing the body, adding strength and energy, or for general health. In contrast, there were only seven references to curative purposes, possibly all "wind" associated. Because the consumer informants reported using *Beras Kencur* for preventative and health maintaining functions three times more frequently than curative

uses, the consumer analysis strongly suggests that it is primarily a preventative *jamu.* Similarly, vendors reported *Beras Kencur* twice as many times for preventative purposes than for curative. Overall, the reported preventative uses were clearly much more common than curative uses, and therefore *Beras Kencur* is considered to be primarily a preventative *jamu.*

Cabe Puyang

Cabe Puyang is often considered to be one of the "hottest" *jamu* remedies. Even the name suggests the "heat" of this *jamu: "cabe"* is a chili pepper, and *"puyang"* is a medicinal plant in the ginger family. It is this "heat" of *Cabe Puyang* that is credited with its preventative or curative efficacy. While only one *jamu gendong* vendor regularly sells this remedy, seven vendors of other types also make and sell *Cabe Puyang*. Together, these eight vendors listed fourteen separate uses for this *jamu* (see Table 8).

As preventative and health maintaining functions of *Cabe Puyang*, I include "for tiredness," mentioned six times, "for energy and strength," mentioned three times, and "for sexual stamina," mentioned once. These all have the same purpose, which is to increase the strength, energy, and health of the individual. Also, the reported uses "good for the body" and "for women's fitness," each mentioned once, further clarify the value of *Cabe Puyang* as an agent to improve bodily health and fitness.

Other preventative uses of *Cabe Puyang* concern the maintenance of health during the different phases of pregnancy and childbirth. Use of this *jamu* "during pregnancy" was reported five times, "for an easy birth" was mentioned once, and "for after giving birth" was mentioned twice. Sometimes, this *jamu* was given a separate name, *"Cabe Puyang Hamil,"* which translates roughly to "pregnancy *Cabe Puyang*." These childbearing purposes, however, were more often associated with regular *Cabe Puyang*, suggesting these are not necessarily two different remedies. Instead, I suspect that this is a single *jamu* used for multiple purposes.

Curative purposes of *Cabe Puyang* include the following: "for wind entering,"

Table 8: *Cabe Puyang* Vendor Responses

Category	Stated Purpose	#	Percent
Preventative	For tiredness	6	19.4%
	During pregnancy	5	16.1%
	For energy and strength	3	9.7%
	For after giving birth	2	6.5%
	For sexual stamina	1	3.2%
	Good for the body	1	3.2%
	For women's fitness	1	3.2%
	For an easy birth	1	3.2%
	Total	=	*64.5%*
Curative	For wind entering	2	6.5%
	For the flu	1	3.2%
	For when sick	1	3.2%
	For muscle aches and rheumatism	1	3.2%
	Total	=	*16.1%*
Either	Warming the body	5	16.1%
	To increase appetites	1	3.2%
	Total	=	*19.3%*

mentioned twice, and "for the flu," "for when sick," and "for muscle aches and rheumatism," each mentioned once. Informants reported that influenza is very similar to wind entering. Many of the symptoms are the same, such as congestion, coughing and sneezing, and they are often treated similarly. All of the specific ailments mentioned are "cold" based, and therefore treated with this "hot" *jamu.*

Finally, the purpose of "warming the body" was mentioned by five vendors. Warming the body can give more energy or prepare a mother's womb for child delivery, just as it also can expel "wind" from the body. Both this and the purpose "to increase appetites," mentioned once, can be either curative or preventative.

Nine of the forty *jamu* consumers reported use of *Cabe Puyang* (see Table 9). Of the reasons given, I only consider the purposes "for fatigue and tiredness," mentioned by two informants, and "for pregnancies," mentioned twice, to be generally health maintaining and preventative. The only stated curative function for this *jamu* was to treat "wind entering," which was reported once. Both "to warm the body," mentioned twice, and "increasing appetites," mentioned once, are categorized as either preventative or curative.

Despite the smaller sample size, the consumer information suggests a slightly greater use of *Cabe Puyang* for preventative reasons. While both preventative and curative uses do exist, the eight *jamu* vendors reported four times the number of preventative and health maintaining purposes than curative. For this reason, I consider the stated purposes

Table 9: *Cabe Puyang* Consumer Responses

Category	Stated Purpose	#	Percent
Preventative	For fatigue and tiredness	2	25%
	For pregnancies	2	25%
	Total	=	*50%*
Curative	For wind entering	1	12.5%
	Total	=	*12.5%*
Either	To warm the body	2	25%
	To increase appetites	1	12.5%
	Total	=	*37.5%*

of *Cabe Puyang* to be primarily preventative.

Cabe Puyang with *Daun B'luntas*

This type of *Cabe Puyang* remedy has the addition of *Daun Beluntas* (Gardenia leaves). Only one vendor (Ibu Indah, a *jamu gendong*) reported making and selling this type of *jamu.* Ibu Indah said it is used for getting out the smell of sweat. She said that mostly women buy it for eliminating body odors. Ibu Indah also said that people who do use it generally purchase it from her daily, but that there are also more requests for it during the hot season. One other key informant independently stated that fresh *Beluntas* leaves can be eaten to get rid of body odors, supporting Ibu Indah's claim. I consider this *jamu* to be more cosmetic than health related, as it used to enhance bodily fragrances. For this reason, *Daun Beluntas* was not included in the structured interview schedules, nor mentioned by any consumer informants. Therefore, I categorize this *jamu* as neither preventative nor curative.

Daun Papaya

Daun Papaya, Godogan, and *Pahitan* are three *jamu* names that often refer to the same remedy. *Godogan* translates to "boiled thing," indicating the way this class of *jamu* is made: by boiling the plant ingredients. *Pahitan* means "bitter thing," referring to a particular *jamu* remedy's taste. Many *jamu* mixtures exist which are both boiled and very bitter in taste. *Daun Papaya*, made from papaya leaves, is just one of these bitter and boiled *jamu* remedies. Categorizing information provided by *jamu* vendors and consumers is sometimes problematic, as informants occasionally referred to *Daun Papaya* as either *Godogan* or *Pahitan.* To retain validity in this analysis, I keep *Daun Papaya* separate from *Godogan* and *Pahitan* when distinctions were not clearly given. When a particular *jamu* was termed both *Daun Papaya* and either *Pahitan* or *Godogan,* I use the more specific name *Daun Papaya.* However, when *Pahitan* or *Godogan* are mentioned without specific reference to *Daun Papaya*, I combine the two terms under the general term *"Pahitan."* The

discussion below only involves *Daun Papaya*, while *Pahitan* is discussed seperately.

Only one *jamu gendong* (Ibu Indah) specifically makes and sells *Daun Papaya*. Three other vendors also sell this *jamu*. Purposes for using *Daun Papaya*, stated by these four vendors, include: "for increasing appetites" and "for upset stomachs," both mentioned twice, and "to open up and relieve the stomach," "for stomachs filled with gas," "for gastric problems," "for wind entering," "for breathing difficulties," "for high blood pressure," "for hot-cold people," and "for fevers," each mentioned once (see Table 10).

I consider all of the stated uses to be curative, except for the purpose of "increasing appetites," which is categorized as either preventative or curative. Curative purposes specifically for the stomach were mentioned five times. It is possible that all of the stomach related problems are due to wind entering. "Breathing difficulties" could also be based on the folk illness of "wind entering." It was also mentioned that *Daun Papaya* is used to treat high blood pressure, which was stated to be most commonly used by older men. Finally, treating fevers was mentioned twice. One of these fevers was specifically called "hot-cold," which is commonly used to describe malarial fevers.

Analysis of the *jamu* vendor interviews clearly demonstrates that *Daun Papaya* has primarily curative functions. However, the *jamu* consumer interviews provide a different perspective on how it is used (see Table 11). Twenty-one of the forty *jamu* consumer informants stated that they have used *Daun Papaya*. They reported four preventative uses, six curative uses, and thirteen uses categorized by the author as either were reported.

The four references to preventative and health maintenance purposes include: "to make a fat child," "to make the blood bitter so mosquitos won't bite," "for stamina," and "for power and health." Making a child or infant "fat" is associated with making it well nourished and healthy. In a region where infants and children under five years of age have more cases of diarrhea than people of any other age (Yogyakarta Special Region Province Health Department/Regional Office 1993), keeping a child well nourished and even "fat" should be considered as preventative and health maintaining. "Making the blood bitter so mosquitoes won't bite" is preventative in that its use is to prevent insect bites that not only

Table 10: *Daun Papaya* Vendor Responses

Category	Stated Purpose	#	Percent
Curative	For upset stomachs	2	16.7%
	To open up and relieve the stomach	1	8.3%
	For stomachs filled with gas	1	8.3%
	For gastric problems	1	8.3%
	For wind entering	1	8.3%
	For breathing difficulties	1	8.3%
	For high blood pressure	1	8.3%
	For hot-cold people	1	8.3%
	For fevers	1	8.3%
	Total	=	*83.1%*
Either	For increasing appetites	2	16.7%
	Total	=	*16.7%*

Table 11: *Daun Papaya* Consumer Responses

Category	Stated Purpose	#	Percent
Preventative	To make a fat child	1	4.3%
	To make the blood bitter so mosquitos won't bite	1	4.3%
	For stamina	1	4.3%
	For power and health	1	4.3%
	Total	=	*17.2%*
Curative	To heal malaria (hot-cold)	2	8.7%
	To relieve the stomach and get rid of air	1	4.3%
	To get rid of an upset stomach	1	4.3%
	To treat upset stomachs and diarrhea	1	4.3%
	For stomach aches	1	4.3%
	Total	=	*25.9%*
Either	Increasing (one's) appetite	10	43.5%
	To clean the blood	2	8.7%
	To clean the stomach	1	4.3%
	Total	=	*56.5%*

cause allergic skin irritations, but also may prevent the transmission of mosquito borne diseases that exist in the region: malaria, dengue fever, filariasis, and less frequently, Japanese encephalitis. Finally, use of *Daun Papaya* for "stamina, " "power," and "health" are all considered to be preventative and health maintaining functions.

Curative uses were mentioned six times, including: "to heal malaria (hot-cold)," mentioned by two informants, and "to relieve the stomach and get rid of air," "to get rid of an upset stomach," "to treat upset stomachs and diarrhea," and simply "for stomach aches," each mentioned once. Similar to the vendor reports, the majority of curative uses are related to stomach disorders, with additional mention of treating malarial fevers.

Stated uses of *Daun Papaya* categorized as possibly either preventative or curative include: for "increasing (one's) appetite," mentioned by ten consumers, "to clean the blood," mentioned twice, and "to clean the stomach," mentioned once. Increasing one's appetite was the single most frequently reported purpose for using *Daun Papaya.*

In conclusion, while the vendor interviews suggest that the purposes of this *jamu* are primarily curative, the consumer information strongly suggests that it is significantly either preventative or curative. Because of the larger sample size of *Daun Papaya* consumers than vendors, and due to the greater emphasis I am placing on a *jamu* remedy's reported use over potential use, I categorize the use of *Daun Papaya* as either preventative or curative.

Galian Jamu Remedies

Galian remedies comprise an eclectic grouping of *jamu.* The term *"galian"* translates to "dug up plants or tubers," and likely refers to the primary types of plants used in the *jamu* mixtures. However, this is a very general term, as many plants used in *jamu* remedies are harvested for their tubers and roots; for example, ginger, turmeric, and galingale. *Galian* remedies come with many different names: *Galian Putra, Galian Putri, Galian Singset, Galian Pegal Linu,* and *Galian Sawan Tahun.* Often, the purposes and uses of these different *Galian* remedies overlap, and they are generally all considered to be

"warm" or "hot." In this analysis, I maintain the major distinctions between the *Galian* remedies that were most commonly reported by the informants. For this analysis, I use the *Galian* distinctions listed above. Three of them are discussed in the section below: *Galian Putra, Galian Putri,* and *Galian Singset.* The remaining two *Galian* remedies, *Galian Pegal Linu* and *Galian Sawan Tahun,* are discussed in following sections.

Galian Putra

Galian Putra means *Galian* for men. Other *jamu* names included in this analysis are: *Kuat Pria* ("men's strength") and *Sehat Pria* ("men's health"), each listed by one vendor. Five other *jamu* vendors make and sell *Galian Putra.* Preventative and health maintaining purposes that they identified are: "to make the body strong," specifically reported by two vendors, and "for tiredness and lack of sleep," "for tiredness and health," "to increase appetites for more energy for hard work," "for energy," "to make (the body) strong," "to maintain the stable condition of the body," "for protecting one's health and fitness," and because it is "good for the body," each mentioned once. There is only one report from a generalized *Galian jamu* which suggests a curative purpose, for "diarrhea." Finally, there is one use mentioned that could be construed to have either a preventative or curative activity: "for warmth - for warming the body." However, most uses of this *jamu* identified by the seven vendors are primarily preventative in nature.

Eleven of the eighteen male consumers interviewed stated use of *Galian Putra.* The preventative and health maintaining reasons given include: "for strengthening the body," reported by four informants, including one who specifically said that he used it for driving pedicabs; "to add energy, vitality, or stamina," mentioned by four consumers, including one who said it can be used for sex; and finally, "to make the body healthy and refreshed," mentioned twice. The only other reason reported for consuming *Galian Putra* is a curative use: "for getting rid of muscle aches and pains," mentioned by two informants.

Both the vendor and consumer interviews reveal that the vast majority of *Galian Putra*'s uses are for strength, energy, and bodily health. Curative functions are few and

inconsistently reported between the two groups. Therefore, I consider *Galian Putra* to be a primarily preventative *jamu.*

Galian Putri

Galian Putri means *Galian* for women. Similar to my analysis of *Galian Putra*, I include *Kuat Wanita* ("women's strength") into the discussion of *Galian Putri.* Seven *jamu* vendors make and sell a type of *Galian Putri*. The preventative and health maintaining purposes reported include: "for making women slim," stated by three vendors; and "for increasing appetites for more energy for hard work," "for energy," "for tiredness," "for protecting one's health," and "to maintain the stable condition of the body," each mentioned once. "For warming the body" and "for after menstruation" were each mentioned once and suggest the mode and timing of its therapeutic purposes. Finally, one vendor reported a curative purpose for a non-specific *Galian:* "for diarrhea."

Twelve of the twenty female consumers claimed to have used *Galian Putri.* The reasons given for using this *jamu* are primarily preventative and health maintaining: "to make the body healthy," mentioned by two informants; and "to protect the healthy condition of the body," "to protect the condition of the body and metabolism," "for menstruation," and "for stomach and body slimming after menstruation," each mentioned once. Two women additionally stated that it was to be "drunk after menstruation," but did not state related uses. Finally, three remarks categorized as neither preventative or curative include: "to make lasting youth," "so there is additional prettiness," and simply because it "is good." No curative uses were mentioned by any of the consumer informants.

Both the *jamu* vendor and consumer informants reported purposes and uses of *Galian Putri* that are almost entirely preventative and health maintaining. Only one unspecific remark about a generalized *Galian* suggested a curative purpose. Therefore, I categorize *Galian Putri* as preventative.

Galian Singset

Galian Singset was occasionally reported by the vendor and consumer informants as very similar to *Galian Putri*. One *jamu* vendor actually stated that *Galian Putri* and *Galian Singset* are the same *jamu*. However, many informants gave separate responses for both, suggesting that these are recognized as two different, yet similar, *jamu* remedies. *Galian Singset* translates to "tight *Galian*," a reference to its most popular function: to "tighten," or slim, the body.

Preventative and health maintaining purposes reported by the *jamu* vendors include: "for making women slim," mentioned four times; and "for after menstruation, to make the body thin/slim, not fat," "for tightening the body, not just for slimming, but also for cleaning the body's fluids after menstruation," and "for energy, in a higher dose (of the *jamu)*," each mentioned once. Most of these purposes are for maintaining bodily health and menstrual balance. Another stated purpose suggests this *jamu*: is "for women who have recently given birth and young women," and for women "after menstruation." Only one curative purpose was reported: "for skin irritations."

Thirteen of the twenty female consumers and one male informant claimed to have used *Galian Singset*. Of these, twelve women stated reasons for using it. Each woman said she uses it for "making the body" either "slim," "svelte," "slender," "tight," "not flabby," or "fit." Three of these informants additionally reported it was used "after menstruation each month" for the purposes of "reducing" or "preventing bloating" and slimming the stomach and body. One female informant mentioned drinking it when she thinks she is "fat." The single male informant considered himself to be overweight, and said that he repeatedly uses *Galian Singset* "to stabilize the body for loosing weight." No other uses of *Galian Singset* were mentioned.

Both the *jamu* vendor and the *jamu* consumer informants strongly indicate that the primary purpose and use of *Galian Singset* is to maintain health and physical fitness. Most reported uses pertain to maintaining the ideal physical state of one's body and to regulate the natural menstrual cycle of women. Therefore, I categorize the primary function of

Galian Singset as preventative.

Keputihan (Daun Sirih)

Keputihan means "whitish thing." The illness of *keputihan (sakit keputihan)* translates to "leukorrhea," "white vaginal discharges," and often refers to "vaginal yeast infections." *Daun Sirih* is a *Piper betel* leaf, commonly stated as the prime ingredient for the *Keputihan jamu.* It is vended by Ibu Indah, one of the three *jamu gendong* vendors. Three other *jamu* vendors also make and sell this *jamu*, but each gives it a different name: *Daun Sirih, Sirih,* and *Delima Putih.* The latter translates literally to "white pomegranate." In this discussion and analysis, I use the name of the stated illness, *"Keputihan,"* as the gloss for this *jamu.*

All four *jamu* vendors stated that *Keputihan* is used "to treat" or "to get rid of Leukorrhea and vaginal yeast infections." Two of the vendors additionally said that it can be used "for sick eyes" and "to clean the eyes and see clearly." One vendor said that it "also helps the stomach." Finally, two specifically stated that it was intended for use by females. All of the uses stated by the *jamu* vendors, with the possible exception of "helping the stomach," can be considered curative.

Only two of the twenty female consumers reported previous use of *Keputihan.* Both stated the same reason: "to heal white vaginal discharges (Leukorrhea) and vaginal yeast infections." Each also said that they only use it "when sick," further suggesting that the primary use of this *jamu* is curative. No other reasons for using this *jamu* were given. Because the primary uses of this *jamu,* as stated by each vendor, corroborate the consumers responses, *Keputihan* is categorized as primarily curative.

Keputihan Supaya Punya Anak-Anak

Only one *jamu* vendor, Ibu Indah, a *jamu gendong,* reported making and selling this type of *jamu. Keputihan Supaya Punya Anak-anak* translates literally to *"'Keputihan'* for having children." This type of *jamu* is used to treat infertility. It is made with *Daun*

Sirih (*Piper betel* leaf), similar to *Keputihan,* but is also mixed with Jambe (areca nut). Ibu Indah stated that this remedy is "for child bearing, for women that don't have children, but have problems getting pregnant." She said that some of her customers did become pregnant after using this *jamu* routinely, despite previous failures of biomedical doctors and specialists to increase their fertility. Of my informants, only two women reported prior use of a *jamu* to help increase their fertility, but stated other types of *jamu.*

This *jamu* is not used unless a problem with fertility is first perceived. Therefore, I consider the treatment of infertility problems to be a curative function. Because no other uses were mentioned, I categorize this *jamu* as primarily curative.

Kunir Asam

Kunir Asam is the second most frequently used *jamu* in my survey. Thirty-one of the forty consumers reported using *Kunir Asam*, which is made and sold by all twelve of the vendors interviewed. A commonly held belief, articulated by three vendors, is that this *jamu* is "cool" or "cold."

The twelve *jamu* vendors reported many preventative and health maintaining functions of *Kunir Asam* (see Table 12). Ten vendors stated purposes related to menstruation. Some specifically said that *Kunir Asam* was primarily, but not exclusively, for women before and during menstruation. Five vendors reported it is "to make blood flow quickly and evenly," and "better," during menstruation. Four said it prevents "upset stomachs" and "the sick feeling during menstruation." Because these uses center around preventing cramps and maintaining comfort during the menstrual period, I classify them as preventative. Other preventative and health maintaining purposes include: "for pregnancies" and "giving birth," mentioned twice, "to prevent the body from being bloated during menstruation," "for keeping the body slim," and "for males who often use it to not be fat," each mentioned once. Finally, three vendors reported that this *jamu* can be used for "adding mother's milk" after giving birth. Because this function maintains healthy lactation, it is also considered preventative and health maintaining.

Table 12: *Kunir Asam* Vendor Responses

Category	Stated Purpose	#	Percent
Preventative	To make blood flow quickly, evenly, and better	5	12.8%
	To prevent upset stomachs during menstruation	4	10.3%
	Adding mother's milk after childbirth	3	7.7%
	For pregnancies, giving birth	2	5.1%
	To prevent the body from being bloated during	1	2.6%
	For keeping the body slim	1	2.6%
	For males who often use it to not be fat	1	2.6%
	Total	=	*43.7%*
Curative	For upset stomachs	4	10.3%
	For fevers	3	7.7%
	For hemorrhoids	2	5.1%
	For high blood pressure	1	2.6%
	For a stroke	1	2.6%
	For acne	1	2.6%
	Total	=	*30.9%*
Either	For making (the body) cool	2	5.1%
	For cleaning the blood and skin	1	2.6%
	To add blood	1	2.6%
	Total	=	*10.3%*
Neither	To prevent menstrual odors	2	5.1%
	To rid the body of odors	2	5.1%
	To make one's skin smooth from within	1	2.6%
	For refreshing	1	2.6%
	Total	=	*15.4%*

Curative uses reported by vendors include: "for upset stomachs" (not specifically associated with menstruation), mentioned four times; "for fevers," mentioned three times; "for hemorrhoids," mentioned twice; "for high blood pressure," "for a stroke," and "for acne," each mentioned once. The "cool" or "cold" properties of *Kunir Asam* are said to reduce fevers and hemorrhoids, as well as to lower blood pressure.

The vendors also identified uses which I categorize as either preventative or curative: "for making (the body) cool," mentioned twice, "for cleaning the blood and skin," and "to add blood," each mentioned once. These uses are too general for specific classification, although they are probably menstruation-related. Finally, "to prevent menstrual odors," and "to rid the body of odors" (such as "sweat"), were each reported twice, and "to make one's skin smooth from within," and "for refreshing," were both stated once. All four purposes are categorized as neither preventative nor curative.

The consumer analysis of how *Kunir Asam* was used presents a slightly different pattern (see Table 13). Eighteen of the twenty female informants reported using *Kunir Asam.* Three only said they use it "to drink during menstruation" each month; two said that it is used "to add blood when there is not enough blood;" four said that it is used "to get rid of upset stomachs" and "problems of sickness" during menstruation; three said it is "for a quick, smooth, even flow of menstruation;" and one woman said she drinks it "for one week before menstruation and for two days after menstruation starts to prevent cramps, to make menstruation more agreeable, and to clean." Because the above uses of *Kunir Asam* are associated with maintaining a healthy menstrual cycle and preventing menstrual discomfort, they are categorized as preventative functions. Using this *jamu* to ease menstrual cramps is not considered curative because it is consumed prior to and during menstruation to prevent discomfort from occurring.

Two women said they use *Kunir Asam* "to clean the stomach," and one said she uses it "to clean the uterus." While I categorize these functions as possibly either preventative or curative, they probably are also related to maintaining menstrual health. Additional reasons for using *Kunir Asam*, which are neither preventative nor curative,

Table 13: *Kunir Asam* Consumer Responses

Category	Stated Purpose	#	Percent
Preventative	To get rid of upset stomachs/sickness during menstr.	4	15.4%
	For a quick, smooth, even flow of menstruation	3	11.5%
	For body freshness and health	3	11.5%
	To add blood when there is not enough blood	2	7.7%
	To prevent cramps, to make menstruation agreeable	1	3.8%
	To get rid of tiredness	1	3.8%
	To stabilize the body for loosing weight	1	3.8%
	To reduce weariness and tiredness	1	3.8%
	Total	=	*61.3%*
Either	To clean the stomach	2	7.7%
	To clean the uterus	1	3.8%
	For freshening the stomach	1	3.8%
	To add an appetite for eating	1	3.8%
	Total	=	*19.1%*
Neither	During menstruation to eliminate menstrual odors	3	11.5%
	Use while pregnant so the child will be more yellow	1	3.8%
	To get rid of sweat odors	1	3.8%
	Total	=	*19.1%*

include: "during menstruation to eliminate menstrual odors," mentioned three times, and "while pregnant so the child will be more yellow," stated once. I assume this final use refers to lightening the pigmentation of an infant's skin by drinking this *jamu* during fetal development.

Eleven male informants also reported drinking *Kunir Asam*. Three said they use it "for body freshness and health" and one said he uses it "to get rid of tiredness." One informant said that he uses *Kunir Asam* "to stabilize the body for loosing weight." Another informant, whose gender was not reported, also stated using *Kunir Asam* "to reduce weariness and tiredness." I consider the above uses to be preventative and health maintaining. Two additional uses are categorized as possibly either preventative or curative: "for freshening the stomach" and "to add an appetite for eating," each mentioned only once. Finally, one male said that he uses *Kunir Asam* "to get rid of sweat odors," which is neither preventative nor curative.

The majority of the *jamu* consumers reported uses of *Kunir Asam* which are preventative in nature. No specifically curative uses were mentioned. This provides a slight contrast to the *jamu* vendor informants, who reported some potentially curative purposes. Because more vendor-reported purposes are preventative than curative, and the majority of all consumer uses are also preventative, I categorize *Kunir Asam* as primarily preventative in function.

Pahitan (Godogan)

As discussed in reference to *Daun Papaya*, *Pahitan* translates to "bitter thing" and *Godogan* means "boiled thing." This refers to the way this class of *jamu* is made: by boiling the bitter plant ingredients. Many *jamu* mixtures are boiled and have a very bitter taste. *Daun Papaya* is only one of the more popularly used of these bitter and boiled remedies, and is analyzed separately above. When *Pahitan* or *Godogan* are mentioned without reference to *Daun Papaya*, I combine them under the general term *"Pahitan."* However, a *jamu* labelled as *Pahitan* or *Godogan* by an informant could actually have the

same ingredients as *Daun Papaya*, but was not identified as such.

Seven *jamu* vendors reported making and selling *Pahitan* or *Godogan*. One of the primary purposes stated is curative: "for skin irritations," mentioned by six vendors. Other curative purposes include for "dizziness," "stomach aches," and "for wind entering," each mentioned only once. One of the vendors gave two more uses for a *Pahitan* remedy mixed "with additional plants:" "for high blood pressure" and "for kidney problems." The additional plants were unspecified. The use of this *jamu* for kidney disorders is similiar to a *jamu* called *"Keji Beling"* (discussed below with the second prediction). Other stated uses of *Pahitan*, which are possibly either curative or preventative, include: "for increasing (one's) appetite," mentioned by five vendors; "to clean the blood," mentioned three times; "for better circulation" and "for mothers who recently gave birth," both mentioned once. No specifically preventative purposes were reported.

Consumers of *jamu* reported differring uses of *Pahitan*. Six informants stated use of *Pahitan* or *Godogan*, and listed a variety of reasons. Preventative and health maintaining functions include: "to have a smooth, even digestion and to help with metabolism," "to keep strong," and "to add body weight because (the informant) is skinny," each mentioned once. Adding body weight is health maintaining because it implies additional nourishment. Three non-specific reported uses are possibly either preventative or curative: for "when not eating," "to clean blood," and "for mosquito bites," each mentioned once. Finally, two stated uses of *Pahitan*, "for body odors" and "multipurpose," are neither preventative nor curative.

Analysis of *Pahitan*'s functions, as stated by the vendors and consumers, reveals conflicting classifications. The most commonly stated use of *Pahitan* by the *jamu* vendors is for skin irritations, a curative function, which was possibly alluded to by only one consumer (for mosquito bites). No preventative purposes were reported by the vendors, while no curative uses were given by the consumers. Commonality between the two informant groups only exists in relation to functions categorized as possibly either preventative and curative. Five vendors and one consumer reported the use of this *jamu* for

increasing appetites, while three vendors and a consumer said it is employed for cleaning the blood. In consideration of these differences and commonalities, I categorize the use of *Pahitan* as either preventative or curative.

Sakit Maag

Sakit Maag translates as "stomach/gastric disorder," which reflects the primary purpose of this *jamu.* Two of the vendors independently stated making and selling a *jamu* with this name, and a third gave a different, yet related name: *Perut Mulas dan Mual* ("upset stomach and queasiness"). The reported functions directly reflect the names: "for stomach aches," "for upset stomachs, " and to relieve stomach aches and queasiness." One vendor additionally said that this *jamu* could also be used "for hypertension." Three *jamu* consumers reported use of a *jamu* termed *Sakit Perut dan Maag* ("sick/upset stomach and gastric disorder"). Two said they used it "to get rid of the feeling of sickness," and the third stated it was used "to treat gastric/stomach sickness." No additional purposes or uses were mentioned by either the *jamu* vendors or consumers. Based on the consistently reported purposes and uses, the *jamu Sakit Maag* is categorized as primarily curative in function.

Uyup-Uyup

The *jamu Uyup-uyup* is sold by four of the vendors, including one *jamu gendong,* Ibu Indah. One vendor said that *Uyup-uyup* is "for mothers (to drink) for two years after giving birth to make lots of healthy fresh breast milk and to make fat babies." A second vendor said that it is "to make mother's milk," while a third simply said it is "good for women after childbirth." A fourth vendor calls her *jamu "Parem Uyup"* which functions "to make the mother's breast milk fresh and healthy." I assume that *"Parem Uyup"* is only lexically different from *Uyup-uyup.*

Six *jamu* consumers reported that they have used *Uyup-uyup,* and two stated use of *Parem Uyup.* The reasons for using *Uyup-uyup* included: "after giving birth, for the quick, smooth, and even flow of the breast milk," mentioned by three consumers; and "to

make the uterus/womb fertile," stated once. One *Parem Uyup* consumer reported that it is used "before or during pregnancy, to make the stomach cold for fertility," and the other user said it was "for drinking, and to refresh the body."

All of the stated purposes and uses of this *jamu* are considered to be preventative and health maintaining, except for its utilization "for drinking." Therefore, *Uyup-uyup* is categorized as a predominately preventative *jamu.*

Jamu to Induce Abortions

Only one vendor, a *jamu gendong*, openly reported making and selling a *jamu* that has the specific purpose "to induce abortions." While there exists a commonly known *jamu,* called *Terlambat Bulan* ("late in the month"), which was suggested to be an abortifacient, I do not classify the two as the same *jamu.* The unnamed abortion *jamu* was not reported as having *Terlambat Bulan*'s primary function, which is to start menstruation when it is not keeping its regular cycle. Though similar, *Terlambat Bulan* is discussed separately below.

While only one vendor sells a *jamu* that has the specific purpose of inducing abortions, she does not vend it on a regular basis. Instead, she reported making it only when it is requested in advance. No *jamu* consumers stated use of a *jamu* to induce an abortion, which was the only purpose given by the vendor. While pregnancy is not a illness, it can be perceived as a problem requiring treatment if the pregnancy is unwanted. This *jamu* functions to eliminate that perceived problem, thereby treating it. For this reason, I categorize this *jamu* as having a curative function.

DISCUSSION OF *JAMU GENDONG* VENDORS

To assess the first prediction that the *jamu* remedies sold by the *jamu gendong* vendors are predominately preventative and health maintaining, I now analyze the reported quantities of each *jamu* made and sold (see Appendix C for *jamu* categorizations and

quantities sold, listed by vendor). The first *jamu gendong*, Ibu Ardjo, makes and sells five types of *jamu: Beras Kencur*, *Galian Putra*, *Galian Putri*, *Kunir Asam*, and *Pahitan* (see Appendix C, page 163). She sells more *Kunir Asam*, a primarily preventative remedy, than any other *jamu:* reportedly eight or nine bottles daily (one and a half liters each). *Beras Kencur*, also primarily preventative, is her second most vended *jamu:* six or seven bottles a day. Her two other preventative remedies, *Galian Putra* and *Galian Putri*, have significantly fewer sales: less than one bottle each daily. Ibu Ardjo vends a maximum total of eighteen bottles of preventative *jamu* each day. In contrast, her only other *jamu, "Paitan" (Pahitan),* categorized as either preventative or curative, sells one or two bottles daily. Therefore, Ibu Ardjo vends much more preventative *jamu* than any other category.

Ibu Dita, however, only vends three types of *jamu* remedies: *Beras Kencur*, *Galian*, and *Kunir Asam* (see Appendix C, page 163). She makes and sells more *Beras Kencur*, a predominately preventative *jamu*, than any other *jamu*: five bottles daily during the hot season, and three to four bottles daily in the rainy season. She sells slightly less *Kunir Asam*, also preventative, during the hot season (three to four bottles each day), and sometimes as much in the rainy season (usually two bottles, but up to four a day). She makes a third *jamu* which she called *"Galian."* The three analyzed types of *Galian (Galian Putra, Galian Putri,* and *Galian Singset)* are all categorized as primarily preventative. However, Ibu Dita's type of *Galian* was reported to be for rheumatism, a curative purpose, and for increasing appetites to add energy for hard work, a preventative and health maintaining purpose. For these reasons, I categorize this general *Galian* as either preventative or curative in function. She vends one bottle of this *Galian* each day during the hot season, and two bottles daily in the rainy season. However, this is only one-ninth of her daily hot season *jamu* sales, the remainder of which are primarily preventative remedies. During the rainy season, she reports vending up to eight bottles of preventative *jamu,* but only two bottles of *Galian* each day. Therefore, Ibu Dita regularly sells much more preventative *jamu* than any other category.

In contrast with the first two *jamu gendong* informants, Ibu Indah makes and sells

twelve types of *jamu* (see Appendix C, pages 163-164). During the hot season, she sells much more *Beras Kencur* and *Kunir Asam*, both primarily preventative, than all of her other *jamu* types combined. An equal amount is sold during the rainy season. Twenty liters of *Beras Kencur* each day during the hot season, and ten liters daily in the rainy season, are reportedly sold. She sells twelve and a half liters of *Kunir Asam* each day during the hot season, and seven and a half liters each day in the rainy. Ibu Indah said that during the hot season there is a greater demand for *Kunir Asam* than the amount she can actually carry. Other preventative *jamu* remedies which she sells include *Cabe Puyang, Galian Singset,* and *Uyup-uyup.* She sells four liters of *Uyup-uyup* and one liter of *Cabe Puyang* each day during both seasons, and one liter a day of *Galian Singset* in the hot season, but only half a liter daily during the rainy season.

Other *jamu* types vended by Ibu Indah, ones which I categorize as having primarily curative functions, include: *Keputihan, Keputihan Supaya Punya Anak-anak, Sakit Maag,* and an unnamed *jamu* for inducing abortions. Of these, *Keputihan* is the most frequently sold *jamu*, with about one liter sold each day in both seasons. She said about ten people each day purchase little tied plastic bags of *Sakit Maag.* I estimate this to be equivalent to one liter of *jamu.* She reported that *Keputihan Supaya Punya Anak-anak* is the least frequently sold type of her regularly vended *jamu* remedies: only a half liter sold daily in both seasons. Ibu Indah only makes the abortion inducing *jamu* when specially requested by a customer, which she estimates to average only three times each year.

Ibu Indah vends two *jamu* types categorized as either preventative or curative: *Daun Papaya* and *Godogan.* She reported selling five liters of *Godogan* each day in both seasons, and three liters of *Daun Papaya* daily in the hot season, and two liters a day during the rainy season.

Finally, Ibu Indah makes one *jamu* considered to be neither preventative nor curative: *Cabe Puyang* with *Daun B'luntas* (said to prevent body odors). She reports selling about two liters of this *jamu* each day in both the hot and the rainy seasons. However, she added that more of this *jamu* is requested during the hot season than the

amount she carries.

During the hot season, Ibu Indah vends up to thirty-eight and a half liters of preventative *jamu* remedies, and about two and a half liters of curative remedies. During the hot season, she also vends eight liters of remedies which are possibly either preventative or curative, and two liters of *jamu* considered to have neither function. During the rainy season, Ibu Indah vends twenty-three liters of preventative *jamu,* and two and a half liters of curative remedies. Additionally in the rainy season, she vends seven liters of *jamu* considered to be possibly either preventative or curative, and two liters of a *jamu* which is neither category. Overall, Ibu Indah vends many more liters of preventative *jamu* than all of the other categories combined, despite having more types of non-preventative remedies than types of preventative *jamu.*

JAMU CONSUMERS

While the *jamu gendong* vendors serve as the primary source of information for this analysis, the *jamu* consumer interviews are now utilized to further assess the prediction (see Appendix D for consumer summaries). Twenty-two *jamu* consumers reported purchasing one or more types of *jamu* from a *jamu gendong*. From these informants, fifteen types of *jamu* were listed as being bought from a *jamu gendong* vendor: *Beras Kencur, Cabe Puyang, Cekokan, Daun Papaya, Galian Putra, Galian Putri, Galian Singset, Gatal, Jambu, Kunir, Kunir Asam, Nafsu Makan, Pegal Linu, Terlambat Bulan,* and *Uyup-uyup.* Of these *jamu* remedies, seven *(Cekokan, Gatal, Jambu, Kunir, Nafsu Makan, Pegal Linu,* and *Terlambat Bulan)* are not discussed in relation to the three *jamu gendong* vendors. These seven *jamu* are evaluated and categorized below.

Nafsu Makan (Cekokan)

Nafsu Makan ("appetite for eating") has only one stated function: increasing one's appetite. The only vendor who specifically reported making and selling *Nafsu Makan*

stated this purpose, as did four of the seven consumers who reported prior use of it. One informant said it is given to young children once a month to "make a fat child." Some consumers did note using it when young, but others indicated they still use it as adults. No other uses for *Nafsu Makan* were reported.

Cekokan literally means "forced thing," referring to the way this *jamu* is administered to young children; it is forcibly squeezed from a sponge or rag into the mouth of an infant or child. This is likely due to both the bitter taste of the *jamu* and the refusal of the child to eat and drink. While none of the vendors specifically stated selling *Cekokan*, nine consumers reported using it as children. Seven of these consumers gave reasons for its use, all of which were "for adding an appetite." One informant elaborated by saying this *jamu* is an "appetite stimulant for children under one and a half years old."

For this analysis, I consider *Cekokan* and *Nafsu Makan* to be essentially the same type of *jamu* despite differing modes of consumption. It is highly possible that *Nafsu Makan* and *Cekokan* are both a type of *Godogan* or *Pahitan*, possibly even *Daun Papaya;* however, the interviews neither suggest nor refute this possibility. The only stated function of *Nafsu Makan* and *Cekokan* is to increase one's appetite. While this function may be associated with increasing energy and nourishment, it could also be used to help treat an illness that has exhausted the body and desire to eat. For this reason, I categorize *Nafsu Makan* and *Cekokan* as possibly either preventative or curative.

Gatal

Gatal literally means "itchiness" or "skin irritation." This is also the only function reported for this *jamu*. Two vendors reported selling a *jamu* called *Sawanan Gatal,* which I understand to be the same as *Gatal*. They stated it is "for skin irritations and itchiness," and "to get rid of the feeling of itchiness." Only one *jamu* consumer reported using *Gatal*, and also said that it was used "for itchiness." *Gatal* may also be a type of *Pahitan*, which is often attributed to curing skin irritations; however, this was not specifically stated by any informants. Because both the vendors and the consumers reported the function of *Gatal* as

treating skin irritations, this *jamu* is categorized as primarily curative.

Daun Jambu

Use of *Jambu* was only reported by two *jamu* consumers and no vendors. *"Daun Jambu,"* meaning "guava leaves," is the part of the plant used in this *jamu.* Both consumers said it is mixed with salt, and one also said water is added. It is used to combat diarrhea. One informant specifically said it is "for children's diarrhea." It is my assumption that this *jamu* functions similar to biomedical oral rehydration solutions for treating diarrhea. Both informants stated consistent uses of *Daun Jambu*, which is categorized as a curative remedy.

Kunir

The use of *Kunir* by itself was not frequently reported by the informants. A single vendor reported vending *Kunir* roots mixed with "gamping" (limestone) to treat "children's diarrhea." Two consumers also reported using *Kunir* by itself. One said that *Kunir* was used to treat itchiness and skin irritations, and the other reported using *"Sari Kunir"* (meaning concentrated *Kunir)* "to treat gastric/stomach sickness *(maag).*" *Kunir* can be categorized as curative in nature.

Galian Pegal Linu

Discussed briefly above, *Pegal Linu* is often considered to be a type of *Galian jamu. "Pegal Linu"* translates to "stiff, painful, or weary rheumatic pains," describing the condition this *jamu* most often is used to treat. Five vendors reported making and selling this *jamu.* Of the purposes reported, "for treating rheumatism" was mentioned by each vendor. Others added that it is also used for sore knees, bones that ache, muscle pains, tiredness, exhaustion, and fatigue (often due to hard work). Only one vendor said it is intended for use by older people. Twelve *jamu* consumers stated using *Pegal Linu.* Of these, eight specifically reported using *Pegal Linu* to treat muscle aches, pains, and

rheumatism; all curative uses. Two said it is used for replenishing stamina and energy, which I consider a preventative and health maintaining function. Despite these two preventative uses, I categorize *Pegal Linu* as a curative *jamu.*

Terlambat Bulan

Terlambat Bulan means "the month is late," referring to the late arrival of menstruation. Many other *jamu* remedies are employed during different stages within the menstrual cycle. *Kunir Asam*, for example, is drunk before and during menstruation to insure a quick and smooth menstrual flow and to control cramping. *Galian Putri* and *Galian Singset* are consumed after menstruation to reduce bloating. Javanese women are generally very conscious of their menstrual cycles and try to keep them well regulated to maintain bodily health and balance. *Terlambat Bulan* is used when an expected menstruation does not start on time. Its purpose, as reported by one *jamu* vendor, is "to speed up menstruation (and) the arrival of the month." Interestingly, the vendor calls this *jamu "Peluntur,"* which translates literally to "laxative;" apparently associated with restarting the menstrual flow. The other vendor, who sells what he terms *"Telat Bulan"* (an abbreviation for *Terlambat Bulan),* reported that it is used "for menstrual cycles normally late due to stress, low blood pressure, or being too tired; for a quick, even flow of menstruation; and can be used for abortions." He said, however, that he tries not to sell it for that latter purpose. That last function could give a new interpretation to the earlier term *"Peluntur,"* possibly implying this remedy's use to resume the desired menstrual flow by expelling the fetus. The potential use of *Terlambat Bulan* for this purpose was well known among many of the Javanese whom I interviewed, although none specifically reported this use.

Four *jamu* consumers reported using *Terlambat Bulan*, and stated reasons I consider to be preventative and health maintaining. Two said they had used this *jamu* because menstruation was late, and another said it was consumed to maintain "appropriate and exact timing." These functions are preventative because they are associated with

maintaining the natural menstrual cycle. The only other reason given for using *Terlambat Bulan* is "so that menstruation is quick, smooth, and even," which I also consider to be preventative and health maintaining. Use of this *jamu* for curative reasons was not reported.

Inducing abortions, the only potentially curative function of *Terlambat Bulan* was mentioned by only one vendor and no consumers. All of the other reported functions are preventative and health maintaining. Therefore, despite a possible abortifacient role for this *jamu, Terlambat Bulan* is categorized as preventative in nature.

JAMU CONSUMER DISCUSSION

Twelve consumers reported purchasing *Beras Kencur* from *jamu gendong* vendors, and eleven stated pruchasing *Kunir Asam* from them as well. This contrasts with all of the other *jamu* remedies reportedly bought from *jamu gendong* vendors. No other *jamu* remedy enjoyed such widespread use. Preventative *jamu* remedies purchased from *jamu gendong* vendors include: *Beras Kencur*, mentioned by twelve consumers; *Kunir Asam*, mentioned eleven times; *Galian Putra*, mentioned once; *Galian Putri*, mentioned twice; *Galian Singset*, mentioned once; *Uyup-uyup*, mentioned twice; *Cabe Puyang* , mentioned once; and *Terlambat Bulan*, mentioned once (thirty-one total reports).

The curative *jamu* remedies purchased from *jamu gendong* vendors include: *Pegal Linu, Kunir, Jambu,* and *Gatal;* each mentioned by only one consumer. Consumers additionally identified six other *jamu* remedies purchased from *jamu gendong* vendors. These remedies could be categorized as possibly either preventative or curative. Of these, *Daun Papaya* was mentioned by three consumers, *Nafsu Makan* was mentioned twice, and *Cekokan* was mentioned once. In total, only ten reports of purchasing non-preventative *jamu* from *jamu gendong* vendors were stated by the consumers, which contrasts to the thirty-one statements of preventative *jamu.*

CONCLUSION

The first expectation states that *"jamu* sold daily by door to door vendors *(jamu gendong)* will most often be preventatives, rather than curatives." For this prediction to have validity, there must be a greater quantity of preventative than curative *jamu* sold by the *jamu gendong* vendors on an overall basis (see Appendix C for *jamu* categorizations and quantities sold, listed by vendor).

First, the number of different types of preventative *jamu* purchased from each *jamu gendong* vendor needs to be greater than the curative types. The first two *jamu gendong* vendors support this requirement. The first *jamu gendong*, Ibu Ardjo, reported selling four types of primarily preventative *jamu*, but no remedies categorized as curative (see Appendix C, page 163). Ibu Dita, the second *jamu gendong*, sells two types of preventative *jamu*, but no curative remedies (see Appendix C, page 163). The third *jamu gendong,* however, does not fit this pattern as strongly as the first two vendors. Ibu Indah, the third *jamu gendong*, reported selling five types of preventative, but also four types of curative, *jamu* (see Appendix C, pages 163-164).

This apparent failure of the third *jamu gendong* to conform to this expectation can be rationalized. The first two vendors, Ibu Ardjo and Ibu Dita, carry their bottled *jamu* in a single basket on their backs, which limits the amount of *jamu* they can vend. The third *jamu gendong*, however, is not similarly limited. Instead, Ibu Indah carries her bottled *jamu* in two large baskets hanging from her bicycle, which she rides when vending. By doing so, Ibu Indah is able to carry and vend many more bottles of *jamu*, and, therefore, a greater variety of *jamu* types. This practice does not conform with the basic assumptions behind the first prediction; that due to their limited carrying capacity, *jamu gendong* vendors will choose to vend the types of *jamu* most frequently used on a daily basis: preventatives and health maintainers. Only vendors with greater amounts of *jamu* should be able to afford vending *jamu* not regularly used daily: curative *jamu.* I argue that because of the greater amount of *jamu* bottles Ibu Indah carried, she was able to carry, and

potentially sell, more types of curative *jamu* than the other *jamu gendong* vendors. In this way, Ibu Indah conforms more to the second prediction concerning the sedentary *jamu* vendors.

To support the first prediction, I additionally stated that the mass liquid quantity of preventative *jamu* purchased from *jamu gendong* vendors should be clearly greater than that of curative *jamu.* Both the first and second *jamu gendong*, Ibu Ardjo and Ibu Dita, sell preventative *jamu* remedies, not curative *jamu.* In all, they sell much more preventative and health maintaining *jamu* than any other *jamu* category (see Appendix C, page 163). While Ibu Indah vends almost as many types of curative *jamu* as she does preventative, she still vends more than double the liquid quantity of preventative *jamu* than all other categories combined, and over ten times the amount of curative *jamu* alone (see Appendix C, pages 163-164). Therefore, all three *jamu gendong* lend support to the first prediction.

The consumer analysis additionally supports this prediction. First, the consumer informants reported purchasing eight different types of preventative *jamu* from *jamu gendong* vendors, but only four types of curative remedies. This suggests that the pattern seen with the first two *jamu gendong* vendors, Ibu Ardjo and Ibu Dita, is reliable. Second, the consumers gave thirty-one individual reports of purchasing preventative *jamu* from *jamu gendong* vendors, but only four statements of purchasing curative remedies.

With the rationalized exception of the third *jamu gendong*, both data sets conform well to the two primary expectations. First, the two *jamu gendong* who carry their *jamu* on foot do vend significantly more types of preventative *jamu* than curative. Second, all three *jamu gendong* vend a much greater liquid quantity of preventative than curative *jamu.* Finally, the consumer interviews support both findings, suggesting this is a much broader pattern beyond that associated with the three *jamu gendong* informants. Therefore, I consider the first prediction, that door to door *jamu gendong* vendors tend to sell more preventative than curative *jamu*, to be strongly supported. This is particularly interesting because the total number of curative *jamu* types identified in this research outnumber the preventative types more than two to one.

SECOND *JAMU* PREDICTION

INTRODUCTION

The second expectation states, "*jamu* sold by sedentary vendors will more often be used for specific illnesses (curatives) than those sold by door to door vendors (*jamu gendong).*" This suggests that the sedentary *jamu* vendors sell a greater range of curative *jamu* remedies than the *jamu gendong* vendors. The methods for assessing this prediction are very similar to those employed to test the first expectation, as I analyze interviews from both the sedentary *jamu* vendors and the *jamu* consumers. For the second prediction to be supported, there needs to be strong evidence that the *jamu* stores and other sedentary vendors sell more curative *jamu* than do the mobile *jamu gendong* vendors.

SEDENTARY *JAMU* VENDORS

During the field research, I interviewed nine sedentary *jamu* vendors: Pak Bambang, Ibu Amat, Ibu Ina, Ibu Lamidjan, Ibu Manang, Ibu Sari, Ibu Sumirah, Ibu Mun, and Pak Sosromarto. Four of these vendors, Pak Bambang, Ibu Manang, Ibu Sari and Ibu Sumirah, were interviewed in their homes, while five - Ibu Amat, Ibu Ina, Ibu Lamidjan, Ibu Mun, and Pak Sosromarto - were interviewed in their respective vending places. All nine vendors live and sell *jamu* in the city of Yogyakarta.

In contrast to the *jamu gendong*, each of these vendors sells their *jamu* daily from their permanent business location. Pak Bambang, Ibu Amat, Ibu Ina, Ibu Lamidjan, Ibu Manang, and Ibu Sari each separately vend their *jamu* in market places of various sizes. They generally prepare their *jamu* at home before bringing it to their respective market

locales. Most bring their prepared *jamu* in bottles, as do the *jamu gendong*. However, some, such as Ibu Amat, hand-squeeze their *jamu* when ordered from prepared plant pulp mixtures. These marketplace vendors generally sell jamu from early morning until early afternoon when the customers become scarce.

One vendor, Ibu Sumirah, sells her *jamu* in a small roadside kiosk which she sets up each evening. There she vends her home-prepared *jamu* from late afternoon until after ten at night. During the day Ibu Sumirah works as a fitness instructor at a local health center, where she also sells her preventative and health maintaining *jamu* to its members.

Finally, Ibu Mun and Pak Sosromarto each own and manage a *jamu* store. There they make fresh *jamu* daily from the large supplies of medicinal plants in their storerooms. Their stores stay open to customers from mid morning until late in the evening. Each has tables and chairs so people can drink *jamu* in the store, or can purchase "take out" in tied plastic bags. Both provide menus of the *jamu* available, but each independently claimed their store could make almost any type of *jamu* requested.

Pak Bambang makes his *jamu* with the assistance of his wife, but vends it alone at a local market. Ibu Lamidjan makes and sells *jamu* with the aid of her teenage daughter. Ibu Sari makes and sells her *jamu* in cooperation with her younger sister. Both Ibu Mun and Pak Sosromarto have the assistance of the hired staff in their stores for both making and selling *jamu*. All of the other *jamu* vendors discussed in this section both make and sell their *jamu* remedies independently.

To assess the second prediction, I first categorized each *jamu* sold by the nine sedentary *jamu* vendors. As with the first prediction, I analyzed the vendor and consumer interviews to determine a category for each *jamu* type as primarily preventative, curative, either, or neither (eg. a beauty aid).

The sedentary vendors each make and sell many different types of *jamu* (see Appendix B for reported *jamu* functions, listed by vendor). Many of the sedentary vendors reported selling almost every type of *jamu* discussed in relation to the *jamu gendong* and their consumers. In addition, the sedentary vendors reported making and selling twenty-

seven *jamu* remedies not reported by the *jamu gendong*. These additional remedies include: *Batukan, Beras Kencur Keras, Datang Bulan, Endak-endak Cacing, Galian Sawanan, Galian Sawan Tahun,* Influenza, *Jerawat, Keji Beling, Masuk Angin, Parem, Penyegar, Pilis, Remujung, Sakit Pinggang, Sariawan, Semelak Pace, Sesak Nafas, Sorokan, Tambah Darah, Tapel Susu, Telor Madu Mrica Anggur, Temu Lawak, Tolak Angin, Urat Syaraf,* and *Wejah Sawanan.* Because the vendors did not discuss the uses attributed to two remedies, *Galian Parem* and *Galian Sawanan,* I do not include them in the following discussion, and categorize them only as "unknown." I discuss and categorize the remaining twenty-five *jamu* below (see Appendix C for *jamu* categorizations and quantities sold, listed by vendor).

Beras Kencur Keras

Only one *jamu* vendor, Pak Sosromarto, produces this *jamu*. *Beras Kencur Keras* means "strong" *Beras Kencur*, describing its additional potency and extra "hotness." Pak Sosromarto reported that this *jamu* "gives strength back after giving birth, (and is) for coughs, sore throats, and for tightness of breath." I consider the addition of strength to be a preventative and health maintaining function, and the remaining three purposes to be curative. Coughs are often associated with wind entering, which is treatable with "hot" *jamu.* "Tightness of breath" may have a similar connection to wind entering, and is possibly considered to be similar to, or the same as, asthma. No consumers specifically reported using this *jamu.* In conclusion, I consider *Beras Kencur Keras*, as described by the one vendor, to be primarily a curative *jamu.*

Datang Bulan

Only Pak Sosromarto, a *jamu* store vendor, makes and sells *Datang Bulan.* This *jamu*, which translates to "arrival of the month," is said to be very similar to *Terlambat Bulan.* However, the vendor said that *Datang Bulan* uses *Kunir*, while *Terlambat Bulan* does not. He reported two purposes for this *jamu*: "to bring the arrival of menstruation"

and "to support the family planning programs." This latter purpose strongly suggests that *Datang Bulan* is used to end pregnancies by inducing abortions. However, the first remark suggests its purpose is to start menstruation when the cycle is late, but does not exclude normal lateness unrelated to pregnancies. No consumers have reported using this *jamu*, and further interpretation is not available. Therefore, I suggest that this *jamu* could be used for normal menstrual lateness, but also to induce abortions. In this regard, I categorize *Datang Bulan* as possibly either preventative or curative.

Endak-endak Cacing

Only one *jamu* vendor, a store vendor, makes and sells this *jamu*. *Endak-endak Cacing* translates roughly to "no worms." However, the purpose stated for its use is "to increase a child's appetite." Similarly, the only consumer who reported using this *jamu* said that it was "to add an appetite." While this *jamu*'s title suggests elimination of stomach or intestinal worms, the stated function of *Endak-endak Cacing* does not directly reflect this purpose. Because this *jamu* is similar to the other remedies which function to increase one's appetite, such as *Nafsu Makan*, I categorize *Endak-endak Cacing* as possibly either preventative or curative.

Galian Sawan Tahun

Galian Sawan Tahun, often called *Sawan Tahun*, is a *jamu* specifically intended for use by older people, as stated by every *jamu* vendor who reported on its functions. A literal translation of its name is "epileptic years *Galian*," referring to people in older age groups whose bodies might be degenerating. Six *jamu* vendors reported making and selling this *jamu*. One vendor stated that its purpose is to "strengthen the health of older people and to maintain the health of people who are already advanced (in age)." Another vendor said that its function is to "(treat) sicknesses, warm the body, help tiredness, and add energy," and that it is "for people fifty years or older who are not active or menstruating anymore." Another vendor said that it is "for people fifty years old or above,

for bones that ache and are sick (with) rheumatism, . . . and gets rid of sluggishness and fatigue." This vendor also said that it is "used twice a week" by consumers. A fourth vendor said that it for "still painful muscles" and for use "twice a week by older people," but additionally stated that it works "to keep (older people) from getting overweight." Finally, one vendor said that *Galian Sawan Tahun*'s purpose is "to make (older people's) bodies warm so wind won't enter." Only one *jamu* consumer stated use of *Galian Sawan Tahun*, and said it is "used twice a day for fatigue and a healthy body."

This *jamu* clearly has many preventative and health maintaining functions. Many informants stated use of it on a regular basis, further suggesting it is used as a health maintainer. However, some informants also stated that it functions as a treatment for rheumatic aches and pains. Not only does the "heat" of this *jamu* work to maintain health by preventing illness, such as wind entering, but it also treats rheumatism that already exists. Therefore, despite its many preventative reports, I categorize *Galian Sawan Tahun* as either preventative or curative.

Jerawat

Jerawat translates to "acne" or "pimple." This name refers to the function of this *jamu,* as stated by the only vendor who sells it: "for getting rid of acne." Eight of the forty *jamu* consumers reported using this *jamu.* All of their reasons were essentially the same: "to dry up," "to get rid of," "to heal," "to overcome," "to treat," or "for cleaning" acne. Neither the vendors nor the consumers mentioned any other reasons for its use. Therefore, I categorize *Jerawat* as primarily curative.

Keji Beling

Keji Beling translates as "shameful shards," possibly in reference to the feeling of the illness it reportedly treats: kidney stones. *Keji Beling* is actually the local name of four different plants, reported by other researchers (Soepardi 1965, Umiati et al. 1991), used for kidney stones: *Clerodendron calamitosum, Desmodium gangeticum, Ruellia napifera,*

and *Strobilanthes crispus.* Two *jamu* vendors said they make and sell this *jamu.* The first, Ibu Mun, reported that the function of *Keji Beling* is "to crush or dissolve kidney stones." The other vendor, Pak Sosromarto, said that *Keji Beling* is a type of *Pahitan jamu*, and is used for "cleaning the kidneys and crushing kidney stones." He reported that it is additionally "for washing the blood, for (treating) diabetes, and for arousing one's appetite." Two *jamu* consumers reported using *Keji Beling*. One said he used it "to heal kidney stones." The other reported the reason for its use was "to get rid of urinary problems that (feel) hot," presumably indicating pain during urination. All of the major reported functions of *Keji Beling* are curative, with the possible exception of washing the blood and increasing appetites, which was only stated once. The primary function of this *jamu* is treating kidney and urinary problems, notably kidney stones. Therefore, I categorize *Keji Beling* as a curative *jamu.*

Masuk Angin (Batukan, Influenza, *Tolak Angin, Watukan)*

Regardless of possible differentiations in plant mixtures used for these *jamu*, I am discussing them together because they have very similar functions. *Masuk Angin* translates to "wind entering," which is the illness this *jamu* treats. Likewise, *Tolak Angin* means "repel wind," stating the function of the *jamu*: casting out wind which has entered the body. Influenza is treated similarly to wind entering, as many symptoms are the same: coughing, headaches, congestion, etc. *Batukan* and *Watukan* both mean "coughs," which is one of wind entering's most common symptoms. These can all be considered a result of excess air within a person's body, a condition brought about by a cold imbalance.

Two of the *jamu* vendors make and sell a type of *Batukan*, and both state that the purpose of their *jamu* is "for treatment of coughs." The vendor who makes *Tolak Angin* said that it is for "wind entering." The vendor selling a *jamu* called "Flu" stated that it is for treating "influenza." Finally, one vendor sells a *jamu* called both *Masuk Angin* and Influenza, reflecting its function and the similarity of these illnesses. She reported that its purpose is "to get rid of headaches and the coughs of a cold." Nine consumers stated using

a *jamu* for wind entering or influenza. Five said they used it "to get rid of" or "to heal" wind entering. Three said that they used it "to heal" or "to cancel" influenza. One consumer of this *jamu* stated using it "to get rid of the feeling of sickness," but did not specify which illness. Finally, two consumers reported use of *Watukan*, and both said that it is "for coughs." All of the stated functions of these *jamu* remedies are curative. Therefore, I categorize *Masuk Angin*, and the other related *jamu*, as curative.

Parem

A *Parem jamu* is an externally applied mixture of medicinal plants, and is commonly associated with treating muscle or joint aches and pains. Of the *jamu* vendors interviewed, only one reported selling *Parem*. This vendor, who called his *jamu "Parem Cuwer,"* said that its purpose is "for (treating) sprains, and used after massaging." Twenty-two of the forty *jamu* consumer informants reported use of an externally applied *Parem*. Of these, one person said he uses *Parem* "to treat rheumatic aches and pains," one said "for repairing aching muscle pains in the feet," one said "to get rid of muscle aches due to fatigue," two said "to get rid of muscle aches and fatigue," seven said "to get rid of fatigue," one said "to get rid of the feeling of fatigue after giving birth," two said "to get rid of muscle aches and pains," one said "for tiredness of muscles from working or walking too much," two said "to get rid of the feeling of tiredness," another person said "for swollen joints, scrapes, and cuts," and finally, two people said they use it "to warm the body."

I consider the majority of these responses to be curative in function, with the possible exception of using *Parem* "for fatigue," "for tiredness," and "to warm the body." However, I feel that the fatigue and tiredness reported is that of aching muscle fatigue caused by strenuous work or exercise, as claimed by some informants. I also consider "warming the body" to be the method of treating these muscle aches and pains, as *Parem* is often considered to be a "hot" or "warm" *jamu*. It is likely that this "heat" is the agent treating the inflicted areas of the body. In discussing the many *jamu* remedies taken

internally, such as *Beras Kencur*, I suggested that the reported use of *jamu* to "get rid of tiredness" probably intended enhancement of energy and stamina. Here, however, users topically apply *Parem* to the inflicted region of their body. This is a curative use. "Getting rid of tiredness," in this context, probably functions to treat and eliminate "tiredness" or "fatigue" from the body. Regardless of these semantical distinctions, there are enough clearly curative uses reported to categorize *Parem* as a curative *jamu.*

Penyegar

Penyegar means "freshener," which is the generally stated purpose of this *jamu.* Only one vendor, Ibu Mun, sells a remedy called *Penyegar.* It is possibly a different name for one of the preventative remedies already discussed, but this is unconfirmed. The vendor who makes and sells *Penyegar* stated that its purpose is "to keep the body always healthy." Three *jamu* consumers also reported using this *jamu.* Two said that they use it "to refresh and give health to the body," while the other said it is used "for headaches." Despite this one curative reference, all of the other statements concerning this *jamu* reflected its preventative and health maintaining role: keeping the body fresh and healthy. For this reason, I categorize *Penyegar* as a preventative *jamu.*

Pilis

Only two *jamu* vendors stated making and selling *Pilis.* A *"Pilis"* is a herbal based compress placed on the forehead. It is not taken internally. The first vendor said the purpose of *Pilis* is "to clean the eyes (and) to see clearly, as a result of blurriness caused by migraines." The other vendor reported that it is "for itchy eyes and for seeing stars due to headaches." No *jamu* consumers reported using *Pilis.* Because both vendors reported that it is for eye problems due to headaches, I categorize *Pilis* as a curative *jamu.*

Remujung

Remujung is a plant *(Orthosiphon grandiflorus)* used as a tea. Only one vendor,

Ibu Mun, reported making and selling this *jamu.* She stated that it is "for making urination quick, even, and smooth." Similarly, the only *jamu* consumer reporting use of *Remujung* said that she drank it "to quicken, even, and smooth urination." I categorize *Remujung* as possibly either preventative or curative in function.

Sakit Pinggang

Sold by only one *jamu* vendor, Ibu Mun, *Sakit Pinggang* translates to "sick waist or loins." Both the vendor and the consumers reported the use of this *jamu* for treating nephritis, an inflammation of the kidneys. Ibu Mun stated that this *jamu* is "for nephritis, for kidneys to release urine, for waist pains, and to get rid of the feeling of sharply painful waist or loins." Two consumers reported using this *jamu* "to heal nephritis." It is possible that this *jamu* is actually *Keji Beling* or another kidney-related *jamu.* However, for the purposes of this analysis, combining similar *jamu* remedies is not necessary. Because of the consistently reported uses of this *jamu,* I categorize *Sakit Pinggang* as curative.

Sariawan

Only one *jamu* vendor, Ibu Mun, reported making and selling *Sariawan.* This word translates to "sprue" or "oral ulceration," referring to the curative function of this *jamu.* Ibu Mun reported that the purpose of this *jamu* is "to cure a sprue (oral ulceration)." Similarly, two of the five *jamu* consumers who reported utilizing *Sariawan* said they use it to "to heal a sprue." One other consumer stated using this *jamu* "for chapped lips," which could either be a similar function or a misinterpretation of the same purpose. Regardless, the reported uses of this *jamu* are consistent, and I categorize *Sariawan* as curative.

Semelak Pace

While I do not know the translation of *Semelak, Pace* is the Javanese term for the tree *Morinda citrifolia.* Only one *jamu* vendor, Ibu Sari, reported making and selling *Semelak Pace.* She said that it treats "headaches and high blood." My assumption is that

"high blood" refers either to high blood pressure or to hypertension, both called *"tekanan darah tinggi."* No other vendors or consumers reported *Semelak Pace.* Based on the purposes stated by the single *jamu* vendor, I categorize *Semelak Pace* as primarily curative.

Sesak Nafas

Sesak Nafas translates to "tightness of breathing." The single vendor who reported selling this *jamu*, Ibu Mun, stated it is "for asthma and to make breathing smooth and even." Three *jamu* consumers reported using *Sesak Nafas.* Two consumers said they use it "to heal tightness of breathing," and the third said she uses it "for overcoming smoker problems." All of these functions are either directly or indirectly for treating breathing difficulties, possibly asthma. Therefore, I categorize *Sesak Nafas* as a curative agent.

Sorokan

Sorokan probably means *"surukan,"* which translates literally to "hiding place," or "shelter." I assume this refers to the place where an infant rests before its birth: the womb. I make this assumption based on the reported use of this *jamu,* as stated by the vendor who sells it: "for the third trimester of pregnancy, one week before birth, to make the delivery easier." No other vendors reported selling *Sorokan,* and no consumers stated using it. Another possible meaning of *"Sorokan"* is *"sogokan,"* which means to "bribe," possibly referring to "bribing" an infant to come out easily from its mother's womb. Regardless of its definition, I categorize *Sorokan* as preventative because it functions to facilitate ease and safety in childbirth.

Tambah Darah

Ibu Mun is the only *jamu* vendor who makes and sells *Tambah Darah,* which means "to add blood." Ibu Mun reported the purpose of this *jamu* is "to get rid of the feeling of weakness and seeing stars." "Seeing stars" can possibly be interpreted as fainting or blacking out. Three consumers reported using *Tambah Darah,* and all said they

used it "to add blood," but did not state why additional blood was needed. Other informants said that adding blood provides extra energy. It is possible that other curative functions also exist, for example, recovery from severe blood loss. Because of this, *Tambah Darah* can be classified as either preventative or curative.

Tapel Susu (Wejah Sawanan)

While *Tapel Susu* translates to "milk paste," I do not have an accurate meaning for *Wejah Sawanan.* However, the functions of these *jamu* are reported as the same, suggesting they are the same remedy. Two vendors reported making and selling this *jamu.* The primary purpose of this *jamu,* stated by both vendors, is "to eliminate foul odors from mother's breast milk." One vendor mentioned that it is very similar to *Uyup-uyup.* Additionally, one of the two vendors said it is "also used as a refreshment drink." Finally, one consumer reported drinking this *jamu* daily, but did not report why. Because the informants did not clearly state any health-related functions, I consider this *jamu* to be neither preventative nor curative.

Telor Madu Mrica Anggur

Telor translates to "egg," *Madu* is "honey," *Mrica* is "pepper" and *Anggur* is "wine," which together comprise the ingredients for this *jamu.* One vendor reported making and selling this *jamu,* and claimed that it functions "to speed up the addition of blood." Two consumers stated that they drink this *jamu,* and said it is used "to protect stamina" and "for body power," both preventative and health maintaining functions. Many vendor and consumer informants stated that these ingredients give extra energy, strength, and sexual potency when consumed individually or mixed with other *jamu* remedies. I suggest that the vendor's reported purpose of this *jamu,* to hasten the addition of blood in the body, is intended to give extra energy to those who drink this *jamu.* This would be consistent with information about the individual ingredients and the statements by the consumers of this *jamu.* Therefore, I categorize *Telor Madu Mrica Anggur* as a

preventative agent.

Temu Lawak

Temu Lawak is *Curcuma xanthorrhiza,* a plant in the ginger family. The root of this plant is commonly used in *jamu* preparation. Despite statements regarding *Temu Lawak* as a *Pahitan jamu*, two vendors specifically reported that *Temu Lawak* is itself a type of *jamu.* The first said its purpose is to "clean the stomach and kidneys, also to relieve the stomach." The second vendor remarked that it is "for ease of urination, and also for drinking, like lemonade." Sixteen *jamu* consumers reported use of *Temu Lawak.* Of these, four stated preventative and health maintaining uses, which include: "to freshen and give health to the body," mentioned three times, and "to have a quick, smooth, evenly flowing blood, and to make (the body) healthy," mentioned by one consumer. Four consumers reported curative uses of *Temu Lawak*, which included: "for wind entering," "when there are urination and stomach problems," "for urination sickness," and "to treat jaundice." Finally, there were six statements of its use which could be either preventative or curative. These include four reports of increasing one's appetite, one reference to cleaning the stomach, and one claim that *Temu Lawak* is used "to strengthen the function of the liver." Additionally, one consumer said this *jamu* is "just for drinking, like water." In conclusion, consumers use *Temu Lawak* for a variety of reasons, from maintaining health to treating urinary problems. Therefore, I categorize *Temu Lawak* as either preventative or curative.

Urat Syaraf

Only one *jamu* vendor, Ibu Mun, reported selling *Urat Syaraf.* No *jamu* consumers mentioned using it. *Urat Syaraf* translates literally to "nerve tendon," or simply "nerve." This directly relates to the stated functions of this *jamu*, which are to "relieve stress," for "calming," and for "tense nerves." It is interesting to note that the given Indonesian uses of this term are similar to its double meaning in English: anatomical nerves and emotional

nerves. Despite the limited information available, I categorize *Urat Syaraf* as a curative *jamu.*

DISCUSSION OF SEDENTARY *JAMU* VENDORS

To assess the second prediction that "*jamu* sold by sedentary vendors will more often be used for specific illnesses (curatives) than those sold by door to door vendors *(jamu gendong),*" I now compare the categories of the different *jamu* types in reference to each sedentary vendor (see Appendix C for *jamu* categorizations and quantities sold, listed by vendor). Because the most popularly used *jamu* types are consistently preventative and health maintaining, such as *Beras Kencur* and *Kunir Asam*, it is unreasonable to expect curative *jamu* to outsell preventative *jamu.* Almost every vendor reported that they sell more *Beras Kencur* and *Kunir Asam* than any other *jamu.* Therefore, a liter by liter comparison of preventative to curative *jamu* remedies is not an appropriate test of this expectation. Instead, a comparison of the number of different types of preventative *jamu* against the number of curative types would better establish the pattern of *jamu* types vended.

First, I discuss the marketplace *jamu* vendors in relation to the pattern established by the *jamu gendong* vendors. Two *jamu gendong*, Ibu Ardjo and Ibu Dita, vend multiple preventative *jamu,* with no curative remedies, and only one categorized as either (see Appendix C, page 163). Ibu Ina, a sedentary market *jamu* vendor, follows this *jamu gendong* pattern exactly, with two preventatives, no curatives, and one that is either (see Appendix C, pages 164-165). Ibu Manang, also a market vendor, has a similar breakdown of *jamu* categories, with five preventatives and three that are either (see Appendix C, page 165). Slightly more distant from this *jamu gendong* pattern, Ibu Lamidjan sells four preventatives, one curative and three *jamu* categorized as either (see Appendix C, page 165).

The remaining marketplace *jamu* vendors do not follow the pattern of the first two

jamu gendong. Instead, their pattern is more similar to that of Ibu Indah, the mobile *jamu gendong* who uses a bicycle to carry her *jamu*. Ibu Indah vends five preventative remedies, four curatives and two categorized as either. Pak Bambang, Ibu Amat, and Ibu Sari follow this general pattern. Pak Bambang makes and sells three preventative *jamu*, two curative remedies, and one *jamu* that is either (see Appendix C, page 164). Ibu Amat vends six preventative remedies, four curatives, and one that is either (see Appendix C, page 164). Finally, Ibu Sari vends seven preventative *jamu*, four that are curative, and three categorized as either (see Appendix C, pages 165-166).

Second, I discuss the single informant who vends her *jamu* from a roadside stall (kiosk): Ibu Sumirah. She reported selling six types of preventative *jamu*, one curative, and one that is either (see Appendix C, page 166). Her pattern lies between that of the two *jamu gendong* vendors and that of Ibu Indah, who vends by bicycle. This shift towards preventative and health maintaining *jamu* is possibly influenced by Ibu Sumirah's interest in physical fitness and health. She is an instructor at a health center. Therefore, Ibu Sumirah may have focused more on preventative *jamu* despite vending in a sedentary location close to her residence.

Third, I discuss the two *jamu* store vendors. Their permanent locations allow them to provide a much wider selection of *jamu* types than any of the other vendors. For this reason, they have many more remedies of all categories (preventative, curative, either, and neither) and conform to the expectations of the second prediction. One *jamu* store vendor, Ibu Mun, reportedly makes and sells twelve types of preventative *jamu* remedies, eleven types of curative *jamu*, and seven *jamu* types that can be categorized as either (see Appendix C, pages 166-168). Pak Sosromarto, the other store vendor interviewed, reported selling seven types of preventative *jamu*, seven curative types, and three *jamu* types that are categorized as either (see Appendix C, page 168).

JAMU CONSUMERS

To lend additional support to the patterns suggested above, I analyzed the consumer interviews in relation to the reported sources of each *jamu* type purchased (see Appendix D for consumer summaries). Before discussing their purchasing patterns, I categorized the remaining *jamu* types reportedly used by these consumers, but types not sold by any vendors interviewed. These remaining *jamu* types, ones not listed by the vendors, include: *Benalu, Daun Tempu Iyung,* Ginseng, *Habis Bersalin, Inggu, Kejed,* and *Temu Gereng.* It is possible, however, that some of these remedies may be different names for *jamu* types already discussed.

Benalu

Two consumers reported the use of *Benalu* as a *jamu* remedy. *Benalu* is a parasitic plant *(Laronthus sp.)* that grows on tea and mango trees. One consumer said that he used it "for treating the measles," while the other reported using it to treat a "tumor in (her) breast." Both said their parents purchased the *jamu* for them, and one said it was from an unspecified *jamu* distributor. Both of these uses of *Benalu,* although probably unrelated, are considered to be curative. Therefore, I categorize *Benalu* as a curative *jamu.*

Daun Tempu Iyung

Daun Tempu Iyung is more commonly called *"Daun Tempuyung,"* which is the leaf of *Sonchus arvensis* in the *Compositae* family. One female consumer reported using this *jamu* "for curing the often urinating sickness," which I considered to be a bladder infection. She said she gathered the leaves of this plant from a garden. Because informants did not mention any other uses of *Daun Tempu Iyung,* I categorize this *jamu* as a curative agent.

Ginseng

Four consumers reported using *jamu* made with ginseng. The first uses Ginseng

Tangkur Buaya/Anak Kidang, which literally translates to "ginseng, seahorse, crocodile/baby antelope." This is either the brand name of a factory-made *jamu*, or it is a list of ingredients. According to one Javanese informant, "seahorse" is an indirect reference to genitalia. This informant went on to say that crocodile or antelope genitalia are generally thought to be part of the ingredients of this *jamu*. The consumer reported purchasing it often from a *jamu* vendor, and using it "for a strong body, to wake the morning fresh and healthy, and for a strong erection." The second consumer often purchases Ginseng *Tangkor* (Seahorse/Genitalia Ginseng) from a *jamu* "depot" (a *jamu* stand often vending factory-made *jamu*). He uses it "to add freshness, health and energy." The third informant purchases Ginseng *Lapen* from a *jamu* depot and uses it "for intoxication." *Lapen* refers to the alcohol present in this *jamu*. Finally, the fourth consumer purchases Ginseng from a *jamu* depot "to add energy." None of the *jamu* vendors reported selling such Ginseng *jamu* remedies, and in my experience, this type of *jamu* is usually factory-made. However, assuming that non-factory vendors might make this *jamu*, the inclusion of animal parts would exclude it from this study. Therefore, I make the assumption that these are not of direct relevance to this analysis.

Habis Bersalin

One consumer reported using a *jamu* called *Habis Bersalin,* which means "after childbirth." The informant said she used it "for forty days after giving birth." While I can assume that this is a post-childbirth health maintainer, no specific functions were stated. Therefore, this *jamu* cannot be categorized.

Inggu

Inggu is the local name for *Ruta angustifolia.* One female consumer reported using this *jamu* "for coughs." She said she uses it every morning while sick, and prepares this *jamu* at home after purchasing the plant in the market. I categorize this *jamu* as primarily curative in function.

Kejed

One female consumer reported previous use of *Kejed* when she was sick. I found no translation for *Kejed,* but the consumer said it was *jamu* for the heart. The reason given for using this *jamu* was "to treat heart disease or sickness resulting from too much cholesterol." I categorize this *jamu* as primarily curative in function.

Temu Gereng

Temu Gereng is a local name for *Curcuma heyneana* in the *Zingiberaceae* family. One female *jamu* consumer reported using this *jamu* when mixed with *Temu Lawak* (discussed above) "to treat jaundice." I categorize this *jamu* as primarily curative.

JAMU CONSUMER DISCUSSION

For the purpose of this analysis, any reference to "kiosks," "depots," "stores," or "shops" involved sedentary *jamu* vendors. Other statements, such as "from the market" or "pharmacy," are either considered to be too general or not a *jamu* vendor. For example, "from the market" could possibly mean purchasing factory *jamu*, or even purchasing the individual plants to prepare at home. Neither possibility conforms to the stated restrictions of my analysis. Additionally, claims of using factory-produced *jamu* are omitted from this analysis.

Twenty-eight of the forty consumers mentioned purchasing at least one *jamu* from a sedentary vendor (see Appendix D for consumer summaries). Twenty-two reported purchasing preventative remedies from *jamu* kiosks, depots, shops or stores. These twenty-two consumers stated purchasing preventative remedies from sedentary vendors a total of fifty-six times. Twenty-five informants stated purchasing curative *jamu* from sedentary vendors a combined total of fifty-four times. Finally, fourteen informants gave twenty-two reports of purchasing *jamu* I categorized as either curative or preventative from

sedentary vendors. Therefore, the number of consumers who purchased preventatives from sedentary vendors is relatively equal to the number who purchased curative *jamu.*

As discussed in relation to the first prediction, preventatives are the primary types of *jamu* purchased from *jamu gendong* vendors. Seventeen consumers stated purchasing preventative remedies from *jamu gendong* vendors, while twenty-two consumers reported buying them from sedentary vendors. Additionally, four consumers reported purchasing curative *jamu* from *jamu gendong* vendors, while twenty-five said they bought curative *jamu* from sedentary vendors. The analysis indicates that while more preventative *jamu* are purchased than curative remedies from *jamu gendong* vendors, consumers purchased an approximately equal number of preventative and curative remedies from the stationary vendors. Finally, this comparison of the two vendor patterns, as reported by the consumers, strongly suggests that sedentary vendors do sell significantly more curative *jamu* than do *jamu gendong* vendors.

CONCLUSION

To support the second prediction, there needs to be strong evidence that sedentary *jamu* vendors and stores do sell more curative *jamu* than do *jamu gendong* vendors. Both sources of information, vendors and consumers, suggest this is true. Analysis of the consumer interviews strongly suggests that much more curative *jamu* is purchased from sedentary vendors than from *jamu gendong*. The vendor interviews demonstrate that the majority of the sedentary vendors sell more curative *jamu* types than the *jamu gendong* who carry their remedies on foot. However, variation exists with respect to the pattern of sales reported by sedentary vendors interviewed for this research (see Appendix C for *jamu* categorizations and quantities sold, listed by vendor).

On one extreme, two sedentary *jamu* vendors (Ibu Ina and Ibu Manang) exhibit the same sales patterns as the two pedestrian *jamu gendong* (Ibu Ardjo and Ibu Dita). To the other extreme, Ibu Mun and Pak Sosromarto, who both own *jamu* stores, vend more types

of curative *jamu* than any other vendor. The remaining sedentary vendors exhibit *jamu* vending patterns that fall in between these two extremes. I propose that rather than fitting evenly into a dichotomized model of *jamu gendong* on one side and sedentary *jamu* vendors on the other, all of these vendors fit along a graded scale between two poles.

This graded model allows for greater variability than a dichotomized model, and could still support the first and second predictions. On one end of this scale are the vendors who make and sell primarily preventative *jamu*, but no curatives. On the opposite end are the vendors who still sell many preventatives, but additionally sell a large number of curative *jamu* types. The primary variable in this scale is the reported number of curative *jamu* types vended (see Figure 1).

Adjusted within this scale, Ibu Ardjo and Ibu Dita, the two pedestrian *jamu gendong*, are placed on the pole where no curative *jamu* is vended. Also on this extreme are Ibu Ina and Ibu Manang, the two market vendors who did not report selling any

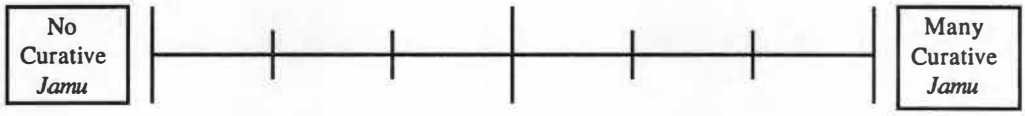

Figure 1: *Jamu* Vendor Scale Based on Number of Curative Types

curative *jamu*. Ibu Lamidjan, also a market vendor, is placed slightly away from this pole, as she sells one curative *jamu*. Along with her is Ibu Sumirah, who vends one curative type from her roadside kiosk. Closer to the center is Pak Bambang, a market vendor, who sells two curative remedies. At this model's center is Ibu Indah, the bicycle *jamu gendong* vendor, with Ibu Amat and Ibu Sari, both marketplace *jamu* vendors. These three each vend four curative *jamu* types. Finally, Ibu Mun and Pak Sosromarto, both *jamu* store vendors, are placed near the other end of this scale. Pak Sosromarto sells seven types of curative *jamu*, while Ibu Mun vends eleven.

The logic behind the first and second expectations is consisent with this model. The first prediction's rationale is that vendors who must carry all of their *jamu* will choose

to bring only the types most popularly and regularly sold. I predicted the most popular and regularly consumed *jamu* are those to prevent illness and maintain good health. I assumed that curative *jamu* will generally be consumed during illness episodes, but not on a regular basis. Therefore, vendors who are limited by what they can carry will first choose the more regularly used types to vend: the preventative and health maintaining *jamu*. Ibu Ardjo and Ibu Dita, both mobile *jamu gendong*, conform well to these expectations. They do not vend any curative *jamu*.

The rationale of the second prediction is that vendors with a sedentary base do not have the constraints experienced by pedestrian vendors. By having a single vending location, a greater range in the number of *jamu* types is possible. This is clearly observed in relation to the two *jamu* store vendors. In their vending locations, they have a wide variety of plants from which they make many different types of *jamu*. They are not only able to vend the popularly and regularly used *jamu*, such as many of the preventatives, but also the less frequently used remedies, such as many of the curatives. In fact, both Ibu Mun and Pak Sosromarto stated that they could make almost any type of *jamu* requested because of the great variety of medicinal plants available at their sedentary vending locations.

Sales data for many marketplace *jamu* vendors also support the second prediction, although not as strongly as the *jamu* store vendors. Pak Bambang, Ibu Amat, and Ibu Sari are sedentary market vendors who sell multiple curative remedies in addition to other types of *jamu*, thus supporting the second prediction. Ibu Lamidjan, also a marketplace vendor, conforms less to this expectation as she vends only one curative *jamu*. So does Ibu Sumirah, the sedentary roadside kiosk vendor, who also sells one curative. However, her greater emphasis on vending preventative and health maintaining *jamu* remedies may be explained by her role as a fitness instructor rather than as a direct contradiction of the second prediction.

Interestingly, Ibu Indah, the *jamu gendong* who carries her *jamu* on a bicycle while vending, conforms more to the second prediction than the first prediction. The greater

capacity of her two bicycle baskets allows her to vend a wider selection of *jamu* remedies, including four curatives. This actually supports the logic of the second prediction that the number of curative remedies vended is related to the total capacity of *jamu* a vendor can provide. Because the bicycling *jamu gendong* has a larger capacity than do the pedestrian *jamu gendong*, she therefore can choose to additionally diversify her *jamu* types and vend more curative remedies.

Two sedentary marketplace *jamu* vendors do not conform to the second expectation: neither Ibu Ina nor Ibu Manang sell any curative *jamu*. This may either be due to their personal vending preferences, or to factors similar to those predicted to influence the *jamu gendong*. As discussed above, the first prediction suggests that vendors who must transport their *jamu* are limited by the amount they can carry, thus influencing their choice of remedies. This also holds true for other vendors who transport their *jamu*. As marketplace vendors, both Ibu Ina and Ibu Manang prepare their *jamu* at home and then bring it to the market each morning. I suggest that the transporting of *jamu* from home to market is a limiting factor, one that explains why these women select preventatives instead of curatives.

This interpretation may also explain the differences observed among the other sedentary vendors. All of the sedentary *jamu* vendors (and the bicycling *jamu gendong*) sell much less curative *jamu* than the two *jamu* store vendors. I suggest this is because the two store owners are the only vendors who do not transport their *jamu* from where they prepare it to where they sell it. Possibly the manner in which vendors carry *jamu* to their vending places is the limiting variable affecting the amount brought and therefore influencing the types they choose to vend. A single vendor taking a bus from her house to the market may only be able to carry two or three large baskets of *jamu* bottles. This could influence her choice to sell more curative *jamu* types than another vendor who carries only one basket of *jamu* because she walks, but less than a vendor whose supplies are kept at her store. In this way, the first and the second predictions can be used jointly to interpret the general types and quantities of *jamu* a vendor makes and sells.

In conclusion, I suggest that the dichotomized model between *jamu gendong* and sedentary *jamu* vendors functions better as a graded scale. Regardless, the second expectation, that sedentary vendors will tend to sell more curative *jamu* remedies than the *jamu gendong* vendors, is strongly supported. I also discovered that the first and the second predictions work well together to explain variation in types of *jamu* sold by all of the vendors. In reference to the graded scale of *jamu* vendors, the first prediction offers an interpretation for the vendors who sell no or few curative remedies. The second prediction offers an explanation concerning the vendors who sell many curative *jamu* types. The second prediction gains additional strength when viewed in collaboration with the first prediction.

THIRD *JAMU* PREDICTION

INTRODUCTION

The third expectation states that "seasonal differences (rainy versus dry seasons) will be observed in *jamu* use patterns." I proposed a "null hypothesis" with which to assess this prediction: "If there is no observable difference between the two seasons in the patterns of *jamu* consumption and sales, then the prediction is not true." Additionally, the interviews need to suggest a clear association between the seasonal changes in *jamu* use and the perceived seasonal variations in local epidemiological patterns.

During field research, however, I noticed a seasonally-based *jamu* consumption pattern that is not necessarily health related. Ibu Dita, Ibu Indah, Pak Bambang, and Ibu Sari each said that "people are not as thirsty" and "don't want to drink *jamu* during the rainy season." Ibu Sari additionally said that "People don't want to go out in the rainy season." Ibu Indah also said that "People are not as brave to go outside in the rainy

season, therefore they buy less *jamu.*" Ibu Sumirah supported these statements by saying that "People are lazier to go out of the house during the rainy season; (for example,) the amount of buyers (of *Kunir Asam*) for menstruation (purposes) is constant, but the everyday buyers are less during the rainy season." Ibu Sari and Ibu Indah also said that the *jamu* remedies which are often used as refreshment beverages, rather than medicinal agents, are not purchased as much in the rainy season. Suggesting why *Beras Kencur* is sold more frequently during the hot/dry season, Ibu Indah said that "People are more thirsty in the hot season; *(Beras Kencur)* is more for drinking purposes when thirsty rather than just for medicinal purposes." Finally, in reference to why a particular *jamu* is sold less during the rainy season, Ibu Sari said "People are not as thirsty in the rainy season, and *Tapel Susu* is also used as a (refreshment) drink."

These statements suggest some seasonal differentiations in the use of *jamu* that are not clearly associated with perceived epidemiological variations or ethnomedical beliefs. In light of these remarks from *jamu* vendors, a second "null hypothesis" can be advanced: "if the only seasonal difference is that of greater *jamu* consumption and sales during the dry/hot season, then the original prediction is not supported." This is intended to control for the hot season bias within *jamu* consumption patterns which may not be directly related to health seeking behavior. Using information collected from both consumer and vendor informants, the two "null hypotheses" are evaluated below. If neither of these "null hypotheses" is validated, and if the seasonal patterns correlate with perceived epidemiological changes or ethnomedical beliefs, then the third prediction is supported.

JAMU CONSUMERS

Of the forty *jamu* consumers interviewed, fifteen clearly stated that they do not perceive a seasonally based difference in their *jamu* purchasing and use patterns. A few of these fifteen consumers elaborated in their statements. A twenty-seven year old woman replied, "There is no seasonality, if (I am) sick again, yes, I drink *jamu*, (but) I don't pay

attention to the rainy or the dry season." Similarly, a retired sixty year old man said, "There is not a difference in (my) *jamu* purchasing that is based on the season. I drink *jamu* only if sick." Finally a forty-two year old female merchant answered, "No, it is only based on the illness, except for health *jamu* which can (be used) any time." These statements support the first "null hypothesis."

A thirty-three year old lower class working woman gave a reply that was not clearly negative. She said, "It (her *jamu* purchasing pattern) is based on the illnesses, except for health *jamu* which can be drunk routinely." However, she did not specify if she does or does not recognize a seasonally based pattern.

Three consumer informants did state that there are seasonally based variations in their *jamu* purchasing patterns. The first person simply said, "There is, seasonally." The second informant, a twenty-seven year old woman, said, "If it is the rainy season, I drink *jamu* with ginger for warming my body." Finally, a thirty-three year old woman replied, "In the cold season (I use) *Jamu Watukan* (for coughs); in the hot season (I use) *Galian Putri.*" The responses given by these three informants oppose the first "null hypothesis" by suggesting that there are seasonally based patterns. The statements of two informants also contradict the second "null hypothesis" by stating use of some *jamu* types in the rainy season. Finally, the responses of these two informants also suggest that their rainy season use patterns are based on Javanese ethnomedical beliefs, primarily concerning "hot" and "cold" disease theories (see Chapter III: Literature Review). Both the ginger-based remedy and *Jamu Watukan* are used to treat "cold" based diseases believed to be prevalent during the rainy season.

JAMU VENDORS

Every vendor interviewed mentioned seasonal differences in the quantity of sales for some or all of their *jamu* remedies (see Appendix C for seasonal variations in *jamu* quanitities sold, listed by vendor). All twelve of the vendors stated at least one *jamu* sold

more frequently during the hot season. Similarly, ten vendors reported that at least one *jamu* is sold more often in the rainy season. Only two vendors, Ibu Ina and Ibu Sari, did not report vending any remedies that have greater sales during the rainy season.

Ibu Amat said, "In the rainy season I sell more *jamu* that is warm." This is a common theme about *jamu* remedies with higher sale frequencies during the rainy season. Primary among these "hot" remedies is *Cabe Puyang*. Typical of the vendors' remarks concerning *Cabe Puyang* are those of Ibu Amat, who said that it "makes the body warm, especially during the rainy season. (It is) sold more than other *jamu* in the rainy season because *(Cabe Puyang)* is warm." Ibu Sumirah concurred with this by saying "More people buy *(Cabe Puyang)* in the rainy season than in the hot due to the warmth of the *jamu.*" Ibu Mun also said that *Cabe Puyang* has "high use in the rainy season because it is warm." Three other vendors, Ibu Indah, Ibu Lamidjan and Ibu Manang, independently reported that they sell *Cabe Puyang* "more often in the rainy season." Ibu Manang elaborated by saying that during the hot season she vends *Cabe Puyang* only on Saturdays or when it is specially requested. During the rainy season, however, she sells one liter of it each day. The stated reason for this was because "it warms bodies during the rainy season."

According to these *jamu* vendor interviews, *Cabe Puyang* clearly has greater popularity during the rainy season. The only reason given for this seasonally-based patterning is that *Cabe Puyang* is a "hot" *jamu* and is used to "warm people's bodies" during the rainy season, which is commonly referred to as the "colder" season. Vendors often gave this same reason for some other *jamu* remedies with high frequencies of rainy season sales. Ibu Ardjo said that *Beras Kencur* "is the most popular (*jamu* that she sells) in the rainy season because (it) is hot." In contrast, most other vendors said that *Beras Kencur* is most popular during the hot season because it is used to quench thirst. For example, Ibu Sumirah said that "*Beras Kencur* mixed with ice makes it (a) refreshing (beverage) in the hot season." However, Ibu Ardjo emphasized that *Beras Kencur* is primarily used in the rainy season for its medicinal "heat," not for refreshment. Similarly,

Pak Sosromarto said that *Beras Kencur Keras* is "most often sold in the rainy season." One of the primary purposes he stated is for treating coughs, a "cold" related illnesses.

Pak Sosromarto also mentioned two other *jamu* remedies - *Tolak Angin* and Flu - that are specifically for "cold" related illnesses. The primary purpose of *Tolak Angin* is to "repel" or cure the folk illness of "wind entering." This folk illness, caused by a "cold" imbalance, is treated by adding "hot" elements to the body and restoring its balance. Therefore, *Tolak Angin* is widely viewed as a "hot" *jamu,* one consumed to treat "cold" related illnesses. Many informants said that influenza is very similar to "wind entering" because it is also a "cold" based illness. The third prediction suggests that if seasonal variations do cause higher frequencies of "cold" based illnesses during the rainy season, then *jamu* remedies that treat such illnesses would be used more often during that season. Because Pak Sosromarto reported that both *Tolak Angin* and Flu are primarily consumed during the rainy season, and that both are specifically used for treating "cold" based illnesses, the third prediction is further supported.

Pak Bambang vends *Kunir* roots mixed with *"gamping"* (limestone), which he said is used to treat children's diarrhea. He said that there are "more sales of *Kunir* roots in the rainy season because there is more diarrhea during (that) season." This statement suggests that because of a perceived epidemiological shift caused by seasonal change, this *jamu* is sold more in one season than the other. Pak Bambang's single statement opposes both of the "null hypotheses" and suggests an epidemiological correlation to the variation in *jamu* use frequencies, a fact that lends support to the third prediction.

Many vendors also reported a high frequency of sales involving various *Galian jamu* remedies. Ibu Dita said that she sells twice as much *Galian* in the rainy season than during the hot/dry season. While she did not specify the type of *Galian* vended, she did say that it is "hot to change the coldness," suggesting that it may have a similar use as *Cabe Puyang* or other "hot" remedies. One of the primary uses of *Galian* reported by Ibu Dita is to treat rheumatism. Rheumatism is generally thought to be caused by excessive "cold" in the body which in turn coagulates the blood and slows circulation (Jordaan 1985: 213).

During the rainy season Pak Bambang also sells twice as much *Galian Pegal Linu* "for rheumatism," and *Galian Sawan Tahun* "to make (older people's) bodies warm so wind won't enter." Pak Sosromarto similarly reported that *Ngeres Linu (Pegal Linu)* and *Sawan Tahun* are most "popular in the rainy season." Finally, both Pak Bambang and Pak Sosromarto said that *Galian Putra* and *Galian Putri* are also sold more frequently in the rainy season. While the vendors did not specifically say that *Galian Putra* and *Putri* are "hot" remedies, my assumption is that, like *Pegal Linu* and *Sawan Tahun*, they may also be used to prevent or treat "cold" based illnesses. These findings about *Galian* remedies additionally support the third prediction.

Ibu Lamidjan mentioned one additional *jamu* which has a higher frequency of sales during the rainy season. She said that she generally sells five liters of *Pahitan Bratawali* each day in the rainy season, but she typically only sells three liters daily during the hot season. Ibu Lamidjan said that the purpose of her *Pahitan jamu* is to treat skin irritations. No informants, however, have suggested to me that skin irritations occur more frequently in the rainy season. Therefore, while this statement about *Pahitan Bratawali* does oppose both of the "null hypotheses" by suggesting higher rainy season sales, I cannot establish a direct correlation with seasonally based ethnomedical theories or perceived epidemiological variations. This example does not support nor oppose the third *jamu* prediction.

CONCLUSION

Only three of the *jamu* consumers said that they perceived a seasonally-based difference in their *jamu* purchasing patterns. Two of these informants elaborated by saying that they use *jamu* remedies related to "cold" imbalances during the rainy season. One said that she generally uses *jamu* to "warm" her body, while the other said that she uses a particular remedy to treat "coughs," a "cold" related illness. I argue that these two statements meet all of the criteria to support the third prediction. In contrast, fifteen consumers gave answers that suggested there is no notable difference in their *jamu* use

between the two seasons. Some elaborated by saying that when they feel sick, they use *jamu* to treat it, but do not notice a specific pattern. These statements support the first "null hypothesis" and challange the expectation.

Alternately, all of the twelve vendors whom I interviewed said that they noticed specific seasonal patterns in the sales of their *jamu.* These statements directly oppose the first "null hypothesis" by suggesting that there are seasonal differences. Of these, ten vendors mentioned one or more remedies sold more frequently during the rainy season, opposing the second "null hypothesis." Finally, the majority of the remedies which have higher rainy season sales can be associated with seasonally based illness patterns and ethnomedical beliefs. Remedies such as *Cabe Puyang, Beras Kencur, Beras Kencur Keras,* and the various *Galian jamu* types are all used for purposes of preventing or treating "cold" based illnesses that are reported to have higher occurrences during the rainy season. More specifically, *Tolak Angin* and Flu are *jamu* remedies used to treat wind entering or influenza, both caused by excessive "cold," and both are most frequently sold during the rainy season. The *jamu Kunir* mixed with limestone is specifically stated to treat children's diarrhea, and has higher sales correlated with the reported higher prevalence of that illness in the rainy season. The higher sales of these *jamu* remedies during the rainy season are directly associated with the Javanese ethnomedical beliefs of seasonally based illness patterns.

Despite the many consumers who did not report seasonally based differences in their use of *jamu* remedies, my primary informants, the *jamu* vendors, stated a marked pattern of differentiation. It is possible that many consumers misunderstood the intended meaning of my question, or that some are not aware of a seasonal pattern in their own *jamu* use, leading to the contradictory responses. I find the contradictory nature of the consumer responses to be unpersuasive. It is unlikely that all or most of the *jamu* vendors were incorrect in stating that they make and sell more *jamu* during one season than the other. I argue that a veteran *jamu* vendor, who has sold *jamu* daily for many years, is probably aware of pronounced sales trends during the regular seasonal cycle. I expect that this is

particularly true when a vendor can easily quantify the amount of a *jamu* sold, as the most commonly stated unit of *jamu* made and sold is the one and a half liter bottle. If more bottles of a particular *jamu* are sold daily during one season over another, I expect that the vendor will notice. While I am not arguing that *jamu* consumers are all together unaware of the amount of each *jamu* they purchase during each season, I am suggesting that *jamu* vendors should generally be keenly aware of sales trends.

In conclusion, I retain the *jamu* vendors as the primary data source for assessing the third prediction. As discussed above, the two "null hypotheses" are not supported. My analysis demonstrates that there are seasonal variations in the use of many *jamu* remedies. This seasonal variation is not only observed during the hot season, but also during the rainy season. Finally, many of these increases in *jamu* use during the rainy season are associated with perceived epidemiological changes. Many of the epidemiological changes I discuss are associated with Javanese ethnomedical theories on folk illnesses, particularly "hot/cold" imbalances and wind entering. Based on this analysis, I conclude that seasonal differences are observed in *jamu* use patterns, therefore supporting the third prediction.

FOURTH AND FIFTH *JAMU* PREDICTIONS

INTRODUCTION

In assessing the fourth and fifth expectations, I first analyze interview data from the twelve *jamu* vendors and forty consumers referred to in the discussion of the other three predictions. These two sets of interviews, however, provide limited results for this analysis.

When asked if there were any economic class-based differences in their customers, most *jamu* vendors replied either that they did not know the economic statuses of their

customers, or that all types and classes of people enjoy their *jamu*. Pak Bambang, for example, said that rich people often purchase a bottle of *jamu* to keep refrigerated at home for social occasions. One vendor, Ibu Ina, said that even the ninth Sultan of Yogyakarta used to regularly purchase her *jamu*. What these vendors did not state, and generally would not know, are the frequencies of people from each economic class who use their *jamu* for more serious health concerns, and if they had sought biomedical treatment prior to using their *jamu*. The only conclusion drawn from these interviews is that, generally, all classes of people drink *jamu*.

Many of the forty consumer interviews similiarly do not lend themselves to this analysis. In some cases, the informant's economic class was either unknown to me or questionable. Most health seeking histories were not discussed beyond the use of *jamu*. Illnesses treated by means other than *jamu* were not frequently mentioned by my informants. Therefore, reliable patterns in health seeking behavior are not apparent in my first consumer interview data set .

The most useful information from the forty consumers surveyed is their responses to the question, "which do you prefer, *jamu* or medicine?" Nineteen people responded to this question: seven were in the lower economic class, five in the lower-middle class, and six in the middle or upper class. Of the lower economic class informants, six stated preference for *jamu*, while only one preferred biomedicine. They said that *jamu* is "more natural," "a quick cure," "has few side effects," "does not have chemicals," and, unlike medicine, "does not cause nausea." The one person preferring biomedicine claimed that it produces a quicker recovery.

The informants in the lower-middle class showed similar patterns, four prefer *jamu* while one prefers biomedicine. Three said they prefer *jamu* because it "has no side effects," unlike biomedical pharmaceuticals, and the fourth prefers it because *jamu* is "more natural." The only lower-middle class informant reporting preference for biomedical pharmaceuticals said that this is "because *jamu* is generally bitter, whereas medicine is easily swallowed and there is no bitter taste."

Respondents from the middle and higher economic classes gave less uniform responses: three prefer *jamu*, three prefer biomedicine, and one said it depends on the severity of the illness. The three preferring *jamu* stated that it "does not have chemical substance risk," "has few side effects," and "is more natural." Those preferring biomedicine said that it "has a more reliable nature," and "is quicker to heal (the illness)." One informant, who stated preference of biomedicine, additionally said ". . . but the truth is that I am afraid of (the) effects (of biomedical pharmaceuticals)."

I suggest that these statements may illustrate a dichotomization between the economic classes based on the preference of either *jamu* or biomedicine for therapy. The lower classes tend to prefer the use of *jamu*, while more people in the upper classes prefer biomedicine. However, these responses also illustrate a distrust of chemically manufactured pharmaceuticals because of their perceived side effects. This is expressed by most informants, regardless of class standing. *Jamu* is generally perceived as being a more natural and gentle treatment. While this suspicion of biomedicine and trust of *jamu* is evident in all economic classes, preference for biomedicine appears to be greatest within the upper classes. While this conforms to my expectations, additional data are needed to evaluate the fourth and fifth predictions.

DUKUN JAMU PATIENTS

During field research, I observed and interviewed three specialized *jamu* healers, called *dukun jamu*. The first, Pak Sudjono, is a healer who specializes in treating heart, liver, and kidney problems with his *jamu*. He said that many of the illnesses he treats cannot be healed with biomedicine, but can be healed by using *jamu*. Pak Sudjono said that he has twenty-five types of *jamu* used to treat both regular illnesses and serious diseases, many of which are treated with the same type of *jamu*. He claimed that his knowledge about *jamu* came from over two decades of experience and experimentation. Finally, Pak Sudjono diagnoses his patients by feeling their pulse. This pulse reflection,

he states, lets him know the cause of the illness, after which he often suggests a *jamu* remedy.

The second healer, Pak Wiro, reportedly can treat most illnesses with his *jamu*, but primarily treats patients with lung, ovarian, and breast cancer. He uses essentially the same plant mixture to treat all of his patients, but said that he sometimes adds different leaves to it, depending on the illness. I observed that Pak Wiro usually said a quick, silent prayer over the *jamu* before giving it to a patient. This could be interpreted as use of a potent *mantra*, intended to increase the power of his *jamu*. Pak Wiro states that the *jamu* treatments he gives are "based on the greatness of God," as his knowledge of *jamu* came to him from God in a dream.

The third *dukun jamu*, Ibu Oti, is a woman who treats almost any disease with her various *jamu* remedies. She said that she often treats many types of illness, some of which include cancer, heart disease, hepatitis, infertility, kidney problems, diabetes, tuberculosis, and venereal diseases. Her assistant said that they use more than sixty types of *jamu*, made up from over one hundred different types of plants. While Ibu Oti said that her ability to heal is inherited as a descendant of the seventh Sultan of Yogyakarta, she also stated that she is not a paranormal healer and does not use any magic in curing people, only *jamu*.

All three *jamu* healers have patients come to their homes for their *jamu* treatments. Some travel great distances for their therapy. These healers use *jamu* treatments that are more specialized than most other *jamu* remedies. As stated in the Literature Review, the terms "special *jamu*" or "specialized *jamu*" refer exclusively to the types of remedies provided by these *dukun jamu*. Pak Sudjono even said that he does not offer the more commonly vended *jamu* because he does not want to provide competition for the local *jamu* vendors, or *tukang jamu*. Additionally, the botanical ingredients in the *jamu* remedies of the three healers were not revealed to me, as such information is generally considered to be a "trade secret."

I interviewed twenty-one people who were seeking treatment from these *dukun jamu*. In each case, the patient had a specific problem, and the healer only provided *jamu*

as treatment. Of these twenty-one interviews, eighteen people provided in-depth, qualitative interviews regarding their current illness and health seeking history, along with discussion of their general use of *jamu*, other traditional therapies, and biomedicine. These eighteen interviews included six of Ibu Oti's patients and twelve of Pak Wiro's patients. This separate set of *jamu* consumer data is utilized below as the primary source for the analysis of the fourth and fifth predictions.

DISCUSSION OF THE FOURTH PREDICTION

My fourth expectation, that "individuals of low economic standing will use both preventative and curative *jamu* remedies regularly for both minor health concerns and serious illnesses," is not always clearly supported. One lower class thirty-five year old woman had a large neck goiter for ten years. In that time, she never resorted to biomedicine, but rather sought specialized *jamu* for her condition when the pressure in her goiter increased. However, she did not report using regular *jamu* for most preventative or curative purposes, instead she favored a few other Javanese ethnomedical practices (eg. coining). Her only uses of biomedicine were for child birthing and for some severe gastrointestinal problems. Overall, she mostly uses *jamu* and other traditional practices for treatment, and has resorted to *jamu* use for primary care of her goiter. This case study gives some support to the fourth prediction, despite some minor contradictions.

Another case study clearly indicates that reliance on *jamu* is, at times, a product of economic constraints. In this example, a man of low economic class who often drinks *jamu* for many purposes, sought biomedical treatment when he started to become seriously ill. The doctor diagnosed him as having a glandular tumor, and eventually recommended an operation. Because the man did not have enough money, and because he was afraid of having surgery, he then resorted to using special *jamu*. The *jamu* was both more affordable, and less extreme than the suggested operation. This man used *jamu* in part because the biomedical help remained economically inaccessible to him. This finding thus

supports the fourth expectation, although not as strongly.

Most lower class informants had also initially sought out the more expensive biomedical attention rather than using *jamu* and other Javanese ethnomedical systems. Often, individuals pursued biomedical treatment despite it being a severe economic drain on their resources. This finding contradicts the fourth prediction that people of lower economic standings would use curative *jamu* regularly for both minor and serious illnesses.

For example, a woman of low socioeconomic standing discovered a lump in her breast. Although she often drinks *jamu*, she was concerned and soon went to a doctor for treatment. Only after the doctor told her that she needed a mastectomy did she turn back out of fear to specialty *jamu* for treatment. In this case, she would have fit well with the fifth prediction, except that she was of a lower class and she regularly consumes *jamu.*

To explain this, I would suggest that the perceived level of severity of the illness often influences the type of treatment sought. In this situation, the woman perceived that her case was severe, and resorted to biomedicine despite her economic standing. However, economic constraints have often forced patients to resort to *jamu* or other traditional ethnomedical practices despite concern over severity.

Additionally, two lower class informants tried biomedical treatments without success before switching to the traditional medicines, and one woman utilized both medical systems simultaneously. In total, two of the *dukun jamu* patient interviews lend partial support to the fourth prediction, but four interviews oppose some of its expectations. I suggest that another influential factor, the perceived severity of the illness, helps to explain these contradictions.

DISCUSSION OF THE FIFTH PREDICTION

The fifth expectation, which states that "individuals of high economic standing will generally use curative *jamu* only for disorders that are not effectively treated by Western biomedicine (eg., arthritis, infertility, cancer, etc.)," is more strongly supported. A clear

example involved a fifty year old upper-middle class man who had a cancerous tumor in his throat. He went to Australia for an extended period of radiation therapy, but traces of the cancer remained and eventually spread to a serious degree. He resorted to using specialized *jamu* only after trying extensively to treat his cancer in several hospital settings. Here, the use of *jamu* was as a last alternative when the biomedical treatments repeatedly failed to cure him. This example conforms well with the fifth expectation.

Another case also supports this prediction. A thirty-nine year old upper-middle class woman enjoys using *jamu* and some other traditional practices for minor purposes such as discomfort with menstruation, tiredness, mosquito bites, the culturally bound illness of wind entering, and general health. She feels that *jamu* is good for the body. However, she said she uses physicians and pharmaceuticals for headaches, fevers, and diabetes, despite the existence of *jamu* for such conditions. When she had problems getting pregnant, she resorted to biomedicine for three years without success. After this, she saw a *dukun jamu*, and after only two consultations and prescriptions of *jamu*, she finally conceived.

Seven other case studies also support the fifth expectation, but not always because biomedicine failed to effectively treat a given condition. Instead, biomedicine failed because its final attempts at treatment might not be acceptable from the patient's perspective. Often people use *jamu* as an alternative to one of biomedicine's last options. Perceiving a particular treatment to be too risky often encourages people to seek alternative therapies. A doctor told one upper class man from Jakarta that he needed delicate surgery to remove his brain cancer. Fearing that he might die because of this operation, the man immediately sought out special *jamu* as an alternate treatment.

Some similar reasons for seeking alternative treatments were the combination of both the failure of the biomedical treatment and the individual's fear. For example, a middle class government worker initially sought biomedical attention when she discovered a breast tumor. A doctor removed her tumor, but another lump grew back shortly after. The doctor told her that her cancer would continue to grow back, despite operations, if she

did not have radiation therapy. She was afraid of having the radiation treatment because she had heard that her hair would fall out and it would leave a black mark on her skin. Instead, she sought specialized *jamu* as an alternate treatment. She reported that previously she rarely drank any *jamu.* Now, she wanted special *jamu* both because the operations had failed her, and because the radiation therapy frightened her. This example therefore supports the fifth prediction.

Not all upper class informants rely on biomedicine for primary care, despite being able to afford it. A seventy year old upper middle class woman stated preference for *jamu*, and reported liking to drink almost every kind of it. When sick, she prefers traditional medicine, and said that she does not like the chemicals in biomedicines. She had recently hurt her back from a fall, and was seeking *jamu* as primary treatment. In this case, the older age of the individual may have influenced her attitudes and health seeking behaviors, despite her high economic standing.

Another factor that complicates the results is that many people tend to resort to both biomedical and traditional treatments at the same time. This is particularly common in the lower middle classes. For example, a lower middle class woman with breast cancer first used medicine from a doctor, but it did not help. She then went to a traditional healer who pulled seven rusted needles out of her breast, claiming them to be a result of black magic. The woman went back for treatment at a hospital, and then again to a traditional healer, but still she was not healed. She next started radiation therapy, but due to both expense and length of time, she stopped the therapy, and finally sought out specialized *jamu* for treatment. As with some other cases, her health seeking behavior is not easily broken down into the dichotomized predictions.

Of the informants categorized loosely as being in the middle and upper classes, nine strongly support the fifth prediction, while three do not. Of the three that do not support it, two utilize both systems (biomedicine and *jamu),* while the third's choice to use traditional medicine is likely influenced by her older age. Despite these few contradicting cases, which can be partially explained, I suggest that the field data support the fifth prediction.

CONCLUSION

I predicted that patterns of *jamu* use would often fall along economic lines, but this distinction is often not apparent. Qualitative analysis of the patient interviews suggest that many additional factors may also strongly influence patterns in health seeking behavior. Factors, such as illness severity, age, and fear, are among many that affect an individual's utilization of a particular ethnomedical system, be it Western biomedicine or *jamu.* I also find that these factors are often mixed to further complicate predictability, as I illustrated with a combination of biomedical failure and the patient's fear of a treatment. Finally, I encountered problems when an informant's health seeking behavior could not easily be broken down into the dichotomized model. This is also true when a person's economic standing was intermediate rather than of clearly lower or upper class standing.

My research found that while members of the lower classes do not invariably use *jamu* or other traditional practices, economic constraints often force people to resort to *jamu* use. Many lower class informants initially sought out the more expensive biomedical attention, and only turned to curative *jamu* when the cost became too high. I suggest that the choice to utilize a particular medical system is additionally influenced by the individual's perception of the illness's severity and of the ability of the particular system to successfully treat it.

I also found that members of the upper classes may often resort to *jamu* for treatment when biomedical interventions fail. For the upper classes, it is not always affordability that influences the choice to use curative *jamu*, but more often either the failure of biomedicine to treat a condition, the individual's fear of a procedure, or a combination of both. However, I did find that these socioeconomic trends are often strongly influenced by other factors, such as the age of the individual.

Analysis of my other set of interviews, the forty *jamu* consumers, additionally suggests that preference for either *jamu* or biomedicine is often patterned according to

general economic class differences. Of the nineteen people who stated a preference, the majority of the lower class informants prefer *jamu*, while preference of the people in the upper classes were evenly divided. This further supports my argument that the socioeconomic status of the individual often affects the patterning of choice to use traditional *jamu* remedies instead of biomedicine for health related concerns.

My analysis reveals that there is more variability in the fourth prediction concerning the lower classes, which states that "individuals of low economic standing will use both preventative and curative *jamu* remedies regularly for both minor health concerns and serious illnesses." I also find that there is greater consistency concerning the fifth prediction about the upper classes, that "individuals of high economic standing will generally use curative *jamu* only for disorders that are not effectively treated by Western biomedicine (eg., arthritis, infertility, cancer, etc.)." Therefore, my research finds that health seeking behavior and the use of curative *jamu* is often economically patterned. I also suggest that much of the variation encountered may also be patterned in relation to many other factors influencing the use of a particular medical system.

CHAPTER VI
CONCLUSIONS

As discussed in the previous chapters, *jamu,* as a Javanese ethnomedical system, has maintained a wide, if not growing, popularity in Java despite the increased availability of the Western biomedical system in Indonesia. I examined the patterns of *jamu* use not only to understand the cultural significance of this traditional medical system, but also as a means to evaluate the strengths and shortcomings of the Indonesian health care system in Java. Using qualitative and quantitative data gathered through interviews with numerous *jamu* vendors, healers, and consumers, I assessed five of the seven predictions I generated concerning the cultural patterning of *jamu* use. The conclusions from this ethnographic analysis are discussed below.

The first expectation states that "*jamu* sold daily by door to door vendors *(jamu gendong)* will most often be preventatives, rather than curatives." My analysis, based on interviews with three *jamu gendong* vendors and forty *jamu* consumers, suggests this is often true. I found that two of the three *jamu gendong* vendors strongly support this prediction, in that they vend a greater number of preventative *jamu* than curative *jamu.* The third vendor, however, sells almost as many curative remedies as she does preventative *jamu.* I argue that this deviation does not weaken the first prediction because the third *jamu gendong* uses a bicycle to transport her remedies, thus providing her a means to carry a

larger volume of *jamu*. Because of this, she conforms more to the expectations of the second prediction. The *jamu gendong* vendors also support the first prediction's second criterion, that the liquid quantity of *jamu* purchased from *jamu gendong* vendors for preventative functions should be greater than that for curative purposes. The first two *jamu gendong* sold no curative remedies, and the third sold ten times more liters of preventative *jamu* than curative. Additionally, the consumers stated purchasing preventative *jamu* from *jamu gendong* vendors significantly more often than curative remedies. Therefore, I consider the first prediction to be strongly supported.

The second *jamu* expectation represents a dichotomy to the first prediction. It states that "*jamu* sold by sedentary vendors will more often be used for specific illnesses (curatives) than those sold by door to door vendors *(jamu gendong)*." Analysis of interviews with nine sedentary vendors and forty consumers supports this prediction, by suggesting that most sedentary vendors sell more curative *jamu* than do *jamu gendong*. However, the analysis reveals a patterned variation among the sedentary vendors. Rather than a strict dichotomy between the mobile *jamu gendong* and the sedentary vendors, I suggest that these vendors present a graded scale arranged by the types of *jamu* each sells. At one end of this range are vendors selling preventative *jamu* but no curative remedies; often exemplified by the *jamu gendong*. On the other extreme are vendors who sell many curative remedies in addition to preventative *jamu*; as represented by the *jamu* stores. Between these two poles are located the bicycling *jamu gendong* vendor, the marketplace vendors, and the kiosk vendor; all of whom sell varying amounts and types of curative *jamu*.

This model, however, does not refute my first or second *jamu* predictions. Instead, it supports them by suggesting that the more *jamu* a vendor can provide, the number of curative types will often increase. The bicycle using vendor can carry more *jamu* than the pedestrian *jamu gendong* vendors. Many marketplace vendors can provide more *jamu* than the bicycling vendor, but are probably still limited by how they transport their remedies to the market. The *jamu* stores, having a permanent location, can provide the largest amount

of *jamu,* and therefore the greatest variety of curative types. Despite reworking the original dichotomy, the second prediction is further strengthened in collaboration with the first.

Not discussed previously, I also suggest that the interviews with the specialized *jamu* healers, called *dukun jamu,* lend additional support to the second prediction. The three *dukun jamu* are generally consulted in their homes by people with specific illnesses who came from throughout Java and the Indonesian archipelago. In treating these people, the healers used only curative *jamu.* Therefore, these healers further support the second prediction. Additionally, incorporation of these healers into the scaled model further extends its scope. As presented above, the model suggests that vendors range from those who provide only preventative remedies to vendors who provide both preventatives and curatives. The addition of the *dukun jamu* into this model extends it further to people who provide curatives, but not preventatives. In this way, the vendors of preventatives are at one pole, the providers of curatives are at the opposite pole, and the vendors who supply both are in the middle (see Figure 2). This suggests that as vendors get more sedentary and specialized, they are expected to have a greater focus on curative *jamu* remedies. Therefore the second prediction is further supported.

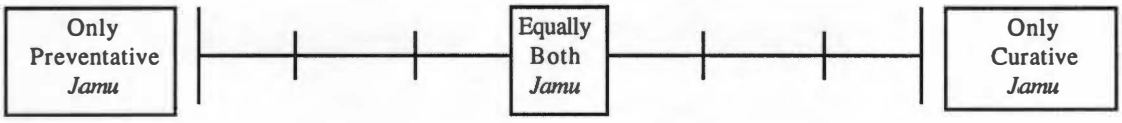

Figure 2: *Jamu* Provider Scale Based on Proportion of Preventative and Curative Types

The third expectation states that "seasonal differences (rainy versus dry seasons) will be observed in *jamu* use patterns." Analysis of this prediction primarily utilizes data drawn from the twelve *jamu* vendors. Testing against two "null hypotheses," the analysis strongly suggests that seasonally-based variations in *jamu* use-patterns exist, and that they are associated with perceived epidemiological changes. Many of these epidemiological changes are associated with Javanese ethnomedical theories, particularly "hot/cold" imbalances and wind entering. I also suggest that because of their greater association with

jamu marketing trends, vendors are often more aware of seasonal use-patterns than are consumers. Based on this analysis, I conclude that the third prediction is also supported.

Finally, the fourth and fifth expectations propose that the socioeconomic status of an individual often affects the patterning of choice in using *jamu* instead of biomedicine for health-related concerns. The fourth expectation states that "individuals of low economic standing will use both preventative and curative *jamu* remedies regularly for both minor health concerns and serious illnesses." The fifth expectation states that "individuals of high economic standing will generally use curative *jamu* only for disorders that are not effectively treated by Western biomedicine (eg., arthritis, infertility, cancer, etc.)." To assess these two predictions, I primarily used interviews with eighteen patients of *dukun jamu.* The analysis found that while the lower classes do not invariably use *jamu* or other traditional practices, economic constraints often force people to resort to its use. Many lower class informants initially sought out the more expensive biomedical care, and only turned to curative *jamu* when the cost became too high. Therefore, because lower socioeconomic class informants often sought biomedical treatment, the fourth prediction is not clearly supported. Instead, I suggest that greater cultural variability exists in the health seeking behavior of the lower socioeconomic class.

In assessing the fifth expectation, I found that members of the upper classes often resort to *jamu* for treatment when biomedical attempts fail. Additionally, some wealthy informants only turned to *jamu* when biomedical procedures proved too drastic and frightening. I found that, for the upper classes, it is usually not affordability that influences the choice to use curative *jamu,* but more often either the failure of biomedicine to treat a given condition, an individual's fear of a medical procedure, or a combination of both. However, while field data support the fifth prediction, I also found that these socioeconomic trends are influenced by other cultural and demographic factors.

In addition to the findings of the five assessed predictions, I suggest that the patterning in the use of *jamu* by individuals of all socioeconomic classes is influenced by

factors such as age, gender, and rural or urban locality. I briefly discussed many of these factors within Chapter II: the Research Setting, and Chapter III: Literature Review. Interviews conducted with the many *jamu* vendors, healers, and consumers clarify what role these additional factors play in the patterning of *jamu* use.

While members of all age groups use *jamu*, I found that preference for different types of *jamu* is often patterned by age. The high sales frequency of many remedies specifically made for different age groups lends support to the idea that *jamu* use is patterned across the age spectrum. Popular age-related *jamu* include *Nafsu Makan,* which is often used to increase the appetite of small children and infants; *Kunir Asam,* used in association with menstruation; and *Sawan Tahun,* used to alleviate rheumatic pains and maintain the health of older people. The existence of *jamu* remedies which are specifically intended for different age groups indicates a strong use-patterning by age.

Even though *jamu* is popular within all age groups, older people are often more inclined to use *jamu* and other traditional medicines instead of Western biomedicine. For example, a seventy year old upper-middle class woman stated preference for *jamu* remedies, and reported liking to drink almost every type. When sick, she prefers traditional medicine, and said that she does not like the chemicals in biomedicines. In this case, the older age of the individual may have influenced her attitudes and health seeking behavior, despite her higher economic standing and ability to afford biomedical care.

Gender is another factor influencing the use of *jamu.* Similar to the age-related *jamu*, there are a wide diversity of *jamu* specifically for gender-based purposes, such as menstruation, fertility, pregnancy, and child bearing for women. Different *jamu* remedies are used throughout the menstrual cycle to regulate its ease and punctuality. For example, *Kunir Asam* is often used to ease menstrual cramps, and *Terlambat Bulan* is used to start menstruation when it is even a few days late. There are many *jamu* remedies used during the different stages of pregnancy and childbirth to facilitate ease and safety. Finally, there are *jamu* remedies for post-childbirth purposes, such as *Uyup-uyup,* which is used to increase a mother's supply of breast milk. As one vendor stated, this *jamu* is used to

"make fat babies." Interestingly, Van Esterik (1988) found that 93% of all breast-feeding women actively tried to increase their milk supply. Of these women, 81% regularly drank *jamu* to accomplish this. Possibly because *jamu*-making is generally a specialty of women, female-health remedies make up a large part of the whole.

There are also *jamu* remedies specifically for men. *Galian Putra* is intended to make a man's body healthy, strong, and full of energy. Men often prefer *Beras Kencur* and *Cabe Puyang* for the similar purposes of countering fatigue and exhaustion. Bicycle rickshaw drivers often remarked that they consume these *jamu* remedies for energy so they are able to remain competitive in their strenuous profession. *Jamu* for men usually concerns strength and energy, qualities necessary for hard work. Other *jamu* remedies are employed specifically for sexual vitality. While there are more *jamu* remedies for women than there are for men, it is difficult to argue that any one gender tends to prefer using *jamu* more than the other. Even though males and females use *jamu* for treating illnesses, I feel that women tend to use *jamu* more regularly than men for preventative and health maintenance purposes. This helps to explain why there is a greater variety of gender-specific *jamu* for females.

One reason why *jamu* remains as a culturally appropriate alternative to biomedicine relates to the Javanese cosmology of health and healing. This ethnomedical system can explain many of these age and gender patterns seen in the use of *jamu.* Many diseases are often thought to be caused by a "hot" or "cold" imbalance within the human body, thus altering it from a state of health. Many *jamu* remedies are comprised of plants considered to have "hot" or "cold" qualities. Both vendors and consumers could usually tell me which *jamu* remedies were "hot," "warm," "cool," or "cold" based. These remedies are often used to counter a "hot" or "cold" imbalance and restore health. Anthropologists, such as Jordaan (1985), have noted the perceived differences in the hot/cold physiological make-up of individuals. For example, infants, young children, and older people are considered to be colder than those in other age groups. Also observed are gender-based differences, as females are generally considered to be slightly colder than males, with variations occurring

at different points during their menstrual cycles and pregnancies. This Javanese disease theory therefore helps to account for the *jamu* use-patterns along age and gender lines.

Although I could not assess the seventh prediction, which states that "folk-urban differences in *jamu* use patterns will be seen, with a higher use of *jamu* in rural communities," I do suggest that locality is an important factor often influencing the cultural use-patterns of *jamu*. The disease load in rural populations is often higher than that in urban areas. The Indonesian Central Bureau of Statistics (1994) published epidemiological data on rural and urban health for the central Javanese province of Yogyakarta. It reports that almost sixteen percent of the rural population was sick within a one month period in 1992, which contrasts with only eleven percent of the urban population being sick at the same time. Additionally, the Yogyakarta Province Statistical Office (1996) presents disease prevalence data from 1994, from which I now select two contrasting regions of relatively equal population size to illustrate these differences: the city of Yogyakarta and the rural region of Kulon Progo. In Kulon Progo, there were almost twice as many reported cases of typhoid, over three times the amount of dysentery, and almost five times as many cases of pneumonia than that reported for the urban region. More suggestive still is that there were over four thousand reported cases of malaria in that rural region, but only a single reported case in Yogyakarta city.

Despite the existence of higher disease loads, as reported by the Indonesian governmental agencies, access to and availability of biomedical care and pharmaceuticals is often lacking in the rural communities. Each of the two contrasting regions, discussed above, had about four hundred-fifty thousand people in 1994, but there were less than one hundred physicians in the rural region and almost five hundred in the urban zone (Yogyakarta Province Statistical Office 1996). The city of Yogyakarta also had twenty times more nurses than Kulon Progo. More relevant to the potential demand for *jamu* and other alternative medicines, is that the urban region had nearly one hundred pharmacies and medicine stores, while the rural region had a total of three. As illustrated by this example, Javanese rural communities often have fewer doctors and nurses available, and

significantly less access to pharmaceuticals, despite their higher disease loads.

While most Javanese do use *jamu*, rural people most likely rely more on *jamu* and other traditional treatments for their health-related concerns than what is seen in urban areas. The Indonesian Central Bureau of Statistics (1994) also reported that of the patients diagnosed at health clinics within the entire province of Yogyakarta in 1992, rural residents resorted to traditional healers over three times more frequently than patients from urban areas (see Chapter II, Table 4). Similarly, urban residents exhibited higher frequencies of being treated at hospitals and by doctors than rural residents. Interestingly, the few informants from rural communities whom I interviewed generally reported much higher frequencies of *jamu* use for a greater range of health purposes than did my urban informants. However, due to time constraints, I was not able to interview a sufficient number of *jamu* consumers in rural areas. Therefore, the seventh prediction had to go untested. Additional research focusing on rural communities is needed to assess this prediction and examine the *jamu* use patterns of those Javanese who have the least access to primary health care: the rural poor.

Also due to time limitations, some of the assessed predictions, as well as certain *jamu* remedies, have informant sample sizes too small for adequate statistical analysis. Remedies only discussed by one informant, for example, may prove to have additional or even contradicting functions if many other users are interviewed. Future research is needed to gather comprehensive data on these infrequently mentioned remedies. Additional data on all types of *jamu* and their use patterns would enable greater quantitative discussion and statistical analysis. Utilization of an increased number of Javanese research assistants would certainly accelerate the data collection process.

Finally, I was not able to observe *jamu* consumption patterns during both the hot/dry and the rainy seasons. Because the project duration was only within the hot/dry season, all data concerning rainy season patterns of vending and consumption were self reported by informants and not directly observed. Participant observation during the rainy season would benefit this research and most likely strengthen its conclusions.

As noted previously, Indonesia has a national health care system which often extends as far as the community level, but in these rural zones the limitations and disparities in modern health care are often great. Indonesia has recently initiated programs to integrate many of its traditional healers into the national health care system (Republic of Indonesia Department of Health 1995a, 1995b). The Indonesian Department of Health states that there is an average of five to ten traditional practitioners in every village, and it recognizes that traditional healers can play a larger role in primary health care (Republic of Indonesia Department of Health 1995a). The government has also recently started a trial program in one of Yogyakarta's major hospitals where patients can now choose between biomedical and some Javanese ethnomedical treatments, including *jamu*. Some rural health care workers have also recently received official information about the use of many curative *jamu* to disseminate to the public (i.e. Republic of Indonesia Department of Health 1993). However, knowledge and use of *jamu* already exists within the Javanese culture. Despite new government policies, not one of my *jamu* practitioners has been approached by the Health Department concerning integration into, or cooperation with, the national primary health care system.

As discussed in this thesis, *jamu*, as a form of health care, is more affordable, more acceptable, more culturally appropriate, and more available to many Javanese than is Western biomedicine and pharmaceuticals. *Jamu* practitioners and other traditional healers are a significant resource that should be fully utilized in the struggle to provide adequate health care for all, as urged by the World Health Organization. While the Indonesian government has not ignored the value of its traditional medicines, the existing primary health care services in Indonesia, and other Third World nations, can be further strengthened by the increased inclusion of traditional practitioners and plant-based medicines.

Finally, the majority of my predictions concerning cultural patterning in the use of *jamu* are supported. This has applied implications for the delivery of health care, and also

contributes to ethnomedical theory. Not only is the occurrence of disease patterned by cultural factors, but health seeking behavior and the use of different ethnomedical systems are also culturally patterned. In this thesis, I demonstrated that the use of *jamu*, as an ethnomedical system, is not only influenced by the type of its providers and the socioeconomic status of its users, but it is also strongly effected by the culturally patterned and seasonally-based occurrence of disease.

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APPENDICES

APPENDIX A:

STRUCTURED INTERVIEW QUESTIONNAIRE

AND

INFORMED CONSENT STATEMENT

I.D. Code: *Interviewer:* *Econ:* *Gender:* *Age:*

1. Kerja apa? 2. Tinggal dimana? 3. Lahir dimana?

4. Jamu apakah yang pernah anda coba? (di belakang)

5. Berapa kali sehari/minggu/bulan/tahun minum jamu? Jamu apa sajakah? (di belakang)

6. Apakah manfaat dari jamu-jamu tersebut? (di belakang)

7. Dimanakah anda membeli jamu? (toko, depot, warung, jamu gendong, pengobatan tradisional) (di belakang)

8. Apakah ada perbedaan pembelian jamu berdasarkan musim-musimnya? Jenis apa? Mengapa?

9. Manakah yang lebih anda senangi, jamu atau obat? Mengapa?

10. Pernah menderita penyakit apa? Kapan? (di bawah)

11. Kalau pernah sakit, biasanya pergi ke mana untuk setiap jenis penyakitnya? (rumah sakit, klinik, puskesmas, doctor, ahli obat tradisional, penjual jamu, lain-lainnya?) (di bawah)

12. Kalau pernah sakit, bagaimana penanganan untuk setiap jenis penyakit? (jamu, pijit, obat dari toko, obat dari apotik, operasi, lain-lainnya?) (di bawah)

	pernah kapan ?	keterangan ?	Berobat kemana? (RS, klinik, puskesmas, doktor, ahli obat tradisional, penjual jamu, lain?)	Penanganan dengan apa? (jamu, pijit, obat toko/apotik, operasi, lain?)
kepala pusing				
masuk angin				
influenza				
batuk				
asma				
maag				
diare				
gatal-gatal				
sakit kulit				
keputihan				
darah tinggi				
sakit gula				
rematik				
masalah kesuburan				
sakit gigi				
sakit mata				
sakit ginjal				
sakit lever				
sakit jantung				
sakit panas				
malaria				
tetanus				
campak				
tumor				
kanker				
lain-lain?				

	COBA	KAPAN	DARIMANA	MANFAATNYA APA
BERAS KENCUR				
KUNIR ASEM				
PENYEGAR				
UYUP-UYUP				
PAREM (untuk diluar)				
C. BE PUYANG				
CABE PUYANG HAMIL				
INGIN PUNYA ANAK				
GALIAN SINGSET				
GALIAN PUTRI/PUTRA				
KUAT PRIA/WANITA				
SAKIT PERUT DAN MAAG				
MASUK ANGIN/INFLUENZA				
PEGAL LINU				
TAMBAH DARAH				
SESAK NAFAS				
SARIAWAN				
SAWAN TAHUN				
SAWAN GATAL				
URAT SARAF				
KEJI BELING				
TEMU LAWAK				
JERAWAT				
SAKIT PINGGANG				
KEPUTIHAN				
NAFSU MAKAN				
ENDAK-ENDAK CACING				
CEKOKAN nafsu makan anak				
DAUN PAPAYA				
TERLAMBAT BULAN				
BENALU				
JAMU yang lain				

Cultural Patterning in the Use of Herbal Medicines (Jamu) and Health Seeking Behavior in a Javanese City

Jamu User/Provider Informed Consent Statement

(English Version)

The purpose of this study is to determine how, when, and by whom jamu is used. At a time and location of mutual agreement, you will first be asked to discuss your jamu consumption/vending patterns, particularly concerning which types of jamu you use/distribute. You will not be asked to reveal the ingredients of any jamu, for that is not the purpose of this study. Finally, with your additional consent, the investigator may observe you during your jamu consumption/vending practices.

As partial fulfillment of the investigator's Master's degree requirements, it is hoped that this study will show the importance of jamu as a significant part of the Javanese health care system. Although this project may have no direct benefits to you, it is hoped that it can provide needed information for creating more effective health development programs in Indonesia, and offer insight into the use of traditional medicine for both academic and practical purposes.

The risks associated with participating in this survey are minimal, as none are anticipated. While in Indonesia and in the United States of America, only the investigator will have access to your signed informed consent statement and interview notes, which will be locked in his home. Your interview notes will be assigned a letter code in order to maintain confidentiality. The identities to the letter codes will only be known to the investigator. Any reference to informants will be disguised to protect your identity. Collected data will be maintained for consideration of possible future dissertation research, but will not contain any identifiable characteristics. This will all be done to keep your identity confidential.

Your participation is voluntary, and you may refuse or discontinue participation at any time without penalty or loss of possible benefits.

If you have questions about this study at any time, please contact Brook Ross at (Indonesian address and phone number), or after August 10th, 1996, at the Department of Anthropology, 252 South Stadium Hall, University of Tennessee, Knoxville, TN 37996-0720, USA, or call (department phone and fax number).

* * * * * * * * * * * * * *

I have read, or had this read to me, and agree to participate in this study.

_____ _____

Name Date

_____

Signature

APPENDIX B:

VENDOR *JAMU* TYPES

Vendor	*Jamu* Type	Function
Ardjo	*Beras Kencur*	"Hot" - for coughs, tiredness, women just after giving birth (recover the womb)
Ardjo	*Galien Purta* (for males)	"Hot" - tiredness, lack of sleep, for energy
Ardjo	*Galien Putri* (for females)	"Warm" - slimming, after menstruation
Ardjo	*Kunir Asam*	"Cold" - makes blood flow better for menstruation, cleans sick stomach
Ardjo	*Paitan*	Cleans blood, skin irritations, arouse appitite, dizziness
Dita	*Beras Kencur*	Social drinking, ingredient *"kedawung"* helps to release gas from stomach
Dita	*Galien*	"Hot to change the coldness" - rhuematism, increases appitites for more energy for hard work
Dita	*Kunir Asam*	Women at end of their month, after giving birth for lactation
Indah	*Beras Kencur*	Tiredness, for thirst
Indah	*Cabe Puyang*	"Warm" - Tiredness, during pregnancies, for energy, strength, good for body
Indah	*Cabe Puyang & Daun Bluntas*	To prevent body odor (some people drink it every day)
Indah	*Daun Papaya*	Sick stomach, high blood pressure, lack of appetite, breathing difficulties
Indah	*Galien Singset*	For women that have recently given birth & young women
Indah	*Godogan*	Skin irritations, to clean blood
Indah	*Keputihan*	Treats white vaginal discharges (Leukorrhea)
Indah	*Keputihan Supaya Punya Anak-anak*	For infertility problems
Indah	*Kunir Asam*	To keep menstruation evenly flowing, for cleaning blood and skin, acne, keeping body slim
Indah	*Sakit Maag*	Stomach aches
Indah	*Uyup-uyup*	To make mother's milk
Indah	Abortion *jamu*	To induce abortions
Bambang	*Beras Kencur*	Social drinking, ingredient *"kedawung"* helps to release gas from stomach

Bambang	*Galien Putri/ Putra (Pegal Linu) [Sawan Tahun]*	Increases appitites for more energy for hard work, (Older people for rheumatism), [older people, to make bodies warms so wind won't enter] *note: *Pegal Linu* and *Sawan Tahun* are same *jamu.*
Bambang	*Kunir Asam*	Women at end of their month, after giving birth for lactation
Bambang	*Kunir* roots mixed with *"gamping"*	Children's diarhea
Amat	*Batukan*	For coughs
Amat	*Beras Kencur*	As *jamu* chaser, for mixing with drinks
Amat	*Cabe Puyang*	Tiredness, exhaustion, fatigue, to make body warm (reported as hot), especially in rainy season
Amat	*Galien Putri (Singset)/ Putra*	*Singset* - to make slim (mostly women) *Putra* - to make strong (often men ask for it mixed with *Cabe Puyang* and *Beras Kencur)*
Amat	*Kunir Asam*	Stomach aches for males and females, sickness due to menstruation, fever (when mixed with honey, egg and citrus)
Amat	*Pahitan*	For appetite for eating, sometimes for skin irritations
Amat	*Pegal Linu*	Tiredness, exhaustion, fatigue, not as hot as *Cabe Puyang*
Amat	*Pilis*	For itchy eyes, for seeing stars due to head ache
Amat	*Sawanan Gatal*	For skin irritations, ichiness
Amat	*Uyup-uyup*	Good for women after childbirth
Ina	*Beras Kencur*	For health, coughs, tiredness
Ina	*Galien*	Medicine for tiredness, diarrhea, for making women slim (mostly younger women), men use it for tiredness and health, older people use it mostly for tiredness/weakness.
Ina	*Kunir Asam*	Adds blood, makes blood flow smooth and even during menstruation. Medicine for fevers and stomach aches. A different mixture treats hemorrhoids.
Lamidjan	*Beras Kencur*	Men like it strong/ potent
Lamidjan	*Cabe Puyang*	For tiredness, weakness, exhaustion
Lamidjan	*Daun Papaya*	For increasing appetites in children and adults, to open up/ releive the stomach.
Lamidjan	*Daun Sirih*	For *"sakit mata"* (sick eyes), white vaginal dischage (Leukorrhea)
Lamidjan	*Galien Singset*	For slimming (mostly women)

Lamidjan	*Kunir Asam*	Mostly women
Lamidjan	*Pahitan Brotwali*	For skin irritations, ichiness
Lamidjan	*Sawan Tahun*	For old people
Manang	*Beras Kencur*	Tiredness, coughs (with egg, honey and citrus), to make healthy. More often males, but also females. Young and old.
Manang	*Cabe Puyang*	Both males and females, mostly older people. Was used by pregnant women until doctors dissuaded it. "It keeps the body warm in the rainy season"
Manang	*Daun Papaya*	Stomach filled with gas, gastric problems, wind entering. Both males, females, young, old.
Manang	*Galian (Singset) [Putra]*	(After menstruation, to make the body thin/slim, not fat. If drunk during menstruation, it will stop the menstruation. Young females.) [to make the body strong - mixed with egg, honey, and citrus. Males] Many women drink *Galien.*
Manang	*Kunir Asam*	For pregnancy, menstruation, for evenly flowing menstruation, to prevent menstrual odors, to rid body of odors. (Young females)
Manang	*Pahitan*	Stomach aches, increasing appetite for eating, for mothers who recently gave birth. (With additional plants: skin irritations/itch, high blood pressure, kidney problems.) More males (young and old), *becak* drivers
Manang	*Sawan Tahun*	For old people. Males and females.
Sari	*Beras Kencur*	For drinking, refreshing. Used as chaser. Coughs. Males and females, young and old.
Sari	*Cabe Puyang*	For pregnant women who use it twice a week. For after giving birth for recovery. Dissuaded by doctors.
Sari	*Cabe Puyang biasa* (regular)	For energy, tiredness, hard workers, for wind entering because it is warm.
Sari	*Daun Papaya*	Upset stomachs, for hot/cold people when mixed with other herbs, fever
Sari	*Galien Pegal Linu*	Sore knees, rheumatism. Used by people over 35 years, both males and females, for hard workers.
Sari	*Galien Sawan Tahun*	Stiff painful muscles, to keep from getting overweight. Used twice a week by older people, both males and females
Sari	*Galien Singset*	For tightening body, not just for slimming, but also for cleaning body's fluids after menstruation. Can't be drunk during menstruation.

Sari	*Kunir Asam*	Young women use for menstruation, even flow and no upset stomachs while menstruating. Prevents body from being fat/bloated during menstruation. Males often use to not be fat. For upset stomachs.
Sari	*Pahitan*	Appetite for eating, wind entering, skin irritations. Males and females, more younger than older (who drink *Sawan Tahun* instead)
Sari	*Pilis*	For eyes, to see clearly, to clean the eyes, due to bluriness caused by migraines. Older people, and mothers who have recently given birth.
Sari	*Semelak Pace*	Head aches, high blood pressure. Medicinal. More older people, males and females.
Sari	*Sirih*	To see clearly, to clean the eyes, for white vaginal dischages (Leukorrhea), also helps stomach. Females, old and young.
Sari	*Sorokan*	For third trimester of pregnancy, 1 week before birth, makes delivery easier.
Sari	*Tapel Susu*	Almost the same as *Uyup-uyup*. For mothers, to eliminate foul breast milk odors. Also used as refreshment drink.
Sari	*Uyup-uyup*	For mothers for two years after giving birth, to make lots of healthy fresh breast milk, and to make fat babies.
Sumirah	*Beras Kencur*	Tiredness, for people too timid to drink bitter *jamu*. More males than females, all ages.
Sumirah	*Cabe Puyang (Laki-laki/ Sehat Laki-laki) [Prempuan/ Sehat Prempuan]*	Flu, sick, tired, coldness. (With honey, *anggur*, duck egg, younger males often buy for stamina in sex. No seasonal variation for this purpose.) [For women. Good for fitness. Same purpose as for *Laki-laki*, but different dose size. Can use duck egg if they want it strong.]
Sumirah	*Galian Singset*	After menstruation, skin irritations. For young females.
Sumirah	*Kunir Asam*	Makes one skin smooth from within, after menstruation has arrived, rids menstrual odor, rids smell of sweat, for upset stomach from menstruation. Special for women, young & old.
Sumirah	*Sakit Ma'ag*	Upset stomachs, hypertension. Males and females, young and old.
Sumirah	*Sawan Tahun*	Sicknesses, warm body, helps tiredness, adds energy. For people 50 years or older that are not active or menstruating anymore. Both males and females: same distribution.
Mun	*Beras Kencur*	Warm (not hot), "for physical exerciser/ athlete"

Mun	*Cabe Puyang*	Muscle aches, rheumatism, wind entering, refresh energy. More warm (hot) than *Beras Kencur*. "For warming the body, to get rid of the feeling of sleepiness"
Mun	*Cabe Puyang Hamil*	"To keep the health of the mother's womb/unborn baby"
Mun	*Delima Putih*	"To get rid of white vaginal discharges (Leukorrhea), special for women"
Mun	*Endak-endak Cacing*	"To increase the appetite for eating in children"
Mun	*Galian Putri/ (Putra)*	Energy, (warmth), both similiar to *Galian Singset*, both: "for warming the body"
Mun	*Galian Singset*	Energy in a higher dose, "for slimming down the body"
Mun	*Jerawat*	For acne, "to get rid of acne"
Mun	*Keji Beling*	For kidney stones, "to crush/dissolve kidney stones"
Mun	*Kuat Pria/ Wanita*	"To keep the stable condition of the body"
Mun	*Kunir Asam*	Release fever, cooling down (when mixed with honey and egg yolk), to refresh (cold), "to get rid of the sick feeling during menstruation"
Mun	*Masuk Angin/* Influenza	"To get rid of headaches and coughs of a cold"
Mun	*Nafsu Makan*	"? Appetite for food"
Mun	*Pahitan*	Raise appetite, better circulation, "blood cleanser"
Mun	*Parem Uyup*	"To make the mother's breast milk fresh and healthy"
Mun	*Pegal Linu*	"To get rid of the feeling of muscle pains and rheumatism"
Mun	*Peluntur*	"To speed up menstruation/the arrival of the month"
Mun	*Penyegar*	"To keep the body always healthy"
Mun	*Perut Mulas dan Mual*	"To releive stomach pains and queasiness"
Mun	*Remujung*	For urine, "to make urination smooth/even/speedy"
Mun	*Sakit Pinggang*	Kidneys (release urine), waist pains, "to get rid of the feeling of sharply painful waist/loins"
Mun	*Sariawan*	"To cure sprue/oral ulcerations"
Mun	*Sawan Tahun*	Strengthens health of older people, "to keep the health of men/women that are already advanced (in age)"
Mun	*Sawanan Gatal*	"To get rid of the feeling of itchiness"

Mun	*Sesak Nafas*	Asthma, "to make breathing smooth and even"
Mun	*Tambah Darah*	"To get rid of the feeling of weakness and seeing stars"
Mun	*Telur Madu Mrica Anggur*	"Speed up adding blood"
Mun	*Temu Lawak*	Cleans stomach, kidneys, "to releive and clean the stomach"
Mun	*Urat Syaraf*	Releaves stress, calming, "? Tense nerves"
Mun	*Wejah Sawanan*	"To get rid of the foul smell of mother's breast milk"
Sosromarto	*Beras Kencur biasa* (regular)	*Kencur* gives strength back after giving birth. For coughs, sore throats. Preferred by upper class.
Sosromarto	*Beras Kencur keras* (strong)	*Kencur* gives strength back after giving birth. For coughs, sore throats. For *sasak nafas* (shortness of breath)
Sosromarto	*Cabai Lempuyang*	For appetite for food, for pregnant woman to eat for two (the fetus and the mother), for easy birth
Sosromarto	*Datang Bulan*	To bring the arrival of menstruation. (*Kunir Asam* and palm sugar). To support the family planning programs.
Sosromarto	Flu	Influenza (with menthol)
Sosromarto	*Galian Parem*	
Sosromarto	*Galian Putri (Sehat Putri)*	For women. For protecting one's health.
Sosromarto	*Galian Sawanan*	
Sosromarto	*Galian Singset*	Youngsters, not for men
Sosromarto	*Kunir Asam*	For high blood pressure, stroke, for adding mother's milk, for giving birth, for making cold/cool. Is cold. Hemorrhoids. Preferred by upper class
Sosromarto	*Ngeres Linu*	For bones that ache, are sick, rheumatism, often due to hard work.
Sosromarto	*Paitan*	Cleaning the kidneys, crushing kidney stones, for washing blood. Contains *Keji Beling* which can destroy kidney stones. (Also called *Godogan*). Also for diabetes. For arousing one's appetite.
Sosromarto	*Parem Cuwer*	For sprains, after massaging
Sosromarto	*Sawan Tahun*	For people 50 years old or above, for bones that ache, are sick, rheumatism, old people for rheumatism, gets rid of sluggishness/fatigue. To be used twice a week
Sosromarto	*Sehat Pria*	For men. For protecting one's health, protects fitness.

Sosromarto	*Telat Bulan*	For menstrual cycles normally late. For women normaly late due to stress, low blood pressure, or being too tired. To speed/ even the flow of menstruation. Hotter and stronger than *Datang Bulan.* Doesn't use *Kunir* because it is a cold-based plant. *Terlambat Bulan* is very hot. Is a mix between *jamu* for women and *jamu* for men. (Men's *jamu* are generally stronger and hotter). Is very strong. Can be damaging to fetus. Can be used for abortions.
Sosromarto	*Temu Lawak*	For ease of urination. For drink (like lemonade)
Sosromarto	*Tolak Angin*	Wind entering
Sosromarto	*Watukan*	For treatment of coughs

APPENDIX C:

VENDOR *JAMU* SALES

Vendor	*Jamu* Type	Category	Quantity Sold
Ardjo	*Kunir Asam*	preventative	8-9 bot/day (hot): 1 bot/day (rainy) "Is the most popular in the hot season. *Kunir Asam* is too cold to drink in the rainy season which is also cold."
Ardjo	*Beras Kencur*	preventative	6-7 bot/day "is the most popular in the rainy season because *Beras Kencur* is hot."
Ardjo	*Paitan*	either	1-2 bot/day
Ardjo	*Galian Putri* (for females)	preventative	<1 bot/day
Ardjo	*Galian Putra* (for males)	preventative	<1 bot/day
Dita	*Beras Kencur*	preventative	5 bot/day (h): 3-4 bot/day (r) "Sold any season; People don't want to drink *jamu* in the rainy season."
Dita	*Kunir Asam*	preventative	3-4 bot/day (h): 2-4 bot/day (r) "People don't want to drink *jamu* in the rainy season."
Dita	*Galian*	either	1 bot/day (h): 2 bot/day (r)
Indah	*Beras Kencur*	preventative	20 lts/day (h): 10 lts/day (r) "People are more thirsty in the hot season. It is more for drinking puroses when thirsty rather than just for medicinal purposes."
Indah	*Kunir Asam*	preventative	12.5 lts/day (h) ("more requests than supplies"): 7.5 lts/day (r)
Indah	*Godogan*	either	5 lts/day (h&r)
Indah	*Uyup-uyup*	preventative	4 lts/day (h&r)
Indah	*Daun Papaya*	either	3 lts/day (h): 2 lts/day (r) "People are not as thirsty and are lazier during the rainy season."
Indah	*Cabe Puyang & Daun B'luntas*	neither	2 lts/day (h&r) "More requested in hot season than supplies carried."
Indah	*Cabe Puyang*	preventative	1 lt/day (h): 1 lt/day (r) "more often in the rainy season."
Indah	*Keputihan*	curative	1 lt/day (h): 1 lt/day (r)
Indah	*Galian Singset*	preventative	1 lt/day (h): 0.5 lt/day (r) "People are not as brave to go outside in rainy season, therefore buy less *jamu*."

Indah	*Sakit Maag*	curative	10 people/day
Indah	*Keputihan Supaya Punya Anak-anak*	curative	0.5 lt/day (h&r) "least sold *jamu*"
Indah	Abortion *jamu*	curative	~3 times/year
Bambang	*Kunir Asam*	preventative	10 bot/day (h): 6 bot/day (r) People don't want to drink *jamu* in the rainy season
Bambang	*Beras Kencur*	preventative	8-9 bot/day (h): 6-7 bot/day (r) sold any season; People don't want to drink *jamu* in the rainy season
Bambang	*Galien Putri/Putra (Pegal Linu) [Sawan Tahun]*	preventative (curative) [either]	1 bot/day (h) 2 bot/day (r)
Bambang	*Kunir* roots mixed with *"gamping"*	curative	2 sales/month (h?) more in rainy season because there is more diarhea in rainy season. Sold upon request.
Amat	*Cabe Puyang*	preventative	Is the most sold *jamu.* To make the body warm, especially in the rainy season. Sold more than other *jamu* in rainy season because it is warm (mixed with *Beras Kencur*).
Amat	*Galien Putri (Singset)/ Putra*	*Putri (Singset)* - preventative *Putra* - preventative	*Galien Singset* is most often sold along with *Cabe Puyang*
Amat	*Kunir Asam*	preventative	More requests in hot season
Amat	*Batukan*	curative	
Amat	*Beras Kencur*	preventative	
Amat	*Pahitan*	either	
Amat	*Pegal Linu*	curative	
Amat	*Pilis*	curative	
Amat	*Sawanan Gatal*	curative	
Amat	*Uyup-uyup*	preventative	
Ina	*Beras Kencur*	preventative	5-7 bot/day (h): 4-5 bot/day (r) "fewer sales in rainy season because it is a cold based drink. Sales are less in the rainy season because it is the cold season."

Ina	*Kunir Asam*	preventative	5-6 bot/day (h): 3-4 bot/day (r) "fewer sales in rainy season because it is a cold based drink. Sales are less in the rainy season because it is the cold season."
Ina	*Galien*	either	1 bot/day (h&r)
Lamidjan	*Beras Kencur*	preventative	20 ltr/day (h): 15 ltr/day (r) "most often sold in hot season"
Lamidjan	*Cabe Puyang*	preventative	"Most sold in rainy season"
Lamidjan	*Pahitan (Bratawali)*	either	3 bot/day (h): 5 bot/day (r)
Lamidjan	*Daun Papaya*	either	
Lamidjan	*Daun Sirih*	curative	
Lamidjan	*Galien Singset*	preventative	
Lamidjan	*Kunir Asam*	preventative	
Lamidjan	*Sawan Tahun*	either	
Manang	*Beras Kencur*	preventative	10 lts/day (sells same amount in rainy but has to vend more hours to do so)
Manang	*Kunir Asam*	preventative	4-5 lts/day (sells same amount in rainy but has to vend more hours to do so)
Manang	*Pahitan*	either	3 lts/day (h): less in rainy
Manang	*Daun Papaya*	either	1 ltr/day & when ordered (sells same amount in rainy but has to vend more hours to do so)
Manang	*Cabe Puyang*	preventative	Only made on Saturdays or when ordered during hot season: 1 ltr/day in rainy "it warms bodies in the rainy season."
Manang	*Galian (Singset) [Putra]*	(prevent-ative) [prevent-ative]	1 ltr/twice a week (sells same amount in rainy but has to vend more hours to do so)
Manang	*Sawan Tahun*	either	1 ltr both Monday and Thursday (sells same amount in rainy but has to vend more hours to do so)
Sari	*Beras Kencur*	preventative	20 lts/day (h): 10 lts/day (r)
Sari	*Kunir Asam*	preventative	10 lts/day (h): 5 lts/day (r)
Sari	*Pahitan*	either	7 lts/day (h): 3lts/day (r) "people are not as thirsty in the rainy season"
Sari	*Galien Singset*	preventative	2 lts/day (h & r)

Sari	*Semelak Pace*	curative	2 lts/day (h & r)
Sari	*Daun Papaya*	either	2 lts/day (h): 1 ltr/day (r)
Sari	*Tapel Susu*	neither	2 lts/day (h): 1 ltr/day (r) "people are not as thirsty in the rainy season, and *Tapel Susu* is also used as a (refreshment) drink."
Sari	*Uyup-uyup*	preventative	2 lts/day (h): 1 ltr/day (r) "people don't want to go out in rainy season"
Sari	*Cabe Puyang biasa*	preventative	1.5 lts/day (h): 1 ltr/day (r)
Sari	*Galien Pegal Linu*	curative	1 ltr/day (h & r)
Sari	*Galian Sawan Tahun*	either	1 ltr/day (h & r)
Sari	*Sirih*	curative	1 ltr/day (h & r)
Sari	*Pilis*	curative	20 paste packets/day (h & r)
Sari	*Sorokan*	preventative	One glass/person each week for a month before delivery
Sari	*Cabe Puyang (Hamil)*	preventative	
Sumirah	*Beras Kencur*	preventative	8 bot/day (h): 4-5 bot/day (r) "mixed with ice makes it refreshing in the hot season."
Sumirah	*Kunir Asam*	preventative	7 bot/day (h): 4-5 bot/day (r) "People are lazier to go out of the house during the rainy season. The amount of buyers for menstruation is constant, but the everyday buyers are less in rainy season."
Sumirah	*Cabe Puyang (Laki-laki/ Sehat Laki-laki) [Prempuan/ Sehat Prempuan]*	preventative (prevent-ative) [prevent-ative]	1.5 lts/day Uses smaller glasses than *Beras Kencur.* "More people buy in rainy season than hot due to the warmness of the *jamu.*" ("No seasonal variation for C.P.Laki-Laki")
Sumirah	*Galian Singset*	preventative	"Same distribution in hot and rainy due to its purpose. Many still buy in the rainy season."
Sumirah	*Sawan Tahun*	either	<1 ltr/day (h & r)
Sumirah	*Sakit Ma'ag*	curative	Made when ordered.
Mun	*Beras Kencur*	preventative	Most popular, high frequency use by males and females. High use in hot and rainy seasons.

Mun	*Kunir Asam*	prevenative	Most popular, high use by females. High use in hot season.
Mun	*Galian Putri/ (Putra)*	preventaive (prevent-ative)	*G. Putri:* high frequency of use by females. *G. Putra:* high frequency of use by males.
Mun	*Cabe Puyang*	preventative	High use in rainy season because it is warm.
Mun	*Cabe Puyang Hamil*	preventative	
Mun	*Delima Putih*	curative	
Mun	*Endak-endak Cacing*	either	
Mun	*Galian Singset*	preventative	
Mun	*Jerawat*	curative	
Mun	*Kuat Pria/ Wanita*	preventative	
Mun	*Masuk Angin/* influenza	curative	
Mun	*Nafsu Makan*	either	
Mun	*Pahitan*	either	
Mun	*Parem Uyup*	preventative	
Mun	*Pegal Linu*	curative	
Mun	*Peluntur*	preventative	
Mun	*Penyegar*	preventative	
Mun	*Perut Mulas dan Mual*	curative	
Mun	*Remujung*	either	
Mun	*Sakit Pinggang*	curative	
Mun	*Sariawan*	curative	
Mun	*Sawan Tahun*	either	
Mun	*Sawanan Gatal*	curative	
Mun	*Sesak Nafas*	curative	
Mun	*Tambah Darah*	either	
Mun	*Telur Madu Mrica Anggur*	preventative	
Mun	*Temu Lawak*	either	

Mun	*Urat Syaraf*	curative	
Mun	*Wejah Sawanan*	neither	
Mun	*Keji Beling*	curative	Rarest used
Sosromarto	*Telat Bulan*	preventative	50 times/ day (most often sold, famous for it)
Sosromarto	*Sehat Pria*	preventative	2nd most popular. Many people buy (10-20 customers/ day). Popular in rainy season.
Sosromarto	*Galian Putri (Sehat Putri)*	preventative	2nd most popular (along with sehat pria) Popular in rainy season
Sosromarto	*Kunir Asam*	preventative	3rd most sold. Popular in hot season with ice
Sosromarto	*Beras Kencur biasa (regular)*	preventative	Most often sold in hot season (with ice)
Sosromarto	*Beras Kencur keras (strong)*	curative	Most often sold in rainy season
Sosromarto	*Sawan Tahun*	either	Popular in rainy season. Many people buy (10-20 customers/ day).
Sosromarto	*Ngeres Linu*	curative	Popular in rainy season
Sosromarto	*Cabai Lempuyang*	preventative	Popular when mixed with beras kencur
Sosromarto	*Galian Parem*	unknown	Popular in hot season with ice
Sosromarto	*Temu Lawak*	either	Many people like it
Sosromarto	Flu	curative	Rainy season use
Sosromarto	*Tolak Angin*	curative	Rainy season use
Sosromarto	*Datang Bulan*	either	
Sosromarto	*Galian Sawanan*	unknown	
Sosromarto	*Galian Singset*	preventative	
Sosromarto	*Keji Beling (Paitan)*	curative	
Sosromarto	*Parem Cuwer*	curative	
Sosromarto	*Watukan*	curative	

APPENDIX D:

CONSUMER SUMMARIES

KEY TO APPENDIX D

First Bracket Space (X,_,_,_)

L = Lower socioeconomic class
UL = Upper-Lower socioeconomic class
LM = Lower-Middle socioeconomic class
M = Middle socioeconomic class
UM = Upper-Middle socioeconomic class
U = Upper socioeconomic class

Second Bracket Space (_,X,_,_)

f = female
m = male

Third Bracket Space (_,_,X,_)

= age

Fourth Bracket Space (_,_,_,X)

Ur = Urban
R = Rural

# 1 (L,m,28,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Often	J. Gendong	To get rid of tiredness (ngilangi kesel [Javanese])
KUNIR ASAM	Yes	Often	J. Gendong	To get rid of tiredness
KUAT PRIA/WANITA	Yes	Often	Carried Warung Vendor (Angkring [Javanese])	To add energy
JERAWAT	Yes	Before	Warung	To dry up acne.
CEKOKAN nafsu makan anak	Yes	Before	Warung	So that I could eat a lot.
Other types of JAMU: GINSENG TANGKUR BUAYA/ANAK KIDANG (ginseng, seahorse, crocodile, baby antelope)	Yes	Often	Carried Warung Vendor (Angkring [Javanese])	For a strong body, waking in the moring fresh and healthy. For a stong erection.

# 2 (L,f,27,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	For a Long While	Jamu Vendor (Tukang Jual Jamu)	To get rid of tiredness, exhaustion
KUNIR ASAM	Yes	For a Long While	Jamu Vendor (Tukang Jual Jamu)	For adding blood.
PAREM (untuk diluar)	Yes	For Many Months	Bought in a Medicine Store	For repairing aching muscle pains in the feet.
GALIAN SINGSET	Yes	For a Long While	Jamu Vendor (Tukang Jual Jamu)	For keeping bodily fitness/health
TEMU LAWAK	Yes	Already Long Ago	Buy in the Market	For freshening the body and adding appetite for eating.
JERAWAT	Yes	Occa-sionally	Buy in a Store	For cleaning acne in the face.
Other types of JAMU: DAUN TEMPU IYUNG	Yes	Already Long Ago	Taken from the Garden	For curing the often urinating sickness (bladder infection)

# 3 (L,m,21,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Occa-sionally	Jamu Vendor	To add strength/ appetite for eating
KUNIR ASAM	Yes	Occa-sionally	Jamu Vendor	I don't exactly know.
PAREM (untuk diluar)	Yes	Occa-sionally	Store	To get rid of fatigue/ exhaustion/ weariness (keletihan)
JERAWAT	Yes	Often	Store	To get rid of acne
DAUN PAPAYA	Yes	Occa-sionally	Warung	To add an appetite for eating
BENALU	Yes	When Small	- (Treated by Parents)	For curing the measles (compak)

# 4 (L,f,22 Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Already Long Ago	J. Gendong	To freshen my bodily odors.
GALIAN SINGSET	Yes	Already Long Ago	Jamu Store	For slenderizing my body.
JERAWAT	Yes	Already Long Ago	Jamu Store	For getting rid of acne.

# 5 (L,f,33,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes		Buy (Warung - Squeezed Jamu)	To make my body fresh/healthy
KUNIR ASAM	Yes	M (Menstr-Uation?)	Buy (Warung - Squeezed Jamu)	For upset stomachs
UYUP-UYUP	Yes	After Giving Birth	Buy (Warung - Squeezed Jamu)	For the speedy/ smooth/ even flow of the breast milk
PAREM (untuk diluar)	Yes		Buy (Warung - Squeezed Jamu)	For fatigue/tiredness/exhaustion
CABE PUYANG HAMIL	Yes		Buy (Warung - Squeezed Jamu)	So that the baby is cleaned

GALIAN SINGSET	Yes		Buy (Warung - Squeezed Jamu)	For slimming the body
GALIAN PUTRI/PUTRA	Yes		Buy (Warung - Squeezed Jamu)	So there is additional prettiness
MASUK ANGIN/ INFLUENZA	Yes		Buy (Warung - Squeezed Jamu)	For getting rid of wind
PEGAL LINU	Yes		Buy (Warung - Squeezed Jamu)	For getting rid of the feeling of muscle pains.
SESAK NAFAS	Yes		Buy to Boil	To get rid of the tightness of breathing
TEMU LAWAK	Yes		(Warung - Squeezed Jamu)	To freshen/give health to the body.
DAUN PAPAYA	Yes		(Warung - Squeezed Jamu)	To add an appetite for eating.

# 6 (L,m,35,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Often	Jamu Kiosk/ Stall	To get rid of pains
KUNIR ASAM	Yes	Often	Jamu Kiosk/ Stall	To add an appetite for eating
PAREM (untuk diluar)	Yes			To get rid of the feeling of fatigue/ tiredness/ exhaustion
GALIAN PUTRI/PUTRA	Yes	Often	Jamu Kiosk/ Stall	To get rid of muscle aches/ pains
PEGAL LINU	Yes	Often	Jamu Kiosk/ Stall	
SARIAWAN	Yes	Often	Jamu Kiosk/ Stall	
NAFSU MAKAN	Yes	Often	Jamu Kiosk/ Stall	
CEKOKAN nafsu makan anak	Yes	Often		
DAUN PAPAYA	Yes	Often		

# 7 (L,f,29,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Adoles-cent	Jamu Vendor	The body's health
KUNIR ASAM	Yes	Adoles-cent	Jamu Vendor	To clean the stomach
PAREM (untuk diluar)	Yes	Small	Warung/ Pharmacy	To warm the body/ to get rid of the feeling of fatigue/tiredness
GALIAN SINGSET	Yes	Adoles-cent	Jamu Vendor	Slim/ tight body
SAKIT PERUT DAN MAAG	Yes	Adult	Pharmacy	To get rid of the feeling of sickness
DAUN PAPAYA	Yes	Adult	Myself	In order to add an appetite for eating.
TERLAMBAT BULAN	Yes	Adult	Pharmacy	Appropriate/ exact timing

# 8 (L,m,25,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	-	Jamu Kiosk/ Stall	To get rid of rheumatic aches and pains
PAREM (untuk diluar)	Yes	Small	Jamu Kiosk/ Stall	To get rid of the feeling of weariness/ tiredness/ exhaustion
GALIAN PUTRI/PUTRA	Yes	Often	Jamu Kiosk/ Stall	To refresh/ give health to the body
MASUK ANGIN/ INFLUENZA	Yes	Often	Jamu Kiosk/ Stall	To cancel influenza

# 9 (L,m,24,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes		Jamu Vendor	To refresh/give health to the body
KUNIR ASAM	Yes		Jamu Vendor	To refresh/give health to the body
PENYEGAR	Yes		Jamu Vendor	To refresh/give health to the body
PAREM (untuk diluar)	Yes		Jamu Vendor	To warm the body
CABE PUYANG	Yes			To warm the body
GALIAN PUTRI/PUTRA	Yes		Jamu Warung	To add vitality

KUAT PRIA/WANITA	Yes	Adult	Jamu Warung	To add vitality
SAKIT PERUT DAN MAAG	Yes	Adult	Jamu Warung	To get rid of the feeling of sickness
MASUK ANGIN/ INFLUENZA	Yes	Adult	Jamu Warung	To get rid of the feeling of sickness
CEKOKAN nafsu makan anak	Yes	Small		To add an appetite for eating
DAUN PAPAYA	Yes	Small		To add an appetite for eating

# 10 (L,m,22,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Often	Make Myself	For cough medicine
KUNIR ASAM	Yes	Occa-sionally	Make Myself	Body freshness/health
PAREM (untuk diluar)	Yes	Occa-sionally	Warung	So that the fatigue/ tiredness is gone
GALIAN PUTRI/PUTRA	Yes	Before	J. Gendong	For strengthening my body.
PEGAL LINU	Yes	Occa-sionally	Depot (Jamu Stand)	To get rid of the feeling of fatigue/ tiredness and muscle pains/aches
NAFSU MAKAN	Yes	Before	Made Myself	To add an appetite for eating.
ENDAK-ENDAK CACING	Yes	Before	Depot (Jamu Stand)	To add an appetite for eating.
CEKOKAN nafsu makan anak	Yes	Before	Depot (Jamu Stand)	So that I could eat a lot.
Other types of JAMU: GINSENG, TANGKOR	Yes	Often	Depot (Jamu Stand)	To add freshness/health, energy.

# 11 (L,?,39,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Occa-sionally	Jamu Vendor	-
KUNIR ASAM	Yes			
PAREM (untuk diluar)	Yes			
CABE PUYANG	Yes		Jamu Vendor	To add an appetite for eating
DAUN PAPAYA	Yes	Often	Jamu Vendor	

Other types of JAMU: (not listed)	Yes	Often	Jamu Vendor	To add bodily strength.

# 12 (LM,f,27,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	When Sick	J. Gendong, Depot (Stall)	To treat coughs, neck/throat itches
KUNIR ASAM	Yes	Every Month/ Menstru-ation	J. Gendong, Depot (Stall)	To have a speedy/ smooth/ evenly flowing menstruation.
PAREM (untuk diluar)	Yes	When Tired/ Fatigued	Depot (Stall), Store, Warung	To treat rheumatic pains/ aches.
GALIAN SINGSET	Yes	When Fat	Depot (Stall), Store	Yes, so that I am slim.
GALIAN PUTRI/PUTRA	Yes	Once a Week	Depot (Stall), Store	To make my body healthy
MASUK ANGIN/ INFLUENZA	Yes	When Sick	Depot (Stall), Store	To heal influenza
PEGAL LINU	Yes	When Fatigued /Tired	Depot (Stall), Store	
SESAK NAFAS	Yes	When Sick	Depot (Stall), Store	To heal tightness of breathing
SARIAWAN	Yes	When Sick	Depot (Stall), Store	To heal a sprue/ oral ulceration
TEMU LAWAK	Yes	When Desired	Market, Boil Myself	To have speedy, smooth, evenly flowing ? Blood, to make healthy
JERAWAT	Yes	When Sick	Depot (Stall), Store	To heal acne
KEPUTIHAN	Yes	When Sick	Depot (Stall), Store	To cure vaginal yeast infections, leukorrhea
NAFSU MAKAN	Yes	When Small	J. Gendong	To add an appetite for eating.
CEKOKAN nafsu makan anak	Yes	When Small	J. Gendong, Depot (Stall)	To add an appetite for eating.
DAUN PAPAYA	Yes	When Small	Made Myself (Home Made)	To add an appetite for eating.

Other types of JAMU: KEJED untuk jantung (for the heart)	Yes	When Previ-ously Sick	Depot (Stall)	To treat heart sickness due to too much cholesterol.

# 13 (LM,f,48,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Before	J. Gendong	To warm the body
KUNIR ASAM	Yes	Before	J. Gendong, Made at Home	For speedy, smooth, even flow of menstruation (before, already menapause now)
UYUP-UYUP	Yes	?	J. Gendong	For speedy, smooth, even flow of mother's breast milk.
PAREM (untuk diluar)	Yes	After Giving Birth	Warung	To get rid of the feeling of fatigue/ tiredness
CABE PUYANG	Yes	When Neces-sary	Depot (Stall)	To get rid of the feeling of fatigue/ tiredness
GALIAN SINGSET	Yes	When Neces-sary	J. Gendong, Depot (Stall)	So that the body is not flabby.
GALIAN PUTRI/PUTRA	Yes	Once a Week	J. Gedong, Depot (Stall)	To make the body healthy
MASUK ANGIN/ INFLUENZA	Yes	When Neces-sary	Depot (Stall)	To heal wind entering.
PEGAL LINU	Yes	When Neces-sary	J. Gendong, Depot (Stall)	To get rid of rheumatic aches and pains
TAMBAH DARAH	Yes	Before, When Sick	Depot (Stall)	To add blood.
SARIAWAN	Yes	When Sick	Depot (Stall)	To heal sprues/ oral ulcerations.
TEMU LAWAK	Yes	When Neces-sary	Self Made	To add an appetite for eating
SAKIT PINGGANG	Yes	When Sick	Depot (Stall)	To heal sick waist/ loins
KEPUTIHAN	Yes	When Sick	Depot (Stall)	To cure vaginal yeast infections, leukorrhea

DAUN PAPAYA	Yes	When Sick	Self Made	To heal "hot -cold" (like malaria)
TERLAMBAT BULAN	Yes	When Late	Depot (Stall)	So that menstruation is speedy/ smooth/ even

# 14 (LM,m,60,Ur/R)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	When Neces-sary	Depot (Stall)	To get rid of coughs)
KUNIR ASAM	Yes	When Neces-sary	Self Made	To get rid of sweat odors
PAREM (untuk diluar)	Yes	When Fatiqued / Tired	Depot (Stall)	To get rid of fatigue/ tiredness
CABE PUYANG	Yes	Often Before	Depot (Stall), Self Made	To warm the body.
KUAT PRIA/WANITA	Yes	When Neces-sary	Depot (Stall)	To make the body healthy
MASUK ANGIN/ INFLUENZA	Yes	Often	Warung	To heal influenza
PEGAL LINU	Yes	When Neces-sary	Warung	To get rid of rheumatic aches and pains
TEMU LAWAK	Yes	When Neces-sary	Self Made	To add an appetite for eating
SAKIT PINGGANG	Yes	When Neces-sary	Store	To get rid of sick waist/ loins
DAUN PAPAYA	Yes	When Neces-sary	Self Made	To heal malaria ("hot-cold")

# 15 (ML,f,37,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes		J. Gendong	To refresh/give health to the body
KUNIR ASAM	Yes		Self Made	To get rid of upset stomachs (menstruation)

UYUP-UYUP	Yes		J. Gendong	? stomach
PAREM (untuk diluar)	Yes		Warung	To get rid of muscle aches and tiredness/ weariness
CABE PUYANG	Yes		J. Gendong	To get rid of the feeling of tiredness/ weariness
GALIAN PUTRI/PUTRA	Yes		Store	To protect the condition of the body and metabolism
TEMU LAWAK	Yes		Self Made	To strengthen the function of the liver
DAUN PAPAYA	Yes		J. Gendong	To releive the stomach, to get rid of air filling (stomach)
Other types of JAMU: GODOGAN	Yes	Before	Traditional Healer	To have a smooth, even digestion, to help with metabolism

# 16 (LM,f,28,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	High School	J. Gendong	To refresh/ give health to the body, and for wind entering
KUNIR ASAM	Yes	High School	J. Gendong	To clean the uterus
PAREM (untuk diluar)	Yes	If/When Neces-sary	Store	To get rid of muscle aches due to weariness/ tiredness
GALIAN PUTRI/PUTRA	Yes	High School	Store	To protect the condition of the body that is healthy
SAKIT PERUT DAN MAAG	Yes	High School	Self Made	To treat gastric/ stomach sickness (maag)
Other types of JAMU: SARI KUNIR	Yes	High School	Self Made	To treat gastric/ stomach sickness (maag)

# 17 (M,f,23,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Occa-sionally	Jamu Vendor	To add an appetite for eating
KUNIR ASAM	Yes	Every Month	Jamu Vendor	To speed up/ make smooth/ even menstruation
CEKOKAN nafsu makan anak	Yes	When Small	Home Made	For adding an appetite for eating

# 18 (M,m,24,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Before	Jamu Vendor	To add an appetite for eating
KUNIR ASAM	Yes	Before	J. Gendong	Freshening stomach
PAREM (untuk diluar)	Yes	Before	Store	To get rid of muscle aches/ pains
KUAT PRIA/WANITA	Yes	Before	Store	To add strength
TEMU LAWAK	Yes	Before	Warung	-
CEKOKAN nafsu makan anak	Yes	When Small	Jamu Warung	
DAUN PAPAYA	Yes	Adult	Self Made	To get rid of upset stomach
Other types of JAMU: JAMU CINA DARI SINSHE (Chinese Jamu from a chinese herbalist)	Yes	Adult	Sinshe	To treat sickness & speed up and smooth/even the current of blood

# 19 (M,m,31,Ur/R)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Rarely	J. Gendong	Just out of desire
KUNIR ASAM	Yes	Rarely	J. Gendong	Just out of desire
PAREM (untuk diluar)	Yes	Rarely	Warung/ Store	To get rid of muscle aches and fatigue/ tiredness
MASUK ANGIN/ INFLUENZA	Yes	Rarely	Warung	To get rid of wind entering
SARIAWAN	Yes	Rarely	Warung/ Store	
TEMU LAWAK	Yes	Rarely	Home Made	I don't know (when I was little)
NAFSU MAKAN	Yes	Rarely	J. Gendong	To add appetite for eating

# 20 (M,m,25,Ur/R)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes		Depot (Stall)	To make a healthy body
KUNIR ASAM	Yes		Depot (Stall)	-
PEGAL LINU	Yes		Warung	To repair/ replenish energy
NAFSU MAKAN	Yes		Depot (Stall)	To add an appetite for eating

# 21 (M,f,42,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes		Make	To make a fresh/ healthy body

KUNIR ASAM	Yes		Make	To clean the stomach
UYUP-UYUP	Yes		Warung, Squeezed Jamu Vendor	For fast, smooth, evenly flowing breast milk
GALIAN SINGSET	Yes		Warung, Squeezed Jamu Vendor	To make the body slim
GALIAN PUTRI/PUTRA	Yes		Warung, Squeezed Jamu Vendor	To make lasting youth
PEGAL LINU	Yes		Warung, Squeezed Jamu Vendor	To get rid of the feeling of muscle aches/ pains
KEJI BELING	Yes		Make	To get rid of urinary problems that are hot
TEMU LAWAK	Yes		Warung, Squeezed Jamu Vendor	To make fresh/healthy
DAUN PAPAYA	Yes		Make	To add an appetite for eating

# 22 (M,f,33,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Often	Jamu Kiosk	To get rid of tiredness/ exhaustion
KUNIR ASAM	Yes	Often	Jamu Kiosk	To get rid of sickness from menstruation
UYUP-UYUP	Yes	Before, Adult	Jamu Vendor	To make the uterus/womb fertile
PAREM (untuk diluar)	Yes	Small	Jamu Vendor	To get rid of the feeling of weariness, tiredness
INGIN PUNYA ANAK (same as Uyup-uyup)	Yes	Before, Adult	Jamu Kiosk	To make the uterus/womb fertile
GALIAN SINGSET	Yes	Adoles-cent	Jamu Kiosk	To make the body slim
PEGAL LINU	Yes	Adult	Jamu Kiosk	To get rid of the feeling of rheuamtic pains/ rheumatism
TAMBAH DARAH	Yes	Adult	Jamu Kiosk	To add blood
DAUN PAPAYA	Yes	Often, Adult	Jamu Vendor	To add the appetite for eating

Other types of JAMU: JAMU WATUKAN	Yes	Often	Jamu Vendor	coughs
KUNIR	Yes	Small	J. Gendong	Itchiness, skin irritations

# 23 (M,f,26,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Occa-sionally	J. Gendong	To repair/ replenish stamina
KUNIR ASAM	Yes	Occa-sionally	Made by my Servant	For problems of sickness during menstruation
GALIAN SINGSET	Yes	Rarely	In a Store	To be svelt/ slender/ slim
PEGAL LINU	Yes	Rarely	In a Depot (Stall)	To repair muscle aches/ pains after physical exercise
SESAK NAFAS	Yes	Often	In a Depot (Stall)	For overcoming smoker problems
JERAWAT	Yes	Before	In a Store	To overcome acne
Other types of JAMU: GINSENG (LAPEN)	Yes	Often	In a Depot (Stall)	For intoxication

# 24 (M,m,25,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Often	J. Gendong	Fresh/healthy body
PAREM (untuk diluar)	Yes	Occa-sionally	Warung	To get rid of muscle aches/ pains
JERAWAT	Yes	Before	Warung	To treat acne
DAUN PAPAYA	Yes	Occa-sionally	Self Made	To treat upset stomachs (diarrhea)
Other types of JAMU: GINSENG	Yes	Often	Depot (Stall)	To add energy

# 25 (M,?,23,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Often	Jamu Vendor	To reduce weariness/ tiredness
KUNIR ASAM	Yes	Often	Jamu Vendor	To reduce weariness/ tiredness
PAREM (untuk diluar)	Yes	Occa-sionally	Jamu Vendor	To reduce weariness/ tiredness
JERAWAT	Yes	Current-ly	Traditional Medicine	For getting rid of acne
CEKOKAN nafsu makan anak	Yes	When Small	Self Made	To add an appetite for eating

DAUN PAPAYA	Yes	Occa-sionally	Self Made	To add an appetite for eating
Other types of JAMU: JAMBU & GARAM (guava & salt)	Yes	Occa-sionally	J. Gendong	For diarrhea

# 26 (UM,f,39,U)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Once a Week	From Salon	For freshness, warming the body
KUNIR ASAM	Yes	Once a Week or More	J. Gendong	During menstruation to eliminate menstrual odors. When pregnant so the child will be yellower.
UYUP-UYUP	Yes			
PAREM (untuk diluar)	Yes	3 Times/ Year	Warung	Tiredness of muscles from working or walking too much
INGIN PUNYA ANAK	Yes	Twice, for a Month each Time	Jamu Healer/ Dukun	For help getting pregnant
GALIAN SINGSET	Yes	Once a Month	Market	For stomach and body slimming. Used after menstruation.
GALIAN PUTRI/PUTRA	Yes (Putri)	Once a Month	Store	For stomach and body slimming. Used after menstruation.
NAFSU MAKAN	Yes, with kunir asam or b. kencur	Once a Month When Five Years or Younger	Warung	To make a fat child.
DAUN PAPAYA	Yes, with Palm Suger.	Once a Month When Five Years or Younger	Pasar	To make a fat child. Mosquitos don't want to bite because the blood is bitter.
Other types of JAMU: PAREM UYUP	Yes	When Pregnant or Before	Pasar	Cold (stomach) for fertility

# 27 (L,f,23,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Twice/ Week	Market, Self Made	To warm the body, to make the voice beautiful
KUNIR ASAM	Yes	Three/ Week		Add blood (when not enough blood). Used first day of menstruation each month so blood doesn't smell.
PAREM (untuk diluar)	Yes	Once a Day When Sick		For swollen joints, scrapes, cuts. Used after bathing.
GALIAN SINGSET	Yes	Once a Month		After menstruation each month to reduce bloating
TEMU LAWAK	Yes	When Sick		To treat "sakit kuning" (jaundice) (along with temu gering)
CEKOKAN nafsu makan anak	Yes	Once a Week While a Child		Appetite stimulant for children until 1.5 years old.
DAUN PAPAYA (also called Godogan/rebus "boiled")	Yes	Three Times a Week	Self Made	To stimulate appetite
Other types of JAMU: PAREM UYUP (for drinking)	Yes	Once a Week	Market	To refresh the body
LULUR	Yes	Once Each Evening During Allergy	Self Made	Allergic reactions on skin. External application. Keraton people use it everyday for yellowed skin (solf, light, refined skin)
INGGU	Yes	Every Morning While Sick	Bought in Market, Prepared at Home	For coughs
TEMU GERENG	Yes	When Sick		To treat "sakit kuning" (jaundice) (along with Temu lawak)

# 28 (M,m,28,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes			

KUAT PRIA/WANITA	Yes	Once Every 3 Days	Store, Factory Made Jamu	Add energy, can use for sex
SARIAWAN	Yes			For chapped lips
TEMU LAWAK	Yes	Occa-sionally		(Pahitan) to stimulate appetite
DAUN PAPAYA	Yes			To clean blood

# 29 (LM,f,20,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes			To refresh/give health to the body, and to add an appetite for eating.
KUNIR ASAM	Yes	Each Month		Drink during menstruation
GALIAN PUTRI/PUTRA	Yes	Once a Month		Drink after menstruation

# 30 (M,f,60,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Often Every-day	Warung	Cleans, quickens blood
KUNIR ASAM	Yes	Previ-ously	Home Made	For menstruation
UYUP-UYUP	Yes	Have Baby	Ordered From Jamu Person	
CABE PUYANG HAMIL	Yes	Once a Week When Pregnant	Home Made	For pregnancy
GALIAN SINGSET	Yes	When Young	Warung	
GALIAN PUTRI/PUTRA	Yes	When Young	Warung	
SAWAN TAHUN	Yes	Twice a Day (Before eating in morning & before sleeping)	Market	For fatigue/tiredness, for healthy body

TEMU LAWAK	Yes	When there is a Problem	Home Made	For urination, stomach problems
Other types of JAMU: PAHITAN	Yes			Clean blood, mosquito bites
HABIS BERSALIN (after giving birth)	Yes	For 40 Days after Giving Birth		After giving birth

# 31 (M,f,25,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Once a Week	J. Gendong	When tired
KUNIR ASAM	Yes	Once a Month	J. Gendong	During menstruation
GALIAN PUTRI/PUTRA	Yes	Previ-ously	J. Gendong	After menstruation
TERLAMBAT BULAN	Yes	Previ-ously	J. Gendong	For late menstruation
Other types of JAMU: GATAL (itchy)	Yes	Once	J. Gendong	For itchiness
PAHIT/GODOGAN	Yes	Twice a Day for One Month	From Market, Boiled at Home	To add body weight because she is skinny

# 32 (L,f,60,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Once a Day	Home Made from Market Bought Plants	To give mother's milk
CABE PUYANG HAMIL	Yes	Once a Week from 5 to 9 Months Pregnant	Home Made from Market Bought Plants	
GALIAN PUTRI/PUTRA	Yes		Home Made from Market Bought Plants	menstruation

PEGAL LINU	Yes		Home Made from Market Bought Plants	
SAWAN TAHUN	Yes	Old	Home Made from Market Bought Plants	For arthritis in knees
TEMU LAWAK	Yes		Home Made from Market Bought Plants	Urination sickness
NAFSU MAKAN	Yes	After Sickness for 3 Days	Home Made from Market Bought Plants	
DAUN PAPAYA	Yes	Once a Week	Home Made from Market Bought Plants	Clean blood, stomach aches, clean stomach
Other types of JAMU: PAHIT/ GODOGAN	Yes	Once a Day	Home Made from Market Bought Plants	Keep strong, multipurpose
DAUN JAMBU (Guava Leaves, Salt and Water)	Yes		Home Made	For children's diarrhea
WEJAN SAWANAN	Yes	Once Each Morning	Home Made from Market Bought Plants	

# 33 (M,m,26,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes		Small Shop	For refreshing/health
CABE PUYANG	Yes		Small Shop	For wind entering
KUAT PRIA/WANITA	Yes		Small Shop	For rheumatic aches/pains, and for stamina
PEGAL LINU	Yes		Small Shop	For rheumatic aches/pains
TAMBAH DARAH	Yes		Small Shop	To add blood
TEMU LAWAK	Yes		Small Shop	For wind entering
NAFSU MAKAN	Yes		Small Shop	For appetite for eating

DAUN PAPAYA (PAHITAN)	Yes		Small Shop, J. Gendong	Stamina, for appetite for eating
Other types of JAMU: TELUR MADU MRICA ANGGUR (Egg, Honey, Pepper, Wine)	Yes		Small Shop	To protect stamina
REMUJUNG	Yes			To speed/even urination
GODOGAN (REBUS) (boiled)	Yes		Warung	For body odor

# 34 (M,f,20,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes		Small Shop	Upset stomach, to refresh/give health
KUNIR ASAM	Yes	Every Menstru-ation	J. Gendong	So menstruation doesn't smell
PENYEGAR	Yes		Facotry Jamu	To refresh/give health
PAREM (untuk diluar)	Yes	When Fatigued	Store	To get rid of fatigue/tiredness
KEJI BELING	Yes		From Garden	To heal kidney sickness
Other types of JAMU: LULUR	Yes	Twice a Week	Store	To make skin soft and refined

# 35 (M,f,26,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Once a Year	Warung Now, J. Gendong Before	To make fit, refreshed/healthy
KUNIR ASAM	Yes	3-4 Times a Month	Warung	For one week before menstruation, for two days after menstruation starts. To prevent cramps, to make menstruation more agreeable, to clean
GALIAN SINGSET	Yes	Twice a Month	Warung	After menstruation. Prevent bloating after menstruation.
GALIAN PUTRI/PUTRA	Yes	Once a Month	Warung	Is good
MASUK ANGIN	Yes	When Sick	Warung	To get out wind

TEMU LAWAK (GODOGAN)	Yes	3 Times a Year	Home Made	To clean the stomach
TERLAMBAT BULAN	Yes	Twice	Warung	The month (menstruation) was late
BENALU	Yes	Once	Parent Purchased it from Jamu Agent	Tumor in breast

# 36 (M,m,25,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Once a Day	Warung, J. Gendong	To get rid of tiredness
KUNIR ASAM	Yes	Once a Day	J. Gendong	Is inexpensive, to stabilize body for loosing weight
GALIAN SINGSET	Yes	Repeat-edly Try	Warung	To stabilize body for loosing weight
MASUK ANGIN	Yes	When Sick	Factory Warung	For wind entering
TEMU LAWAK	Yes	Often (Like Water)	Warung	Just for drinking (like hot water)
Other types of JAMU: TELUR MADU MRICA ANGGUR (egg, honey, pepper, wine)	Yes	Once a Month	Warung	For body power (special)

# 37 (L,m,30,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes	Once a Day		For breathing/ respiration
KUAT PRIA/WANITA	Yes	Twice a Month	Prefers Factory Jamu	For strength for becak driving
Incomplete interview				

# 38 (L,m,53,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
KUAT PRIA/WANITA	Yes	Twice a Month	Factory Jamu from Warung or Jamu Gendong	For strength
Incomplete interview				

# 39 (UL,m,40,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes			
KUNIR ASAM	Yes		J. Gendong	For health
DAUN PAPAYA	Yes		J. Gendong	For power, health
Incomplete interview				

# 40 (LM,m,35,Ur)	TRIED	WHEN	FROM	FOR WHAT PURPOSE
BERAS KENCUR	Yes			
PENYEGAR (sehat)	Yes			For headaches. Drink with Cabe Puyang
MASUK ANGIN/ INFLUENZA	Yes			For wind entering
PEGAL LINU	Yes			When tired, for stamina, for lots of work
Other types of JAMU: PAHITAN	Yes			When not eating
WATUKAN	Yes			For coughs

Vita

Brook Williams Weisman-Ross was born in Rhode Island on May 4, 1971. His first experience living in Indonesia was for one year between 1982 and 1983 when his father consulted for the U.S. Agency for International Development. Prior to completing his Bachelor of Arts in Anthropology from the University of Rhode Island in 1994, he returned to Indonesia for six months as a student in the Council for International Educational Exchange program and conducted an ethnographic study on a women's cooperative pottery industry on the island of Bawean. After enrolling in the Master's program in Anthropology at the University of Tennessee, Knoxville, he returned to Indonesia as a research assistant to Dr. Andrew Kramer during the summer of 1995 and was able to gather preliminary information for his Master's Thesis. After receiving the W. K. McClure Fellowship for the Study of World Affairs, he returned again to Indonesia during the summer of 1996 to collect ethnographic data for his Thesis. The Master's degree was received December, 1997.

He is currently pursuing an applied research career in Indonesia and Southeast Asia with his wife, Merith Weisman-Ross.